



# OPEN SPACE CONSERVANCY TRUST SPECIAL VIDEO MEETING

Thursday, April 21, 2022 at 5:00 PM

## BOARD MEMBERS:

Chair Thomas Hildebrandt  
Vice Chair Carol Lynn Berseth  
Secretary Geraldine Poor  
Board Members: Lisa Anderl, Marie Bender,  
Hillary Ethe, and Craig Olson

## LOCATION & CONTACT

Mercer Island City Hall – Zoom Meeting  
9611 SE 36<sup>th</sup> Street | Mercer Island, WA 98040  
Phone: 206.275.7706 | [www.mercerisland.gov](http://www.mercerisland.gov)

*In compliance with the Americans with Disabilities Act, those requiring accommodation for meetings should notify the Staff Liaison at least 24 hours prior to the meeting at 206.275.7706.*

**Registering to Speak:** Individuals wishing to speak live during Appearances will need to register their request with staff at 206.275.7793 or email [andrea.larson@mercerisland.gov](mailto:andrea.larson@mercerisland.gov) and leave a message before 4 PM on the day of the meeting. Please reference "Appearances" on your correspondence. Each speaker will be allowed three (3) minutes to speak.

**Join by Telephone at 5:00 PM:** To listen to the meeting, or speak under appearances, via telephone, please call **253.215.8782** and enter Webinar ID **878 0144 0636** and Password **074222** when prompted.

**Join by Internet at 5:00 PM:** To watch the meeting, or speak under appearances, over the internet via your computer, follow these steps:

- 1) Click [this link](#)
- 2) If the Zoom app is not installed on your computer, you will be prompted to download it.
- 3) If prompted for Webinar ID, enter **878 0144 0636**; Enter Password **074222**

## CALL TO ORDER & ROLL CALL, 5 PM

## PUBLIC APPEARANCES

### REGULAR BUSINESS

1. Approval of Minutes for the November 3, 2021 and January 20, 2022 Meetings  
*Please note, the November 3, 2021 Minutes will be available by Tuesday April 19.*  
**Recommended Action:** Approve the November 3, 2021 and January 20, 2022 minutes.
2. Restoration Work Plan  
**Recommended Action:** Approve the 2022 Restoration Work Plan
3. Fire Management Plan Revisions  
**Recommended Action:** Approve the revised Fire Management Plan
4. 2022 Trails Work Plan  
**Recommended Action:** Approve the 2022 Trails Work Plan
5. Special Events Policy Discussion
6. Letterboxing Update

## OTHER BUSINESS

7. [Quadrant](#) Reports
8. [Next](#) Scheduled Meeting – July 21, 2022

## ADJOURNMENT



# OPEN SPACE CONSERVANCY TRUST BOARD MEETING MINUTES November 3, 2021

## CALL TO ORDER AND ROLL CALL

Chair Hildebrandt called the meeting to order at 5:04 PM

Chair Thomas Hildebrandt, Secretary Geraldine Poor, Lisa Anderl and Trustees Marie Bender, Hillary Ethe, Craig Olson, participated remotely using a video teleconferencing platform by Zoom.

Staff participating remotely included: City Manager Jessi Bon, Deputy Public Works Director Alaine Sommargren, Sr. Management Analyst Merrill Thomas-Schadt

## PUBLIC APPEARANCES:

No public appearances

## REGULAR BUSINESS:

### 1. PROS Plan: 2023-2028 Capital Improvement Program (CIP).

City Manager Jessi Bon presented an update on the CIP projects of the PROS plan. Questions and comments by Trustees were fielded by staff. Trust agreed to recommend preserving the funding that has been presented in the CIP presentation. The board was in consensus in support of exploring expanding the Open Space Conservancy trust board to oversee other island open spaces.

## OTHER BUSINESS

### Next Meeting

The next meeting is scheduled for November 18th, 2021, at 5:00 PM.

## ADJOURNMENT

Meeting adjourned at 6:31pm

---

Thomas Hildebrandt, OSCT Chair

Attest:

---

Andrea Larson, City Clerk



# OPEN SPACE CONSERVANCY TRUST BOARD MEETING MINUTES January 20th, 2022

## CALL TO ORDER AND ROLL CALL

Chair Hildebrandt called the meeting to order at 5:01 PM

Chair Thomas Hildebrandt, Vice Chair Carol Lynn Berseth, Secretary Geraldine Poor, and Trustees, Hillary Ethe, Craig Olson and Councilmember Anderl participated remotely using a video teleconferencing platform by Zoom.

Staff participating remotely included: Deputy Public Works Director Alaine Sommargren, Parks Operations Manager Sam Harb, Natural Resources Project Manager Lizzy Stone

## PUBLIC APPEARANCES:

There were no public appearances.

## REGULAR BUSINESS:

### 1. Approve Minutes of the November 18<sup>th</sup>, 2021, Meeting

Moved by Berseth; Seconded by Olson to:  
**Approve the Minutes of the November 18th meeting.**  
PASSED

### 2. Annual Report to Council and 2022 Annual Work plan

Staff Natural Resources Project Manager Lizzy Stone discussed the draft 2021 annual report.

The Board discussed and provided feedback on the 2022 Annual Work Plan including noting scrivener's errors and suggested a clarification to add "invasive species removal" to the last sentence under forest health. Deputy Director Sommargren mentioned the trails portion of the report might be missing a section of the Ravine trail that might be missing, staff will double check on this.

Chair Hildebrandt discussed the work plan and staff moving to a 4 meeting a year schedule from 6, suggested a vote to accept this change.

Moved by Olson, seconded by Poor to;  
**Move the meeting to the third Thursday of the month each quarter**  
PASSED

Deputy Public Works Director Sommargren presented the 2022 work plan. No further discussion by the Trust regarding the work plan other that they were in agreement with it.

### 3. Trail Network Expansion on Trust properties

Trust board discussed the possibility of adding trails on Trust properties. Trustees discussed maintenance implications, volunteer opportunities and other parks plans that might concern trail expansion. Staff gave input on environmental impacts of opening up new trails in the open space. Another suggestion was that staff could evaluate trails in the park and recommend how they could be re routed or changed to improve connectivity.

**OTHER BUSINESS**

**Quadrant Reports**

Northwest quadrant – Very busy, well used, tree had fallen down and was reported on MI Connect app. Woodpecker trail muddy.

Northeast quadrant – maintenance work has been done well, including muddy trouble spots, ivy starting to come back up trees

Southeast quadrant – ivy starting to come back up trees, trails are well maintained

**Next Meeting**

The next meeting is scheduled for April 21<sup>st</sup>, 2022, at 5:00 PM.

**ADJOURNMENT**

There being no further business to come before the Open Space Conservancy Trust, the meeting was adjourned at 5:52 PM

\_\_\_\_\_  
Thomas Hildebrandt, OSCT Chair

Attest:

\_\_\_\_\_  
Andrea Larson, City Clerk



# OPEN SPACE CONSERVANCY TRUST STAFF REPORT

Item 2  
April 21, 2022  
Regular Business

## AGENDA ITEM INFORMATION

<b>TITLE:</b>	2022 Restoration Work Plan	<input type="checkbox"/> Discussion Only <input checked="" type="checkbox"/> Action Needed: <input checked="" type="checkbox"/> Motion <input type="checkbox"/> Ordinance <input type="checkbox"/> Resolution
<b>RECOMMENDED ACTION:</b>	Approve the 2022 Restoration Work Plan	

<b>STAFF:</b>	Lizzy Stone, Natural Resource Project Manager
<b>COUNCIL LIAISON:</b>	Lisa Anderl
<b>EXHIBITS:</b>	1. 2022 Restoration Maps

## SUMMARY

### BACKGROUND

City staff reports to the Trust board each year on planned forest restoration activities in Pioneer Park and Engstrom Open Space. Restoration activities are performed by professional contractors, volunteers, seasonal crew members, and Natural Resources staff. Restoration work is guided by the Pioneer Park Forest Health Plan and the 10-Year Update to the Open Space Vegetation Management Plan.

### 2022 RESTORATION WORK PLAN

#### Professional Contractors

In 2022, professional contractor work is scheduled in the NE and SE quadrants of Pioneer Park. Work will include the launch of comprehensive weed removal efforts as outlined in the Pioneer Park Forest Health Plan (see maps in Exhibit 1), as well as maintenance and watering of recently installed plants in the NE quadrant. Contracts were awarded for these projects in early April and work is slated to begin in early May and continue through the fall.

- **Comprehensive weed removal** is scheduled in approximately 3.4 acres of the NE quadrant (PP1003a) and 4.9 acres in the SE quadrant (PP0902a1 and PP0902a2). The specifications for this work include ground ivy and herbaceous weed removal, ivy rings, and invasive tree treatment, which progresses many of the restoration metrics set out in the Pioneer Park Forest Health Plan. Even still, this is notably behind the benchmarks outlined in the Plan, which calls for 15.5 acres of ground ivy and herbaceous weed removal in 2021 and 15.5 additional acres in 2022. The significant increase in contracting costs and the increasing complexity of the work required as invasive weeds take hold in these sites have made these benchmarks, originally set in 2015, untenable with the current budget.

- **Watering of new plantings** is slated for one site in Pioneer Park’s NE quadrant (PP1004a). These plants were installed in 2021 over the nearly 4 acre restoration area.
- **Planting maintenance** is scheduled for the same 4 acre zone in Pioneer Park NE (PP1004a). As part of this work, weeds will be cleared in a 4 foot diameter circle around each plant installed in 2021. These plants will also be mulched and inventoried to determine survival rates.

**CONTRACTOR WORK SUMMARY**

Site	Area ID	Project Area (acres)	Restoration Task
Pioneer Park NE	PP1004a	4.0	Water Plantings
Pioneer Park NE	PP1004a	4.0	Planting maintenance
Pioneer Park NE	PP1003a	4.4	Comprehensive Invasive Removal
Pioneer Park SE	PP0902a1	2.6	Comprehensive Invasive Removal
Pioneer Park SE	PP0902a2	2.3	Comprehensive Invasive Removal

Natural Resources Crew

During the 2022 field season, the Natural Resources crew will continue to monitor and treat noxious weed populations on all Trust properties. Noxious weed species slated for monitoring, removal and/or treatment include spotted jewelweed (*Impatiens capensis*) and knotweed (*Polygonum* spp.) in the SE quadrant located within PP1002. Yellow archangel (*Lamiastrum galeobdolon*) will also be treated along private property boundaries within the NW and SE quadrants. Bordering neighbors will be informed of encroaching yellow archangel infestations and notified when treatments occur. Shiny geranium (*Geranium lucidum*) infestations identified in 2020 will continue to be monitored, though they seem to have responded well to treatment and can be managed with manual methods.

The seasonal crew is currently working on establishing ivy rings along the Ravine Trail in the southeast edge of Pioneer Park NE and will continue this work throughout the spring and early summer. They will conduct planting maintenance in select areas of PP1004c in the NE quadrant, as well as ivy rings and invasive tree treatment in the SE quadrant zones PP0904a3 and PP1001. In addition, planting maintenance will be done around the two small plantings installed in 2020 in the NW quadrant at the NW trailhead and at the junction of the Woodpecker and Dogwood trails.

A 2021 pilot project to deter parking along the northern section of 84<sup>th</sup> Ave SE (western edge of NW quadrant) resulted in general support from the community and Trust board to move forward with the project. As a next step in this project, the seasonal crew will assist Parks staff in reclaiming the current compacted parking areas along 84<sup>th</sup> Ave SE and installing more permanent parking barriers.

The Natural Resources Crew will also be available to respond to restoration related issues and tasks as they arise throughout the field season.

Volunteer Stewardship

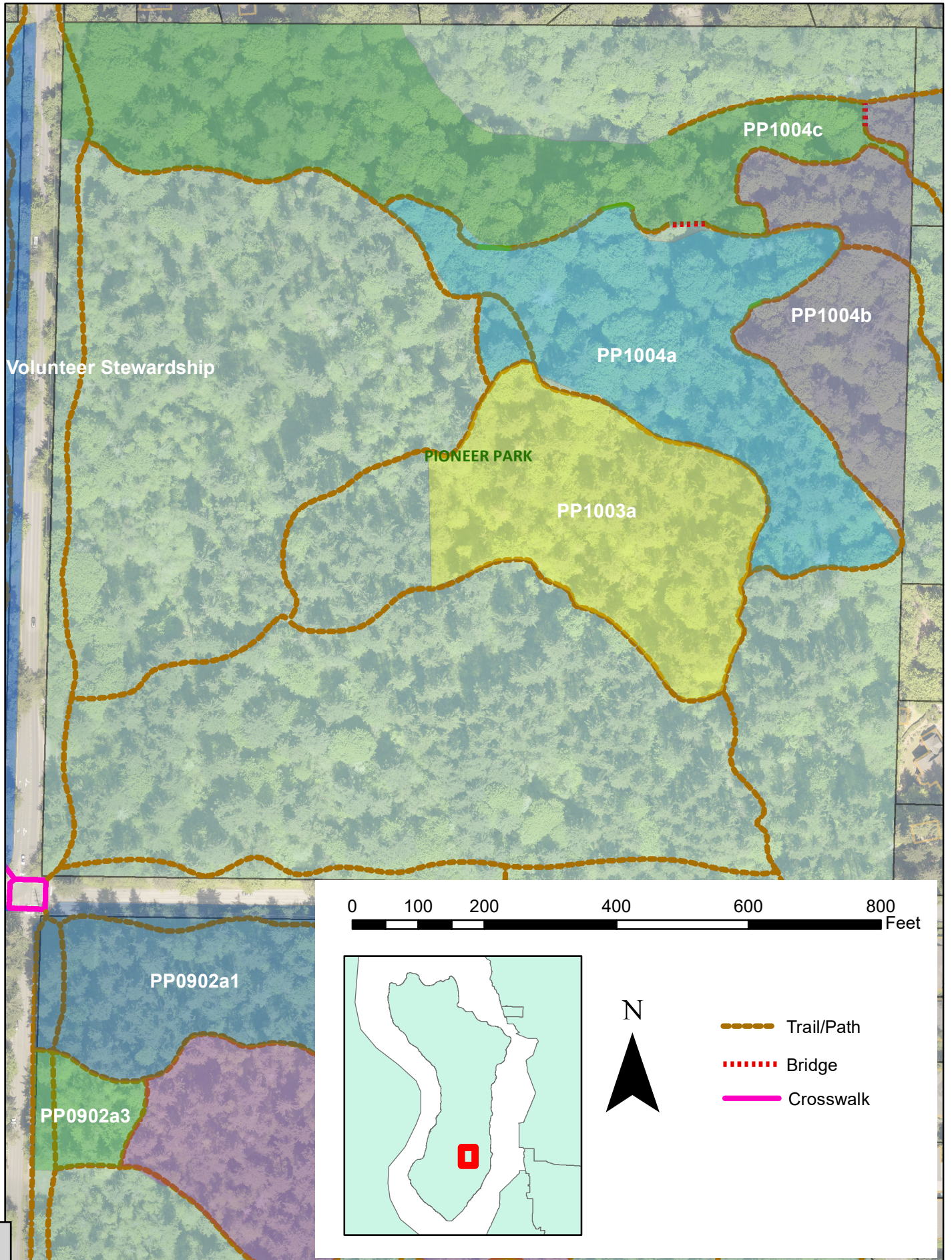
Due to programmatic changes and increased costs for volunteer management with our partners, the City has opted to hire a seasonal volunteer coordinator that will host regular, small volunteer events throughout the island, including on Trust properties. This coordinator will also work to build up the community of regular volunteers and reinvigorate the forest steward program that trains and supports volunteers in stewarding parks on their own. This new seasonal staff member will start in mid-May and work until mid-November.

**RECOMMENDATION**

Approve the 2022 Restoration Work Plan.

# Pioneer Park NE Restoration Plan 2022

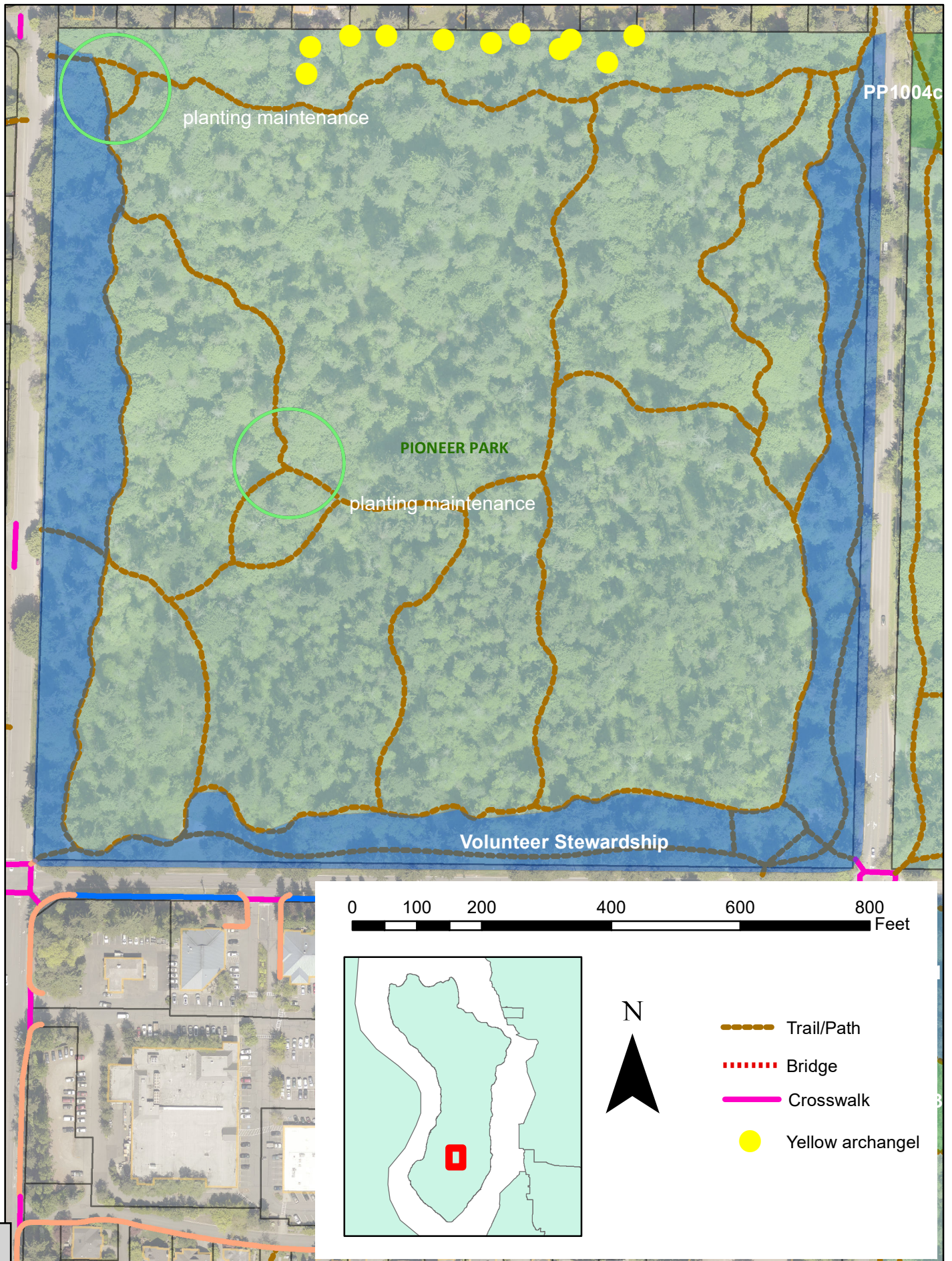
Item 2.





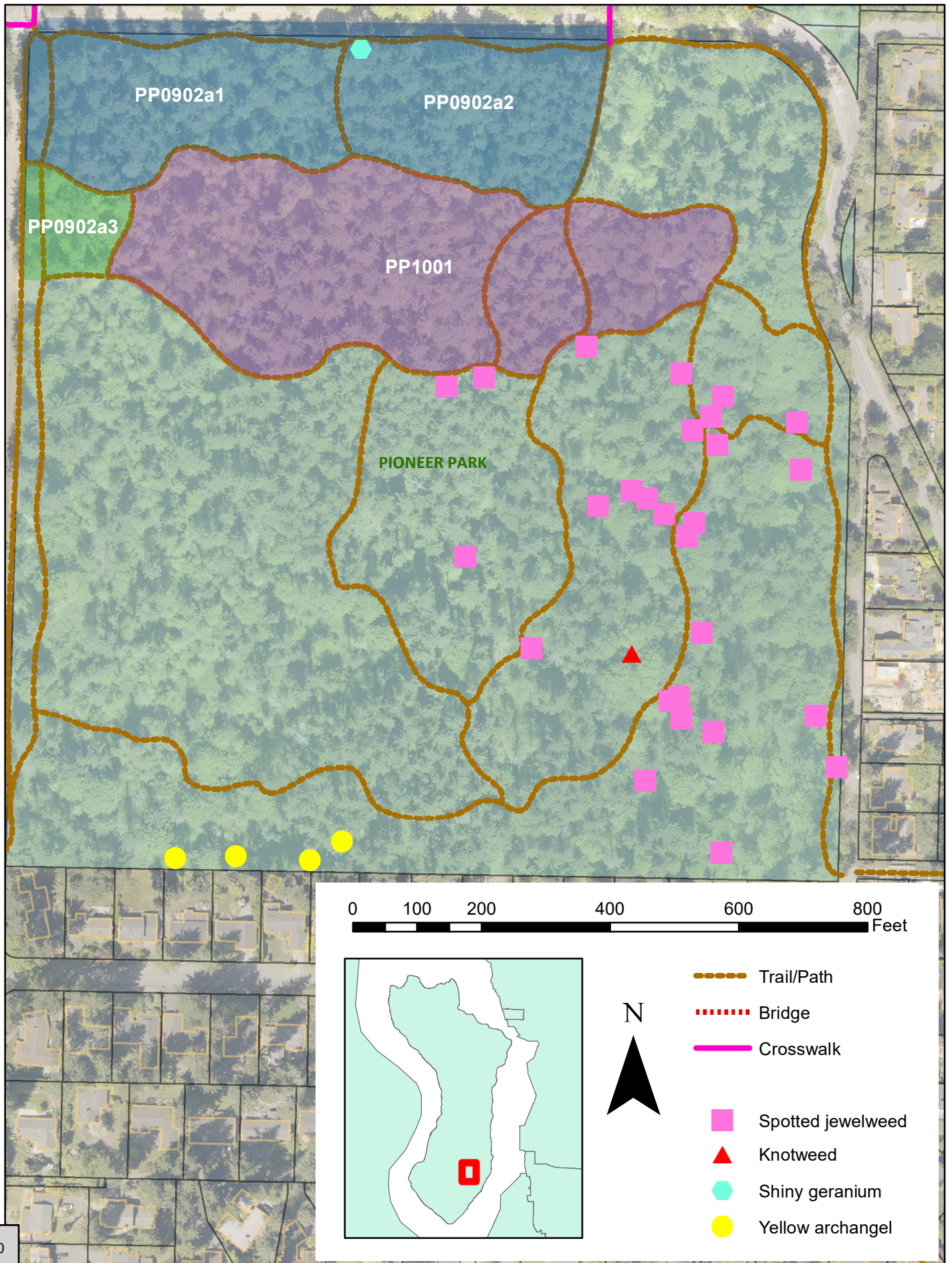
# Pioneer Park NW Restoration Plan 2022

Item 2.



# Pioneer Park SE Restoration Plan 2022

Item 2.





# OPEN SPACE CONSERVANCY TRUST STAFF REPORT

Item 3  
April 21, 2022  
Regular Business

## AGENDA ITEM INFORMATION

<b>TITLE:</b>	Fire Management Plan Revisions	<input type="checkbox"/> Discussion Only <input checked="" type="checkbox"/> Action Needed: <input checked="" type="checkbox"/> Motion <input type="checkbox"/> Ordinance <input type="checkbox"/> Resolution
<b>RECOMMENDED ACTION:</b>	Discuss and approve revised Fire Management Plan.	

<b>STAFF:</b>	Alaine Sommargren, Deputy Public Works Director Lizzy Stone, Natural Resource Project Manager
<b>COUNCIL LIAISON:</b>	Lisa Anderl
<b>EXHIBITS:</b>	1. Revised Appendix M: Pioneer Park and Engstrom Open Space Fire Management Plan

## SUMMARY

### BACKGROUND

The Pioneer Park Forest Management Plan, adopted by City Council in November 2003, includes the Pioneer Park Fire Management Plan (Appendix M), which was intended to guide the City in protecting Trust properties and the surrounding neighborhoods in the event of fire. This plan details the firefighting resources available to address such a fire, summarizes the challenges and mitigating factors involved in fighting a wildland fire on these properties, and outlines actions that the Mercer Island Fire Department and Parks staff can take to minimize fire risk in the park.

In January 2021, Trust Board members reviewed the 2003 Pioneer Park Fire Management Plan with City staff and provided suggestions for updates and edits.

### PLAN REVIEW AND UPDATES

After initial discussions with the Trust Board, City staff consulted with the Mercer Island Fire Department (MIFD) Fire Marshal, Jeromy Hicks, and Interim Deputy Fire Chief, Doug McDonald, to provide details about current mutual aid agreements, updated information about fire hose reach/water availability in the park, and MIFD’s assessment of the challenges that the properties present for wildland firefighting. In addition, Parks staff consulted with King Conservation District’s Forest Stewardship team and reviewed current literature from Washington State Department of Natural Resources, Washington State University Extension, and King County’s Forestry program to update best management practices for mitigating wildfire risk in the wildland urban interface of western Washington.

Staff recognize that several of the action items included in the plan, meant to address areas for improvement, are not reflected in current work plans and practices. While staff has continuously worked with neighboring property owners to improve habitat value along the park boundary, staff has not recently sought to educate homeowners about fire-wise landscaping techniques or worked with them to reduce firewood and debris adjacent to the park. Such educational outreach can be prioritized in the coming year.

## **RECOMMENDATION**

Discuss and approve revised Fire Management Plan.

## 23. Appendix M: Pioneer Park and Engstrom Open Space Fire Management Plan

### 23.1 Introduction

Pioneer Park and Engstrom Open Space are susceptible to forest fires of natural and human origin. The risk can be partially managed by planning for an occurrence and intervening to mitigate risk factors before such an occurrence. This plan does both within the constraint of preserving the native forest on Trust properties and using the resources currently available to the City of Mercer Island. The goal of this plan is to guide City departments to better protect Pioneer Park, Engstrom Open Space, and the surrounding neighborhood from fire. It begins by assessing current resources and proposing certain goals for fire management, then describes actions for mitigation of risk factors and improving response to fire occurrences.

### 23.2 Definitions

- **Automatic Aid:** Recourses that are pre-determined and automatically dispatched for incidents outside of their jurisdictional boundaries.
- **Brush Unit:** Any light, mobile vehicular unit with limited pumping and water capacity.
- **Handline:** Hose lines that are less than 2.5" in diameter used for fire extinguishment.
- **Mutual Aid:** Pre-determined resources that are mutually used across jurisdictional boundaries.
- **Incident Command:** A standardized on-scene emergency management concept specifically designed to allow its users to adopt an integrated organizational structure equal to the complexity and demands of single or multiple incidents, without being hindered by jurisdictional boundaries.
- **Incident Commander:** An individual who is properly trained and currently assigned to the overall supervision of an incident.
- **Inter-mix Areas:** The area undergoing a transition from agricultural and forest uses to urban uses.
- **Structure Engine:** A fire apparatus designed to carry tools, supplies, water, and pump capable responding to and mitigating structure fires.
- **Supply Line:** Larger diameter hoses designed to supply large amounts of water to/from pumps to smaller fire suppression hose lines.
- **WUIC:** Wildland Urban Interface Code.

### 23.3 Resource Assessment

#### Firefighting Resources

The Mercer Island Fire Department (MIFD) would be the first response to fire occurrence. MIFD has seven firefighters stationed on the island at any one time. Three are located at Fire Station 92, which is located on the south side of SE 68<sup>th</sup> St, across from Pioneer Park's NW Quadrant.

The remaining firefighters are located at Fire Station 91, located approximately 3 miles north of Pioneer Park. Either station might respond to a fire based on the battalion's availability. The Incident Commander would make the decisions about fighting a fire based on the situation.

Washington State Department of Labor and Industries allows firefighters in structural protective clothing to work a maximum of one hour on a wildfire (WAC 296-305). First response by on-duty staff could be followed by calling out for mutual aid from adjacent jurisdictions. If required, off-duty staff could be called to report for duty as the Incident Commander deems necessary, and dependent on the duration of the incident.

Mutual aid agreements with other jurisdictions allow MIFD to request fire units from other fire departments. Bellevue, Kirkland, Woodinville, Redmond, Seattle and Eastside Fire and Rescue have resources that would be useful for wildland fire fighting; these Departments have firefighters who are wildland firefighting certified ("Red Card") to fight this type of fire, and who would respond under a mutual aid request. These resources would likely be needed depending on the extent of a fire.

Washington State Department of Natural Resources (DNR) also has the capability to fight wildland fires. They may be called in, if necessary, when local and mutual aid resources are exhausted. DNR offers many resources most fire departments do not have, such as inmate crews, wildland engines, and experienced overhead (aerial) support.

### **Hydrants and Hose Access**

Pioneer Park and Engstrom Open Space have fire hydrants along the perimeter roads. Other boundaries also have hydrants available through private property. Hose that is normally used in structural firefighting is too bulky and cumbersome to be used in wildland firefighting, but can be used to maintain and support the supply of water to smaller handlines. MIFD has 600 feet of wildland hose (single jacket, lightweight) specific to wildland firefighting available and 1000 feet of 4" traditional structure hydrant supply line for hydrant hook-up on each of its units.

However, topography and trail access reduce the actual distance that water can be conveyed into the park by fire hose. Realistically, 500 feet is the maximum distance that water can be reliably conveyed into the park using conventional tactics. While it is possible to extend the 500 feet further, additional resources and personnel would be needed. Figure 1 illustrates that center of each quadrant and some parts of the ravine in the Northeast quadrant are more than 500 feet from an available hydrant, leaving significant areas of the park without access to water in case of a fire. During these situations other tactical options should be considered such as hand crews and helicopter operations.

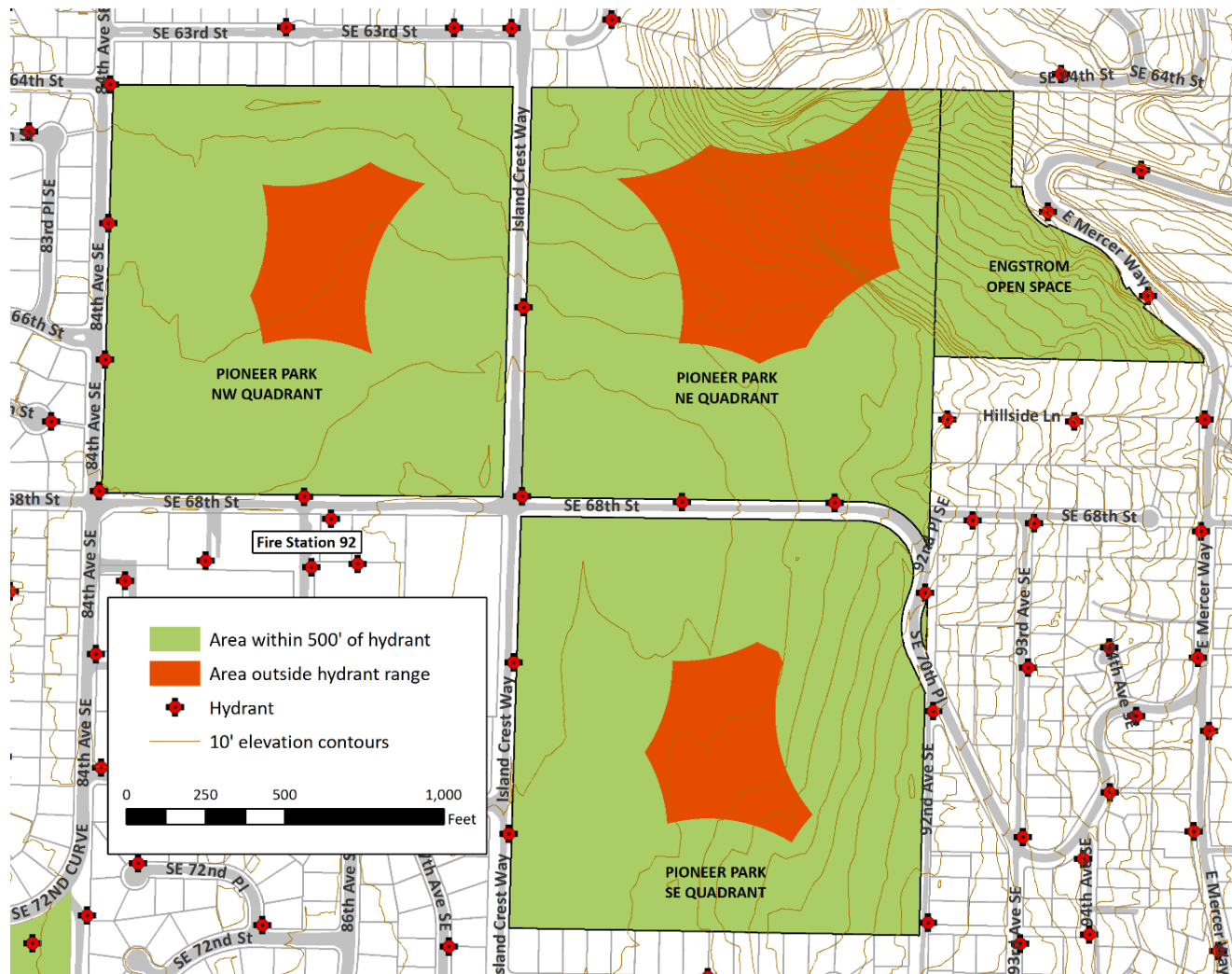


Figure 1: Map showing hydrant locations and coverage in Pioneer Park and Engstrom Open Space.

### 23.4 Goals and Priorities

Common fire mitigation strategies used in dry forests, such as thinning or understory clearing, do little to mitigate fire risk in the dense, fuel-rich forests of western Washington<sup>1</sup>. In naturally high-biomass ecosystems like Pioneer Park and Engstrom Open Space, the most effective approaches to mitigating fire risk are to 1) minimize ignition sources, 2) quickly detect and

1. Joshua S. Halofsky et al., "The Nature of the Beast: Examining Climate Adaptation Options in Forests with Stand-Replacing Fire Regimes," *Ecosphere* 9, no. 3 (March 2018): e02140, <https://doi.org/10.1002/ecs2.2140>;

Matt Provencher, "Wildfires in Western Washington: Less Frequent, but No Less Dangerous," *Forest Stewardship Notes* (Washington State University Extension; Washington State Department of Natural Resources, February 1, 2021), <https://foreststewardshipnotes.wordpress.com/2021/02/01/wildfires-in-western-washington-less-frequent-but-no-less-dangerous/>.

suppress fires that do occur, 3) maintain a healthy, biodiverse ecosystem that can be resilient in the face of disturbance, and 4) maintain defensible buffers around structures and buildings.<sup>2</sup> The goals of the Pioneer Park Forest Management Plan (PPFMP) are directed toward maintaining a healthy, biodiverse native forest with vegetated buffers and abundant downed wood for habitat and tree regeneration. The goals outline in the PPFMP are generally in line with expert recommendations. However, they also suggest that additional effort is needed to reduce ladder fuels and dense, dead vegetation where park boundaries overlap with a neighbor's defensible space.

Prescriptions for wildland fire response should include the early identification, as well as early request and allocation of resources. The size and location of the hydrant system surrounding Trust properties, as well as the immediate availability of a highly-trained, well-equipped firefighting staff, allow for rapid suppression of fires when they do arise, making these forests distinct from typical wildland fire situations.

The priorities for MIFD response in any situation are (in priority order) life, property, and incident stabilization. Protecting lives and adjacent homes would be the overriding concern of the Incident Commander in a forest fire situation. A large fire in the park could burn sizable portions of the park before it could be brought under control. There is also the risk of fire extending outside the park boundaries leading to a potential conflagration. Additional risk is assumed if a fire in the park reaches the crowns of a cluster of trees, particularly in warm, dry weather, in which case, providing a defensive line of fire crews to protect fire from reaching homes on the park perimeter would be a top priority. While uncommon in suburban/urban intermix areas, it should be a consideration of the fire response crews and pre-incident planning. Early identification and early resource allocation is imperative.

### **23.5 Evaluation**

Pioneer Park and Engstrom Open Space are susceptible to fire primarily from human behavior. Historical incidents of campfires and fireworks use in the park are concerns. The forest is particularly prone to drought during dry years because the soils are well drained. Woody debris and organic "duff" are abundant in the park, creating fuel in dry seasons. Houses back up to the park, with minimal distances between structures and stands of dense vegetation. The interior of the park is not accessible to fire vehicles because the trails are too narrow for large fire apparatus to traverse.

However, the size of the park and the cooler, moister climate of western Washington reduce risk in comparison to eastern Washington forest landscapes. The quadrants are surrounded by a network of fire hydrants that can supply water to the park perimeter and significant portions

---

<sup>2</sup>Halofsky et al., "The Nature of the Beast".;

Brian Harvey, Daniel Donato, and Joshua Halofsky, "Fighting Wildfires in Western WA Requires Different Approaches | Crosscut," crosscut.com, July 14, 2021, [https://crosscut.com/opinion/2021/07/fighting-wildfires-western-wa-requires-different-approaches](https://crosscut.com/opinion/2021/07/fighting-wildfires-western-wa-requires-different-approaches;).;

Provencher, "Wildfires in Western Washington".



of the interior. Fire Station 92 is located across the street from the park. The staff of the MIFD is highly trained and experienced in incident response. Furthermore, mutual aid agreements with other cities and the availability of DNR crews would enable the City to respond and initiate mitigation and control measures, and provide specialized capabilities as conditions warrant.

Limitations in response include the difficulty of conveying water to the center portion of a quadrant, difficult terrain in certain areas of the park, and limited firefighting resources. For certain hydrants, vegetation poses a barrier to ready trail access, while other hydrants have no trails that lead into the park. City firefighters have not received training specific to the situation in Pioneer Park and Engstrom Open Space. These limitations are certainly addressable (See section 23.6 *Action Items*).

In most fire scenarios within the wooded areas, MIFD will likely lay hose lines into the interior of the park and wait for the fire to reach their location. One advantage here is that the park trail system provides reasonable access, except in the NE corner of the NE quadrant, where the terrain is untenable.

	Safety Factors	Risk Factors
Fire Occurrence	<ul style="list-style-type: none"> <li>Well-developed trail system</li> <li>Extensive fire hydrant network around park perimeter</li> <li>Nearby location of Fire Station 92</li> <li>Trained and coordinated firefighters</li> <li>Mutual aid agreements with other cities</li> <li>Availability of DNR resources</li> <li>Incident Management protocols for all possible fire scenarios (NIMS)</li> </ul>	<ul style="list-style-type: none"> <li>Narrow trail widths</li> <li>Some hydrant locations are not close to trail access points</li> <li>Lack of water conveyance to the interior of the park</li> <li>Lack of firefighter training specific to Trust properties</li> <li>Limited <i>initial</i> firefighting resources</li> <li>Hilly terrain and shrubby understory vegetation in certain quadrants reduces ability to lay hose lines close to the seat of a fire</li> </ul>
Fire Mitigation	<ul style="list-style-type: none"> <li>Street buffers</li> <li>Low summer temperatures</li> <li>Winter rainfall</li> <li>Low summer wind speeds</li> <li>Small land area</li> <li>Cooler, covered canopy</li> <li>Moisture of ground materials</li> </ul>	<ul style="list-style-type: none"> <li>Seasonal low rainfall</li> <li>Well-drained, drought-prone soils</li> <li>Woody debris and “duff” (ground fuel load)</li> <li>Campfire activity</li> <li>Fireworks use in the park</li> <li>Minimal backyard buffers</li> <li>Lack of supervision</li> </ul>

Figure 2: Case-specific factors in Fire Occurrence and Fire Mitigation at Pioneer Park and Engstrom Open Space

## **23.6 Vegetation Management Plan**

The Pioneer Park Forest Management Plan outlines the City’s approach to maintaining a healthy, resilient forested ecosystem. Strategies described in the plan include preserving existing canopy, aiding natural regeneration by planting habitat- and climate- adapted species, and removing invasive plants to improve biodiversity and prevent overcrowding.

In addition to improving the health and resiliency of forests throughout the park, City staff will work with participating neighbors to cooperatively develop a plan for managing park boundaries that meets forest management and fire management goals. City staff will recommend ways the forest edge can be managed to establish a defensible space in areas where Trust property is within 30 feet of a home or structure<sup>3</sup>. Site-specific recommendations will be developed in accordance with resources and input from King Conservation District and King County Department of Natural Resources and Parks. Some examples of these recommendations are to 1) remove dense patches of dead vegetation, 2) ensure any dead trees that are leaning against structures or other trees are felled and in full contact with the ground, 3) prune overhanging branches to create a 6-10 foot buffer between any structures and the canopy.

## **23.7 Action Items**

### **Fire Occurrence**

1. MIFD will offer training for pertinent to the Pioneer Park and Engstrom Open Space situation. The DNR Western Washington Interagency Training Committee provides standard training on wildfire situations.
2. MIFD will familiarize staff with Pioneer Park and Engstrom Open Space and evaluate its existing equipment for anticipated incidents in the park.
3. MIFD will develop a list of desirable basic firefighting hand tools to be stored in fire caches at Stations 91 and 92.
4. Both departments will further research the availability of DNR for fire response and determine what conditions may warrant their involvement.
5. MIFD will work with other local jurisdictions to ensure the establishment and maintenance of Automatic Aid and Mutual Aid agreements.
6. MIFD will provide annual refresher training to fire crews on initial wildland fire response.

### **Forest Fire Mitigation**

1. Parks staff will conduct an educational campaign about fire-wise landscaping with adjacent property owners using existing educational materials.

---

<sup>3</sup> King County Department of Natural Resources and Parks, “Be Firewise: Create the First Line of Defense,” n.d., <https://your.kingcounty.gov/dnrp/library/water-and-land/forestry/forestfire/FirewiseBrochure-rev.pdf>.

2. Parks staff will work with interested park neighbors to establish a defensible space and improve habitat value along the residential perimeter of the park.
3. Parks staff will patrol remote locations of the park during summer months to identify and address potential human-cause ignition sources.
4. Parks staff and MIFD will develop a plan to improve trail access into the park for a narrow vehicle and create access points where the trail system does not connect well with existing hydrant locations.



# OPEN SPACE CONSERVANCY TRUST STAFF REPORT

Item 4  
April 21, 2022  
Regular Business

## AGENDA ITEM INFORMATION

<b>TITLE:</b>	2022 Trails Work Plan	<input type="checkbox"/> Discussion Only <input checked="" type="checkbox"/> Action Needed: <input checked="" type="checkbox"/> Motion <input type="checkbox"/> Ordinance <input type="checkbox"/> Resolution
<b>RECOMMENDED ACTION:</b>	Approve the Pioneer Park and Engstrom Open Space 2022 Trails Work Plan	
<b>STAFF:</b>	Andrew Prince, Trails and Urban Forestry Specialist	
<b>COUNCIL LIAISON:</b>	Lisa Anderl	
<b>EXHIBITS:</b>	1. Pioneer Park and Engstrom Open Space 2022 Trails Work Plan	

## SUMMARY

During the winter and spring, staff evaluate the condition of trails throughout Pioneer Park and Engstrom Open Space and create a draft work plan to address issues that impact the use and sustainability of the trails. Typically, City staff report to the Trust Board on planned trail maintenance and construction activities on Trust properties in spring or early summer. Several minor trail improvements on the work plan are already in progress.

### 2021 TRAIL WORK SUMMARY

In 2021 staff was able to make up some ground that was lost in 2020 due to short staffing and pandemic stay-home-stay-safe orders. Major trail resurfacing was undertaken in SE quadrant with approximately 1,400 linear feet of trail resurfaced. Approximately 160 tons of gravel were used, and 350 hours of staff time were required to complete the project. Additionally, substantial corrective pruning was done on beaked hazelnut in all quadrants as well as minor repairs to the ravine trail in SE. New non-skid material was added to the boardwalk in Engstrom.

### 2022 TRAIL WORK PLAN SUMMARY

In April 2022, the City hired two Natural resources seasonal staff to help with trail and restoration work in MI parks and open space, including trail repairs and maintenance projects in Pioneer Park and Engstrom Open Space. This is a smaller seasonal staff than typical due to lack of qualified applicants and may affect the amount of work we are able to accomplish. Additionally, the Natural Resources team has a large trail construction project in Luther Burbank Park that will affect the amount of work accomplished in Pioneer Park.

The following projects are likely to be completed in 2022. Several of these projects are already underway or have been completed.

- Ravine trail repairs
- SE Quadrant water bar maintenance
- Bike team volunteer event

See Exhibit 1 for the scope and timeline for each project.

## **RECOMMENDATION**

Approve the Pioneer Park and Engstrom Open Space 2022 Trails Work Plan.

## Exhibit 1: Pioneer Park and Engstrom Open Space 2022 Trails Work Plan

---

### NORTHWEST QUADRANT

---

#### Muddy Trail Patching

The below photo shows trail widening caused by walkers trying to avoid stepping in the mud. The Northwest quadrant is particularly susceptible to this problem as there is very little topography to turn water off of the trail. Currently we have one volunteer event scheduled for May 5<sup>th</sup> with the MI Mountain Bike Club to address these issues. Hopefully we will be able to add more events like this with the onboarding of the new position of Volunteer coordinator. Parks staff may also address problem areas as time allows.



### NORTHEAST QUADRANT AND ENGSTROM OS

---

#### Ravine Trail Repairs

The highest section of the Ravine Trail, which overlooks Engstrom Open Space, is actively eroding and in need of repairs. Steep cross slopes make this trail extremely difficult to maintain. Trail surface regrading has been ongoing and work will continue as time allows.



*(Above) Before and after re-treading. (Below) Rotten stair needing replacement.*



## SOUTHEAST QUADRANT

---

### Water Bar Cleaning and Replacement

Parks Natural Resources staff have been clearing water bars in the SE Quadrant as well as replacing rotten water bars.

Retreading short sections of trail in the SE quadrant is also underway.



### Further Discussion: Adding/rerouting trail in Pioneer Park

In previous OSCT meeting there was some discussion on the topic of adding more trail to pioneer park

- More trail does not necessarily equal better trail system
- Difficult terrain features and current trail layout have high maintenance requirements
- Hard to accomplish much without major re-design
- Is a better layout possible? Yes, discovery and planning is a major project, construction an even bigger project







# 2022 Trails Work Plan

Open Space Conservancy Trust  
April 21, 2022

# Summary of 2021 Trail Work

- Major trail resurfacing in PP SE
- Major pruning to keep shrubs out of trail corridors
- New Non-skid material Engstrom Open Space
- Minor repairs Ravine trail



# Northwest Quadrant



## Gravel Muddy sections

- May 5<sup>th</sup> volunteer event with Mercer Island Mountain Bike Team
- Potential future volunteer event
- Parks staff



# Northeast Quadrant & Engstrom OS

## Ravine Trail repairs

- Retreading some trail
- Replace rotten stairs
- Importing soil or gravel to fill muddy spots in Engstrom



# Southeast Quadrant

## Water Bar Cleaning and Replacement



# Additional Discussion



## New Trail Construction/Rerouting trail PP

- More trail does not necessarily equal better trail system
- Difficult terrain features and current trail layout have high maintenance requirements
- Hard to accomplish much without major re-design
- Is a better layout possible? Yes, discovery and planning is a major project, construction an even bigger project









## Special Events in Pioneer Park and Engstrom Open Space

---

Open Space Conservancy Trust owns Pioneer Park and Engstrom Open Space for the purpose of preserving and protecting them as natural ecosystems. Special events in Pioneer Park and Engstrom Open Space may cause long-term or cumulative damage to the ecosystem when heavy trail use or off-trail use occurs, either as part of the event or incidental to the event. The goal of this policy is to prevent damage to the ecological resources contained within these properties.

At the same time, the Trust seeks to encourage the use of its properties by the citizens of Mercer Island. The City of Mercer Island Parks and Recreation Department acts on behalf of the Trust. The purpose of this policy is to provide policy direction to the Parks and Recreation Department when special events in Trust properties are being proposed. This policy provides Parks and Recreation staff guidance to allow the public reasonable access to the Trust properties for special events while regulating special event activities to prevent damage. This policy is supplemental to the Parks and Recreation Special Events Policy for events that occur in Pioneer Park and Engstrom Open Space only.

1. The following are criteria that are used to determine what conditions or restrictions may be placed on special events in Pioneer Park and Engstrom Open Space.
  - a. If any of the following are expected, then the event requires a Special Event application, review and permit:
    - i. The group size is more than 50 people
    - ii. The event is timed or competitive
    - iii. The event involves trail use other than walking
    - iv. The group will occupy a fixed portion of the park for more than 10 minutes
    - v. Any participant may go off maintained trails or turf areas at any times
    - vi. The group will block any trail or inhibit the safe passage of park users
2. Special Event applications that are located in Pioneer Park and/or Engstrom Open Space may be subject to the following reviews:
  - a. Review by the Parks Natural Resources Coordinator or designee
  - b. Supplemental information, including maps and details showing environmental protection measures the applicant is proposing. Examples of such submittals can be provided by Parks and Recreation staff.
  - c. A presentation to the Open Space Conservancy Trust at one of its regular bimonthly meetings.
3. The City of Mercer Island Parks and Recreation Department reserves the right to deny a special event application if it determines that an event will negatively impact Pioneer Park and/or Engstrom Open Space. This includes poor performance or unpaid damage claims on previous special events. The applicant may request that the Open Space Conservancy Trust review the determination of Parks and Recreation staff.
4. Special events may be subject to the following conditions:

- a. Temporary environmental protection features, such as fencing, plywood, ground covering, erosion control fabric, etc.
- b. Site monitors at areas expected to be impacted to prevent off-trail use. The applicant may propose to provide site monitors, but Parks and Recreation reserve the right to require its own staff or paid independent staff to provide monitoring. Parks and Recreation staff cost \$37/hour with a 3 hour minimum.
- c. Damage deposit proportional to the size of the group and the duration of activity, as follows:
- d.

		Number of participants			
		50-99	100-149	150-199	200-249
Event length	1 hour	\$500	\$1,000	\$1,500	\$2,000
	2 hours	\$600	\$1,200	\$1,800	\$2,400
	3 hours	\$700	\$1,400	\$2,100	\$2,800
	4 hours	\$800	\$1,600	\$2,400	\$3,200

Any numbers or times in excess of what is listed will be calculated proportionally. These are 2013 dollars and the fee schedule will be adjusted to keep pace with inflation.

- e. Any damage that occurs that is not covered by the damage deposit will be charged to the event organizer. Restoration costs typically run three to five dollars per square foot in 2013 dollars.
- f. Restoration plan – a schematic repair plan for anticipated impacts, including trail damage, vegetation damage, soil erosion and soil compaction.

5. Areas of concern

- a. **The ravine in the northeast quadrant.** This terrain is steep and erodible. The trails are single track for the most part. Passing is difficult without going off-trail. Going off trail is likely to cause erosion and plant damage. Large and competitive events are expected to have high impact. Monitoring is typically required for events in this area.
- b. **The southeast quadrant.** These trails are shared by horseback riders. Passing equestrians is difficult without going off trail. Coordination with the Saddle Club is required.
- c. **Secondary trails, all quadrants.** Secondary trails are single track trails for the most part. Passing is difficult without going off-trail. Some trails are poorly drained and users tend to walk on the edges, which causes widening. Best used in the dry season for large group events. Monitoring may be required.
- d. **Picnic area across from shopping center.** This is a popular entry point to the park, and can get consistent traffic from park users throughout the course of an event. Timed or competitive events may need monitoring and/or signage to alert park users to the event. Blocking access to this area is not permitted.