April 2023

Cheasty Mountain Bike Trail Monitoring Baseline Summary Report

Seattle
Parks & Recreation

LOCAL RESTORATION
EARTH CORPS
GLOBAL LEADERSHIP

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Cheasty Mountain Bike Trail Monitoring Baseline Summary Report

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All photos in this report by Nelson Salisbury -

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1. Introduction

Seattle Parks and Recreation contracted with EarthCorps in 2020 to develop and implement a monitoring plan prior to the construction associated with the Cheasty Mountain Bike/Pedestrian Trail Pilot Project at the Cheasty Natural Area in South Seattle. The proposed monitoring plan was intended to track general changes to the vegetation as a direct result of trail construction throughout the 3-year pilot project timeline. Five vegetation monitoring plots were established prior to trail construction in order to obtain representative baseline vegetation structure and composition data.

SPR identified five locations directly along the proposed trail corridor where baseline plots would be located. In November 2020 prior to trail construction, EarthCorps ecologists established and collected data on five 1/10th acre plots based on mapped locations provided by SPR (Appendix E). Plot centers were established along flagged lines indicating the proposed trail locations. Plots were proposed to be used to both collect baseline vegetation information prior to trail construction as well as provide locations for repeat monitoring for three years following trail construction. Two protocols were developed in order to meet these separate metrics. One protocol was used to show full plot vegetation changes over the course of trail construction (visited twice, once before trail construction (2020) and once at the end of the monitoring period three years following trail construction (2025)). A separate protocol was developed to show qualitative changes to the vegetation adjacent to the trail post-construction (monitored quarterly for three years following construction (2023-2025)).

The following report summarizes the monitoring protocols and summary results of initial data collection. See maps 1 and 2 for locations of monitoring plots and trail tread-depth measurements. The Appendices include photo monitoring and other data as indicated in the report.

The following table describes the proposed monitoring year designations for this three-year reporting period:

Baseline (pre-construction):	2020
Trail construction:	2021
Trail construction continued:	2022
Year 1 monitoring:	2023
Year 2 monitoring:	2024
Year 3 monitoring:	2025

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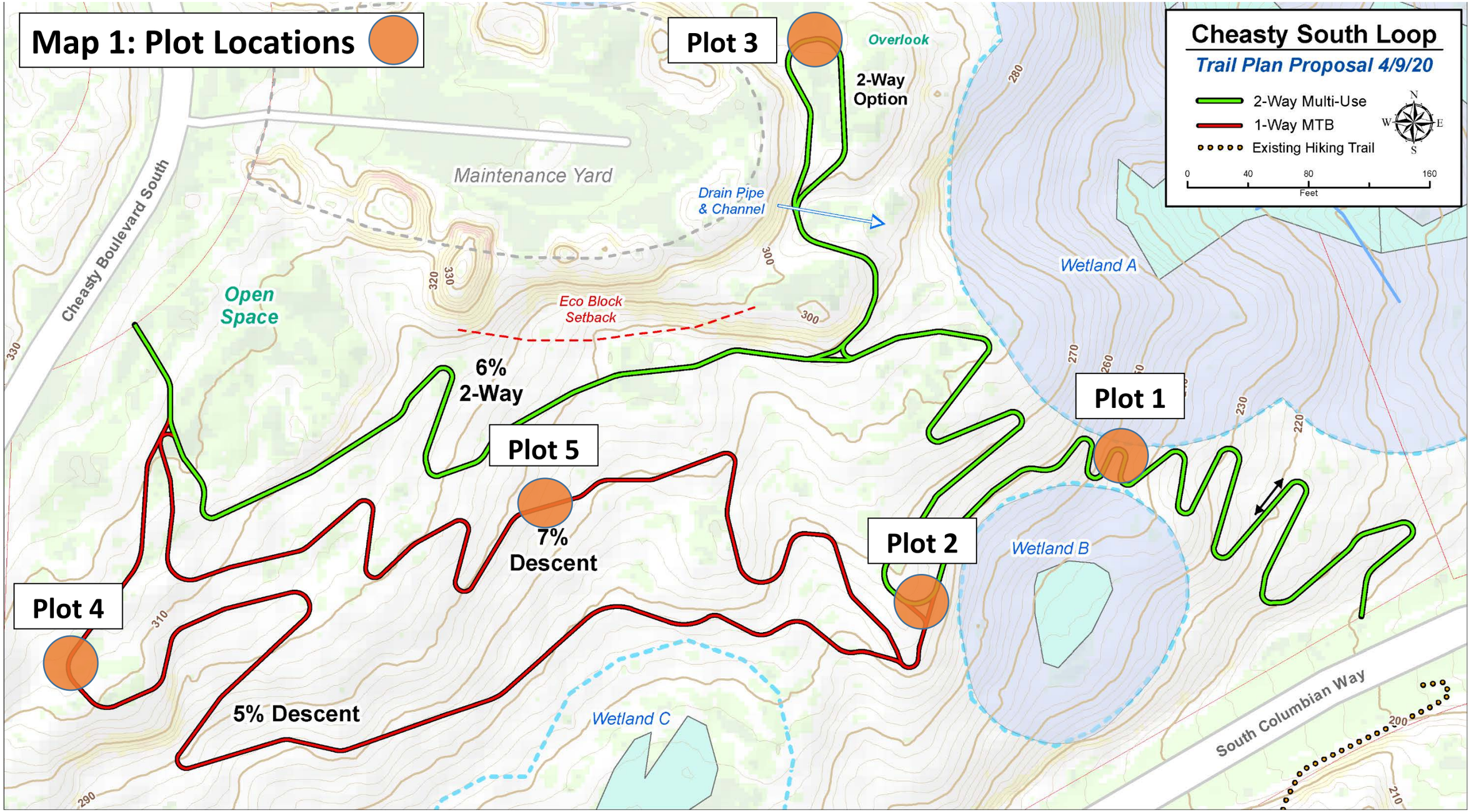
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2-Way
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Cheasty South Loop
Trail Plan Proposal 4/9/20
2-Way Multi-Use
1-Way MTB
Existing Hiking Trail
0
40
80
160
Feet
N
W
E
S
Maintenance Yard
Drain Pipe
& Channel
Cheasty Boulevard South
Open
Space
Eco Block
Setback
Wetland A
6%
2-Way
Plot 5
Plot 1
7%
Descent
Plot 2
Wetland B
Plot 4
5% Descent
Wetland C
South Columbian Way
330
320
300
280
270
260
230
220
310
290
200
210

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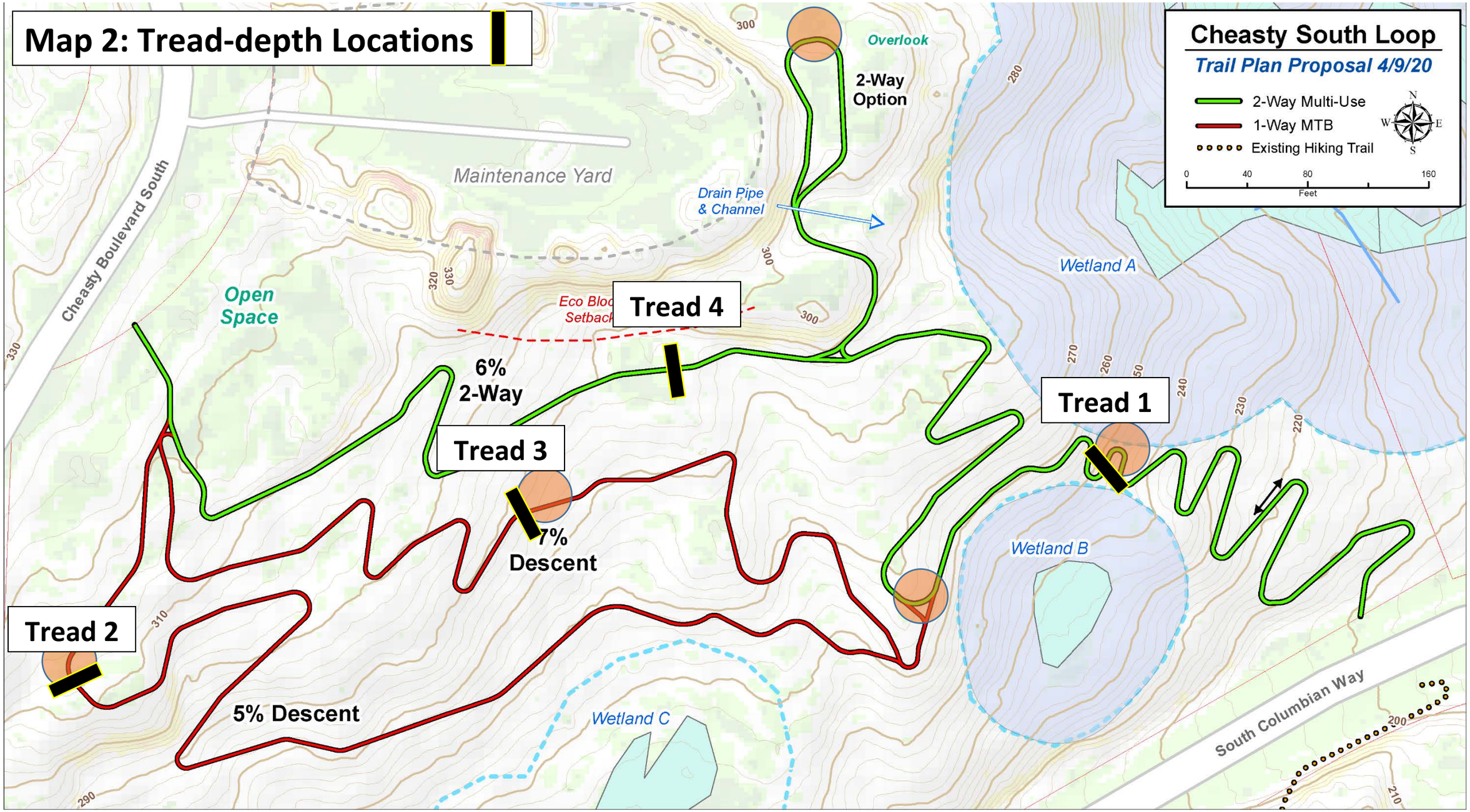
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Cheasty Boulevard South
Open
Space
Eco Bloc
Setback
Tread 4
6%
2-Way
Tread 3
7%
Descent
Tread 2
5% Descent
Tread 1
Wetland A
Wetland B
Wetland C
South Columbian Way
300
280
330
320
310
290
270
260
250
240
230
220
210
200

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2. Full Plot - Pre-Construction Vegetation Monitoring Protocols

Five 1/10th acre plots were established based on guidance provided from SPR (Map 1). Plots were established and baseline data was collected over 2 days (November 12 and 13, 2020). Data collection was modeled off of standardized forest monitoring protocols used by SPR and the Green Seattle Partnership since 2010. These protocols were developed to:

- Provide a quantitative and objective way to evaluate restoration progress.
- Allow for comparisons and generalizations across sites, parks, and municipalities over time.
- Improve our understanding of the effectiveness of restoration techniques, providing information to adapt management techniques when necessary.

The monitoring data collection methods collect the following information:

- Size and quantity of trees
- Extent of invasive plant cover
- Cover of shrubs, vines, and ground cover
- Size and quantity of dead snags and coarse woody debris
- Site characteristics, including soil type, aspect, and slope

Full protocols can be downloaded here: **GSP Ecological Assessment Efforts - Green Seattle Partnership**

These protocols identify and quantify the general cover of native and non-native plant species present within the plot. The data is collected in two general categories: Tree density (each tree is individually enumerated within the plot) and non-tree (shrub, herbaceous, and vine) species cover (each species cover is estimated within the plot). In addition, snags (standing dead wood) and coarse woody debris (fallen dead wood), are enumerated and quantified.

Baseline data can be found in the Appendices and associated Access Database. These five plots will be re-monitored in the fall of 2025 to compare overall changes to the vegetation over the course of the reporting period. Plot centers were temporarily demarcated with five wooden stakes placed at the center and four cardinal edges of the 1/10th acre circular plots. In addition, two reference objects were identified to aid in plot relocation. Photo monitoring took place from the center of each plot looking in each of the four cardinal directions resulting in a total of four photos per plot.

2.1. Full Plot Data Summary

Overall trends from the 2020 baseline data show that the forest canopy is dominated by bigleaf maple (*Acer macrophyllum*) with small amounts of red alder (*Alnus rubra*) and black cottonwood (*Populus trichocarpa*) (Table 1). Common regenerating native trees include Douglas fir (*Pseudotsuga menziesii*), western red cedar (*Thuja plicata*) black cottonwood,

bigleaf maple, and western hemlock (*Tsuga heterophylla*) (Table 2). It was observed that most (if not all) of the regenerating conifer trees were installed during previous habitat restoration efforts.

The most densely encountered non-native tree species was Sycamore maple which was only found in Plot 4. Other non-native regenerating trees that pose a concern include English holly (*Ilex aquifolium*), sweet cherry (*Prunus avium*), Norway maple (*Acer platanoides*), and cherry laurel (*Prunus laurocerasus*).

Dominant native shrub species found across all plots include low Oregon grape (*Mahonia nervosa*), beaked hazelnut (*Corylus cornuta*), and sword fern (*Polystichum munitum*). Other commonly encountered species include osoberry (*Oemlaria cerasiformis*), creeping blackberry (*Rubus ursinus*), and salal (*Gaultheria shallon*). A total of 62 native and shrub, herb, and grass species were identified. See Appendix D for full species record tables.

3. Post-construction Line-Intercept Vegetation Monitoring Protocols

Following trail construction (which was completed during the summer of 2022), EarthCorps ecologists revisited four of the five baseline vegetation monitoring plots and collected post-construction vegetation data on areas adjacent to the trail within the boundary of each 1/10th acre circular plot. Line transects were established in areas adjacent to the trail surface in order to develop repeat locations were vegetation can be monitored throughout the reporting period. Each transect is scheduled to be revisited on a quarterly basis through Q4 of 2025. The line-intercept method was chosen to collect as-built vegetation data adjacent to the trails within plots as a way to quantify current conditions at the time of this "new baseline" monitoring event.

Transects were located within each plot in a representative location generally perpendicular to trail crossings and aiming for at least 6 feet on either side of trail. Some plot transects were laid out to cut across multiple sections of trail while other plots had multiple transect established. The sum of all transects were combined for analysis. The purpose of these transects is to objectively measure changes in vegetation characteristics associated with trail-edge disturbances or other dynamics over time. Transect ends and other locations were marked with wooden stakes for relocation purposes. Compass bearings and other location notes were recorded. Data was collected by EarthCorps on 11/01-02/2022 on trail monitoring plots 1, 2, 4, and 5. Plot 3 was not monitored as this trail section was not complete at the time of survey.

Vegetation data was collected for all species that were noted to overhang the transect. Overlap was measured if occurring between different species (more than 100% total cover is possible). Additional surface features were indicated in the following categories: Trail Surface, CWD (downed wood greater than 5" in diameter), Litter (includes duff/leaf litter, straw wattles, or

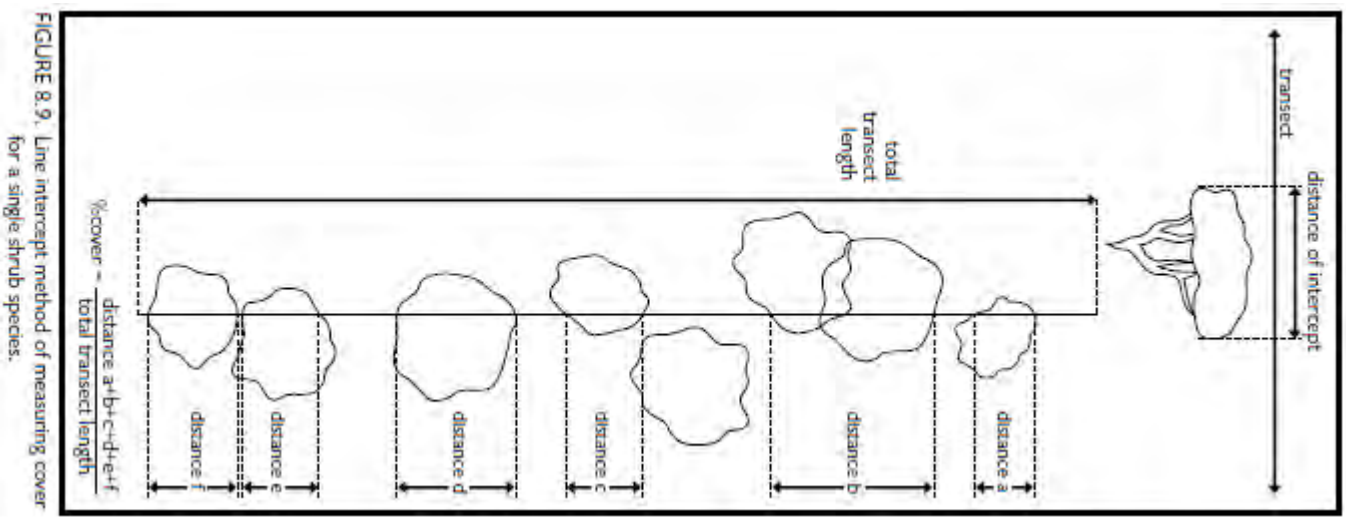
other non-vegetated substrate), and Bare Ground. Litter and Bare Ground were not recorded if below immediate understory vegetation.

Species and surface types were grouped into the following six categories: Native Vegetation, Non-native Vegetation, Invasive Vegetation, Bare ground/Litter, CWD, and Trail Surface for generalization purposes. Non-native (noninvasive) species included undifferentiated non-native meadow grass, wall lettuce, nipplewort, clover, and broad dock. Invasive species included: English ivy, English holly, and Himalayan blackberry. See data tables for more detail.

For consistency and repeatability, distances were recorded in increments of 10 centimeters and small gaps within an individual plant canopy were not considered. Species with lacy leaves or narrow canopies (such as trailing blackberry or gallium) were rounded to the nearest decimeter, even if they were noted just intersecting the line.

Vegetation higher than 15 feet was considered "Overstory" and recorded separately in order to better track changes to lower vegetation. Species recorded as overstory included Bigleaf maple, Douglas fir, and Beaked hazelnut. Several regenerating western red cedar trees were recorded in the understory. Note that the larger Douglas fir trees (> 15 feet) in Plot 5 were considered overstory trees even though they are still rather young and have extensive lower branches. All other vegetation or surface types (less than 15 feet) were considered "Understory".

Figure 8.9 from *BLM TNC AIM Measuring and Monitoring Plant Populations Technical Reference 1730-1*



3.1. Line-Intercept Transect Data Summary

Total distances of each plant species or surface type across all transects within each plot were summed and divided by the total length to determine the percent cover represented by each species or surface type. Table 1 below shows all summed records for each plot and Table 2 shows these data grouped by Cover Type. Figure 1 displays a chart showing Cover Type percentages by plot.

Table 1. Percent cover summary of species/surface types by plot for line-intercept transect data collected on 11/01/2022 and 11/02/2022. Table is sorted by Plot, Form, and % Cover. See Protocol section for discussion of "Cover Type" indications.

Plot	Strata	Form	Scientific	Common	Cover Type	% Cover
1	Understory	Surface	trail	trail	Trail	28.58
1	Understory	Surface	litter	litter	Bare/litter	10.08
1	Understory	Surface	CWD	coarse woody debris	CWD	5.04
1	Understory	Surface	bare dirt	bare dirt	Bare/litter	2.52
1	Overstory	Veg	*Acer macrophyllum*	bigleaf maple	Native	94.12
1	Understory	Veg	grass	grass	Non-Native	39.49
1	Understory	Veg	*Polystichum munitum*	sword fern	Native	6.72
1	Understory	Veg	*Rubus bifrons*	Himalayan blackberry	Invasive	5.04
1	Understory	Veg	*Tellima grandiflora*	fringecup	Native	5.04
1	Understory	Veg	*Lapsana communis*	nipplewort	Non-Native	3.36
1	Understory	Veg	*Mahonia nervosa*	low Oregon grape	Native	1.68
1	Understory	Veg	*Galium aparine*	stickywilly	Native	0.84
1	Understory	Veg	*Hedera helix*	English ivy	Invasive	0.84
1	Understory	Veg	*Rubus ursinus*	creeping blackberry	Native	0.84
2	Understory	Surface	trail	trail	Trail	35.56
2	Understory	Surface	litter	litter	Bare/litter	13.34
2	Understory	Surface	bare dirt	bare dirt	Bare/litter	10.55
2	Overstory	Veg	*Acer macrophyllum*	bigleaf maple	Native	100
2	Understory	Veg	*Polystichum munitum*	sword fern	Native	12.78
2	Understory	Veg	*Rubus ursinus*	creeping blackberry	Native	10.59
2	Understory	Veg	*Mahonia nervosa*	low Oregon grape	Native	7.24
2	Understory	Veg	*Rubus bifrons*	Himalayan blackberry	Invasive	3.34
2	Understory	Veg	grass	grass	Non-Native	2.79
2	Understory	Veg	*Hedera helix*	English ivy	Invasive	1.67
2	Understory	Veg	*Mycelis muralis*	wall-lettuce	Non-Native	1.11
2	Understory	Veg	*Thuja plicata*	western red cedar	Native	1.11
4	Understory	Surface	trail	trail	Trail	15.55
4	Understory	Surface	litter	litter	Non-Native	8.33
4	Understory	Veg	grass	grass	Non-Native	72.23
4	Understory	Veg	*Pseudotsuga menziesii*	Douglas fir	Native	30.56
4	Understory	Veg	*Corylus cornuta*	beaked hazelnut	Native	11.67
4	Understory	Veg	*Mahonia aquifolium*	tall Oregon grape	Native	8.89
4	Understory	Veg	*Abies grandis*	grand fir	Native	2.22
4	Understory	Veg	*Lapsana communis*	nipplewort	Non-Native	1.67
4	Understory	Veg	*Trifolium sp.*	clover	Non-Native	1.67
4	Understory	Veg	*Cornus sericea*	red-osier dogwood	Native	1.11
4	Understory	Veg	*Rubus bifrons*	Himalayan blackberry	Invasive	1.11

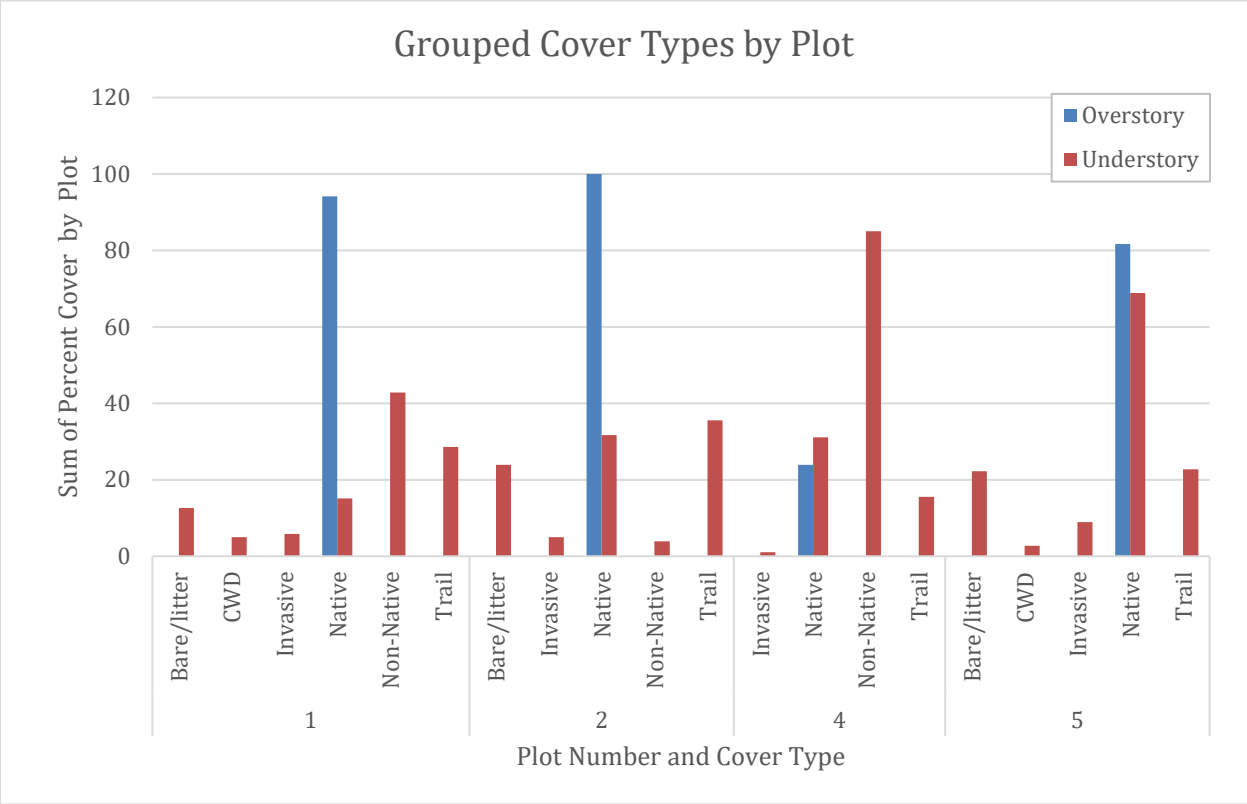
4	Understory	Veg	*Rumex obtusifolius*	bitter dock	Non-Native	1.11
4	Understory	Veg	*Rubus ursinus*	creeping blackberry	Native	0.56
5	Understory	Surface	trail	trail	Trail	22.77
5	Understory	Surface	litter	litter	Bare/litter	20.57
5	Understory	Surface	CWD	coarse woody debris	CWD	2.78
5	Understory	Surface	bare dirt	bare dirt	Bare/litter	1.67
5	Overstory	Veg	*Corylus cornuta*	beaked hazelnut	Native	48.33
5	Overstory	Veg	*Acer macrophyllum*	bigleaf maple	Native	33.33
5	Understory	Veg	*Rubus ursinus*	creeping blackberry	Native	34.47
5	Understory	Veg	*Polystichum munitum*	sword fern	Native	12.77
5	Understory	Veg	*Thuja plicata*	western red cedar	Native	10
5	Understory	Veg	*Gaultheria shallon*	salal	Native	6.67
5	Understory	Veg	*Hedera helix*	English ivy	Invasive	4.45
5	Understory	Veg	*Corylus cornuta*	beaked hazelnut	Native	3.33
5	Understory	Veg	*Rubus bifrons*	Himalayan blackberry	Invasive	2.79
5	Understory	Veg	*Ilex aquifolium*	English holly	Invasive	1.67
5	Understory	Veg	*Pteridium aquilinum*	bracken fern	Native	1.11
5	Understory	Veg	*Oemleria cerasiformis*	osoberry	Native	0.56

Table 2. Percent cover summary of Cover Types by plot for line-intercept transect data collected on 11/01/2022 and 11/02/2022

Plot	Cover Type	Overstory	Understory
1	Bare/litter		12.6
1	CWD		5.04
1	Invasive		5.88
1	Native	94.12	15.12
1	Non-Native		42.85
1	Trail		28.58
2	Bare/litter		23.89
2	Invasive		5.01
2	Native	100	31.72
2	Non-Native		3.9
2	Trail		35.56
4	Invasive		1.11
4	Native	23.89	31.12
4	Non-Native		85.01
4	Trail		15.55
5	Bare/litter		22.24
5	CWD		2.78
5	Invasive		8.91

5	Native	81.66	68.91
5	Trail		22.77

Figure 1: Percent cover summary of Category Types by plot for line-intercept transect data collected on 11/01/2022 and 11/02/2022. See protocol text for descriptions of Cover Types.



Due to the time required to collect the line-intercept data (and the potential for inconsistencies with data collection and interpretation determined during analysis), EarthCorps recommends that this methodology is not repeated on a quarterly basis. It could be revisited on an annual (or longer) interval after further discussion with SPR or other groups. Instead, we recommend that these transects be revisited on a quarterly basis as the foundation for monitoring qualitative changes to vegetative cover over time. Quarterly monitoring will be comprised of comparing these baseline data by transect to current conditions and noting any additional plant species or areas of obvious decline. These protocols will be further developed with input from SPR during Year 1 monitoring and will include repeat photo monitoring. See Appendix B for line-intercept photo monitoring.

4. Tread-depth Measurement Protocols

A total of four tread-depth monitoring locations were established and measured on 11/02/2022. Three were associated with established vegetation monitoring plots (plots 1, 4, and 5) and one on the upper 2-way trail where no monitoring plots are positioned. Tread-depth was not recorded on the "2-Way Option" as this section was not complete at the time of monitoring.

Monitoring locations are marked by small metal pins driven into established trees on either side of the trail. A meter tape is pulled taught between the pins which were leveled at the time of establishment. A second meter stick is then used to measure depth from the bottom of the tape to where it touches the ground in 10-centimeter increments. Measurements aimed to begin and end past the tread of the trail. In two cases, only one anchor tree was used and a set of bricks were buried into the other side to create a semi-permanent platform. In these cases, the measuring tape was leveled to a wooden rod placed on the brick platform and held taught during measurement.

Trail left always refers to the left side of the trail looking downhill. Trail right always refers to the right side of the trail looking downhill. Measurements are displayed as if taken from left to right facing downhill and converted accordingly for congruency in display. One measurement (Tread-depth 3 associated with Veg Monitoring Plot 5) was taken from right to left (pin is located on right side of trail) and measurements were reordered to show depth in the chart as looking downhill.

Surface type (Vegetation, Edge, and Tread) were subjectively recorded for future comparison if warranted. "Vegetation" indicates obvious rooted plants beyond trail surface. "Edge" indicates loose portion of trail edge where compaction is less common. "Tread" indicates clearly compacted trail surface.

4.1. Tread-depth Data Summary

EarthCorps recommends collecting this type of detailed tread-depth measurements once a year in Q3 of each year. Once repeat data is acquired, comparisons can be made to show changes at each of these monitoring locations. See associated Access Database for tread data and Appendix C for tread monitoring photos.

5. Tread-width Measurement Protocols

A rapid trail-width measurement protocol was established to monitor changes to overall tread width within each 1/10th acre plot area. Beginning at the edge of the plot, the width of the tread was measured approximately every 5 meters along each trail segment. Measurements were taken to generally represent the entire width of the trail including apparent trail edges. Records for each width measurement include estimations of right edge, main tread, and left edge. Measurement locations were not marked with stakes or other permanent demarcations and are intended to be generalizations of the entirety of the trail segments within a given plot,

although locations were generally indicated on plot diagram maps for some consistency (Appendix F).

5.1. Tread-width Data Summary

EarthCorps recommends that these rapid width measurements are collected quarterly with each monitoring visit, allowing for general trend information over time. It should be noted that determining trail edges is not always clear and there will likely be some subjective variability between monitoring visits. We recommend revisiting these protocols during Year 1 monitoring to determine if any changes should be considered.

Across all plots, the average trail width was 1.89 meters (including the trail edge measurements).

Plot	Avg. Width (m)	Count
1	2.16	8
2	1.96	8
4	1.29	6
5	2.07	5

Table 3: Tread width measurements collected on 11/01/2022 and 11/02/2022

Plot_Num	TW_Transect	Left_Edge	Tread	Right_Edge	Total_Width
1	1	0.35	1.15	0.45	1.95
1	2	0.25	1.3	0.35	1.9
1	3	0.6	1.5	0.35	2.45
1	4	0.2	1.25	0.35	1.8
1	5	0.45	1.45	1.4	3.3
1	6	0.3	1	0.6	1.9
1	7	0.8	1.2	0.2	2.2
1	8	0.5	1.1	0.2	1.8
2	1	0.42	1.04	0.37	1.83
2	2	0.52	1.16	0.24	1.92
2	3	0.34	2.44	0.73	3.51
2	4	0.58	1.07	0.18	1.83
2	5	0.7	1.04	0.3	2.04
2	6	0.21	0.73	0.18	1.12
2	7	0.27	0.88	0.55	1.7
2	8	0.21	1.22	0.33	1.76
4	1	0.35	0.45	0.3	1.1
4	2	0.25	0.4	0.35	1
4	3	0.3	0.6	0.2	1.1
4	4	0.6	0.8	0.4	1.8
4	5	0.4	0.8	0.2	1.4
4	6	0.3	0.85	0.2	1.35
5	1	0.5	1	0.7	2.2
5	2	0.45	1.25	0.45	2.15
5	3	0.4	1.6	0.5	2.5
5	4	0.35	0.95	0.45	1.75
5	5	0.3	1.25	0.2	1.75

Appendices:

Cheasty Greenspace Mountainbike/Pedestrian Trail – South Loop
Photo monitoring 2022

Contents

Seattle Parks & Recreation

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Appendix A Plot Photo Monitoring

Plot	# of Photos
1	4
3 photo points at: #1 top of trail looking NE (1 photo), #2 southern switchback looking NW and NE (2 photos), and #3 bottom of trail looking N (1 photo)	

Plot 1 Photo Point 1 (NE)

Plot 1 Photo Point 2a (NW)

Appendix A Plot Photo Monitoring

Plot 1 Photo Point 2b (NE)

Plot 1 Photo Point 3 (N)

Appendix A Plot Photo Monitoring

Plot	# of Photos
4	4
3 photo points at: #1 top of trail looking SW (1 photo), #2 at end of line-intercept transect looking N and E (2 photos), and #3 bottom of trail looking SW (1 photo)	

Plot 4 Photo Point 1 (SW)

Plot 4 Photo Point 2a (N)

Appendix A Plot Photo Monitoring

Plot 4 Photo Point 2b (E)

Plot 4 Photo Point 3 (SW)

Appendix A Plot Photo Monitoring

Plot	# of Photos
5	2
2 photo points at: #1 top of trail looking NE (1 photo) and #2 bottom of trail looking SW (1 photo)	

Plot 5 Photo Point 1 (NE)

Plot 5 Photo Point 2 (SW)

Appendix B Plot Transect Photo Monitoring

Plot	Transects	Length (m)
1	1	11.9
Transect extends downhill at 83 degrees beginning at wooden stake below smaller diameter ACMA tree for 11.9m, crosses trail twice, and ends just before crossing trail outside of plot		
Stakes placed at 0m, 5m, and 10.9m and extends 1m past bottom stake.		

Looking down the transect

Looking up the transect

Appendix B Plot Transect Photo Monitoring

Location of top stake

10.9m stake

Appendix B Plot Transect Photo Monitoring

Plot	Transects	Length (m)
2	1	18
Single transect extends 18 m beginning on w side of plot at wooden stake behind large ACMA		
Crosses trail 3 times heading through the NW section of the plot. Wooden stakes at 5m, 12m, and 16.95m and extends to trail tread past last wooden stake.		

5m stake

12m stake

16.9 m stake

Appendix B Plot Transect Photo Monitoring

Plot	Transects	Length (m)
4	3	18
Three, 6m transects perpendicular to the trail starting from the uphill (N) portion of plot. See plot map for general layout. Plot ends marked with wooden stakes.		
Transect 1 = 310 degrees Transect 2 = 236 degrees Transect 3 = 196 degrees		

Transect 1 Left

Transect 1 Right

Appendix B Plot Transect Photo Monitoring

Transect 2 Left

Transect 2 Right

Appendix B Plot Transect Photo Monitoring

Transect 3 Left

Transect 3 Right

Appendix B Plot Transect Photo Monitoring

Plot	Transects	Length (m)
5	3	18
Three, 6m transects perpendicular to the trail starting from the uphill (N) portion of plot. See plot map for general layout. Plot ends marked with wooden stakes.		
Transect 1 = 5.7m uphill from center of plot Transect 2 = at center of plot Transect 3 = 10m downhill from plot center		

Transect 1 Left

Transect 1 Right

Appendix B Plot Transect Photo Monitoring

Transect 2 Left

Transect 2 Right

Appendix B Plot Transect Photo Monitoring

Transect 3 Left

Transect 3 Right

Line_Intercept_Transect

Established 11/01-02/2022

ID	Plot_Number	Transect_Num	Length_m	Direction_Deg	Direction_Cardinal
1	1	1	11.9	263	W
2	2	1	18	40	NNE
3	4	1	6	310	NW
4	4	2	6	236	SW
5	4	3	6	196	SSW
6	5	1	6	330	SE
7	5	2	6	352	SSE
8	5	3	6	350	SE

Line-Intercept_Nov-2022

Data collected 11/01-02/2022

ID	Plot	Transect	Species	Start	End	Length	Type	Strata	Notes
1	1	1	_bare dirt	10.9	11.2	0.3	Bare/litter	Understory	
2	1	1	_CWD	5.1	5.5	0.4	CWD	Understory	
3	1	1	_CWD	10.7	10.9	0.2	CWD	Understory	
4	1	1	_grass	0.8	2.2	1.4	Non-Native	Understory	
5	1	1	_grass	3.4	5.1	1.7	Non-Native	Understory	
6	1	1	_grass	6.3	7.3	1.0	Non-Native	Understory	
7	1	1	_grass	11.3	11.9	0.6	Non-Native	Understory	
8	1	1	_litter	6	6.3	0.3	Bare/litter	Understory	Wattle
9	1	1	_litter	9.1	9.3	0.2	Bare/litter	Understory	Wattle
10	1	1	_litter	9.7	10.1	0.4	Bare/litter	Understory	Duff
11	1	1	_litter	10.3	10.6	0.3	Bare/litter	Understory	Duff
12	1	1	_trail	2	3.5	1.5	Trail	Understory	
13	1	1	_trail	7.1	9	1.9	Trail	Understory	
14	1	1	ACMA3	0	5.2	5.2	Native	Overstory	
15	1	1	ACMA3	5.9	11.9	6.0	Native	Overstory	
16	1	1	GAAP2	10.2	10.3	0.1	Native	Understory	
17	1	1	HEHE	0.4	0.5	0.1	Invasive	Understory	
18	1	1	LACO3	5.8	6	0.2	Non-Native	Understory	
19	1	1	LACO3	9	9.1	0.1	Non-Native	Understory	
20	1	1	LACO3	10.1	10.2	0.1	Non-Native	Understory	
21	1	1	MANE2	0	0.2	0.2	Native	Understory	
22	1	1	POMU	5.5	6.3	0.8	Native	Understory	
23	1	1	RUBI	0.2	0.4	0.2	Invasive	Understory	
24	1	1	RUBI	0.5	0.8	0.3	Invasive	Understory	
25	1	1	RUBI	8.9	9	0.1	Invasive	Understory	
26	1	1	RUUR	9.3	9.4	0.1	Native	Understory	
27	1	1	TEGR2	9.3	9.7	0.4	Native	Understory	
28	1	1	TEGR2	10.6	10.8	0.2	Native	Understory	
29	2	1	_bare dirt	4.6	4.8	0.2	Bare/litter	Understory	
30	2	1	_bare dirt	5.7	6.6	0.9	Bare/litter	Understory	
31	2	1	_bare dirt	9.3	9.9	0.6	Bare/litter	Understory	
32	2	1	_bare dirt	12	12.2	0.2	Bare/litter	Understory	
33	2	1	_grass	1.9	2	0.1	Non-Native	Understory	
34	2	1	_grass	2.2	2.3	0.1	Non-Native	Understory	
35	2	1	_grass	3.9	4.2	0.3	Non-Native	Understory	
36	2	1	_litter	5.1	5.3	0.2	Bare/litter	Understory	
37	2	1	_litter	5.4	5.5	0.1	Bare/litter	Understory	
38	2	1	_litter	10.3	11.1	0.8	Bare/litter	Understory	
39	2	1	_litter	11.9	12	0.1	Bare/litter	Understory	
40	2	1	_litter	16	16.4	0.4	Bare/litter	Understory	
41	2	1	_litter	13.1	13.4	0.3	Bare/litter	Understory	
42	2	1	_litter	12.5	13	0.5	Bare/litter	Understory	
43	2	1	_trail	1.9	3.8	1.9	Trail	Understory	

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ID	Plot	Transect	Species	Start	End	Length	Type	Strata	Notes
87	4	2	TRIFO	1	1.3	0.3	Non-Native	Understory	
88	4	3	_grass	0	2.3	2.3	Non-Native	Understory	
89	4	3	_litter	3.8	4.4	0.6	Non-Native	Understory	
90	4	3	_litter	5.1	6	0.9	Non-Native	Understory	
91	4	3	_trail	2.3	3.8	1.5	Trail	Understory	
92	4	3	COCO6	0	2.1	2.1	Native	Understory	
93	4	3	LACO3	1.1	1.4	0.3	Non-Native	Understory	
94	4	3	MAAQ2	4.5	5.1	0.6	Native	Understory	
95	4	3	PSME	2.3	6	3.7	Native	Overstory	
96	4	3	RUOB	0.5	0.7	0.2	Non-Native	Understory	
97	5	1	_litter	1.2	1.6	0.4	Bare/litter	Understory	
98	5	1	_litter	1.7	2.2	0.5	Bare/litter	Understory	
99	5	1	_litter	3.8	5.2	1.4	Bare/litter	Understory	
100	5	1	_litter	5.7	6	0.3	Bare/litter	Understory	
101	5	1	_trail	2.3	3.8	1.5	Trail	Understory	
102	5	1	COCO6	0	6	6.0	Native	Overstory	Uphill tran
103	5	1	GASH	0	1.2	1.2	Native	Understory	
104	5	1	HEHE	5.2	5.7	0.5	Invasive	Understory	
105	5	1	RUBI	1.1	1.2	0.1	Invasive	Understory	
106	5	1	RUUR	1.6	1.7	0.1	Native	Understory	
107	5	1	RUUR	2.2	2.3	0.1	Native	Understory	
108	5	2	_CWD	0.6	0.7	0.1	CWD	Understory	
109	5	2	_litter	1.6	2.1	0.5	Bare/litter	Understory	
110	5	2	_litter	3.8	4.3	0.5	Bare/litter	Understory	
111	5	2	_trail	2.4	3.7	1.3	Trail	Understory	
112	5	2	HEHE	0	0.1	0.1	Invasive	Understory	
113	5	2	POMU	4.3	6	1.7	Native	Understory	
114	5	2	RUBI	4.3	4.5	0.2	Invasive	Understory	
115	5	2	RUUR	0	2.4	2.4	Native	Understory	Center tra
116	5	2	RUUR	3.5	3.8	0.3	Native	Understory	
117	5	2	THPL	0.2	1.7	1.5	Native	Understory	
118	5	3	_bare dirt	3.6	3.8	0.2	Bare/litter	Understory	
119	5	3	_bare dirt	4.4	4.5	0.1	Bare/litter	Understory	
120	5	3	_CWD	5.4	5.8	0.4	CWD	Understory	
121	5	3	_litter	4.5	4.6	0.1	Bare/litter	Understory	
122	5	3	_trail	2.3	3.6	1.3	Trail	Understory	
123	5	3	ACMA3	0	6	6.0	Native	Overstory	
124	5	3	COCO6	5.4	6	0.6	Native	Understory	
125	5	3	COCO6	0	2.7	2.7	Native	Overstory	
126	5	3	HEHE	1.6	1.8	0.2	Invasive	Understory	
127	5	3	ILAQ80	3.9	4.2	0.3	Invasive	Understory	
128	5	3	OECE	5.9	6	0.1	Native	Understory	
129	5	3	POMU	4.8	5.4	0.6	Native	Understory	

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ID	Plot	Transect	Species	Start	End	Length	Type	Strata	Notes
44	2	1	_trail	6.6	9.3	2.7	Trail	Understory	
45	2	1	_trail	14.2	16	1.8	Trail	Understory	
46	2	1	ACMA3	0	18	18.0	Native	Overstory	
47	2	1	HEHE	11.5	11.7	0.2	Invasive	Understory	
48	2	1	HEHE	12.4	12.5	0.1	Invasive	Understory	
49	2	1	MANE2	4.8	5	0.1	Native	Understory	
50	2	1	MANE2	11.2	11.4	0.2	Native	Understory	
51	2	1	MANE2	17.8	18	0.2	Native	Understory	
52	2	1	MANE2	17.1	17.6	0.5	Native	Understory	
53	2	1	MANE2	16.4	16.5	0.1	Native	Understory	
54	2	1	MANE2	13.4	13.5	0.1	Native	Understory	
55	2	1	MANE2	12.3	12.4	0.1	Native	Understory	
56	2	1	MYMU	3.7	3.9	0.2	Non-Native	Understory	
57	2	1	POMU	0	2.1	2.1	Native	Understory	
58	2	1	POMU	10.1	10.3	0.2	Native	Understory	
59	2	1	RUBI	4.2	4.4	0.2	Invasive	Understory	
60	2	1	RUBI	5	5.1	0.1	Invasive	Understory	
61	2	1	RUBI	5.3	5.4	0.1	Invasive	Understory	
62	2	1	RUBI	5.5	5.7	0.2	Invasive	Understory	
63	2	1	RUUR	4.4	4.6	0.1	Native	Understory	
64	2	1	RUUR	11.1	11.2	0.1	Native	Understory	
65	2	1	RUUR	11.4	11.5	0.1	Native	Understory	
66	2	1	RUUR	11.7	11.9	0.2	Native	Understory	
67	2	1	RUUR	17.7	17.8	0.1	Native	Understory	
68	2	1	RUUR	17.2	17.3	0.1	Native	Understory	
69	2	1	RUUR	16.4	16.9	0.5	Native	Understory	
70	2	1	RUUR	13.5	14	0.5	Native	Understory	
71	2	1	RUUR	13	13.1	0.1	Native	Understory	
72	2	1	RUUR	12.2	12.3	0.1	Native	Understory	
73	2	1	THPL	9.9	10.1	0.2	Native	Understory	
74	4	1	_grass	0	2.8	2.8	Non-Native	Understory	
75	4	1	_grass	3.3	6	2.7	Non-Native	Understory	
76	4	1	_trail	2.8	3.3	0.5	Trail	Understory	
77	4	1	COSE16	1	1.2	0.2	Native	Understory	
78	4	1	MAAQ2	1.3	2.3	1.0	Native	Understory	
79	4	1	PSME	0	0.6	0.6	Native	Overstory	
80	4	1	PSME	4.8	6	1.2	Native	Understory	
81	4	1	RUBI	2	2.2	0.2	Invasive	Understory	
82	4	1	RUUR	5.3	5.4	0.1	Native	Understory	
83	4	2	_grass	0	2.8	2.8	Non-Native	Understory	
84	4	2	_grass	3.6	6	2.4	Non-Native	Understory	
85	4	2	_trail	2.8	3.6	0.8	Trail	Understory	
86	4	2	ABGR	0	0.4	0.4	Native	Understory	

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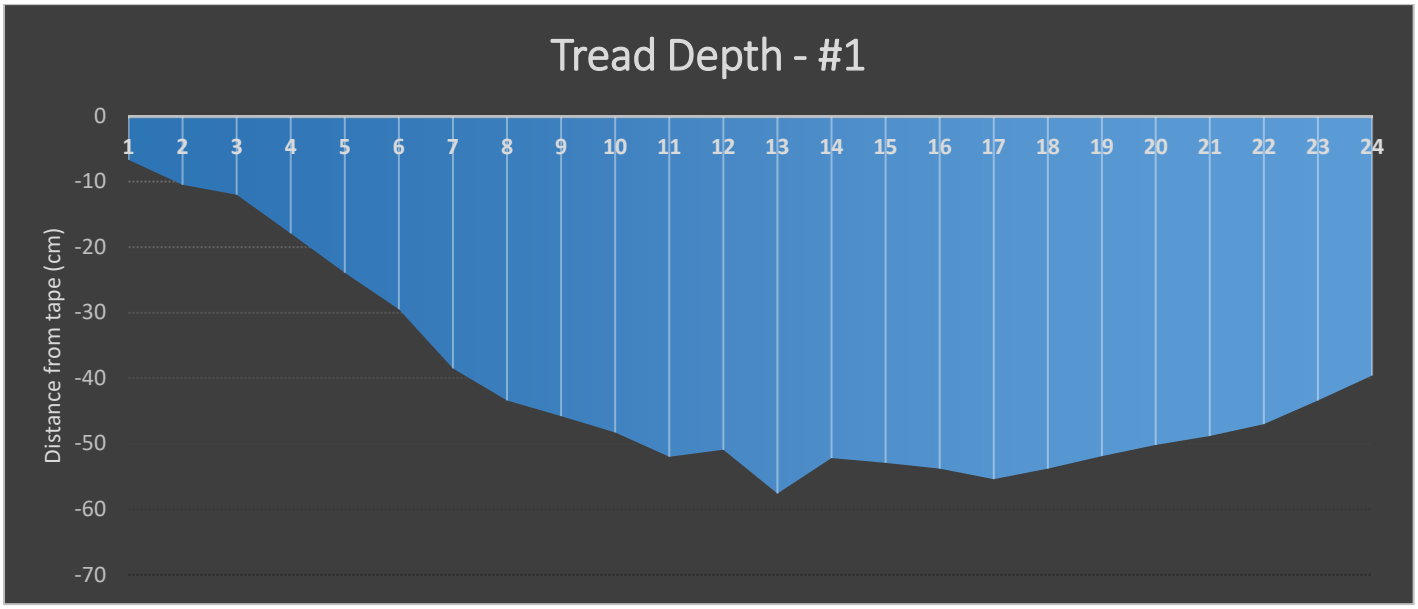
ID	Plot	Transect	Species	Start	End	Length	Type	Strata	Notes
130	5	3	PTAQ	5.8	6	0.2	Native	Understory	
131	5	3	RUBI	4.8	4.9	0.1	Invasive	Understory	
132	5	3	RUBI	5.8	5.9	0.1	Invasive	Understory	
133	5	3	RUUR	0	2.3	2.3	Native	Understory	Downhill t
134	5	3	RUUR	3.8	4	0.2	Native	Understory	
135	5	3	RUUR	4.3	4.4	0.1	Native	Understory	
136	5	3	RUUR	4.6	4.7	0.1	Native	Understory	
137	5	3	RUUR	4.9	5.4	0.5	Native	Understory	
138	5	3	RUUR	5.8	5.9	0.1	Native	Understory	
139	5	3	THPL	4.1	4.4	0.3	Native	Understory	

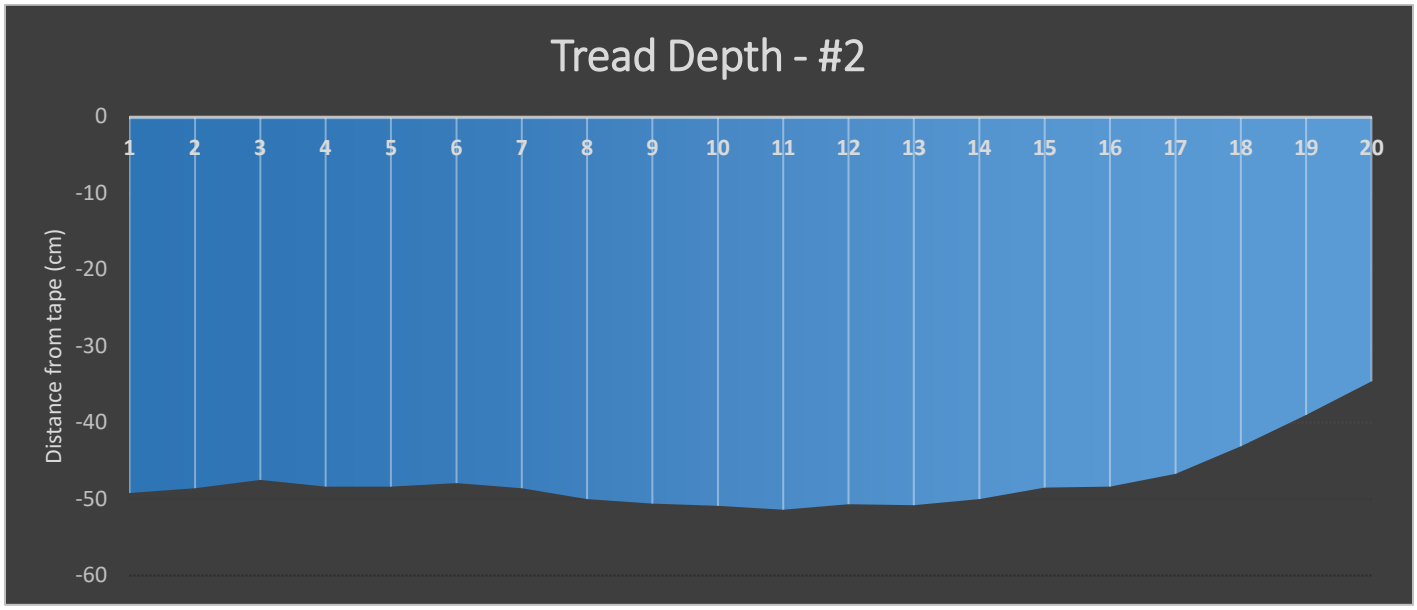
Appendix C Tread-depth Monitoring

Tread Plot	Veg Plot	Length	Begin on left side of trail looking downhill
			Transect inside plot near uphill side
1	1	2.8	Pins in large ACMA stump on left and small ACMA on right



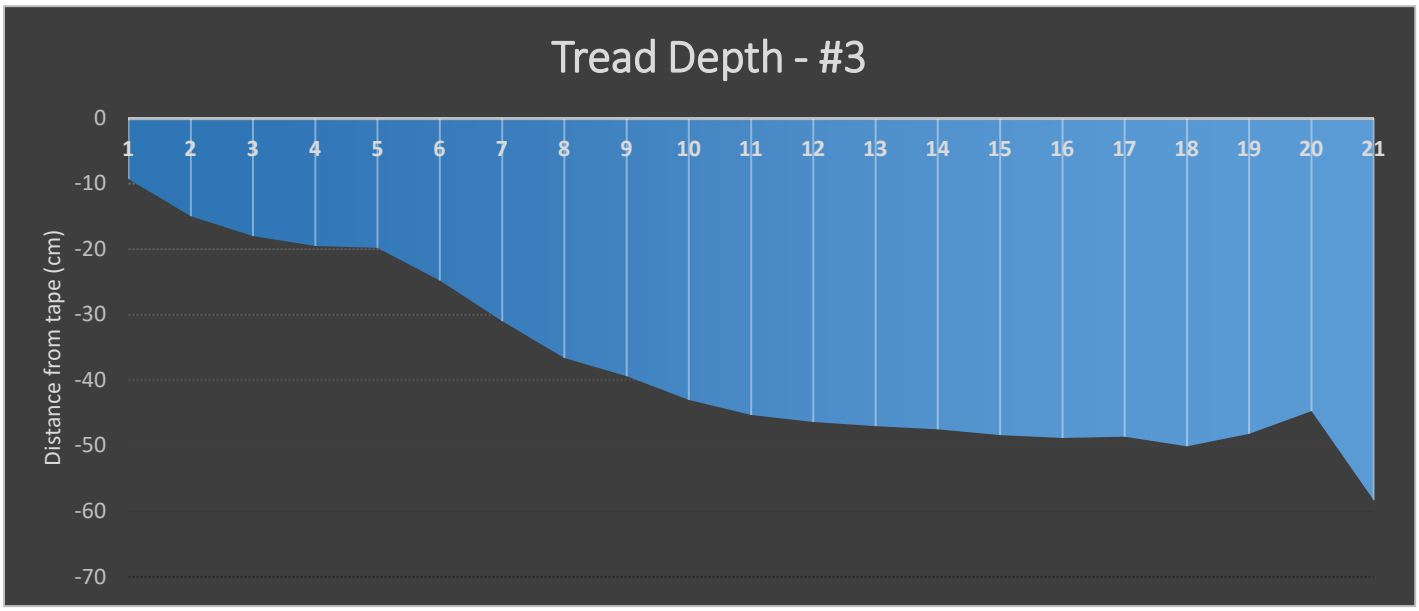
Appendix C Tread-depth Monitoring

Tread Plot	Veg Plot	Length	Begin on left side of trail looking downhill
2	4	2.16	Transect inside plot near downhill side
			Pins in PSME on either side of trail



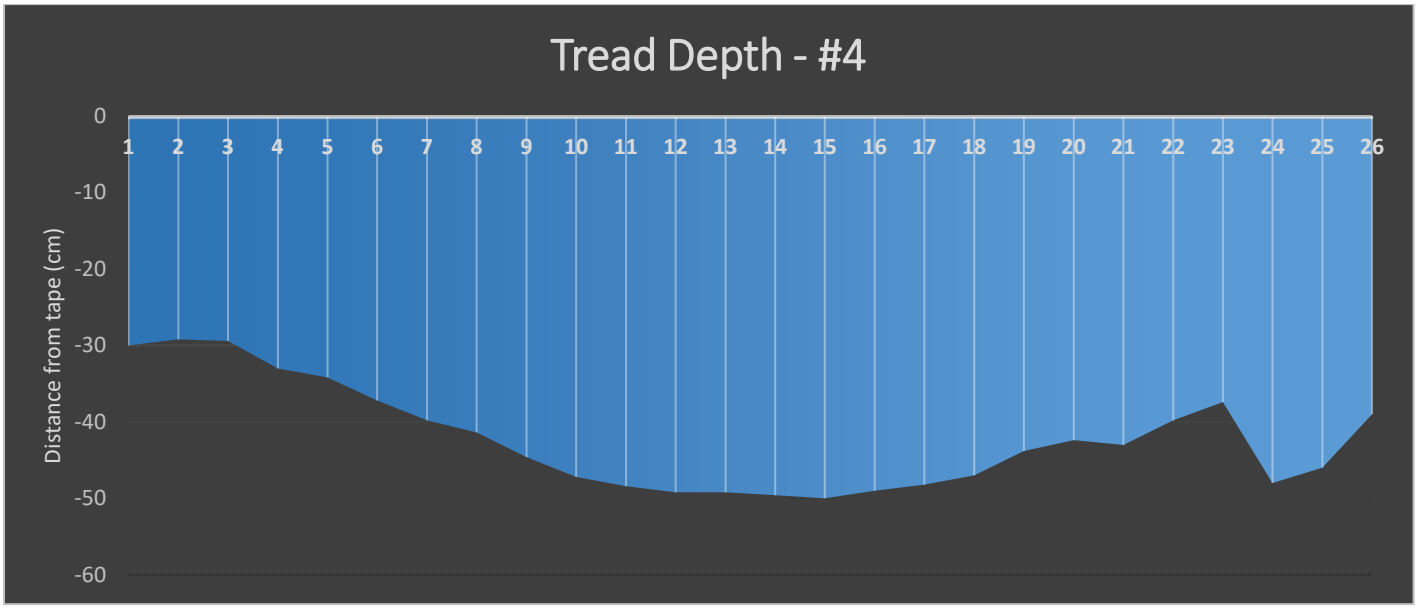
Appendix C Tread-depth Monitoring

Tread Plot	Veg Plot	Length	Transect outside plot on uphill side
3	5	2.5	Left side (upslope) has embedded brick base, right side has pin in maple tree
			did not record past 2.1 meters down slope to tree



Appendix C Tread-depth Monitoring

Tread Plot	Veg Plot	Length	Begin on left side of trail looking downhill at 0.6m when tape clears tree
			Transect on "upper" 2-way trail (not associated w/ plots, see GPS)
4	N/A	3.1	Pin in large ACMA on left side of trail



Appendix C Tread-depth Monitoring

Appendix C Tread-depth Monitoring

ID	Tread_Transect	Distance on Tape	Height	Invert	Surface
1	1	0	n/a		Tree
2	1	0.1	6.7	-6.7	Vegetation
3	1	0.2	10.5	-10.5	Vegetation
4	1	0.3	12	-12	Vegetation
5	1	0.4	17.9	-17.9	Vegetation
6	1	0.5	23.9	-23.9	Vegetation
7	1	0.6	29.5	-29.5	Vegetation
8	1	0.7	38.5	-38.5	Vegetation
9	1	0.8	43.4	-43.4	Vegetation
10	1	0.9	45.8	-45.8	Vegetation
11	1	1	48.3	-48.3	Edge
12	1	1.1	52	-52	Edge
13	1	1.2	50.9	-50.9	Tread
14	1	1.3	57.6	-57.6	Tread
15	1	1.4	52.2	-52.2	Tread
16	1	1.5	52.9	-52.9	Tread
17	1	1.6	53.8	-53.8	Tread
18	1	1.7	55.4	-55.4	Tread
19	1	1.8	53.8	-53.8	Tread
20	1	1.9	51.9	-51.9	Tread
21	1	2	50.2	-50.2	Tread
22	1	2.1	48.8	-48.8	Tread
23	1	2.2	47	-47	Tread
24	1	2.3	43.4	-43.4	Edge
25	1	2.4	39.6	-39.6	Edge
26	1	2.5	n/a		Tree
27	2	0	n/a		Tree
28	2	0.1	49.2	-49.2	Edge
29	2	0.2	48.6	-48.6	Edge
30	2	0.3	47.5	-47.5	Edge
31	2	0.4	48.4	-48.4	Edge
32	2	0.5	48.4	-48.4	Edge
33	2	0.6	47.9	-47.9	Edge
34	2	0.7	48.6	-48.6	Tread
35	2	0.8	50	-50	Tread
36	2	0.9	50.6	-50.6	Tread
37	2	1	50.9	-50.9	Tread
38	2	1.1	51.4	-51.4	Tread
39	2	1.2	50.7	-50.7	Tread
40	2	1.3	50.8	-50.8	Tread
41	2	1.4	50	-50	Tread
42	2	1.5	48.5	-48.5	Tread
43	2	1.6	48.4	-48.4	Tread
44	2	1.7	46.7	-46.7	Edge
45	2	1.8	43.1	-43.1	Edge
46	2	1.9	39	-39	Edge
47	2	2	34.6	-34.6	Edge

Appendix C Tread-depth Monitoring

ID	Tread_Transect	Distance on Tape	Height	Invert	Surface
48	3	2.9	9.3	-9.3	Vegetaion
49	3	2.8	15	-15	Vegetaion
50	3	2.7	18	-18	Vegetaion
51	3	2.6	19.5	-19.5	Vegetaion
52	3	2.5	19.8	-19.8	Edge
53	3	2.4	24.8	-24.8	Edge
54	3	2.3	31	-31	Edge
55	3	2.2	36.6	-36.6	Edge
56	3	2.1	39.4	-39.4	Edge
57	3	2	43	-43	Edge
58	3	1.9	45.3	-45.3	Tread
59	3	1.8	46.4	-46.4	Tread
60	3	1.7	47	-47	Tread
61	3	1.6	47.5	-47.5	Tread
62	3	1.5	48.4	-48.4	Tread
63	3	1.4	48.8	-48.8	Tread
64	3	1.3	48.6	-48.6	Edge
65	3	1.2	50.1	-50.1	Edge
66	3	1.1	48.2	-48.2	Edge
67	3	1	44.7	-44.7	Edge/Wattle
68	3	0.9	58.3	-58.3	Vegetaion
69	4	0.6	30	-30	Vegetation
70	4	0.7	29.2	-29.2	Vegetation
71	4	0.8	29.4	-29.4	Vegetation
72	4	0.9	33	-33	Vegetation
73	4	1	34.2	-34.2	Vegetation
74	4	1.1	37.2	-37.2	Edge
75	4	1.2	39.8	-39.8	Edge
76	4	1.3	41.4	-41.4	Tread
77	4	1.4	44.6	-44.6	Tread
78	4	1.5	47.2	-47.2	Tread
79	4	1.6	48.4	-48.4	Tread
80	4	1.7	49.2	-49.2	Tread
81	4	1.8	49.2	-49.2	Tread
82	4	1.9	49.6	-49.6	Tread
83	4	2	50	-50	Tread
84	4	2.1	49	-49	Tread
85	4	2.2	48.2	-48.2	Tread
86	4	2.3	47	-47	Edge
87	4	2.4	43.8	-43.8	Edge
88	4	2.5	42.4	-42.4	Edge
89	4	2.6	43	-43	Edge
90	4	2.7	39.8	-39.8	Vegetation
91	4	2.8	37.4	-37.4	Vegetation
92	4	2.9	48	-48	Vegetation
93	4	3	46	-46	Vegetation
94	4	3.1	39	-39	Brick

Density Data

Table 1. Overstory (5 inches or greater diameter at breast height) tree species and woody material by plot in Cheasty Greenspace baseline vegetation plots – November 2020.

Plot	Scientific	Common	Stems/pieces per Acre
Plot 1	***Acer macrophyllum***	bigleaf maple	160
	Alnus rubra	red alder	10
	CWD	coarse woody debris	100
	snag	snag	10
Plot 2	***Acer macrophyllum***	bigleaf maple	120
	CWD	coarse woody debris	50
Plot 3	***Alnus rubra***	red alder	40
Plot 4	**CWD**	coarse woody debris	10
	Populus trichocarpa	black cottonwood	10
Plot 5	***Acer macrophyllum***	bigleaf maple	40
	CWD	coarse woody debris	130
	snag	snag	20

Table 2. Regenerating (less than 5 inches diameter at breast height) tree species by plot in Cheasty Greenspace baseline vegetation plots – November 2020.
* indicates species not native to the Pacific Northwest

Plot	Scientific	Common	Stems per Acre
Plot 1	***Prunus avium****	sweet cherry	20
Plot 2	***Acer macrophyllum***	bigleaf maple	50
	Pseudotsuga menziesii	Douglas fir	20
	Thuja plicata	western red cedar	20
Plot 3	***Acer macrophyllum***	bigleaf maple	10
	Alnus rubra	red alder	20
	Picea sitchensis	Sitka spruce	10
	Prunus avium*	sweet cherry	30
	Pseudotsuga menziesii	Douglas fir	220
	Thuja plicata	western red cedar	140
	Tsuga heterophylla	western hemlock	70
Plot 4	***Abies grandis***	grand fir	40
	Acer macrophyllum	bigleaf maple	80
	Acer pseudoplatanus	sycamore maple	490
	Picea sitchensis	Sitka spruce	30
	Pinus contorta var. contorta	shore pine	40
	Populus trichocarpa	black cottonwood	170
	Prunus cerasifera*	cherry plum	10
	Pseudotsuga menziesii	Douglas fir	90
	Thuja plicata	western red cedar	30
Plot 5	***Acer platanoides****	Norway maple	10

Ilex aquifolium*	English holly	90
Prunus laurocerasus*	cherry laurel	10
Pseudotsuga menziesii	Douglas fir	50
Thuja plicata	western red cedar	70
Tsuga heterophylla	western hemlock	10

Table 3. Non-native and invasive vegetation by plot in Cheasty Greenspace baseline vegetation plots – November 2020.

Plot	Scientific	Common	Plot Cover (%)
Plot 1	*Hedera helix*	English ivy	2
	Rubus armeniacus	Himalayan blackberry	5
Plot 2	*Hedera helix*	English ivy	0.25
	Mycelis muralis	wall-lettuce	0.1
	Rubus armeniacus	Himalayan blackberry	2
Plot 3	*Calystegia sepium*	hedge false bindweed	3
	Geranium robertianum	herb Robert	1
	Geum urbanum	herb bennet	0.1
	Lapsana communis	nipplewort	0.1
	Mycelis muralis	wall-lettuce	0.1
	Rubus armeniacus	Himalayan blackberry	3
	Solanum dulcamara	bittersweet nightshade	0.25
Plot 4	*Conium maculatum*	poison hemlock	0.25
	Convolvulus arvensis	field bindweed	0.1
	Cytisus scoparius	scotch broom	0.25
	Geranium molle	dove-foot geranium	0.1
	grass	grass	70
	Hypericum perforatum	St. John's wort	0.1
	Hypochaeris radicata	hairy cat's-ear	0.1
	Lapsana communis	nipplewort	0.1
	Plantago lanceolata	lance-leaved plantain	0.25
	Rubus armeniacus	Himalayan blackberry	1
	Rumex acetosella	sheep sorel	0.1
	Rumex sp.	dock	0.25
	Taraxacum officinale	dandelion	0.25
	Trifolium sp.	clover	0.25
	Verbascum thapsus	mullein	0.1
	Vicia sp.	vetch	0.25
Plot 5	*Hedera helix*	English ivy	0.25
	Rubus bifrons	Himalayan blackberry	2

Table 4. Native vegetation by plot in Cheasty Greenspace baseline vegetation plots – November 2020.

Plot	Scientific	Common	Plot Cover (%)
Plot 1	*Bromus vulgaris*	Columbia brome	0.25
	Corylus cornuta	beaked hazelnut	45
	Lonicera involucrata	twinberry	0.1
	Mahonia nervosa	low Oregon grape	50
	Oemleria cerasiformis	osoberry	0.5
	Polypodium glycyrrhiza	licorice fern	0.5
	Polystichum munitum	sword fern	45
	Pteridium aquilinum	bracken fern	0.5
	Rubus ursinus	creeping blackberry	1
	Salix scouleriana	Scouler's willow	0.25
	Sambucus racemosa	red elderberry	0.25
Plot 2	*Corylus cornuta*	beaked hazelnut	20
	Galium aparine	stickywilly	0.1
	Gaultheria shallon	salal	0.5
	Mahonia nervosa	low Oregon grape	80
	Oemleria cerasiformis	osoberry	1
	Polypodium glycyrrhiza	licorice fern	0.1
	Polystichum munitum	sword fern	8
	Pteridium aquilinum	bracken fern	1
	Rubus ursinus	creeping blackberry	2
	Symphoricarpos albus	snowberry	5
	Vaccinium parvifolium	red huckleberry	1
Plot 3	*Acer circinatum*	vine maple	0.25
	Corylus cornuta	beaked hazelnut	0.1
	Epilobium ciliatum	fringed willowherb	0.1
	Equisetum telmateia	giant horsetail rush	8
	Galium aparine	stickywilly	0.1
	Gaultheria shallon	salal	2
	Holodiscus discolor	oceanspray	4
	Lonicera ciliosa	orange honeysuckle	0.1
	Oemleria cerasiformis	osoberry	1
	Polystichum munitum	sword fern	2
	Rubus parviflorus	thimbleberry	1
	Rubus spectabilis	salmonberry	0.1
	Spiraea douglasii	hardhack	4
	Symphoricarpos albus	snowberry	4
	Tellima grandiflora	fringecup	0.25
Plot 4	*Cornus sericea*	red-osier dogwood	8
	Corylus cornuta	beaked hazelnut	3
	Epilobium ciliatum	fringed willowherb	0.1
	Galium aparine	stickywilly	0.1
	Mahonia aquifolium	tall Oregon grape	2
	Morella californica	pacific wax myrtle	1.5
	Polystichum munitum	sword fern	1

	Ribes sanguineum	red-flowering currant	2
	Rubus ursinus	creeping blackberry	0.5
	Salix scouleriana	Scouler's willow	0.1
Plot 5	*Acer circinatum*	vine maple	2
	Corylus cornuta	beaked hazelnut	45
	Galium aparine	stickywilly	0.25
	Gaultheria shallon	salal	2
	Holodiscus discolor	oceanspray	1
	Mahonia aquifolium	tall Oregon grape	2
	Mahonia nervosa	low Oregon grape	25
	Oemleria cerasiformis	osoberry	3
	Polystichum munitum	sword fern	12
	Pteridium aquilinum	bracken fern	2
	Rubus parviflorus	thimbleberry	1.5
	Rubus ursinus	creeping blackberry	2
	Sambucus racemosa	red elderberry	0.5
	Tolmiea menziesii	piggy-back plant	0.25
	Urtica dioica	stinging nettle	0.25

Appendix E GSP Forest Monitoring Plot 2021 Baseline Data
Plot Location Map (see GSP Reference Map for phase data)

Appendix E GSP Forest Monitoring Plot 2021 Baseline Data
Plot Cover (1 of 2)

Plot_Number	Species	Scientific	Common	Cover (%)	Life_Form	Native	Invasive	Sample_Date
Cheasty Yard	GAAP2	Galium aparine	stickywilly	3	Graminoid	Yes	No	06/03/21
Cheasty Yard	BRVU	Bromus vulgaris	Columbia brome	0.25	Herbaceous	Yes	No	06/03/21
Cheasty Yard	GASH	Gaultheria shallon	salal	0.25	Herbaceous	Yes	No	06/03/21
Cheasty Yard	HEHE	Hedera helix	English ivy	2	Herbaceous	No	Yes	06/03/21
Cheasty Yard	LOIN5	Lonicera involucrata	twinberry	1	Herbaceous	Yes	No	06/03/21
Cheasty Yard	MYMU	Mycelis muralis	wall-lettuce	3	Herbaceous	No	No	06/03/21
Cheasty Yard	POMU	Polystichum munitum	sword fern	8	Herbaceous	Yes	No	06/03/21
Cheasty Yard	PTAQ	Pteridium aquilinum	bracken fern	8	Herbaceous	Yes	No	06/03/21
Cheasty Yard	RUBI	Rubus bifrons	Himalayan blackberry	5	Herbaceous	No	Yes	06/03/21
Cheasty Yard	RUUR	Rubus ursinus	creeping blackberry	5	Herbaceous	Yes	No	06/03/21
Cheasty Yard	ACCI	Acer circinatum	vine maple	1	Shrub	Yes	No	06/03/21
Cheasty Yard	COCO6	Corylus cornuta	beaked hazelnut	35	Shrub	Yes	No	06/03/21
Cheasty Yard	HODI	Holodiscus discolor	oceanspray	1.5	Shrub	Yes	No	06/03/21
Cheasty Yard	HYHI5	Hyacinthoides hispanica	Spanish bluebell	0.25	Shrub	No	Yes	06/03/21
Cheasty Yard	LACO3	Lapsana communis	nipplewort	0.25	Shrub	No	Yes	06/03/21
Cheasty Yard	MANE2	Mahonia nervosa	low Oregon grape	8	Shrub	Yes	No	06/03/21
Cheasty Yard	OECE	Oemleria cerasiformis	indian plum	4	Shrub	Yes	No	06/03/21
Cheasty Yard	RIBES	Ribes sp.	currant	1.5	Shrub	No	No	06/03/21
Cheasty Yard	RUPA	Rubus parviflorus	thimbleberry	3	Shrub	Yes	No	06/03/21
Cheasty Yard	RUSP	Rubus spectabilis	salmonberry	2	Shrub	Yes	No	06/03/21
Cheasty Yard	SYAL	Symphoricarpos albus	snowberry	25	Shrub	Yes	No	06/03/21
Cheasty Yard	TEGR2	Tellima grandiflora	fringecup	0.5	Shrub	Yes	No	06/03/21
Cheasty Yard	TROV2	Trillium ovatum	trillium	0.25	Shrub	Yes	No	06/03/21
Cheasty Yard	VAOV2	Vaccinium ovatum	evergreen huckleberry	1	Shrub	Yes	No	06/03/21
Cheasty Yard 2	EPCI	Epilobium ciliatum	fringed willowherb	1	Herbaceous	Yes	No	06/03/21
Cheasty Yard 2	GAAP2	Galium aparine	stickywilly	12	Herbaceous	Yes	No	06/03/21
Cheasty Yard 2	GERO	Geranium robertianum	herb Robert	6	Herbaceous	No	Yes	06/03/21
Cheasty Yard 2	GEMA4	Geum macrophyllum	bigleaved avens	1	Herbaceous	Yes	No	06/03/21
Cheasty Yard 2	HEHE	Hedera helix	English ivy	4	Herbaceous	No	Yes	06/03/21
Cheasty Yard 2	HYRA3	Hypochaeris radicata	hairy cat's-ear	0.25	Herbaceous	No	Yes	06/03/21
Cheasty Yard 2	LACO3	Lapsana communis	nipplewort	3	Herbaceous	No	Yes	06/03/21
Cheasty Yard 2	MYMU	Mycelis muralis	wall-lettuce	2	Herbaceous	No	No	06/03/21
Cheasty Yard 2	POMU	Polystichum munitum	sword fern	11	Herbaceous	Yes	No	06/03/21
Cheasty Yard 2	SOAS	Sonchus asper	spiny sowthistle	0.25	Herbaceous	No	No	06/03/21
Cheasty Yard 2	SOOL	Sonchus oleraceus	annual sowthistle	1	Herbaceous	No	No	06/03/21
Cheasty Yard 2	TEGR2	Tellima grandiflora	fringecup	0.25	Herbaceous	Yes	No	06/03/21
Cheasty Yard 2	VAHE	Vancouveria hexandra	inside-out flower	0.25	Herbaceous	Yes	No	06/03/21
Cheasty Yard 2	ACCI	Acer circinatum	vine maple	0.5	Shrub	Yes	No	06/03/21
Cheasty Yard 2	COCO6	Corylus cornuta	beaked hazelnut	2	Shrub	Yes	No	06/03/21
Cheasty Yard 2	GASH	Gaultheria shallon	salal	3	Shrub	Yes	No	06/03/21
Cheasty Yard 2	HODI	Holodiscus discolor	oceanspray	9	Shrub	Yes	No	06/03/21
Cheasty Yard 2	MANE2	Mahonia nervosa	low Oregon grape	1	Shrub	Yes	No	06/03/21
Cheasty Yard 2	OECE	Oemleria cerasiformis	indian plum	8	Shrub	Yes	No	06/03/21
Cheasty Yard 2	PHLE4	Philadelphus lewisii	mockorange	5	Shrub	Yes	No	06/03/21
Cheasty Yard 2	RUAR9	Rubus armeniacus	Himalayan blackberry	2	Shrub	No	Yes	06/03/21
Cheasty Yard 2	RUBI	Rubus bifrons	Himalayan blackberry	3	Shrub	No	Yes	06/03/21
Cheasty Yard 2	SYAL	Symphoricarpos albus	snowberry	4	Shrub	Yes	No	06/03/21

Appendix E GSP Forest Monitoring Plot 2021 Baseline Data
Plot Cover (2 of 2)

Plot_Number	Species	Scientific	Common	Cover (%)	Life_Form	Native	Invasive	Sample_Date
Cheasty Yard East	ALPE4	Alliaria petiolata	Garlic mustard	0.01	Herbaceous	No	Yes	05/20/21
Cheasty Yard East	ARMI2	Arctium minus	lesser burdock	1	Herbaceous	No	No	05/20/21
Cheasty Yard East	ARDIA	Aruncus dioicus var. acun	goatsbeard	0.01	Herbaceous	Yes	No	05/20/21
Cheasty Yard East	CASE13	Calystegia sepium	hedge false bindweed	0.01	Herbaceous	No	Yes	05/20/21
Cheasty Yard East	EPCI	Epilobium ciliatum	fringed willowherb	0.25	Herbaceous	Yes	No	05/20/21
Cheasty Yard East	EQTE	Equisetum telmateia	giant horsetail rush	3	Herbaceous	Yes	No	05/20/21
Cheasty Yard East	GAAP2	Galium aparine	stickywilly	2	Herbaceous	Yes	No	05/20/21
Cheasty Yard East	GERO	Geranium robertianum	herb Robert	5	Herbaceous	No	Yes	05/20/21
Cheasty Yard East	GEUR	Geum urbanum	herb bennet	1	Herbaceous	No	No	05/20/21
Cheasty Yard East	HEHE	Hedera helix	English ivy	25	Herbaceous	No	Yes	05/20/21
Cheasty Yard East	LACO3	Lapsana communis	nipplewort	3	Herbaceous	No	Yes	05/20/21
Cheasty Yard East	MYMU	Mycelis muralis	wall-lettuce	0.01	Herbaceous	No	No	05/20/21
Cheasty Yard East	POMU	Polystichum munitum	sword fern	4	Herbaceous	Yes	No	05/20/21
Cheasty Yard East	SODU	Solanum dulcamara	bittersweet nightshade	0.01	Herbaceous	No	Yes	05/20/21
Cheasty Yard East	TEGR2	Tellima grandiflora	fringecup	1	Herbaceous	Yes	No	05/20/21
Cheasty Yard East	ACCI	Acer circinatum	vine maple	0.5	Shrub	Yes	No	05/20/21
Cheasty Yard East	AMAL2	Amelanchier alnifolia	serviceberry	0.25	Shrub	Yes	No	05/20/21
Cheasty Yard East	GASH	Gaultheria shallon	salal	0.25	Shrub	Yes	No	05/20/21
Cheasty Yard East	HODI	Holodiscus discolor	oceanspray	5	Shrub	Yes	No	05/20/21
Cheasty Yard East	MANE2	Mahonia nervosa	low Oregon grape	0.01	Shrub	Yes	No	05/20/21
Cheasty Yard East	OECE	Oemleria cerasiformis	indian plum	1	Shrub	Yes	No	05/20/21
Cheasty Yard East	RUBI	Rubus bifrons	Himalayan blackberry	1	Shrub	No	Yes	05/20/21
Cheasty Yard East	RUPA	Rubus parviflorus	thimbleberry	1	Shrub	Yes	No	05/20/21
Cheasty Yard East	RUSP	Rubus spectabilis	salmonberry	1	Shrub	Yes	No	05/20/21
Cheasty Yard East	SPDO	Spiraea douglasii	hardhack	3	Shrub	Yes	No	05/20/21
Cheasty Yard East	SYAL	Symphoricarpos albus	snowberry	10	Shrub	Yes	No	05/20/21
Cheasty Yard East	VIBUR	Viburnum sp.	viburnum	4	Shrub	No	No	05/20/21

Appendix E GSP Forest Monitoring Plot 2021 Baseline Data
Plot Density (1 of 3)

Plot_Number	Species	Scientific	Common	Diameter	Height	Native	Invasive
Cheasty Yard	ACMA3	Acer macrophyllum	bigleaf maple	20.5	85	Yes	No
Cheasty Yard	ACMA3	Acer macrophyllum	bigleaf maple	13.5	85	Yes	No
Cheasty Yard	ACMA3	Acer macrophyllum	bigleaf maple	11	50	Yes	No
Cheasty Yard	ACMA3	Acer macrophyllum	bigleaf maple	7	45	Yes	No
Cheasty Yard	ACMA3	Acer macrophyllum	bigleaf maple	1	18	Yes	No
Cheasty Yard	ACPS	Acer pseudoplatanus	sycamore maple	0.5	6	No	Yes
Cheasty Yard	ACPS	Acer pseudoplatanus	sycamore maple	0.5	3	No	Yes
Cheasty Yard	FRPU7	Frangula purshiana	cascara	0.5	8	Yes	No
Cheasty Yard	FRPU7	Frangula purshiana	cascara	0.5	6	Yes	No
Cheasty Yard	ILAQ80	Ilex aquifolium	English holly	0.5	1	No	Yes
Cheasty Yard	ILAQ80	Ilex aquifolium	English holly	0.5	3	No	Yes
Cheasty Yard	PIST	Pinus strobus	eastern white pine	0.5	8	No	No
Cheasty Yard	POTR15	Populus trichocarpa	black cottonwood	44.5	110	Yes	No
Cheasty Yard	POTR15	Populus trichocarpa	black cottonwood	37	120	Yes	No
Cheasty Yard	POTR15	Populus trichocarpa	black cottonwood	35.5	110	Yes	No
Cheasty Yard	POTR15	Populus trichocarpa	black cottonwood	35	120	Yes	No
Cheasty Yard	POTR15	Populus trichocarpa	black cottonwood	29	110	Yes	No
Cheasty Yard	PREM	Prunus emarginata	bitter cherry	0.5	8	Yes	No
Cheasty Yard	PSME	Pseudotsuga menziesii	Douglas fir	0.5	3	Yes	No
Cheasty Yard	PSME	Pseudotsuga menziesii	Douglas fir	0.5	6	Yes	No
Cheasty Yard	THPL	Thuja plicata	western red cedar	1.5	11	Yes	No
Cheasty Yard	THPL	Thuja plicata	western red cedar	0.5	3	Yes	No
Cheasty Yard	THPL	Thuja plicata	western red cedar	0.5	6	Yes	No
Cheasty Yard	_CWD	CWD	coarse woody debris	25	5	No	No
Cheasty Yard	_CWD	CWD	coarse woody debris	18	19	No	No
Cheasty Yard	_CWD	CWD	coarse woody debris	9	15	No	No
Cheasty Yard	_CWD	CWD	coarse woody debris	8	11	No	No
Cheasty Yard	_CWD	CWD	coarse woody debris	7.4	17.1	No	No
Cheasty Yard	_CWD	CWD	coarse woody debris	5.7	21	No	No
Cheasty Yard East	ACMA3	Acer macrophyllum	bigleaf maple	15	65	Yes	No
Cheasty Yard East	ACMA3	Acer macrophyllum	bigleaf maple	14	60	Yes	No
Cheasty Yard East	ACMA3	Acer macrophyllum	bigleaf maple	6	40	Yes	No
Cheasty Yard East	ACMA3	Acer macrophyllum	bigleaf maple	4	35	Yes	No
Cheasty Yard East	ACMA3	Acer macrophyllum	bigleaf maple	3	30	Yes	No
Cheasty Yard East	ACMA3	Acer macrophyllum	bigleaf maple	3	30	Yes	No
Cheasty Yard East	ACMA3	Acer macrophyllum	bigleaf maple	2.5	25	Yes	No
Cheasty Yard East	ACMA3	Acer macrophyllum	bigleaf maple	2	21	Yes	No
Cheasty Yard East	ACMA3	Acer macrophyllum	bigleaf maple	2	26	Yes	No
Cheasty Yard East	ACMA3	Acer macrophyllum	bigleaf maple	2	26	Yes	No
Cheasty Yard East	ACMA3	Acer macrophyllum	bigleaf maple	2	26	Yes	No
Cheasty Yard East	ACMA3	Acer macrophyllum	bigleaf maple	2	40	Yes	No
Cheasty Yard East	ACMA3	Acer macrophyllum	bigleaf maple	2	40	Yes	No
Cheasty Yard East	ACMA3	Acer macrophyllum	bigleaf maple	2	26	Yes	No
Cheasty Yard East	ACMA3	Acer macrophyllum	bigleaf maple	1	12	Yes	No
Cheasty Yard East	ACMA3	Acer macrophyllum	bigleaf maple	1	12	Yes	No

Appendix E GSP Forest Monitoring Plot 2021 Baseline Data
Plot Density (2 of 3)

Plot_Number	Species	Scientific	Common	Diameter	Height	Native	Invasive
Cheasty Yard East	ACMA3	Acer macrophyllum	bigleaf maple	1	12	Yes	No
Cheasty Yard East	ACMA3	Acer macrophyllum	bigleaf maple	1	12	Yes	No
Cheasty Yard East	ACMA3	Acer macrophyllum	bigleaf maple	1	12	Yes	No
Cheasty Yard East	ACMA3	Acer macrophyllum	bigleaf maple	1	12	Yes	No
Cheasty Yard East	ACMA3	Acer macrophyllum	bigleaf maple	1	12	Yes	No
Cheasty Yard East	ACMA3	Acer macrophyllum	bigleaf maple	0.5	3	Yes	No
Cheasty Yard East	ACMA3	Acer macrophyllum	bigleaf maple	0.5	3	Yes	No
Cheasty Yard East	ACMA3	Acer macrophyllum	bigleaf maple	0.5	3	Yes	No
Cheasty Yard East	ACMA3	Acer macrophyllum	bigleaf maple	0.5	9	Yes	No
Cheasty Yard East	ACMA3	Acer macrophyllum	bigleaf maple	0.5	9	Yes	No
Cheasty Yard East	ACMA3	Acer macrophyllum	bigleaf maple	0.5	9	Yes	No
Cheasty Yard East	ACMA3	Acer macrophyllum	bigleaf maple	0.5	9	Yes	No
Cheasty Yard East	ACMA3	Acer macrophyllum	bigleaf maple	0.5	9	Yes	No
Cheasty Yard East	ACMA3	Acer macrophyllum	bigleaf maple	0.5	9	Yes	No
Cheasty Yard East	ACMA3	Acer macrophyllum	bigleaf maple	0.5	9	Yes	No
Cheasty Yard East	ALRU2	Alnus rubra	red alder	19	100	Yes	No
Cheasty Yard East	ALRU2	Alnus rubra	red alder	14	75	Yes	No
Cheasty Yard East	ILAQ80	Ilex aquifolium	English holly	0.5	0.5	No	Yes
Cheasty Yard East	ILAQ80	Ilex aquifolium	English holly	0.5	0.5	No	Yes
Cheasty Yard East	ILAQ80	Ilex aquifolium	English holly	0.5	0.5	No	Yes
Cheasty Yard East	ILAQ80	Ilex aquifolium	English holly	0.5	0.5	No	Yes
Cheasty Yard East	ILAQ80	Ilex aquifolium	English holly	0.5	0.5	No	Yes
Cheasty Yard East	ILAQ80	Ilex aquifolium	English holly	0.5	0.5	No	Yes
Cheasty Yard East	ILAQ80	Ilex aquifolium	English holly	0.5	0.5	No	Yes
Cheasty Yard East	ILAQ80	Ilex aquifolium	English holly	0.5	0.5	No	Yes
Cheasty Yard East	ILAQ80	Ilex aquifolium	English holly	0.5	0.5	No	Yes
Cheasty Yard East	ILAQ80	Ilex aquifolium	English holly	0.5	0.5	No	Yes
Cheasty Yard East	PISI	Picea sitchensis	Sitka spruce	0.5	5	Yes	No
Cheasty Yard East	PISI	Picea sitchensis	Sitka spruce	0.5	3	Yes	No
Cheasty Yard East	PISI	Picea sitchensis	Sitka spruce	0.5	3	Yes	No
Cheasty Yard East	POTR15	Populus trichocarpa	black cottonwood	53	130	Yes	No
Cheasty Yard East	PSME	Pseudotsuga menziesii	Douglas fir	0.5	3	Yes	No
Cheasty Yard East	PSME	Pseudotsuga menziesii	Douglas fir	0.5	3	Yes	No
Cheasty Yard East	PSME	Pseudotsuga menziesii	Douglas fir	0.5	3	Yes	No
Cheasty Yard East	PSME	Pseudotsuga menziesii	Douglas fir	0.5	3	Yes	No
Cheasty Yard East	PSME	Pseudotsuga menziesii	Douglas fir	0.5	3	Yes	No
Cheasty Yard East	PSME	Pseudotsuga menziesii	Douglas fir	0.5	3	Yes	No
Cheasty Yard East	PSME	Pseudotsuga menziesii	Douglas fir	0.5	3	Yes	No
Cheasty Yard East	PSME	Pseudotsuga menziesii	Douglas fir	0.5	3	Yes	No
Cheasty Yard East	PSME	Pseudotsuga menziesii	Douglas fir	0.5	3	Yes	No
Cheasty Yard East	PSME	Pseudotsuga menziesii	Douglas fir	0.5	3	Yes	No
Cheasty Yard East	PSME	Pseudotsuga menziesii	Douglas fir	0.5	6	Yes	No
Cheasty Yard East	SOAU	Sorbus aucuparia	European mountain ash	0.5	3	No	Yes
Cheasty Yard East	THPL	Thuja plicata	western red cedar	0.5	6	Yes	No
Cheasty Yard East	THPL	Thuja plicata	western red cedar	0.5	6	Yes	No
Cheasty Yard East	THPL	Thuja plicata	western red cedar	0.5	6	Yes	No

Appendix E GSP Forest Monitoring Plot 2021 Baseline Data
Plot Density (3 of 3)

Plot_Number	Species	Scientific	Common	Diameter	Height	Native	Invasive
Cheasty Yard East	THPL	Thuja plicata	western red cedar	0.5	3	Yes	No
Cheasty Yard East	_cwd	CWD	coarse woody debris	11	32	No	No
Cheasty Yard East	_cwd	CWD	coarse woody debris	6	8	No	No
Cheasty Yard East	_snag	snag	snag	15	25	No	No
Cheasty Yard East	_snag	snag	snag	8	45	No	No
Cheasty Yard East	_snag	snag	snag	7	45	No	No
Cheasty Yard-2	ABGR	Abies grandis	grand fir	0.5	6	Yes	No
Cheasty Yard-2	ACMA3	Acer macrophyllum	bigleaf maple	18.5	85	Yes	No
Cheasty Yard-2	ACMA3	Acer macrophyllum	bigleaf maple	17	5	Yes	No
Cheasty Yard-2	ACMA3	Acer macrophyllum	bigleaf maple	11.5	65	Yes	No
Cheasty Yard-2	ACMA3	Acer macrophyllum	bigleaf maple	11	80	Yes	No
Cheasty Yard-2	ACMA3	Acer macrophyllum	bigleaf maple	9	65	Yes	No
Cheasty Yard-2	ACMA3	Acer macrophyllum	bigleaf maple	8	80	Yes	No
Cheasty Yard-2	ACMA3	Acer macrophyllum	bigleaf maple	8	35	Yes	No
Cheasty Yard-2	ACMA3	Acer macrophyllum	bigleaf maple	6.5	50	Yes	No
Cheasty Yard-2	ACMA3	Acer macrophyllum	bigleaf maple	6	40	Yes	No
Cheasty Yard-2	ACMA3	Acer macrophyllum	bigleaf maple	4.5	45	Yes	No
Cheasty Yard-2	ACMA3	Acer macrophyllum	bigleaf maple	4	30	Yes	No
Cheasty Yard-2	ACMA3	Acer macrophyllum	bigleaf maple	2.5	25	Yes	No
Cheasty Yard-2	ACMA3	Acer macrophyllum	bigleaf maple	2	25	Yes	No
Cheasty Yard-2	ACMA3	Acer macrophyllum	bigleaf maple	0.5	8	Yes	No
Cheasty Yard-2	ACPA2	Acer palmatum	Japanese maple	3	25	No	No
Cheasty Yard-2	ACPS	Acer pseudoplatanus	sycamore maple	0.5	3	No	Yes
Cheasty Yard-2	ACPS	Acer pseudoplatanus	sycamore maple	0.05	6	No	Yes
Cheasty Yard-2	ILAQ80	Ilex aquifolium	English holly	0.5	5	No	Yes
Cheasty Yard-2	ILAQ80	Ilex aquifolium	English holly	0.5	3	No	Yes
Cheasty Yard-2	POTR15	Populus trichocarpa	black cottonwood	39	120	Yes	No
Cheasty Yard-2	POTR15	Populus trichocarpa	black cottonwood	0.5	5	Yes	No
Cheasty Yard-2	PRAV	Prunus avium	sweet cherry	1	15	No	Yes
Cheasty Yard-2	PRAV	Prunus avium	sweet cherry	0.5	3	No	Yes
Cheasty Yard-2	PRAV	Prunus avium	sweet cherry	0.5	8	No	Yes
Cheasty Yard-2	PSME	Pseudotsuga menziesii	Douglas fir	0.5	6	Yes	No
Cheasty Yard-2	THPL	Thuja plicata	western red cedar	1.5	8	Yes	No
Cheasty Yard-2	THPL	Thuja plicata	western red cedar	0.5	6	Yes	No
Cheasty Yard-2	THPL	Thuja plicata	western red cedar	0.5	4	Yes	No
Cheasty Yard-2	_CWD	CWD	coarse woody debris	15	20	No	No
Cheasty Yard-2	_CWD	CWD	coarse woody debris	12	8.5	No	No
Cheasty Yard-2	_CWD	CWD	coarse woody debris	8	3	No	No
Cheasty Yard-2	_CWD	CWD	coarse woody debris	8	9	No	No
Cheasty Yard-2	_CWD	CWD	coarse woody debris	6	8	No	No
Cheasty Yard-2	_snag	snag	snag	11	9	No	No
Cheasty Yard-2	_snag	snag	snag	8	20	No	No
Cheasty Yard-2	_snag	snag	snag	7	50	No	No
Cheasty Yard-2	_snag	snag	snag	6.5	25	No	No
Cheasty Yard-2	_snag	snag	snag	5	12	No	No

Appendix E GSP Forest Monitoring Plot 2021 Baseline Data

Cheasty Yard East (N)

Cheasty Yard East (E)

Appendix E GSP Forest Monitoring Plot 2021 Baseline Data

Cheasty Yard East (S)

Cheasty Yard East (W)

Appendix E GSP Forest Monitoring Plot 2021 Baseline Data

Cheasty Yard (N)

Cheasty Yard (E)

Appendix E GSP Forest Monitoring Plot 2021 Baseline Data

Cheasty Yard (S)

Cheasty Yard (W)

Cheasty Yard 2 (N)

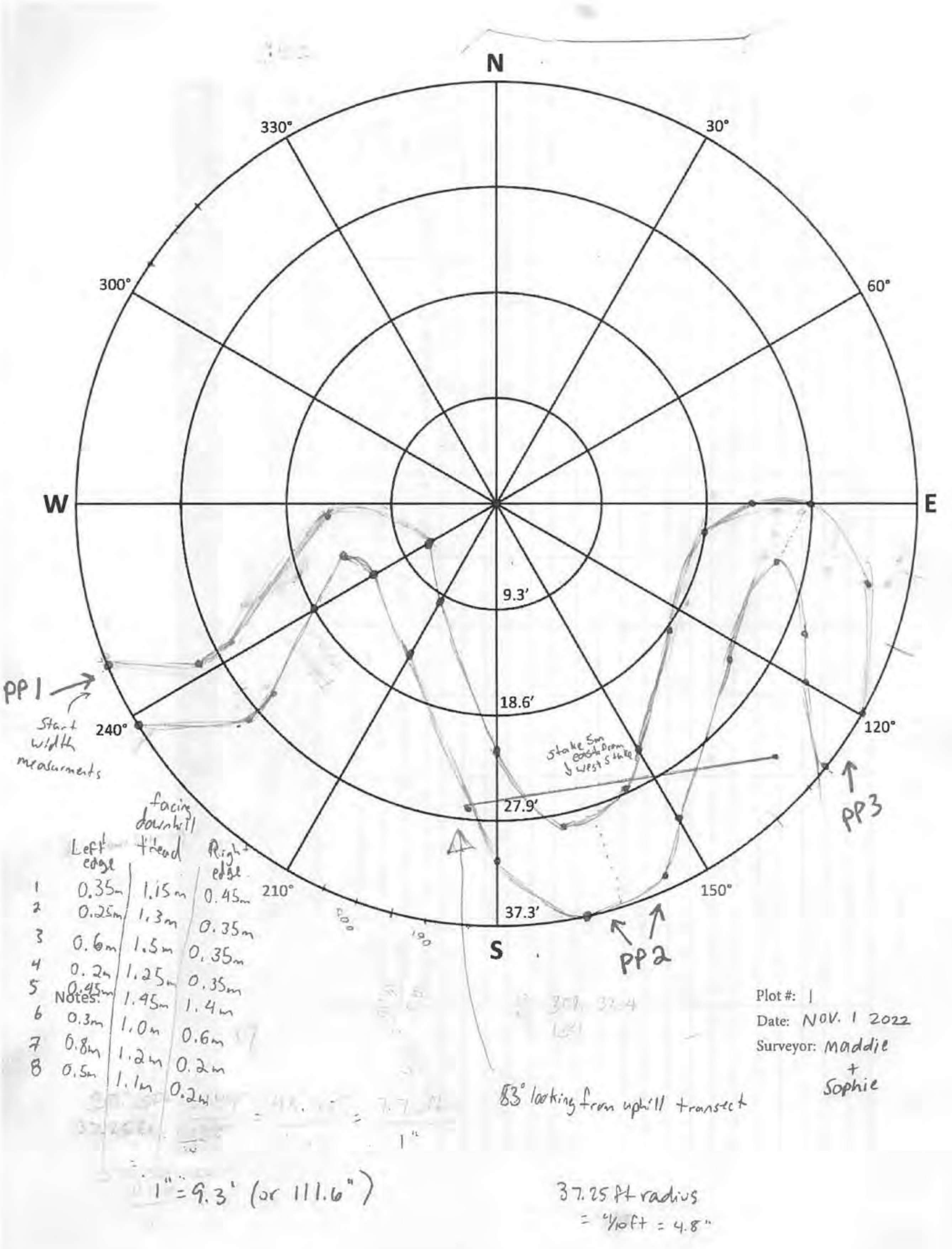
Cheasty Yard 2 (E)

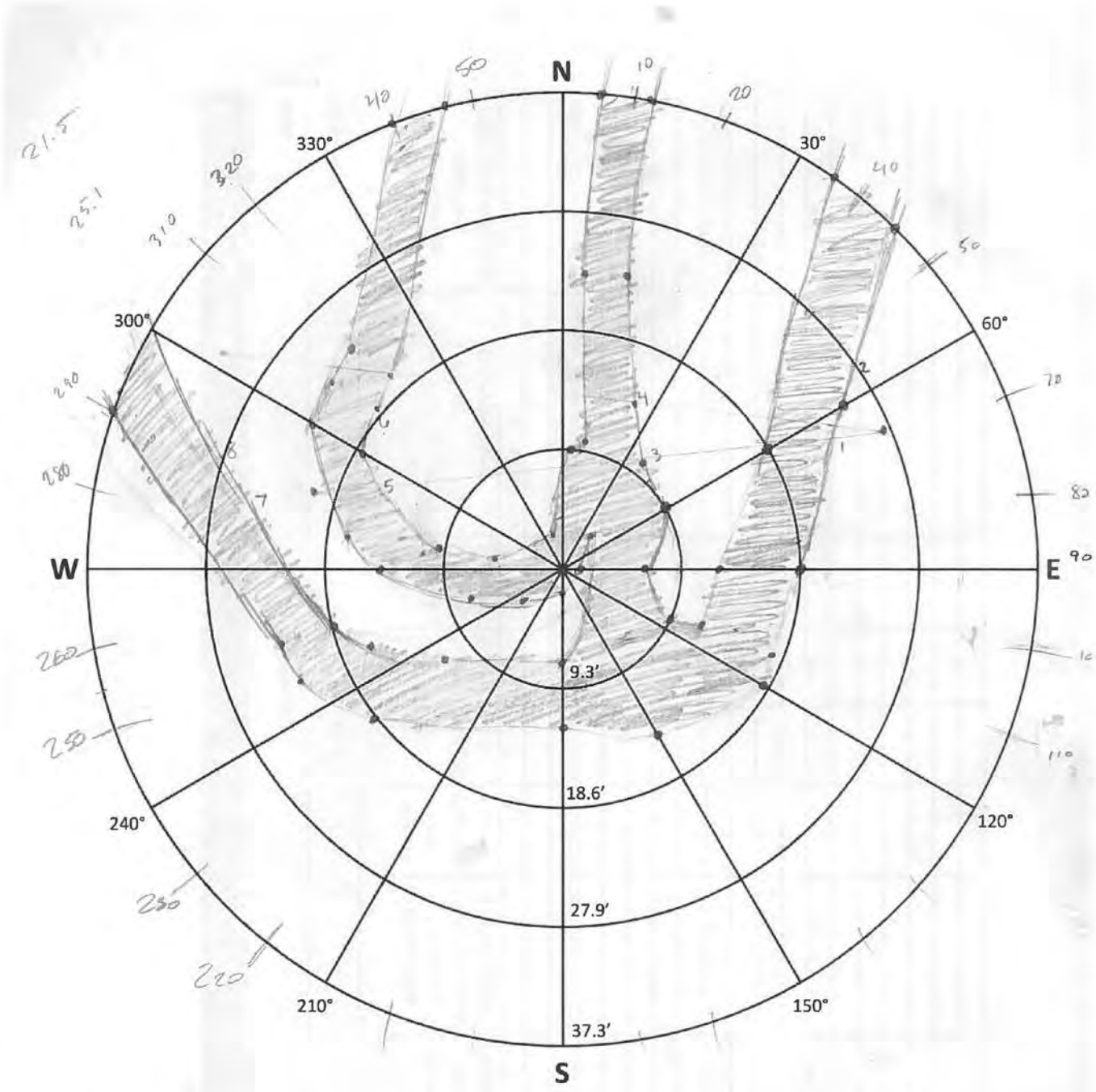
Appendix E GSP Forest Monitoring Plot 2021 Baseline Data

Cheasty Yard 2 (S)

Cheasty Yard 2 (W)

Appendix F Plot graph trail drawings – Nov 2022





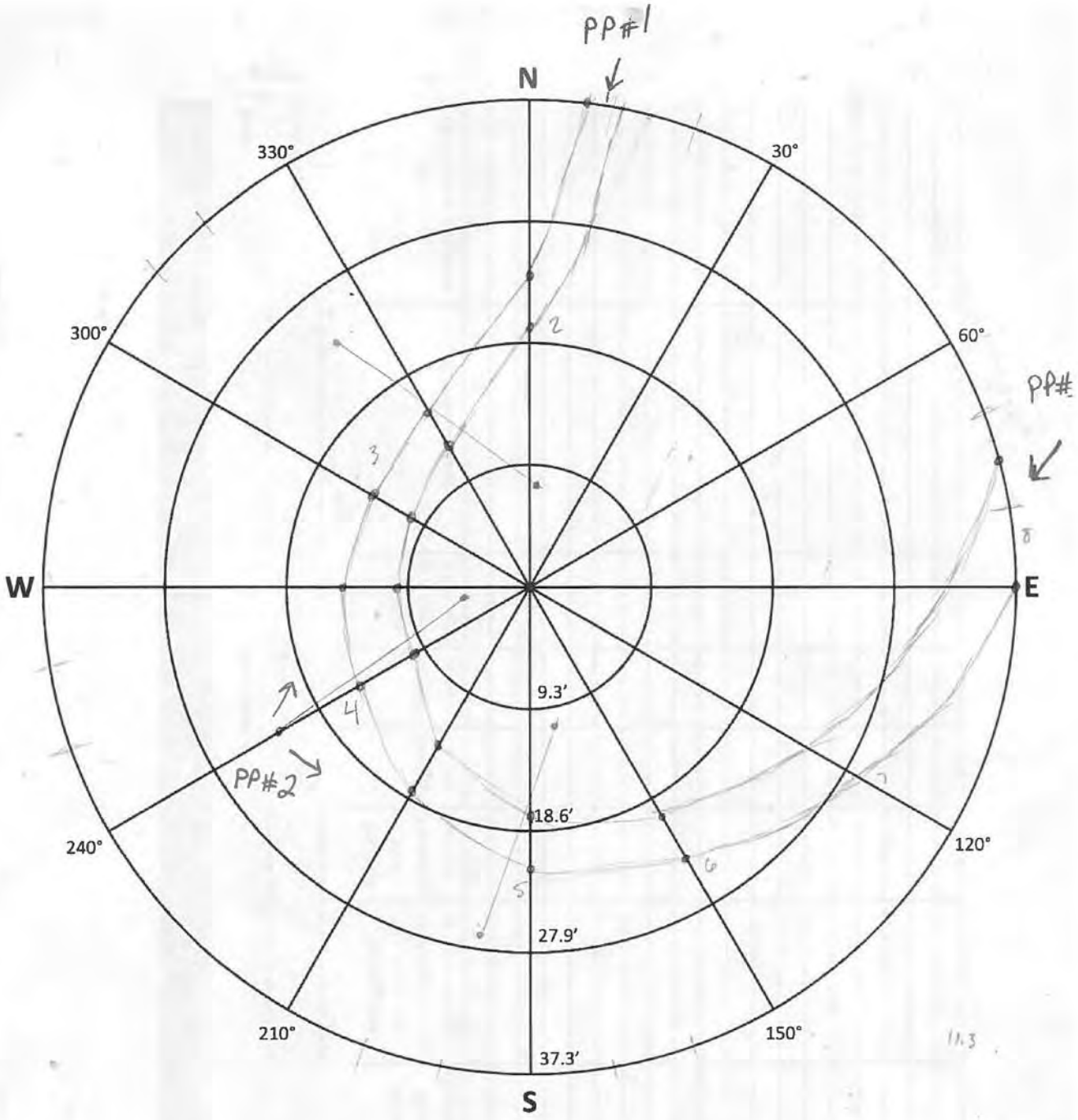
Notes:

L W R
1.4 3.4 1.2

	L	W	R
1,2	0.42	1.04	0.37
	0.52	1.16	0.24
3,4	0.34	2.44	0.73
	0.58	1.07	0.18
5,6	0.7	1.04	0.3
	0.24	0.73	0.18
7,8	0.27	0.88	0.55
	0.21	1.22	0.33

310
29.8
27.2

Plot #: 2
Date: 11.01.22
Surveyor:



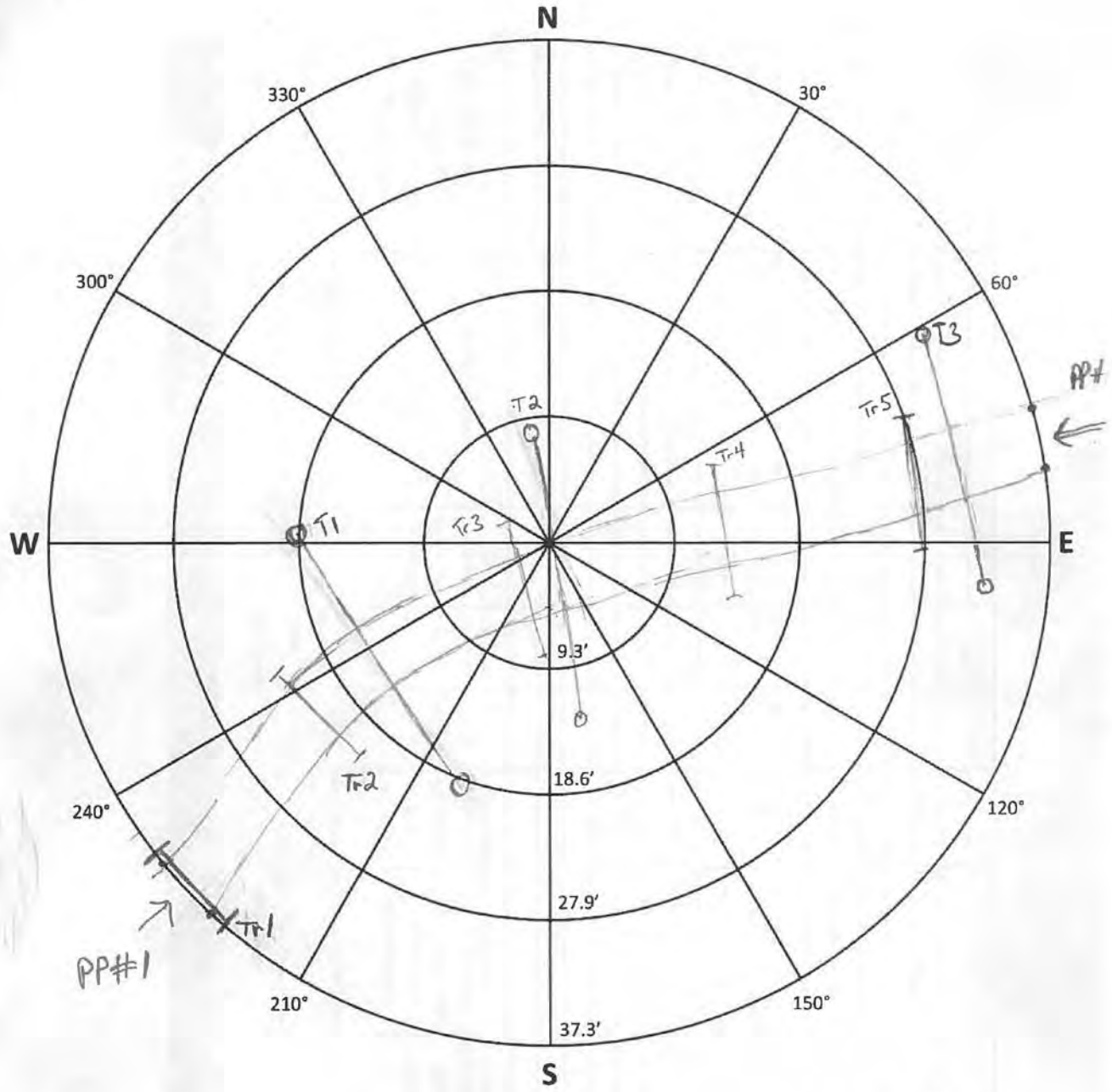
Notes:

	Left	Width	Right
1	0.35	0.45	0.3 meters
2	0.25	0.4	0.35
3	0.3	0.6	0.2
4	0.6	0.8	0.4
5	0.4	0.8	0.2
6	0.3	0.85	0.2
7	0.2	1m	0.2
8	0.2	1m	0.2

Plot #: 4

Date: Nov 2nd 2022

Surveyor:
Sean
Maddie
Sophie



Notes:

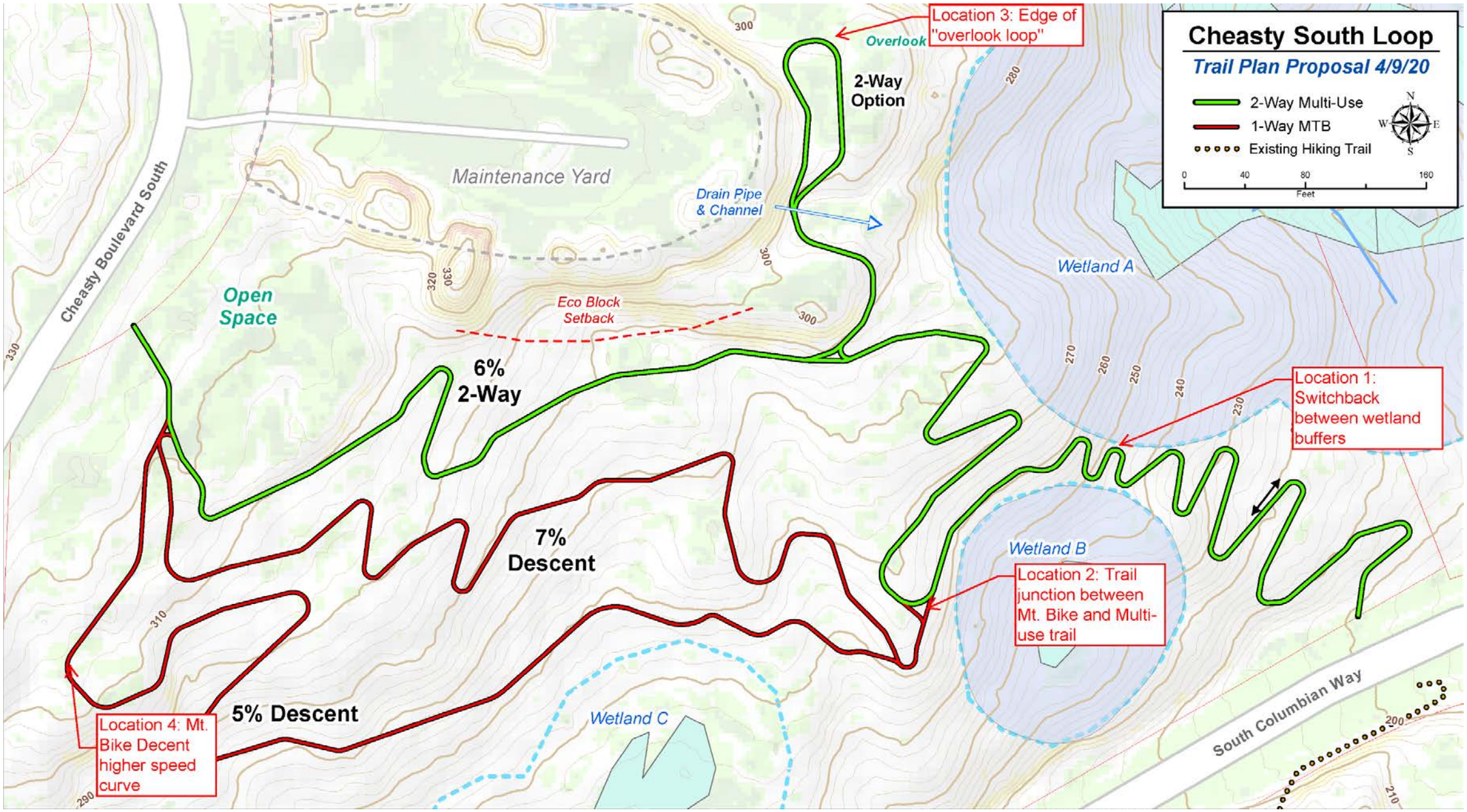
Plot #: 5
Date: 11/01/22
Surveyor: nws

Tread width (From uphill edge of plot)

1. LE	Tread	RE
1. 0.5	1.0	0.7 = 2.20
2. 0.45	1.25	0.45 = 2.15
3. 0.4	1.6	0.5 = 2.50
4. 0.35	0.95	0.45 = 1.75
5. 0.3	1.25	0.20 = 1.75

5m = 16.4ft

Appendix G SPR Proposed Trail Layout With Monitoring Plot Locations



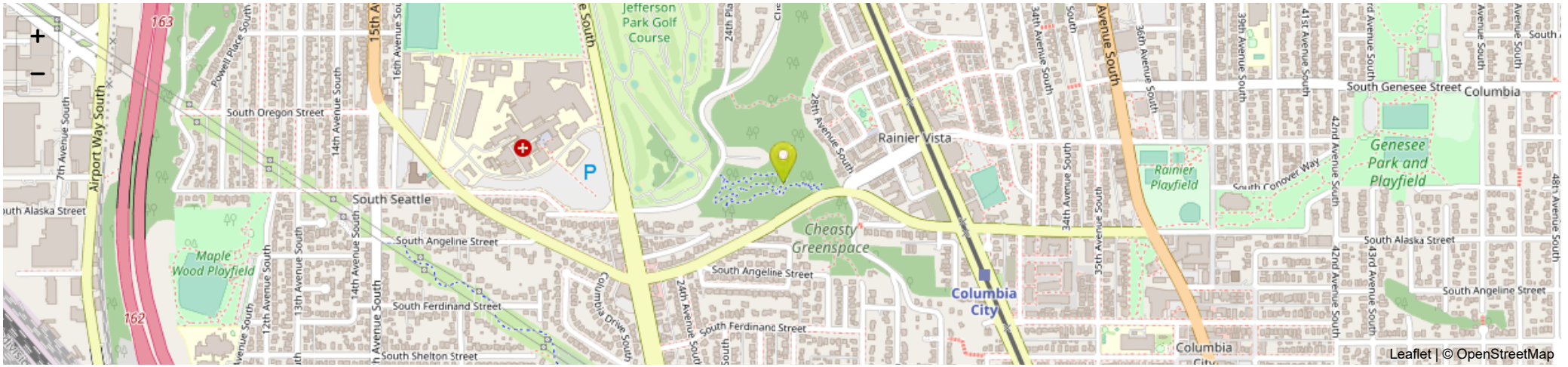
City of Seattle Parks & Recreation

Kelly Stamm
03/13/2023

Cheasty MTB Trail- Snowberry Trail

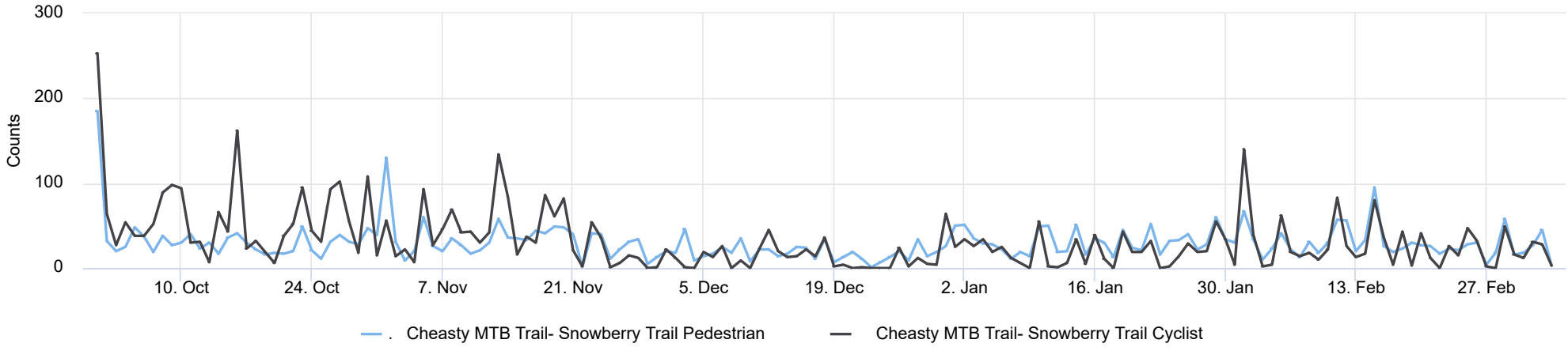
October 1, 2022 12:00 AM → March 6, 2023 12:00 AM

Location



Daily traffic open_in_full

date_range 10/01/2022 → 03/06/2023



Cheasty MTB Trail- Snowberry Trail

October 1, 2022 12:00 AM → March 6, 2023 12:00 AM

Daily Average Peds

date_range 10/01/2022 → 03/05/2023

Daily Average

30

Daily Average Bicyclists

date_range 10/01/2022 → 03/05/2023

Daily Average

32

Peak Day Bicyclists

date_range 10/01/2022 → 03/05/2023

Peak Day

Saturday
Oct 1, 2022

253

Peak Day Peds

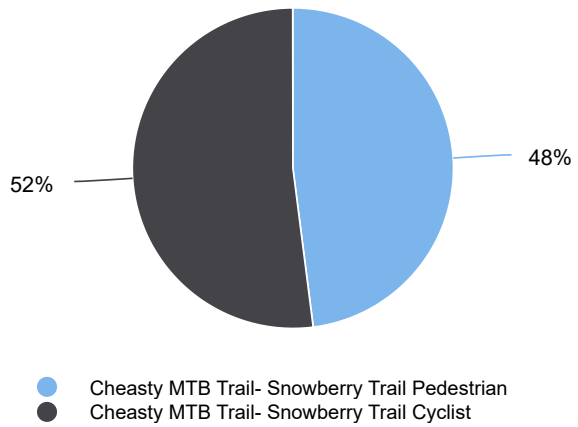
date_range 10/01/2022 → 03/05/2023

Peak Day

Saturday
Oct 1, 2022

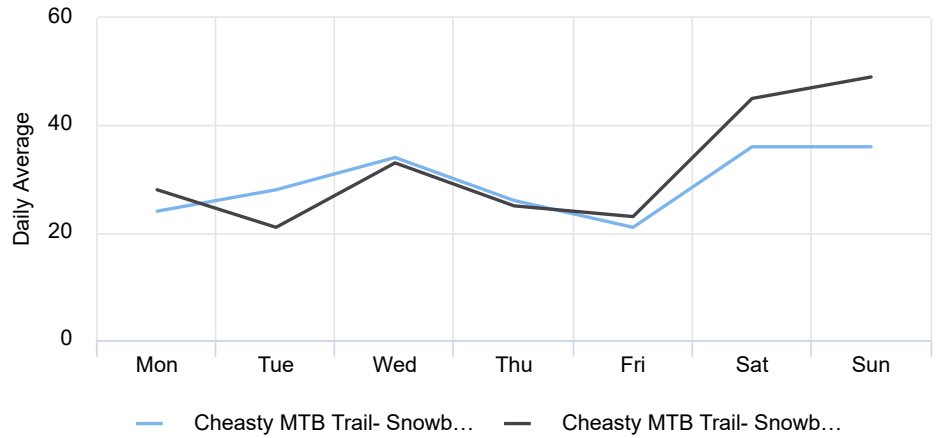
185

Bike/Ped Distribution



Daily Profile

date_range 10/01/2022 → 03/05/2023

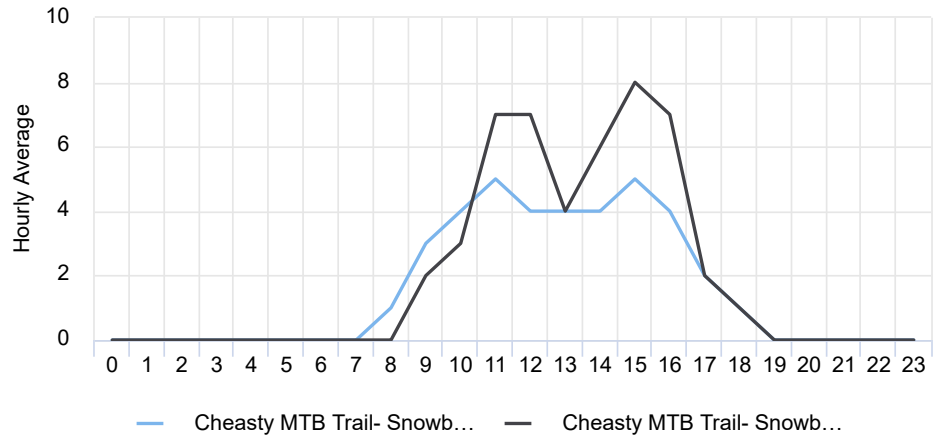


Cheasty MTB Trail- Snowberry Trail

October 1, 2022 12:00 AM → March 6, 2023 12:00 AM

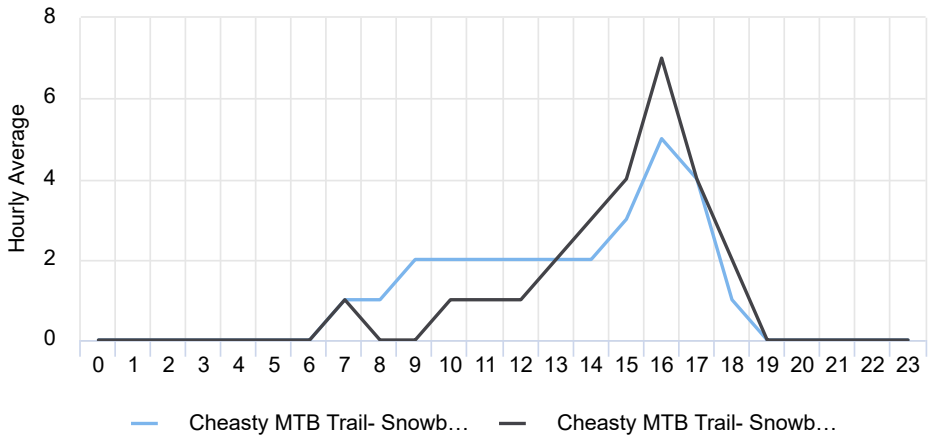
Hourly Profile - Weekend

date_range 10/01/2022 → 03/07/2023



Hourly Profile - Weekdays

date_range 10/01/2022 → 03/06/2023



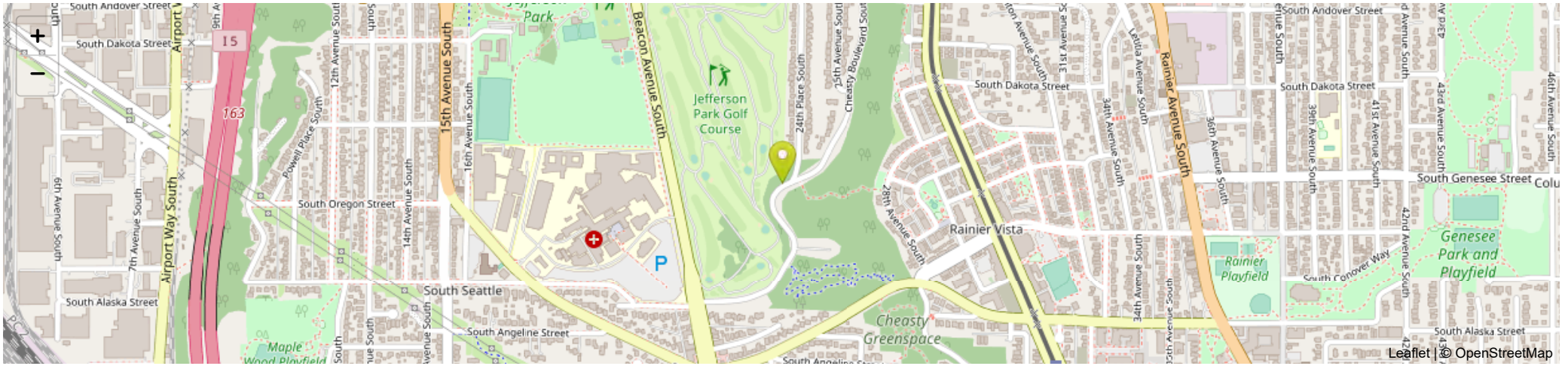
City of Seattle Parks & Recreation

Mike Schwindeller
03/13/2023

Cheasty MTB Trail- S. of 24th Pl

July 1, 2022 12:00 AM → March 6, 2023 12:00 AM

Location



Daily Average Bicyclists

date_range 06/01/2022 → 03/05/2023

Daily Average

2

Daily Average Peds

date_range 07/01/2022 → 03/05/2023

Daily Average

440

Peak Day Bicyclists

date_range 07/01/2022 → 03/05/2023

Peak Day

Sunday
Jan 15, 2023

17

Peak Day Peds

date_range 07/01/2022 → 03/05/2023

Peak Day

Saturday
Aug 6, 2022

1,077

Daily Avg. - Week Ped&Bike

date_range 07/01/2022 → 03/12/2023

Daily Average

472

Daily Avg. - Weekend Ped&Bike

date_range 07/01/2022 → 03/12/2023

Daily Average

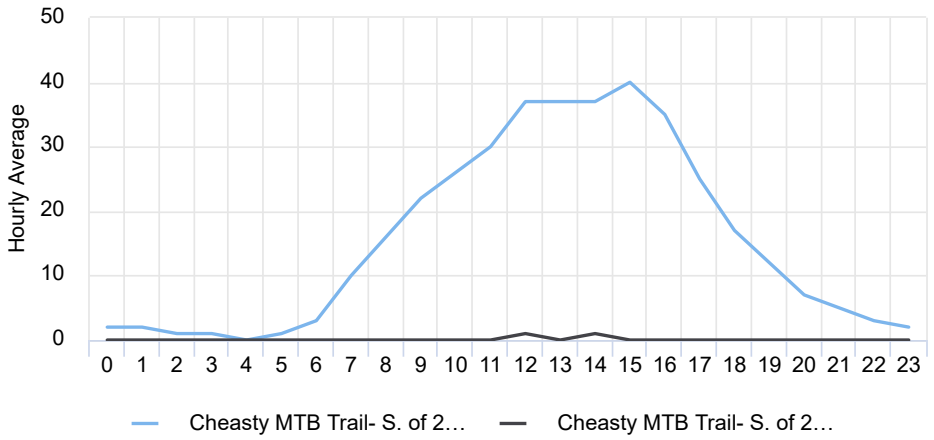
373

Cheasty MTB Trail- S. of 24th Pl

July 1, 2022 12:00 AM → March 6, 2023 12:00 AM

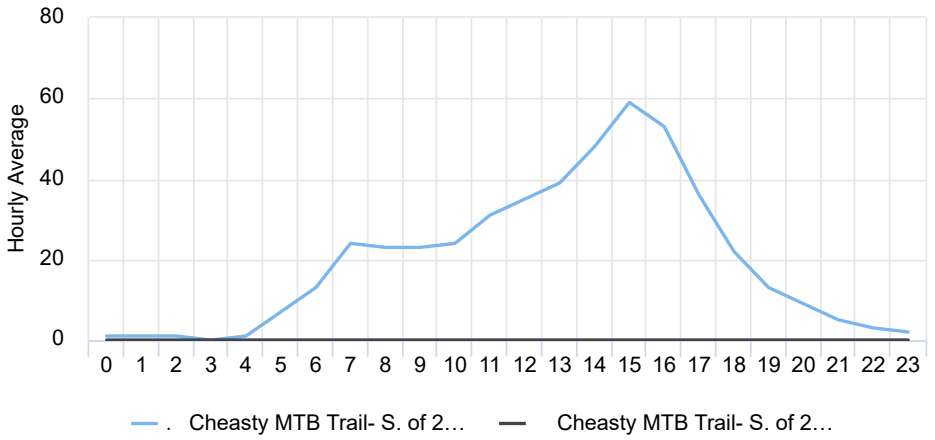
Hourly Profile - Weekend

date_range 07/01/2022 → 03/07/2023



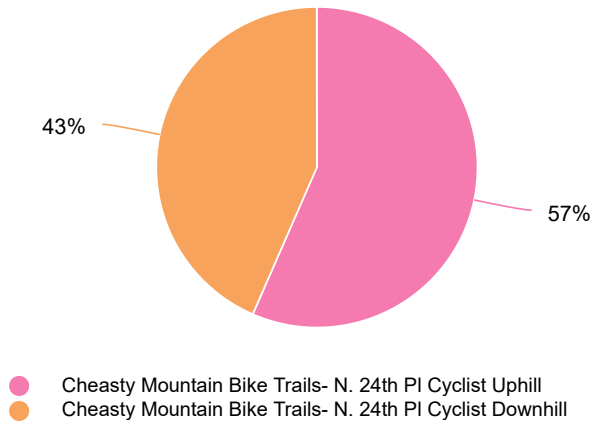
Hourly Profile - Weekdays

date_range 07/01/2022 → 03/07/2023

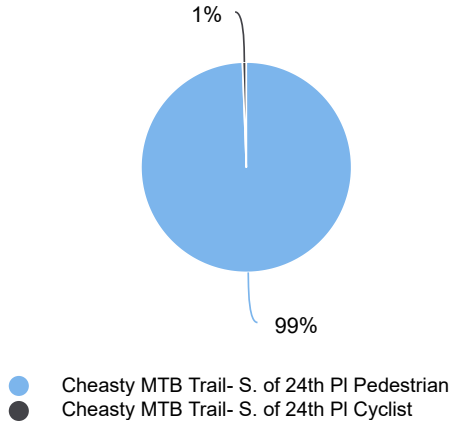


Downhill Vs Uphill Cyclists

date_range 07/01/2022 → 03/05/2023



Bike/Ped Distribution

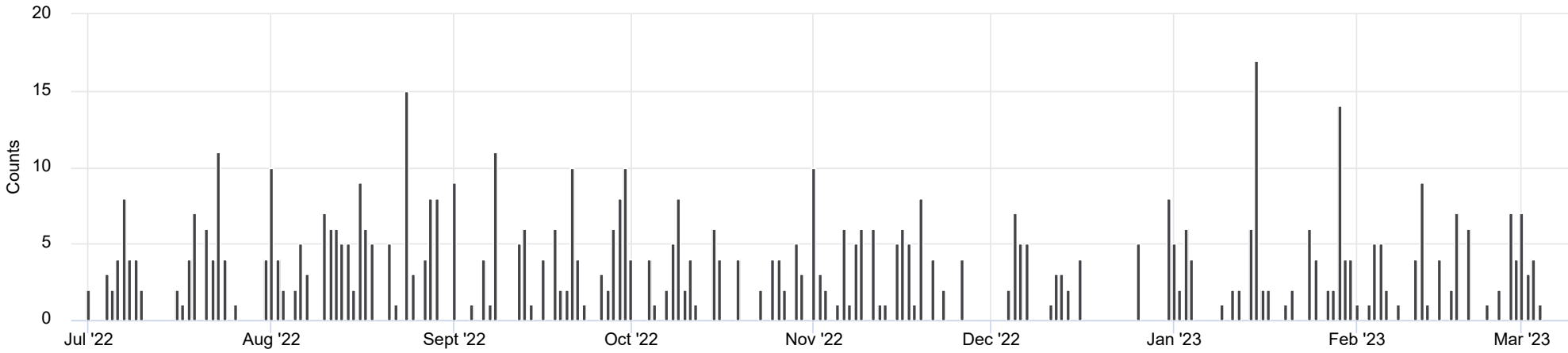


Cheasty MTB Trail- S. of 24th Pl

July 1, 2022 12:00 AM → March 6, 2023 12:00 AM

Daily Cyclists

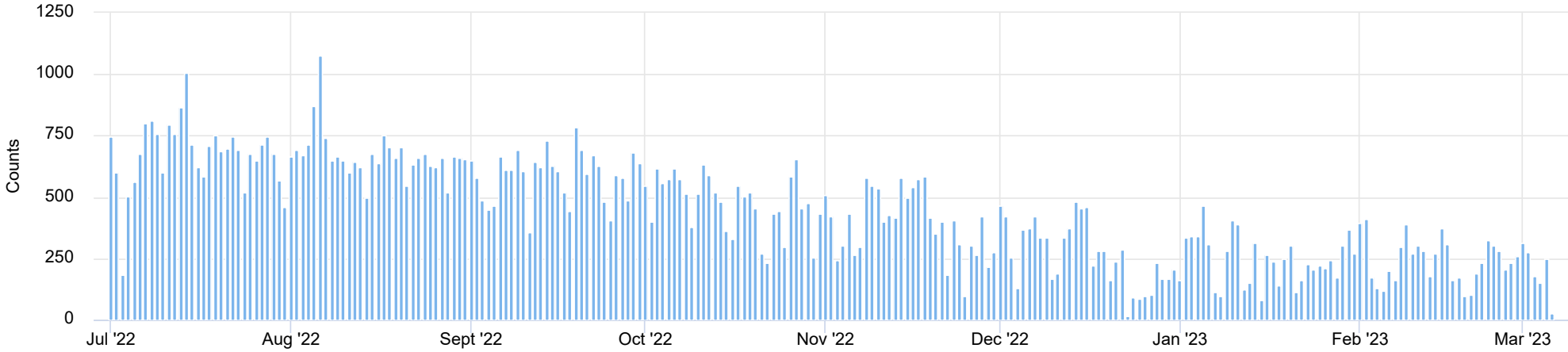
date_range 07/01/2022 → 03/06/2023



Daily Pedestrians

open_in_full

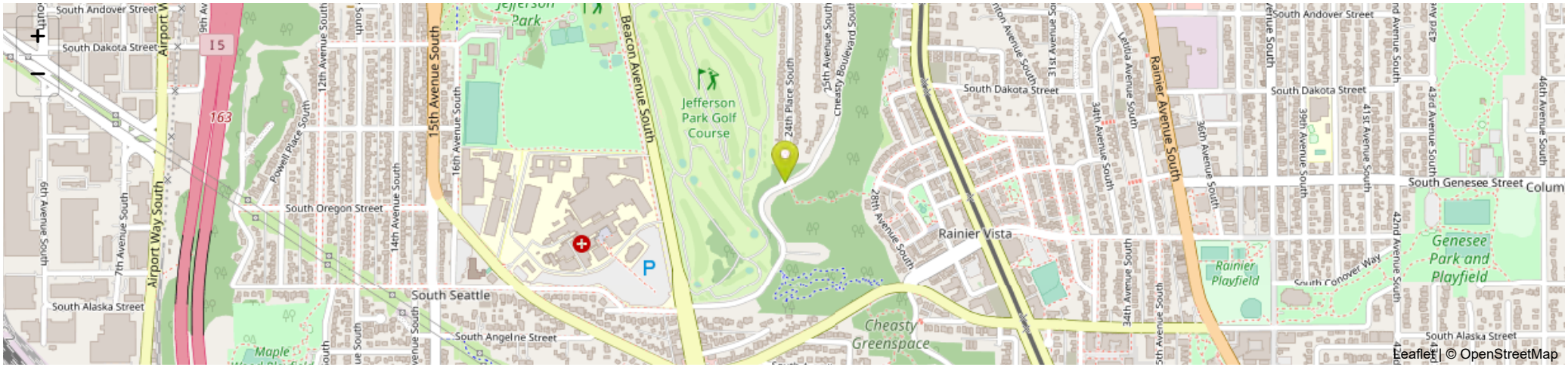
date_range 07/01/2022 → 03/06/2023



Cheasty MTB Trails- N. of 24th Pl

July 1, 2022 12:00 AM → March 6, 2023 12:00 AM

Location



Daily Average Bicyclists

date_range 06/01/2022 → 03/05/2023

Daily Average

1

Daily Average Peds

date_range 07/01/2022 → 03/05/2023

Daily Average

551

Peak Day Bicyclists

date_range 07/01/2022 → 03/05/2023

Peak Day

Saturday
Nov 19, 2022

6

Peak Day Peds

date_range 07/01/2022 → 03/05/2023

Peak Day

Saturday
Aug 6, 2022

1,185

Daily Avg. - Week Ped&Bike

date_range 07/01/2022 → 03/12/2023

Daily Average

592

Daily Avg. - Weekend Ped&Bike

date_range 07/01/2022 → 03/12/2023

Daily Average

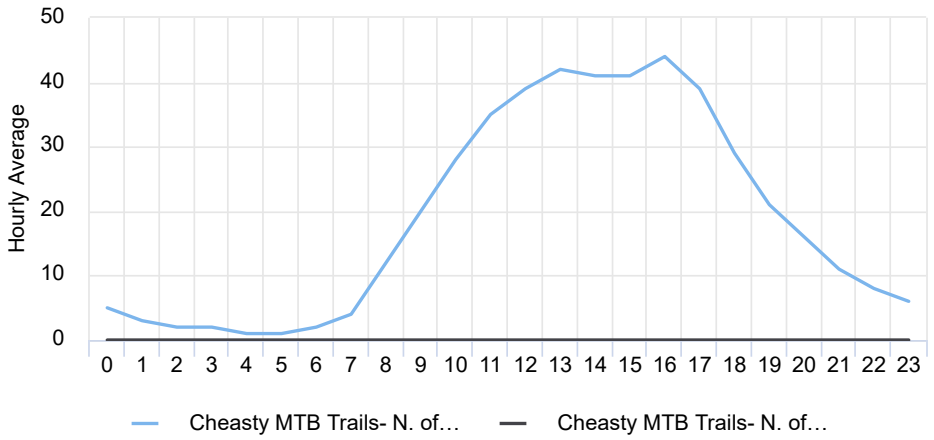
452

Cheasty MTB Trails- N. of 24th Pl

July 1, 2022 12:00 AM → March 6, 2023 12:00 AM

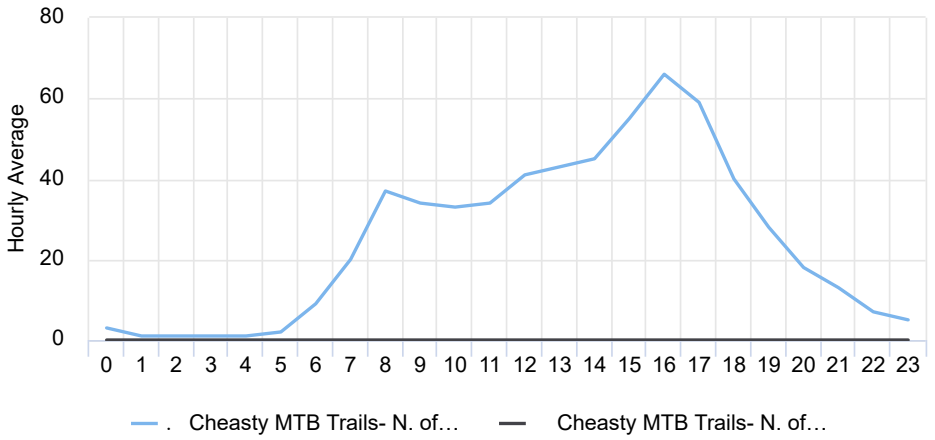
Hourly Profile - Weekend

date_range 07/01/2022 → 03/07/2023



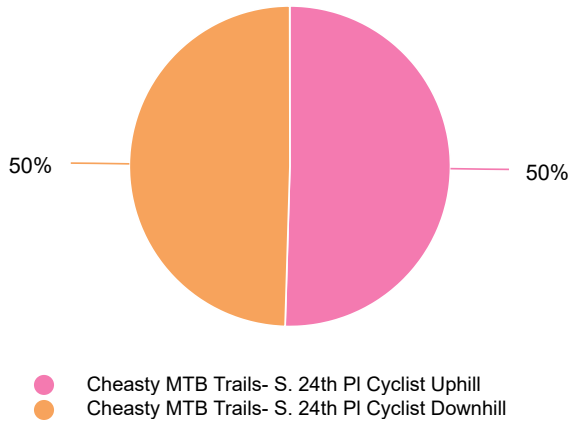
Hourly Profile - Weekdays

date_range 07/01/2022 → 03/07/2023

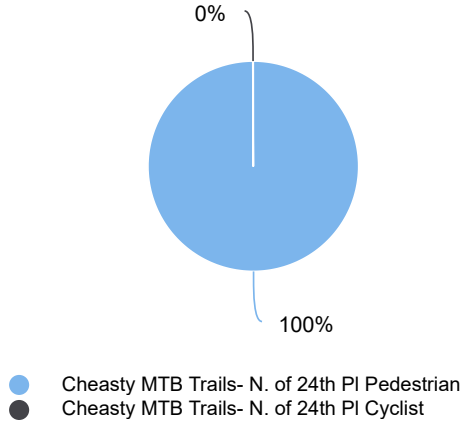


Downhill Vs Uphill Cyclists

date_range 07/01/2022 → 03/05/2023



Bike/Ped Distribution

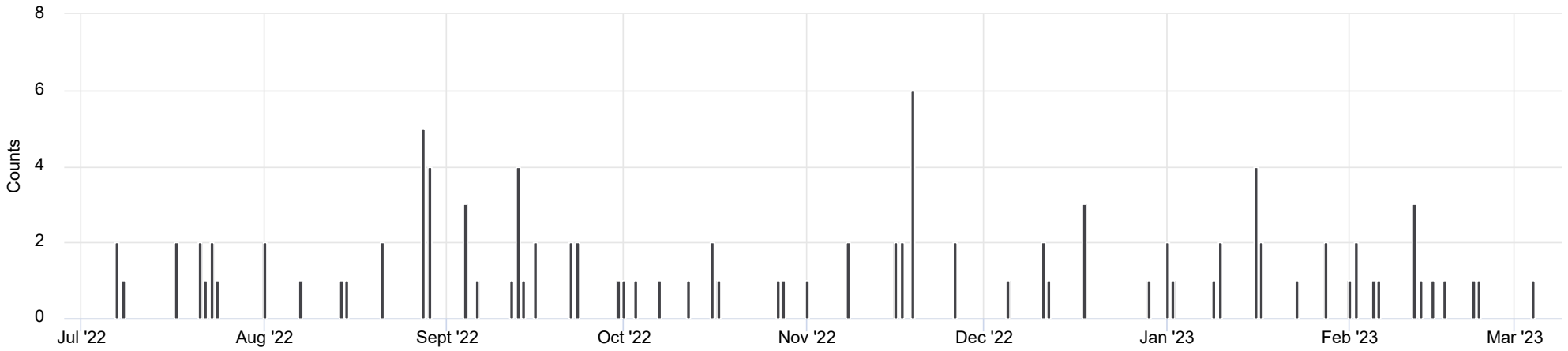


Cheasty MTB Trails- N. of 24th Pl

July 1, 2022 12:00 AM → March 6, 2023 12:00 AM

Daily Cyclists

date_range 07/01/2022 → 03/06/2023



Daily Pedestrians

open_in_full

date_range 07/01/2022 → 03/06/2023