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Technical Memorandum

To: Chris Beale, AICP, City of Puyallup File Number: 1077.0012

From: Rachael Hyland, Soundview Consultants LLC Date: October 6, 2021

Matt DeCaro, Soundview Consultants LLC

Re: Response to Third Party Comments

Benaroya Capital Company - South Hill Data Center

Wetland and Fish and Wildlife Habitat Assessment Report Third-Party Review

Dear Mr. Beale,

Soundview Consultants LLC (SVC) has been assisting Benaroya Capital Company (Applicant) with wetland and habitat assessments and environmental regulatory compliance support for a proposed commercial parking lot expansion on an 86.65-acre site located at 1015, 1019-1021, and 1023 39th Avenue Southeast in the City of Puyallup, Washington. The subject property consists of three parcels situated in the Southeast ½ of Section 3, Township 19 North, Range 4 East, W.M. (Pierce County Tax Parcel Numbers 0419034036, 0419034037, and 0419034038).

This Technical Memorandum has been prepared in response to the City of Puyallup third-party reviewer's comments dated July 16, 2021 (Confluence Environmental Company, 2021) regarding the review of the *Wetland and Fish and Wildlife Habitat Assessment Report* by SVC dated December 7, 2020. Rachael Hyland, of SVC, completed a follow up investigation on September 22, 2021, in order to respond to Confluence's comments; onsite conditions were representative of the typical dry summer season.

Confluence confirmed the presence and boundaries of Wetlands A-F delineated by SVC; however, Confluence had several comments regarding wetland ratings, wetland rating figures, and data forms. Their comments are listed below in italics, with SVC's responses below them

Confluence generally concurred with all of the wetland ratings, with the exception of Wetland F. [...] Wetland F was misclassified as a slope wetland when it should have been rated under the depressional hydrogeomorphic class. While Wetland F is located on a gradual slope, it contains depressions and water does not flow unidirectionally throughout the entire wetland unit. Per Ecology's guidance, a wetland with both slope and depressional characteristics is rated as depressional (Hruby 2014).

SVC understands that water may be entering Wetland F from multiple directions, giving the impression of multiple directions of flow within the wetland unit. However, based on Soundview's observations, surface water within the wetland appears to flow down the gradual slope from east to west in the northern portion of the wetland, before changing direction and ultimately flowing south along the sloped topography.

While SVC does not necessarily agree with a depressional geomorphic classification, the Wetland F rating has been updated as depressional HGM class to expedite the review and approval process. As a depressional wetland, Wetland F is classified as a Category IV wetland, therefore, no changes to the buffer or code analytics are necessary. The updated wetland rating is provided in Attachment A of this Technical Memorandum

[S]ome of the rating figures were missing required components (i.e., location of outlet and plant density for slope wetlands). Rating figures should be updated to contain all required components.

Wetland rating figures have been updated (Attachment B) to show outlets for depressional Wetlands B, D, and F. Wetland C is a closed depression, and therefore no outlet depiction is warranted. Additional review of topography and onsite investigations in September 2021 determined that Wetland A is also a closed depression; the area previously thought to be an intermittent outlet actually appears to be an inlet upon closer inspection. The rating has been updated to reflect these findings and increased by 2 points, which did not affect the overall rating; therefore no changes to the buffer or code analytics are necessary. The additional slope rating figures have been included for Wetland E.

In addition, Confluence reviewed the wetland determination data forms. While the overall wetland determinations were accurate, Confluence observed several minor errors throughout the forms. Multiple instances were noted in which hydric soils were marked as present but a hydric soil indicator was not provided or vice versa. Additionally, for data plots 12 and 13, hydric soil indicator Sandy Redox (S5) was identified, however, hydric soils were marked as absent with the explanation that the soil profile was apparently representative of subsoils exposed by excavation activities. Given the established vegetation in the area and the absence of evidence observed during the site visit, Confluence requests additional documentation to support the proposed condition of the soils. This could be in the form of aerial imagery, site observations, etc.

SVC has reviewed all the data forms associated with this project and revised them (Attachment C) to ensure that the proper indicators and criteria have been correctly checked, and to meet our current standards of work. Additional remarks have been added to explain inconsistencies or abnormalities, and two historical aerials from Pierce County's online Public GIS map are attached to this Technical Memorandum (Attachment D) that show the historical earth disturbances that are referenced in several of the data forms (DP-11 through DP-18). Review and revision of these data forms has not resulted in any changes to the wetland and non-wetland determinations.

We trust this Technical Memorandum addresses the third-party comments. Updated wetland ratings are included as Attachment A, updated wetland rating figures are included as Attachment B, updated data forms are included as Attachment C, and historical aerials are included as Attachment D. Please do not hesitate to contact us with any additional questions or concerns you may have.

Sincerely,

Rachael Hyland

Environmental Scientist

Matt DeCaro

Associate Principal

References

- Confluence Environmental Company. 2021. Benaroya Capital Company South Hill Data Center Wetland and Fish and Wildlife Habitat Assessment Report Third-Party Review. Prepared for City of Puyallup Planning Services. July 16, 2021.
- Pierce County. 2021. *Pierce County Public GIS*. https://matterhornwab.co.pierce.wa.us/publicgis/. Accessed September 22, 2021.
- Soundview Consultants (SVC). 2020. Wetland and Fish and Wildlife Habitat Assessment Report South Hill Data Center. Prepared December 7, 2020.

Attachment A – Updated Wetland Ratings

This attachment includes updated rating forms for Wetland A and Wetland F.

RATING SUMMARY – Western Washington

Name of wetland (or ID #): A - SHDC	Date of site visit: 9/13/16			
Rated by Richard Peel	_ Trained by Ecology? <u>✓</u> YesNo Date of training 9/29/16			
HGM Class used for rating Depressional	Wetland has multiple HGM classes?Y <u>✓</u> N			
NOTE: Form is not complete without the figures requested (figures can be combined). Source of base aerial photo/map Esri Arc GIS				
OVERALL WETLAND CATEGORY	(based on functions <u>v</u> or special characteristics)			

1. Category of wetland based on FUNCTIONS

Category I – Total score = 23 - 27

Category II – Total score = 20 - 22

X Category III – Total score = 16 - 19

Category IV – Total score = 9 - 15

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
		Circle the ap	propriate ratings	
Site Potential	Н	Н	L	
Landscape Potential	М	Н	L	
Value	М	L	М	TOTAL
Score Based on Ratings	7	7	4	18

Score for each function based on three ratings (order of ratings is not *important)* 9 = H,H,H8 = H,H,M7 = H,H,L7 = H,M,M 6 = H,M,L6 = M,M,M5 = H,L,L 5 = M,M,L4 = M, L, L3 = L, L, L

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY	
Estuarine	I	II
Wetland of High Conservation Value	I	
Bog	I	
Mature Forest	I	
Old Growth Forest	I	
Coastal Lagoon	I	II
Interdunal	I II	III IV
None of the above	N/A	

Maps and figures required to answer questions correctly for Western Washington

Depressional Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (can be added to map of hydroperiods)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	D 2.2, D 5.2	
Map of the contributing basin	D 4.3, D 5.3	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H 2.1, H 2.2, H 2.3	
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (can be added to another figure)	R 4.1	
Map of the contributing basin	R 2.2, R 2.3, R 5.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H 2.1, H 2.2, H 2.3	
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	R 3.1	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	R 3.2, R 3.3	

Lake Fringe Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (can be added to another figure)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense , rigid trees, shrubs, and herbaceous plants	S 4.1	
(can be added to figure above)		
Boundary of 150 ft buffer (can be added to another figure)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H 2.1, H 2.2, H 2.3	
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	\$ 3.3	

HGM Classification of Wetlands in Western Washington

For questions 1-7, the criteria described must apply to the entire unit being rated.

If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you probably have a unit with multiple HGM classes. In this case, identify which hydrologic criteria in questions 1-7 apply, and go to Question 8.

1.	Are the water levels in the entire	e unit usually controlled	by tides except during floods?
	☑NO – go to 2	YES – the wetl	and class is Tidal Fringe – go to 1.1
-	1.1 Is the salinity of the water dur	ing periods of annual lo	w flow below 0.5 ppt (parts per thousand)?
		d as a Freshwater Tidal n Estuarine wetland an	☐ YES - Freshwater Tidal Fringe Fringe use the forms for Riverine wetlands. If it d is not scored. This method cannot be used to
2.	The entire wetland unit is flat an and surface water runoff are NO		nly source (>90%) of water to it. Groundwater to unit.
Σ	NO – go to 3 If your wetland can be classified	as a Flats wetland, use t	☐ YES – The wetland class is Flats he form for Depressional wetlands.
3.	Does the entire wetland unit me ☐The vegetated part of the wet plants on the surface at any to ☐At least 30% of the open wate	cland is on the shores of ime of the year) at least	a body of permanent open water (without any 20 ac (8 ha) in size;
×	☑NO – go to 4 □	YES – The wetland class	is Lake Fringe (Lacustrine Fringe)
4.	Does the entire wetland unit me The wetland is on a slope (sl The water flows through the seeps. It may flow subsurface The water leaves the wetland	ope can be very gradual wetland in one direction e, as sheetflow, or in a s), on (unidirectional) and usually comes from wale without distinct banks,
×	☑NO – go to 5		☐ YES – The wetland class is Slope
	-		tlands except occasionally in very small and are usually <3 ft diameter and less than 1 ft
5.	Does the entire wetland unit me The unit is in a valley, or stre stream or river, The overbank flooding occur	eam channel, where it go	ets inundated by overbank flooding from that

Wetl	land name or number <u>A -</u>	
_ N	NO – go to 6 NOTE : The Riverine unit can contain depressio looding	☐ YES – The wetland class is Riverine ns that are filled with water when the river is not
S		ression in which water ponds, or is saturated to the ans that any outlet, if present, is higher than the interior
	NO – go to 7	▼ YES – The wetland class is Depressional
fl n	looding? The unit does not pond surface water	area with no obvious depression and no overbank more than a few inches. The unit seems to be he wetland may be ditched, but has no obvious natural
XN	NO – go to 8	YES – The wetland class is Depressional

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM classes. For example, seeps at the base of a slope may grade into a riverine floodplain, or a small stream within a Depressional wetland has a zone of flooding along its sides. GO BACK AND IDENTIFY WHICH OF THE HYDROLOGIC REGIMES DESCRIBED IN QUESTIONS 1-7 APPLY TO DIFFERENT AREAS IN THE UNIT (make a rough sketch to help you decide). Use the following table to identify the appropriate class to use for the rating system if you have several HGM classes present within the wetland unit being scored.

NOTE: Use this table only if the class that is recommended in the second column represents 10% or more of the total area of the wetland unit being rated. If the area of the HGM class listed in column 2 is less than 10% of the unit; classify the wetland using the class that represents more than 90% of the total area.

HGM classes within the wetland unit	HGM class to
being rated	use in rating
Slope + Riverine	Riverine
Slope + Depressional	Depressional
Slope + Lake Fringe	Lake Fringe
Depressional + Riverine along stream	Depressional
within boundary of depression	
Depressional + Lake Fringe	Depressional
Riverine + Lake Fringe	Riverine
Salt Water Tidal Fringe and any other	Treat as
class of freshwater wetland	ESTUARINE

If you are still unable to determine which of the above criteria apply to your wetland, or if you have **more than 2 HGM classes** within a wetland boundary, classify the wetland as Depressional for the rating.

DEPRESSIONAL AND FLATS WETLANDS		
Water Quality Functions - Indicators that the site functions to improve water	er quality	
D 1.0. Does the site have the potential to improve water quality?		
D 1.1. Characteristics of surface water outflows from the wetland:		
Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing of Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing	points = 3 outlet. points = 2 points = 1	3
Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. D 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions). Yes =	points = 1 = 4 No = 0	0
D 1.3. Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Coward Wetland has persistent, ungrazed, plants > 95% of area Wetland has persistent, ungrazed, plants > ½ of area Wetland has persistent, ungrazed plants > ½ of area		5
Area seasonally ponded is > 1/4 total area of wetland	points = 4 points = 2 points = 0	4
Total for D 1 Add the points in the box	xes above	12
Rating of Site Potential If score is: \times 12-16 = H6-11 = M0-5 = L Record the rating	on the first pa	ge
D 2.0. Does the landscape have the potential to support the water quality function of the site?		
D 2.1. Does the wetland unit receive stormwater discharges? Yes = 1	1 No = 0	1
D 2.2. Is $>$ 10% of the area within 150 ft of the wetland in land uses that generate pollutants? Yes =	1 No = 0	1
D 2.3. Are there septic systems within 250 ft of the wetland?	1 No = 0	0
D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in questions D 2.1-Source	D 2.3? 1 No = 0	0
Total for D 2 Add the points in the box	xes above	2
Rating of Landscape Potential If score is: 3 or 4 = H X 1 or 2 = M 0 = L Record the re	ating on the fir	st page
D 3.0. Is the water quality improvement provided by the site valuable to society?		
D 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, lake, or marine water that is 303(d) list?	s on the 1 No = 0	0
D 3.2. Is the wetland in a basin or sub-basin where an aquatic resource is on the 303(d) list? Yes =	1 No = 0	1
D 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality (if there is a TMDL for the basin in which the unit is found)? Yes = 3	(answer YES 2 No = 0	0
Total for D 3 Add the points in the box	xes above	1
Rating of Value If score is: $2-4 = H \times 1 = M = 0 = L$ Record the rating on the j	first page	

DEPRESSIONAL AND FLATS WETLANDS		
Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradation		
D 4.0. Does the site have the potential to reduce flooding and erosion?		
D 4.1. Characteristics of surface water outflows from the wetland: Wetland is a depression or flat depression with no surface water leaving it (no outlet) Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outletpoints = 2 Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing points = 0	4	
D 4.2. Depth of storage during wet periods: Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part. Marks of ponding are 3 ft or more above the surface or bottom of outlet points = 7 Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet points = 5 Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet points = 3 The wetland is a "headwater" wetland points = 3 Wetland is flat but has small depressions on the surface that trap water points = 1 Marks of ponding less than 0.5 ft (6 in) points = 0	3	
D 4.3. Contribution of the wetland to storage in the watershed: Estimate the ratio of the area of upstream basin contributing surface water to the wetland to the area of the wetland unit itself. The area of the basin is less than 10 times the area of the unit points = 5 The area of the basin is 10 to 100 times the area of the unit points = 3 The area of the basin is more than 100 times the area of the unit points = 0 Entire wetland is in the Flats class points = 5	5	
Total for D 4 Add the points in the boxes above	12	
Rating of Site Potential If score is: × 12-16 = H6-11 = M0-5 = L Record the rating on the	first page	
D 5.0. Does the landscape have the potential to support hydrologic functions of the site?		
D 5.1. Does the wetland receive stormwater discharges? Yes = 1 No = 0	1	
D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? Yes = 1 No = 0	1	
D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)? Yes = 1 No = 0	1	
Total for D 5 Add the points in the boxes above	3	
Rating of Landscape Potential If score is: X 3 = H 1 or 2 = M 0 = L Record the rating on the	first page	
D 6.0. Are the hydrologic functions provided by the site valuable to society?	-	
D 6.1. The unit is in a landscape that has flooding problems. Choose the description that best matches conditions around the wetland unit being rated. Do not add points. Choose the highest score if more than one condition is met. The wetland captures surface water that would otherwise flow down-gradient into areas where flooding has damaged human or natural resources (e.g., houses or salmon redds): • Flooding occurs in a sub-basin that is immediately down-gradient of unit. • Surface flooding problems are in a sub-basin farther down-gradient. Flooding from groundwater is an issue in the sub-basin. The existing or potential outflow from the wetland is so constrained by human or natural conditions that the water stored by the wetland cannot reach areas that flood. Explain why points = 0	0	
There are no problems with flooding downstream of the wetland. points = 0		
D 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan? Yes = 2 No = 0	0	
Total for D 6 Add the points in the boxes above	0	

Rating of Value If score is: $_2$ -4 = H $_1$ = M $_2$ 0 = L

Record the rating on the first page

These questions apply to wetlands of all HGM classes. **HABITAT FUNCTIONS** - Indicators that site functions to provide important habitat H 1.0. Does the site have the potential to provide habitat? H 1.1. Structure of plant community: Indicators are Cowardin classes and strata within the Forested class. Check the Cowardin plant classes in the wetland. Up to 10 patches may be combined for each class to meet the threshold of ¼ ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked. Aquatic bed 4 structures or more: points = 4 3 structures: points = 2 ___Emergent 0 ___Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1 × Forested (areas where trees have > 30% cover) 1 structure: points = 0 If the unit has a Forested class, check if: The Forested class has 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the Forested polygon H 1.2. Hydroperiods Check the types of water regimes (hydroperiods) present within the wetland. The water regime has to cover more than 10% of the wetland or ¼ ac to count (see text for descriptions of hydroperiods). Permanently flooded or inundated 4 or more types present: points = 3 × Seasonally flooded or inundated 3 types present: points = 2 Occasionally flooded or inundated 2 types present: points = 1 1 × Saturated only 1 type present: points = 0 ___Permanently flowing stream or river in, or adjacent to, the wetland Seasonally flowing stream in, or adjacent to, the wetland Lake Fringe wetland 2 points Freshwater tidal wetland 2 points H 1.3. Richness of plant species Count the number of plant species in the wetland that cover at least 10 ft². Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle 1 If you counted: > 19 species points = 2 5 - 19 species points = 1 points = 0 < 5 species H 1.4. Interspersion of habitats Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. If you have four or more plant classes or three classes and open water, the rating is always high. 0 None = 0 points Moderate = 2 points Low = 1 point All three diagrams in this row are **HIGH** = 3points

H.1.5. Special habitat features: Check the habitat features that are present in the wetland. The number of checks is the number of points. x. Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long). X. Standing snags (dbh > 4 in) within the wetland (> 4 in diameter and 6 ft long). X. Standing snags (dbh > 4 in) within the wetland Undercut banks are present for at least 6.6 ft (2 m) and/or overhanging plants extends at least 3.3 ft (1 m) over a stream (or ditch) in, or contiguous with the wetland, for at least 33 ft (10 m) Stable steep banks of fine material that might be used by beaver or mustars for denning (> 30 degree slope) OR signs of recent beaver activity are present (cut shrubs or trees that have not yet weathered where wood is exposed) X. At least % ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (structures for egg-leving by amphibians) Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of stroto) Total for H		
* Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long). * Standing snags (dbh > 4 in) within the wetland (> 4 in diameter and 6 ft long). * Standing snags (dbh > 4 in) within the wetland (> 4 in) diameter and 6 ft long). * Stable steep banks are present for at least 6.6 ft (2 m) and/or overhanging plants extends at least 3.3 ft (1 m) over a stream (or ditch) in, or contiguous with the wetland, for at least 33 ft (10 m) * Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (cut structures for egg-laying by amphibions) * At least X ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (structures for egg-laying by amphibions) * Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of strotal) * Total for H 1 * Add the points in the boxes above * Rating of Site Potential if score is:15-18 = H7-14 = MX-0.6 = L	H 1.5. Special habitat features:	
x_Standing snags; (dbh > 4 in) within the wetland Undercut banks are present for at least 6.6 ft (2 m) and/or overhanging plants extends at least 3.3 ft (1 m) over a stream (or ditch) in, or contiguous with the wetland, for at least 33 ft (10 m) Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (cut shrubs or trees that have not yet weathered where wood is exposed) x_At least Xa cd thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (structures for egg-laying by amphibions) [Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of strotal) Total for H 1	Check the habitat features that are present in the wetland. The number of checks is the number of points	S.
Undercut banks are present for at least 6.6 ft (2 m) and/or overhanging plants extends at least 3.3 ft (1 m) over a stream (or ditch) in, or contiguous with the wetland, for at least 3.3 ft (10 m) over a stream (or ditch) in, or contiguous with the wetland, for at least 3.3 ft (10 m) over a stream (or ditch) in, or contiguous with the wetland, for at least 3.3 ft (10 m) over a stream (or ditch) in, or contiguous with the wetland, for at least 3.3 ft (10 m) over a stream (or ditch) in the boxes above of the wetland area in every stratum of plants (see H 1.1 for list of strotta). **Example of Site Potential If score is:15-18=H7-14=MX 0-6=L	_x_Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).	
over a stream (or ditch) in, or contiguous with the wetland, for at least 33 ft (10 m) Stable steep banks of fine material that might be used by beaver or maskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (cut shrubs or trees that have not yet weathered where wood is exposed)	_ x Standing snags (dbh > 4 in) within the wetland	
over a stream (or ditch) in, or contiguous with the wetland, for at least 33 ft (10 m) Stable steep banks of fine material that might be used by beaver or maskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (cut shrubs or trees that have not yet weathered where wood is exposed)	Undercut banks are present for at least 6.6 ft (2 m) and/or overhanging plants extends at least 3.3 f	t (1 m)
Stable steep banks of fine material that might be used by beaver or muskrat for denning. (> 30 degree slope) OR signs of recent beaver activity are present (cut shrubs or trees that have not yet weathered where wood is exposed) **At least % a cof thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (structures for egg-laying by amphibians)		3
slope) OR signs of recent beaver activity are present (reut shrubs or trees that have not yet weathered where wood is exposed) ** At least % a co of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (structures for egg-laying by amphibians) Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of strata) Total for H 1 Add the points in the boxes above 5 Rating of Site Potential If score is:15-18 = H7-14 = MX 0-6 = L		ee
### At least % ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (structures for egg-laying by amphibians) Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of strata) Total for H 1		
permanently or seasonally inundated (structures for egg-laying by amphibians) Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of strata) Total for H 1	where wood is exposed)	
Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of strato) Total for H 1	At least ¼ ac of thin-stemmed persistent plants or woody branches are present in areas that are	
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Wetland Rating System for Western WA: 2014 Update Rating Form – Effective January 1, 2015

WDFW Priority Habitats

<u>Priority habitats listed by WDFW</u> (see complete descriptions of WDFW priority habitats, and the counties in which they can be found, in: Washington Department of Fish and Wildlife. 2008. Priority Habitat and Species List. Olympia, Washington. 177 pp. http://wdfw.wa.gov/publications/00165/wdfw00165.pdf or access the list from here: http://wdfw.wa.gov/conservation/phs/list/)

Count how many of the following priority habitats are within 330 ft (100 m) of the wetland unit: *NOTE:* This question is independent of the land use between the wetland unit and the priority habitat.

- **Aspen Stands:** Pure or mixed stands of aspen greater than 1 ac (0.4 ha).
- **Biodiversity Areas and Corridors**: Areas of habitat that are relatively important to various species of native fish and wildlife (*full descriptions in WDFW PHS report*).
- **Herbaceous Balds:** Variable size patches of grass and forbs on shallow soils over bedrock.
- Old-growth/Mature forests: Old-growth west of Cascade crest Stands of at least 2 tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) > 32 in (81 cm) dbh or > 200 years of age. Mature forests Stands with average diameters exceeding 21 in (53 cm) dbh; crown cover may be less than 100%; decay, decadence, numbers of snags, and quantity of large downed material is generally less than that found in old-growth; 80-200 years old west of the Cascade crest.
- **Oregon White Oak:** Woodland stands of pure oak or oak/conifer associations where canopy coverage of the oak component is important (*full descriptions in WDFW PHS report p. 158 see web link above*).
- **Riparian**: The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other.
- **Westside Prairies:** Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet prairie (*full descriptions in WDFW PHS report p. 161 see web link above*).
- **Instream:** The combination of physical, biological, and chemical processes and conditions that interact to provide functional life history requirements for instream fish and wildlife resources.
- **Nearshore**: Relatively undisturbed nearshore habitats. These include Coastal Nearshore, Open Coast Nearshore, and Puget Sound Nearshore. (*full descriptions of habitats and the definition of relatively undisturbed are in WDFW report see web link on previous page*).
- **Caves:** A naturally occurring cavity, recess, void, or system of interconnected passages under the earth in soils, rock, ice, or other geological formations and is large enough to contain a human.
- **Cliffs:** Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation.
- **Talus:** Homogenous areas of rock rubble ranging in average size 0.5 6.5 ft (0.15 2.0 m), composed of basalt, andesite, and/or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs.
- Snags and Logs: Trees are considered snags if they are dead or dying and exhibit sufficient decay characteristics to enable cavity excavation/use by wildlife. Priority snags have a diameter at breast height of > 20 in (51 cm) in western Washington and are > 6.5 ft (2 m) in height. Priority logs are > 12 in (30 cm) in diameter at the largest end, and > 20 ft (6 m) long.

Note: All vegetated wetlands are by definition a priority habitat but are not included in this list because they are addressed elsewhere.

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type	Category
Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.	
SC 1.0. Estuarine wetlands	
Does the wetland meet the following criteria for Estuarine wetlands?	
☐ The dominant water regime is tidal,	
☐ Vegetated, and	
☐ With a salinity greater than 0.5 ppt ☐ Yes –Go to SC 1.1 ☑No= Not an estuarine wetland	
SC 1.1. Is the wetland within a National Wildlife Refuge, National Park, National Estuary Reserve, Natural Area	
Preserve, State Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30-151?	
\square Yes = Category I \square No - Go to SC 1.2	
SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?	
\square The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has less	
than 10% cover of non-native plant species. (If non-native species are Spartina, see page 25)	
At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland.	
The wetland has at least two of the following features: tidal channels, depressions with open water, or	
contiguous freshwater wetlands. The wetland has at least two of the following features: tidal chambers, depressions with open water, of the following features: tidal chambers, depressions with open water, of the following features: tidal chambers, depressions with open water, of the following features: tidal chambers, depressions with open water, of the following features: tidal chambers, depressions with open water, of the following features: tidal chambers, depressions with open water, of the following features: tidal chambers, depressions with open water, of the following features: tidal chambers, depressions with open water, of the following features: tidal chambers, depressions with open water, of the following features: tidal chambers, depressions with open water, of the following features: tidal chambers, depressions with open water, of the following features: tidal chambers, depressions with open water, of the following features: tidal chambers, depressions with open water, of the features water, depressions with open water, of the features water, depressions with open water, depressions with the features water, depressions with the features water water, depressions with the features water water, depressions with the features water wate	
contiguous resirvater wetianas.	
SC 2.0. Wetlands of High Conservation Value (WHCV)	
SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High	
Conservation Value?	
SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value?	
☐Yes = Category I ☑No = Not a WHCV	
SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf	
Tes – Contact WNHP/WDNR and go to SC 2.4 ⊠No = Not a WHCV	
SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on	
their website?	
SC 3.0. Bogs	
Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? Use the key	
below. If you answer YES you will still need to rate the wetland based on its functions.	
SC 3.1. Does an area within the wetland unit have organic soil horizons, either peats or mucks, that compose 16 in or	
more of the first 32 in of the soil profile?	
SC 3.2. Does an area within the wetland unit have organic soils, either peats or mucks, that are less than 16 in deep	
over bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or	
pond? \square Yes – Go to SC 3.3 \square No = Is not a bog	
SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30%	
cover of plant species listed in Table 4?	
NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that criterion by	
measuring the pH of the water that seeps into a hole dug at least 16 in deep. If the pH is less than 5.0 and the	
plant species in Table 4 are present, the wetland is a bog. SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, western red cedar,	
western hemlock, lodgepole pine, quaking aspen, Engelmann spruce, or western white pine, AND any of the	
species (or combination of species) listed in Table 4 provide more than 30% of the cover under the canopy?	
Yes = Is a Category I bog \(\subseteq \text{In ot a bog} \)	

Wetland name or number A -

SC 4.0. Forested Wetlands	
Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you answer YES you will still need to rate the wetland based on its functions.</i>	
 Old-growth forests (west of Cascade crest): Stands of at least two tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) that are at least 200 years of age OR have a diameter at breast height (dbh) of 32 in (81 cm) or more. Mature forests (west of the Cascade Crest): Stands where the largest trees are 80- 200 years old OR the species that make up the canopy have an average diameter (dbh) exceeding 21 in (53 cm). 	
☐ Yes = Category I 図No = Not a forested wetland for this section	
SC 5.0. Wetlands in Coastal Lagoons Does the wetland meet all of the following criteria of a wetland in a coastal lagoon? — The wetland lies in a depression adjacent to marine waters that is wholly or partially separated from marine waters by sandbanks, gravel banks, shingle, or, less frequently, rocks — The lagoon in which the wetland is located contains ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (needs to be measured near the bottom) □ Yes − Go to SC 5.1 ☑No = Not a wetland in a coastal lagoon SC 5.1. Does the wetland meet all of the following three conditions? — The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has less than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100). — At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland. — The wetland is larger than ¹/₁₀ ac (4350 ft²) □ Yes = Category I □ No = Category II	
Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? If you answer yes you will still need to rate the wetland based on its habitat functions. In practical terms that means the following geographic areas: — Long Beach Peninsula: Lands west of SR 103 — Grayland-Westport: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 115 and SR 109 — Yes – Go to SC 6.1 No = not an interdunal wetland for rating SC 6.1. Is the wetland 1 ac or larger and scores an 8 or 9 for the habitat functions on the form (rates H,H,H or H,H,M for the three aspects of function)? Yes = Category I No – Go to SC 6.2 SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? — Yes = Category II No – Go to SC 6.3 SC 6.3. Is the unit between 0.1 and 1 ac, or is it in a mosaic of wetlands that is between 0.1 and 1 ac? — Yes = Category III No – Category IV	
Category of wetland based on Special Characteristics If you answered No for all types, enter "Not Applicable" on Summary Form	

Wetland name or number A -

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RATING SUMMARY – Western Washington

Name of wetland (or ID #): F	Date of site visit: 09/22/21				
Rated by Rachael Hyland	Trained by Ecology? <u> YesNo Date of training 3/2019</u>				
HGM Class used for rating Depressional	Wetland has multiple HGM classes?Y <u>✓</u> N				
NOTE: Form is not complete without the figures requested (figures can be combined). Source of base aerial photo/map ESRI ArcGIS					
DVERALL WETLAND CATEGORY IV (based on functions \checkmark or special characteristics)					

1. Category of wetland based on FUNCTIONS

Category I – Total score = 23 - 27

Category II – Total score = 20 - 22

Category III – Total score = 16 - 19

X Category IV – Total score = 9 - 15

FUNCTION	Improving Water Quality	Hydrologic	Habitat	
Circle the appropriate ratings				
Site Potential	L	L	L	
Landscape Potential	М	M	L	
Value	Н	L	М	TOTAL
Score Based on Ratings	6	4	4	14

Score for each function based on three ratings (order of ratings is not *important)* 9 = H,H,H8 = H,H,M7 = H,H,L 7 = H,M,M6 = H,M,L6 = M,M,M5 = H,L,L 5 = M,M,L4 = M, L, L3 = L, L, L

2. Category based on SPECIAL CHARACTERISTICS of wetland

CHARACTERISTIC	CATEGORY	
Estuarine	I	II
Wetland of High Conservation Value	I	
Bog	I	
Mature Forest	I	
Old Growth Forest	I	
Coastal Lagoon	I	II
Interdunal	I II	III IV
None of the above	N/A	

Maps and figures required to answer questions correctly for Western Washington

<u>Depressional Wetlands</u>

Map of:	To answer questions:	Figure #
Cowardin plant classes	D 1.3, H 1.1, H 1.4	
Hydroperiods	D 1.4, H 1.2	
Location of outlet (can be added to map of hydroperiods)	D 1.1, D 4.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	D 2.2, D 5.2	
Map of the contributing basin	D 4.3, D 5.3	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H 2.1, H 2.2, H 2.3	
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	D 3.1, D 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	D 3.3	

Riverine Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Ponded depressions	R 1.1	
Boundary of area within 150 ft of the wetland (can be added to another figure)	R 2.4	
Plant cover of trees, shrubs, and herbaceous plants	R 1.2, R 4.2	
Width of unit vs. width of stream (can be added to another figure)	R 4.1	
Map of the contributing basin	R 2.2, R 2.3, R 5.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H 2.1, H 2.2, H 2.3	
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	R 3.1	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	R 3.2, R 3.3	

Lake Fringe Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	L 1.1, L 4.1, H 1.1, H 1.4	
Plant cover of trees, shrubs, and herbaceous plants	L 1.2	
Boundary of area within 150 ft of the wetland (can be added to another figure)	L 2.2	
1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat	H 2.1, H 2.2, H 2.3	
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	L 3.1, L 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	L 3.3	

Slope Wetlands

Map of:	To answer questions:	Figure #
Cowardin plant classes	H 1.1, H 1.4	
Hydroperiods	H 1.2	
Plant cover of dense trees, shrubs, and herbaceous plants	S 1.3	
Plant cover of dense, rigid trees, shrubs, and herbaceous plants	S 4.1	
(can be added to figure above)		
Boundary of 150 ft buffer (can be added to another figure)	S 2.1, S 5.1	
1 km Polygon: Area that extends 1 km from entire wetland edge - including	H 2.1, H 2.2, H 2.3	
polygons for accessible habitat and undisturbed habitat		
Screen capture of map of 303(d) listed waters in basin (from Ecology website)	S 3.1, S 3.2	
Screen capture of list of TMDLs for WRIA in which unit is found (from web)	\$ 3.3	

HGM Classification of Wetlands in Western Washington

For questions 1-7, the criteria described must apply to the entire unit being rated.

If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you probably have a unit with multiple HGM classes. In this case, identify which hydrologic criteria in questions 1-7 apply, and go to Question 8.

1.	Are the water levels in the entire un	nit usually controlled by tides except during floods?
Σ	⊠NO – go to 2	☐ YES – the wetland class is Tidal Fringe – go to 1.1
1	1.1 Is the salinity of the water during	periods of annual low flow below 0.5 ppt (parts per thousand)?
		s a Freshwater Tidal Fringe use the forms for Riverine wetlands. If it stuarine wetland and is not scored. This method cannot be used to
2.	The entire wetland unit is flat and pand surface water runoff are NOT s	precipitation is the only source (>90%) of water to it. Groundwater ources of water to the unit.
×	☑NO – go to 3 If your wetland can be classified as a	TYES – The wetland class is Flats a Flats wetland, use the form for Depressional wetlands.
3.	<u> </u>	d is on the shores of a body of permanent open water (without any of the year) at least 20 ac (8 ha) in size;
X	☑NO – go to 4 ☐YES	5 - The wetland class is Lake Fringe (Lacustrine Fringe)
4.	_	e can be very gradual), etland in one direction (unidirectional) and usually comes from s sheetflow, or in a swale without distinct banks,
X	☑NO – go to 5	☐ YES – The wetland class is Slope
		d in these type of wetlands except occasionally in very small and nmocks (depressions are usually <3 ft diameter and less than 1 ft
5.	Does the entire wetland unit meet The unit is in a valley, or stream stream or river, The overbank flooding occurs a	channel, where it gets inundated by overbank flooding from that

We	Wetland name or number <u>F</u>	
X	NO − go to 6	
6.	6. Is the entire wetland unit in a topographic depression in which water ponds, or is saturat surface, at some time during the year? This means that any outlet, if present, is higher that of the wetland.	
	☐ NO – go to 7	al
7.	7. Is the entire wetland unit located in a very flat area with no obvious depression and no or flooding? The unit does not pond surface water more than a few inches. The unit seems maintained by high groundwater in the area. The wetland may be ditched, but has no obvoutlet.	to be
	□ NO – go to 8 □ YES – The wetland class is Depression	al

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM classes. For example, seeps at the base of a slope may grade into a riverine floodplain, or a small stream within a Depressional wetland has a zone of flooding along its sides. GO BACK AND IDENTIFY WHICH OF THE HYDROLOGIC REGIMES DESCRIBED IN QUESTIONS 1-7 APPLY TO DIFFERENT AREAS IN THE UNIT (make a rough sketch to help you decide). Use the following table to identify the appropriate class to use for the rating system if you have several HGM classes present within the wetland unit being scored.

NOTE: Use this table only if the class that is recommended in the second column represents 10% or more of the total area of the wetland unit being rated. If the area of the HGM class listed in column 2 is less than 10% of the unit; classify the wetland using the class that represents more than 90% of the total area.

HGM classes within the wetland unit	HGM class to		
being rated	use in rating		
Slope + Riverine	Riverine		
Slope + Depressional	Depressional		
Slope + Lake Fringe	Lake Fringe		
Depressional + Riverine along stream	Depressional		
within boundary of depression			
Depressional + Lake Fringe Depression			
Riverine + Lake Fringe	Riverine		
Salt Water Tidal Fringe and any other	Treat as		
class of freshwater wetland	ESTUARINE		

If you are still unable to determine which of the above criteria apply to your wetland, or if you have **more than 2 HGM classes** within a wetland boundary, classify the wetland as Depressional for the rating.

DEPRESSIONAL AND FLATS WETLANDS	
Water Quality Functions - Indicators that the site functions to improve water quality	
D 1.0. Does the site have the potential to improve water quality?	
D 1.1. Characteristics of surface water outflows from the wetland: Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet). points = 3	
Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. points = 2 Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing points = 1	2
Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. points = 1 D 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions). Yes = 4 No = 0	0
D 1.3. Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cowardin classes): Wetland has persistent, ungrazed, plants > 95% of area Wetland has persistent, ungrazed, plants > ½ of area Wetland has persistent, ungrazed plants > ½ of area Wetland has persistent, ungrazed plants > ½ of area points = 1 Wetland has persistent, ungrazed plants < 1/10 of area points = 0	3
D 1.4. Characteristics of seasonal ponding or inundation: This is the area that is ponded for at least 2 months. See description in manual. Area seasonally ponded is > ½ total area of wetland Area seasonally ponded is > ¼ total area of wetland Area seasonally ponded is < ¼ total area of wetland points = 2 points = 0	0
Total for D 1 Add the points in the boxes above	5
Rating of Site Potential If score is:12-16 = H6-11 = M \times _0-5 = L Record the rating on the first potential	ige
D 2.0. Does the landscape have the potential to support the water quality function of the site?	
D 2.1. Does the wetland unit receive stormwater discharges? Yes = 1 No = 0	0
D 2.2. ls > 10% of the area within 150 ft of the wetland in land uses that generate pollutants? Yes = 1 No = 0	1
D 2.3. Are there septic systems within 250 ft of the wetland? Yes = 1 No = 0	0
D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in questions D 2.1-D 2.3? Source Yes = 1 No = 0	0
Total for D 2 Add the points in the boxes above	1
Rating of Landscape Potential If score is:3 or 4 = HX_1 or 2 = M0 = L Record the rating on the file	rst page
D 3.0. Is the water quality improvement provided by the site valuable to society?	
D 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, lake, or marine water that is on the 303(d) list? Yes = 1 No = 0	0
D 3.2. Is the wetland in a basin or sub-basin where an aquatic resource is on the 303(d) list? Yes = $1 \text{ No} = 0$	1
D 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality (answer YES if there is a TMDL for the basin in which the unit is found)? Yes = 2 No = 0	2
Total for D 3 Add the points in the boxes above	3
Rating of Value If score is: X 2-4 = H 1 = M 0 = L NOTES and FIELD OBSERVATIONS: Record the rating on the first page	

DEPRESSIONAL AND FLATS WETLANDS	
Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradat	ion
D 4.0. Does the site have the potential to reduce flooding and erosion?	
D 4.1. Characteristics of surface water outflows from the wetland: Wetland is a depression or flat depression with no surface water leaving it (no outlet) Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outletpoints = 2 Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing points = 0	2
D 4.2. Depth of storage during wet periods: Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part. Marks of ponding are 3 ft or more above the surface or bottom of outlet points = 7 Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet points = 5 Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet points = 3 The wetland is a "headwater" wetland points = 3 Wetland is flat but has small depressions on the surface that trap water points = 1 Marks of ponding less than 0.5 ft (6 in)	0
D 4.3. Contribution of the wetland to storage in the watershed: Estimate the ratio of the area of upstream basin contributing surface water to the wetland to the area of the wetland unit itself. The area of the basin is less than 10 times the area of the unit points = 5 The area of the basin is 10 to 100 times the area of the unit points = 3 The area of the basin is more than 100 times the area of the unit points = 0 Entire wetland is in the Flats class points = 5	3
Total for D 4 Add the points in the boxes above	5
Rating of Site Potential If score is: 12-16 = H 6-11 = M × 0-5 = L Record the rating on the	first page
D 5.0. Does the landscape have the potential to support hydrologic functions of the site? D 5.1. Does the wetland receive stormwater discharges? Yes = 1 No = 0	
	0
D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff? Yes = 1 No = 0	1
D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)? Yes = 1 No = 0	1
Total for D 5 Add the points in the boxes above	2
Rating of Landscape Potential If score is: 3 = H X 1 or 2 = M 0 = L Record the rating on the	first page
D 6.0. Are the hydrologic functions provided by the site valuable to society?	
D 6.1. The unit is in a landscape that has flooding problems. Choose the description that best matches conditions around the wetland unit being rated. Do not add points. Choose the highest score if more than one condition is met. The wetland captures surface water that would otherwise flow down-gradient into areas where flooding has damaged human or natural resources (e.g., houses or salmon redds): • Flooding occurs in a sub-basin that is immediately down-gradient of unit. • Surface flooding problems are in a sub-basin farther down-gradient. Flooding from groundwater is an issue in the sub-basin. points = 1 The existing or potential outflow from the wetland is so constrained by human or natural conditions that the water stored by the wetland cannot reach areas that flood. Explain why points = 0 There are no problems with flooding downstream of the wetland.	0
D 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan?	0
Yes = 2 No = 0 Total for D 6 Add the points in the boxes above	0
Add the points in the boxes above	V

Rating of Value If score is: $_2$ -4 = H $_1$ = M $_2$ 0 = L

Record the rating on the first page

These questions apply to wetlands of all HGM classes. **HABITAT FUNCTIONS** - Indicators that site functions to provide important habitat H 1.0. Does the site have the potential to provide habitat? H 1.1. Structure of plant community: Indicators are Cowardin classes and strata within the Forested class. Check the Cowardin plant classes in the wetland. Up to 10 patches may be combined for each class to meet the threshold of ¼ ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked. Aquatic bed 4 structures or more: points = 4 3 structures: points = 2 ___Emergent 0 ___Scrub-shrub (areas where shrubs have > 30% cover) 2 structures: points = 1 × Forested (areas where trees have > 30% cover) 1 structure: points = 0 If the unit has a Forested class, check if: The Forested class has 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the Forested polygon H 1.2. Hydroperiods Check the types of water regimes (hydroperiods) present within the wetland. The water regime has to cover more than 10% of the wetland or ¼ ac to count (see text for descriptions of hydroperiods). Permanently flooded or inundated 4 or more types present: points = 3 Seasonally flooded or inundated 3 types present: points = 2 Occasionally flooded or inundated 2 types present: points = 1 0 × Saturated only 1 type present: points = 0 ___Permanently flowing stream or river in, or adjacent to, the wetland Seasonally flowing stream in, or adjacent to, the wetland Lake Fringe wetland 2 points Freshwater tidal wetland 2 points H 1.3. Richness of plant species Count the number of plant species in the wetland that cover at least 10 ft². Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle 1 If you counted: > 19 species points = 2 5 - 19 species points = 1 points = 0 < 5 species H 1.4. Interspersion of habitats Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. If you have four or more plant classes or three classes and open water, the rating is always high. 0 None = 0 points Moderate = 2 points Low = 1 point All three diagrams in this row are **HIGH** = 3points

		,
H 1.5. Special habitat features:		
Check the habitat features that are present in the wetland. The number	of checks is the number of points.	
_ x _Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).		
Standing snags (dbh > 4 in) within the wetland		
Undercut banks are present for at least 6.6 ft (2 m) and/or overhang	ging plants extends at least 3.3 ft (1 m)	
over a stream (or ditch) in, or contiguous with the wetland, for at le		1
Stable steep banks of fine material that might be used by beaver or		
slope) OR signs of recent beaver activity are present (cut shrubs or		
where wood is exposed)		
At least ¼ ac of thin-stemmed persistent plants or woody branches	are present in areas that are	
permanently or seasonally inundated (structures for egg-laying by	amphibians)	
Invasive plants cover less than 25% of the wetland area in every stra	tum of plants (see H 1.1 for list of	
strata)		
Total for H 1	Add the points in the boxes above	2
Rating of Site Potential If score is:15-18 = H7-14 = MX_0-6 = L	Record the rating on	the first page
H 2.0. Does the landscape have the potential to support the habitat fund	ctions of the site?	
H 2.1. Accessible habitat (include only habitat that directly abuts wetland unit).		
Calculate: 2.97 % undisturbed habitat + [(% moderate and low intens	sity land uses) 0.00 /21 = 2.97 %	
If total accessible habitat is:	70 (and uses) (a.ac) 72] = <u>2.ac </u>	
$> \frac{1}{3}$ (33.3%) of 1 km Polygon	noints - 2	
· · · · · · · · · · · · · · · · · · ·	points = 3	0
20-33% of 1 km Polygon	points = 2	
10-19% of 1 km Polygon	points = 1	
< 10% of 1 km Polygon	points = 0	
H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.	sity land uses) 10.74 /2] 17.03 o/	
Calculate: 7.16 % undisturbed habitat + [(% moderate and low intens		
Undisturbed habitat > 50% of Polygon	points = 3	1
Undisturbed habitat 10-50% and in 1-3 patches	points = 2	
Undisturbed habitat 10-50% and > 3 patches	points = 1	
Undisturbed habitat < 10% of 1 km Polygon	points = 0	
H 2.3. Land use intensity in 1 km Polygon: If		
> 50% of 1 km Polygon is high intensity land use	points = (- 2)	-2
≤ 50% of 1 km Polygon is high intensity	points = 0	
Total for H 2	Add the points in the boxes above	-1
Rating of Landscape Potential If score is: $4-6 = H$ $1-3 = M$ $\times < 1 = L$	Record the rating on t	he first page
H 3.0. Is the habitat provided by the site valuable to society?		-
	olicios? Chanca only the high act and	
H 3.1. Does the site provide habitat for species valued in laws, regulations, or p that applies to the wetland being rated.	uncles? Crioose only the highest score	
	noints = 2	
Site meets ANY of the following criteria:	points = 2	
— It has 3 or more priority habitats within 100 m (see next page) It provides habitat for Threatened or Endangered species (any plant)	or animal on the state or federal list-	
It provides habitat for Threatened or Endangered species (any plant It is manned as a loss tion for an individual MADEW priority species.)	or animal on the state or federal lists)	1
It is mapped as a location for an individual WDFW priority species It is a Westland of High Consequation Value as determined by the Der	partment of Natural Baseurses	'
It is a Wetland of High Conservation Value as determined by the Dep		
 It has been categorized as an important habitat site in a local or region Shoreline Master Plan, or in a watershed plan 	onal comprehensive plan, in a	
Site has 1 or 2 priority habitats (listed on next page) within 100 m	points = 1	
	•	
Site does not meet any of the criteria above	points = 0	th a finat
Rating of Value If score is: $2 = H \times 1 = M = 0 = L$	Record the rating on	tne Jirst page

Wetland Rating System for Western WA: 2014 Update Rating Form – Effective January 1, 2015

Wetland name or number F

WDFW Priority Habitats

<u>Priority habitats listed by WDFW</u> (see complete descriptions of WDFW priority habitats, and the counties in which they can be found, in: Washington Department of Fish and Wildlife. 2008. Priority Habitat and Species List. Olympia, Washington. 177 pp. http://wdfw.wa.gov/publications/00165/wdfw00165.pdf or access the list from here: http://wdfw.wa.gov/conservation/phs/list/)

Count how many of the following priority habitats are within 330 ft (100 m) of the wetland unit: *NOTE:* This question is independent of the land use between the wetland unit and the priority habitat.

- **Aspen Stands:** Pure or mixed stands of aspen greater than 1 ac (0.4 ha).
- **Biodiversity Areas and Corridors**: Areas of habitat that are relatively important to various species of native fish and wildlife (*full descriptions in WDFW PHS report*).
- **Herbaceous Balds:** Variable size patches of grass and forbs on shallow soils over bedrock.
- Old-growth/Mature forests: Old-growth west of Cascade crest Stands of at least 2 tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) > 32 in (81 cm) dbh or > 200 years of age. Mature forests Stands with average diameters exceeding 21 in (53 cm) dbh; crown cover may be less than 100%; decay, decadence, numbers of snags, and quantity of large downed material is generally less than that found in old-growth; 80-200 years old west of the Cascade crest.
- **Oregon White Oak:** Woodland stands of pure oak or oak/conifer associations where canopy coverage of the oak component is important (*full descriptions in WDFW PHS report p. 158 see web link above*).
- **Riparian**: The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other.
- **Westside Prairies:** Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet prairie (*full descriptions in WDFW PHS report p. 161 see web link above*).
- **Instream:** The combination of physical, biological, and chemical processes and conditions that interact to provide functional life history requirements for instream fish and wildlife resources.
- **Nearshore**: Relatively undisturbed nearshore habitats. These include Coastal Nearshore, Open Coast Nearshore, and Puget Sound Nearshore. (*full descriptions of habitats and the definition of relatively undisturbed are in WDFW report see web link on previous page*).
- **Caves:** A naturally occurring cavity, recess, void, or system of interconnected passages under the earth in soils, rock, ice, or other geological formations and is large enough to contain a human.
- **Cliffs:** Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation.
- **Talus:** Homogenous areas of rock rubble ranging in average size 0.5 6.5 ft (0.15 2.0 m), composed of basalt, andesite, and/or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs.
- Snags and Logs: Trees are considered snags if they are dead or dying and exhibit sufficient decay characteristics to enable cavity excavation/use by wildlife. Priority snags have a diameter at breast height of > 20 in (51 cm) in western Washington and are > 6.5 ft (2 m) in height. Priority logs are > 12 in (30 cm) in diameter at the largest end, and > 20 ft (6 m) long.

Note: All vegetated wetlands are by definition a priority habitat but are not included in this list because they are addressed elsewhere.

Wetland name or number $\underline{\mathsf{F}}$

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Wetland Type	Category
Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.	
SC 1.0. Estuarine wetlands	
Does the wetland meet the following criteria for Estuarine wetlands?	
☐ The dominant water regime is tidal,	
☐ Vegetated, and	
☐ With a salinity greater than 0.5 ppt ☐ Yes –Go to SC 1.1 ☑No= Not an estuarine wetland	
SC 1.1. Is the wetland within a National Wildlife Refuge, National Park, National Estuary Reserve, Natural Area	
Preserve, State Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30-151?	
\square Yes = Category I \square No - Go to SC 1.2	
SC 1.2. Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?	
\square The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has less	
than 10% cover of non-native plant species. (If non-native species are Spartina, see page 25)	
At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland.	
The wetland has at least two of the following features: tidal channels, depressions with open water, or	
contiguous freshwater wetlands. The wetland has at least two of the following features: tidal chambers, depressions with open water, of the following features: tidal chambers, depressions with open water, of the following features: tidal chambers, depressions with open water, of the following features: tidal chambers, depressions with open water, of the following features: tidal chambers, depressions with open water, of the following features: tidal chambers, depressions with open water, of the following features: tidal chambers, depressions with open water, of the following features: tidal chambers, depressions with open water, of the following features: tidal chambers, depressions with open water, of the following features: tidal chambers, depressions with open water, of the following features: tidal chambers, depressions with open water, of the following features: tidal chambers, depressions with open water, of the following features: tidal chambers, depressions with open water, of the features water, depressions with open water, of the features water, depressions with open water, depressions with the features water, depressions with the features water water, depressions with the features water water, depressions with the features water wate	
contiguous resirvater wetianas.	
SC 2.0. Wetlands of High Conservation Value (WHCV)	
SC 2.1. Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High	
Conservation Value?	
SC 2.2. Is the wetland listed on the WDNR database as a Wetland of High Conservation Value?	
☐Yes = Category I ☑No = Not a WHCV	
SC 2.3. Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland? http://www1.dnr.wa.gov/nhp/refdesk/datasearch/wnhpwetlands.pdf	
Tes – Contact WNHP/WDNR and go to SC 2.4 ⊠No = Not a WHCV	
SC 2.4. Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on	
their website?	
SC 3.0. Bogs	
Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? Use the key	
below. If you answer YES you will still need to rate the wetland based on its functions.	
SC 3.1. Does an area within the wetland unit have organic soil horizons, either peats or mucks, that compose 16 in or	
more of the first 32 in of the soil profile?	
SC 3.2. Does an area within the wetland unit have organic soils, either peats or mucks, that are less than 16 in deep	
over bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or	
pond? \square Yes – Go to SC 3.3 \square No = Is not a bog	
SC 3.3. Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30%	
cover of plant species listed in Table 4?	
NOTE: If you are uncertain about the extent of mosses in the understory, you may substitute that criterion by	
measuring the pH of the water that seeps into a hole dug at least 16 in deep. If the pH is less than 5.0 and the	
plant species in Table 4 are present, the wetland is a bog. SC 3.4. Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, western red cedar,	
western hemlock, lodgepole pine, quaking aspen, Engelmann spruce, or western white pine, AND any of the	
species (or combination of species) listed in Table 4 provide more than 30% of the cover under the canopy?	
Yes = Is a Category I bog \(\subseteq \text{In ot a bog} \)	

Wetland name or number $\underline{\mathsf{F}}$

SC 4.0. Forested Wetlands	
Does the wetland have at least 1 contiguous acre of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? If you answer YES you will still need to rate the wetland based on its functions. — Old-growth forests (west of Cascade crest): Stands of at least two tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) that are at least 200 years of	
age OR have a diameter at breast height (dbh) of 32 in (81 cm) or more. — Mature forests (west of the Cascade Crest): Stands where the largest trees are 80- 200 years old OR the species that make up the canopy have an average diameter (dbh) exceeding 21 in (53 cm).	
☐ Yes = Category I ☑No = Not a forested wetland for this section	
SC 5.0. Wetlands in Coastal Lagoons	
Does the wetland meet all of the following criteria of a wetland in a coastal lagoon? — The wetland lies in a depression adjacent to marine waters that is wholly or partially separated from marine waters by sandbanks, gravel banks, shingle, or, less frequently, rocks — The lagoon in which the wetland is located contains ponded water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (needs to be measured near the bottom) □ Yes − Go to SC 5.1 ☑No = Not a wetland in a coastal lagoon	
SC 5.1. Does the wetland meet all of the following three conditions? — The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has less than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100). — At least ¾ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland.	
— The wetland is larger than $^{1}/_{10}$ ac (4350 ft ²)	
Yes = Category I □No = Category II	
SC 6.0. Interdunal Wetlands	
Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? If you answer yes you will still need to rate the wetland based on its habitat functions. In practical terms that means the following geographic areas: — Long Beach Peninsula: Lands west of SR 103 — Grayland-Westport: Lands west of SR 105 — Ocean Shores-Copalis: Lands west of SR 115 and SR 109	
SC 6.1. Is the wetland 1 ac or larger and scores an 8 or 9 for the habitat functions on the form (rates H,H,H or H,H,M for the three aspects of function)?	
SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger? \[\subseteq Yes = \textbf{Category II} \] \[\subseteq No - Go to \textbf{SC 6.3} \]	
SC 6.3. Is the unit between 0.1 and 1 ac, or is it in a mosaic of wetlands that is between 0.1 and 1 ac?	
Category of wetland based on Special Characteristics	
If you answered No for all types, enter "Not Applicable" on Summary Form	

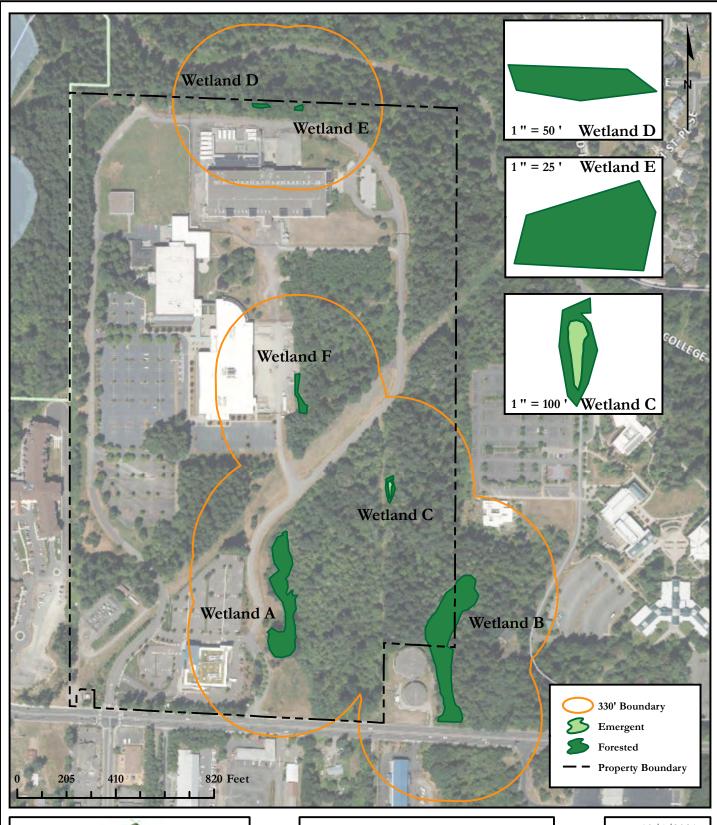
Wetland name or number $\underline{\mathsf{F}}$

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Attachment B – Updated Wetland Rating Figures

This attachment includes an updated set of wetland rating figures including location of outlets (included on hydroperiod map) and additional slope rating figures.

SOUTH HILL DATA CENTER - COWARDIN MAP





2907 Harborview Dr., Suite D, Gig Harbor, WA 98335 Phone: (253) 514-8952 Fax: (253) 514-8954 www.soundviewconsultants.com

SOUTH HILL DATA CENTER

1015 - 1025 39TH AVENUE SE PUYALLUP, WA 98374

PIERCE COUNTY PARCEL NUMBER: 0419034031, 0419034032, & 0419034034

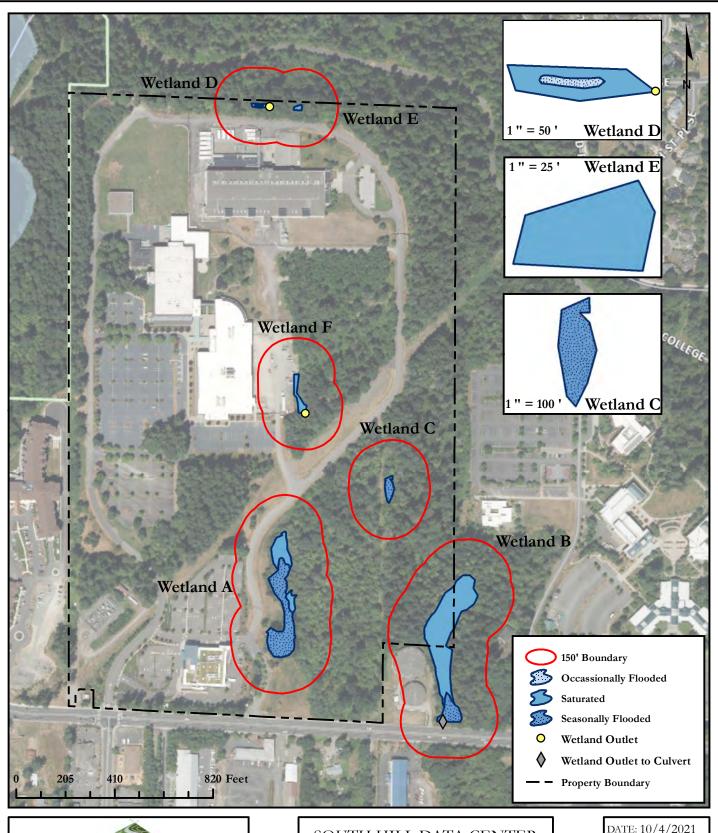
DATE: 10/4/2021
JOB: 1077.0012

BY: DLS

SCALE: 1 " = 400 '

FIGURE NO. 1 of 6

SOUTH HILL DATA CENTER - HYDROPERIOD MAP





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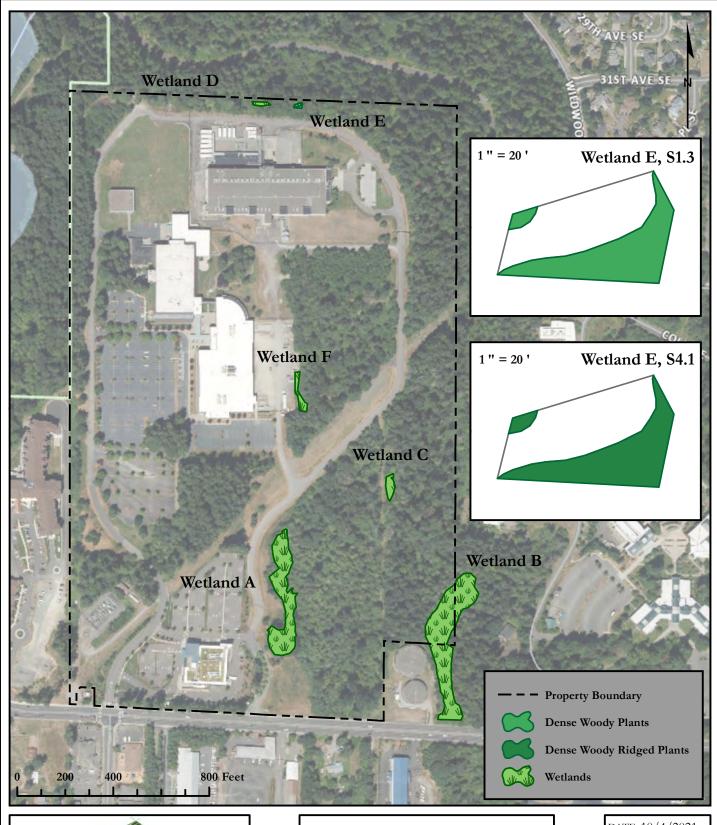
SOUTH HILL DATA CENTER

1015 - 1025 39TH AVENUE SE PUYALLUP, WA 98374

PIERCE COUNTY PARCEL NUMBER: 0419034031, 0419034032, & 0419034034

DATE: 10/4/2021
ЈОВ: 1077.0012
BY: DLS/DDS
SCALE: 1 " = 400 '
FIGURE NO. 2 of 6

SOUTH HILL DATA CENTER - PLANT COVER MAP





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SOUTH HILL DATA CENTER

1015 - 1025 39TH AVENUE SE PUYALLUP, WA 98374

PIERCE COUNTY PARCEL NUMBER: 0419034031, 0419034032, & 0419034034

DATE: 10/4/2021 JOB: 1077.0012

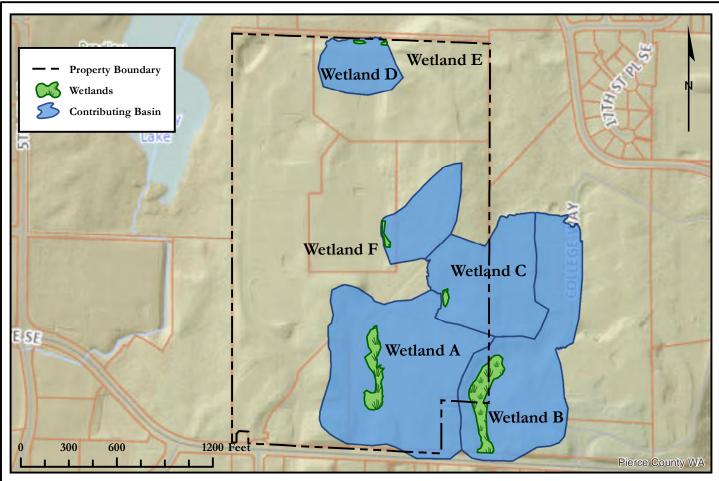
--- DD0

BY: DDS

SCALE: 1 " = 400 '

FIGURE NO. 3 of 6

SOUTH HILL DATA CENTER - CONTRIBUTING BASIN MAP



0.4.0	<u> </u>	
D.4.3		
	Area of Contributing Basin (SF)	872,950
	Area of Wetland A (SF)	34,089
	Percent of Wetland A within Contributing Basin	3.905%
	Area of Intensive Human Land Uses (SF)	387,728
	Percent of Intensive Human Land Use within Contributing Basin for Wetland A	44%
	Area of Contributing Basin (SF)	651,998
	Area of Wetland B (SF)	53,041
	Percent of Wetland B within Contributing Basin	8.135%
	Area of Intensive Human Land Uses (SF)	402,701
	Percent of Intensive Human Land Use within Contributing Basin for Wetland B	62%
	Area of Contributing Basin (SF)	412,836
	Area of Wetland C (SF)	2,949
	Percent of Wetland C within Contributing Basin	0.714%
	Area of Intensive Human Land Uses (SF)	219,894
	Percent of Intensive Human Land Use within Contributing Basin for Wetland C	53%
	Area of Contributing Basin (SF)	150,054
	Area of Wetland D (SF)	1,016
	Percent of Wetland D within Contributing Basin	0.677%
	Area of Intensive Human Land Uses (SF)	133,814
	Percent of Intensive Human Land Use within Contributing Basin for Wetland D	89%
	Area of Contributing Basin (SF)	188,600
	Area of Wetland F (SF)	3,175
	Percent of Wetland f within Contributing Hasin	1.683%
	Area of Intensive Human Land Uses (SF)	188,600
	Percent of Intensive Human Land Use within Contributing Basin for Wetland F	100%



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SOUTH HILL DATA CENTER

1015 - 1025 39TH AVENUE SE PUYALLUP, WA 98374

PIERCE COUNTY PARCEL NUMBER: 0419034031, 0419034032, & 0419034034

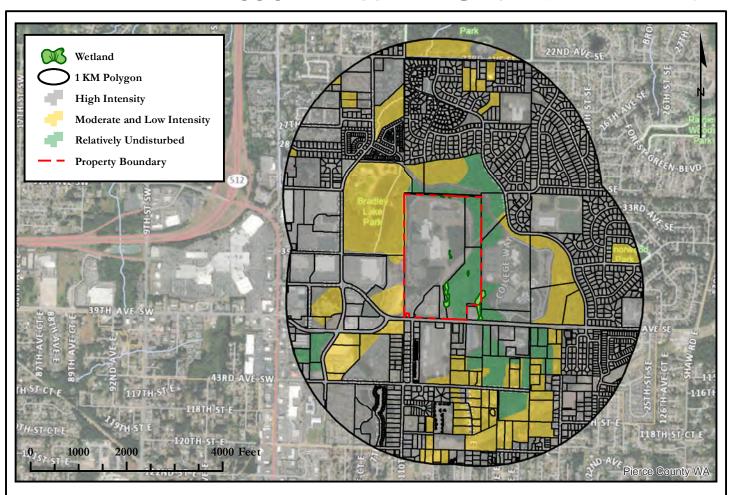
DATE: 10/4/2021 JOB: 1077.0012

BY: DLS/DDS

SCALE: 1 " = 600 '

FIGURE NO. 4 of 6

SOUTH HILL DATA CENTER - HABITAT MAP



H.2.0 Wetlands A-F	3		
H.2.1			
	Abutting Undisturbed Habitat	2.97%	
Abutting Moderate & Low Intensity Land Uses			
	Accessible Habitat	2.97%	
H.2.2			
	Undisturbed Habitat	7.16%	
	Moderate & Low Intensity Land Uses	19.74%	
	Undisturbed Habitat in 1 KM Polygon	17.03%	
H.2.3			
	High Intensity Land Use in 1 KM Polygon	73.10%	



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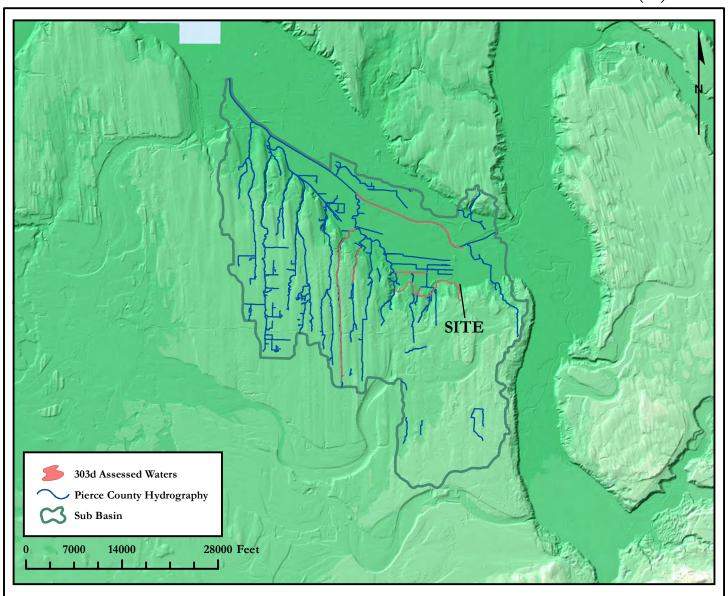
SOUTH HILL DATA CENTER

1015 - 1025 39TH AVENUE SE PUYALLUP, WA 98374

PIERCE COUNTY PARCEL NUMBER: 0419034031, 0419034032, & 0419034034

DATE: 10/4/2021	
ЈОВ: 1077.0012	
BY: DLS	
SCALE: 1 " = 2,000 '	
FIGURE NO. 5 of 6	

SOUTH HILL DATA CENTER - 303(D) MAP



LISTING ID	CATEGORY PARAMETER	MEDIA	WATERBODY	WATERBODY TYPE
78052	5 Dissolved Oxygen	Water	DIRU CREEK	Rivers/Streams
10862	5 Temperature	Water	PUYALLUP RIVER	Rivers/Streams
10874	5 Mercury	Water	PUYALLUP RIVER	Rivers/Streams
10848	5 Temperature	Water	WHITE RIVER	Rivers/Streams
79712	5 Fine Sediment	Habitat	UNNAMED CREEK (TRIB TO SILVER CREEK)	Rivers/Streams
78998	5 Fine Sediment	Habitat	RODY CREEK	Rivers/Streams
7511	5 pH	Water	MEEKER CREEK	Rivers/Streams
78999	5 Fine Sediment	Habitat	SILVER CREEK	Rivers/Streams
7509	5 Temperature	Water	MEEKER CREEK	Rivers/Streams
79714	5 Fine Sediment	Habitat	SILVER CREEK, E.F.	Rivers/Streams



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SOUTH HILL DATA CENTER

1015 - 1025 39TH AVENUE SE PUYALLUP, WA 98374

PIERCE COUNTY PARCEL NUMBER: 0419034031, 0419034032, & 0419034034

DATE: 10/4/2021
ЈОВ: 1077.0012
BY: DLS
SCALE: 1 " = 14,000 '
FIGURE NO. 6 of 6

Attachment C – Revised Data Forms

This attachment includes all the revised data forms (DP-1 through DP-20).

Project/Site: 1077.0012 - South Hill Data Center	(City/County	_{/:} Puyallu	ıp/Pierce	Sampling Date: 9/13/16 & 4/24/18
Applicant/Owner: Benaroya Capital Company				State: WA	Sampling Point: DP-1
Investigator(s): Richard Peel, Emily Swaim			Section, To	ownship, Range: <u>03, 19,</u>	04
Landform (hillslope, terrace, etc.): Valley Floor					<u>/e</u> Slope (%): 0
Subregion (LRR): A2	_ _{Lat:} <u>47.</u>	15579		Long: -122.27874	Datum: WGS84
Soil Map Unit Name: Indianola Loamy Sand				NWI classifica	tion: PFOC
Are climatic / hydrologic conditions on the site typical for this	time of yea	r? Yes 🗷	No ☐ (I	f no, explain in Remarks.)	
Are Vegetation, Soil, or Hydrology sign	ificantly dist	turbed?	Are "No	ormal Circumstances" pres	ent? Yes ☒ No ☐
Are Vegetation, Soil, or Hydrology natu	rally problen	natic?	(If need	ed, explain any answers in	Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing	samplin	g point le	ocations, transects,	important features, etc.
Hydrophytic Vegetation Present? Yes ☒ No ☐					
Hydric Soil Present? Yes ☒ No ☐			e Sampled		. 🗖
Wetland Hydrology Present? Yes ☒ No ☐		with	in a Wetlar	nd? Yes ☒ N	5 []
Remarks: Data collected near center of Wetland A in an	area known	to pond s	seasonally	Soils are naturally proble	matic due to prolonged
seasonal ponding, therefore soils do not meet		-	•	• •	• •
VEGETATION – Use scientific names of plant	 ts.				
		Dominant		Dominance Test works	sheet:
Tree Stratum (Plot size: 30 ft)	<u>% Cover</u> 50	Species? Yes	Status FAC	Number of Dominant Sp	
1. Alnus rubra 2. Populus balsamifera	40	Yes	FAC	That Are OBL, FACW, o	or FAC: <u>4</u> (A)
		163	170	Total Number of Domina	
3				Species Across All Strat	a: <u>4</u> (B)
4	90	= Total C		Percent of Dominant Sp	
Sapling/Shrub Stratum (Plot size: 15 ft)		- Total C	Ovei	That Are OBL, FACW, o	or FAC: 100% (A/B)
1. Rubus spectabilis	30	Yes	FAC	Prevalence Index work	sheet:
2. Spiraea douglasii	30	Yes	FACW	Total % Cover of:	Multiply by:
3				OBL species	x 1 =
4				FACW species	x 2 =
5					x 3 =
Hade Otratura (Distratas 5 (t)	60	= Total C	over		x 4 =
Herb Stratum (Plot size: 5 ft)				•	x 5 =
1				Column Totals:	(A) (B)
2				Prevalence Index	= B/A =
4				Hydrophytic Vegetatio	
5				☐ Rapid Test for Hydro	
6.				■ Dominance Test is >	• •
7				☐ Prevalence Index is	≤3.0 ¹
8.					tations ¹ (Provide supporting or on a separate sheet)
9				☐ Wetland Non-Vascu	• ,
10					hytic Vegetation ¹ (Explain)
11					and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft)	0	= Total C	over	be present, unless distu	
1				Hydrophytic	
2				Vegetation	
% Bare Ground in Herb Stratum 100	0	= Total C	over		S⊠ No □
Remarks:					
Hydrophytic vegetation criteria met thro	ough dom	inance te	est.		

Profile Des Depth	cription: (Describe Matrix	e to the de	-	ocument the dedox Featur		or confir	m the abse	ence of indicators.)
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-12	10YR 2/1	100	-	-	-	-	LoSa	Loamy Fine Sand
12-16	10YR 3/4	95	10YR 3/6	5	CS	M	Sand	Fine Sand
						-		· · ·
	-							
			•					
¹Type: C=C	Concentration, D=De	pletion, RN	M=Reduced Matrix	c, CS=Cover	ed or Coat	ed Sand G	Grains.	² Location: PL=Pore Lining, M=Matrix.
	Indicators: (Appli							icators for Problematic Hydric Soils ³ :
☐ Histosol	(A1)		☐ Sandy Red	ox (S5)				2 cm Muck (A10)
	pipedon (A2)		☐ Stripped Ma	, ,				Red Parent Material (TF2)
	istic (A3)			ky Mineral (F		t MLRA 1)		Very Shallow Dark Surface (TF12)
	en Sulfide (A4)	(0.4.4)		red Matrix (F.	2)		×	Other (Explain in Remarks)
	d Below Dark Surface	ce (A11)	☐ Depleted M	atrix (F3) Surface (F6	`		3100	licators of budrankutia vagatatian and
	ark Surface (A12) Mucky Mineral (S1)			ark Surface (Fo	,			licators of hydrophytic vegetation and wetland hydrology must be present,
-	Gleyed Matrix (S4)		•	essions (F8)				unless disturbed or problematic.
	Layer (if present):							
Type:								
Depth (in	nches):						Hydric	Soil Present? Yes ⊠ No □
Remarks:								
No hydric	soil indicator me	et, potent	ially due to the	e location	of the DF	o in the c	center of	the wetland (hydric soil indicators
								esent due to the presence of
seasonal			3 //			•	•	·
HYDROLO)GY							
	drology Indicators	s:						
Primary Indi	cators (minimum of	one require	ed; check all that	apply)				Secondary Indicators (2 or more required)
■ Surface	Water (A1)		☐ Water-	Stained Lea	ves (B9) (except ML	RA [☐ Water-Stained Leaves (B9) (MLRA 1, 2,
	ater Table (A2)		1, 2	2, 4A, and 4	В)			4A, and 4B)
■ Saturati	on (A3)		☐ Salt Ci	ust (B11)				☐ Drainage Patterns (B10)
■ Water M	larks (B1)		☐ Aquati	c Invertebrat	es (B13)			☐ Dry-Season Water Table (C2)
☐ Sedime	nt Deposits (B2)		☐ Hydro	gen Sulfide C	dor (C1)			☐ Saturation Visible on Aerial Imagery (C9)
☐ Drift De	posits (B3)		Oxidiz	ed Rhizosph	eres along	Living Roo	ots (C3)	Geomorphic Position (D2)
☐ Algal Ma	at or Crust (B4)		☐ Preser	ice of Reduc	ed Iron (C	4)		☐ Shallow Aquitard (D3)
☐ Iron Dep	posits (B5)		☐ Recen	t Iron Reduct	ion in Tille	d Soils (C	6) [☐ FAC-Neutral Test (D5)
	Soil Cracks (B6)			d or Stressed		1) (LRR A	N) [Raised Ant Mounds (D6) (LRR A)
	on Visible on Aerial			Explain in R	emarks)			☐ Frost-Heave Hummocks (D7)
	y Vegetated Concav	e Surface	(B8)					
Field Obse		_	_	Non	0/61			
Surface Wa	ter Present?			ches): Non				
Water Table	Present?	Yes 🔀 N		ches): Non				
Saturation F		Yes 🔀 N	lo Depth (in	_{ches):} Non	e/U	Wet	land Hydr	ology Present? Yes ⊠ No □
	ipillary fringe) ecorded Data (streai	m gauge, m	nonitoring well, ae	rial photos, p	revious in	spections)	, if availabl	e:
	,	5 5 7	y ,	. /1				
Remarks:								
Wetland h	ydrology criteria	met thro	ough primary i	ndicators /	41, A2, A	A3, and E	31. Prima	ary hydrology indicator B1 observe
								exact depth of surface water at
DP-1 not i			,					·

Project/Site: 1077.0012 - South Hill Data Center		City/C	ounty	: Puyallu	ıp/Pierce	Samplin	ng Date: 9/13	3/16
		-	-		State: WA		-	
Investigator(s): Richard Peel, Emily Swaim				Section, To	ownship, Range: 03, 19,	04		
Landform (hillslope, terrace, etc.): Valley Floor					· -		Slope (%	_{%):} 0
Subregion (LRR): A2		_						
Soil Map Unit Name: Indianola Loamy Sand					NWI classifica			
Are climatic / hydrologic conditions on the site typical for this								
Are Vegetation, Soil, or Hydrology sign	nificantly dist	turbed	l?	Are "No	ormal Circumstances" pre	sent? Ye	es 🗵 No 🗆]
Are Vegetation, Soil, or Hydrology natu				(If neede	ed, explain any answers ir	n Remark	s.)	
SUMMARY OF FINDINGS - Attach site map								res, etc.
Hydrophytic Vegetation Present? Yes ☒ No ☐								
Hydric Soil Present? Yes ⊠ No □				e Sampled		_		
Wetland Hydrology Present? Yes ☒ No ☐			with	in a Wetlar	nd? Yes ເເ	∘⊔		
Remarks: All three wetland criteria met. Da	ta collec	ted 1	neat	· central	-western border o	f Wetla	and A	
The times wettand effectia free Bu	tu conce			CCIITIAI	western border of	- W CHA		
VEGETATION – Use scientific names of plan	ts.							
Troe Stratum (Plot size: 20 ft)	Absolute			Indicator	Dominance Test work	sheet:		
Tree Stratum (Plot size: 30 ft) 1. Alnus rubra	<u>% Cover</u> 45	Yes		FAC	Number of Dominant Sp That Are OBL, FACW, of		5	(A)
2. Populus balsamifera	45	Yes		FAC			<u> </u>	_ (/\)
3.					Total Number of Domini Species Across All Stra		5	(B)
4								_ (2)
	90	= To	tal Co	over	Percent of Dominant Sp That Are OBL, FACW, of	ecies or FAC:	100%	(A/B)
Sapling/Shrub Stratum (Plot size: 15 ft)	35	Vo	_	EAC\\\				
1. Spiraea douglasii 2. Rubus spectabilis	30	Yes		FACW FAC	Prevalence Index worl		Multiply	
3. Pseudotsuga menziesii	5	No		FACU	Total % Cover of: OBL species			
				17100	FACW species			
4 5.					FAC species			
0	70	= To	tal Co	over	FACU species			
Herb Stratum (Plot size: 5 ft)					UPL species			
1. Phalaris arundinacea	20	Yes	<u>S</u>	FACW	Column Totals:	(A))	(B)
2					Dravalance Inday	D/A		
3					Prevalence Index Hydrophytic Vegetation			-
4					Rapid Test for Hydr			
5					Dominance Test is:		Syciation	
6 7					☐ Prevalence Index is			
8.					☐ Morphological Adap	tations1 (F	Provide supp	orting
9.					data in Remarks		•	et)
10					Wetland Non-Vascu			
11.					☐ Problematic Hydrop	, ,		,
Woody Vine Stratum (Plot size: 30 ft)	20	= To	tal Co	over	¹ Indicators of hydric soil be present, unless distu			y must
1					Lludron budio			
2					Hydrophytic Vegetation			
% Bare Ground in Herb Stratum 80	0	= To	tal Co	over		s⊠ No		
Remarks: Hydrophytic vegetation criteria met thre	ough dom	ninan	ce te	est. Pseu	dotsuga menziesii gr	owing o	n upland b	erm.

	Matrix	,		Pod	lox Feature			n the ab		
Depth (inches)	Color (moist)	<u> </u>	Cold	or (moist)	<u>ox reature</u> %	Type ¹	Loc ²	Textur	e	Remarks
0-12	10YR 4/2	97		YR 3/6	3	C	M/PL	GrSa		Gravelly Sandy Loam
								-		
-										
1Type: C-C	oncentration, D=D)enletion	EM-Pec	Juced Matrix (S-Covere	d or Coat	ed Sand G	raine	21.00	cation: PL=Pore Lining, M=Matrix.
	Indicators: (App						eu Sanu O			ors for Problematic Hydric Soils ³ :
☐ Histosol				Sandy Redox		,				Muck (A10)
	oipedon (A2)			Stripped Matrix				F		Parent Material (TF2)
☐ Black His				Loamy Mucky	, ,	1) (excep	t MLRA 1)			Shallow Dark Surface (TF12)
	en Sulfide (A4)			Loamy Gleyed			,		-	er (Explain in Remarks)
☐ Depleted	d Below Dark Surfa	ace (A11)	×	Depleted Matri	ix (F3)					
	ark Surface (A12)			Redox Dark Si	urface (F6)			³ lr	ndicato	ors of hydrophytic vegetation and
-	lucky Mineral (S1))		Depleted Dark	,	7)				nd hydrology must be present,
	Bleyed Matrix (S4)			Redox Depres	sions (F8)				unles	s disturbed or problematic.
	Layer (if present)):								
Type: N/.				_						
Depth (in	iches):			-				Hydri	ic Soil	Present? Yes ⊠ No □
Remarks:										
Hydric soil	criteria met th	rough in	dicato	r F3. Refusa	al at 12 ir	nches di	ue to gra	vel.		
		J					J			
L HYDROLO	ACY.									
Watland Hy		ro:								
_	drology Indicator		uirod, ob	and all that are	ah d				Casar	ndary Indicators (2 or more required)
Primary Indi	drology Indicator		uired; ch			(20)				ndary Indicators (2 or more required)
Primary India	rdrology Indicator cators (minimum c Water (A1)		uired; ch	☐ Water-Sta	ained Leav		except MLF	AS		ater-Stained Leaves (B9) (MLRA 1, 2,
Primary India ☐ Surface ☐ High Wa	rdrology Indicator cators (minimum c Water (A1) ater Table (A2)		uired; ch	☐ Water-Sta	ained Leav 1A, and 4E		except MLF	RA	□ W	ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Primary India Surface High Wa Saturation	cators (minimum o Water (A1) ater Table (A2) on (A3)		uired; ch	☐ Water-Sta 1, 2, 4 ☐ Salt Crus	ained Leav 4A, and 4E t (B11)	3)	except MLF		□ W	dater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10)
Primary India Surface High Wa Saturatio	cators (minimum c Water (A1) ater Table (A2) on (A3) larks (B1)		uired; ch	☐ Water-Sta 1, 2, 4 ☐ Salt Crus ☐ Aquatic Ir	ained Leav	s) s (B13)	except MLI		□ W	rater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2)
Primary India Surface High Wa Saturatic Water M Sedimer	cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) on Deposits (B2)		uired; ch	Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger	ained Leav 1A, and 4E t (B11) nvertebrate n Sulfide O	s (B13) dor (C1)			□ W □ Di □ Di □ Si	rater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9)
Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep	cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) on Deposits (B2) cosits (B3)		uired; ch	Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized	ained Leav 4A, and 4E t (B11) nvertebrate n Sulfide O Rhizosphe	s (B13) dor (C1) res along	Living Roc		W Di	rater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) raturation Visible on Aerial Imagery (C9) eomorphic Position (D2)
Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma	cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) oosits (B3) at or Crust (B4)		uired; ch	Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence	ained Leav 4A, and 4E t (B11) nvertebrate n Sulfide O Rhizosphe e of Reduce	s (B13) dor (C1) res along	Living Roc 4)	ots (C3)	W Di	rater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) raturation Visible on Aerial Imagery (C9) reomorphic Position (D2) rallow Aquitard (D3)
Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma	cators (minimum of water (A1) ater Table (A2) on (A3) alarks (B1) on Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5)		uired; ch	Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir	ained Leav 4A, and 4E t (B11) nvertebrate a Sulfide O Rhizosphe e of Reduce on Reducti	s (B13) dor (C1) res along ed Iron (C4 on in Tille	Living Roc 4) d Soils (C6	ots (C3)	W Di Di Si G G F/	rater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) returation Visible on Aerial Imagery (C9) reomorphic Position (D2) rallow Aquitard (D3) AC-Neutral Test (D5)
Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface	cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6)	of one requ		Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir	ained Leav 1A, and 4E t (B11) nvertebrate a Sulfide O Rhizosphe e of Reduce on Reducti or Stressed	s (B13) dor (C1) res along ed Iron (Coon in Tille Plants (D	Living Roc 4)	ots (C3)	Di Di Si G Si F F Ri	rater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) eemorphic Position (D2) nallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface	cators (minimum of water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aeria	of one requ	· (B7)	Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir	ained Leav 4A, and 4E t (B11) nvertebrate a Sulfide O Rhizosphe e of Reduce on Reducti	s (B13) dor (C1) res along ed Iron (Coon in Tille Plants (D	Living Roc 4) d Soils (C6	ots (C3)	Di Di Si G Si F F Ri	rater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) returation Visible on Aerial Imagery (C9) reomorphic Position (D2) rallow Aquitard (D3) AC-Neutral Test (D5)
Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio	cators (minimum of water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6) on Visible on Aeria of Vegetated Concar	of one requ	· (B7)	Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir	ained Leav 1A, and 4E t (B11) nvertebrate a Sulfide O Rhizosphe e of Reduce on Reducti or Stressed	s (B13) dor (C1) res along ed Iron (Coon in Tille Plants (D	Living Roc 4) d Soils (C6	ots (C3)	Di Di Si G Si F F Ri	rater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) eemorphic Position (D2) nallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely	cators (minimum of cators (minim	of one requ	r (B7) ce (B8)	Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted of	ained Leav 14, and 4E 15 (B11) 16 (B11) 17 (B11) 18 (B11) 18 (B11) 19	s (B13) dor (C1) res along ed Iron (C- on in Tille Plants (D emarks)	Living Roc 4) d Soils (C6	ots (C3)	Di Di Si G Si F F Ri	rater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) eemorphic Position (D2) nallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
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Primary India Surface High Wa Saturatio Water M Sedimer Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Wat Water Table Saturation P	cators (minimum of cators (minimum of cators (minimum of water (A1)) ater Table (A2) on (A3) larks (B1) on Deposits (B2) osits (B3) at or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aeria of Vegetated Concators ter Present? Present?	al Imagery ave Surfac	e (B7) ce (B8) No 🗵	Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted of Other (Ex	ained Leav 14, and 4E t (B11) nvertebrate a Sulfide O Rhizosphe e of Reduce on Reducti or Stressed cplain in Re es): None None	s (B13) dor (C1) res along d Iron (C4) on in Tille Plants (D4) marks)	Living Roo 4) d Soils (C6 1) (LRR A	ots (C3) (5)	W	rater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) eemorphic Position (D2) nallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
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Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Wat Water Table Saturation P (includes ca Describe Re	cators (minimum of cators (minimum of cators (minimum of water (A1)) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) Soil Cracks (B6) on Visible on Aeria of Vegetated Concar vations: ter Present? Present? pillary fringe) corded Data (streat	al Imagery ave Surfac Yes Yes Yes am gauge	No 🗵 No 🗵 No 🗵	Water-Sta 1, 2, 4 Salt Crus Aquatic Ir Hydroger Oxidized Presence Recent Ir Stunted of Other (Ex	ained Leav 14A, and 4E 15 (B11) 16 (B11) 17 (Parallel of Area (B11) 18 (Parallel of Area (B11) 18 (Parallel of Area (B11) 19 (Parallel	s (B13) dor (C1) res along ed Iron (C4 on in Tille Plants (D4 marks)	Living Roc 4) d Soils (C6 1) (LRR A	ots (C3) (S) (S)	W	later-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) haised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)

Project/Site: 1077.0012 - South Hill Data Center	(City/County	_{y:} Puyallu	ıp/Pierce	Sampling Date: 9/13/16
Applicant/Owner: Benaroya Capital Company				State: WA	Sampling Point: DP-3
				ownship, Range: <u>03, 19,</u>	
Landform (hillslope, terrace, etc.): Valley Floor		Local relie	ef (concave,	, convex, none): Concav	e Slope (%): 0
Subregion (LRR): A2	_ Lat: 47.	15582		Long: -122.27858	Datum: WGS84
Soil Map Unit Name: Indianola Loamy Sand				NWI classifica	tion: N/A
Are climatic / hydrologic conditions on the site typical for this	s time of yea	ır? Yes 🗷	No ☐ (I	f no, explain in Remarks.)	
Are Vegetation, Soil, or Hydrology sign	nificantly dist	turbed?	Are "No	ormal Circumstances" pres	ent? Yes 🗵 No 🗌
Are Vegetation, Soil, or Hydrology natu	rally probler	natic?	(If need	ed, explain any answers in	Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing	samplin	g point l	ocations, transects,	important features, etc.
Hydrophytic Vegetation Present? Yes ☐ No 🗵					
Hydric Soil Present? Yes ☐ No 🗵			e Sampled		
Wetland Hydrology Present? Yes ☐ No 🗵		with	in a Wetlar	nd? Yes □ N	o 🔀
Remarks:					
No wetland criteria met. Data por	int collec	cted eas	t of Wet	land A boundary.	
VEGETATION – Use scientific names of plan	ts.				
[Dominant	Indicator	Dominance Test works	heet:
Tree Stratum (Plot size: <u>30 ft</u>)	% Cover			Number of Dominant Sp	
1. Alnus rubra	80	Yes	FAC_	That Are OBL, FACW, o	r FAC: <u>2</u> (A)
2				Total Number of Domina	_
3				Species Across All Strat	a: <u>5</u> (B)
4	80	= Total C	over	Percent of Dominant Sports That Are OBL, FACW, o	
Sapling/Shrub Stratum (Plot size: 15 ft)				That Aic OBE, I AOV, o	1170. <u>1070</u> (7(B)
1. Vaccinium ovatum	30	Yes	FACU	Prevalence Index work	
2. Rubus spectabilis	30	Yes	FAC		Multiply by:
3					x 1 =
4					x 2 =
5	60				x 3 =
Herb Stratum (Plot size: 5 ft)	60	= Total C	over		x 4 =
1. Polystichum munitum	30	Yes	FACU	•	x 5 = (A) (B)
2. Pteridium aquilinum	10	Yes	FACU	Column Totals.	(A) (D)
3.				Prevalence Index	= B/A =
4				Hydrophytic Vegetation	n Indicators:
5				☐ Rapid Test for Hydro	phytic Vegetation
6				☐ Dominance Test is >	·50%
7				☐ Prevalence Index is	≤3.0 ¹
8					tations ¹ (Provide supporting or on a separate sheet)
9				□ Wetland Non-Vascul	• • • • • • • • • • • • • • • • • • • •
10					nytic Vegetation¹ (Explain)
11.					and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft)	40	= Total C	over	be present, unless distu	
1				Lludron budio	
2				Hydrophytic Vegetation	
	0	= Total C	over		□ No 🗵
% Bare Ground in Herb Stratum 60					
Remarks: No hydrophytic vegetation criteria met.	Prevalen	ice index	not warr	anted due to lack of c	ombined hydric soil and
hydrology.					

(inches) Color (moist) % Type¹ Loc² Texture Remarks 0-4 10YR 3/3 99 7.5YR 4/6 1 CS M LoSa Loamy Sand 4-6 10YR 4/6 100 - - - - LoSa Loamy Sand 6-16 10YR 3/4 99 10YR 4/6 1 CS M LoSa Loamy Sand	
4-6 10YR 4/6 100 LoSa Loamy Sand	
6-16 10YR 3/4 99 10YR 4/6 1 CS M LoSa Loamy Sand	
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=Pore Lining, M=N	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric S	ioils³:
☐ Histosol (A1) ☐ Sandy Redox (S5) ☐ 2 cm Muck (A10)	
☐ Histic Epipedon (A2) ☐ Stripped Matrix (S6) ☐ Red Parent Material (TF2))
□ Black Histic (A3) □ Loamy Mucky Mineral (F1) (except MLRA 1) □ Very Shallow Dark Surface (TF12 □ Hydrogen Sulfide (A4) □ Loamy Gleyed Matrix (F2) □ Other (Explain in Remarks)	:)
Depleted Below Dark Surface (A11) Depleted Matrix (F3)	
☐ Thick Dark Surface (A12) ☐ Redox Dark Surface (F6) ☐ Indicators of hydrophytic vegetation	and
☐ Sandy Mucky Mineral (S1) ☐ Depleted Dark Surface (F7) wetland hydrology must be preser	
☐ Sandy Gleyed Matrix (S4) ☐ Redox Depressions (F8) unless disturbed or problematic.	
Restrictive Layer (if present):	
Type: <u>N/A</u>	
Depth (inches): Hydric Soil Present? Yes No 🗵]
HYDROLOGY	
Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more re	
□ Surface Water (A1) □ Water-Stained Leaves (B9) (except MLRA □ Water-Stained Leaves (B9) (M	LRA 1, 2,
☐ High Water Table (A2) 1, 2, 4A, and 4B) 4A, and 4B)	
☐ High Water Table (A2) 1, 2, 4A, and 4B) 4A, and 4B) ☐ Saturation (A3) ☐ Salt Crust (B11) ☐ Drainage Patterns (B10)	
☐ High Water Table (A2) 1, 2, 4A, and 4B) 4A, and 4B) ☐ Saturation (A3) ☐ Salt Crust (B11) ☐ Drainage Patterns (B10) ☐ Water Marks (B1) ☐ Aquatic Invertebrates (B13) ☐ Dry-Season Water Table (C2)	(00)
☐ High Water Table (A2) 1, 2, 4A, and 4B) 4A, and 4B) ☐ Saturation (A3) ☐ Salt Crust (B11) ☐ Drainage Patterns (B10) ☐ Water Marks (B1) ☐ Aquatic Invertebrates (B13) ☐ Dry-Season Water Table (C2) ☐ Sediment Deposits (B2) ☐ Hydrogen Sulfide Odor (C1) ☐ Saturation Visible on Aerial Image	agery (C9)
☐ High Water Table (A2) 1, 2, 4A, and 4B) 4A, and 4B) ☐ Saturation (A3) ☐ Salt Crust (B11) ☐ Drainage Patterns (B10) ☐ Water Marks (B1) ☐ Aquatic Invertebrates (B13) ☐ Dry-Season Water Table (C2) ☐ Sediment Deposits (B2) ☐ Hydrogen Sulfide Odor (C1) ☐ Saturation Visible on Aerial Image Patterns (B10) ☐ Drift Deposits (B3) ☐ Oxidized Rhizospheres along Living Roots (C3) ☐ Geomorphic Position (D2)	agery (C9)
High Water Table (A2) 1, 2, 4A, and 4B) 4A, and 4B) Saturation (A3) Water Marks (B1) Aquatic Invertebrates (B13) Drift Deposits (B2) Hydrogen Sulfide Odor (C1) Algal Mat or Crust (B4) 1, 2, 4A, and 4B) Aquatic Invertebrates (B13) Aquatic	agery (C9)
High Water Table (A2) 1, 2, 4A, and 4B) A4A, and 4B) Saturation (A3) Water Marks (B1) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Image Patterns (B10) Dry-Season Water Table (C2) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Inon Deposits (B5) Recent Iron Reduction in Tilled Soils (C6) FAC-Neutral Test (D5)	
High Water Table (A2) 1, 2, 4A, and 4B) Saturation (A3) Vater Marks (B1) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Recent Iron Reduction in Tilled Soils (C6) Surface Soil Cracks (B6) Torainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Image Patterns (B13) Dry-Season Water Table (C2) Saturation Visible on Aerial Image Patterns (B10) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR	
High Water Table (A2) 1, 2, 4A, and 4B) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) HA, and 4B) AA, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (B10) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR	
High Water Table (A2) 1, 2, 4A, and 4B) Saturation (A3) Water Marks (B1) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Cher (Explain in Remarks) AA, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Image Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR Cher (Explain in Remarks) Frost-Heave Hummocks (D7)	
High Water Table (A2) Saturation (A3) Vater Marks (B1) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Cother (Explain in Remarks) Field Observations:	
High Water Table (A2) \$\text{I, 2, 4A, and 4B}\$} \$\text{Saturation (A3)}\$ \$\text{Satt Crust (B11)}\$ \$\text{Drainage Patterns (B10)}\$ \$\text{Sediment Deposits (B2)}\$ \$\text{Drift Deposits (B3)}\$ \$\text{Drift Deposits (B3)}\$ \$\text{Drift Deposits (B4)}\$ \$\text{Drift Presence of Reduced Iron (C4)}\$ \$\text{Stunded or Stressed Plants (D1) (LRR A)}\$ \$\text{Surface Soil Cracks (B6)}\$ \$\text{Stunded Observations:}\$ \$\text{Surface Water Present?}\$ \$Yes \$\text{No }\text{No }Depth (inches):	
High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Inon Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Teld Observations: Surface Water Present? Yes No Depth (inches): Drift Crust (B11) Aquatic Invertebrates (B13) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Saturation Visible on Aerial Image Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) FAC-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Other (Explain in Remarks) Frost-Heave Hummocks (D7) Depth (inches): Depth (inches): Depth (inches):	A)
High Water Table (A2)	A)
High Water Table (A2) Saturation (A3) Salt Crust (B11) Aquatic Invertebrates (B13) Dry-Season Water Table (C2) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No Depth (inches): Saturation Yes Inches): Depth (inches): Saturation Present? Yes No Depth (inches): Saturation Present? Yes No Wetland Hydrology Present? Yes No No Wetland Present? Yes No	A)
High Water Table (A2)	A)
High Water Table (A2)	A)
High Water Table (A2)	A)

Project/Site: 1077.0012 - South Hill Data Center	(City/County	_{/:} Puyallu	ıp/Pierce	Sampling Date: 9/13/16
Applicant/Owner: Benaroya Capital Company				State: WA	Sampling Point: DP-4
				ownship, Range: <u>03, 19,</u>	
Landform (hillslope, terrace, etc.): Valley Floor		Local relie	ef (concave,	, convex, none): Concav	<u>e</u> Slope (%): 0
Subregion (LRR): A2	_ Lat: <u>47.</u> ′	15563		Long: -122.27630	Datum: WGS84
Soil Map Unit Name: Indianola Loamy Sand				NWI classifica	tion: PFOCD
Are climatic / hydrologic conditions on the site typical for this	time of yea	ır? Yes 🗷	No □ (I	f no, explain in Remarks.)	
Are Vegetation, Soil, or Hydrology sign	ificantly dist	turbed?	Are "No	ormal Circumstances" pres	ent? Yes 🗷 No 🗌
Are Vegetation, Soil, or Hydrology natu	rally problen	natic?	(If need	ed, explain any answers in	Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing	samplin	g point le	ocations, transects,	important features, etc.
Hydrophytic Vegetation Present? Yes ☒ No ☐					
Hydric Soil Present? Yes ☒ No ☐			e Sampled		
Wetland Hydrology Present? Yes ☒ No ☐		with	in a Wetlar	nd? Yes ເເ N	5 []
Remarks:		4	** 4 4 .	_	
All three wetland criteria met. Da	ta collec	ted in V	Vetland .	В.	
VEGETATION – Use scientific names of plant	 ts.				
	Absolute	Dominant		Dominance Test works	sheet:
Tree Stratum (Plot size: 30 ft) 1. Alnus rubra	<u>% Cover</u> 80	Species? Yes	Status FAC	Number of Dominant Sp	
2				That Are OBL, FACW, o	
3				Total Number of Domina Species Across All Strat	_
4				,	
Opening (Objects Objects on AF (C)	80	= Total C	over	Percent of Dominant Sp That Are OBL, FACW, o	or FAC: <u>100%</u> (A/B)
Sapling/Shrub Stratum (Plot size: 15 ft) 1. Salix sitchensis	10	Yes	FACW	Prevalence Index work	
2. Rubus spectabilis	10	Yes	FAC		Multiply by:
3.					x 1 =
4.					x 2 =
5.					x 3 =
	20	= Total C	over	FACU species	x 4 =
Herb Stratum (Plot size: 5 ft)	50	V	ODI	UPL species	x 5 =
1. Lysichiton americanus	50	Yes		Column Totals:	(A) (B)
2. Oenanthe sarmentosa	30	Yes	OBL	Prevalence Index	= B/A =
3				Hydrophytic Vegetatio	
4				Rapid Test for Hydro	
5				Dominance Test is >	
6				☐ Prevalence Index is	≤3.0 ¹
8				☐ Morphological Adapt	tations ¹ (Provide supporting
9.					or on a separate sheet)
10				Wetland Non-Vascu	
11					hytic Vegetation ¹ (Explain)
	80	= Total C	over	be present, unless distu	and wetland hydrology must rbed or problematic.
Woody Vine Stratum (Plot size: 30 ft) 1					
2				Hydrophytic	
	0	= Total C	over	Vegetation Present? Yes	s⊠ No □
% Bare Ground in Herb Stratum 80					
Remarks: Hydrophytic vegetation criteria met thro	ough dom	inance te	est.		

Depth	cription: (Describ Matrix		aeptii iie		ox Feature		or commi	ii uie ab	Selice	or indicators.)
(inches)	Color (moist)	%	Colo	r (moist)	<u>%</u>	Type ¹	Loc ²	Textu	re	Remarks
0-16	5YR 2.5/1	100	-		-	-	-	Muck	(Organic peat/muck
								-		
	-									-
¹Tvpe: C=C	oncentration, D=D	epletion. I	RM=Red	uced Matrix. C	S=Covere	d or Coate	ed Sand G	rains.	² Loc	eation: PL=Pore Lining, M=Matrix.
	Indicators: (App									rs for Problematic Hydric Soils ³ :
× Histosol	(A1)		П	Sandy Redox (S5)			Г	7 2 cm	Muck (A10)
	oipedon (A2)			Stripped Matrix						Parent Material (TF2)
	stic (A3)			_oamy Mucky I	, ,	1) (except	MLRA 1)			Shallow Dark Surface (TF12)
	en Sulfide (A4)		□ I	_oamy Gleyed	Matrix (F2	2)] Othe	r (Explain in Remarks)
□ Deplete	d Below Dark Surfa	ace (A11)		Depleted Matrix	x (F3)					
☐ Thick Da	ark Surface (A12)			Redox Dark Su	ırface (F6)			3	ndicato	rs of hydrophytic vegetation and
	lucky Mineral (S1)			Depleted Dark	Surface (F	7)			wetla	nd hydrology must be present,
-	Bleyed Matrix (S4)			Redox Depress	sions (F8)				unles	s disturbed or problematic.
Restrictive	Layer (if present)	:								
Type:										
Depth (ir	ches):							Hydr	ic Soil	Present? Yes ⊠ No □
Remarks:								ı		
HYDROLO	nev .									
_	drology Indicator		irad: ab	ack all that ann	also)				Sagar	adon (Indicators (2 or more required)
		one requ	illea, che			(5.0) (ndary Indicators (2 or more required)
Surface	` '			☐ Water-Sta		. , .	xcept MLF	KA	☐ W	ater-Stained Leaves (B9) (MLRA 1, 2,
_	ater Table (A2)				A, and 4B	5)				4A, and 4B)
Saturati	` '			☐ Salt Crust	` '	(D.40)				rainage Patterns (B10)
➤ Water M	, ,			☐ Aquatic In		, ,				y-Season Water Table (C2)
	nt Deposits (B2)					, ,				aturation Visible on Aerial Imagery (C9)
	posits (B3)			Oxidized F		•	•	ts (C3)		eomorphic Position (D2)
	at or Crust (B4)			Presence						nallow Aquitard (D3)
· ·	oosits (B5)			☐ Recent Iro			•	,		AC-Neutral Test (D5)
	Soil Cracks (B6)		(D=)			•	1) (LRR A))		aised Ant Mounds (D6) (LRR A)
	on Visible on Aeria			☐ Other (Ex	plain in Re	emarks)			∐ Fr	ost-Heave Hummocks (D7)
	/ Vegetated Conca	ve Surfac	e (B8)							
Field Obse		—	—		. None					
Surface Wa	ter Present?	Yes 🗌	No 🗵	Depth (inche	_	'				
Water Table	Present?	Yes 🗵	No 🗌	Depth (inche	,					
Saturation F		Yes 🗵	No 🗌	Depth (inche	es): 0		Wetl	and Hy	drology	/ Present? Yes ⊠ No □
	pillary fringe) ecorded Data (strea	am gauge	monitor	ing well. aerial	photos, n	revious ins	spections)	if availa	ble:	
20001100110	zzzasa zata (otroc	34490			F5.50, Pi			Grand		
Remarks:										
	criteria met th	rough n	rimarv	indicators A	2 A3 B	1 and 0	21			
riyarologi	ontona met lii	rough p	ııııaıy	ii iuioaiois P	, AJ, D	, i, ailu (٠١.			

Project/Site: 1077.0012 - South Hill Data Center	(City/Count	y: Puyallu	ıp/Pierce	Sampling Date: 9/13/16
Applicant/Owner: Benaroya Capital Company				State: WA	Sampling Point: DP-5
				ownship, Range: <u>03, 19,</u>	
Landform (hillslope, terrace, etc.): Slope		Local reli	ef (concave,	, convex, none): Concav	<u>e</u> Slope (%): 20
Subregion (LRR): A2	_ _{Lat:} <u>47.</u>	15550		Long: -122.27639	Datum: WGS84
Soil Map Unit Name: Indianola Loamy Sand				NWI classifica	tion: N/A
Are climatic / hydrologic conditions on the site typical for this	time of yea	ır? Yes 🗵] No □ (I	If no, explain in Remarks.)	
Are Vegetation, Soil, or Hydrology sign	nificantly dist	turbed?	Are "No	ormal Circumstances" pres	sent? Yes ☒ No ☐
Are Vegetation, Soil, or Hydrology natu	rally probler	natic?	(If need	ed, explain any answers in	Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing	samplin	ng point le	ocations, transects,	important features, etc.
Hydrophytic Vegetation Present? Yes ☒ No ☐					
Hydric Soil Present? Yes ☐ No 🗵			ne Sampled		
Wetland Hydrology Present? Yes ☐ No 🗵		with	nin a Wetlar	nd? Yes □ N	o 🔀
Remarks:					
Not all three wetland criteria met, only	hydrophy	ytic vege	etation. Da	ata point collected eas	st of Wetland B boundary.
VEGETATION – Use scientific names of plant	te .				
VEGETATION OSC SCIONARIO NAMES OF Plant		Dominant	t Indicator	Dominance Test works	sheet:
Tree Stratum (Plot size: 30 ft)	% Cover	Species?	Status	Number of Dominant Sp	
1. Alnus rubra	60	Yes	FAC	That Are OBL, FACW, o	or FAC: <u>4</u> (A)
2. Thuja plicata	20	Yes	FAC	Total Number of Domina	ant
3				Species Across All Strat	a: <u>6</u> (B)
4				Percent of Dominant Sp	ecies
Sapling/Shrub Stratum (Plot size: 15 ft)	80	= Total C	Cover	That Are OBL, FACW, o	
1. Rubus spectabilis	30	Yes	FAC	Prevalence Index work	sheet
2. Rubus armeniacus	10	Yes	FAC		Multiply by:
3					x 1 =
4					x 2 =
5.					x 3 =
	40	= Total C	Cover		x 4 =
Herb Stratum (Plot size: 5 ft)					x 5 =
1. Polystichum munitum	10		FACU	Column Totals:	(A) (B)
2. Rubus ursinus	10	<u>Yes</u>	FACU		
3					= B/A =
4				Hydrophytic Vegetatio	
5				Rapid Test for Hydro	• •
6				➤ Dominance Test is >	
7				☐ Prevalence Index is	
8					tations ¹ (Provide supporting or on a separate sheet)
9				☐ Wetland Non-Vascu	. ,
10				☐ Problematic Hydropl	hytic Vegetation ¹ (Explain)
11	20			¹ Indicators of hydric soil	and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft)	20	= Total C	over	be present, unless distu	rbed or problematic.
1				Hydrophytic	
2				Vegetation	
0/ Page 0	0	= Total C	Cover		s⊠ No □
% Bare Ground in Herb Stratum 80 Remarks:					
Hydrophytic vegetation criteria met thro	ough dom	inance t	est.		

Depth	cription: (Descri		иерин п		dox Featur		or comm	iiii tiite at	JSEIICE	or mulcators.)
(inches)	Color (moist)	%	Colo	or (moist)	%	Type ¹	Loc ²	Textu	re	Remarks Programme Remarks
0-14	10YR 3/3	99	10`	YR 3/6	1	CS	M	LoSa	а	Loamy Sand
										
			_							
							-			
							-			
¹Type: C=C	Concentration, D=D	enletion	RM=Red	uced Matrix (CS=Cover	ed or Coat	ed Sand	Grains	² l 0	cation: PL=Pore Lining, M=Matrix.
	Indicators: (App						ca Garia			ors for Problematic Hydric Soils ³ :
☐ Histosol				Sandy Redox		,				n Muck (A10)
	pipedon (A2)			Stripped Matri				-		Parent Material (TF2)
	istic (A3)			Loamy Mucky	, ,	1) (excen	t MI RΔ1	1) [Shallow Dark Surface (TF12)
	en Sulfide (A4)			Loamy Gleyed				_		er (Explain in Remarks)
	d Below Dark Surf	ace (A11)		Depleted Matr		-/			_	(Explain in Nomano)
-	ark Surface (A12)	acc (/ 1.1.)		Redox Dark S)		3	Indicato	ors of hydrophytic vegetation and
	Mucky Mineral (S1))		Depleted Dark	•	•				and hydrology must be present,
-	Gleyed Matrix (S4)			Redox Depres	•	,				ss disturbed or problematic.
	Layer (if present)			<u> </u>	, ,					·
Type: N	/A			_						
Depth (ir	nches):							Hydi	ric Soil	Present? Yes ☐ No ☒
Remarks:								1.,,	10 00	- 100 - 100
INO HYDRIC	soil criteria me	i. Keius	arat 12	inches du	e to root	S.				
HYDROLO	OGY									
Wetland Hy	drology Indicato	rs:								
Primary Ind	icators (minimum d	of one requ	uired; ch	eck all that ap	ply)				Seco	ndary Indicators (2 or more required)
☐ Surface	Water (A1)			☐ Water-St	ained Leav	ves (B9) (xcept MI	LRA	□ w	ater-Stained Leaves (B9) (MLRA 1, 2,
	ater Table (A2)				4A, and 4I		•			4A, and 4B)
☐ Saturati				☐ Salt Crus	t (B11)	,			Πр	rainage Patterns (B10)
	farks (B1)			☐ Aquatic II	` ,	es (B13)				ry-Season Water Table (C2)
	nt Deposits (B2)				n Sulfide C	` '				aturation Visible on Aerial Imagery (C9)
	posits (B3)				Rhizosphe	, ,	Livina Da	oote (C3)		eomorphic Position (D2)
	at or Crust (B4)				of Reduc	-	-	JUIG (UG)		hallow Aquitard (D3)
					on Reduct	•	•	26)		
·	posits (B5)						,	,		AC-Neutral Test (D5)
_	Soil Cracks (B6)	al las - :	(DZ)		or Stressed		(LKK)	A)		aised Ant Mounds (D6) (LRR A)
	on Visible on Aeria			☐ Otner (E)	xplain in R	emarks)			⊔ Fi	rost-Heave Hummocks (D7)
	y Vegetated Conca	ave Surfac	e (B8)				-			
Field Obse		_	_		Non	2				
Surface Wa	ter Present?	Yes 🗌	No 🔀	Depth (inch						
Water Table	Present?	Yes 🗌	No 🗵	Depth (inche	_{es):} None	<u> </u>				
Saturation F		Yes 🗌	No 🗵	Depth (inche	_{es):} None	e	We	etland Hy	drolog	y Present? Yes ☐ No ⊠
	pillary fringe)			da a a !! !	.la.la.t			\ '£ = : = "	-1-1-	
Describe Re	ecorded Data (stre	am gauge	, monitoi	ing well, aeria	ıı pnotos, p	revious in	spections	s), it availa	able:	
Remarks:										
No hydrol	ogy criteria me	t.								

Project/Site: 1077.0012 - South Hill Data Center	(City/Coun	_{ty:} Puyallu	ıp/Pierce	Sampling Date: 9/14/16 & 4/24/18
Applicant/Owner: Benaroya Capital Company				State: WA	Sampling Point: DP-6
				ownship, Range: <u>03, 19,</u>	
Landform (hillslope, terrace, etc.): Valley Floor		Local reli	ief (concave,	, convex, none): Concav	<u>'e</u> Slope (%): 2
Subregion (LRR): A2	_ _{Lat:} <u>47.</u>	15753		Long: -122.27711	Datum: WGS84
Soil Map Unit Name: Indianola Loamy Sand				NWI classifica	tion: PFOC
Are climatic / hydrologic conditions on the site typical for this	s time of yea	ır? Yes 🗵	No □ (I	f no, explain in Remarks.)	
Are Vegetation, Soil, or Hydrology sign	nificantly dist	turbed?	Are "No	ormal Circumstances" pres	ent? Yes ☒ No ☐
Are Vegetation, Soil, or Hydrology natu	rally probler	matic?	(If need	ed, explain any answers ir	ı Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing	samplir	ng point l	ocations, transects,	important features, etc.
Hydrophytic Vegetation Present? Yes ☒ No ☐					
Hydric Soil Present? Yes ☒ No ☐			he Sampled		
Wetland Hydrology Present? Yes ☒ No ☐		Witi	hin a Wetlar	nd? Yes ☒ N	0 📙
Remarks:		l			
All three wetland criteria met. Da	ta point	collect	ed in inte	erior of Wetland C	
VEGETATION – Use scientific names of plan	ts				
		Dominan	t Indicator	Dominance Test works	sheet:
Tree Stratum (Plot size: 30 ft)	% Cover			Number of Dominant Sp	ecies
1. Acer macrophyllum	<u>15</u>	Yes	FACU	That Are OBL, FACW, o	or FAC: <u>3</u> (A)
2. Frangula purshiana	5	Yes	FAC	Total Number of Domina	ant
3. Pseudotsuga menziesii	5	Yes	FACU	Species Across All Strat	_
4				Percent of Dominant Sp	ecies
Sanling/Shruh Stratum (Plot size: 15 ft)	25	= Total (Cover	That Are OBL, FACW, o	
Sapling/Shrub Stratum (Plot size: 15 ft) 1. Alnus rubra	20	Yes	FAC	Prevalence Index work	
1. Allius Tubia 2					Multiply by:
3.					x 1 =
4					x 2 =
5					x 3 =
<u> </u>	20	= Total (Cover		x 4 =
Herb Stratum (Plot size: 5 ft)					x 5 =
1. Phalaris arundinacea	100	Yes	FACW		(A) (B)
2					
3					= B/A =
4			·	Hydrophytic Vegetatio	
5				Rapid Test for Hydro	
6			·	■ Dominance Test is >	
7				☐ Prevalence Index is	
8					tations ¹ (Provide supporting or on a separate sheet)
9				☐ Wetland Non-Vascu	. ,
10				☐ Problematic Hydropl	hytic Vegetation ¹ (Explain)
11	100				and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft)	100	= Total (Cover	be present, unless distu	rbed or problematic.
1				Hydrophytic	
2				Vegetation	
0/ Para Cround in Harts Chrosting 0	0	= Total 0	Cover		s⊠ No □
% Bare Ground in Herb Stratum 0					
Hydrophytic vegetation criteria met three	ough dom	inance	test.		

	(Describe to the	uepiii ii	eeded to docun	ilenit tine	muicator	or contiri	m the ab	sence of	indicators.)	
Depth	Matrix		Redo	x Feature						
(inches) Color (r			or (moist)	%	Type ¹	Loc ²	Textur		Remarks	<u> </u>
<u>0-6</u> <u>10YR</u>	2/1 100	<u> </u>		-	-	-	LoSa	<u>L</u>	oamy Sand	
6-12 10YR	3/2 90	10	YR 3/6	10	CS	М	LoSa	<u> L</u>	oamy Sand	
12-18 10YR	8 4/2 90	10	YR 4/6	10	CS	М	LoSa	a L	oamy Sand	
							-		•	_
¹Type: C=Concentra	tion. D=Depletion	RM=Rec	duced Matrix, CS	S=Covere	d or Coate	ed Sand G	Grains.	² l ocati	on: PL=Pore Lining	g. M=Matrix
Hydric Soil Indicato						<u> </u>			for Problematic H	
☐ Histosol (A1)		×	Sandy Redox (S	55)				2 cm M	uck (A10)	
☐ Histic Epipedon ((A2)		Stripped Matrix (Red Pa	rent Material (TF2)	
☐ Black Histic (A3)			Loamy Mucky M			MLRA 1)			nallow Dark Surface	
☐ Hydrogen Sulfide			Loamy Gleyed N)			Other (I	Explain in Remarks	s)
☐ Depleted Below [Depleted Matrix				0-			
☐ Thick Dark Surface	` '		Redox Dark Sur	, ,			3 r		of hydrophytic vege	
☐ Sandy Mucky Mir☐ Sandy Gleyed Ma	, ,		Depleted Dark S Redox Depressi	•	7)				hydrology must be listurbed or problem	
Sandy Gleyed Ma	, ,		Redux Deplessi	OIIS (FO)				uniess	isturbed of problem	nauc.
Type: N/A	presenty.									
Depth (inches):			_				Llydri	ic Soil Pr	esent? Yes ⊠	No □
Remarks:			-				Пуш	10 3011 F1	esent: Tes 🔼	140
			- OF \A/b:lo 4b			! !	A	44 400	م م م م ال م الم م	
Hydric soil criteria sandy layers occu										
		itely abt	we me dede						s and a cindina	
	and laver (10)									a 01 1 01 1000.
Therefore the sec	cond layer (10									d 01 1 01 1000.
HYDROLOGY	cond layer (10									
	· · · · · ·									2 01 1 01 1000.
HYDROLOGY	Indicators:	YR 3/2)	fails to meet	the A11				a greater		
HYDROLOGY Wetland Hydrology	Indicators:	YR 3/2)	fails to meet	the A11	require	ements (chroma	a greater	r than 1).	more required)
HYDROLOGY Wetland Hydrology Primary Indicators (m	Indicators: ninimum of one re	YR 3/2)	fails to meet eck all that apply Water-Stail	the A11	require	ements (chroma	Seconda	r than 1). ary Indicators (2 or n	more required)
HYDROLOGY Wetland Hydrology Primary Indicators (m Surface Water (A	Indicators: ninimum of one re	YR 3/2)	fails to meet eck all that apply Water-Stail	the A11	require	ements (chroma	Seconda Wate	r than 1). ary Indicators (2 or representations)	more required) B9) (MLRA 1, 2,
HYDROLOGY Wetland Hydrology Primary Indicators (m Surface Water (A High Water Table	Indicators: ninimum of one re	YR 3/2)	eck all that apply Water-Stain 1, 2, 44	the A11 y) ned Leav A, and 4B (B11)	require	ements (chroma	Seconda Wate 4	r than 1). ary Indicators (2 or ner-Stained Leaves (I	more required) B9) (MLRA 1, 2,
HYDROLOGY Wetland Hydrology Primary Indicators (m Surface Water (A High Water Table Saturation (A3)	Indicators: ninimum of one re 11) e (A2)	YR 3/2)	eck all that apply Water-Stair 1, 2, 4A	the A11 y) ned Leav a, and 4B (B11) ertebrate	require es (B9) (e) s (B13)	ements (chroma	Seconda Wate 4 Drair Dry-S	r than 1). ary Indicators (2 or repr-Stained Leaves (Ind. A, and 4B) hage Patterns (B10)	more required) B9) (MLRA 1, 2,) e (C2)
HYDROLOGY Wetland Hydrology Primary Indicators (m Surface Water (A High Water Table Saturation (A3) Water Marks (B1)	Indicators: ninimum of one re (1) e (A2)) its (B2)	YR 3/2)	eck all that apply Water-Stain 1, 2, 4A Salt Crust (Aquatic Inv	y) ned Leav A, and 4B (B11) ertebrate Sulfide Or	require es (B9) (e) s (B13) dor (C1)	xcept ML	chroma RA	Seconda Seconda Wate 4 Drair Dry-S Satu	r than 1). ary Indicators (2 or restricted to the ser-Stained Leaves (6 A, and 4B) age Patterns (B10) Season Water Table	more required) (B9) (MLRA 1, 2,) e (C2) erial Imagery (C9)
HYDROLOGY Wetland Hydrology Primary Indicators (m Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposi	Indicators: ninimum of one re (1) e (A2)) its (B2)	YR 3/2)	eck all that apply Water-Stain 1, 2, 4A Salt Crust (Aquatic Inv	y) ned Leav A, and 4B B11) ertebrate Sulfide O hizosphe	require es (B9) (e) s (B13) dor (C1) res along	xcept ML	chroma RA	Seconda Wate 4 Drair Dry-S Satu	r than 1). ary Indicators (2 or representation 1). ary Indicators (2 or representation 1). ary Indicators (1). ary Indicators (2). ary Indicators (1). ary Indicators (1). ary Indicators (2). ary Indicators (1). ary Indicators (1).	more required) (B9) (MLRA 1, 2,) e (C2) erial Imagery (C9)
HYDROLOGY Wetland Hydrology Primary Indicators (m Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposit Drift Deposits (B3)	Indicators: ninimum of one re (1) e (A2)) its (B2) 3) et (B4)	YR 3/2)	eck all that apply Water-Stain 1, 2, 44 Salt Crust (Aquatic Inv Hydrogen S Oxidized R	w) med Leav a, and 4B B11) ertebrate Sulfide Or hizosphe of Reduce	es (B9) (e) s (B13) dor (C1) res along d Iron (C4	ements (xcept ML Living Roo	RA ots (C3)	Seconda Wate 4 Drair Dry-S Satu	r than 1). ary Indicators (2 or ner-Stained Leaves (Fa., and 4B) age Patterns (B10) Season Water Table ration Visible on Aemorphic Position (D.)	more required) (B9) (MLRA 1, 2,) e (C2) erial Imagery (C9)
HYDROLOGY Wetland Hydrology Primary Indicators (m Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposi Drift Deposits (B3) Algal Mat or Crus	Indicators: ninimum of one re (1) e (A2)) its (B2) 3) st (B4) 5)	YR 3/2)	eck all that apply Water-Stain 1, 2, 4A Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence of	the A11 y) ned Leav a, and 4B (B11) ertebrate Sulfide Or hizosphe of Reduce n Reducti	es (B9) (e) s (B13) dor (C1) res along d Iron (C4 on in Tille	ements (xcept ML Living Roo) d Soils (Co	chroma RA ots (C3)	Seconda Wate Drair Dry-S Satul Geor Shall	ary Indicators (2 or ner-Stained Leaves (I.A., and 4B) nage Patterns (B10) Season Water Table ration Visible on Aemorphic Position (Dalow Aquitard (D3)	more required) B9) (MLRA 1, 2,) e (C2) erial Imagery (C9)
HYDROLOGY Wetland Hydrology Primary Indicators (m Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposit Drift Deposits (B3) Algal Mat or Crus Iron Deposits (B5) Surface Soil Crac	Indicators: ninimum of one re (1) e (A2)) its (B2) 3) st (B4) cks (B6) e on Aerial Image	quired; ch	eck all that apply Water-Stain 1, 2, 4A Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence co	the A11 //) ned Leav A, and 4B (B11) ertebrate Sulfide Or hizosphe of Reduce n Reducti Stressed	require es (B9) (e) s (B13) dor (C1) res along d Iron (C4 on in Tille Plants (D	ements (xcept ML Living Roo) d Soils (Co	chroma RA ots (C3)	Seconda Wate 4 Drair Dry-S Satur Geor Shall FAC-	ary Indicators (2 or ner-Stained Leaves (I.A., and 4B) nage Patterns (B10) Season Water Table ration Visible on Ae morphic Position (Di low Aquitard (D3) Neutral Test (D5)	more required) (B9) (MLRA 1, 2,) e (C2) erial Imagery (C9) (C2) (C3) (LRR A)
HYDROLOGY Wetland Hydrology Primary Indicators (m Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposit Drift Deposits (B3) Algal Mat or Crus Iron Deposits (B5) Surface Soil Crac	Indicators: ninimum of one re (1) e (A2)) its (B2) 3) st (B4) cks (B6) e on Aerial Image	quired; ch	eck all that apply Water-Stain 1, 2, 4A Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence co Recent Iror Stunted or	the A11 //) ned Leav A, and 4B (B11) ertebrate Sulfide Or hizosphe of Reduce n Reducti Stressed	require es (B9) (e) s (B13) dor (C1) res along d Iron (C4 on in Tille Plants (D	ements (xcept ML Living Roo) d Soils (Co	chroma RA ots (C3)	Seconda Wate 4 Drair Dry-S Satur Geor Shall FAC-	ary Indicators (2 or representation Visible on Aemorphic Position (D3) Neutral Test (D5) ed Ant Mounds (D6)	more required) (B9) (MLRA 1, 2,) e (C2) erial Imagery (C9) (C2) (C3) (LRR A)
HYDROLOGY Wetland Hydrology Primary Indicators (m Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposit Drift Deposits (B3) Algal Mat or Crus Iron Deposits (B5) Surface Soil Crac	Indicators: ninimum of one re (1) e (A2)) its (B2) (3) et (B4) (5) cks (B6) e on Aerial Image ted Concave Surfa	quired; ch	eck all that apply Water-Stain 1, 2, 4A Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Stunted or Other (Exp	the A11 A) med Leav A, and 4B B11) ertebrate Sulfide O hizosphe of Reducti Stressed lain in Re	require es (B9) (e) s (B13) dor (C1) res along d Iron (C4 on in Tille Plants (D marks)	ements (xcept ML Living Roo) d Soils (Co	chroma RA ots (C3)	Seconda Wate 4 Drair Dry-S Satur Geor Shall FAC-	ary Indicators (2 or representation Visible on Aemorphic Position (D3) Neutral Test (D5) ed Ant Mounds (D6)	more required) (B9) (MLRA 1, 2,) e (C2) erial Imagery (C9) (C2) (C3) (LRR A)
HYDROLOGY Wetland Hydrology Primary Indicators (m Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposit Drift Deposits (B3 Algal Mat or Crus Iron Deposits (B5 Surface Soil Crac Inundation Visible Sparsely Vegetat	Indicators: ninimum of one re (1) e (A2)) its (B2) (3) st (B4) (5) cks (B6) e on Aerial Image	quired; ch	eck all that apply Water-Stain 1, 2, 4A Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Stunted or Other (Exp	the A11 y) ned Leav A, and 4B B11) ertebrate Sulfide Or hizosphe f Reduce Reducti Stressed lain in Re	require es (B9) (e) s (B13) dor (C1) res along d Iron (C2 on in Tille Plants (D marks) / 6+	ements (xcept ML Living Roo) d Soils (Co	chroma RA ots (C3)	Seconda Wate 4 Drair Dry-S Satur Geor Shall FAC-	ary Indicators (2 or representation Visible on Aemorphic Position (D3) Neutral Test (D5) ed Ant Mounds (D6)	more required) (B9) (MLRA 1, 2,) e (C2) erial Imagery (C9) (C2) (C3) (LRR A)
HYDROLOGY Wetland Hydrology Primary Indicators (m Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposit Drift Deposits (B3) Algal Mat or Crus Iron Deposits (B5) Surface Soil Crac Inundation Visible Sparsely Vegetat Field Observations:	Indicators: ninimum of one re (1) e (A2)) its (B2) 3) st (B4) 5) cks (B6) e on Aerial Image ted Concave Surfate ent? Yes 🔀	quired; ch	eck all that apply Water-Stain 1, 2, 4A Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence co Recent Iror Stunted or Other (Exp) Depth (inches	the A11 A) med Leav A, and 4B (B11) ertebrate Sulfide Or hizosphe of Reducti Stressed lain in Re): None None	require es (B9) (e) s (B13) dor (C1) res along d Iron (C2 on in Tille Plants (D marks) / 6+ / 0	ements (xcept ML Living Roo) d Soils (Co	chroma RA ots (C3)	Seconda Wate 4 Drair Dry-S Satur Geor Shall FAC-	ary Indicators (2 or representation Visible on Aemorphic Position (D3) Neutral Test (D5) ed Ant Mounds (D6)	more required) (B9) (MLRA 1, 2,) e (C2) erial Imagery (C9) (C2) (C3) (LRR A)
HYDROLOGY Wetland Hydrology Primary Indicators (m Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposit Algal Mat or Crus Iron Deposits (B5) Surface Soil Crac Inundation Visible Sparsely Vegetat Field Observations: Surface Water Prese Water Table Present?	Indicators: ninimum of one re (1) e (A2)) sits (B2) 3) st (B4) 5) cks (B6) e on Aerial Image ted Concave Surface ent? Yes Yes Yes Yes Yes	quired; ch	eck all that apply Water-Stain 1, 2, 4A Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence c Recent Iror Stunted or Other (Exp	the A11 A) med Leav A, and 4B (B11) ertebrate Sulfide Or hizosphe of Reducti Stressed lain in Re): None None	require es (B9) (e) s (B13) dor (C1) res along d Iron (C2 on in Tille Plants (D marks) / 6+ / 0	ements (Except ML Living Roo Output Discourse (Color of the color	RA ots (C3)	Seconda Wate 4 Drair Dry-S Satu Geor Shall FAC- Raise	ary Indicators (2 or representation Visible on Aemorphic Position (D3) Neutral Test (D5) ed Ant Mounds (D6)	more required) (B9) (MLRA 1, 2,) e (C2) erial Imagery (C9) (C2) (C3) (LRR A)
HYDROLOGY Wetland Hydrology Primary Indicators (m Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crus Iron Deposits (B5) Surface Soil Crac Inundation Visible Sparsely Vegetat Field Observations: Surface Water Prese Water Table Present' Saturation Present? (includes capillary friir	Indicators: ninimum of one re (1) e (A2)) its (B2) 3) st (B4) 5) cks (B6) e on Aerial Image ted Concave Surfate ent? Yes Yes Yes Yes	quired; ch	eck all that apply Water-Stain 1, 2, 4A Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence co Recent Iror Stunted or Other (Exp	the A11 A) med Leav A, and 4B B11) ertebrate Sulfide Or hizosphe of Reducti Stressed lain in Re None None None	require es (B9) (e) s (B13) dor (C1) res along d Iron (C2 on in Tille Plants (D marks) / 6+ / 0 / 0	ements (Except ML Living Roo 1) d Soils (Co 1) (LRR A	chroma RA ots (C3) 6)	Seconda Wate 4 Drair Dry-S Satur Geor Shall FAC- Raise Frost	r than 1). ary Indicators (2 or refer-Stained Leaves (6 A, and 4B) hage Patterns (B10) Season Water Table ration Visible on Aemorphic Position (D2) Neutral Test (D5) ed Ant Mounds (D6) t-Heave Hummocks	more required) (B9) (MLRA 1, 2,) e (C2) erial Imagery (C9) (C2) (C3) (LRR A) (C4) (C5) (LRR A)
HYDROLOGY Wetland Hydrology Primary Indicators (m Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposit Algal Mat or Crus Iron Deposits (B5) Surface Soil Crac Inundation Visible Sparsely Vegetat Field Observations: Surface Water Prese Water Table Present?	Indicators: ninimum of one re (1) e (A2)) its (B2) 3) st (B4) 5) cks (B6) e on Aerial Image ted Concave Surfate ent? Yes Yes Yes Yes	quired; ch	eck all that apply Water-Stain 1, 2, 4A Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence co Recent Iror Stunted or Other (Exp	the A11 A) med Leav A, and 4B B11) ertebrate Sulfide Or hizosphe of Reducti Stressed lain in Re None None None	require es (B9) (e) s (B13) dor (C1) res along d Iron (C2 on in Tille Plants (D marks) / 6+ / 0 / 0	ements (Except ML Living Roo 1) d Soils (Co 1) (LRR A	chroma RA ots (C3) 6)	Seconda Wate 4 Drair Dry-S Satur Geor Shall FAC- Raise Frost	r than 1). ary Indicators (2 or refer-Stained Leaves (6 A, and 4B) hage Patterns (B10) Season Water Table ration Visible on Aemorphic Position (D2) Neutral Test (D5) ed Ant Mounds (D6) t-Heave Hummocks	more required) (B9) (MLRA 1, 2,) e (C2) erial Imagery (C9) (C2) (C3) (LRR A) (C4) (C5) (LRR A)
HYDROLOGY Wetland Hydrology Primary Indicators (m Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposit Drift Deposits (B3) Algal Mat or Crus Iron Deposits (B5) Surface Soil Crac Inundation Visible Sparsely Vegetat Field Observations: Surface Water Prese Water Table Present' Saturation Present? (includes capillary frindles Control of the Contro	Indicators: ninimum of one re (1) e (A2)) its (B2) 3) st (B4) 5) cks (B6) e on Aerial Image ted Concave Surfate ent? Yes Yes Yes Yes	quired; ch	eck all that apply Water-Stain 1, 2, 4A Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence co Recent Iror Stunted or Other (Exp	the A11 A) med Leav A, and 4B B11) ertebrate Sulfide Or hizosphe of Reducti Stressed lain in Re None None None	require es (B9) (e) s (B13) dor (C1) res along d Iron (C2 on in Tille Plants (D marks) / 6+ / 0 / 0	ements (Except ML Living Roo 1) d Soils (Co 1) (LRR A	chroma RA ots (C3) 6)	Seconda Wate 4 Drair Dry-S Satur Geor Shall FAC- Raise Frost	r than 1). ary Indicators (2 or refer-Stained Leaves (6 A, and 4B) hage Patterns (B10) Season Water Table ration Visible on Aemorphic Position (D2) Neutral Test (D5) ed Ant Mounds (D6) t-Heave Hummocks	more required) (B9) (MLRA 1, 2,) e (C2) erial Imagery (C9) (C2) (C3) (LRR A) (C4) (C5) (LRR A)
HYDROLOGY Wetland Hydrology Primary Indicators (m Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust Iron Deposits (B5) Surface Soil Cract Inundation Visible Sparsely Vegetat Field Observations: Surface Water Prese Water Table Present' Saturation Present? (includes capillary frind Describe Recorded Describe	Indicators: ninimum of one re (1) (2) (A2) (3) (3) (3) (3) (4) (5) (5) (6) (7) (8) (9) (9) (1) (1) (1) (1) (1) (2) (3) (4) (5) (6) (7) (8) (8) (9) (9) (1) (1) (1) (1) (1) (1	quired; ch	eck all that apply Water-Stain 1, 2, 4A Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence co Recent Iror Stunted or Other (Exp) Depth (inches Depth (inches	the A11 A) med Leav A, and 4B (B11) ertebrate Sulfide Or hizosphe of Reducti Stressed lain in Re None (None (No	require es (B9) (e) s (B13) dor (C1) res along d Iron (C2 on in Tille Plants (D marks) / 6+ / 0 / 0	Ements (Except ML Living Roo () d Soils (Co 1) (LRR A	chroma RA ots (C3) 6) A)	Seconda Wate Prair Dry-S Satur Geor Shall FAC- Raise Frost	ary Indicators (2 or represent (2 or represent) and 4B) and 4B) and 4B) and 4B) are retained Visible on Aemorphic Position (Day Aquitard (D3) and Aquitard (D5) and Ant Mounds (D6) and Ant Mounds (D6) are Heave Hummocks	more required) (B9) (MLRA 1, 2,) e (C2) erial Imagery (C9) (C2) (C3) (LRR A) (C5) (LRR A) (C6) (D7)
HYDROLOGY Wetland Hydrology Primary Indicators (m Surface Water (A High Water Table Saturation (A3) Water Marks (B1) Sediment Deposit Drift Deposits (B3) Algal Mat or Crus Iron Deposits (B5) Surface Soil Crac Inundation Visible Sparsely Vegetat Field Observations: Surface Water Prese Water Table Present' Saturation Present? (includes capillary frindles Control of the Contro	Indicators: ninimum of one re (1) (2) (A2) (3) (b) (b) (c) (c) (d) (d) (d) (e) (d) (e) (e) (e	quired; ch	eck all that apply Water-Stain 1, 2, 4A Salt Crust (Aquatic Inv Hydrogen S Oxidized R Presence co Recent Iror Stunted or Other (Exp	the A11 (/) med Leav A, and 4B (B11) ertebrate Sulfide Or hizosphe of Reducti Stressed lain in Re (): None (): None (): None (): None (): (): (): (): (): (): (): (): (): ():	require es (B9) (e) s (B13) dor (C1) res along d Iron (C4 on in Tille Plants (D marks) / 6+ / 0 revious ins 3, and E	Ements (Except ML Living Roo 1) d Soils (Ce 1) (LRR A	chroma RA ots (C3) 6) A) cland Hyce if availal ary indic	Seconda Seconda Wate 4 Drair Dry-S Satur Geor Shall FAC- Raise Frost	ary Indicators (2 or representation Visible on Aemorphic Position (D3) -Neutral Test (D5) -Neutral Test (D5) -Heave Hummocks	more required) (B9) (MLRA 1, 2,) e (C2) erial Imagery (C9) (C2) (C3) (LRR A) (C5) (LRR A) (C6) (D7)

Project/Site: 1077.0012 - South Hill Data Center		City/Coun	_{ty:} Puyallu	ıp/Pierce	Sampling Date: 9/14/16
Applicant/Owner: Benaroya Capital Company				State: WA	Sampling Point: DP-7
				ownship, Range: <u>03, 19,</u>	
Landform (hillslope, terrace, etc.): Valley Floor		Local reli	ief (concave,	, convex, none): Concav	<u>'e</u> Slope (%): 0
Subregion (LRR): A2	_ _{Lat:} <u>47.</u>	15753		_ Long: -122.27711	Datum: WGS84
Soil Map Unit Name: Indianola Loamy Sand				NWI classifica	tion: N/A
Are climatic / hydrologic conditions on the site typical for thi	s time of yea	ar? Yes 🗵	No □ (I	If no, explain in Remarks.)	
Are Vegetation, Soil, or Hydrology sig	nificantly dis	turbed?	Are "No	ormal Circumstances" pres	sent? Yes ☒ No ☐
Are Vegetation, Soil, or Hydrology nate	urally probler	matic?	(If need	ed, explain any answers ir	Remarks.)
SUMMARY OF FINDINGS – Attach site map	showing	samplir	ng point le	ocations, transects,	important features, etc.
Hydrophytic Vegetation Present? Yes ☐ No 🗵					
Hydric Soil Present? Yes ☐ No 🗵			he Sampled		5
Wetland Hydrology Present? Yes ☐ No ☒		Witi	hin a Wetlar	nd? Yes □ N	o 🔀
Remarks:		I			
No wetland criteria met. Data co	llected u	pland o	of Wetlan	nd C	
VECETATION . Her ecientific names of plants	.40				
VEGETATION – Use scientific names of plan	Absolute	Dominan	nt Indicator	Dominance Test works	shoot:
Tree Stratum (Plot size: 30 ft)	% Cover			Number of Dominant Sp	
1. Acer macrophyllum	50	Yes	FACU	That Are OBL, FACW, o	
2. Alnus rubra	25	Yes	FAC	Total Number of Domina	ant
3. Pseudotsuga menziesii	25	Yes	FACU	Species Across All Strat	_
4				Percent of Dominant Sp	ecies
Sanling/Shrub Stratum (Diot cize: 15 ft)	100	= Total (Cover	That Are OBL, FACW, o	
Sapling/Shrub Stratum (Plot size: 15 ft) 1. Rubus spectabilis	30	Yes	FAC	Prevalence Index work	
2. Ilex aquifolium	10	Yes	FACU		Multiply by:
3. Frangula purshiana	10	Yes	FAC		x 1 =
4.			·		x 2 =
5.	-				x 3 =
	50	= Total (Cover		x 4 =
Herb Stratum (Plot size: 5 ft)					x 5 =
1. Polystichum munitum	30		FACU	Column Totals:	(A) (B)
2. Pteridium aquilinum 3. Rubus armeniacus	<u>15</u> 5	Yes	FACU	Dravalance Index	D/A
		No	FAC	Hydrophytic Vegetatio	= B/A =
4				Rapid Test for Hydro	
5				Dominance Test is >	· ·
6				☐ Prevalence Index is	
7				_	tations ¹ (Provide supporting
8 9					or on a separate sheet)
10				☐ Wetland Non-Vascu	lar Plants ¹
11.		-		☐ Problematic Hydropl	hytic Vegetation ¹ (Explain)
	50	= Total (Cover	¹ Indicators of hydric soil be present, unless distu	and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft)				be present, unless distu	
1			·	Hydrophytic	
2				Vegetation	
% Bare Ground in Herb Stratum 50	0	= Total (Cover	Present? Yes	s □ No ⊠
Remarks:				1	
No hydrophytic vegetation criteria met	. Prevaler	nce inde	x not warr	anted due to lack of o	combined hydric soil and
hydrology.					

Profile Des										·,
Depth	Matrix			Redox	Features					
(inches)	Color (moist)	%	Cold	or (moist)	%	Type ¹	Loc ²	Textu	re	Remarks Programme Remarks
0-12	10YR 3/6	100	-		-	-	-	GrSa	а	Gravelly sand
		_								
										1
			_							
		_								
	-									
	Concentration, D=D						ed Sand C			cation: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (App	licable to	all LRR	Rs, unless otherv	vise note	d.)		lı	ndicato	rs for Problematic Hydric Soils ³ :
☐ Histosol	(A1)			Sandy Redox (S5	5)] 2 cm	Muck (A10)
☐ Histic Ep	pipedon (A2)			Stripped Matrix (S					Red	Parent Material (TF2)
☐ Black Hi	istic (A3)			Loamy Mucky Mir	neral (F1)	(except	MLRA 1) [☐ Very	Shallow Dark Surface (TF12)
☐ Hydroge	en Sulfide (A4)			Loamy Gleyed M	atrix (F2)				Othe	r (Explain in Remarks)
☐ Depleted	d Below Dark Surfa	ace (A11)		Depleted Matrix (F3)					
☐ Thick Da	ark Surface (A12)			Redox Dark Surfa	ace (F6)			3	Indicato	rs of hydrophytic vegetation and
☐ Sandy N	Mucky Mineral (S1)			Depleted Dark Su	ırface (F7	·)			wetla	nd hydrology must be present,
☐ Sandy G	Bleyed Matrix (S4)			Redox Depressio	ns (F8)				unles	s disturbed or problematic.
Restrictive	Layer (if present)	:								
Type:_ N /	′A			_						
Depth (in	nches):			_				Hydi	ric Soil	Present? Yes ☐ No ☒
Remarks:	-							i i yu	10 0011	Tresent. Tes No
No hydric	soil criteria me	i.								
HYDROLO										
	OGY rdrology Indicator	s:								
Wetland Hy			uired; ch	eck all that apply)				Secon	ndary Indicators (2 or more required)
Wetland Hy	drology Indicator		uired; ch			s (B9) (e	xcept ML	.RA		ndary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hy Primary Indi ☐ Surface	rdrology Indicator cators (minimum o Water (A1)		uired; ch	☐ Water-Stain	ed Leave	s (B9) (e	xcept ML	.RA		ater-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hy Primary Indi ☐ Surface ☐ High Wa	rdrology Indicator icators (minimum o Water (A1) ater Table (A2)		uired; ch	☐ Water-Stain	ed Leave and 4B)	s (B9) (e	xcept ML	.RA	☐ W	ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Wetland Hy Primary Indi ☐ Surface ☐ High Wa	rdrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3)		uired; ch	☐ Water-Stain	ed Leave and 4B) 311)		xcept ML	.RA	□ W	ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10)
Wetland Hy Primary Indi Surface High Wa Saturatio Water M	rdrology Indicator icators (minimum o Water (A1) ater Table (A2) on (A3) farks (B1)		uired; ch	☐ Water-Stain 1, 2, 4A, ☐ Salt Crust (E ☐ Aquatic Inve	ed Leave and 4B) 311) ertebrates	(B13)	xcept ML	.RA	□ W:	ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2)
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimen	rdrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) darks (B1) nt Deposits (B2)		uired; ch	Water-Stain 1, 2, 4A, Salt Crust (E Aquatic Inve	ed Leave and 4B) 311) rtebrates ulfide Odd	(B13) or (C1)			☐ Wa	ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9)
Wetland Hy Primary Indi Surface High Wa Saturatio Water M Sedimer Drift Dep	rdrology Indicator icators (minimum of Water (A1) ater Table (A2) on (A3) flarks (B1) nt Deposits (B2) posits (B3)		uired; ch	Water-Stain 1, 2, 4A, Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh	ed Leave and 4B) 311) rtebrates ulfide Ode izosphere	(B13) or (C1) es along	Living Ro		☐ Wa	ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9) eomorphic Position (D2)
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Project/Site: 1077.0012 - South Hill Data Center	(City/Count	_{y:} Puyallu	ıp/Pierce	Sampling Date: 9/14/16
Applicant/Owner: Benaroya Capital Company				State: WA	Sampling Point: DP-8
				ownship, Range: <u>03, 19,</u>	
Landform (hillslope, terrace, etc.): Slope		Local reli	ef (concave,	convex, none): Concav	e Slope (%): 5
Subregion (LRR): A2	_ _{Lat:} <u>47.</u> ′	15753		Long: -122.27711	Datum: WGS84
Soil Map Unit Name: Indianola Loamy Sand				NWI classifica	tion: PFOD
Are climatic / hydrologic conditions on the site typical for this	time of yea	r? Yes 🗷] No □ (I	f no, explain in Remarks.)	
Are Vegetation, Soil, or Hydrology sign	nificantly dist	urbed?	Are "No	ormal Circumstances" pres	ent? Yes ☒ No ☐
Are Vegetation, Soil, or Hydrology natu	rally problen	natic?	(If need	ed, explain any answers in	Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing	samplin	ng point le	ocations, transects,	important features, etc.
Hydrophytic Vegetation Present? Yes ☒ No ☐					
Hydric Soil Present? Yes ☒ No ☐			he Sampled		
Wetland Hydrology Present? Yes ☒ No ☐		With	nin a Wetlar	nd? Yes ☒ No) ∐
Remarks:		l e			
All three wetland criteria met. Da	ta collec	ted in i	nterior o	f Wetland D.	
VEGETATION – Use scientific names of plan	ts.				
	Absolute		t Indicator	Dominance Test works	heet:
Tree Stratum (Plot size: 30 ft)	% Cover			Number of Dominant Sp	
1. Populus balsamifera	50	Yes	FAC	That Are OBL, FACW, o	r FAC: <u>8</u> (A)
2. Alnus rubra	20	Yes	FAC	Total Number of Domina	
3. Salix lucida	20	Yes	FACW	Species Across All Strate	a: <u>8</u> (B)
4	00			Percent of Dominant Spo	ecies
Sapling/Shrub Stratum (Plot size: 15 ft)	90	= Total C	Cover	That Are OBL, FACW, o	r FAC: <u>100%</u> (A/B)
1. Rubus armeniacus	25	Yes	FAC	Prevalence Index work	sheet:
2. Rubus spectabilis	15	Yes	FAC		Multiply by:
3			-		x 1 =
4					x 2 =
5.					x 3 =
	40	= Total C	Cover		x 4 =
Herb Stratum (Plot size: 5 ft)					x 5 =
1. Equisetum arvense	5	Yes		Column Totals:	(A) (B)
2. Glyceria striata	5	Yes	OBL		
3. Ranunculus repens	5	Yes	FAC		= B/A =
4			-	Hydrophytic Vegetation	
5				Rapid Test for Hydro	
6				■ Dominance Test is >	
7				Prevalence Index is	
8					tations ¹ (Provide supporting or on a separate sheet)
9				☐ Wetland Non-Vascul	• ,
10				☐ Problematic Hydroph	nytic Vegetation¹ (Explain)
11	15				and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft)	15	= Total C	Cover	be present, unless distur	bed or problematic.
1				Hydrophytic	
2				Vegetation	
0.5 0 1.11.0 2.1 QF	0	= Total C	Cover		X No □
% Bare Ground in Herb Stratum 85					
Remarks: Hydrophytic vegetation criteria met thre	ough dom	inance t	est.		

Depth Ma							sence of indicators.)
(:			Redox Featur		12	Tautuu	Domonto.
(inches) Color (moist) 0-4 7.5YR 2.5/	<u>%</u> 1 100	Color (moist)		Type ¹	Loc ²	Textu Silt	<u>Remarks</u> Mucky silt
		40)/D 4/0			- N 4		
4-7 10YR 4/2	93	10YR 4/6	7	_ <u>C</u>	<u>M</u>	CILo	Clay Loam
7-16 10YR 2/1	98	10YR 5/8	2	<u>C</u>	M	Silt	Mucky silt
		_				-	
		_	·				
1Tunes C. Concentration D	Donlotion F	PM Dadwood Mote				roino	21 agetion, DL Days Lining M Matrix
¹ Type: C=Concentration, D Hydric Soil Indicators: (A					ed Sand G		² Location: PL=Pore Lining, M=Matrix. dicators for Problematic Hydric Soils ³ :
☐ Histosol (A1)		☐ Sandy Red	ox (S5)	-			2 cm Muck (A10)
☐ Histic Epipedon (A2)		☐ Stripped M					Red Parent Material (TF2)
☐ Black Histic (A3)		•	cky Mineral (F		t MLRA 1)		Very Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4)			yed Matrix (F	2)			Other (Explain in Remarks)
Depleted Below Dark St		☐ Depleted N				٠.	
Thick Dark Surface (A12	•	_	Surface (F6			ગ	ndicators of hydrophytic vegetation and
☐ Sandy Mucky Mineral (\$☐ Sandy Gleyed Matrix (\$			ark Surface (ressions (F8)	-1)			wetland hydrology must be present, unless disturbed or problematic.
Restrictive Layer (if prese		☐ I/Gdox Det	163310113 (1 0)				unless disturbed of problematic.
Type: N/A							
Depth (inches):						Hydr	ic Soil Present? Yes ⊠ No □
Remarks:						ı ı yu.	O CONTROCOR. TO E NO E
Wetland Hydrology Indica		irad: abaqlı all that	analy)				Secondary Indicators (2 or more required)
Wetland Hydrology Indica Primary Indicators (minimum				voc (PO) (e	avecant MII I		Secondary Indicators (2 or more required)
Wetland Hydrology Indica Primary Indicators (minimur Surface Water (A1)		☐ Water	-Stained Leav		except MLI	RA	☐ Water-Stained Leaves (B9) (MLRA 1, 2
Wetland Hydrology Indicators (minimum Surface Water (A1) High Water Table (A2)		☐ Water 1 ,	-Stained Leav 2, 4A, and 4l		except MLI	RA	☐ Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B)
Wetland Hydrology Indica Primary Indicators (minimur Surface Water (A1) High Water Table (A2) Saturation (A3)		☐ Water 1 , ☐ Salt C	-Stained Leav 2, 4A, and 4l rust (B11)	3)	except MLI	RA	☐ Water-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ☐ Drainage Patterns (B10)
Wetland Hydrology Indica Primary Indicators (minimur □ Surface Water (A1) □ High Water Table (A2) ☑ Saturation (A3) □ Water Marks (B1)	n of one requ	☐ Water 1, ☐ Salt C ☐ Aquat	-Stained Leaver 2, 4A, and 4if rust (B11) ic Invertebrate	B) es (B13)	except MLI	RA	 □ Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2)
Wetland Hydrology Indica Primary Indicators (minimur Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	n of one requ	☐ Water 1, ☐ Salt C ☐ Aquat	-Stained Leav 2, 4A, and 4l rust (B11) ic Invertebrate gen Sulfide C	es (B13) dor (C1)			 □ Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9)
Wetland Hydrology Indicators (minimum Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	n of one requ	☐ Water 1, ☐ Salt C ☐ Aquat ☐ Hydro	-Stained Leave 2, 4A, and 4I rust (B11) ic Invertebrate gen Sulfide Co ed Rhizosphe	es (B13) dor (C1) eres along	Living Roc		 Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2)
Wetland Hydrology Indica Primary Indicators (minimur Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	n of one requ	☐ Water 1, ☐ Salt C ☐ Aquat ☐ Hydro ☐ Oxidiz ☐ Prese	-Stained Leav 2, 4A, and 4l rust (B11) ic Invertebrate gen Sulfide C	es (B13) dor (C1) eres along ed Iron (C	Living Roo 4)	ots (C3)	Water-Stained Leaves (B9) (MLRA 1, 2
Wetland Hydrology Indica Primary Indicators (minimur Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	n of one requ	☐ Water 1, ☐ Salt C ☐ Aquat ☐ Hydro ☐ Oxidiz ☐ Prese ☐ Recer	-Stained Leaver 2, 4A, and 4B rust (B11) ic Invertebrate gen Sulfide Cored Rhizosphence of Reduc	es (B13) dor (C1) eres along ed Iron (C- ion in Tille	Living Roo 4) d Soils (C6	ots (C3)	 Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9 Geomorphic Position (D2)
Wetland Hydrology Indica Primary Indicators (minimur Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	n of one requ	☐ Watel 1, ☐ Salt C ☐ Aquat ☐ Hydro ☐ Oxidiz ☐ Prese ☐ Recel	-Stained Leav 2, 4A, and 4B rust (B11) ic Invertebrate gen Sulfide C ed Rhizosphe nce of Reduc at Iron Reduct	es (B13) dor (C1) eres along ed Iron (Colon in Tille I Plants (D	Living Roo 4) d Soils (C6	ots (C3)	 Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9 □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5)
Wetland Hydrology Indica Primary Indicators (minimur) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6	n of one requ	Water 1, Salt C Aquat Hydro Oxidiz Prese Recei Stunte (B7) Other	-Stained Leav 2, 4A, and 4I rust (B11) ic Invertebrate gen Sulfide C ed Rhizosphe nce of Reduct at Iron Reducted or Stressed	es (B13) dor (C1) eres along ed Iron (Colon in Tille I Plants (D	Living Roo 4) d Soils (C6	ots (C3)	Water-Stained Leaves (B9) (MLRA 1, 2
Wetland Hydrology Indica Primary Indicators (minimur Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on A6	n of one requ	Water 1, Salt C Aquat Hydro Oxidiz Prese Recer Stunto (B7) Other e (B8)	-Stained Leaver 2, 4A, and 4B rust (B11) ic Invertebrate gen Sulfide Cored Rhizosphence of Reduct Iron Reducted or Stressed (Explain in Reducted Cored Reducted (Explain in Reducted Re	es (B13) dor (C1) eres along ed Iron (C- ion in Tille I Plants (D emarks)	Living Roo 4) d Soils (C6	ots (C3)	Water-Stained Leaves (B9) (MLRA 1, 2
Wetland Hydrology Indica Primary Indicators (minimur Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6 Inundation Visible on Ae Sparsely Vegetated Cor	n of one requ s) erial Imagery ncave Surface	Water 1, Salt C Aquat Hydro Oxidiz Prese Recer Stunto (B7) Other e (B8)	-Stained Leav 2, 4A, and 4I rust (B11) ic Invertebrate gen Sulfide C ed Rhizosphe nce of Reduct at Iron Reducted or Stressed	es (B13) dor (C1) eres along ed Iron (C- ion in Tille I Plants (D emarks)	Living Roo 4) d Soils (C6	ots (C3)	Water-Stained Leaves (B9) (MLRA 1, 2
Wetland Hydrology Indica Primary Indicators (minimur Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on A6 Sparsely Vegetated Cor Field Observations:	n of one requi s) erial Imagery ncave Surface Yes □	Usated 1, Salt C Aquat Hydro Oxidiz Prese Recei Stunte (B7) □ Other (B8) Depth (in	-Stained Leaver 2, 4A, and 4B rust (B11) ic Invertebrate gen Sulfide Cored Rhizosphence of Reduct Iron Reducted or Stressed (Explain in Reducted Cored Reducted (Explain in Reducted Re	es (B13) dor (C1) eres along ed Iron (C- ion in Tille I Plants (D- emarks)	Living Roo 4) d Soils (C6	ots (C3)	Water-Stained Leaves (B9) (MLRA 1, 2
Primary Indicators (minimur □ Surface Water (A1) □ High Water Table (A2) ☑ Saturation (A3) □ Water Marks (B1) □ Sediment Deposits (B2) □ Drift Deposits (B3) ☑ Algal Mat or Crust (B4) □ Iron Deposits (B5) □ Surface Soil Cracks (B6) □ Inundation Visible on Ac □ Sparsely Vegetated Cor Field Observations: Surface Water Present? Water Table Present? Saturation Present?	n of one requires s) erial Imagery ncave Surface Yes Yes Yes	Usated 1, Salt C Aquat Hydro Oxidiz Prese Recei Stunte (B7) Other e (B8) No ☑ Depth (in	-Stained Leav 2, 4A, and 4I rust (B11) ic Invertebrate gen Sulfide C ed Rhizosphe nce of Reduc at Iron Reduct ed or Stressed (Explain in Re	es (B13) dor (C1) eres along ed Iron (C- ion in Tille I Plants (D- emarks)	Living Roo 4) d Soils (Co 1) (LRR A	ots (C3)	Water-Stained Leaves (B9) (MLRA 1, 2
Wetland Hydrology Indical Primary Indicators (minimur □ Surface Water (A1) □ High Water Table (A2) ☑ Saturation (A3) □ Water Marks (B1) □ Sediment Deposits (B2) □ Drift Deposits (B3) ☑ Algal Mat or Crust (B4) □ Iron Deposits (B5) □ Surface Soil Cracks (B6 □ Inundation Visible on A6 □ Sparsely Vegetated Cor Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe)	n of one requirement of one requ	Usated 1, Salt C Aquat Hydro Oxidiz Prese Recei Stunto (B7) Other e (B8) No ☑ Depth (ir No ☑ Depth (ir	-Stained Leaver 2, 4A, and 4B rust (B11) ic Invertebrate gen Sulfide Control Reduct at Iron Reduct at Iron Reduct (Explain in Reducted or Stressed (Explain in Reducted Stressed (Explain	es (B13) dor (C1) eres along ed Iron (C- ion in Tille I Plants (D- emarks)	Living Roo 4) d Soils (C6 1) (LRR A	ots (C3) 6) .)	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9 □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7)
Wetland Hydrology Indica Primary Indicators (minimur Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Action Sparsely Vegetated Cor Field Observations: Surface Water Present? Water Table Present?	n of one requirement of one requ	Usated 1, Salt C Aquat Hydro Oxidiz Prese Recei Stunto (B7) Other e (B8) No ☑ Depth (ir No ☑ Depth (ir	-Stained Leaver 2, 4A, and 4B rust (B11) ic Invertebrate gen Sulfide Control Reduct at Iron Reduct at Iron Reduct (Explain in Reducted or Stressed (Explain in Reducted Stressed (Explain	es (B13) dor (C1) eres along ed Iron (C- ion in Tille I Plants (D- emarks)	Living Roo 4) d Soils (C6 1) (LRR A	ots (C3) 6) .)	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9 □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7)
Wetland Hydrology Indical Primary Indicators (minimur □ Surface Water (A1) □ High Water Table (A2) ☑ Saturation (A3) □ Water Marks (B1) □ Sediment Deposits (B2) □ Drift Deposits (B3) ☑ Algal Mat or Crust (B4) □ Iron Deposits (B5) □ Surface Soil Cracks (B6 □ Inundation Visible on A6 □ Sparsely Vegetated Cor Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe)	n of one requirement of one requ	Usated 1, Salt C Aquat Hydro Oxidiz Prese Recei Stunto (B7) Other e (B8) No ☑ Depth (ir No ☑ Depth (ir	-Stained Leaver 2, 4A, and 4B rust (B11) ic Invertebrate gen Sulfide Control Reduct at Iron Reduct at Iron Reduct (Explain in Reducted or Stressed (Explain in Reducted Stressed (Explain	es (B13) dor (C1) eres along ed Iron (C- ion in Tille I Plants (D- emarks)	Living Roo 4) d Soils (C6 1) (LRR A	ots (C3) 6) .)	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9 □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7)
Wetland Hydrology Indical Primary Indicators (minimur □ Surface Water (A1) □ High Water Table (A2) ☑ Saturation (A3) □ Water Marks (B1) □ Sediment Deposits (B2) □ Drift Deposits (B3) ☑ Algal Mat or Crust (B4) □ Iron Deposits (B5) □ Surface Soil Cracks (B6) □ Inundation Visible on A6 □ Sparsely Vegetated Cor Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (st	n of one requirement of one requirement of one requirement of the requ	Usated 1, Salt C Aquat Hydro Oxidiz Prese Stunte (B7) Other (B8) No ☑ Depth (ir No ☑ Depth (ir No ☐ Depth (ir monitoring well, a	-Stained Leaver 2, 4A, and 4B rust (B11) ic Invertebrate gen Sulfide Ced Rhizosphence of Reduct Iron Reducted or Stressed (Explain in Reducted or Stressed (Explain in Reducted Stressed (es (B13) dor (C1) eres along ed Iron (C- ion in Tille I Plants (Demarks)	Living Roo 4) d Soils (C6 1) (LRR A	ots (C3) 6) .)	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9 □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7)
Wetland Hydrology Indica Primary Indicators (minimur) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on A6 Sparsely Vegetated Cor Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (st	n of one requirement of one requirement of one requirement of the requ	Usated 1, Salt C Aquat Hydro Oxidiz Prese Stunte (B7) Other (B8) No ☑ Depth (ir No ☑ Depth (ir No ☐ Depth (ir monitoring well, a	-Stained Leaver 2, 4A, and 4B rust (B11) ic Invertebrate gen Sulfide Ced Rhizosphence of Reduct Iron Reducted or Stressed (Explain in Reducted or Stressed (Explain in Reducted Stressed (es (B13) dor (C1) eres along ed Iron (C- ion in Tille I Plants (Demarks)	Living Roo 4) d Soils (C6 1) (LRR A	ots (C3) 6) .)	Water-Stained Leaves (B9) (MLRA 1, 2 4A, and 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9 □ Geomorphic Position (D2) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks (D7)

Project/Site: 1077.0012 - South Hill Data Center		City/Cour	_{nty:} Puyallu	ıp/Pierce	Sampling Date: 9/14/16
Applicant/Owner: Benaroya Capital Company				State: WA	Sampling Point: DP-9
Investigator(s): Richard Peel, Matthew DeCaro				ownship, Range: <u>03, 19</u> ,	
Landform (hillslope, terrace, etc.): Slope		Local re	elief (concave,	, convex, none): Concav	<u>/e</u> Slope (%): <u>5</u>
Subregion (LRR): A2	_{Lat:} 47.	16180		Long: -122.27927	Datum: WGS84
Soil Map Unit Name: Indianola Loamy Sand				NWI classifica	ation: N/A
Are climatic / hydrologic conditions on the site typical for the	is time of yea	ar? Yes [× No □ (I	f no, explain in Remarks.)	
Are Vegetation, Soil, or Hydrology signature.	gnificantly dis	turbed?	Are "No	ormal Circumstances" pre	sent? Yes ⊠ No □
Are Vegetation, Soil, or Hydrology na	turally probler	matic?	(If need	ed, explain any answers in	n Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing	sampli	ng point le	ocations, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes ⊠ No □					
Hydric Soil Present? Yes ☐ No 🗵			the Sampled		
Wetland Hydrology Present? Yes ☐ No 🗷		Wi	thin a Wetlar	nd? Yes □ N	10 X
Remarks:					
Not all three wetland criteria met,	only hydi	rophyti	c vegetati	on. Data collected	upland of Wetland D.
VEGETATION – Use scientific names of plan	nts.				
	Absolute		nt Indicator	Dominance Test work	sheet:
Tree Stratum (Plot size: 30 ft)			Status	Number of Dominant Sp	pecies
1. Populus balsamifera	35	Yes	FAC	That Are OBL, FACW, o	or FAC: <u>5</u> (A)
2. Alnus rubra	25	Yes	FAC	Total Number of Domina	
3. Salix lucida	5	No	FACW	Species Across All Stra	ta: <u>6</u> (B)
4		-		Percent of Dominant Sp	pecies
Sapling/Shrub Stratum (Plot size: 15 ft)	65	= Total	Cover	That Are OBL, FACW, o	
1. Rubus spectabilis	25	Yes	FAC	Prevalence Index worl	ksheet:
2. Rubus armeniacus	15	Yes	FAC		Multiply by:
3. Physocarpus capitatus	5	No	FACW		x 1 =
4. Salix sitchensis	5	No	FACW		x 2 =
5.					x 3 =
S	50	= Total	Cover		x 4 =
Herb Stratum (Plot size: 5 ft)					x 5 =
1. Rubus ursinus	40	Yes	FACU		(A) (B)
2. Ranunculus repens	20	Yes	FAC		
3. Geranium robertianum	10	No	FACU		= B/A =
4. Equisetum arvense	10	No	FAC	Hydrophytic Vegetation	
5. Dicentra formosa	5	No	FACW	Rapid Test for Hydr	• •
6	<u> </u>			Dominance Test is:	
7	<u> </u>			☐ Prevalence Index is	
8					otations ¹ (Provide supporting sor on a separate sheet)
9				☐ Wetland Non-Vascu	•
10				☐ Problematic Hydrop	hytic Vegetation ¹ (Explain)
11	0 <i>E</i>				and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft)	85	= Total	Cover	be present, unless distu	
1				Hydrophytic	
2				Vegetation	
0/ Page Consum d in Harb Construct 15	0	= Total	Cover		s ⊠ No □
% Bare Ground in Herb Stratum 15 Remarks:					
Hydrophytic vegetation criteria met th	rough dom	ninance	test.		

Depth	Matrix	%	Cala		x Feature		Loc2	Touter	•	Pomorko
(inches) 0-18	Color (moist) 10YR 3/2	100	<u>Colo</u>	r (moist)	<u>%</u> -	Type ¹	Loc ²	Sand		Remarks Coarse sand
18-24	10YR 3/2	100						GrSa		Gravelly sand
10-24	1011 3/2							Gisa		Graverry Sariu
					_	-				
	-									
1Type: C-C	Concentration D_C	Nonlotion D	M_Bad	uood Motriy, C	S-Covere	d or Coot	d Sand Cr	roine	21 000	ation: DI - Doro Lining M-Matrix
	Concentration, D=D I Indicators: (App						ed Sand Gr			ation: PL=Pore Lining, M=Matrix. s for Problematic Hydric Soils ³ :
☐ Histoso				Sandy Redox (,				Muck (A10)
	pipedon (A2)			Stripped Matrix						Parent Material (TF2)
☐ Black H	listic (A3)		□ L	oamy Mucky N	/lineral (F	1) (except	MLRA 1)] Very	Shallow Dark Surface (TF12)
☐ Hydroge	en Sulfide (A4)		□ L	oamy Gleyed l	Matrix (F2	2)] Other	(Explain in Remarks)
	ed Below Dark Surf	ace (A11)		Depleted Matrix	. ,					
	ark Surface (A12)			Redox Dark Su	` ,			3In		s of hydrophytic vegetation and
	Mucky Mineral (S1))		Depleted Dark		7)				d hydrology must be present,
•	Gleyed Matrix (S4) Layer (if present)	١-	F	Redox Depress	ions (F8)			1	uniess	disturbed or problematic.
Type: N) -								
• •	nches):							Llydei	io Soil I	Present? Yes □ No ☒
Remarks:								пушт	ic Soil i	resent? res No A
IYDROLO	nev									
	ydrology Indicato	roi								
	licators (minimum o		red: che	eck all that ann	lv)				Secon	dary Indicators (2 or more required)
	: Water (A1)	one requi	rcu, cric	☐ Water-Stai		oc (B0) (o	voont MI E			ter-Stained Leaves (B9) (MLRA 1, 2,
	ater Table (A2)				A, and 4B		KCEPI WILN	NA.	☐ VVa	4A, and 4B)
☐ Saturati	, ,			☐ Salt Crust		''			□ Dra	ninage Patterns (B10)
	Marks (B1)			Aquatic Inv		s (B13)			_	-Season Water Table (C2)
	ent Deposits (B2)			☐ Hydrogen		, ,			_ ,	curation Visible on Aerial Imagery (C9)
	posits (B3)			☐ Oxidized F		` '	Living Roo			omorphic Position (D2)
	at or Crust (B4)			☐ Presence		_	_	· -/		allow Aquitard (D3)
	` '					•	,		_	
☐ Iron De	posits (B5)			☐ Kecentilo	n Reducti	on in Tille	d Soils (C6)	☐ FA	C-Neutral Test (D5)
	posits (B5) Soil Cracks (B6)			☐ Stunted or			,	,		C-Neutral Test (D5) sed Ant Mounds (D6) (LRR A)
☐ Surface		al Imagery (B7)		Stressed	Plants (D	,	,	☐ Ra	
☐ Surface☐ Inundat	Soil Cracks (B6)	• • •	,	☐ Stunted or	Stressed	Plants (D	,	,	☐ Ra	sed Ant Mounds (D6) (LRR A)
☐ Surface☐ Inundat	Soil Cracks (B6) ion Visible on Aeria y Vegetated Conca	• • •	,	Stunted or Other (Exp	Stressed blain in Re	Plants (D marks)	,	,	☐ Ra	sed Ant Mounds (D6) (LRR A)
☐ Surface ☐ Inundat ☐ Sparsel Field Obse	Soil Cracks (B6) ion Visible on Aeria y Vegetated Conca	ave Surface	,	☐ Stunted or	Stressed blain in Re	Plants (D marks)	,	,	☐ Ra	sed Ant Mounds (D6) (LRR A)
☐ Surface ☐ Inundat ☐ Sparsel Field Obse	e Soil Cracks (B6) ion Visible on Aeria y Vegetated Conca rvations: ater Present?	eve Surface	(B8)	Stunted or Other (Exp	Stressed plain in Re s): None	Plants (Demarks)	,	,	☐ Ra	sed Ant Mounds (D6) (LRR A)
Surface Inundat Sparsel Field Obse Surface Water Table Saturation I	e Soil Cracks (B6) ion Visible on Aeria ly Vegetated Conca rvations: ater Present? e Present?	Yes Yes	(B8)	Stunted or Other (Exp	Stressed plain in Re S): None None	Plants (Demarks)	1) (LRR A)		☐ Ra	sed Ant Mounds (D6) (LRR A)
Surface Inundat Sparsel Field Obse Surface Water Table Saturation I (includes ca	e Soil Cracks (B6) ion Visible on Aeria ly Vegetated Conca prvations: ater Present?	Yes Yes Yes Yes Yes Yes	No X No X No X	Depth (inchest	Stressed plain in Research None Signature None None None	Plants (D	(LRR A)	and Hyd	☐ Ra☐ Fro	sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7)
Surface Inundat Sparsel Field Obse Surface Water Table Saturation I (includes ca	e Soil Cracks (B6) ion Visible on Aeria ly Vegetated Conca ervations: ater Present? e Present? Present? apillary fringe)	Yes Yes Yes Yes Yes Yes	No X No X No X	Depth (inchest	Stressed plain in Research None Signature None None None	Plants (D	(LRR A)	and Hyd	☐ Ra☐ Fro	sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7)
Surface Inundat Sparsel Field Obse Surface Wa Water Table Saturation I (includes ca Describe Re	e Soil Cracks (B6) ion Visible on Aeria ly Vegetated Conca ervations: ater Present? e Present? Present? apillary fringe) ecorded Data (stream	Yes	No X No X No X	Depth (inchest	Stressed plain in Research None Signature None None None	Plants (D	(LRR A)	and Hyd	☐ Ra☐ Fro	sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7)
Surface Inundat Sparsel Field Obse Surface Wa Water Table Saturation I (includes ca Describe Re	e Soil Cracks (B6) ion Visible on Aeria ly Vegetated Conca ervations: ater Present? e Present? Present? apillary fringe)	Yes	No X No X No X	Depth (inchest	Stressed plain in Research None Signature None None None	Plants (D	(LRR A)	and Hyd	☐ Ra☐ Fro	sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7)
☐ Surface ☐ Inundat ☐ Sparsel Field Obse Surface Wa Water Table Saturation I (includes ca Describe Re Remarks:	e Soil Cracks (B6) ion Visible on Aeria ly Vegetated Conca ervations: ater Present? e Present? Present? apillary fringe) ecorded Data (stream	Yes	No X No X No X	Depth (inchest	Stressed plain in Research None Signature None None None	Plants (D	(LRR A)	and Hyd	☐ Ra☐ Fro	sed Ant Mounds (D6) (LRR A) st-Heave Hummocks (D7)

Project/Site: 1077.0012 - South Hill Data Center	(City/Count	_{y:} <u>Puyallu</u>	ıp/Pierce	Sampling Da	_{ite:} 9/15/16
Applicant/Owner: Benaroya Capital Company				State: WA	Sampling Po	int: DP-10
Investigator(s): Richard Peel, Alex Callender			Section, To	ownship, Range: <u>03, 19,</u>	04	
Landform (hillslope, terrace, etc.): Slope		Local relie	ef (concave,	, convex, none): Concav	'e	Slope (%): <u>5</u>
Subregion (LRR): A2	_ _{Lat:} <u>47.</u>	15747		Long: -122.28034	Da	atum: WGS84
Soil Map Unit Name: Indianola Loamy Sand				NWI classifica	tion: N/A	
Are climatic / hydrologic conditions on the site typical for this	s time of yea	r? Yes 🗷	l No □ (l	f no, explain in Remarks.)		
Are Vegetation, Soil, or Hydrology sign	nificantly dist	urbed?	Are "No	ormal Circumstances" pres	ent? Yes 🗵	No 🗆
Are Vegetation, Soil, or Hydrology natu	-		(If need	ed, explain any answers in	Remarks.)	
SUMMARY OF FINDINGS - Attach site map						features, etc.
Hydrophytic Vegetation Present? Yes ☐ No 🗵						
Hydric Soil Present? Yes ☐ No 🗵			ne Sampled nin a Wetlar		. ▽	
Wetland Hydrology Present? Yes ☐ No ☒		WILI	iiii a vveliai	nd? Yes □ N) <u>\</u>	
Remarks:						
No wetland criteria met. Data col	lected in	uplano	ds			
VEGETATION – Use scientific names of plan	ts.					
	Absolute		Indicator	Dominance Test works	heet:	-
Tree Stratum (Plot size: 30 ft) 1. Pseudotsuga menziesii	<u>% Cover</u> 75	Yes	FACU	Number of Dominant Sp That Are OBL, FACW, o		(A)
2				Total Number of Domina	ant	
3				Species Across All Strat	_	(B)
4				Percent of Dominant Sp	ecies	
Sapling/Shrub Stratum (Plot size: 15 ft)	75	= Total C	Cover	That Are OBL, FACW, o	r FAC: <u>0%</u>	(A/B)
1. Oemleria cerasiformis	30	Yes	FACU	Prevalence Index work	sheet:	
2. Acer macrophyllum	5	No	FACU	Total % Cover of:		tiply by:
3.				OBL species		
4				FACW species	x 2 = _	
5				FAC species	x 3 = _	
	35	= Total C	Cover	FACU species	x 4 = _	
Herb Stratum (Plot size: <u>5 ft)</u> 1. Rubus ursinus	45	Yes	EACH	UPL species		
2. Polystichum munitum	5	No	FACU FACU	Column Totals:	(A)	(B)
3. Pteridium aquilinum	5	No	FACU	Prevalence Index	= B/A =	
4				Hydrophytic Vegetatio		
5				☐ Rapid Test for Hydro		
6.				☐ Dominance Test is >	·50%	
7				☐ Prevalence Index is	≤3.0 ¹	
8				☐ Morphological Adapt		
9				data in Remarks Wetland Non-Vascu		ate sneet)
10				☐ Problematic Hydropl		on¹ (Evolain)
11				¹ Indicators of hydric soil	-	
Woody Vine Stratum (Plot size: 30 ft)	55	= Total C	Cover	be present, unless distu		
1				Hydrophytic		
2				Vegetation		
% Bare Ground in Herb Stratum 45	0	= Total C		Present? Yes	i □ No ⊠	
Remarks:	D				1.1	. ()
No hydrophytic vegetation criteria met and hydrology.	Prevalen	ce index	not warr	anted due to the com	Dined lack (ot nydric soils

	cription: (Describ		lepth ne				or confire	m the abs	sence	of indicators.)
Depth (inches)	Matrix Color (moist)	%	Colo	r (moist)	ox Feature %	<u>es</u> Type¹	Loc ²	Texture	.	Remarks
0-3	10YR 3/3	100	<u>-</u>	or (moiot)	-	<u>- 1750</u>	-	SiLo		Silt Loam
3-8	10YR 4/4	100	-		-	-	-	GrSiL	.0	Gravelly Silt loam
8/18	10YR 5/6	100	-		-	-	-	GrSal	Lo	Gravelly Sandy Loam
	-									
	-									
								-		
	oncentration, D=De						ed Sand G			cation: PL=Pore Lining, M=Matrix.
Ī -	Indicators: (Appl	icable to				ted.)				ors for Problematic Hydric Soils ³ :
☐ Histosol	• •			Sandy Redox (Muck (A10)
☐ Black His	ipedon (A2)			Stripped Matrix Loamy Mucky	` '	1) (evcen	MIDA 1			Parent Material (TF2) Shallow Dark Surface (TF12)
	n Sulfide (A4)			Loamy Gleyed			I WILKA I)		-	er (Explain in Remarks)
	l Below Dark Surfa	ce (A11)		Depleted Matri	,	-/			Otilio	(Explain in Nomano)
-	rk Surface (A12)	(* * * * *)		Redox Dark Su	, ,)		3In	dicato	ors of hydrophytic vegetation and
☐ Sandy M	ucky Mineral (S1)			Depleted Dark	Surface (F	- 7)			wetla	nd hydrology must be present,
	leyed Matrix (S4)			Redox Depres	sions (F8)				unles	s disturbed or problematic.
	_ayer (if present):									
Type: N/				-						
Depth (in	ches):			-				Hydri	c Soil	Present? Yes ☐ No ☒
Remarks:										
No hydric s	soil criteria met									
HYDROLO	GY									
Wetland Hy	drology Indicator	s:								
Primary India	cators (minimum of	f one requ	ired; ch	eck all that app	oly)				Secor	ndary Indicators (2 or more required)
☐ Surface \	Water (A1)			☐ Water-Sta	ained Leav	es (B9) (e	xcept MLI	RA	□ w	ater-Stained Leaves (B9) (MLRA 1, 2,
☐ High Wa	ter Table (A2)				IA, and 4E		·			4A, and 4B)
☐ Saturation				☐ Salt Crust	t (B11)				☐ Di	rainage Patterns (B10)
☐ Water Ma	arks (B1)			☐ Aquatic Ir	vertebrate	es (B13)			☐ Di	ry-Season Water Table (C2)
☐ Sedimen	t Deposits (B2)			☐ Hydrogen	Sulfide O	dor (C1)			☐ Sa	aturation Visible on Aerial Imagery (C9)
☐ Drift Dep	osits (B3)			Oxidized	Rhizosphe	res along	Living Roo	ots (C3)	☐ G	eomorphic Position (D2)
☐ Algal Ma	t or Crust (B4)			☐ Presence	of Reduce	ed Iron (C4	4)		☐ Sh	nallow Aquitard (D3)
☐ Iron Dep	osits (B5)			☐ Recent Ire	on Reduct	ion in Tille	d Soils (C	6)	□ FA	AC-Neutral Test (D5)
☐ Surface	Soil Cracks (B6)			☐ Stunted or	r Stressed	l Plants (D	1) (LRR A	()	☐ Ra	aised Ant Mounds (D6) (LRR A)
☐ Inundation	on Visible on Aeria	l Imagery	(B7)	☐ Other (Ex	plain in Re	emarks)			☐ Fr	ost-Heave Hummocks (D7)
☐ Sparsely	Vegetated Concar	ve Surface	e (B8)							
Field Obser	vations:									
Surface Wat	er Present?	Yes 🗌	No 🗷	Depth (inche	es): None					
Water Table	Present?	Yes 🗌	No 🗵	Depth (inche	es): None	-				
Saturation P		Yes 🗌	No 🗵	Depth (inche	es): None	9	Wet	land Hyd	rolog	y Present? Yes □ No ⊠
(includes car	oillary fringe) corded Data (strea	ım dalide	monitor	ring well aerial	I nhotos n	revious in	snections)	if availah	ıle.	
DOSCING IVE	oordod Dala (oliba	yauye,		ing won, acida	, μποισό, μ	TOVIOUS III	-poolioi ia),	, ii avaiidi	,,,,,	
Remarks:										
	gy criteria met									
,										

Project/Site: 1077.0012 - South Hill Data Center	(City/Count	_{y:} Puyallu	ıp/Pierce	Sampling Date: 9/15/16
Applicant/Owner: Benaroya Capital Company				State: WA	Sampling Point: DP-11
Investigator(s): Richard Peel, Alex Callender			Section, To	ownship, Range: <u>03, 19,</u>	04
Landform (hillslope, terrace, etc.): HIIIslope		Local reli	ef (concave,	, convex, none): None	Slope (%): 20
Subregion (LRR): A2	_ Lat: 47.	15919		Long: -122.27853	Datum: WGS84
Soil Map Unit Name: Indianola Loamy Sand				NWI classifica	tion: N/A
Are climatic / hydrologic conditions on the site typical for this	s time of yea	ır? Yes 🗵] No □ (I	f no, explain in Remarks.)	
Are Vegetation, Soil, or Hydrology sign	nificantly dist	turbed?	Are "No	ormal Circumstances" pres	ent? Yes ☒ No ☐
Are Vegetation, Soil, or Hydrology natu	rally probler	natic?	(If need	ed, explain any answers ir	Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing	samplir	ng point le	ocations, transects,	important features, etc.
Hydrophytic Vegetation Present? Yes ☐ No 🗵					
Hydric Soil Present? Yes ☐ No 🗵			he Sampled		, IV
Wetland Hydrology Present? Yes ☐ No 🗵		Witt	nin a Wetlar	nd? Yes □ N	
Remarks:					
No wetland criteria met. Data col	lected in	uplan	ds		
VEGETATION – Use scientific names of plan	ts.				
	Absolute		t Indicator	Dominance Test works	sheet:
Tree Stratum (Plot size: 30 ft) 1. Alnus rubra	<u>% Cover</u> 80	Yes	FAC	Number of Dominant Sp	ecies
2. Pseudotsuga menziesii	5	No	FACU	That Are OBL, FACW, o	or FAC: <u>2</u> (A)
3. Populus balsamifera	5	No	FAC	Total Number of Domina	
4.			1710	Species Across All Strat	a: <u>4</u> (B)
	90	= Total 0	Cover	Percent of Dominant Sp That Are OBL, FACW, o	ecies or FAC: <u>50%</u> (A/B)
Sapling/Shrub Stratum (Plot size: 15 ft)	70	Voc	EAC		
1. Rubus spectabilis 2. Oemleria cerasiformis	10	Yes No	FAC FACU	Prevalence Index work	
Complessores		No	FACU		<u>Multiply by:</u> x 1 =
					x 2 =
4					x 3 =
5	85	= Total (Cover		x 4 =
Herb Stratum (Plot size: 5 ft)		- rotar c	JOVCI		x 5 =
1. Polystichum munitum	20	Yes	FACU		(A) (B)
2. Rubus ursinus	10	Yes	FACU		
3					= B/A =
4			-	Hydrophytic Vegetatio	
5				Rapid Test for Hydro	· ·
6				☐ Dominance Test is >	
7				☐ Prevalence Index is	≤3.0¹ tations¹ (Provide supporting
8					or on a separate sheet)
9				☐ Wetland Non-Vascu	lar Plants ¹
10			-	☐ Problematic Hydropl	hytic Vegetation¹ (Explain)
11	30	= Total 0	Cover		and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft)		– rolar (70VEI	be present, unless distu	rbed or problematic.
1				Hydronbytic	
2				Hydrophytic Vegetation	
0/ Page 07000 dia 11 di 22 di 70	0	= Total C	Cover		i □ No ⊠
% Bare Ground in Herb Stratum 70					
Remarks: No hydrophytic vegetation criteria met.	Prevalen	ce inde	k not warr	anted due to the com	bined lack of hydric soils
and hydrology.					

Depth	Matrix				x Feature		1 - 2	-	Day 1
(inches) 0-2	Color (moist) 7.5YR 4/3	<u>%</u> 100	<u>Color</u>	(moist)	<u>%</u>	Type ¹	Loc ²	<u>Texture</u> SaLo	e <u>Remarks</u> Sandy Loam
	-		-	/D 4/0	-		-		
2-12	10YR 5/4	75	7.5Y	'R 4/6	25	<u>C</u>	M	SaLo	Sandy Loam
		<u> </u>							
					-				
	-								
					-				
	Concentration, D=D						ed Sand G		² Location: PL=Pore Lining, M=Matrix.
-	Indicators: (App	olicable to a	II LRRs,	unless other	wise no	ted.)		Inc	dicators for Problematic Hydric Soils ³ :
Histosol	, ,			andy Redox (S					2 cm Muck (A10)
	pipedon (A2)			ripped Matrix	. ,	1) (2)	4 MI D A 4)		Red Parent Material (TF2)
	istic (A3) en Sulfide (A4)			oamy Mucky M oamy Gleyed N			t WILKA 1)) <u> </u>	
	d Below Dark Surf	ace (A11)		epleted Matrix		-)			Other (Explain in Remarks)
	ark Surface (A12)	,		edox Dark Sur	. ,)		³ In	dicators of hydrophytic vegetation and
☐ Sandy N	Mucky Mineral (S1))	☐ De	epleted Dark S	Surface (l	F7)			wetland hydrology must be present,
	Sleyed Matrix (S4)		☐ Re	edox Depressi	ons (F8)				unless disturbed or problematic.
	Layer (if present):							
Type: N									
Depth (ir	nches):							Hydri	c Soil Present? Yes ☐ No 区
Remarks:									
No hydric	soil criteria me	et.							
HYDROLO)GY								
	drology Indicato	rs:							
-	cators (minimum o		ed: chec	k all that apply	v)				Secondary Indicators (2 or more required)
Surface				☐ Water-Stair		es (B9) (except ML	RA	☐ Water-Stained Leaves (B9) (MLRA 1, 2,
	ater Table (A2)		_		A, and 4E				4A, and 4B)
☐ Saturati	` ,			☐ Salt Crust (, (B11)	,			☐ Drainage Patterns (B10)
☐ Water M	larks (B1)			Aquatic Inv	ertebrate	es (B13)			☐ Dry-Season Water Table (C2)
☐ Sedime	nt Deposits (B2)			☐ Hydrogen \$	Sulfide O	dor (C1)			☐ Saturation Visible on Aerial Imagery (C9)
☐ Drift De	posits (B3)			☐ Oxidized R	hizosphe	eres along	Living Ro	ots (C3)	☐ Geomorphic Position (D2)
☐ Algal Ma	at or Crust (B4)			☐ Presence o	of Reduce	ed Iron (C	4)		☐ Shallow Aquitard (D3)
☐ Iron Dep	oosits (B5)			☐ Recent Iron	n Reduct	ion in Tille	d Soils (C	6)	☐ FAC-Neutral Test (D5)
☐ Surface	Soil Cracks (B6)			☐ Stunted or	Stressec	l Plants (D	01) (LRR A	A)	Raised Ant Mounds (D6) (LRR A)
	on Visible on Aeria			☐ Other (Exp	lain in Re	emarks)			☐ Frost-Heave Hummocks (D7)
-	y Vegetated Conca	ave Surface	(B8)						
Field Obse	rvations:				None	_			
Surface Wa	ter Present?	_		Depth (inches					
Water Table	Present?	Yes 🗌 🛚 1		Depth (inches					
Saturation F		Yes 🗌 🛚 1	Vo ⊠	Depth (inches): <u>None</u>	-	Wet	land Hyd	rology Present? Yes ☐ No ⊠
	pillary fringe) ecorded Data (stre	am gauge, r	nonitorin	g well, aerial r	ohotos, p	revious in	spections)	. if availab	ole:
		gg-, ·		· · · · · · · · · · · · · · · · · · ·	, բ			,	
Remarks:									
	ogy criteria me	t							
,	- 57 - 271101101110								

Project/Site: 1077.0012 - South Hill Data Center		City/County	_{/:} Puyallu	ıp/Pierce	Sampling Date: 9/15/16 & 4/24/18
Applicant/Owner: Benaroya Capital Company				State: WA	Sampling Point: DP-12
Investigator(s): Richard Peel, Alex Callender			Section, To	ownship, Range: <u>03, 19,</u>	04
Landform (hillslope, terrace, etc.): HIIIslope		Local relie	ef (concave,	, convex, none): Concav	<u>re</u> Slope (%): 10
Subregion (LRR): A2	_ Lat: 47.	15931		Long: -122.27867	Datum: WGS84
Soil Map Unit Name: Kapowsin				NWI classifica	tion: N/A
Are climatic / hydrologic conditions on the site typical for this	s time of yea	ır? Yes 🗷	No □ (I	f no, explain in Remarks.)	
Are Vegetation, Soil, or Hydrology sign	nificantly dist	turbed?	Are "No	ormal Circumstances" pres	ent? Yes 🗵 No 🗌
Are Vegetation, Soil, or Hydrology natu	rally probler	natic?	(If need	ed, explain any answers in	Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing	samplin	g point l	ocations, transects,	important features, etc.
Hydrophytic Vegetation Present? Yes ☒ No ☐					
Hydric Soil Present? Yes ☐ No 🗵			e Sampled		
Wetland Hydrology Present? Yes ☐ No 🗵		with	in a Wetlar	nd? Yes ☐ No	o ⊠
Remarks: Not all three wetland criteria met, only hydro	abyrtia yraaa	tation Dat	a aolloatad	in an area that was histor	rically disturbed as shown by
a 1985 aerial.	pnytic vege	tation. Dat	.a conceted	in an area that was histor	nearly disturbed as shown by
VEGETATION – Use scientific names of plan	ts.				
Tree Stratum (Plot size: 30 ft)	Absolute	Dominant Species?		Dominance Test works	heet:
1. Alnus rubra	% Cover 90	Yes	FAC	Number of Dominant Sp That Are OBL, FACW, o	
2				Total Number of Domina	ant
3				Species Across All Strate	a: <u>6</u> (B)
4	00	Tatal C		Percent of Dominant Spe	ecies
Sapling/Shrub Stratum (Plot size: 15 ft)	30	= Total C	over	That Are OBL, FACW, o	r FAC: <u>67%</u> (A/B)
1. Rubus spectabilis	40	Yes	FAC	Prevalence Index work	sheet:
2					Multiply by:
3					x 1 =
4					x 2 =
5	40				x 3 =
Herb Stratum (Plot size: 5 ft)	40	= Total C	over		x 4 =
1. Juncus effusus	30	Yes	FACW		x 5 = (A) (B)
2. Rubus ursinus	30	Yes	FACU	Column Totals.	(A) (B)
3. Polystichum munitum	20	Yes	FACU	Prevalence Index	= B/A =
4. Agrostis capillaris	20	Yes	FAC	Hydrophytic Vegetation	n Indicators:
5				☐ Rapid Test for Hydro	phytic Vegetation
6				Dominance Test is >	50%
7				☐ Prevalence Index is:	
8					tations ¹ (Provide supporting or on a separate sheet)
9				☐ Wetland Non-Vascul	·
10				☐ Problematic Hydroph	nytic Vegetation¹ (Explain)
11	100	Total C		¹ Indicators of hydric soil	and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft)		= Total C		be present, unless distur	bed or problematic.
1				Hydrophytic	
2	0	= Total C	ovor.	Vegetation Present? Yes	i⊠ No □
% Bare Ground in Herb Stratum 0		= rotarC	ovei	resont: 165	
Remarks: Hydrophytic vegetation criteria met thro	ough dom	inance to	est	•	
, a. sp. iy as rogotation ontona mot till	- agri dorr				
I and the second					

	-		depth n				or confirm	n the abse	ence of indicators.)
Depth (inches)	Matrix Color (moist)	%	Colo	Redo or (moist)	x Feature %	es Type¹	Loc ²	Texture	Remarks
0-2	10YR 4/2	99		YR 4/6	1	C	M	SaLo	Sandy Loam - roots
2-12	10YR 6/2	60	7.5	YR 5/6	40	CS	M	Sand	Sand
	10111 0/2			7110 3/0			101	Cana	Cana
					_				
								-	
	oncentration, D=De Indicators: (Appl						ed Sand Gr		² Location: PL=Pore Lining, M=Matrix. icators for Problematic Hydric Soils ³ :
_		ilcable to				ieu.)			•
☐ Histosol	ipedon (A2)			Sandy Redox (S Stripped Matrix					2 cm Muck (A10) Red Parent Material (TF2)
☐ Black His				Loamy Mucky N	` '	1) (except	MLRA 1)		Very Shallow Dark Surface (TF12)
	n Sulfide (A4)			Loamy Gleyed I	•		,		Other (Explain in Remarks)
☐ Depleted	Below Dark Surfa	ace (A11)		Depleted Matrix	(F3)				, ,
	rk Surface (A12)			Redox Dark Sui	, ,			³ Inc	licators of hydrophytic vegetation and
	ucky Mineral (S1)		_	Depleted Dark S	`	7)			wetland hydrology must be present,
	leyed Matrix (S4)		Ш	Redox Depress	ions (F8)			1	unless disturbed or problematic.
Type: N/	Layer (if present):	:							
Depth (inc				_				1	
Remarks:	ones)			-				Hydric	Soil Present? Yes ☐ No ☒
linings; coate	ed sand grains do excavation activiti	not mee	t this re	quirement. Add	ditionally,	the soil p	rofile appe	ears to be	tions occurring as soft masses and/or pore representative of subsoils that have been seen in the 1985 Pierce County aerial.
	drology Indicator	6.							
•	cators (minimum o		iired: ch	eck all that anni	v)			ç	Secondary Indicators (2 or more required)
☐ Surface \		i one requ	ilicu, cii	U Water-Stai		os (B0) (o s	rcent MI P		☐ Water-Stained Leaves (B9) (MLRA 1, 2,
	ter Table (A2)			_	A, and 4B	` , `	rcept with		4A, and 4B)
☐ Saturatio				□ Salt Crust	,	,		Г	Drainage Patterns (B10)
☐ Water Ma	, ,			☐ Aquatic Inv		s (B13)		_	☐ Dry-Season Water Table (C2)
	t Deposits (B2)			☐ Hydrogen		, ,		_	☐ Saturation Visible on Aerial Imagery (C9)
	osits (B3)			☐ Oxidized R			Living Root		Geomorphic Position (D2)
☐ Algal Ma	t or Crust (B4)			☐ Presence of	of Reduce	ed Iron (C4	.)		☐ Shallow Aquitard (D3)
☐ Iron Dep	osits (B5)			☐ Recent Iro	n Reducti	on in Tilled	Soils (C6)) [☐ FAC-Neutral Test (D5)
☐ Surface \$	Soil Cracks (B6)			☐ Stunted or	Stressed	Plants (D	1) (LRR A)		Raised Ant Mounds (D6) (LRR A)
☐ Inundation	on Visible on Aeria	l Imagery	(B7)	☐ Other (Exp	lain in Re	emarks)			Frost-Heave Hummocks (D7)
☐ Sparsely	Vegetated Conca	ve Surfac	e (B8)						
	vations:				N1				
Field Observ	vations.			Depth (inches					
Field Observ Surface Water		Yes 🗌	No 🗵						
	er Present?	Yes ☐ Yes ☐	No 🗵	Depth (inches					
Surface Water Water Table Saturation Pr	er Present? Present? resent?	_					Wetla	and Hydr	ology Present? Yes ☐ No ⊠
Surface Water Water Table Saturation Projection (includes cap	er Present? Present? resent? pillary fringe)	Yes Yes	No ⊠ No ⊠	Depth (inches	s): None	<u> </u>			
Surface Water Water Table Saturation Projection (includes cap	er Present? Present? resent?	Yes Yes	No ⊠ No ⊠	Depth (inches	s): None	<u> </u>			
Surface Water Water Table Saturation Projection (includes cap Describe Reconstruction)	er Present? Present? resent? pillary fringe)	Yes Yes	No ⊠ No ⊠	Depth (inches	s): None	<u> </u>			
Surface Water Table Saturation Projection (includes cap Describe Recommendation) Remarks:	er Present? Present? resent? pillary fringe) corded Data (strea	Yes Yes am gauge	No ⊠ No ⊠ monitor	Depth (inches Depth (inches ring well, aerial	photos, p	erevious ins	pections),	if availabl	e:
Surface Water Table Saturation Projection (includes cap Describe Red Remarks: No hydrological parts of the surface water than 100 miles and 100 miles are the surface water than 100 miles are the surface water than 100 miles are the surface water than 100 miles are than 100 miles	er Present? Present? resent? billary fringe) corded Data (strea	Yes	No ⊠ No ⊠ monitor	Depth (inchest Depth	photos, p	revious ins	pections), /24/18 re	if availabl	

Project/Site: 1077.0012 - South Hill Data Center		City/Coun	_{ity:} Puyallu	ıp/Pierce	Sampling Date: 9/15/16 & 4/24/18
Applicant/Owner: Benaroya Capital Company				State: WA	Sampling Point: DP-13
Investigator(s): Richard Peel, Alex Callender			Section, To	ownship, Range: <u>03, 19,</u>	04
Landform (hillslope, terrace, etc.): HIIIslope		Local rel	lief (concave,	, convex, none): Concav	re Slope (%): 20
Subregion (LRR): A2	_ _{Lat:} <u>47.</u>	15924		Long: -122.27868	Datum: WGS84
Soil Map Unit Name: Indianola				NWI classification	tion: N/A
Are climatic / hydrologic conditions on the site typical for thi					
Are Vegetation, Soil, or Hydrology sig	nificantly dis	turbed?	Are "No	ormal Circumstances" pres	ent? Yes ☒ No ☐
Are Vegetation, Soil, or Hydrology natu	ırally probler	matic?	(If need	ed, explain any answers in	Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing	sampli	ng point le	ocations, transects,	important features, etc.
Hydrophytic Vegetation Present? Yes ☐ No 🗵					
Hydric Soil Present? Yes ☐ No 🗵			the Sampled		
Wetland Hydrology Present? Yes ☐ No ☒		Wit	hin a Wetlar	nd? Yes ☐ No	o X
Remarks:					
No wetland criteria met. Data collec	ted in an	area tha	at was hist	torically disturbed as	s shown by a 1985 aerial.
VEGETATION – Use scientific names of plan	ts.				
	Absolute		nt Indicator	Dominance Test works	heet:
Tree Stratum (Plot size: 30 ft)	% Cover			Number of Dominant Sp	
1. Alnus rubra 2. Acer macrophyllum	10 10	Yes	FAC FACU	That Are OBL, FACW, o	r FAC: <u>2</u> (A)
		Yes	FACO	Total Number of Domina	
3				Species Across All Strate	a: <u>6</u> (B)
4	20	Total	Cauca	Percent of Dominant Spe	
Sapling/Shrub Stratum (Plot size: 15 ft)	20	= Total	Cover	That Are OBL, FACW, o	r FAC: <u>33%</u> (A/B)
1. Rubus spectabilis	50	Yes	FAC	Prevalence Index work	sheet:
2. Sorbus scopulina	30	Yes	FACU	Total % Cover of:	Multiply by:
3		-		OBL species	x 1 =
4				FACW species	x 2 =
5				FAC species	x 3 =
	80	= Total	Cover	FACU species	x 4 =
Herb Stratum (Plot size: 5 ft) 1. Rubus ursinus	20	Voc	FACU	•	x 5 =
2 Polystichum munitum	20	Yes	FACU	Column Totals:	(A) (B)
		-		Prevalence Index	= B/A =
3				Hydrophytic Vegetation	
4. 5.				☐ Rapid Test for Hydro	
6.				☐ Dominance Test is >	
7				☐ Prevalence Index is	≤3.0¹
8.				☐ Morphological Adapt	tations ¹ (Provide supporting
9				data in Remarks	or on a separate sheet)
10.				Wetland Non-Vascul	
11.					nytic Vegetation ¹ (Explain)
	40	= Total	Cover	¹ Indicators of hydric soil be present, unless distur	and wetland hydrology must rbed or problematic.
Woody Vine Stratum (Plot size: 30 ft)				20 procest, arricos distui	200 of problematic.
1				Hydrophytic	
2	0			Vegetation	
% Bare Ground in Herb Stratum 60	0	= Total	Cover	Present? Yes	□ No ⊠
Remarks:	D			- 1 - 1 - 1 - 2	L
No hydrophytic vegetation criteria met and hydrology.	. Prevaler	ice inde	x not warr	anted due to the com	bined lack of hydric soils

inches))-3	Color (moint)	0/	Colo	Rec r (moist)	lox Featur		1.002	Toutun		Domorko	
<i>i</i> -0	Color (moist) 10YR 4/3	<u>%</u> 100	<u>Colo</u>	r (moist)	%	Type ¹	Loc ²	<u>Textur</u> SaLc		Remarks Sandy Loam	
	-			/D F/0			-				
3-4	10YR 5/3	50		/R 5/6	50	CS	<u>M</u>	Sand		Sand	
l-18	10YR 5/2	25	10	/R 5/6	75	CS	M	Sand	<u> </u>	Sand	
									,		
	oncentration, D=De	nlotion		ucod Matrix (od or Coat	ad Sand G	raine	21.00	ation: PL=Pore Lining, M=Ma	triv
	Indicators: (Appli						eu Sanu G			rs for Problematic Hydric Sc	
] Histosol				Sandy Redox		ŕ] 2 cm	Muck (A10)	
	pipedon (A2)			Stripped Matri						Parent Material (TF2)	
Black His	stic (A3)		□ L	oamy Mucky	Mineral (F	1) (excep	t MLRA 1)] Very	Shallow Dark Surface (TF12)	
] Hydroge	n Sulfide (A4)		□ L	oamy Gleyed	Matrix (F	2)] Othe	r (Explain in Remarks)	
•	d Below Dark Surfa	ce (A11)		Depleted Matr	ix (F3)						
_	ark Surface (A12)		☐ F	Redox Dark S	urface (F6	i)		3	ndicato	rs of hydrophytic vegetation ar	nd
-	lucky Mineral (S1)			Depleted Dark	•	,				nd hydrology must be present,	
	Bleyed Matrix (S4)		L F	Redox Depres	sions (F8))			unles	s disturbed or problematic.	
Type: N/	Layer (if present):										
Depth (in				•							
Deptii (iii	cries)							Hydr	ic Soil	Present? Yes ☐ No 🗵	
ncentrations	s occurring as soft r	masses a tionally, t	nd/or por he soil pr	e linings; the n ofile appears t	natrix is les o be repre	ss than 609 sentative o	%, and the of subsoils the	bserved	coated	e distinct or prominent redox sand grains do not meet the re kposed by excavation activities.	
ncentrations ncentrations turbance in	s occurring as soft r s requirement. Addi n the vicinity of this o	masses a tionally, t data plot I	nd/or por he soil pr	e linings; the n ofile appears t	natrix is les o be repre	ss than 609 sentative o	%, and the of subsoils the	bserved	coated	sand grains do not meet the re	
ncentration: ncentration: sturbance in DROLO fetland Hyd	s occurring as soft r s requirement. Addi n the vicinity of this of GY drology Indicators	masses a tionally, t data plot I	nd/or por he soil pro location c	e linings; the nofile appears to an be seen in	natrix is les o be repre the 1985 F	ss than 609 sentative o	%, and the of subsoils the	bserved	coated been e	sand grains do not meet the re sposed by excavation activities.	. Earth
ncentrations ncentrations sturbance in DROLO fetland Hydrimary India	s occurring as soft r s requirement. Addi n the vicinity of this of GGY drology Indicators cators (minimum of	masses a tionally, t data plot I	nd/or por he soil pro location c	e linings; the nofile appears to an be seen in eck all that appears to the control of the contro	natrix is les o be repres the 1985 F	ss than 609 sentative o Pierce Cou	%, and the of subsoils the off subsoils the other serial.	bbserved hat have	coated been es	sand grains do not meet the recovered by excavation activities.	. Earth
TOROLO Tetland Hydrimary India Surface N	s occurring as soft r s requirement. Addi n the vicinity of this of GY drology Indicators cators (minimum of Water (A1)	masses a tionally, t data plot I	nd/or por he soil pro location c	e linings; the nofile appears to an be seen in eck all that appears to water-Sta	natrix is les o be repres the 1985 F	ss than 609 sentative o Pierce Cour	%, and the of subsoils the off subsoils the other serial.	bbserved hat have	coated been es	sand grains do not meet the recovered by excavation activities. dary Indicators (2 or more requater-Stained Leaves (B9) (ML)	. Earth
DROLO etland Hydimary India Surface High Wa	s occurring as soft r s requirement. Addi n the vicinity of this of GY drology Indicators cators (minimum of Water (A1) ater Table (A2)	masses a tionally, t data plot I	nd/or por he soil pro location c	e linings; the nofile appears to an be seen in eck all that appears to the seek all that appears the seek all that appears the seek all th	natrix is les o be repre- the 1985 F ply) ained Leav	ss than 609 sentative o Pierce Cour	%, and the of subsoils the off subsoils the other serial.	bbserved hat have	Secon	sand grains do not meet the responded by excavation activities. dary Indicators (2 or more regater-Stained Leaves (B9) (MLI 4A, and 4B)	. Earth
TDROLO etland Hydrimary India Surface High Wa	s occurring as soft r s requirement. Addi n the vicinity of this of GGY drology Indicators cators (minimum of Water (A1) tter Table (A2) on (A3)	masses a tionally, t data plot I	nd/or por he soil pro location c	e linings; the nofile appears to an be seen in eck all that appears to the seen in eck all that appears to the seek all that appears the seek all that appears to the seek all the seek all that appears to the seek all th	ply) ained Leav t (B11)	ss than 60° sentative of Pierce Countries (B9) (€	%, and the of subsoils the off subsoils the other serial.	bbserved hat have	Secon	sand grains do not meet the resposed by excavation activities. dary Indicators (2 or more requater-Stained Leaves (B9) (MLI 4A, and 4B) ainage Patterns (B10)	. Earth
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rocentrations recentrations recentrations recentrations recentrations recentrations recentrations recentrations recentrations recentration recentrat	s occurring as soft r s requirement. Addi in the vicinity of this of the vicinity of the vicinity of the vicinity of the vicinity of the vicinity of the vicinity of the vicinity of the vicinity of the vicinity of the vicinity of the vicinity of the vicinity of the vicinity of t	Imagery ve Surface	uired; che (B7) ce (B8)	e linings; the nofile appears to an be seen in eck all that appears to the seen in	ply) ained Leav 4A, and 4I t (B11) nivertebrate a Sulfide C Rhizosphe of Reduct or Stressed cplain in R es): None	ves (B9) (e B) es (B13) odor (C1) eres along ed Iron (C tion in Tille d Plants (E emarks)	www.and the of subsoils the of subsoils the off subsoils the other subsoils the off subsoils (Cotton) (LRR A	chat have	Secor W Dr Sa Ge St Ra Fr	dary Indicators (2 or more regater-Stained Leaves (B9) (MLI 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) atturation Visible on Aerial Image comorphic Position (D2) allow Aquitard (D3) aC-Neutral Test (D5)	uired) RA 1, 2
rocentrations recentrations recentrations recentrations recentrations recentrations recentrations recentrations recentrations recentration recentrat	s occurring as soft rs requirement. Adding the vicinity of this control of the vicinity of the	Imagery ve Surface Yes Yes Yes Yes Yes Yes	uired; che (B7) be (B8) No 🗵 No 🗵	e linings; the nofile appears to an be seen in eck all that appears to an be seen in eck all that appears to an be seen in eck all that appears to a to	ply) ained Leav 4A, and 4I t (B11) nivertebrate a Sulfide C Rhizosphe of Reduct on Reduct or Stressed cplain in R es): None es): None es):	ves (B9) (e B) es (B13) es (B13) odor (C1) eres along ed Iron (C tion in Tille d Plants (E emarks) e e	weekent MLI Living Roc 4) d Soils (C6 01) (LRR A	RA ots (C3)	Secor Dr Dr Sa Ge Ra Fr	dary Indicators (2 or more regater-Stained Leaves (B9) (MLI 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) atturation Visible on Aerial Image comorphic Position (D2) allow Aquitard (D3) aC-Neutral Test (D5) aised Ant Mounds (D6) (LRR Apost-Heave Hummocks (D7)	uired) RA 1, 2
rocentrations recentrations recentrations recentrations recentrations recentrations recentrations recentrations recentrations recentrations recentration recentra	s occurring as soft r s requirement. Addi in the vicinity of this of the vicinity of the vicinity vicinity of the vicinity of the vicinity of the vicinity of the vicinity of t	Imagery ve Surface Yes Yes Yes Yes Yes Yes	uired; che (B7) be (B8) No 🗵 No 🗵	e linings; the nofile appears to an be seen in eck all that appears to an be seen in eck all that appears to an be seen in eck all that appears to a to	ply) ained Leav 4A, and 4I t (B11) nivertebrate a Sulfide C Rhizosphe of Reduct on Reduct or Stressed cplain in R es): None es): None es):	ves (B9) (e B) es (B13) es (B13) odor (C1) eres along ed Iron (C tion in Tille d Plants (E emarks) e e	weekent MLI Living Roc 4) d Soils (C6 01) (LRR A	RA ots (C3)	Secor Dr Dr Sa Ge Ra Fr	dary Indicators (2 or more regater-Stained Leaves (B9) (MLI 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) atturation Visible on Aerial Image comorphic Position (D2) allow Aquitard (D3) aC-Neutral Test (D5) aised Ant Mounds (D6) (LRR Apost-Heave Hummocks (D7)	uired) RA 1, 2
recentrations of turbance in centrations of turbance in turbance i	s occurring as soft rs requirement. Adding the vicinity of this content of the vicinity of the	Imagery ve Surface Yes Yes Yes The gauge	uired; che (B7) ce (B8) No 🗵 No 🖾	e linings; the nofile appears to an be seen in whether the seen in whether the seek all that appears to an be seen in whether the seek all that appears to a	poly) ained Leaver 1985 February 1985 Febru	ves (B9) (e B) es (B13) odor (C1) eres along red Iron (C tion in Tille d Plants (E emarks) e e e e	Living Roc 4) d Soils (Ce 21) (LRR A	RA ots (C3) land Hyo	Secon Secon Dr Sa Ge St FA Ra Fr	dary Indicators (2 or more regater-Stained Leaves (B9) (MLI 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) atturation Visible on Aerial Image comorphic Position (D2) allow Aquitard (D3) aC-Neutral Test (D5) aised Ant Mounds (D6) (LRR Apost-Heave Hummocks (D7)	uired) RA 1, 2

Project/Site: 1077.0012 - South Hill Data Center		City/County	_{y:} Puyallu	ıp/Pierce	Sampling Date: 9/15/16 & 4/24/18
Applicant/Owner: Benaroya Capital Company				State: WA	Sampling Point: DP-14
Investigator(s): Richard Peel, Alex Callender			Section, To	ownship, Range: <u>03, 19,</u>	04
Landform (hillslope, terrace, etc.): Terrace		Local relie	ef (concave,	, convex, none): Concav	<u>re</u> Slope (%): 0
Subregion (LRR): A2	_ Lat: 47.	15983		Long: <u>-122.27728</u>	Datum: WGS84
Soil Map Unit Name: Indianola				NWI classification	tion: N/A
Are climatic / hydrologic conditions on the site typical for this	s time of yea	ır? Yes 🗷	No ☐ (I	f no, explain in Remarks.)	
Are Vegetation, Soil, or Hydrology sign	nificantly dist	turbed?	Are "No	ormal Circumstances" pres	ent? Yes 🗵 No 🗌
Are Vegetation, Soil, or Hydrology natu	rally probler	natic?	(If need	ed, explain any answers in	Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing	samplin	g point le	ocations, transects,	important features, etc.
Hydrophytic Vegetation Present? Yes ☒ No ☐					
Hydric Soil Present? Yes ☐ No 🗵			e Sampled		
Wetland Hydrology Present? Yes ☐ No 🗵		with	in a Wetlar	nd? Yes □ No	o 🔀
Remarks: Not all three wetland criteria met, only hydro	nhytic vece	tation Dat	ta collected	on road terrace in area t	hat was historically disturbed
as shown by a 1998 aerial.	pnytic vege	tation. Dat	ia conceteu	on road terrace, in area t	nat was instorically disturbed
VEGETATION – Use scientific names of plan	ts.				
Trace Christian (Diet circu 20 ft)	Absolute	Dominant		Dominance Test works	heet:
Tree Stratum (Plot size: 30 ft) 1. Alnus rubra	% Cover 10	Yes	FAC	Number of Dominant Sp That Are OBL, FACW, o	
2.				Total Number of Domina	
3				Species Across All Strate	_
4	40			Percent of Dominant Spo	ecies
Sapling/Shrub Stratum (Plot size: 15 ft)	10	= Total C	over	That Are OBL, FACW, o	r FAC: <u>100%</u> (A/B)
1. Rubus armeniacus	30	Yes	FAC	Prevalence Index work	sheet:
2. Rubus spectabilis	20	Yes	FAC	Total % Cover of:	Multiply by:
3. Acer macrophyllum	10	No	FACU	OBL species	x 1 =
4				FACW species	x 2 =
5				FAC species	x 3 =
	60	= Total C	over		x 4 =
Herb Stratum (Plot size: 5 ft) 1 Juncus effusus	35	Yes	FACW		x 5 =
2 Agrostis capillaris	30	Yes	FAC	Column Totals:	(A) (B)
3. Ranunculus repens	30	Yes	FAC	Prevalence Index	= B/A =
4. Cirsium vulgare	5	No	FACU	Hydrophytic Vegetation	
5				☐ Rapid Test for Hydro	
6.				■ Dominance Test is >	·50%
7				☐ Prevalence Index is	≤3.0 ¹
8.					tations ¹ (Provide supporting
9				data in Remarks Wetland Non-Vascul	or on a separate sheet)
10					nytic Vegetation ¹ (Explain)
11	400				and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft)	100	= Total C	over	be present, unless distu	bed or problematic.
1				Hydrophytic	
2	0			Vegetation	. ✓ No □
% Bare Ground in Herb Stratum 0	-	= Total C	over	Present? Yes	S⊠ No □
Remarks: Hydrophytic vegetation criteria met thro	ough dom	inance t	est	1	
Try droptry do rogolddorf offichia fflot till	oagii doll				

Depth	Matrix				x Features					
(inches)	Color (moist)	%_	Cold	or (moist)	%	Type ¹	Loc ²	<u>Textur</u>		Remarks
0-18	10YR 4/2	100	<u> </u>		-			GrSa	Lo	Gravelly Sandy Loam
	-				-			-		
-		_								
	-									
	oncentration, D=De Indicators: (Appli						ed Sand Gr			cation: PL=Pore Lining, M=Matrix. ors for Problematic Hydric Soils³:
Histosol				Sandy Redox (S		•				Muck (A10)
	oipedon (A2)			Stripped Matrix						Parent Material (TF2)
☐ Black Hi				Loamy Mucky N	. ,) (except	MIRA1)			Shallow Dark Surface (TF12)
_	n Sulfide (A4)			Loamy Gleyed I			,		-	er (Explain in Remarks)
	d Below Dark Surfac	ce (A11)		Depleted Matrix						(Explain in Nomano)
	ark Surface (A12)) (/ t i i)		Redox Dark Sur				3 1	ndicato	ors of hydrophytic vegetation and
	fucky Mineral (S1)			Depleted Dark S	` ,	7)				nd hydrology must be present,
-	Gleyed Matrix (S4)		_	Redox Depress	`	• ,				s disturbed or problematic.
	Layer (if present):				.0.10 (1 0)					o diotalboa el problemation
Type: N/										
Depth (in				_				1		.
	01100)			-				Hydr	ic Soil	Present? Yes ☐ No ☒
Remarks:										
plot location	on can be seen i					ation a	ctivities.	Earth	distur	bance in the vicinity of this data
HYDROLO	GY									
Wetland Hy	drology Indicators	s:								
Primary Indi	cators (minimum of	one requ	uired; ch	eck all that appl	y)				Secor	ndary Indicators (2 or more required)
Surface				☐ Water-Stai		es (B9) (e	xcept MLR	RA	\square w	ater-Stained Leaves (B9) (MLRA 1, 2,
	iter Table (A2)				A, and 4B)		xoop: iii zi	.,.		4A, and 4B)
_					-	'			П Р	rainage Patterns (B10)
☐ Saturation				☐ Salt Crust		(D40)				
☐ Water M				Aquatic Inv		` '				ry-Season Water Table (C2)
	nt Deposits (B2)			Hydrogen						aturation Visible on Aerial Imagery (C9)
	oosits (B3)			Oxidized R		_	_	ts (C3)		eomorphic Position (D2)
☐ Algal Ma	at or Crust (B4)			☐ Presence					☐ Sh	nallow Aquitard (D3)
☐ Iron Dep	osits (B5)			☐ Recent Iro	n Reductio	on in Tille	d Soils (C6))	☐ F/	AC-Neutral Test (D5)
☐ Surface	Soil Cracks (B6)			☐ Stunted or	Stressed I	Plants (D	1) (LRR A))	☐ Ra	aised Ant Mounds (D6) (LRR A)
☐ Inundation	on Visible on Aerial	Imagery	(B7)	☐ Other (Exp	lain in Rer	marks)			☐ Fr	ost-Heave Hummocks (D7)
☐ Sparsely	Vegetated Concav	e Surfac	e (B8)							
Field Obser	vations:									
Surface Wat	er Present?	Yes 🗌	No 🗷	Depth (inches	s): None					
Water Table		Yes 🗌	No ⊠	Depth (inches	,					
				Depth (inches			Wotl	and Uve	drologi	v Bracent2 Vec No V
Saturation P (includes ca	pillary fringe)	Yes 🗌	No 🗵	Depth (inches	s). <u>110110</u>		wetta	апо пус	arology	y Present? Yes ☐ No 区
	corded Data (stream	m gauge,	, monito	ring well, aerial	photos, pre	evious ins	spections),	if availa	ble:	
Remarks:										
	nav criteria met	Lacko	of hydr	alogy confirm	and durin	na the 1	/24/12 ro	יובעם.	ation	. Precipitation during the 4/24/18
visit was a		35 perc	ent of							normal for the year-to-date per

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Project/Site: 1077.0012 - South Hill Data Center	(City/County	_{/:} Puyallu	ıp/Pierce	Sampling Date: 9/15/16 & 4/24/18
Applicant/Owner: Benaroya Capital Company				State: WA	Sampling Point: DP-15
Investigator(s): Richard Peel, Alex Callender			Section, To	ownship, Range: <u>03, 19,</u>	04
Landform (hillslope, terrace, etc.): Hillslope		Local relie	ef (concave,	, convex, none): None	Slope (%): 20
Subregion (LRR): A2	_ Lat: 47.	15919		Long: -122.27870	Datum: WGS84
Soil Map Unit Name: Indianola				NWI classificat	tion: N/A
Are climatic / hydrologic conditions on the site typical for this	s time of yea	r? Yes 🗷	No □ (I	If no, explain in Remarks.)	
Are Vegetation, Soil, or Hydrology sign	nificantly dist	turbed?	Are "No	ormal Circumstances" pres	ent? Yes 🗵 No 🗌
Are Vegetation, Soil, or Hydrology natu	rally probler	natic?	(If need	ed, explain any answers in	Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing	samplin	g point l	ocations, transects,	important features, etc.
Hydrophytic Vegetation Present? Yes ☐ No 🗵					
Hydric Soil Present? Yes ☐ No 🗵			e Sampled		
Wetland Hydrology Present? Yes ☐ No 🗵		with	in a Wetlar	nd? Yes ☐ No) <u>X</u>
Remarks: No wetland criteria met. Data collected on ter	race slope l	Data colle	eted on roa	d terrace in area that was	historically disturbed as
shown by a 1985 aerial.	ruce stope i	Data cone	011 104	ar terruce, in area titut was	motorically distarbed as
VEGETATION – Use scientific names of plan	ts.				
Tree Stratum (Plot size: 30 ft)	Absolute % Cover	Dominant Species?		Dominance Test works	
1. Alnus rubra	80	Yes	FAC	Number of Dominant Spartnat Are OBL, FACW, o	
2.				Total Number of Domina	ant
3				Species Across All Strata	
4	80			Percent of Dominant Spe	
Sapling/Shrub Stratum (Plot size: 15 ft)	80	= Total C	over	That Are OBL, FACW, o	r FAC: <u>50%</u> (A/B)
1. Rubus spectabilis	70	Yes	FAC	Prevalence Index work	sheet:
2. Crataegus douglasii	10	No	FACU	Total % Cover of:	Multiply by:
3				OBL species	x 1 =
4					x 2 =
5					x 3 =
Herb Stratum (Plot size: 5 ft)	80	= Total C	over		x 4 =
1. Rubus ursinus	70	Yes	FACU	1	x 5 =
2. Polystichum munitum	20	Yes	FACU	Column Totals:	(A) (B)
3				Prevalence Index	= B/A =
4.				Hydrophytic Vegetation	n Indicators:
5				☐ Rapid Test for Hydro	phytic Vegetation
6				☐ Dominance Test is >	·50%
7				☐ Prevalence Index is:	≤3.0 ¹
8					tations ¹ (Provide supporting or on a separate sheet)
9				☐ Wetland Non-Vascul	•
10					nytic Vegetation¹ (Explain)
11	90				and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft)	90	= Total C	over	be present, unless distur	
1				Hydrophytic	
2	0			Vegetation	. □ No ☑
% Bare Ground in Herb Stratum 10	-	= Total C	over	Present? Yes	s □ No ⊠
Remarks: No hydrophytic vegetation criteria met.	Prevalen	ce indev	not warr	anted due to lack of o	combined hydric soil and
hydrology.	. Tovalon	JO IIIGOA	ct waii	and add to lack of t	omenica nyano son ana

Depth	Matrix	,		Pedo	x Feature						
(inches)	Color (moist)	%	Colo	or (moist)	<u> </u>	Type ¹	Loc ²	Textu	e	Remarks	
0-4	10YR 6/1	100	-		-	-	-	Sand		Sand	
4-18	10YR 5/4	100			-	-	-	Sand		Sand	
					_						
					_						-
	-										
	oncentration, D=D Indicators: (App						ed Sand Gr			ation: PL=Pore Lining, M=Matrrs for Problematic Hydric Soil	
☐ Histosol		iicabic te				.u.,				Muck (A10)	.
	oipedon (A2)			Sandy Redox (S Stripped Matrix						Parent Material (TF2)	
☐ Black His				Loamy Mucky N	. ,) (except	MLRA 1)	F		Shallow Dark Surface (TF12)	
	n Sulfide (A4)			Loamy Gleyed I			,			r (Explain in Remarks)	
	d Below Dark Surfa	ace (A11)		Depleted Matrix						()	
	ark Surface (A12)	, ,		Redox Dark Suı				³ 1	ndicato	rs of hydrophytic vegetation and	l
☐ Sandy M	lucky Mineral (S1)			Depleted Dark S	Surface (F	7)			wetlar	nd hydrology must be present,	
	Bleyed Matrix (S4)			Redox Depress	ions (F8)				unless	s disturbed or problematic.	
	Layer (if present)):									
Type:_ <u>N/</u>				_							
Depth (in	ches):			-				Hydr	ic Soil	Present? Yes ☐ No 🗵	
Remarks:								•			
No hydric s	soil criteria me	t; not er	nough r	edox (<2%)	to meet	S5 requ	uirements	s. Earth	n distu	rbance in the vicinity of the	nis data
	n can be seen					•				,	
•				•							
HYDROLO	iGY										
Wetland Hy		rs:									
_	drology Indicator		uired: ch	eck all that appl	(v)				Secon	dary Indicators (2 or more requ	red)
Primary Indi	drology Indicator		uired; ch			es (B9) (e	except MI R			dary Indicators (2 or more requ	
Primary India	drology Indicator cators (minimum o Water (A1)		uired; ch	☐ Water-Stai	ined Leave		xcept MLR	RA		ater-Stained Leaves (B9) (MLR	
Primary India Surface High Wa	drology Indicator cators (minimum c Water (A1) ater Table (A2)		uired; ch	☐ Water-Stai	ned Leave		xcept MLR	RA	☐ Wa	ater-Stained Leaves (B9) (MLR. 4A, and 4B)	
Primary India Surface High Wa Saturation	cators (minimum c Water (A1) tter Table (A2) on (A3)		uired; ch	☐ Water-Stai 1, 2, 4, ☐ Salt Crust	ned Leave A, and 4B (B11)		xcept MLR	RA	□ Wa	ater-Stained Leaves (B9) (MLR . 4A, and 4B) ainage Patterns (B10)	
Primary India Surface High Wa Saturatio Water M	cators (minimum c Water (A1) hter Table (A2) on (A3) larks (B1)		uired; ch	☐ Water-Stai 1, 2, 4/ ☐ Salt Crust ☐ Aquatic Inv	ined Leave A, and 4B (B11) vertebrates	s (B13)	xcept MLR	RA	□ Wa	ater-Stained Leaves (B9) (MLR. 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2)	A 1, 2,
Primary India Surface High Wa Saturatio Water M Sedimer	cators (minimum of Water (A1) Inter Table (A2) Ion (A3) Iarks (B1) Int Deposits (B2)		uired; ch	Water-Stai 1, 2, 4/ Salt Crust Aquatic Inv Hydrogen	ined Leave A, and 4B (B11) vertebrates Sulfide Oc	s (B13) or (C1)			□ Wa□ Dra□ Dra□ Sa	ater-Stained Leaves (B9) (MLR. 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Image	A 1, 2,
Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep	drology Indicator cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) on Deposits (B2) posits (B3)		uired; ch	Water-Stai 1, 2, 4/ Salt Crust Aquatic Inv Hydrogen	ined Leave A, and 4B (B11) vertebrates Sulfide Oc Rhizospher	s (B13) or (C1) es along	Living Root		☐ Wa	ater-Stained Leaves (B9) (MLR. 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Image comorphic Position (D2)	A 1, 2,
Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma	cators (minimum of water (A1) ater Table (A2) on (A3) aterks (B1) on Deposits (B2) cosits (B3) at or Crust (B4)		uired; ch	Water-Stai 1, 2, 4/ Salt Crust Aquatic Inv Hydrogen Oxidized R Presence of	ined Leave A, and 4B (B11) vertebrates Sulfide Oc Rhizosphei of Reduce	s (B13) or (C1) es along d Iron (C4	Living Root	ts (C3)	☐ Wa	ater-Stained Leaves (B9) (MLR. 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Image comorphic Position (D2) allow Aquitard (D3)	A 1, 2,
Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep	cators (minimum of water (A1) ater Table (A2) on (A3) arks (B1) at Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5)		uired; ch	Water-Stai 1, 2, 4/ Salt Crust Aquatic Inv Hydrogen Oxidized R Presence o	ined Leave A, and 4B (B11) vertebrates Sulfide Oc Rhizospher of Reduce n Reduction	s (B13) or (C1) es along d Iron (C4 on in Tille	Living Room 4) d Soils (C6)	ts (C3)	☐ Wa	ater-Stained Leaves (B9) (MLR. 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Image eomorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5)	A 1, 2,
Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface	cators (minimum of water (A1) ter Table (A2) on (A3) larks (B1) on Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6)	of one req		Water-Stai 1, 2, 4/ Salt Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Stunted or	ned Leave A, and 4B (B11) vertebrates Sulfide Oc Rhizospher of Reduce n Reductio Stressed	s (B13) or (C1) es along d Iron (C4 on in Tille Plants (D	Living Root	ts (C3)	Dr. Dr. Sa Gee	ater-Stained Leaves (B9) (MLR. 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Image comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) iised Ant Mounds (D6) (LRR A)	A 1, 2,
Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundation	cators (minimum of water (A1) Inter Table (A2) Ion (A3) Iarks (B1) Int Deposits (B2) Iosits (B3) Int or Crust (B4) Iosits (B5) Iosit Cracks (B6) Ion Visible on Aeria	of one req	v (B7)	Water-Stai 1, 2, 4/ Salt Crust Aquatic Inv Hydrogen Oxidized R Presence o	ned Leave A, and 4B (B11) vertebrates Sulfide Oc Rhizospher of Reduce n Reductio Stressed	s (B13) or (C1) es along d Iron (C4 on in Tille Plants (D	Living Room 4) d Soils (C6)	ts (C3)	Dr. Dr. Sa Gee	ater-Stained Leaves (B9) (MLR. 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Image eomorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5)	A 1, 2,
Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely	cators (minimum of water (A1) Inter Table (A2) Ion (A3) Iarks (B1) Int Deposits (B2) Ionit Deposits (B3) Int or Crust (B4) Ionit (B5) Ionit (B5) Ionit (B6) Ionit (B6	of one req	v (B7)	Water-Stai 1, 2, 4/ Salt Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Stunted or	ned Leave A, and 4B (B11) vertebrates Sulfide Oc Rhizospher of Reduce n Reductio Stressed	s (B13) or (C1) es along d Iron (C4 on in Tille Plants (D	Living Room 4) d Soils (C6)	ts (C3)	Dr. Dr. Sa Gee	ater-Stained Leaves (B9) (MLR. 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Image comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) iised Ant Mounds (D6) (LRR A)	A 1, 2,
Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatic Sparsely	drology Indicator cators (minimum of Water (A1) Inter Table (A2) Inter Table (A2) Inter Table (A2) Inter Table (B1) Inter Table (B2) Inter Table (B3) Inter Table (B4) Inter Tab	of one req	v (B7) ce (B8)	Water-Stai 1, 2, 4/ Salt Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Stunted or Other (Exp	ned Leave A, and 4B (B11) vertebrate: Sulfide Oc Rhizospher of Reduce n Reductio Stressed	s (B13) or (C1) es along d Iron (C4 on in Tille Plants (D	Living Room 4) d Soils (C6)	ts (C3)	Dr. Dr. Sa Gee	ater-Stained Leaves (B9) (MLR. 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Image comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) iised Ant Mounds (D6) (LRR A)	A 1, 2,
Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Wat	drology Indicator cators (minimum of Water (A1) Inter Table (A2) Inter Table (A2) Inter Table (B2) Inter Table (B3) Inter Table (B2) Inter Tab	al Imagery ave Surfac	v (B7) ce (B8) No ⊠	Water-Stai 1, 2, 4/ Salt Crust Aquatic Inv Hydrogen Oxidized R Presence o Recent Iro Stunted or Other (Exp	ined Leave A, and 4B (B11) vertebrates Sulfide Oc Rhizospher of Reduce n Reductic Stressed plain in Re	s (B13) or (C1) es along d Iron (C4 on in Tille Plants (D	Living Room 4) d Soils (C6)	ts (C3)	Dr. Dr. Sa Gee	ater-Stained Leaves (B9) (MLR. 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Image comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) iised Ant Mounds (D6) (LRR A)	A 1, 2,
Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Water Table	drology Indicator cators (minimum of Water (A1) Inter Table (A2) Inter Table (A2) Inter Table (B1) Int Deposits (B2) Int Deposits (B3) Int or Crust (B4) Inter Table (B5) Inter Table (B5) Inter Table (B6) Inter Table (B6) Inter Table (B6) Inter Table (B6) Inter Table (B2) Inter	al Imagery ave Surface Yes Yes	v (B7) ce (B8) No ⊠ No ⊠	Water-Stai 1, 2, 4/ Salt Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Stunted or Other (Exp	A, and 4B (B11) vertebrates Sulfide Oc Rhizospher of Reduce n Reductio Stressed blain in Re S): None	s (B13) or (C1) es along d Iron (C4 on in Tille Plants (D	Living Room 4) d Soils (C6) 1) (LRR A)	ts (C3)	☐ Wa	ater-Stained Leaves (B9) (MLR. 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Image comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)	A 1, 2,
Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Water Table Saturation P	drology Indicator cators (minimum of Water (A1) Inter Table (A2) Inter Table (A2) Inter Table (B2) Inter Tab	al Imagery ave Surfac	v (B7) ce (B8) No ⊠	Water-Stai 1, 2, 4/ Salt Crust Aquatic Inv Hydrogen Oxidized R Presence o Recent Iro Stunted or Other (Exp	A, and 4B (B11) vertebrates Sulfide Oc Rhizospher of Reduce n Reductio Stressed blain in Re S): None	s (B13) or (C1) es along d Iron (C4 on in Tille Plants (D	Living Room 4) d Soils (C6) 1) (LRR A)	ts (C3)	☐ Wa	ater-Stained Leaves (B9) (MLR. 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Image comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) iised Ant Mounds (D6) (LRR A)	A 1, 2,
Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Wat Water Table Saturation P (includes cal	drology Indicator cators (minimum of Water (A1) Inter Table (A2) Inter Table (A2) Inter Table (B1) Int Deposits (B2) Int Deposits (B3) Int or Crust (B4) Inter Table (B5) Inter Table (B5) Inter Table (B6) Inter Table (B6) Inter Table (B6) Inter Table (B6) Inter Table (B2) Inter	al Imagery ave Surface Yes Yes Yes Yes Yes	v (B7) ce (B8) No 🗵 No 🗵 No 🗵	Water-Stai 1, 2, 4/ Salt Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Stunted or Other (Exp	A, and 4B (B11) Vertebrates Sulfide Oc Rhizospher of Reduce on Reductic Stressed blain in Re None None None	s (B13) or (C1) es along d Iron (C4 n in Tille Plants (D narks)	Living Root 4) d Soils (C6) 1) (LRR A)	ts (C3)) and Hyo	☐ Wa	ater-Stained Leaves (B9) (MLR. 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Image comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)	A 1, 2,
Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Wat Water Table Saturation P (includes cal	drology Indicator cators (minimum of Water (A1) Inter Table (A2) Inter Table (A2) Inter Table (A2) Inter Table (B2) Inter Tab	al Imagery ave Surface Yes Yes Yes Yes Yes	v (B7) ce (B8) No 🗵 No 🗵 No 🗵	Water-Stai 1, 2, 4/ Salt Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Stunted or Other (Exp	A, and 4B (B11) Vertebrates Sulfide Oc Rhizospher of Reduce on Reductic Stressed blain in Re None None None	s (B13) or (C1) es along d Iron (C4 n in Tille Plants (D narks)	Living Root 4) d Soils (C6) 1) (LRR A)	ts (C3)) and Hyo	☐ Wa	ater-Stained Leaves (B9) (MLR. 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Image comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)	A 1, 2,
Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Wat Water Table Saturation P (includes cal	drology Indicator cators (minimum of Water (A1) Inter Table (A2) Inter Table (A2) Inter Table (A2) Inter Table (B2) Inter Tab	al Imagery ave Surface Yes Yes Yes Yes Yes	v (B7) ce (B8) No 🗵 No 🗵 No 🗵	Water-Stai 1, 2, 4/ Salt Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Stunted or Other (Exp	A, and 4B (B11) Vertebrates Sulfide Oc Rhizospher of Reduce on Reductic Stressed blain in Re None None None	s (B13) or (C1) es along d Iron (C4 n in Tille Plants (D narks)	Living Root 4) d Soils (C6) 1) (LRR A)	ts (C3)) and Hyo	☐ Wa	ater-Stained Leaves (B9) (MLR. 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Image comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)	A 1, 2,
Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatic Sparsely Field Obser Surface Water Table Saturation P (includes ca) Describe Re	drology Indicator cators (minimum of Water (A1) Inter Table (A2) Inter Table (A2) Inter Table (A2) Inter Table (B2) Inter Tab	al Imagery ave Surfac Yes Yes Yes am gauge	v (B7) ce (B8) No 🗵 No 🗵 No 🗷 e, monitor	Water-Stai 1, 2, 4/ Salt Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Stunted or Other (Exp Depth (inches Depth (inches	ined Leave A, and 4B (B11) vertebrates Sulfide Oc Rhizospher of Reduce n Reductic Stressed plain in Re Si: None None photos, pr	s (B13) or (C1) es along d Iron (C4 in in Tille Plants (D inarks)	Living Roof 4) d Soils (C6) 1) (LRR A) Wetla	ts (C3)) and Hyo	☐ Wa	ater-Stained Leaves (B9) (MLR. 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Image emorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) ast-Heave Hummocks (D7)	A 1, 2, ry (C9)
Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Water Table Saturation P (includes ca) Describe Re Remarks: No hydrolog	drology Indicator cators (minimum of Water (A1) Inter Table (A2) Inter Table (A2) Inter Table (B2) Inter Tab	al Imagery ave Surface Yes Yes Yes am gauge	v (B7) ce (B8) No 🗵 No 🗵 No 🗵 e, monitor	Water-Stai 1, 2, 4/ Salt Crust Aquatic Inv Hydrogen Oxidized R Presence of Recent Iron Stunted or Other (Exp Depth (inchest Depth (inchest Depth (inchest Depth (aerial) Cology confirm	ined Leave A, and 4B (B11) vertebrates Sulfide Oc Rhizospher of Reduce on Reduction Stressed plain in Ref None None photos, pr	s (B13) or (C1) es along d Iron (C4 in in Tille Plants (D inarks) evious ins	Living Room 4) d Soils (C6) 1) (LRR A) Wetlan spections),	and Hydif availa	☐ Wa ☐ Dr. ☐ Dr. ☐ Sa ☐ Ge ☐ Sh ☐ FA ☐ Ra ☐ Fro	ater-Stained Leaves (B9) (MLR. 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) turation Visible on Aerial Image comorphic Position (D2) allow Aquitard (D3) C-Neutral Test (D5) aised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)	ry (C9)

Project/Site: 1077.0012 - South Hill Data Center	(City/County	_{/:} Puyallu	ıp/Pierce	Sampling Date: 9/15/16 & 4/24/18
Applicant/Owner: Benaroya Capital Company				State: WA	Sampling Point: DP-16
				ownship, Range: <u>03, 19,</u>	
Landform (hillslope, terrace, etc.): Terrace		Local relie	ef (concave	, convex, none): Concav	e Slope (%): 0
Subregion (LRR): A2	_ Lat: 47.	15859		Long: -122.27864	Datum: WGS84
Soil Map Unit Name: Indianola				NWI classification	tion: N/A
Are climatic / hydrologic conditions on the site typical for this					
Are Vegetation, Soil, or Hydrology sign	nificantly dist	turbed?	Are "No	ormal Circumstances" pres	ent? Yes ☒ No ☐
Are Vegetation, Soil, or Hydrology natu	rally probler	natic?	(If need	ed, explain any answers in	Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing	samplin	g point l	ocations, transects,	important features, etc.
Hydrophytic Vegetation Present? Yes ☒ No ☐					
Hydric Soil Present? Yes ⊠ No □			e Sampled		_
Wetland Hydrology Present? Yes ☒ No ☐		with	in a Wetlar	nd? Yes ເເ No	o 📙
Remarks: All three wetland criteria met. Data collected	in Watland	E Data as	lloated in a	and that was historically o	liaturbad as shown by a 1005
aerial.	in wenand	1. Data co	nected in t	irea that was instolleany c	isturbed as shown by a 1705
VEGETATION – Use scientific names of plan	ts.				
Tree Stratum (Plot size: 30 ft)		Dominant Species?		Dominance Test works	
1. Alnus rubra	<u>% Cover</u> 40	Yes	FAC	Number of Dominant Sp That Are OBL, FACW, o	
2				Total Number of Domina	ınt
3				Species Across All Strate	_
4	40			Percent of Dominant Spo	
Sapling/Shrub Stratum (Plot size: 15 ft)	40	= Total C	over	That Are OBL, FACW, o	r FAC: 100% (A/B)
Crataegus douglasii	5	Yes	FAC	Prevalence Index work	sheet:
2					Multiply by:
3					x 1 =
4					x 2 =
5					x 3 =
Herb Stratum (Plot size: 5 ft)	5	= Total C	over		x 4 =
1. Holcus lanatus	55	Yes	FAC	•	x 5 = (A) (B)
2. Juncus effusus	25	Yes	FACW	Column Totals.	(A) (D)
3. Agrostis capillaris	20	Yes	FAC	Prevalence Index	= B/A =
4				Hydrophytic Vegetation	n Indicators:
5				☐ Rapid Test for Hydro	phytic Vegetation
6				■ Dominance Test is >	
7				☐ Prevalence Index is	≤3.0¹
8					ations ¹ (Provide supporting or on a separate sheet)
9				☐ Wetland Non-Vascul	. ,
10					nytic Vegetation¹ (Explain)
11	100				and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft)	100	= Total C	over	be present, unless distur	
1				Hydrophytic	
2				Vegetation	M. N. C
% Bare Ground in Herb Stratum 0	0	= Total C	over	Present? Yes	⊠ No □
Remarks: Hydrophytic vegetation criteria met thro	ough the	dominan	ca tast	ı	
Trydrophytio vogotation ontena met tilli	cagii iile (aominan'			

Profile Des	cription: (Describ	e to the	depth n	eeded to docur	nent the	indicator	or confirm	n the ab	sence of indica	tors.)
Depth	Matrix				x Feature	<u>es</u>				
(inches)	Color (moist)	%		or (moist)	%	Type ¹	Loc ²	Textu		Remarks
0-4	10YR 5/2	95	10	YR 4/6	5	С	M	Sand	Sand	
4-12	10YR 5/4	100	-		-	-	-	Sand	I Sand	
					-					_
	-									
					_					
					-			-		
	Concentration, D=D						ed Sand G			=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (App	licable to	all LRR	s, unless othe	rwise no	ted.)		In	dicators for Pro	blematic Hydric Soils ³ :
☐ Histosol	l (A1)		×	Sandy Redox (S	S5)				2 cm Muck (A	0)
☐ Histic E _I	pipedon (A2)			Stripped Matrix	(S6)				Red Parent Ma	aterial (TF2)
	istic (A3)			Loamy Mucky N			t MLRA 1)			Dark Surface (TF12)
	en Sulfide (A4)			Loamy Gleyed I		2)			Other (Explain	in Remarks)
	d Below Dark Surfa	ace (A11)		Depleted Matrix						
	ark Surface (A12)			Redox Dark Sui	` '			3	•	ophytic vegetation and
-	Mucky Mineral (S1)			Depleted Dark S	•	=7)			-	ogy must be present,
	Gleyed Matrix (S4)		Ш	Redox Depress	ons (F8)				unless disturbe	d or problematic.
Type: N	Layer (if present)	:								
				-						
Depth (ii	nches):			-				Hydr	ic Soil Present?	Yes ⊠ No □
Remarks:										
Hydric soi	I criteria met thi	ough in	dicato	r S5. Earth d	isturbar	nce in th	e vicinity	of this	data plot loca	ation can be seen in the
	ce County aeria									
	•		•							
HYDROLC										
	drology Indicator									
Primary Indi	icators (minimum o	f one requ	<u>ıired; ch</u>							cators (2 or more required)
☐ Surface				☐ Water-Stai	ned Leav	es (B9) (e	xcept MLF	RA		ed Leaves (B9) (MLRA 1, 2,
_	ater Table (A2)				A, and 4E	3)			4A, and	4B)
▼ Saturati	on (A3)			☐ Salt Crust	(B11)				☐ Drainage Pa	atterns (B10)
☐ Water M	/larks (B1)			☐ Aquatic Inv	ertebrate	es (B13)			□ Dry-Season	Water Table (C2)
☐ Sedime	nt Deposits (B2)			☐ Hydrogen	Sulfide O	dor (C1)			☐ Saturation \	isible on Aerial Imagery (C9)
☐ Drift De	posits (B3)			☐ Oxidized R	hizosphe	eres along	Living Roo	ts (C3)	▼ Geomorphic	Position (D2)
☐ Algal Ma	at or Crust (B4)			☐ Presence of	of Reduce	ed Iron (C	4)		☐ Shallow Aqu	iitard (D3)
☐ Iron Dep	posits (B5)			☐ Recent Iro	n Reduct	ion in Tille	d Soils (C6	6)	☐ FAC-Neutra	l Test (D5)
☐ Surface	Soil Cracks (B6)			☐ Stunted or	Stressed	l Plants (D	1) (LRR A)	☐ Raised Ant	Mounds (D6) (LRR A)
☐ Inundati	ion Visible on Aeria	l Imagery	(B7)	☐ Other (Exp	lain in Re	emarks)			☐ Frost-Heave	Hummocks (D7)
☐ Sparsely	y Vegetated Conca	ve Surfac	e (B8)							
Field Of a	rvations:									
riela Obsei			NI- EX	Depth (inches	s): None	9				
	iter Present?	Yes 🗌	INO IXI							
Surface Wa		Yes ☐ Yes ☐	No ⊠ No ⊠		\mathfrak{s}_{0} : None	€				
Surface Wa Water Table	e Present?	Yes	No 🗷	Depth (inches			Wetl	and Hv	trology Present	? Yes⊠ No∏
Surface Wa Water Table Saturation F	e Present?					<u> </u>	Wetl	and Hyd	drology Present	? Yes⊠ No 🗆
Surface Wa Water Table Saturation F (includes ca	e Present? Present?	Yes ☐ Yes 🔀	No ⊠ No □	Depth (inches	s): <u>0</u>			-		? Yes⊠ No □
Surface Wa Water Table Saturation F (includes ca	e Present? Present? apillary fringe)	Yes ☐ Yes 🔀	No ⊠ No □	Depth (inches	s): <u>0</u>			-		? Yes⊠ No□
Surface Wa Water Table Saturation F (includes ca	e Present? Present? apillary fringe)	Yes ☐ Yes 🔀	No ⊠ No □	Depth (inches	s): <u>0</u>			-		? Yes⊠ No□
Surface Wa Water Table Saturation F (includes ca Describe Re	e Present? Present? apillary fringe) ecorded Data (strea	Yes ☑ Yes ☒ am gauge,	No ☑ No ☐ monitor	Depth (inches Depth (inches ring well, aerial	photos, p	revious in	spections),	if availa	ble:	
Surface Wa Water Table Saturation F (includes ca Describe Re Remarks: Hydrology	e Present? Present? apillary fringe) ecorded Data (strea	Yes Yes Market Yes Yes Yes Market Yes Yes Yes	No ☑ No ☐ monitor	Depth (inchest Depth	photos, p	revious in	spections),	if availa	ble:	ary indicators B9 and D2
Surface Wa Water Table Saturation F (includes ca Describe Re Remarks: Hydrology observed	e Present? Present? apillary fringe) ecorded Data (streated) criteria met thr on 9/15/16. Sat	Yes Yes Xem gauge,	No ☑ No ☐ monitor mary i	Depth (inchest Depth	photos, pand seconds. Preci	revious in ondary i pitation	spections), ndicators during th	if availa B9 an e 4/24/	ble: d D2. Second 18 visit was a	

Project/Site: 1077.0012 - South Hill Data Center	(City/Co	_{unty:} Puyallı	up/Pierce	Sampling Date: 9/15/16 & 4/24	4/18
Applicant/Owner: Benaroya Capital Company				State: WA	Sampling Point: DP-17	
				ownship, Range: <u>03, 19,</u>		
Landform (hillslope, terrace, etc.): Terrace		Local	relief (concave	, convex, none): Concav	/e Slope (%): 10)
Subregion (LRR): A2	_ Lat: 47.	15867	•	_ Long: -122.27869	Datum: WGS8	4
Soil Map Unit Name: Indianola				NWI classifica	tion: N/A	
Are climatic / hydrologic conditions on the site typical for this	time of yea	ır? Yes	× No □ (If no, explain in Remarks.)		
Are Vegetation, Soil, or Hydrology sign	ificantly dist	turbed?	Are "N	ormal Circumstances" pres	ent? Yes 🗵 No 🗌	
Are Vegetation, Soil, or Hydrology natu	rally problen	natic?	(If need	led, explain any answers in	Remarks.)	
SUMMARY OF FINDINGS - Attach site map	showing	samp	ling point l	ocations, transects,	important features, e	tc.
Hydrophytic Vegetation Present? Yes ☐ No 🗵						
Hydric Soil Present? Yes ☐ No 🗵			s the Sampled		- (2)	
Wetland Hydrology Present? Yes ☐ No 🗵		ľ	vithin a Wetla	nd? Yes □ N	0 🗷	
Remarks: No wetland criteria met. Data collected no	rth of Wetl	and Fi	n area that w	as historically disturbed	as shown by a 1985 aerial	
1 to weaming official files. 2 and concered no.	til of well		ii aica tiiat w	as motorically distarsed	us snown sy u 1705 uchun	•
VEGETATION – Use scientific names of plant	ts.					
T. 0. (DL.) (0.0)			ant Indicator	Dominance Test works	sheet:	
Tree Stratum (Plot size: 30 ft) 1. Alnus rubra	90	Yes	Status FAC	Number of Dominant Sp That Are OBL, FACW, o		
2				Total Number of Domina Species Across All Strat	_	
4.			al Cover	Percent of Dominant Sp	ecies	
Sapling/Shrub Stratum (Plot size: 15 ft)		= 101	ai Covei	That Are OBL, FACW, o		3)
1				Prevalence Index work		
2					Multiply by: x 1 =	
3					x 2 =	
4 5					x 3 =	
o	0	= Tota	al Cover		x 4 =	
Herb Stratum (Plot size: 5 ft)					x 5 =	
1. Rubus ursinus	60	Yes	FACU		(A) (B	3)
2				Provolence Index	= B/A =	
3				Hydrophytic Vegetatio		
4				Rapid Test for Hydro		
5				☐ Dominance Test is >		
6				☐ Prevalence Index is		
8.					tations ¹ (Provide supporting	
9					or on a separate sheet)	
10				☐ Wetland Non-Vascu	iar Plants [*] hytic Vegetation ¹ (Explain)	
11					and wetland hydrology must	
Woody Vine Stratum (Plot size: 30 ft)	60	= Tota	al Cover	be present, unless distu		
1				Hydrophytic		
2	0		ol Cover	Vegetation Present? Yes	s □ No ⊠	
% Bare Ground in Herb Stratum 40		= 10ta	al Cover	riesent: Tes		
Remarks: No hydrophytic vegetation criteria met.	Prevalen	ce inc	lex not warr	anted due to lack of o	combined hydric soil an	d
hydrology.					,	

	cription: (Describe	e to the d	epth ne				or confir	m the ab	sence	of indicators.)
Depth (inches)	Matrix Color (moist)	%	Colo	Redo r (moist)	ox Feature %	<u>s</u> Type¹	Loc ²	Textu	re	Remarks
0-18	10YR 5/4	100	-	in (moist)	-	<u>- 1900</u>	-	SaG		Sandy Gravelly Loam
	101110/1		-							Cana, Craren, Leann
<u> </u>										
¹ Type: C=C	oncentration, D=De	pletion, R	M=Red	uced Matrix, C	S=Covere	d or Coate	ed Sand G	Grains.	² Lo	cation: PL=Pore Lining, M=Matrix.
	Indicators: (Appli									ors for Problematic Hydric Soils ³ :
☐ Histosol	(A1)			Sandy Redox (S5)] 2 cn	n Muck (A10)
☐ Histic Ep	ipedon (A2)			Stripped Matrix					Red	Parent Material (TF2)
☐ Black His				Loamy Mucky N			MLRA 1)			y Shallow Dark Surface (TF12)
	n Sulfide (A4)			Loamy Gleyed)			Othe	er (Explain in Remarks)
	Below Dark Surfac	ce (A11)		Depleted Matrix				31		
	rk Surface (A12) lucky Mineral (S1)			Redox Dark Su Depleted Dark	, ,	7)		ી		ors of hydrophytic vegetation and and hydrology must be present,
-	leyed Matrix (S4)			Redox Depress	•	7)				ss disturbed or problematic.
	Layer (if present):			Todox Boprose	JIO113 (1 0)				unio	so disturbed or problematic.
Type: N/.				_						
Depth (in								Hydr	ic Soil	l Present? Yes □ No ⊠
Remarks:								riyai	10 001	Tresent: Tes No Es
			ماس بهما:	in the	م بران المالمال	ما الما الما	ا عمامہ مع			ha acon in the 1005 Diagon
		Earth c	isturb	ance in the	vicinity o	or this da	ata piot i	ocation	can	be seen in the 1985 Pierce
County ae	iai.									
HYDROLO	GY									
Wetland Hy	drology Indicators	s:								
Primary Indi	cators (minimum of	one requi	red; che	eck all that app	ly)				Seco	ndary Indicators (2 or more required)
☐ Surface	Water (A1)			☐ Water-Sta	ined Leave	es (B9) (e	xcept ML	RA	×V	/ater-Stained Leaves (B9) (MLRA 1, 2,
☐ High Wa	ter Table (A2)			1, 2, 4	A, and 4B)				4A, and 4B)
☐ Saturation	on (A3)			☐ Salt Crust	(B11)				□ D	rainage Patterns (B10)
☐ Water M	arks (B1)			☐ Aquatic In	vertebrate	s (B13)				ry-Season Water Table (C2)
☐ Sedimer	t Deposits (B2)			☐ Hydrogen	Sulfide Od	dor (C1)			□ s	aturation Visible on Aerial Imagery (C9)
☐ Drift Dep	osits (B3)			☐ Oxidized F	Rhizosphei	res along	Living Roo	ots (C3)	□G	eomorphic Position (D2)
☐ Algal Ma	t or Crust (B4)			☐ Presence	of Reduce	d Iron (C	1)		□ s	hallow Aquitard (D3)
☐ Iron Dep	osits (B5)			☐ Recent Iro	n Reduction	on in Tille	d Soils (C	6)	□ F.	AC-Neutral Test (D5)
☐ Surface	Soil Cracks (B6)			☐ Stunted or	r Stressed	Plants (D	1) (LRR A	()	☐ R	aised Ant Mounds (D6) (LRR A)
	on Visible on Aerial			☐ Other (Exp	olain in Re	marks)			□ F	rost-Heave Hummocks (D7)
☐ Sparsely	Vegetated Concav	e Surface	(B8)							
Field Obser	vations:				N1					
Surface Wat	er Present?	Yes 🗌	No 🔀	Depth (inche						
Water Table	Present?	Yes 🗌	No 🗵	Depth (inche						
Saturation P		Yes 🗌	No 🗵	Depth (inche	_{s):} <u>None</u>	!	Wet	land Hy	drolog	y Present? Yes ☐ No ⊠
(includes cap	oillary fringe) corded Data (strear	m dalide	monitor	ing well perial	nhotoe nr	ovious in	enactions)	if availa	hla:	
Pescine Ke	corded Data (Stiedi	ıı gauge,	HOHILOI	nig wen, aenal	ρποιοδ, μι	CVIOUS III	sheerious)	, ii availa	IDIC.	
Damerilia										
Remarks:	an e aultaula es es									
ino nyarok	ogy criteria met.									

Project/Site: 1077.0012 - South Hill Data Center	(City/County	_{/:} Puyallu	ıp/Pierce	Sampling Date: 9/15/16 & 4/24/18
Applicant/Owner: Benaroya Capital Company				State: WA	Sampling Point: DP-18
Investigator(s): Richard Peel, Alex Callender			Section, To	ownship, Range: <u>03, 19,</u>	04
Landform (hillslope, terrace, etc.): Terrace		Local relie	ef (concave,	, convex, none): Concav	<u>re</u> Slope (%): <u>5</u>
Subregion (LRR): A2	_ Lat: 47.	15842		Long: -122.27851	Datum: WGS84
Soil Map Unit Name: Indianola				NWI classifica	tion: N/A
Are climatic / hydrologic conditions on the site typical for this	s time of yea	ır? Yes 🗷	No ☐ (I	f no, explain in Remarks.)	
Are Vegetation, Soil, or Hydrology sign	nificantly disf	turbed?	Are "No	ormal Circumstances" pres	ent? Yes 🗵 No 🗌
Are Vegetation, Soil, or Hydrology natu	rally probler	matic?	(If need	ed, explain any answers in	Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing	samplin	g point le	ocations, transects,	important features, etc.
Hydrophytic Vegetation Present? Yes ☒ No ☐					
Hydric Soil Present? Yes ☒ No ☐			e Sampled		. 🗖
Wetland Hydrology Present? Yes ☒ No ☐		with	in a Wetlar	nd? Yes ☒ N	3 □
Remarks:		4	77 4 4	T	
All three wetland criteria met. Da	ta collec	ted in V	Vetland .	F.	
VEGETATION – Use scientific names of plan	ts.				
		Dominant		Dominance Test works	heet:
Tree Stratum (Plot size: 30 ft) 1. Alnus rubra	% Cover 90	Species? Yes	Status FAC	Number of Dominant Sp That Are OBL, FACW, o	
2					
3.				Total Number of Domina Species Across All Strat	_
4				Percent of Dominant Sp	eries
Sapling/Shrub Stratum (Plot size: 15 ft)	90	= Total C	over	That Are OBL, FACW, o	
1. Rubus spectabilis	30	Yes	FAC	Prevalence Index work	sheet:
2. Rubus armeniacus	5	No	FAC		Multiply by:
3. Spireae douglasii	5	No	FACW		x 1 =
4					x 2 =
5.					x 3 =
	40	= Total C	over	FACU species	x 4 =
Herb Stratum (Plot size: 5 ft)				UPL species	x 5 =
1				Column Totals:	(A) (B)
2				Dravalance Index	D/A
3					= B/A =
4				Hydrophytic Vegetatio Rapid Test for Hydro	
5				Dominance Test is >	
6				☐ Prevalence Index is	
7				_	tations ¹ (Provide supporting
8					or on a separate sheet)
9 10				☐ Wetland Non-Vascu	ar Plants ¹
11				☐ Problematic Hydropl	nytic Vegetation ¹ (Explain)
	0	= Total C	over		and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft)		- 101410	OVOI	be present, unless distu	bed or problematic.
1				Hydrophytic	
2	0			Vegetation Present? Yes	i⊠ No □
% Bare Ground in Herb Stratum 100	-	= Total C	over	Present? res	⊠ NO □
Remarks:		inones t	oot.	1	
Hydrophytic vegetation criteria met thr	Jugn dom	imance t	ટ ડા.		

Depth (inches)	Matrix Color (moist)	%	Colo	or (moist)	ox Feature %	Type ¹	Loc ²	Texture	е	Remarks
0-12	10YR 5/2	90		YR 4/6	10	CS	<u> </u>	GrSal		Gravelly Sandy Loam
	1011110/2							<u> </u>		
					_					
						- '				
	-							-		
					_					-
¹Type: C=C	oncentration, D=D	enletion	RM-Rad	uced Matrix C	S-Covere	d or Coat	ed Sand G	raine	21 00	ation: PL=Pore Lining, M=Matrix.
	Indicators: (App						eu Sanu O			rs for Problematic Hydric Soils ³ :
Histosol				Sandy Redox (·,				Muck (A10)
	oipedon (A2)			Stripped Matrix						Parent Material (TF2)
☐ Black Hi				Loamy Mucky N	, ,) (excep	t MLRA 1)	ī		Shallow Dark Surface (TF12)
	n Sulfide (A4)			Loamy Gleyed			,		-	r (Explain in Remarks)
	d Below Dark Surfa	ace (A11)		Depleted Matrix						,
☐ Thick Da	ark Surface (A12)			Redox Dark Su	rface (F6)			3In	dicato	rs of hydrophytic vegetation and
	lucky Mineral (S1)			Depleted Dark	Surface (F	7)				nd hydrology must be present,
	Bleyed Matrix (S4)			Redox Depress	ions (F8)				unles	s disturbed or problematic.
	Layer (if present)	:								
Type: <u>N</u> /				-						
Depth (in	ches):							Hydri	c Soil	Present? Yes ⊠ No □
Remarks:										
Hydric soil	criteria met th	rough in	dicator	S5 Farth d	isturban	ce in th	e vicinity	of this	data	plot location can be seen in the
	e County aeria									
								una mui		
			,	,	о тортоо	or itali v	0.0000	0113 1101	II CAC	
			,					Olis IIOI		
HYDROLO	GY							0115 1101		
Wetland Hy	drology Indicator	rs:								
Wetland Hy		rs:								ndary Indicators (2 or more required)
Wetland Hy	drology Indicator	rs:			ly)				Secor	
Wetland Hy Primary India	drology Indicator	rs:		eck all that app	ly)	es (B9) (e			Secor	ndary Indicators (2 or more required)
Wetland Hy Primary India	drology Indicator cators (minimum o Water (A1) ater Table (A2)	rs:		eck all that app	ly) ined Leave A, and 4B	es (B9) (e		RA A	Secor W	ndary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2,
Wetland Hy Primary India Surface High Wa	drology Indicator cators (minimum o Water (A1) ater Table (A2) on (A3)	rs:		eck all that app Water-Sta 1, 2, 4	ly) ined Leave A, and 4B (B11)	es (B9) (e		RA	Secor	ndary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
Wetland Hy Primary India ☐ Surface ☐ High Wa ☑ Saturatio ☐ Water M	drology Indicator cators (minimum o Water (A1) ater Table (A2) on (A3)	rs:		eck all that app Water-Sta 1, 2, 4	ly) ined Leav A, and 4B (B11) vertebrate	es (B9) (e) s (B13)		RA	Secor W Di	ndary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10)
Wetland Hy Primary India ☐ Surface ☐ High Wa ☑ Saturatio ☐ Water M ☐ Sedimer	drology Indicator cators (minimum o Water (A1) ater Table (A2) on (A3) larks (B1)	rs:		eck all that app Water-Sta 1, 2, 4, Salt Crust Aquatic In	ly) ined Leave A, and 4B (B11) vertebrate Sulfide Oc	es (B9) (e) s (B13) dor (C1)	except MLF	RA	Secor W W	ndary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep	drology Indicator cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2)	rs:		eck all that app Water-Sta 1, 2, 4 Salt Crust Aquatic Ind Hydrogen	ined Leave A, and 4B (B11) vertebrate Sulfide Oc	es (B9) (e) s (B13) dor (C1) res along	except MLF	RA ots (C3)	Secor W Di Control Secor	adary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) y-Season Water Table (C2) aturation Visible on Aerial Imagery (C9
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma	cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) on Deposits (B2) on (B3)	rs:		eck all that app Water-Sta 1, 2, 4. Salt Crust Aquatic In Hydrogen Oxidized F	ly) ined Leave A, and 4B (B11) vertebrate Sulfide Oc Rhizosphe of Reduce	es (B9) (e) s (B13) dor (C1) res along d Iron (C4)	except MLF	RA ots (C3)	Secor W Di Di Sa S Gi	adary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 ecomorphic Position (D2)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma	cators (minimum of water (A1) ater Table (A2) on (A3) atricks (B1) on Deposits (B2) on to Crust (B3) at or Crust (B4)	rs:		eck all that app Water-Sta 1, 2, 4. Salt Crust Aquatic In Hydrogen Oxidized F Presence	ined Leave A, and 4B (B11) vertebrate Sulfide Oc Rhizosphe of Reduce n Reduction	es (B9) (e) s (B13) dor (C1) res along d Iron (C4 on in Tille	except MLF Living Roo 4)	RA ots (C3)	Secor W Di Si Gi Si	ndary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) ainage Patterns (B10) y-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 eomorphic Position (D2) nallow Aquitard (D3)
Wetland Hy Primary India □ Surface □ High Wa ☑ Saturatio □ Water M □ Sedimer □ Drift Dep □ Algal Ma □ Iron Dep □ Surface	cators (minimum of water (A1) ter Table (A2) on (A3) larks (B1) on Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5)	rs: of one requ	uired; che	eck all that app Water-Sta 1, 2, 4. Salt Crust Aquatic In Hydrogen Oxidized F Presence	ined Leave A, and 4B (B11) vertebrate Sulfide Oc Rhizosphe of Reduce n Reductic Stressed	es (B9) (e) s (B13) dor (C1) res along d Iron (C- on in Tille Plants (D	Except MLF Living Roo 4) d Soils (C6	RA ots (C3)	Secor W Di Di Si Si F/	adary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 ecomorphic Position (D2) rallow Aquitard (D3) AC-Neutral Test (D5)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface	cators (minimum of water (A1) ster Table (A2) on (A3) starks (B1) nt Deposits (B2) cosits (B3) at or Crust (B4) cosits (B5) Soil Cracks (B6)	rs: one requal	uired; che	eck all that app Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or	ined Leave A, and 4B (B11) vertebrate Sulfide Oc Rhizosphe of Reduce n Reductic Stressed	es (B9) (e) s (B13) dor (C1) res along d Iron (C- on in Tille Plants (D	Except MLF Living Roo 4) d Soils (C6	RA ots (C3)	Secor W Di Di Si Si F/	adary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface	cators (minimum of water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) Soil Cracks (B6) on Visible on Aeria	rs: one requal	uired; che	eck all that app Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or	ined Leave A, and 4B (B11) vertebrate Sulfide Oc Rhizosphe of Reduce n Reductic Stressed	es (B9) (e) s (B13) dor (C1) res along d Iron (C- on in Tille Plants (D	Except MLF Living Roo 4) d Soils (C6	RA ots (C3)	Secor W Di Di Si Si F/	adary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Algal Ma Iron Dep Surface Inundatio	drology Indicator cators (minimum of Water (A1) Inter Table (A2) Inter Table (A2) Inter Table (A2) Inter Table (B1) Int Deposits (B2) Int Deposits (B3) Int or Crust (B4) Inter Table (B5) Inter Table (B6) Inter	rs: If one required the requirement of the require	uired; che	eck all that app Water-Sta 1, 2, 4, Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or	ined Leave A, and 4B (B11) vertebrate Sulfide Oc Rhizospher of Reduction r Reduction r Stressed plain in Re	es (B9) (e) s (B13) dor (C1) res along d Iron (C4) on in Tille Plants (D marks)	Except MLF Living Roo 4) d Soils (C6	RA ots (C3)	Secor W Di Di Si Si F/	adary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely	drology Indicator cators (minimum of Water (A1) Inter Table (A2) Inter Table (A2) Inter Table (B2) Inter Tab	rs: one requal	uired; che (B7) ce (B8)	eck all that app Water-Sta 1, 2, 4, Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ly) ined Leave A, and 4B (B11) vertebrate Sulfide Oc Rhizosphe of Reduce n Reduction Stressed blain in Re	es (B9) (e) s (B13) dor (C1) res along d Iron (Con in Tille Plants (Donarks)	Except MLF Living Roo 4) d Soils (C6	RA ots (C3)	Secor W Di Di Si Si F/	adary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatic Sparsely Field Obser Surface Water Table	drology Indicator cators (minimum of Water (A1) Inter Table (A2) Ion (A3) Iarks (B1) Int Deposits (B2) Ion (B3) Int Order (B4) Ion (B4) Ion (B5) Ion Visible on Aeria Inter Vegetated Concator Inter Table (A2) Ion (B4) Ion Visible on Aeria Inter Tresent? Inter Present?	rs: If one requal Imagery ave Surface Yes Yes Yes	uired; che (B7) ce (B8) No 🗵	eck all that app Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leave A, and 4B (B11) vertebrate Sulfide Oc Rhizosphe of Reduce n Reductic Stressed blain in Re s): None	es (B9) (e) s (B13) dor (C1) res along d Iron (Con in Tille Plants (Donarks)	Living Roo 4) d Soils (C6	RA ots (C3)	Secor W W Di Di Si Si Gi Ff	adary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 reomorphic Position (D2) rallow Aquitard (D3) AC-Neutral Test (D5) raised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Wat Water Table Saturation P (includes ca	drology Indicator cators (minimum of Water (A1) Inter Table (A2) Inter Table (A2) Inter Table (A2) Inter Table (B2) Inter Tab	rs: If one required in the second in the se	uired; che (B7) ce (B8) No 🗵 No 🖸	eck all that app Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leave A, and 4B (B11) vertebrate Sulfide Oc Rhizosphe of Reduce n Reductic Stressed blain in Re s): None s): None	es (B9) (e) s (B13) dor (C1) res along d Iron (C- on in Tille Plants (D marks)	Living Roo 4) d Soils (C6 1) (LRR A	RA ots (C3) s)	Secor	adary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 eomorphic Position (D2) hallow Aquitard (D3) AC-Neutral Test (D5) aised Ant Mounds (D6) (LRR A)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Wat Water Table Saturation P (includes ca	drology Indicator cators (minimum of Water (A1) Inter Table (A2) Inter Table (A2) Inter Table (B2) Inter Tab	rs: If one required in the second in the se	uired; che (B7) ce (B8) No 🗵 No 🖸	eck all that app Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leave A, and 4B (B11) vertebrate Sulfide Oc Rhizosphe of Reduce n Reductic Stressed blain in Re s): None s): None	es (B9) (e) s (B13) dor (C1) res along d Iron (C- on in Tille Plants (D marks)	Living Roo 4) d Soils (C6 1) (LRR A	RA ots (C3) s)	Secor	adary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 reomorphic Position (D2) rallow Aquitard (D3) AC-Neutral Test (D5) raised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Wat Water Table Saturation P (includes ca	drology Indicator cators (minimum of Water (A1) Inter Table (A2) Inter Table (A2) Inter Table (A2) Inter Table (B2) Inter Tab	rs: If one required in the second in the se	uired; che (B7) ce (B8) No 🗵 No 🖸	eck all that app Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leave A, and 4B (B11) vertebrate Sulfide Oc Rhizosphe of Reduce n Reductic Stressed blain in Re s): None s): None	es (B9) (e) s (B13) dor (C1) res along d Iron (C- on in Tille Plants (D marks)	Living Roo 4) d Soils (C6 1) (LRR A	RA ots (C3) s)	Secor	adary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 reomorphic Position (D2) rallow Aquitard (D3) AC-Neutral Test (D5) raised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Wat Water Table Saturation P (includes ca	drology Indicator cators (minimum of Water (A1) Inter Table (A2) Inter Table (A2) Inter Table (A2) Inter Table (B2) Inter Tab	rs: If one required in the second in the se	uired; che (B7) ce (B8) No 🗵 No 🖸	eck all that app Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp	ined Leave A, and 4B (B11) vertebrate Sulfide Oc Rhizosphe of Reduce n Reductic Stressed blain in Re s): None s): None	es (B9) (e) s (B13) dor (C1) res along d Iron (C- on in Tille Plants (D marks)	Living Roo 4) d Soils (C6 1) (LRR A	RA ots (C3) s)	Secor	adary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 reomorphic Position (D2) rallow Aquitard (D3) AC-Neutral Test (D5) raised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
Wetland Hy Primary India Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Surface Inundatio Sparsely Field Obser Surface Water Table Saturation P (includes ca Describe Re	drology Indicator cators (minimum of Water (A1) Inter Table (A2) Inter Table (A2) Inter Table (B2) Inter Tab	rs: If one required the requirement of the require	uired; che (B7) ce (B8) No 🗵 No 🖸 , monitor	eck all that app Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp Depth (inchest Depth (inchest Depth (inchest Depth (inchest Depth (aerial	ly) ined Leave A, and 4B (B11) vertebrate Sulfide Oc Rhizosphe of Reduce on Reductic Stressed blain in Re s): None s): None photos, pr	es (B9) (e) s (B13) dor (C1) res along d Iron (C- on in Tille Plants (D marks)	Living Roo 4) d Soils (C6 1) (LRR A) Wetl	RA ots (C3) s) dand Hyd if availab	Secor Secor Secor Recor Re	adary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 reomorphic Position (D2) rallow Aquitard (D3) rac-Neutral Test (D5) raised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)
Wetland Hy Primary India □ Surface □ High Wa ☑ Saturatio □ Water M □ Sedimer □ Drift Dep □ Algal Ma □ Iron Dep □ Surface □ Inundatio □ Sparsely Field Obser Surface Water Table Saturation P (includes ca) Describe Re Remarks: Hydrology	cators (minimum of cators (minimum of cators (minimum of water (A1)) ater Table (A2) on (A3) arks (B1) at Deposits (B2) osits (B3) at or Crust (B4) osits (B5) Soil Cracks (B6) on Visible on Aeria of Vegetated Concators are Present? are Present? are Present? bresent? bresent? corded Data (streat	rs: If one required the requirement of the require	uired; che (B7) te (B8) No 🗵 No 🖂 no itor imary ii	eck all that app Water-Sta 1, 2, 4 Salt Crust Aquatic In Hydrogen Oxidized F Presence Recent Iro Stunted or Other (Exp Depth (inchest Depth (inchest Depth (inchest Depth (inchest Depth (aprial)	ined Leave A, and 4B (B11) vertebrate Sulfide Oc Rhizosphe of Reduce on Reductic Stressed blain in Re s): None s): None photos, pr	es (B9) (e) s (B13) dor (C1) res along d Iron (C- on in Tille Plants (D marks) evious in	Living Roo 4) d Soils (C6 1) (LRR A) Wetl	RA ots (C3) s) land Hyd if availab	Secor Secor Secor Record Re	adary Indicators (2 or more required) ater-Stained Leaves (B9) (MLRA 1, 2, 4A, and 4B) rainage Patterns (B10) ry-Season Water Table (C2) aturation Visible on Aerial Imagery (C9 reomorphic Position (D2) rallow Aquitard (D3) AC-Neutral Test (D5) raised Ant Mounds (D6) (LRR A) rost-Heave Hummocks (D7)

Project/Site: 1077.0012 - South Hill Data Center	ıp / Pierce	Sampling Date: 04/24/2018				
Applicant/Owner: Benaroya Capital Company				Sampling Point: DP-19		
				ownship, Range: <u>03, 19,</u>		
Landform (hillslope, terrace, etc.): Hillslope		Local reli	ef (concave,	, convex, none): Concav	e Slope (%): 10	
Subregion (LRR): A2	_ _{Lat:} <u>47.</u>	1618747	885	Long: -122.2788292	995 Datum: WGS84	
Soil Map Unit Name: Indianola				NWI classificat	tion: PFOD	
Are climatic / hydrologic conditions on the site typical for this						
Are Vegetation, Soil, or Hydrology sign	nificantly dist	turbed?	Are "No	ormal Circumstances" pres	ent? Yes 🗌 No 🗌	
Are Vegetation, Soil, or Hydrology natu	rally probler	natic?	(If need	ed, explain any answers in	Remarks.)	
SUMMARY OF FINDINGS - Attach site map	showing	samplin	g point l	ocations, transects,	important features, etc.	
Hydrophytic Vegetation Present? Yes ☒ No ☐						
Hydric Soil Present? Yes ☒ No ☐			ne Sampled			
Wetland Hydrology Present? Yes ☒ No ☐		with	nin a Wetlar	nd? Yes ☒ No) [
Remarks:						
All three wetland criteria met. Da	ta collec	ted in V	Wetland	Е.		
VEGETATION – Use scientific names of plant	 ts.					
		Dominant	Indicator	Dominance Test works	heet:	
Tree Stratum (Plot size: 30 ft)	% Cover 100	Species? Yes	Status FAC	Number of Dominant Spe		
1. Alnus rubra				That Are OBL, FACW, or	r FAC: <u>4</u> (A)	
2				Total Number of Domina		
4				Species Across All Strata	a: <u>4</u> (B)	
	100	= Total C	Cover	Percent of Dominant Spe That Are OBL, FACW, or	ecies r FAC: <u>100%</u> (A/B)	
Sapling/Shrub Stratum (Plot size: 15 ft) 1. Acer circinatum	100	Yes	FAC	Prevalence Index work	sheet:	
2					Multiply by:	
3					x 1 =	
4.					x 2 =	
5.				FAC species	x 3 =	
	100	= Total C	Cover	FACU species	x 4 =	
Herb Stratum (Plot size: 5 ft)	20	Vaa	E40	UPL species	x 5 =	
1. Maianthemum dilatatum 2. Lysichiton americanus	20 20	Yes Yes	OBL	Column Totals:	(A) (B)	
- 			OBL	Prevalence Index	= B/A =	
3				Hydrophytic Vegetation		
4				☐ Rapid Test for Hydro		
5				Dominance Test is >	• •	
6				☐ Prevalence Index is :	≤3.0¹	
8.					ations ¹ (Provide supporting	
9					or on a separate sheet)	
10				Wetland Non-Vascul		
11					nytic Vegetation ¹ (Explain)	
Woody Vine Stratum (Plot size: 30 ft)	40	= Total C	Cover	be present, unless distur	and wetland hydrology must bed or problematic.	
1						
2				Hydrophytic		
	0	= Total C	Cover	Vegetation Present? Yes	⊠ No □	
% Bare Ground in Herb Stratum 60						
Remarks: Hydrophytic vegetation criteria met thro	ough dom	inance t	est.			
	J					

Depth	Matrix				ox Feature		12	T		Description
(inches) 0 - 11	Color (moist) 10YR 2/1	<u>%</u> 100	<u>Color</u>	(moist)	<u>%</u> -	Type ¹	Loc ²	Texture MuSa		Remarks Mucky loamy sand
11 - 16	10YR 4/1	98	10Y	'R 4/6	2	C,CS	M	GrSaL		Gravelly sandy loam
	101111111			11 1/0	- -			Orouz		Cravelly darray loans
	-		-							
	-				_					
			-		_					
17	Demonstration D. D.		M D-4	and Matrice O					21 -	
	Concentration, D=D I Indicators: (App						ea Sana G			cation: PL=Pore Lining, M=Matrix. ors for Problematic Hydric Soils ³ :
Histoso				andy Redox (,				Muck (A10)
	pipedon (A2)			tripped Matrix						Parent Material (TF2)
	listic (A3)			oamy Mucky I	, ,	1) (except	MLRA 1)			Shallow Dark Surface (TF12)
	en Sulfide (A4)			oamy Gleyed			·			er (Explain in Remarks)
Deplete	d Below Dark Surf	ace (A11)		epleted Matri	x (F3)					
	ark Surface (A12)			ledox Dark Su	, ,					ors of hydrophytic vegetation and
	Mucky Mineral (S1)			epleted Dark		- 7)				nd hydrology must be present,
•	Gleyed Matrix (S4)	<u> </u>	⊔R	edox Depress	sions (F8)			1	unles	s disturbed or problematic.
Type: N	Layer (if present)):								
	nches):							l		B 40 V 🖾 N 🗆
. ,	101100)							Hydric	Soil	Present? Yes ⊠ No □
Remarks:	I criteria met th									
HYDROLO	OGY									
	ydrology Indicato									
	icators (minimum o	of one requi								ndary Indicators (2 or more required)
_	Water (A1)		ļ	☐ Water-Sta			xcept MLF	RA [□ W	ater-Stained Leaves (B9) (MLRA 1, 2,
•	ater Table (A2)				A, and 4E	3)				4A, and 4B)
■ Saturati	` '			☐ Salt Crust		(=)		l		rainage Patterns (B10)
	Marks (B1)					. ,				ry-Season Water Table (C2)
	nt Deposits (B2)			☐ Hydrogen		` '				aturation Visible on Aerial Imagery (C9)
	posits (B3)			Oxidized F		_	_			eomorphic Position (D2)
_	at or Crust (B4)			☐ Presence						nallow Aquitard (D3)
	posits (B5) Soil Cracks (B6)			☐ Recent Iro			•	•		AC-Neutral Test (D5)
	ion Visible on Aeria	al Imageny (☐ Stunted of☐ Other (Explicitly)			I) (LKK A) l		aised Ant Mounds (D6) (LRR A) ost-Heave Hummocks (D7)
	y Vegetated Conca				piairi iri ixe	iliaiks)		l	' ' '	ost-rieave ridiffillocks (D1)
Field Obse		ave Gariace	(50)							
	iter Present?	Yes 🗌	No 🔀	Depth (inche	s). None)				
Water Table			No 🗌	Depth (inche						
Saturation F			No 🗆	Depth (inche			Wet	land Hvdr	oloa	y Present? Yes ⊠ No □
(includes ca	apillary fringe)									,
	ecorded Data (stre	am gauge,	monitorii	ng well, aerial	photos, p	revious ins	spections),	if availab	le:	
Remarks:										
11 12 1	and the second of the second of the second					^				
Hydrology	criteria met th	rough pri	mary ir	ndicators A	2 and A	3.				
Hydrology	/ criteria met th	rough pri	mary ir	ndicators A	2 and A	3.				

Project/Site: 1077.0012 - South Hill Data Center		City/C	ounty	: Puyallu	ıp / Pierce	Sampling Date: 04/24/2018
		-				Sampling Point: DP-20
					ownship, Range: <u>03, 19</u>	· -
Landform (hillslope, terrace, etc.): Hillslope		Loca	ıl relie	f (concave,	convex, none): Concav	ve Slope (%): 5
Subregion (LRR): A2	Lat: 47.	1605	3087	715	Long: -122.276306	545833 Datum: WGS84
					NWI classifica	
Are climatic / hydrologic conditions on the site typical for this					f no, explain in Remarks.)	
Are Vegetation, Soil, or Hydrology sign	nificantly dist	turbec	1?	Are "No	ormal Circumstances" pre	sent? Yes ☒ No ☐
Are Vegetation, Soil, or Hydrology natu	rally probler	matic?		(If need	ed, explain any answers i	n Remarks.)
SUMMARY OF FINDINGS - Attach site map				g point le	ocations, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes ☐ No 🗵						
Hydric Soil Present? Yes ☐ No 🗵	nil Present? Yes □ No 🗷					
Wetland Hydrology Present? Yes ☐ No 🗵			withi	in a Wetlar	nd? Yes □ N	10 🗷
No wetland criteria met. Data collect VEGETATION – Use scientific names of plant		land	fore	sted area	a previously mapped	as potential wetlands.
VEGETATION – Ose scientific fiames of plan	Absolute	Dom	inant	Indicator	Dominance Test work	shoot:
Tree Stratum (Plot size: 30 ft)	% Cover				Number of Dominant Sp	
1. Acer macrophyllum	60	Ye	S	FACU	That Are OBL, FACW, of	
2. Pseudotsuga menziesii	40	Ye	S	FACU	Total Number of Domin	ant
3					Species Across All Stra	•
4					Percent of Dominant Sp	necies
Ocalica (Obsah Otsahara (District 45 (t)	100	= To	otal Co	over	That Are OBL, FACW, of	or FAC: <u>50%</u> (A/B)
Sapling/Shrub Stratum (Plot size: 15 ft) 1. Rubus spectabilis	30	Ye	s	FAC	Prevalence Index wor	kshoot:
						Multiply by:
2						x 1 =
4						x 2 =
5						x 3 =
	30	= To	otal Co	over		x 4 =
Herb Stratum (Plot size: 5 ft)					•	x 5 =
1. Urtica dioica	10					(A) (B)
2					Dlana a landau	D/A
3						= B/A =
4					Hydrophytic Vegetatio	
5					Rapid Test for Hydr Dominance Test is:	· ·
6					☐ Prevalence Index is	
7					_	otations ¹ (Provide supporting
8						s or on a separate sheet)
9					☐ Wetland Non-Vascu	ılar Plants ¹
10 11					☐ Problematic Hydrop	hytic Vegetation ¹ (Explain)
111.	40	= To	ntal Co	over		I and wetland hydrology must
Woody Vine Stratum (Plot size: 30 ft)			olai O		be present, unless distu	rbed or problematic.
1					Hydrophytic	
2	^				Vegetation	
% Bare Ground in Herb Stratum 90	0	= To	otal Co	over	Present? Yes	s No 🗵
Remarks:						
No hydrophytic vegetation criteria met. hydrology.	Prevalen	nce ir	ndex	not warra	anted due to lack of	combined hydric soil and

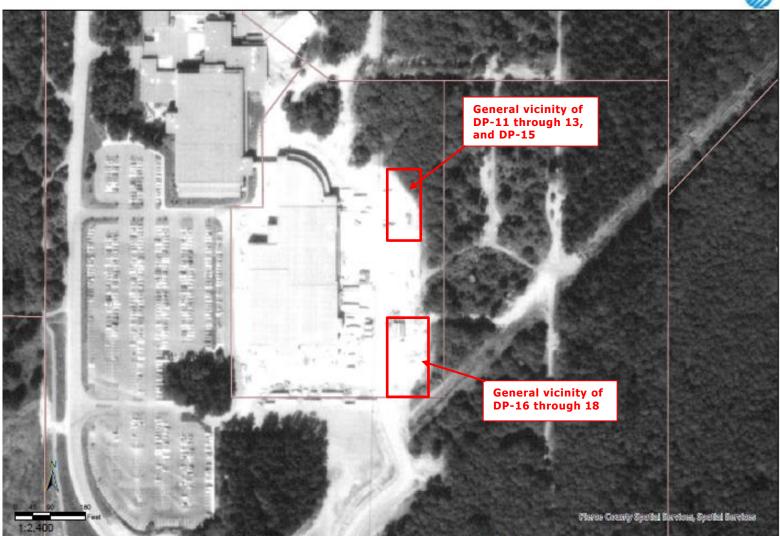
Depth	cription: (Describ Matrix		ieptn ne		ment tne ox Feature		or confir	m the ac	sence	or indicators.)	
(inches)	Color (moist)	%	Colc	or (moist)	%	Type ¹	Loc ²	Textu		Remarks Programme Remarks	
0 - 8	10YR 2/2	100	<u>-</u>			-	-	SaLo)	Sandy loam	
8 - 14	10YR 3/3	100	-		-	-	-	SaLo)	Sandy loam	
	-										_
											_
	-										
1Type: C=C	concentration, D=D	enletion F	M-Rad	luced Matrix C	S-Covere	nd or Coate	ad Sand (2l oc	cation: PL=Pore Lining, M=Matrix.	_
	Indicators: (App						eu Sanu C			ors for Problematic Hydric Soils ³ :	
☐ Histosol				Sandy Redox (,				Muck (A10)	
	oipedon (A2)			Stripped Matrix						Parent Material (TF2)	
	stic (A3)			Loamy Mucky N	. ,	1) (except	MLRA 1) [Shallow Dark Surface (TF12)	
☐ Hydroge	en Sulfide (A4)			Loamy Gleyed	Matrix (F2	2)			Othe	er (Explain in Remarks)	
-	d Below Dark Surfa	ace (A11)		Depleted Matrix							
	ark Surface (A12)			Redox Dark Su	. ,			³		ors of hydrophytic vegetation and	
	Mucky Mineral (S1)			Depleted Dark	,	- 7)				nd hydrology must be present,	
	Bleyed Matrix (S4)			Redox Depress	sions (F8)			-	unles	s disturbed or problematic.	
Type: N	Layer (if present)	:									
	ches):			_				1		B 10 V 🗆 V 🖼	
, ,				•				Hydr	ic Soil	Present? Yes ☐ No ☒	
Remarks:											
No hydric	soil criteria met	t.									
HYDROLC											
_	drology Indicator										
· ·	cators (minimum o	t one requ	ired; ch							ndary Indicators (2 or more required)	
Surface	` '			☐ Water-Sta			xcept ML	-RA	∐ W	ater-Stained Leaves (B9) (MLRA 1, 2	.,
_	ater Table (A2)				A, and 4E	3)				4A, and 4B)	
☐ Saturation	` '			☐ Salt Crust	` '	(-)				rainage Patterns (B10)	
	larks (B1)			Aquatic In		, ,				ry-Season Water Table (C2)	
	nt Deposits (B2)			Hydrogen		' '				aturation Visible on Aerial Imagery (CS	9)
	posits (B3)			Oxidized F	•	-	•	ots (C3)		eomorphic Position (D2)	
	at or Crust (B4)			☐ Presence		•	•	10)		nallow Aquitard (D3)	
-	oosits (B5)			☐ Recent Iro			,	,		AC-Neutral Test (D5)	
_	Soil Cracks (B6)	Image	/D7\	☐ Stunted or			1) (LKK A	' ()		aised Ant Mounds (D6) (LRR A)	
	on Visible on Aeria / Vegetated Conca			☐ Other (Exp	olain in Ke	inarks)			r	ost-Heave Hummocks (D7)	
☐ Sparsely		ive Suriace	e (DO)								
		Vac \square	No 🖬	Depth (inche	a. None	,					
Surface Wa			No 🗵								
Water Table			No 🗵	Depth (inche							
Saturation F (includes ca	resent? pillary fringe)	Yes 🗌	No 🗵	Depth (inche	s): <u>140116</u>	<u>, </u>	We	tiand Hy	arolog	y Present? Yes ☐ No 🗵	
	ecorded Data (strea	am gauge,	monitor	ing well, aerial	photos, p	revious in	spections)), if availa	ble:		
		_ '									
Remarks:											
No hydrol	ogy criteria met	t.									
,	3,										

Attachment D – Historical Aerials

his attachmen	includes a 1985 Pierce County aerial (D1) and a 1998 Pierce County aerial (D	2).

Attachment D1 – 1985 Pierce County Aerial

1985 Aerial



Disclasmer: The map features are approximate and have not been surveyed. Additional features not yet mapped may be present.

Pierce County assumes no liability for variations ascertained by formal survey.

Date: 9/22/2021 06:26 PM

Attachment D2 – 1998 Pierce County Aerial

1998 Aerial





Disclaimer: The map features are approximate and have not been surveyed. Additional features not yet mapped may be present.

Pierce County assumes no liability for variations ascertained by formal survey.

Date: 9/22/2021 05:17 PM