APPENDIX B

Wetland Determination Data Forms



Drainet/Cita, Ningually State Dayle			C:tv/	/County // C	Diarea Compline data: 0.24.2020
Project/Site: Nisqually State Park			_ City/	/County: <u>F</u>	
Applicant/Owner: Washington State Parks					State: WA Sampling Point: DP-1
Investigator(s): Roen Hohlfeld and Jamie Sloan					Range: S19, T16N, R04E
Landform (hillslope, terrace, etc): Small depression		— L	ocal re	elief (concav	e, convex, none): None Slope (%): 5
Subregion (LRR): A Lat: -		Long:			Datum: -
Soil Map Unit Name: Barneston gravelly ashy coarse	sandy loar	m, 0 to	8% slo	pes NW	I classification: none
Are climatic / hydrologic conditions on the site typical for	this time of	f year?	⊠ Yes	s 🗆 No	(If no, explain in remarks.)
Are Vegetation \square , Soil \square , or Hydrology \square significantly d	listurbed?		Are "	"Normal Circ	cumstances" present on the site? ⊠ Yes □ No
Are Vegetation \square , Soil \square , or Hydrology \square naturally prob	lematic?		(If ne	eeded, expla	ain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map s	howing sa	ampling	g point	t locations,	transects, important features, etc.
Hydrophytic Vegetation Present? Yes ⊠			-		
Hydric Soils Present? Yes □	No	\boxtimes		the Sampl vithin a We	
Wetland Hydrology Present? Yes □	No		••	/Itimi a ++>	stianu:
Remarks: Click here to enter text.					
VEGETATION – Use scientific names of plants.					
	Absolute		ninant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 5-m diameter) 1. Populus balsamifera	% Cover 70		cies? 'es	Status FAC	Number of Dominant Species 4 that are OBL, FACW, or FAC: (A)
Thuja plicata	20		es 'es	FAC	Total Number of Dominant
3.					Species Across all Strata: (B)
4	90	= Tc	otal Cov	ver	Percent of Dominant Species that are OBL, FACW, or FAC: 80% (A/B)
Sapling/Shrub Stratum (Plot size: 3-m diameter)				•••	Prevalence Index worksheet:
1. Fraxinus latifolia	85		'es	FACW	Total % Cover of: Multiply by:
2. <u>Corylus cornuta</u> 3.	10		No	FACU	OBL species x 1 = FACW species x 2 =
4.					FACW species
5.					FACU species x 4 =
Herb Stratum (Plot size: 1-m diameter)	95	_ = To	otal Cov	ver	UPL species x 5 = Column Totals: (A) (B)
1. Rubus ursinus	15	Y	'es	FACU	Prevalence Index = B/A =
2. Carex deweyana	10		'es	FAC	
Galium aparine Phalaris arundinacea	5 1		<u> </u>	FACU FACW	Hydrophytic Vegetation Indicators: ☐ 1 – Rapid Test for Hydrophytic Vegetation
5.				17.0	□ 2 – Dominance Test is > 50%
6. 7.					☐ 3 – Prevalence Index is ≤ 3.0¹ ☐ 4 – Morphological Adaptations¹ (Provide supporting
8					data in Remarks or on a separate sheet)
9					☐ 5 – Wetland Non-Vascular Plants¹
10. 11.					☐ Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be
···		= To	tal Co	ver	present, unless disturbed or problematic.
Woody Vine Stratum (Plot size: 3-m diameter)		_			
1					│ Hydrophytic │ Vegetation Yes No
	-	= Tc	otal Cov	ver	Present?
% Bare Ground in Herb Stratum: 75					
Remarks:					

			the c	lepth	need	ed to d			cator	or confirm the ab	sence	of indicators.)		
Depth (inches)	Matrix Color (moist)		%	Co	olor (n	noist)		ox Features %	Туре	Loc ²		Texture		Remarks
0-8	10YR 3/2		00						71.			Loam		
8-16	10YR 3/4	10	00									Loam		
1Typo: C=C	Concontration D	-Doplo	tion F	DM_D	oduco	d Matri	v CS-	-Covered or I	Coato	d Sand Grains	21 00:	DI -Doro Lining	M-Ma	triv
	Concentration, D=								Coale			PL=Pore Lining, tors for Probler		
_	ol (A1)	pnoar	3.0.10	u		Sandy		•				cm Muck (A10)	iiatio i	iyano cons .
	Epipedon (A2)					Strippe		` '				Red Parent Mater	ial (TF	2)
	Histic (A3)					-	-	,	, .	· - I · · /		ery Shallow Darl		
	gen Sulfide (A4)	Surface	. (`				ed Matrix (F2) trix (F3))			other (Explain in I	Remar	ks)
	ted Below Dark S Dark Surface (A		(A I I)				Surface (F6)			3 Indica	ators of hydrophy	tic vec	netation and
	Mucky Mineral	,						k Surface (F	7)		we	etland hydrology	must b	
☐ Sandy	Gleyed Matrix (S4)				Redox	Depre	ssions (F8)			dis	sturbed or proble	matic.	
Restrictive	Layer (if prese	nt):								Hardela a di				
Type:										Hydric soil present?		Yes [No 🛛
Depth	(inches):									present:				
Remarks:														
Nemarks.														
HYDROL	ngy													
	ydrology Indica	tors:												
Primary Inc	dicators (minimur	n of on	e requ	uired:	check	all that	apply)			Seco	ndary Indicators	(2 or m	nore required)
	ce water (A1)								(exce	pt MLRA 1, 2, 4A			Leaves	s (B9) (MLRA 1 ,
_	Vater Table (A2) ation (A3)) (B9) Crust (2, 4A & 4B) Drainage Patte	rno (Dí	10)
	Marks (B1)						,	ertebrates (E	313)			Dry-Season Wa	,	,
	ent Deposits (B2	2)						Sulfide Odor						erial Imagery (C9
	eposits (B3)	,				Oxidi	zed Rł	hizospheres a	along	Living Roots (C3)	\boxtimes	Geomorphic Po	sition	(D2)
_	Mat or Crust (B4))						of Reduced In				Shallow Aquitar		
	eposits (B5)	۵)								ed Soils (C6)		FAC-Neutral Te		
	ce Soil Cracks (B ation Visible on A		mader	v (B7)	_ 			Stressed Pla ain in remark		01) (LRR A)		Raised Ant Mou		
	ely Vegetated Co		_			Ollie	i (expi	alli ili i ciliali	N3)			1 103t-1 leave 1 it	arriirioc	, NO
Field Obse				(-	-,									
Surface Wa	ater Present?	Yes		No	\boxtimes	Depth	n (in):	-						
Water Tabl		Yes		No		Depth	. ,	-		Wetland Hydr Present		Yes	□	No 🛛
Saturation	Present?	Yes		No	\boxtimes	Depth	. ,	-						
	apillary fringe)													
Describe R	ecorded Data (st	tream (gauge	, mon	itoring	y well, a	erial pl	hotos, previo	ous in	spections), if availa	able:			
Remarks:	Soil profile dr	y to 18	-inche	es BS	G. Ge	omorph	ic posi	ition is a dep	ressio	on.				
	-						-	·						



Project/Site: Nisqually State Park		City/0	County: P	rierce Samr	oling date:	9-21-20	020
Applicant/Owner: Washington State Parks				State: WA Sa	•		
Investigator(s): Roen Hohlfeld and Jamie Sloan		Section	Township	Range: S19, T16N, R04E	mpiing r oi	III <u>Di 2</u>	
Landform (hillslope, terrace, etc): Depression		='		e, convex, none): concave	SI		<2
		_	iei (concave	Datum:		ље (<i>7</i> 6).	
• · · / <u></u>		ng: <u>-</u>	NIM				
Soil Map Unit Name: Barneston gravelly ashy coarse							
Are climatic / hydrologic conditions on the site typical for	•				2 ⊠ Vaa	□ No	
Are Vegetation ☐, Soil ☐, or Hydrology ☐ significantly of				cumstances" present on the site	e Ares	□ NO	
Are Vegetation □, Soil □, or Hydrology □ naturally prob	nemano:	(II ne	eded, expla	in any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site map s	howing samp	ling point	locations,	transects, important feature	es, etc.		
Hydrophytic Vegetation Present? Yes ⊠	No 🗆						
Hydric Soils Present? Yes ⊠	No 🗆		he Sample thin a We		× N	No 🗆	
Wetland Hydrology Present? Yes ⊠	No 🗆						
Remarks: Wetland CC in-pit.							
VEGETATION – Use scientific names of plants.							
	Absolute D	Dominant	Indicator	Dominance Test worksheet			
Tree Stratum (Plot size: 5-m diameter)	% Cover S	Species?	Status	Number of Dominant Species	3	3	
Fraxinus latifolia Acer macrophyllum	95 5	Yes No	FACW FACU	that are OBL, FACW, or FAC	:		(A)
3		INO	TACO	Total Number of Dominant Species Across all Strata:		4	(B)
4	400	T		Percent of Dominant Species		75%	(A (D)
	100 =	= Total Cov	er	that are OBL, FACW, or FAC			(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diameter) 1. Symphoricarpos albus	20	Yes	FACU	Prevalence Index workshee Total % Cover of:	et: Multiply	bv:	
2. Ribes divaricatum	10	Yes	FAC	OBL species	x 1 =		_
3.				FACW species	x 2 =		_
4 5.				FAC species FACU species	x 3 = x 4 =		_
	30 =	Total Cov	er	UPL species	x 5 =		_
Herb Stratum (Plot size: 1-m diameter) 1. Carex obnupta	85	Yes	OBL	Column Totals:	(A)		(B)
1. Carex obnupta 2.		103	ODL	Prevalence Index = B/A =			
3				Hydrophytic Vegetation ☐ 1 – Rapid Test for Hydro			
4 5.				□ 1 - Rapid Test for Hydro□ 2 - Dominance Test is >		jetation	
6.				☐ 3 – Prevalence Index is :			
7. 8.				4 – Morphological Adapt data in Remarks or of			
9.				☐ 5 – Wetland Non-Vascul	ar Plants ¹	ŕ	
10.				 □ Problematic Hydrophytic ¹Indicators of hydric soil and ¹ 	-		
11.	85 =	Total Cov	er	present, unless disturbed or p			usi be
Woody Vine Stratum (Plot size: 3-m diameter)							
1				Hydrophytic Vegetation Υε	es 🏻	No 🗆	
	- =	Total Cov	er	Present?	,3 🔼	110	
% Bare Ground in Herb Stratum: 15							
Remarks:							
1							

	scription: (Descr	ibe to the	depth neede			or confirm the at	osence	of indicators.)	
Depth (inches)	Matrix Color (moist)	%	Color (m		Features Type	e ¹ Loc ²	2	Texture	Remarks
0-13	10YR 2/1	95	111) 10100	0101) 70	турс			Silty loam	Mixed matrix
0 10	1011(2/1							Only loans	Greasy/organics Mixed matrix
0-13	10YR 2/2	5						Silty loam	Greasy/organics
									<u> </u>
¹Type: C=0	Concentration, D=I	Depletion, I	RM=Reduce	d Matrix, CS=Co	overed or Coate	ed Sand Grains.	² Loc:	PL=Pore Lining, I	M=Matrix.
Hydric So	il Indicators: (Ap	plicable to	all LRRs, u	nless otherwise	e noted.)		Indica	tors for Problem	natic Hydric Soils³:
☐ Histos	sol (A1)			Sandy Redox (S	S5)		□ 2	cm Muck (A10)	
	Epipedon (A2)			Stripped Matrix	` '			led Parent Materi	
	Histic (A3)			Loamy Mucky M		cept MLRA 1)		ery Shallow Dark	
,	gen Sulfide (A4)			Loamy Gleyed N			\boxtimes C	other (Explain in F	Remarks)
	ted Below Dark S		,	Depleted Matrix	` '		31		Carrage ta Carrage at
	Dark Surface (A1: Mucky Mineral (S			Redox Dark Sur Depleted Dark S	, ,				tic vegetation and must be present, unless
	y Gleyed Matrix (S			Redox Depressi	, ,			sturbed or probler	
		•		redux Depressi	0113 (1 0)				
Restrictive	e Layer (if presen	it):				Hydric soil	I	_	
Type:	Cobble					present?		Yes 🗵	No □
Depth	(inches):	13-inches E	3SG			procent			
Remarks:	High organic m	atter conte	nt masking re	edox; presumed	to meet indicat	or F6.			
HYDROL	OGY								
	lydrology Indicat dicators (minimum		uired: check	all that annly)			Seco	ndary Indicators (2 or more required)
	ce water (A1)	or one req	uncu. criccit		d Looves (aves	m4 MI DA 4 2 4A			' '
	Water Table (A2)			**************************************	ı Leaves (exce	pt MLRA 1, 2, 4A	· 🗆	vvater-Stained L 2, 4A & 4B)	Leaves (B9) (MLRA 1,
_	ation (A3)			Salt Crust (B1	1)			Drainage Patter	ns (B10)
	Marks (B1)			Aquatic Invert				Dry-Season Wa	, ,
	nent Deposits (B2)			Hydrogen Sul				•	e on Aerial Imagery (C9)
	Deposits (B3)					Living Roots (C3)	\boxtimes	Geomorphic Po	
	Mat or Crust (B4)				Reduced Iron (C			Shallow Aquitar	, ,
-	eposits (B5)			Recent Iron R	eduction in Tille	ed Soils (C6)	\boxtimes	FAC-Neutral Te	
☐ Surfac	ce Soil Cracks (B6	i)		Stunted or Str	essed Plants ([01) (LRR A)		Raised Ant Mou	inds (D6) (LRR A)
☐ Inund	ation Visible on A	erial Imagei	y (B7) 🗆	Other (explain	in remarks)			Frost-Heave Hu	mmocks
☐ Spars	ely Vegetated Cor	ncave Surfa	ace (B8)						
Field Obse	ervations:								
Surface Wa	ater Present?	Yes □	No ⊠	Depth (in):	-	Wetland Hyd	Irology		_
Water Tab	le Present?	Yes □	No ⊠	Depth (in):	-	Present	0,	Yes	⊠ No □
Saturation (includes of	Present? apillary fringe)	Yes □	No 🗵	Depth (in):	-				
	Recorded Data (str	eam dalige	monitoring	well aerial phot	os previous in	spections) if avail	able.		
Dogonibo	Coordod Data (Sti	Jan gauge	, mormornig	, acriai priot	.cc, provious iri	opoulonoj, ii avali	abio.		
Remarks:	Geomorphic p	osition is a	depression.						
			•						



Project/Site: Nisqually State Park		City	/County: P	rierce Sampling date: _ 9-21-2020
Applicant/Owner: Washington State Parks				State: WA Sampling Point: DP-3
Investigator(s): Roen Hohlfeld and Jamie Sloan		Section	Townshin	Range: S19, T16N, R4E
Landform (hillslope, terrace, etc): Hummocky depres	cion			
	51011		eller (coricave	
Subregion (LRR): <u>A</u> Lat: <u>-</u>		Long:		Datum:
Soil Map Unit Name: Barneston gravelly ashy coarse	sandy loam	n, 0 to 8% slo	ppes NW	I classification: none
Are climatic / hydrologic conditions on the site typical for	this time of	year? 🛭 Ye	s 🗆 No ((If no, explain in remarks.)
Are Vegetation \square , Soil \square , or Hydrology \square significantly of	disturbed?	Are	"Normal Circ	eumstances" present on the site? ⊠ Yes □ No
Are Vegetation \square , Soil \square , or Hydrology \square naturally prob	olematic?	(If n	eeded, expla	in any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map s	howing sar	npling poin	t locations,	transects, important features, etc.
Hydrophytic Vegetation Present? Yes □	No 🛭		the Campl	ad Araa
Hydric Soils Present? Yes □	No 🛭		the Sampl vithin a We	
Wetland Hydrology Present? Yes □	No 🛭			
Remarks: Click here to enter text.		•		
Normands. Offer field to differ to At.				
VECETATION				
VEGETATION – Use scientific names of plants.				
	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 5-m diameter)	% Cover	Species?	Status	Number of Dominant Species 2
Frangula purshiana Acer macrophyllum	25 25	Yes Yes	FAC FACU	that are OBL, FACW, or FAC: (A) Total Number of Dominant
Pseudotsuga menziesii	20	Yes	FACU	Species Across all Strata:
4. Fraxinus latifolia	20	Yes	FACW	Percent of Dominant Species 22%
	90	= Total Co	ver	that are OBL, FACW, or FAC: (A/B)
Sapling/Shrub Stratum (Plot size: 3-m diameter)				Prevalence Index worksheet:
Oemleria cerasiformis Gaultheria shallon	20	Yes	FACU	Total % Cover of: Multiply by:
Gaultheria shallon Acer macrophyllum	15 12	Yes Yes	FACU FACU	OBL species x 1 = FACW species x 2 = 40
4.				FAC species 25 x 3 = 75
5.				FACU species 195 x 4 = 780
Hoch Charture (Diet sines 4 as dispersed a)	47	= Total Co	ver	UPL species x 5 = (D)
Herb Stratum (Plot size: 1-m diameter) 1. Polystichum munitum	75	Yes	FACU	Column Totals: 240 (A) 895 (B)
2. Rubus ursinus	25	Yes	FACU	Prevalence Index = $B/A = 3.7$
3. Geranium robertii	2	No	FACU	Hydrophytic Vegetation Indicators:
4. Galium aparine	1	No	FACU	☐ 1 – Rapid Test for Hydrophytic Vegetation☐ 2 – Dominance Test is > 50%
5. 6.				☐ 3 – Prevalence Index is ≤ 3.01
7.				4 – Morphological Adaptations ¹ (Provide supporting
8				data in Remarks or on a separate sheet) 5 – Wetland Non-Vascular Plants¹
9				□ Problematic Hydrophytic Vegetation¹ (Explain)
10 11				¹ Indicators of hydric soil and wetland hydrology must be
	103	= Total Co	ver	present, unless disturbed or problematic.
Woody Vine Stratum (Plot size: 3-m diameter)				
1.				Hydrophytic Vegetation Yes ☐ No ☒
2		= Total Co	ver	Present?
% Bare Ground in Herb Stratum: 0				
Remarks:				

Profile Des	scription: (Descr Matrix	ibe to the	depth neede		ent the indicato	r or confirm the al	bsence	of indicators.))	
(inches)	Color (moist)	%	Color (m		% Typ	pe ¹ Loc	2	Texture	R	emarks
0-14	10YR 3/4	90	7.5 YR		5 C			Sandy loam w/cobble		ed matrix
			10YR :	3/6	5 C	; M		Sandy loam w/cobble	Mix	ed matrix
¹Type: C=0	Concentration, D=	Depletion,	RM=Reduce	d Matrix, CS	=Covered or Coa	ted Sand Grains.	² Loc:	PL=Pore Lining	ı, M=Matrix	•
Hydric So	il Indicators: (Ap	plicable to	all LRRs, u	nless otherv	wise noted.)		Indica	tors for Proble	ematic Hyd	Iric Soils³:
	sol (A1)			Sandy Redo	` '			cm Muck (A10)		
	Epipedon (A2)			Stripped Mat	` '			ed Parent Mate		
	Histic (A3)				y Mineral (F1) (e:	xcept MLRA 1)		ery Shallow Da		
	gen Sulfide (A4)	turfoos (A 1			ed Matrix (F2)			ther (Explain in	i Remarks)	
	ted Below Dark S Dark Surface (A1			Depleted Ma	Surface (F6)		3 India	ators of hydropl	ovtic vogot	ation and
	/ Mucky Mineral (,			rk Surface (F7)			etland hydrolog		
	Gleyed Matrix (S			Redox Depre				sturbed or probl		rocorn, armood
		•		rtodox Bopit	30010110 (1 0)			· · ·		
Restrictive	e Layer (if preser	nt):				Hydric soi				
Type:						present?	•	Yes	☐ No	×
Denth	(inches):					present:				
	()									
Remarks:	5-10% cobble									
HYDROL	ngy									
	lydrology Indicat	tors:								
	dicators (minimum		quired: check	all that apply	')		Seco	ndary Indicators	s (2 or more	e required)
☐ Surfac	ce water (A1)			Water-Stai	ned Leaves (exc	ept MLRA 1, 2, 4A	· _	Water-Stained	d Leaves (E	39) (MLRA 1 ,
☐ High \	Nater Table (A2)			& 4B) (B9)		•		2, 4A & 4B)	`	, ,
☐ Satura	ation (A3)			Salt Crust	(B11)			Drainage Patt	erns (B10)	
□ Water	Marks (B1)			Aquatic Inv	vertebrates (B13)			Dry-Season V	Vater Table	(C2)
☐ Sedim	nent Deposits (B2))		Hydrogen	Sulfide Odor (C1))		Saturation Vis	ible on Aeri	al Imagery (C9)
☐ Drift □	Deposits (B3)			Oxidized R	hizospheres alon	g Living Roots (C3)	\boxtimes	Geomorphic F	Position (D2	2)
☐ Algal I	Mat or Crust (B4)			Presence of	of Reduced Iron (C4)		Shallow Aquit	ard (D3)	
☐ Iron D	eposits (B5)			Recent Iro	n Reduction in Ti	lled Soils (C6)		FAC-Neutral	Γest (D5)	
☐ Surfac	ce Soil Cracks (Be	6)		Stunted or	Stressed Plants	(D1) (LRR A)		Raised Ant Mo	ounds (D6)	(LRR A)
☐ Inunda	ation Visible on A	erial Image	ery (B7)	Other (exp	lain in remarks)			Frost-Heave H	Hummocks	
☐ Spars	ely Vegetated Co	ncave Surf	ace (B8)							
Field Obse	ervations:									
Surface Wa	ater Present?	Yes □	No ⊠	Depth (in):		Wetland Hyd	drology		_	-
Water Tabl	le Present?	Yes □	No ⊠	Depth (in):	-	Presen	0,	Ye	es 🗌	No 🛛
Saturation (includes c	Present? apillary fringe)	Yes □	No ⊠	Depth (in):	-					
		ream dallo	nonitoring	well aerial r	hotos previous i	nspections), if avail	lahle [.]			
DOSCIDE N	Coordou Data (Sti	oun gaug	o, monitoring	won, acriai p	otoo, provious i	iopodiolis, ii avai	auto.			
Remarks:	Soil profile do	/ to 14-inch	es BSG Geo	omorphic pos	sition is a depress	ion.				
	p. 5.110 dr)	,				- 1				



Applicant/Owner: Washington State Parks Roen Hohlfeld and Jamie Sloan Section, Township, Range: S20, T16N, R4E Landform (hillslope, terrace, etc): depression Local relief (concave, convex, none): concave Slope (%): Subregion (LRR): A Lat: - Long: - Datum: - Soil Map Unit Name: Barneston gravelly ashy coarse sandy loam, 8 to 15% slopes NWI classification: PEM1C Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in remarks.)	
Landform (hillslope, terrace, etc): depression	5
Subregion (LRR): A Lat: - Long: - Datum: - Soil Map Unit Name: Barneston gravelly ashy coarse sandy loam, 8 to 15% slopes NWI classification: PEM1C	5
Subregion (LRR): A Lat: - Long: - Datum: - Soil Map Unit Name: Barneston gravelly ashy coarse sandy loam, 8 to 15% slopes NWI classification: PEM1C	
Soil Map Unit Name: Barneston gravelly ashy coarse sandy loam, 8 to 15% slopes NWI classification: PEM1C	
· · · · · · · · · · · · · · · · · · ·	
Are Vegetation □, Soil □, or Hydrology □ significantly disturbed? Are "Normal Circumstances" present on the site? ☑ Yes □ No	
Are Vegetation □, Soil □, or Hydrology □ naturally problematic? (If needed, explain any answers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.	
Hydrophytic Vegetation Present? Yes ⊠ No □	
Hydric Soils Present? Yes ⊠ No □ Is the Sampled Area within a Wetland? Yes ☒ No □	
Wetland Hydrology Present? Yes ⊠ No □	
Remarks: Wetland EE in-pit. VEGETATION – Use scientific names of plants.	
Absolute Dominant Indicator Dominance Test worksheet:	
Tree Stratum (Plot size: 5-m diameter) % Cover Species? Status 1. Fraxinus latifolia 50 Y FACW that are OBL, FACW, or FAC:	(A)
2. Total Number of Dominant Species Across all Strata:	(B)
4. Percent of Dominant Species that are OBL, FACW, or FAC:	(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diameter) Prevalence Index worksheet:	
1.	
3 FACW species x 2 =	- -
4 FAC species x 3 =	_
5 FACU species x 4 =	-
= Total Cover	(B)
1. Oenanthe sarmentosa 55 Y OBL Prevalence Index = B/A =	(-)
2. Carex obnupta 25 Y OBL	
3. Sparganium emersum 10 N OBL Hydrophytic Vegetation Indicators: 1 − Rapid Test for Hydrophytic Vegetation	
5.	
6. \Box 3 − Prevalence Index is ≤ 3.0 ¹	
7. 4 – Morphological Adaptations¹ (Provide supp data in Remarks or on a separate sheet)	orting
9 data in Remarks or on a separate sheet) ——————————————————————————————————	
10. □ Problematic Hydrophytic Vegetation¹ (Explain))
11. Indicators of hydric soil and wetland hydrology mu	st be
<u>90</u> = Total Cover present, unless disturbed or problematic. Woody Vine Stratum (Plot size: 3-m diameter)	
1. Hydrophytic	
2 Vegetation Yes ☑ No ☐ - = Total Cover Present?	
I % Bare Ground in Herb Stratum: 15	
% Bare Ground in Herb Stratum: 15 Remarks:	

	scription: (Descr	ibe to the	depth need				or confirm the al	bsence	of indicators.)	
Depth (inches)	Matrix Color (moist)	%	Color (r		Redox Feature	<u>es</u> Type	1 Loc	2	Texture		Remarks
0-8	10YR 2/1	100	1) 10100	noiotj	70	турс	200		Silt loam		High OM
			7.5\(5\)	0/0	4.5						iigii Oivi
8-16	10YR 2/1	85	7.5YR	3/3	15	С	M		Silt loam		
¹Type: C=C	Concentration, D=	Depletion.	RM=Reduce	ed Matrix.	CS=Covered	or Coated	d Sand Grains.	² Loc:	PL=Pore Lining	a. M=Matri	х.
	il Indicators: (Ap						<u> </u>		tors for Probl		
1 -	sol (A1)			Sandy Re		,			cm Muck (A10	-	
	Epipedon (A2)			Stripped	Matrix (S6)			□ R	ted Parent Mat	erial (TF2)	
	Histic (A3)				ucky Mineral		ept MLRA 1)		ery Shallow Da		, ,
	gen Sulfide (A4) ted Below Dark S	turfoos (Ad	1)	-	leyed Matrix ((F2)			other (Explain in	n Remarks	5)
	Dark Surface (A1	,	1) □ ⊠		Matrix (F3) ark Surface (F	- 6)		3 Indica	ators of hydrop	hytic vege	tation and
	/ Mucky Mineral (,			Dark Surface						present, unless
	/ Gleyed Matrix (S				epressions (F			dis	sturbed or prob	lematic.	
Restrictive	Layer (if preser	nt):									
Type:							Hydric soil		Yes	⊠ N	。
	(inches):						present?				_
Ворит	(mones).										
Remarks:											
HYDROLO	OGY										
	ydrology Indicat		nuired: chec	c all that a	anly)			Seco	ndary Indicator	s (2 or mo	re required)
	ce water (A1)	1 01 0110 100	quirea. orico			as (avcar	ot MLRA 1, 2, 4A				B9) (MLRA 1 ,
	Nater Table (A2)			**************************************		oo (excep	71 WILKA 1, 2, 4A		2, 4A & 4B)	u Leaves (D9) (WILKA I,
	ation (A3)			, ,	ust (B11)				Drainage Pat	terns (B10)
	Marks (B1)				Invertebrates	s (B13)			Dry-Season V	Vater Tabl	e (C2)
	ent Deposits (B2))		, ,	en Sulfide Od	` '					rial Imagery (C9)
	Deposits (B3)					_	Living Roots (C3)		Geomorphic I		2)
_	Mat or Crust (B4) eposits (B5)				ce of Reduce Iron Reduction				Shallow Aquit FAC-Neutral		
	ce Soil Cracks (B6	3)			or Stressed				Raised Ant M) (I RR A)
	ation Visible on A				explain in rem		(LIKK A)		Frost-Heave		
	ely Vegetated Co	Ū	, , ,	(,					
Field Obse	ervations:										
Surface Wa	ater Present?	Yes □	No ⊠	Depth (i	n): -						
Water Table		Yes □	No ⊠	Depth (i			Wetland Hyd Present		Ye	es 🏻	No 🗆
							riesein	L:			
Saturation I (includes ca	apillary fringe)	Yes 🗆	No ⊠	Depth (i	n): <u>-</u>						
Describe R	ecorded Data (st	ream gaug	e, monitorin	g well, aeri	al photos, pre	evious ins	pections), if avail	lable:			
Domester	Colleges stated		Coonser-le!	noold !	o don						
Remarks:	Soils moist the	rougnout. (eomorpnic	position is	a uepression						



Project/Site: Nisqually State Park				City/	County: E	atonville/Pierce	Samp	ling date	e: <u>9-22-2</u>	2020
Applicant/Owner: Washington State Parks						State:	WA Sar	mpling P	oint: DP	-5
Investigator(s): Roen Hohlfeld and Jamie Slo	an			Section,	Township,	Range: S20, T	16N, R4E			
Landform (hillslope, terrace, etc): slope				Local re	lief (concav	e, convex, none):	none		Slope (%):	10
Subregion (LRR): A Lat: -			Lon		(*********************************	-,,	Datum:	`	(,,)	
					NIVA/	1 -1				
Soil Map Unit Name: Barneston gravelly ash						•	none			
Are climatic / hydrologic conditions on the site ty	ypical for t	his time o	of year	r? ⊠ Yes	s 🗆 No	(If no, explain in re	emarks.)			
Are Vegetation \square , Soil \square , or Hydrology \square sign	ificantly di	sturbed?		Are "	Normal Circ	cumstances" prese	ent on the site	? ⊠ Ye:	s □ No	
Are Vegetation \square , Soil \square , or Hydrology \square natu	rally probl	ematic?		(If ne	eded, expla	ain any answers in	Remarks.)			
SUMMARY OF FINDINGS – Attach sit	e map sł	nowing s	ampli	ing point	locations,	transects, impo	rtant feature	s, etc.		
Hydrophytic Vegetation Present?	∕es ⊠	No								
Hydric Soils Present?	∕es □	No	\boxtimes		the Sampl ithin a We		Yes		No 🛛	
Wetland Hydrology Present?	∕es □	No	\boxtimes	"	1011111 0 110	tiaria :				
Remarks: Click here to enter text. VEGETATION – Use scientific names of	f plants.									
To a Obstance (Distriction 5 on discussion)		Absolute		ominant	Indicator	Dominance Tes				
Tree Stratum (Plot size: 5-m diameter) 1. Pseudotsuga menziesii		% Cover 40	S	pecies? Y	Status FACU	Number of Dom that are OBL, FA			3	(A)
Frangula purshiana		25		Y	FAC	Total Number of			5	_ ('')
3. Acer mnacrophyllum		15		N	FACU	Species Across			<u> </u>	(B)
4		80		Total Cov	ver	Percent of Domithat are OBL, FA			60	(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diameter	∍r)					Prevalence Ind	ex workshee	t:		
1. Acer circinatum		85		Y	FAC	Total % Cover o	<u>of:</u>	Multip	ly by:	
Symphoricarpos albus Mahonia nervosa		5 3		N N	FACU FACU	OBL species FACW species		x 1 = x 2 =		
4. Oemleria cerasiformis		3		N	FACU	FAC species		x3=		
5.						FACU species		x 4 =		
	_	96	=	Total Cov	ver	UPL species		x 5 =		
Herb Stratum (Plot size: 1-m diameter)		50		V	FACIL	Column Totals:		(A)		(B)
Polystichum munitum Carex deweyana		50 40		Y Y	FACU FAC	Prevalence Inde	ex = B/A =			
3. Rubus ursinus		15		N	FACU	Hydrophyt	ic Vegetation	Indicat	ors:	
4.							est for Hydro		egetation	
5							nce Test is >			
6. 7.						4 – Morpho	nce Index is ≤ logical Adapta		Provide sur	norting
8.							Remarks or o			
9							d Non-Vascula			
10.							Hydrophytic	-		
11		105		Total Cov	/er	¹ Indicators of hy present, unless				nust be
Woody Vine Stratum (Plot size: 3-m diameter) 1.				rotal oot	VOI	Hydrophytic				
1. 2.						Vegetation	Ye	s 🏻	No □]
	_	-	=	Total Cov	ver	Present?				
% Bare Ground in Herb Stratum: 0										
Remarks:										

Depth (inches)	Matrix					ox Features			of indicators.)		
	Color (moist)	%	(Color (r		% Type	Loc ²		Texture	Re	emarks
0-15	10YR 2/2	100)						Sandy loam	50%	% cobble
1Tyma; C. C	'an contration D	Donlotic	DM	Dadua	ad Matrix, CC	Cavarad as Caata	d Cand Crains	21 001 1	DI Doro Linina	M Motrix	
	oncentration, D= I Indicators: (Ap					Covered or Coate	d Sand Grains.		PL=Pore Lining tors for Proble		ric Soile ³ :
☐ Histos	` •	piicabii	e to all t	_KKS, 	Sandy Redo	•			cm Muck (A10)	•	iic solis".
	Epipedon (A2)				Stripped Mat	` '			ed Parent Mate		
	Histic (A3)					y Mineral (F1) (exc	cept MLRA 1)		ery Shallow Da		(TF12)
	gen Sulfide (A4)				Loamy Gleye	` '			ther (Explain in	Remarks)	
	ted Below Dark S Dark Surface (A1:		(A11)		Depleted Ma	, ,		3 India	ators of hydroph	ovitio vogoto	tion and
	Mucky Mineral (,				rk Surface (F7)			tland hydrology		
	Gleyed Matrix (S				Redox Depre	` '			turbed or probl		•
Restrictive	Layer (if presen	t):									
Type:							Hydric soil present?		Yes	□ No	\boxtimes
Depth	(inches):						present				
IYDROLO	DGY										
Wetland Hy	ydrology Indicat	ors: of one	required	d: chec	k all that apply	· · · · · · · · · · · · · · · · · · ·		Secor	ndary Indicators	s (2 or more	required)
□ Surfac	e water (A1)				Water-Stai	ned Leaves (exce)	pt MLRA 1, 2, 4A		Water-Stained	Leaves (B	9) (MLRA 1 ,
-	Vater Table (A2)				& 4B) (B9)				2, 4A & 4B)		
□ Satura	ition (A3)								Drainage Patt	` ,	(C2)
□ \\/otor	ent Deposits (B2)				Aqualic inv	ertebrates (B13)			Dry-Season W		
□ Water	o 2 op oo (22)			Г	Hvdrogen 3	Sulfide Odor (C1)				ible on Aeria	I Imagery (C9)
□ Sedim	eposits (B3)					Sulfide Odor (C1) hizospheres along	Living Roots (C3)		Geomorphic F		0, 1
☐ Sedim	eposits (B3) Mat or Crust (B4)				Oxidized R	, ,	• ,			osition (D2)	0, 1
□ Sedim □ Drift D □ Algal N □ Iron De	Mat or Crust (B4) eposits (B5)				Oxidized R Presence of Recent Iron	hizospheres along of Reduced Iron (C n Reduction in Tille	ed Soils (C6)		Geomorphic F Shallow Aquita FAC-Neutral 1	Position (D2) ard (D3) Fest (D5))
□ Sedim □ Drift D □ Algal N □ Iron De □ Surfac	Mat or Crust (B4) eposits (B5) ee Soil Cracks (B6	·)	agan, (P		Oxidized R Presence of Recent Iron Stunted or	hizospheres along of Reduced Iron (C n Reduction in Tille Stressed Plants (E	ed Soils (C6)		Geomorphic F Shallow Aquits FAC-Neutral T Raised Ant Mo	Position (D2) ard (D3) Fest (D5) ounds (D6))
□ Sedim □ Drift D □ Algal N □ Iron De □ Surfac □ Inunda	Mat or Crust (B4) eposits (B5) ee Soil Cracks (B6 ation Visible on Ae	i) erial Ima	0 , .	7)	Oxidized R Presence of Recent Iron Stunted or	hizospheres along of Reduced Iron (C n Reduction in Tille	ed Soils (C6)		Geomorphic F Shallow Aquita FAC-Neutral 1	Position (D2) ard (D3) Fest (D5) ounds (D6))
□ Sedim □ Drift D □ Algal N □ Iron De □ Surfac □ Inunda	Mat or Crust (B4) eposits (B5) ee Soil Cracks (B6 ation Visible on Ae ely Vegetated Cor	i) erial Ima	0 , .	7)	Oxidized R Presence of Recent Iron Stunted or	hizospheres along of Reduced Iron (C n Reduction in Tille Stressed Plants (E	ed Soils (C6)		Geomorphic F Shallow Aquits FAC-Neutral T Raised Ant Mo	Position (D2) ard (D3) Fest (D5) ounds (D6))
Sedim Drift D Algal N Iron De Surfac Inunda Sparse	Mat or Crust (B4) eposits (B5) ee Soil Cracks (B6 ation Visible on Acely Vegetated Con- ervations:	i) erial Ima ncave S	0 , .	7) □	Oxidized R Presence of Recent Iron Stunted or Other (exp	hizospheres along of Reduced Iron (C n Reduction in Tille Stressed Plants (E	ed Soils (C6) D1) (LRR A)		Geomorphic F Shallow Aquits FAC-Neutral T Raised Ant Mo	Position (D2) ard (D3) Fest (D5) ounds (D6))
Sedim Drift D Algal N Iron De Surfac Inunda Sparse	Mat or Crust (B4) eposits (B5) ee Soil Cracks (B6 ation Visible on Acely Vegetated Contractions: atter Present?	erial Ima ncave S	Surface (7) □ B8)	Oxidized R Presence of Recent Iron Stunted or Other (exp	hizospheres along of Reduced Iron (C n Reduction in Tille Stressed Plants (E	4) ed Soils (C6) D1) (LRR A) Wetland Hyd	rology	Geomorphic F Shallow Aquita FAC-Neutral T Raised Ant Mo Frost-Heave F	Position (D2) ard (D3) Fest (D5) bunds (D6) Hummocks)
□ Sedim □ Drift D □ Algal N □ Iron De □ Surfac □ Inunda □ Sparse Field Obse	Mat or Crust (B4) eposits (B5) ee Soil Cracks (B6 ation Visible on Ace ely Vegetated Cor ervations: ater Present? ee Present?	erial Imancave S	Surface (7)	Oxidized R Presence of Recent Iron Stunted or Other (exp	hizospheres along of Reduced Iron (C n Reduction in Tille Stressed Plants (E	ed Soils (C6) D1) (LRR A)	rology	Geomorphic F Shallow Aquita FAC-Neutral T Raised Ant Mo Frost-Heave F	Position (D2) ard (D3) Fest (D5) bunds (D6) Hummocks	(LRR A)
□ Sedim □ Drift D □ Algal N □ Iron De □ Surface □ Inunda □ Sparse Field Obse Surface Wa Water Table Saturation I (includes ca	Mat or Crust (B4) eposits (B5) eposits (B6)	yes [Yes [Yes [Surface (□ No □ No □ No	7)	Oxidized R Presence of Recent Iron Stunted or Other (exp Depth (in): Depth (in):	hizospheres along of Reduced Iron (C n Reduction in Tille Stressed Plants (E lain in remarks)	Wetland Hyd	rology ?	Geomorphic F Shallow Aquita FAC-Neutral T Raised Ant Mo Frost-Heave F	Position (D2) ard (D3) Fest (D5) bunds (D6) Hummocks	(LRR A)
□ Sedim □ Drift D □ Algal N □ Iron De □ Surface □ Inunda □ Sparse Field Obse Surface Wa Water Table Saturation I (includes ca	Mat or Crust (B4) eposits (B5) eposits (B6)	yes [Yes [Yes [Surface (□ No □ No □ No	7)	Oxidized R Presence of Recent Iron Stunted or Other (exp Depth (in): Depth (in):	hizospheres along of Reduced Iron (C n Reduction in Tille Stressed Plants (E	Wetland Hyd	rology ?	Geomorphic F Shallow Aquita FAC-Neutral T Raised Ant Mo Frost-Heave F	Position (D2) ard (D3) Fest (D5) bunds (D6) Hummocks	(LRR A)
□ Sedim □ Drift D □ Algal N □ Iron De □ Surface □ Inunda □ Sparse Field Obse Surface Wa Water Table Saturation I (includes ca Describe Re	Mat or Crust (B4) eposits (B5) eposits (B6)	yes [Yes [Yes [Surface (□ No □ No □ No	7)	Oxidized R Presence of Recent Iron Stunted or Other (exp Depth (in): Depth (in):	hizospheres along of Reduced Iron (C n Reduction in Tille Stressed Plants (E lain in remarks)	Wetland Hyd	rology ?	Geomorphic F Shallow Aquita FAC-Neutral T Raised Ant Mo Frost-Heave F	Position (D2) ard (D3) Fest (D5) bunds (D6) Hummocks	(LRR A)
□ Sedim □ Drift D □ Algal N □ Iron De □ Surface □ Inunda □ Sparse Field Obse Surface Wa Water Table Saturation I (includes ca	Mat or Crust (B4) eposits (B5) eposits (B6)	yes [Yes [Yes [Surface (□ No □ No □ No	7)	Oxidized R Presence of Recent Iron Stunted or Other (exp Depth (in): Depth (in):	hizospheres along of Reduced Iron (C n Reduction in Tille Stressed Plants (E lain in remarks)	Wetland Hyd	rology ?	Geomorphic F Shallow Aquita FAC-Neutral T Raised Ant Mo Frost-Heave F	Position (D2) ard (D3) Fest (D5) bunds (D6) Hummocks	(LRR A)



Project/Site: Nisqually State Park		City/	County: E	atonville/Pierce	Sampling o	late: <u>9-22</u>	-2020
Applicant/Owner: Washington State Parks				State: W	/A Samplin	g Point: D	P-6
Investigator(s): Roen Hohlfeld and Jamie Sloan		Section,	Township,	Range: S20, T16N,	R4E		
Landform (hillslope, terrace, etc): depression		_ Local re	lief (concav	e, convex, none): <u>c</u>	oncave	_ Slope (%):	2
Subregion (LRR): A Lat: -	Lo	ong:		D	atum:		
Soil Map Unit Name: Barneston gravelly ashy coar	se sandy loam, 8	8 to 15% sl	opes NW	I classification: no	ne		
Are climatic / hydrologic conditions on the site typical f	or this time of yea	ar? ⊠ Yes	s 🗆 No	(If no, explain in remar	ks.)		
Are Vegetation \square , Soil \square , or Hydrology \square significantly	/ disturbed?	Are "	Normal Circ	cumstances" present o	n the site? $oximes$	Yes □ No)
Are Vegetation \square , Soil \square , or Hydrology \square naturally pr	oblematic?	(If ne	eded, expla	ain any answers in Rer	narks.)		
SUMMARY OF FINDINGS – Attach site map	showing samp	ling point	locations,	transects, importan	t features, et	c.	
Hydrophytic Vegetation Present? Yes	⊠ No □	l					
Hydric Soils Present? Yes	□ No ⊠		the Sampl ithin a We		Yes 🗌	No 🛛	
Wetland Hydrology Present? Yes	⊠ No □						
VEGETATION – Use scientific names of plant	s.						
<u>Tree Stratum</u> (Plot size: 5-m diameter)		Dominant Species?	Indicator Status	Dominance Test we Number of Dominan		5	
1. Populus balsamifera	75 20	Y Y	FAC	that are OBL, FACW	·		(A)
Fraxinus latifolia S.		ĭ	FACW	Total Number of Dor Species Across all S		5	(B)
4.		-		Percent of Dominan		100	
	95 =	= Total Cov	ver	that are OBL, FACW			(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diameter) 1. Fraxinus latifolia	60	Υ	FACW	Prevalence Index v Total % Cover of:		Iltiply by:	
2. Acer circinatum	50	Υ	FAC	OBL species	x 1		
3. 4.				FACW species FAC species	x 2 x 3		
5.				FACU species	x 4	-=	<u> </u>
Herb Stratum (Plot size: 1-m diameter)	110 =	= Total Cov	ver	UPL species Column Totals:	x 5 (A)		(B)
1				Prevalence Index =			(5)
Carex deweyana Rubus ursinus	3 trace	Y N	FACU	Hydrophytic V		cators:	
4	liace	IN	1 700	□ 1 – Rapid Test	_		
5.				 □ 2 – Dominance □ 3 – Prevalence			
6. 7.				4 – Morphologic		1 (Provide su	upporting
8				☐ data in Rem☐ 5 – Wetland No	narks or on a s	•	∍t)
9				☐ Problematic Hy			ain)
11				¹ Indicators of hydric present, unless distu			must be
Woody Vine Stratum (Plot size: 3-m diameter)	4 =	= Total Cov	ver	present, unless dist	indea or proble	matic.	
1.				Hydrophytic		7 r	_
2	- =	= Total Cov	ver	Vegetation Present?	Yes 🛭	☑ No [_
% Bare Ground in Herb Stratum: 96							
Remarks:							

Profile Des	scription: (Desc		depth neede		ent the indicator	or confirm the ab	sence	of indicators.)	
(inches)	Color (moist)	%	Color (m		% Type	Loc ²	!	Texture	Remarks
0-8	2.5YR 2.5/1	100						Sandy loam	
8-14	2.5Y 4/2	98	10YR	3/3	2			Sandy loam	
¹Tvpe: C=0	Concentration. D=	Depletion.	RM=Reduce	d Matrix. CS=	Covered or Coate	d Sand Grains.	²Loc: l	PL=Pore Lining, M=	Matrix.
	il Indicators: (Ap							tors for Problemati	
-	sol (A1)			Sandy Redox	-			cm Muck (A10)	
	Epipedon (A2)			Stripped Matr				ed Parent Material (TF2)
	Histic (A3)			Loamy Mucky	/ Mineral (F1) (exc	cept MLRA 1)		ery Shallow Dark Su	
☐ Hydro	gen Sulfide (A4)			Loamy Gleye	d Matrix (F2)			ther (Explain in Ren	narks)
	ted Below Dark S	•	,	Depleted Mat	, ,				
	Dark Surface (A1			Redox Dark S	, ,			ators of hydrophytic	
	Mucky Mineral (k Surface (F7)			etiand hydrology mus sturbed or problemat	st be present, unless
	Gleyed Matrix (S			Redox Depre	SSIONS (FO)		aic	narbea or problemat	10.
	e Layer (if prese	nt):				Hydric soil			5 7
Type:						present?		Yes □	No 🛛
Depth	(inches):					•			
Remarks:	Rocks prevent	excavation	n beyond 14-i	nches. Redox	is faint.				
HYDROL	OGY								
	lydrology Indica								
	dicators (minimun	n of one re	quired: check				Secor	ndary Indicators (2 o	
	ce water (A1)				ned Leaves (exce	ot MLRA 1, 2, 4A		Water-Stained Lea	ves (B9) (MLRA 1,
Ŭ	Nater Table (A2) ation (A3)			& 4B) (B9) Salt Crust (D11)			2, 4A & 4B) Drainage Patterns	(P10)
	Marks (B1)				ertebrates (B13)			Dry-Season Water	, ,
	nent Deposits (B2	·)		•	Sulfide Odor (C1)				n Aerial Imagery (C9)
	Deposits (B3)	.,		, ,	nizospheres along	Living Roots (C3)	\boxtimes	Geomorphic Position	
	Mat or Crust (B4)				f Reduced Iron (C			Shallow Aquitard (I	` '
_	eposits (B5)				Reduction in Tille	,	\boxtimes	FAC-Neutral Test (D5)
☐ Surfac	ce Soil Cracks (B	6)		Stunted or	Stressed Plants ([01) (LRR A)		Raised Ant Mounds	s (D6) (LRR A)
☐ Inunda	ation Visible on A	erial Image	ery (B7)	Other (expl	ain in remarks)			Frost-Heave Humn	nocks
	ely Vegetated Co	ncave Sur	ace (B8)						
Field Obse	ervations:								
Surface Wa	ater Present?	Yes □	No ⊠	Depth (in):		Wetland Hyd	rology		,
Water Tabl	le Present?	Yes □	No ⊠	Depth (in):		Present		Yes 2	☑ No □
Saturation (includes c	Present? apillary fringe)	Yes □	No ⊠	Depth (in):	-				
		ream gaug	e, monitorina	well, aerial pl	notos, previous ins	spections), if availa	able:		
		39		, P.	.,,	,,	-		
_									
Remarks:	Soils moist th	roughout. (3eomorphic p	osition is a de	epression.				
I									



Project/Site: Nisqually State Park		City/0	County: P	ierce	Samp	ling date:	9-28-2	2020
Applicant/Owner: Washington State Parks				State:	WA San	npling Po	int: DP	-4
Investigator(s): Sam Payne and Jamie Sloan		Section,	Township, I	Range: S19, T16	 N, R04E			
Landform (hillslope, terrace, etc): depression		Local rel	ief (concave	e, convex, none):	concave	Sl	ope (%):	<2
Subregion (LRR): A Lat: -	Lo	- ong: -	`	· , -	Datum:		,	
Soil Map Unit Name:Barneston gravelly ashy coars			nes NW		none _			
Are climatic / hydrologic conditions on the site typical for								
Are Vegetation □, Soil □, or Hydrology □ significantly	•			:umstances" present		? ⊠ Yes	□ No	
Are Vegetation □, Soil □, or Hydrology □ naturally pro				in any answers in R		. 🖾 100	_ 140	
The Vogetation E, oon E, or Flydrology E Hattirally pro	boomatio:	(11 110	сиси, схріа	and any answers in it	omanto.)			
SUMMARY OF FINDINGS — Attach site map	showing samp	ling point	locations,	transects, importa	ant feature	s, etc.		
Hydrophytic Vegetation Present? Yes	I No □	15.4	ha Camad	ad Awaa				
Hydric Soils Present? Yes	I No □		he Sample Ithin a We		Yes	X	No 🗆	
Wetland Hydrology Present? Yes	I No □							
Remarks: Wetland FF in-pit.								
VEGETATION – Use scientific names of plants								
	Absolute [Dominant	Indicator	Dominance Test	worksheet:			
Tree Stratum (Plot size: 5-m diameter)	% Cover	Species?	Status	Number of Domina			5	(4)
Populus balsamifera Fraxinus latifolia	100 20	Yes Yes	FAC FACW	that are OBL, FAC Total Number of D				_ (A)
3	20	100	17.011	Species Across all			5	(B)
4	400	Tatal Car		Percent of Domina			100%	(A/D)
	120 =	= Total Cov	er	that are OBL, FAC				(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diameter) 1. Fraxinus latifolia	30	Yes	FACW	Prevalence Index Total % Cover of:	worksheet	t: Multiply	/ bv:	
Lonicera involucrata	25	Yes	FAC	OBL species		x 1 =		_
3. Spiraea douglasii	10	No	FACW	FACW species		x 2 =		_
4. 5.				FAC species FACU species		x 3 = x 4 =		_
	65 =	= Total Cov	er	UPL species		x 5 =		_
Herb Stratum (Plot size: 1-m diameter) 1. Carex obnupta	50	Yes	OBL	Column Totals:		(A)		(B)
Phalaris arundinacea	1	No	FACW	Prevalence Index	= B/A =			
3				Hydrophytic	_			
4. 5.				□ 1 – Rapid Tes⊠ 2 – Dominano			jetation	
6.				☐ 3 – Prevalenc				
7. 8.				☐ 4 – Morpholog data in Re	gical Adapta emarks or o			
9.				☐ 5 – Wetland N	Non-Vascula	ar Plants ¹	·	
10.				□ Problematic F ¹Indicators of hydri		•		•
11		= Total Cov	er	present, unless dis				iusi be
Woody Vine Stratum (Plot size: 3-m diameter)								
1				Hydrophytic Vegetation	Vo	s 🏻	No 🗆	l
	=	= Total Cov	er	Present?	1 6:	3 KN	140	I
% Bare Ground in Herb Stratum: 49								
Remarks:								

Profile Des	scription: (Descr Matrix	ibe to	the de	pth nee	ded to d		ent the indicato	r or confirm the a	bsence	of indicators.)		
(inches)	Color (moist)	%	, 0	Color	(moist)		% Ty	pe ¹ Loc	,2	Texture		Rei	marks
0-16	10YR 2/1	10	00							Sandy loam	(Greasy	/organics
1Typo: C=C	`oncontration D_	Doploti	ion PM	1_Poduc	and Matr	iv CS-	-Covered or Cos	tod Sand Grains	21 00:	PL=Pore Linin	~ N/_N/	otriv	
	Concentration, D=							ileu Sanu Grains.		tors for Probl			c Soils3.
_	sol (A1)	piicabi	ic to an	LIXIX3,		Redox	-			cm Muck (A10		iiyaii	c cons .
	Epipedon (A2)				,		rix (S6)			Red Parent Mat	,	F2)	
	Histic (A3)						y Mineral (F1) (e	xcept MLRA 1)		ery Shallow D			ΓF12)
	gen Sulfide (A4)		(444)				ed Matrix (F2)		\boxtimes C	Other (Explain i	n Rema	arks)	
	ted Below Dark S Dark Surface (A1		(A11)				trix (F3) Surface (F6)		3 Indic	ators of hydrop	hytic ye	itetana	on and
	Mucky Mineral (rk Surface (F7)		we	etland hydrolog	y must	be pre	
	Gleyed Matrix (S				Redox	Depre	essions (F8)		dis	sturbed or prob	lematic).	
Restrictive	Layer (if preser	nt):											
Type:								Hydric soi	ı	Yes	\boxtimes	No	
Depth	(inches):							present?					
Remarks:	High organic m	natter c	ontent r	masking	j redox;	presum	ned to meet indic	ator F6.					
HYDROLO	OGY												
Wetland H	ydrology Indicat dicators (minimum	t ors: n of one	e requir	ed: che	ck all tha	ıt apply	·)		Seco	ndary Indicator	s (2 or	more i	required)
☐ Surfac	ce water (A1)			-	Wat	er-Stai	ned Leaves (exc	ept MLRA 1, 2, 4A	, _	Water-Staine	d Leave	es (B9) (MLRA 1,
_	Vater Table (A2)				8 4 1	3) (B9)			Ш	2, 4A & 4B)			
	ation (A3)					Crust (` '			Drainage Pat	,	,	O0)
	Marks (B1) ent Deposits (B2	١		_			vertebrates (B13) Sulfide Odor (C1			Dry-Season \ Saturation Vis			
	eposits (B3)	,						, lg Living Roots (C3)		Geomorphic			inagory (oc
☐ Algal I	Mat or Crust (B4)			[of Reduced Iron			Shallow Aqui			
	eposits (B5)						n Reduction in T		\boxtimes	FAC-Neutral			
	ce Soil Cracks (Be		/				Stressed Plants	(D1) (LRR A)		Raised Ant M			LRR A)
	ation Visible on A ely Vegetated Co				☐ Oth	er (exp	lain in remarks)			Frost-Heave	Hummo	OCKS	
Field Obse		ilcave (Odriacc	, (DO)									
	ater Present?	Yes		No ⊠	Dont	h (in):	_						
			_					Wetland Hyd		Y .	es 🏻		No 🗆
Water Tabl				No ⊠		h (in):		Presen	t?	•	<u> </u>	•	
Saturation (includes ca	Present? apillary fringe)	Yes		No ⊠	Dept	h (in):	-	1					
		ream ga	auge, n	nonitorir	ng well, a	aerial p	hotos, previous	nspections), if avai	lable:				
	·	-				·		•					
Damerilia	Cooper constitution				_								
Remarks:	Geomorphic p	osition	ıs a de	pressio	11.								



Project/Site: Nisqually State Park				City/	County: F	Pierce	Samp	oling date	e: <u>9-28-2</u>	2020
Applicant/Owner: Washington State Parks						State	: <u>WA</u> Sa	mpling F	Point: DP	-5
Investigator(s): Sam Payne and Jamie Sloan				Section,	Township,	Range: S19,	T16N, R04E			
Landform (hillslope, terrace, etc): slope						e, convex, none			Slope (%):	10
			Lon		nor (corroav	0, 0011100, 110110	Datum:	<u> </u>	5.0po (70).	-10
			_ Lon		NDA	U -1161				
Soil Map Unit Name: Barneston gravelly ash	-					'I classification:	none			
Are climatic / hydrologic conditions on the site ty	•		•			•	,			
Are Vegetation \square , Soil \square , or Hydrology \square signi	ficantly di	sturbed?		Are "	Normal Circ	cumstances" pre	esent on the site	;? ⊠ Ye	s 🗆 No	
Are Vegetation \square , Soil \square , or Hydrology \square natural	rally probl	ematic?		(If ne	eded, expla	ain any answers	in Remarks.)			
SUMMARY OF FINDINGS – Attach site	- man sh	owina s	amnli	ina noint	locations	transects im-	nortant feature	es etc		
	es □	No		T Point	. locations,	transects, imp	portant reature	73, 610.		
	_			ls t	the Sampl	ed Area	V		No 🏻	
,	_	No		w	ithin a We	etland?	Yes	Ш	NO 🖂	
Wetland Hydrology Present? Y	'es □	No								
Remarks: Click here to enter text.										
VEGETATION – Use scientific names of	plants.									
		A h = = 1, .4 =		!1	la dia atau	Dominanaa T	Foot workshoot			
Tree Stratum (Plot size: 5-m diameter)		Absolute % Cover		ominant pecies?	Indicator Status		Fest worksheet ominant Species		0	
1. Populus balsamifera		80		Yes	FAC		FACW, or FAC		2	(A)
2. Pseudotruga menziesii		20		No	FACU	Total Number			5	(D)
3. Alnus rubra 4.		10		No	FAC	Species Acros		_		_ (B)
· -		130	=	Total Cov	ver		minant Species FACW, or FAC		40%	(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diamete	-r)					Prevalence li	ndex workshee	et:		
1. Symphoricarpos albus	.,	90		Yes	FACU	Total % Cove		<u>Multip</u>	oly by:	
2. Gaultheria shallon		40		Yes	FACU	OBL species		_ x 1 =		_
Spiraea douglasii Rubus armeniacus		5 3		No No	FACW FAC	FACW species FAC species	es <u>8</u> 93	- x 2 = x 3 =	<u>16</u> 279	
5.				INO	TAC	FACU species		- x 4 =	608	_
	_	138	=	Total Cov	ver	UPL species		x 5 =		
Herb Stratum (Plot size: 1-m diameter)		_			=.0	Column Total	s: 253	(A)	903	(B)
Phalaris arundinacea Rubus ursinus		2		Yes Yes	FACW FACU	Prevalence In	ndex = B/A =	3.6		
3				165	FACO	Hydroph	ytic Vegetation	n Indica	tors:	
4.							d Test for Hydro	. ,	egetation	
5							nance Test is >			
6. 7.						4 – Morn	alence Index is : hological Adapt		Provide sun	norting
8						data	in Remarks or o	on a sepa	arate sheet))
9						4	and Non-Vascul			
10.						-	atic Hydrophytic hydric soil and	•		,
11		5	=	Total Cov	ver		ss disturbed or p			iusi be
Woody Vine Stratum (Plot size: 3-m diameter)	_						·			
1						Hydrophyti		_		,
2			_	Total Cov	ver	Vegetation Present?	Ye	es 📙	No ⊠	J
% Bare Ground in Herb Stratum: 95	_			. oldi OO		. 10001111				
Remarks:										
T.G. Idino.										

Profile Des	scription: (Desc		the c	depth	need	ed to d		ent the in		or confirm the ab	sence	of indicators	.)		
(inches)	Color (moist)		%	Co	olor (n	noist)		%	<u>сз</u> Туре	e ¹ Loc ²	!	Texture		Re	marks
0-16	10YR 2/1	1	00									Sandy loam			
¹Type: C=C	Concentration, D=	-Denle	tion F	RM-R	educe	ed Matr	ix CS=	-Covered	or Coate	ed Sand Grains	²l oc·	PL=Pore Linin	a M-M	latrix	
	il Indicators: (Ap									d Carla Crairis.		tors for Prob			c Soils ³ :
•	sol (A1)	piioui	0.0 .0	u	□		Redox		,			cm Muck (A10		ya	
☐ Histic	Epipedon (A2)					Stripp	ed Mat	rix (S6)			□ R	Red Parent Ma	řerial (T		
	Histic (A3)									cept MLRA 1)		ery Shallow D			īF12)
	gen Sulfide (A4) ted Below Dark S	Surface	- /Δ11	`			•	ed Matrix (I trix (F3)	F2)			Other (Explain	in Rema	arks)	
	Dark Surface (A1		- (A11	,				Surface (F	- 6)		³ Indica	ators of hydror	ohvtic ve	egetati	on and
	/ Mucky Mineral (Deple	ted Dar	k Surface	(F7)		we	etland hydrolog	gy must	be pre	
☐ Sandy	/ Gleyed Matrix (S	S4)				Redox	Depre	ssions (F	8)		dis	sturbed or prol	olematic). 	
Restrictive	Layer (if prese	nt):								Hydric soil					
Type:	-									present?		Yes		No	\boxtimes
Depth	(inches):									•					
HVDDOL /															
Wetland H	ydrology Indica	tors:													
Primary Inc	dicators (minimun	n of or	ne requ	uired:	check	call tha	it apply)			Seco	ndary Indicato	rs (2 or	more	required)
	ce water (A1)								es (exce	pt MLRA 1, 2, 4A		Water-Staine	ed Leav	es (B9) (MLRA 1,
•	Water Table (A2) ation (A3)					& 4I	B) (B9)					2, 4A & 4B)	ttorno /[240)	
	Marks (B1)						Crust (ertebrates	s (B13)			Drainage Pa Dry-Season	,	,	C2)
	nent Deposits (B2	2)						Sulfide Od	. ,			Saturation Vi			
	eposits (B3)							•	Ū	Living Roots (C3)		Geomorphic		` '	
_	Mat or Crust (B4)							of Reduced				Shallow Aqu			
	eposits (B5) ce Soil Cracks (B	6)								ed Soils (C6) D1) (LRR A)		FAC-Neutral Raised Ant N			IDD A\
	ation Visible on A		mager	v (B7)				ain in rem		OI) (LKK A)		Frost-Heave			-NN A)
	ely Vegetated Co		•	• • •			. (,						
Field Obse	ervations:														
Surface Wa	ater Present?	Yes		No	\boxtimes	Dept	h (in):								
Water Tabl	e Present?	Yes		No	\boxtimes	Dept	h (in):	-		Wetland Hyd Present		Y	es 🗆	l 1	No 🛛
Saturation	Present?	Yes		No	\boxtimes		h (in):	-			-				
	apillary fringe)														-
Describe R	ecorded Data (st	ream (gauge	, mon	itoring	g well, a	aerial p	hotos, pre	evious in	spections), if availa	able:				
Remarks:															



Drainat/Citas Niagually State Dayl		C:tv/	Country F	Diaraa	Compl	ina data.	10.7.0	004
Project/Site: Nisqually State Park		City/	County: F			ing date:	10-7-20	
Applicant/Owner: Washington State Parks				State	e: <u>WA</u> San	npling Poin	:: <u>DP-</u>	9
Investigator(s): Roen Hohlfeld and Sage Presster		Section,	, Township,	Range: S20	, T16N, R04E			
Landform (hillslope, terrace, etc): terrace		Local re	elief (concav	e, convex, non	e): <u>none</u>	Slop	e (%):	2
Subregion (LRR): _A Lat:		Long:			Datum:	-		
Soil Map Unit Name: Barneston gravelly ashy coarse	e sandv loar	n. 0 to 8% slo	pes NW	/I classification:	none			
Are climatic / hydrologic conditions on the site typical for								
, ,		•		•	esent on the site?	2 ⊠ Voc	□ No	
Are Vegetation □, Soil □, or Hydrology □ significantly o				•		r 🖂 162	□ INO	
Are Vegetation \square , Soil \square , or Hydrology \square naturally prol	olematic?	(If ne	eeded, expla	ain any answers	s in Remarks.)			
SUMMARY OF FINDINGS – Attach site map s	showing sa	mpling point	t locations,	transects, im	portant features	s, etc.		
Hydrophytic Vegetation Present? Yes □	No [\boxtimes						
Hydric Soils Present? Yes □	No 🏻		the Sampl vithin a We		Yes	□ No	×	
Wetland Hydrology Present? Yes □	No 🛭	× × × × × × × × × × × × × × × × × × ×	illilli a vve	suanu :				
VEGETATION – Use scientific names of plants.								
	Absolute	Dominant	Indicator	Dominance	Test worksheet:			
Tree Stratum (Plot size: 5-m diameter)	% Cover	Species?	Status FACU		ominant Species , FACW, or FAC:		0	(A)
Acer macrophyllum Pseudotsuga menziesii	55 50	Yes Yes	FACU		er of Dominant			. (A)
3. Prunus emarginata	5	No	FACU		oss all Strata:		4	(B)
4	110	= Total Cov	ver		ominant Species , FACW, or FAC:	0	1%	(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diameter)		-			Index worksheet			
1. Corylus cornuta	50	Yes	FACU	Total % Cove		Multiply b	<u>y:</u>	
2. Symphoricarpos albus	15	No	FACU	OBL species		x 1 =		_
3. Mahonia aquifolium	15	No No	FACU	FACW species		x 2 =	- 1 <i>E</i>	_
Gaultheria shallon Rosa nutkana	10 5	No No	FACU FAC	FAC species FACU specie		x 3 =	15 940	_
3. Nosa naikana	95	= Total Cov		UPL species		x5=	-	_
Herb Stratum (Plot size: 1-m diameter)		_		Column Tota		(A)	955	(B)
1. Rubus ursinus	30	Yes	FACU	Prevalence I	ndex = B/A =	3.8		
Pteridium aquilinum 3.	5	No	FACU	Hydron	hytic Vegetation	Indicators		
4.					id Test for Hydrop			
5				-	ninance Test is > \$			
6.				-	/alence Index is ≤			
7. 8.					ohological Adapta a in Remarks or or			
9.					land Non-Vascula	•		
10.					atic Hydrophytic \	-		
11					f hydric soil and w ess disturbed or p		rology m	ust be
Woody Vine Stratum (Plot size: 3-m diameter)	35	_ = Total Cov	ver	present, unite	ess disturbed or pr	iobiematic.		
1.				Hydrophyt	ic			
2.				Vegetation		s 🗆	No 🏻	
0/ Page Constant in Harb Charters CF		= Total Cov	ver	Present?				
% Bare Ground in Herb Stratum: 65								
Remarks:								

Profile Des		ribe to the o	depth neede		the indicator of	or confirm the ab	sence	of indicators.)	
(inches)	Matrix Color (moist)	%	Color (m		<u>-eatures</u> Type	Loc ²	2	Texture	Remarks
0-6	10YR 2/2	100	•	,	•			Sandy loam	
6-16	7.5Y 4/3	100						Sandy loam	
0.10	7.51 4/5	100						Carray loan	
¹Type: C=C	Concentration, D=	Denletion F	RM-Reduce	d Matrix CS=Co	vered or Coate	d Sand Grains	² l oc: F	PL=Pore Lining, N	∕I–Matrix
	il Indicators: (Ap					d Carla Crairis.			atic Hydric Soils ³ :
-	sol (A1)	prioable to		Sandy Redox (S				cm Muck (A10)	ano riyano cono .
	Epipedon (A2)			Stripped Matrix (ed Parent Materia	al (TF2)
	Histic (A3)			Loamy Mucky M		cept MLRA 1)		ery Shallow Dark	
	gen Sulfide (A4)			Loamy Gleyed M				ther (Explain in R	, ,
☐ Deple	ted Below Dark S	Surface (A11		Depleted Matrix				` '	,
☐ Thick	Dark Surface (A1	2)		Redox Dark Surf	ace (F6)			ators of hydrophyt	
	y Mucky Mineral (Depleted Dark S					nust be present, unless
	Gleyed Matrix (S	54)		Redox Depression	ons (F8)		dis	turbed or problem	natic.
Restrictive	e Layer (if prese	nt):							
Type:						Hydric soil		Yes □	No 🏻
	(inches):					present?			
Бериі	(ITICHES).								
Remarks:									
HYDROL	OGY								
	lydrology Indicat	tors:							
	dicators (minimum		uired: check	all that apply)			Secor	ndary Indicators (2	2 or more required)
	ce water (A1)				Leaves (excer	ot MLRA 1, 2, 4A	П		eaves (B9) (MLRA 1,
Ŭ	Nater Table (A2)			& 4B) (B9)				2, 4A & 4B)	
	ation (A3)			Salt Crust (B1				Drainage Patterr	
	Marks (B1)			Aquatic Inverte	, ,			Dry-Season Wat	
	nent Deposits (B2)		Hydrogen Sulf	, ,	5 . (60)			on Aerial Imagery (C9)
	Deposits (B3)					Living Roots (C3)		Geomorphic Pos	` '
_	Mat or Crust (B4)			Presence of R				Shallow Aquitard	• •
	eposits (B5)	e)		Recent Iron Re				FAC-Neutral Tes	• •
	ce Soil Cracks (Be	•		Stunted or Stre) (LKK A)		Frost-Heave Hur	nds (D6) (LRR A)
	ation Visible on A ely Vegetated Co			Other (explain	in remarks)		Ш	riosi-neave nui	HIHOUKS
Field Obse		neave oune	ICC (DO)						
Surface Wa	ater Present?	Yes □	No ⊠	Depth (in):					
	le Present?	Yes □	No ⊠	Depth (in):		Wetland Hyd		Yes	□ No ⊠
						Present			
Saturation (includes c	apillary fringe)	Yes □	No ⊠	Depth (in):	•				
		ream gauge	, monitorina	well, aerial photo	os, previous ins	spections), if availa	able:		
2 3 3 3 1 1 1	Data (01	u guugu	,	, acriai priot	, p. 0 . 10 do 11 le				
Remarks:									



Project/Site: Nisqually State Park				City/	County: F	Pierce	Samp	ling date	e: <u>11-16</u>	-2020
Applicant/Owner: Washington State Par	rks					State:	WA Sar	mpling P	oint: DP	-10
Investigator(s): Ryan Kahlo and Jamie S	Sloan			Section,	Township,	Range: S25, T16	6N, R03E			
Landform (hillslope, terrace, etc):depre	ession			Local re	lief (concav	e, convex, none):	concave	§	Slope (%):	2
Subregion (LRR): A Lat: -			Lor	ng: -			Datum:	_		
Soil Map Unit Name: Aquic Xerofluven						I classification:				
Are climatic / hydrologic conditions on the				r? ⊠ Yes						
Are Vegetation □, Soil □, or Hydrology □			-			cumstances" preser		? ⊠ Ye	s □ No	
Are Vegetation □, Soil □, or Hydrology □	-					in any answers in F				
SUMMARY OF FINDINGS – Attac	h site map	showing :	sampli			-		s, etc.		
Hydrophytic Vegetation Present?	Yes ⊠	3 No								
Hydric Soils Present?	Yes □	□ No	\boxtimes		the Sampl ithin a We		Yes		No 🛛	
Wetland Hydrology Present?	Yes ⊠	□ No		"	4 ***	, ciarra :				
VEGETATION – Use scientific nam	es of plants	i.								
<u>Tree Stratum</u> (Plot size: 5-m diameter) 1.		Absolute % Cove		ominant pecies?	Indicator Status	Dominance Test Number of Domir that are OBL, FA	ant Species		3	(A)
2. 3.						Total Number of I Species Across a	Dominant		3	_ (B)
4.				Total Cov	ver	Percent of Domin that are OBL, FA			100%	(A/B)
Sapling/Shrub Stratum (Plot size: 3-m dia	ameter)					Prevalence Inde		t:		
Rubus spectabilis Cornus sericea		60 60		Yes Yes	FACW	Total % Cover of: OBL species		Multip x 1 =	ly by:	
Lonicera involucrata		5		No	FAC	FACW species		x 2 =		
4. 5.						FAC species		x 3 =		_
5		125		Total Cov	ver	FACU species UPL species		x 4 = x 5 =		_
Herb Stratum (Plot size: 1-m diameter)						Column Totals:		(A)		(B)
Carex obnupta Phalaris arundinacea		100 12		Yes No	OBL FACW	Prevalence Index	= B/A =			
3				110	17.011	Hydrophytic	Vegetation	Indicat	ors:	
4. 5.						☐ 1 – Rapid Te ☑ 2 – Dominan			egetation	
6						□ 3 – Prevalen				
7.						4 – Morpholo				
8. 9.						□ 5 – Wetland	temarks or o Non-Vascula)
10						☐ Problematic		-		
11		112		Total Cov	ver	¹ Indicators of hyd present, unless d				nust be
Woody Vine Stratum (Plot size: 3-m diam	,			Total Co	VOI	Hydrophytic				
2		_		Total Cov	·or	Vegetation Present?	Ye	s 🏻	No 🗆]
% Bare Ground in Herb Stratum: -			=	Total Co	vei	Flesent				
Remarks:										

Profile Des	scription: (Desc		ne depth	n neede		ent the indicator	or confirm the at	sence	of indicators	.)		
(inches)	Color (moist)	%	C	Color (m		% Type	¹ Loc ²	2	Texture		Ren	narks
0-9	7.5Y 2.5/2	100)						Sandy loam			
9-15	10Y 2/2	95		7.5YR	3/4	5 C	М		Loamy sand		w/co	bbles
¹ Type: C=C	Concentration, D=	-Depletic	n, RM=F	Reduce	d Matrix, CS=	Covered or Coate	d Sand Grains.	²Loc:	PL=Pore Linin	g, M=Ma	trix.	
	I Indicators: (Ap								tors for Prob			Soils ³ :
☐ Histos		•			Sandy Redox				cm Muck (A10			
	Epipedon (A2)				Stripped Matr	rix (S6)		□ R	Red Parent Ma	terial (TF:		
	Histic (A3)					/ Mineral (F1) (exc	cept MLRA 1)		ery Shallow D			F12)
,	gen Sulfide (A4)	S	۸ ۵ ۵ ۷		Loamy Gleye	` '			Other (Explain i	n Remarl	ks)	
	ted Below Dark S Dark Surface (A1		A11)		Depleted Mat Redox Dark S			3 Indice	ators of hydrop	hytic yec	etatic	n and
	Mucky Mineral (,				k Surface (F7)			etland hydrolog			
	Gleyed Matrix (Redox Depre				sturbed or prob		•	•
Restrictive	Layer (if prese	nt):										
Type:							Hydric soil		Yes		No	×
	(inches):						present?		100	_		
Берип	(ITICHES).											
Remarks:												
L HYDROLO	ngy											
	ydrology Indica	tors:										
	licators (minimun		required	: check	all that apply))		Seco	ndary Indicato	rs (2 or m	ore r	equired)
☐ Surfac	e water (A1)					ned Leaves (exce	pt MLRA 1, 2, 4A		Water-Staine	d Leaves	(B9)	(MLRA 1,
Ü	Vater Table (A2)				& 4B) (B9)				2, 4A & 4B)			
	ition (A3)				,				Drainage Pat			10)
	Marks (B1)	١,				ertebrates (B13) Sulfide Odor (C1)			Dry-Season Vision Visio			
	ent Deposits (B2 eposits (B3)	.)			, ,	nizospheres along	Living Roots (C3)		Geomorphic			magery (C9)
	Mat or Crust (B4)					f Reduced Iron (C			Shallow Aqui		` '	
_	eposits (B5)					Reduction in Tille	•		FAC-Neutral			
☐ Surfac	e Soil Cracks (B	6)			Stunted or	Stressed Plants ([01) (LRR A)		Raised Ant M	lounds (E	06) (L	RR A)
	ation Visible on A				Other (expl	ain in remarks)			Frost-Heave	Hummoc	ks	
	ely Vegetated Co	ncave S	urface (E	38)								
Field Obse	ervations:											
Surface Wa	ater Present?	Yes [□ No	\boxtimes	Depth (in):	-	Wetland Hyd	rology		57		
Water Table	e Present?	Yes 2	⊠ No		Depth (in):	11" BSG	Present		Y	es 🏻	N	o 🗆
Saturation I (includes ca	Present? apillary fringe)	Yes [⊠ No		Depth (in):	9" BSG						
		ream ga	uge, moi	nitorina	well, aerial pl	notos, previous in	spections), if avail	able:				
			J - ,o.	9	- , p .	, ,	,					
Remarks:												



Project/Site: Nisqually State Park					City/0	County: P	Pierce	Sampl	ling date:	11-16	-2020
Applicant/Owner: Washington State Park						· <u> </u>		WA San			
Investigator(s): Ryan Kahlo and Jamie S	loan				Section,	Township,	Range: S25, T10	6N, R03E			
Landform (hillslope, terrace, etc): Depres							e, convex, none):		SI	ope (%):	2
Subregion (LRR): A Lat: -											
Soil Map Unit Name: Aquic Xerofluvents											
Are climatic / hydrologic conditions on the si							_				
Are Vegetation □, Soil □, or Hydrology □ s				-			cumstances" preser		? ⊠ Yes	□ No	
Are Vegetation □, Soil □, or Hydrology □ r	•	•					ain any answers in I				
SUMMARY OF FINDINGS – Attach	ı site mar	p sh	owing	sampl		•	•	•	s, etc.		
Hydrophytic Vegetation Present?	Yes	\boxtimes	No								
Hydric Soils Present?	Yes	\boxtimes	No			he Sampl ithin a We		Yes		No 🗆	
Wetland Hydrology Present?	Yes	\boxtimes	No			idimi a w	, tiarra :				
Remarks: Wetland HH in-pit VEGETATION — Use scientific name	s of plan										
	o or plant		Λ h a a l · · t			la dia atau	Dominance Test	workshoot			
Tree Stratum (Plot size: 5-m diameter) 1.			Absolute % Cove		ominant pecies?	Indicator Status	Number of Domir that are OBL, FA	nant Species		3	(A)
3.							Total Number of Species Across a		_	3	(B)
4			-	=	Total Cov	ver	Percent of Domin that are OBL, FA			100%	(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diar	neter)						Prevalence Inde				
Cornus sericea Rubus spectabilis			25 10		Yes Yes	FACW FAC	Total % Cover of: OBL species	<u>.</u>	$\frac{\text{Multiply}}{\text{x 1}}$	<u>/ by:</u>	
3.							FACW species		x 2 =		
4. 5.							FAC species		x 3 =		_
5			35	=	Total Cov	ver	FACU species UPL species		x 4 = x 5 =		_
Herb Stratum (Plot size: 1-m diameter)							Column Totals:		(A)		(B)
Phalaris arundinacea Urtica dioica			100 10		Yes No	FACW FAC	Prevalence Index	x = B/A =			
3.					140	170	Hydrophytic	Vegetation	Indicato	ors:	
4.							☐ 1 – Rapid Te	, ,		getation	
5. 6.							 □ 2 – Dominan □ 3 – Prevalen				
7							☐ 4 – Morpholo	ogical Adapta	ations¹ (P		
8. 9.							data in R □ 5 – Wetland	Remarks or o)
10.							□ Problematic				in)
11.							¹ Indicators of hyd				nust be
Woody Vine Stratum (Plot size: 3-m diame	ater)	-	110	=	Total Cov	er	present, unless d	isturbed or p	roblemat	IC.	
1.	,						Hydrophytic				
2						· · · · · · · · · · · · · · · · · · ·	Vegetation Present?	Ye	s 🏻	No 🗆]
% Bare Ground in Herb Stratum: -		_		=	Total Cov	rei	Present?				
Remarks:											

Depth (inches)	Matrix Color (moist)	%	Color (mo		ox Features % Type	Loc ²	!	Texture		Remarks
0-6	10YR 3/2	100	Color (IIIC	JISI) 7	∕₀ Type	LOC		Silt loam		Remarks
6-16	2.5Y 3/1	70	10YR 3/	/2 1	5 C	M		Silt loam	2 rodov	colors present
0-10	2.51 3/1	70						Siit ioairi	2 Tedux	Colors present
			7.5YR 3	3/3 1	0 C	M				
Type: C=0	Concentration, D=D	epletion. F	RM=Reduced	Matrix. CS=	Covered or Coate	d Sand Grains.	² Loc: P	L=Pore Linin	g. M=Matr	ix.
	il Indicators: (App							ors for Probl		
☐ Histos	sol (A1)		□ S	Sandy Redox	(S5)		□ 2c	m Muck (A10))	
	Epipedon (A2)			Stripped Matr	` '			ed Parent Mat		
	Histic (A3)				Mineral (F1) (exc	cept MLRA 1)		ery Shallow D		
•	gen Sulfide (A4)	rfaaa (111		oamy Gleyed Depleted Mat			□ Ot	her (Explain i	n Remark	S)
	ted Below Dark Sur Dark Surface (A12)		,	Redox Dark S	` '		³ Indicat	tors of hydrop	hytic vege	etation and
	/ Mucky Mineral (S	,			k Surface (F7)					present, unles
	Gleyed Matrix (S4			Redox Depres				urbed or prob		•
Restrictive	e Layer (if present):								
Type:						Hydric soil		Voc	⊠ N	No 🗆
								res		
Depth	(inches):					present?		res		
Depth Remarks:	(inches):					present?		res		
•	(inches):					present?		res		
•						present?		Tes		
Remarks: YDROL Wetland H	DGY lydrology Indicato		uired: check a	all that apply)		present?	Secon			
Remarks: YDROLO Wetland H Primary Ind	OGY lydrology Indicato dicators (minimum o		uired: check a					dary Indicato	rs (2 or mo	ore required)
YDROLO Wetland H Primary Inc	DGY lydrology Indicato		uired: check a			present?	П	dary Indicato	rs (2 or mo	
YDROLO Wetland H Primary Inc □ Surfac ⊠ High \	OGY lydrology Indicato dicators (minimum of the water (A1)			Water-Stain	ned Leaves (exce			dary Indicator Water-Staine	rs (2 or mo	ore required) (B9) (MLRA 1 ,
YDROLO Wetland H Primary Ind □ Surfac ⊠ High \ ⊠ Satura □ Water	DGY Iydrology Indicato dicators (minimum of the water (A1) Nater Table (A2) ation (A3) Marks (B1)			Water-Stain & 4B) (B9) Salt Crust (I Aquatic Inve	ned Leaves (exce B11) ertebrates (B13)			dary Indicator Water-Staine 2, 4A & 4B) Drainage Pat Dry-Season V	rs (2 or mo ed Leaves tterns (B10 Water Tab	ore required) (B9) (MLRA 1,
YDROLO Wetland H Primary Inc □ Surfac ⋈ High \ ⋈ Satura □ Water □ Sedim	DGY Industry I			Water-Stain & 4B) (B9) Salt Crust (I Aquatic Inve Hydrogen S	ned Leaves (excel B11) ertebrates (B13) Sulfide Odor (C1)	ot MLRA 1, 2, 4A		dary Indicator Water-Staine 2, 4A & 4B) Drainage Pat Dry-Season V Saturation Vis	rs (2 or mo ed Leaves tterns (B10 Water Tab sible on Ae	ore required) (B9) (MLRA 1, 0) le (C2) erial Imagery (C
YDROLO Wetland H Primary Ind □ Surface ⋈ High \ ⋈ Satura □ Water □ Sedim □ Drift □	DGY Industry I			Water-Stain & 4B) (B9) Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rh	ned Leaves (exce B11) ertebrates (B13) Sulfide Odor (C1) nizospheres along	et MLRA 1, 2, 4A		dary Indicator Water-Staine 2, 4A & 4B) Drainage Pat Dry-Season V Saturation Vis Geomorphic	rs (2 or mo ed Leaves etterns (B10 Water Tab sible on Ae Position (I	ore required) (B9) (MLRA 1, 0) le (C2) erial Imagery (C
Primary Ind Surface High \ Satura Sedim Drift □ Algal	DGY Industry I			Water-Stain & 4B) (B9) Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rh Presence of	B11) ertebrates (B13) Sulfide Odor (C1) nizospheres along f Reduced Iron (C	et MLRA 1, 2, 4A Living Roots (C3) 4)		dary Indicator Water-Staine 2, 4A & 4B) Drainage Pat Dry-Season V Saturation Vis Geomorphic Shallow Aqui	rs (2 or mo ed Leaves tterns (B10 Water Tab sible on Ae Position (I tard (D3)	ore required) (B9) (MLRA 1, 0) le (C2) erial Imagery (C
Primary Inc Surface High V Satura Sedim Drift D Algal I	DGY Addrology Indicator dicators (minimum of the water (A1) Water Table (A2) ation (A3) Marks (B1) ment Deposits (B2) Deposits (B3) Mat or Crust (B4) Deposits (B5)			Water-Stain & 4B) (B9) Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron	B11) ertebrates (B13) Sulfide Odor (C1) nizospheres along f Reduced Iron (C Reduction in Tille	pt MLRA 1, 2, 4A Living Roots (C3) 4) ed Soils (C6)		dary Indicator Water-Staine 2, 4A & 4B) Drainage Pat Dry-Season V Saturation Vis Geomorphic Shallow Aqui FAC-Neutral	rs (2 or mo ed Leaves tterns (B10 Water Tab sible on Ae Position (I tard (D3) Test (D5)	ore required) (B9) (MLRA 1, 0) ole (C2) orial Imagery (C3
Primary Inc Surface Water Sedim Drift D Algal Iron D Surface	dicators (minimum of the water (A1) Water Table (A2) ation (A3) Marks (B1) ment Deposits (B2) Deposits (B3) Mat or Crust (B4) Deposits (B5) De Soil Cracks (B6)	of one requ		Water-Stain & 4B) (B9) Salt Crust (I Aquatic Inversion Sound of Standard Represented on Standard Recent Iron Stunted or Standard Recent Iron Stunted On Standard Recent Iron Standard Re	B11) ertebrates (B13) Sulfide Odor (C1) nizospheres along f Reduced Iron (C Reduction in Tille Stressed Plants (I	pt MLRA 1, 2, 4A Living Roots (C3) 4) ed Soils (C6)		dary Indicator Water-Staine 2, 4A & 4B) Drainage Pat Dry-Season V Saturation Vis Geomorphic Shallow Aqui FAC-Neutral Raised Ant M	rs (2 or more deal Leaves atterns (B10) Water Tab sible on Ae Position (I stard (D3) Test (D5) Mounds (D0)	ore required) (B9) (MLRA 1, 0) le (C2) erial Imagery (C: 02) 6) (LRR A)
YDROLO Wetland H Primary Inc Surface Water Sedim Drift D Algal Iron D Surface Inunda	DGY Addrology Indicator dicators (minimum of the water (A1) Water Table (A2) ation (A3) Marks (B1) ment Deposits (B2) Deposits (B3) Mat or Crust (B4) Deposits (B5)	of one required	y (B7)	Water-Stain & 4B) (B9) Salt Crust (I Aquatic Inversion Sound of Standard Represented on Standard Recent Iron Stunted or Standard Recent Iron Stunted On Standard Recent Iron Standard Re	B11) ertebrates (B13) Sulfide Odor (C1) nizospheres along f Reduced Iron (C Reduction in Tille	pt MLRA 1, 2, 4A Living Roots (C3) 4) ed Soils (C6)		dary Indicator Water-Staine 2, 4A & 4B) Drainage Pat Dry-Season V Saturation Vis Geomorphic Shallow Aqui FAC-Neutral	rs (2 or more deal Leaves atterns (B10) Water Tab sible on Ae Position (I stard (D3) Test (D5) Mounds (D0)	ore required) (B9) (MLRA 1, 0) le (C2) erial Imagery (C: 02) 6) (LRR A)
YDROLO Wetland H Primary Inc Surface Water Sedim Drift D Algal Iron D Surface Inunda	ydrology Indicato dicators (minimum of ce water (A1) Nater Table (A2) ation (A3) Marks (B1) hent Deposits (B2) Deposits (B3) Mat or Crust (B4) deposits (B5) De Soil Cracks (B6) ation Visible on Aerely Vegetated Cond	of one required	y (B7)	Water-Stain & 4B) (B9) Salt Crust (I Aquatic Inversion Sound of Standard Represented on Standard Recent Iron Stunted or Standard Recent Iron Stunted On Standard Recent Iron Standard Re	B11) ertebrates (B13) Sulfide Odor (C1) nizospheres along f Reduced Iron (C Reduction in Tille Stressed Plants (I	pt MLRA 1, 2, 4A Living Roots (C3) 4) ed Soils (C6)		dary Indicator Water-Staine 2, 4A & 4B) Drainage Pat Dry-Season V Saturation Vis Geomorphic Shallow Aqui FAC-Neutral Raised Ant M	rs (2 or more deal Leaves atterns (B10) Water Tab sible on Ae Position (I stard (D3) Test (D5) Mounds (D0)	ore required) (B9) (MLRA 1, 0) le (C2) erial Imagery (C: 02) 6) (LRR A)
Primary Ind Surface Water Sedim Drift D Algal Iron D Surface Inunda	DGY Industry Industr	of one required	y (B7) ace (B8)	Water-Stain & 4B) (B9) Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (explain	B11) ertebrates (B13) Sulfide Odor (C1) nizospheres along f Reduced Iron (C Reduction in Tille Stressed Plants (I	Living Roots (C3) 4) ed Soils (C6) 01) (LRR A)		dary Indicator Water-Staine 2, 4A & 4B) Drainage Pat Dry-Season V Saturation Vis Geomorphic Shallow Aqui FAC-Neutral Raised Ant M	rs (2 or more deal Leaves atterns (B10) Water Tab sible on Ae Position (I stard (D3) Test (D5) Mounds (D0)	ore required) (B9) (MLRA 1, 0) le (C2) erial Imagery (C: 02) 6) (LRR A)
Remarks: YDROLO Wetland H Primary Inc Surface High V Satura Vater Sedim Drift D Algal D Surface Inunda Spars Field Obse	DGY lydrology Indicato dicators (minimum of the water (A1) Water Table (A2) ation (A3) Marks (B1) Ment Deposits (B2) Deposits (B3) Mat or Crust (B4) Deposits (B5) De Soil Cracks (B6) ation Visible on Aerely Vegetated Concervations: ater Present?	of one required in the second	y (B7) ce (B8)	Water-Stain & 4B) (B9) Salt Crust (I Aquatic Inverse of Presence of Recent Iron Stunted or Stunde or Stunted or Stunde or	B11) ertebrates (B13) Sulfide Odor (C1) nizospheres along f Reduced Iron (C Reduction in Tille Stressed Plants (I	Living Roots (C3) 4) ed Soils (C6) 01) (LRR A) Wetland Hyd	rology	dary Indicator Water-Staine 2, 4A & 4B) Drainage Pat Dry-Season V Saturation Vis Geomorphic Shallow Aqui FAC-Neutral Raised Ant M Frost-Heave	rs (2 or more deal Leaves atterns (B10) Water Tab sible on Ae Position (I stard (D3) Test (D5) Mounds (D0)	ore required) (B9) (MLRA 1, 0) le (C2) erial Imagery (C: 02) 6) (LRR A)
Remarks: YDROLO Wetland H Primary Inc Surface High \ Satura Orift D Orift	DGY Industry Industr	of one required in the second of the second	y (B7)	Water-Stain & 4B) (B9) Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (explain	B11) ertebrates (B13) Gulfide Odor (C1) nizospheres along f Reduced Iron (C Reduction in Tille Stressed Plants (I ain in remarks)	Living Roots (C3) 4) ed Soils (C6) 01) (LRR A)	rology	dary Indicator Water-Staine 2, 4A & 4B) Drainage Pat Dry-Season V Saturation Vis Geomorphic Shallow Aqui FAC-Neutral Raised Ant M Frost-Heave	rs (2 or mo ed Leaves tterns (B10 Water Tab sible on As Position (I ttard (D3) Test (D5) Mounds (D Hummock	ore required) (B9) (MLRA 1, 0) (Be (C2) (C2) (C2) (C3) (C4) (C4) (C5) (C5) (C5) (C6) (LRR A) (C6) (C6) (C7)
Remarks: YDROLO Wetland H Primary Inc Surface High \ Satura Sedim Drift D Iron D Surface Inunda Spars Field Obse Surface Water Tabl Saturation (includes c	dicators (minimum of the water (A1) Water Table (A2) ation (A3) Marks (B1) Ment Deposits (B2) Deposits (B3) Mat or Crust (B4) Deposits (B5) De Soil Cracks (B6) ation Visible on Aerely Vegetated Concervations: ater Present? Present? Present? Apillary fringe)	rial Imager cave Surfa res □ res ⋈	y (B7)	Water-Stain & 4B) (B9) Salt Crust (I Aquatic Inversion of Standard or Standard	B11) ertebrates (B13) Sulfide Odor (C1) nizospheres along f Reduced Iron (C Reduction in Tille Stressed Plants (I ain in remarks) - 6" BSG 0" BSG	Living Roots (C3) 4) 2d Soils (C6) 01) (LRR A) Wetland Hyd Present	rology	dary Indicator Water-Staine 2, 4A & 4B) Drainage Pat Dry-Season V Saturation Vis Geomorphic Shallow Aqui FAC-Neutral Raised Ant M Frost-Heave	rs (2 or mo ed Leaves tterns (B10 Water Tab sible on As Position (I ttard (D3) Test (D5) Mounds (D Hummock	ore required) (B9) (MLRA 1, 0) (Be (C2) (C2) (C2) (C3) (C4) (C4) (C5) (C5) (C5) (C6) (LRR A) (C6) (C6) (C7)
Remarks: YDROLO Wetland H Primary Inc Surface High \ Satura Sedim Drift D Iron D Surface Inunda Spars Field Obse Surface Water Tabl Saturation (includes c	DGY Industry Industr	rial Imager cave Surfa res □ res ⋈	y (B7)	Water-Stain & 4B) (B9) Salt Crust (I Aquatic Inversion of Standard or Standard	B11) ertebrates (B13) Sulfide Odor (C1) nizospheres along f Reduced Iron (C Reduction in Tille Stressed Plants (I ain in remarks) - 6" BSG 0" BSG	Living Roots (C3) 4) 2d Soils (C6) 01) (LRR A) Wetland Hyd Present	rology	dary Indicator Water-Staine 2, 4A & 4B) Drainage Pat Dry-Season V Saturation Vis Geomorphic Shallow Aqui FAC-Neutral Raised Ant M Frost-Heave	rs (2 or mo ed Leaves tterns (B10 Water Tab sible on As Position (I ttard (D3) Test (D5) Mounds (D Hummock	ore required) (B9) (MLRA 1, 0) (Be (C2) (C2) (C2) (C3) (C4) (C4) (C5) (C5) (C5) (C6) (LRR A) (C6) (C6) (C7)
Remarks: YDROLO Wetland H Primary Inc Surface High \ Satura Sedim Drift D Iron D Surface Inunda Spars Field Obse Surface Water Tabl Saturation (includes c	dicators (minimum of the water (A1) Water Table (A2) ation (A3) Marks (B1) Ment Deposits (B2) Deposits (B3) Mat or Crust (B4) Deposits (B5) De Soil Cracks (B6) ation Visible on Aerely Vegetated Concervations: ater Present? Present? Present? Apillary fringe)	rial Imager cave Surfa res □ res ⋈	y (B7)	Water-Stain & 4B) (B9) Salt Crust (I Aquatic Inversion of Standard or Standard	B11) ertebrates (B13) Sulfide Odor (C1) nizospheres along f Reduced Iron (C Reduction in Tille Stressed Plants (I ain in remarks) - 6" BSG 0" BSG	Living Roots (C3) 4) 2d Soils (C6) 01) (LRR A) Wetland Hyd Present	rology	dary Indicator Water-Staine 2, 4A & 4B) Drainage Pat Dry-Season V Saturation Vis Geomorphic Shallow Aqui FAC-Neutral Raised Ant M Frost-Heave	rs (2 or mo ed Leaves tterns (B10 Water Tab sible on As Position (I ttard (D3) Test (D5) Mounds (D Hummock	ore required) (B9) (MLRA 1, 0) (Be (C2) (Barial Imagery (C) (C2) (B) (LRR A) (B)



Project/Site: Nisqually State Park		City/County:	Pierce Sam	pling date: 11-23-2020
Applicant/Owner: Washington State Parks			State: WA Sa	ampling Point: DP-12
Investigator(s): Roen Hohlfeld and Jamie Sloan			o, Range: S25, T16N, R03E	·
			ave, convex, none):concave	Slope (%): 1
Subregion (LRR): A Lat: -	Lor		<u></u>	
Soil Map Unit Name: Aquic Xerofluvents, level		·	WI classification: PSSC	
Are climatic / hydrologic conditions on the site typical for	this time of yea			
Are Vegetation □, Soil □, or Hydrology □ significantly of	listurbed?	Are "Normal Ci	ircumstances" present on the sit	e? ⊠ Yes □ No
Are Vegetation □, Soil □, or Hydrology □ naturally prob		(If needed, exp	blain any answers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map s	howing sampl	ing point locations	s, transects, important featur	es, etc.
Hydrophytic Vegetation Present? Yes ⊠	No 🗆			
Hydric Soils Present? Yes □	No ⊠	Is the Samp within a W		s □ No ⊠
Wetland Hydrology Present? Yes ⊠	No 🗆	within a w	retianti :	
Remarks: Click here to enter text. VEGETATION – Use scientific names of plants.				
See selection of planter			Danis and Tank and Indian	
Tree Stratum (Plot size: 5-m diameter) 1	% Cover S	ominant Indicator pecies? Status	r Dominance Test workshee Number of Dominant Specie that are OBL, FACW, or FAC	es 2
2. 3.			Total Number of Dominant Species Across all Strata:	3 (B)
4.			Percent of Dominant Specie	
	<u> </u>	Total Cover	that are OBL, FACW, or FAC	
Sapling/Shrub Stratum (Plot size: 3-m diameter) 1. Physocarpus capitatus	15	Yes FACW	Prevalence Index workshe Total % Cover of:	et: Multiply by:
Symphoricarpos albus	15	Yes FACU	OBL species	x 1 =
3. Rubus armeniacus	5	No FAC	FACW species	x 2 =
4. Rubus laciniatus 5.	3	No FACU	FAC species FACU species	_ x 3 =
G	38 =	Total Cover	UPL species	x 5 =
Herb Stratum (Plot size: 1-m diameter)			Column Totals:	(A) (B)
Phalaris arundinacea Rubus ursinus	98 5	Yes FACW No FACU	Prevalence Index = B/A =	
3. Carex obnupta	2	No OBL	Hydrophytic Vegetation	n Indicators:
4			☐ 1 – Rapid Test for Hydro	1 7 0
5. 6.				
6. 7.			4 – Morphological Adap	tations ¹ (Provide supporting
8			data in Remarks or	on a separate sheet)
9.			□ 5 – Wetland Non-Vascu□ Problematic Hydrophytic	
10. 11.			¹ Indicators of hydric soil and	0 (1 /
		Total Cover	present, unless disturbed or	
Woody Vine Stratum (Plot size: 3-m diameter)			Hydrophytic	
1				es 🛛 No 🗆
	<u> </u>	Total Cover	Present?	
% Bare Ground in Herb Stratum:				
Remarks:				

Profile Des	scription: (Descr	ribe to the o	lepth need				or confirm the at	sence	of indicators.))	
Depth (inches)	Matrix Color (moist)	%	Color (n		Redox Feature %	<u>ures</u> Type	1 Loc²	2	Texture	R	Remarks
0-5	10YR 3/2	100	00101 (11	10101)	70	турс	200		Silt loam		CHARO
5-8	10YR 3/2	97	7.5YR	3//	3	С	M		Silt loam		
										N.45	and an atoba
8-11	10YR 4/2	50	7.5YR	4/6	5	С	M		Silt loam	KIM	ked matrix
8-11	10YR 3/3	45							Silt loam	Mix	ked matrix
¹Type: C=C	Concentration, D=	:Depletion, F	RM=Reduce	d Matrix	CS=Covere	d or Coate	d Sand Grains	²l oc:	PL=Pore Lining	ı. M=Matrix	<u> </u>
- ' '	I Indicators: (Ap			•			<u> </u>		tors for Proble		
_	sol (A1)				edox (S5)	,			cm Muck (A10)	•	
	Epipedon (A2)				Matrix (S6)				ed Parent Mate	. ,	
	Histic (A3)			-			ept MLRA 1)		ery Shallow Da		. ,
,	gen Sulfide (A4) ted Below Dark S	Surface (A11) 🗆	•	Bleyed Matrix d Matrix (F3)	` '			ther (Explain in	i Remarks)	
	Dark Surface (A1	,	,		ark Surface			3 Indica	ators of hydroph	nytic vegeta	ation and
	Mucky Mineral (d Dark Surfac	. ,		we	etland hydrology	y must be p	oresent, unless
☐ Sandy	Gleyed Matrix (S	S4)		Redox D	epressions ((F8)		dis	sturbed or probl	ematic.	
Restrictive	Layer (if preser	nt):					l leveluin noil	ı			
Type:							Hydric soil present?		Yes		o 🛛
Depth	(inches):						p. cociit.				
Remarks:											
rtomanto.											
HYDROLO	ngv										
	ydrology Indicat	tors:									
	licators (minimum		uired: check	all that a	apply)			Seco	ndary Indicators	s (2 or mor	e required)
	e water (A1)					ves (excep	ot MLRA 1, 2, 4A		Water-Stained	d Leaves (E	39) (MLRA 1,
J	Vater Table (A2)		_	& 4B)	` '				2, 4A & 4B)	(D40)	
	ation (A3) Marks (B1)				rust (B11) c Invertebrat	tos (R13)			Drainage Patte Dry-Season W		
	ent Deposits (B2))		•	gen Sulfide (` ,			•		ial Imagery (C9)
	eposits (B3)	,			•	, ,	Living Roots (C3)	\boxtimes	Geomorphic F		0 , , ,
_	Mat or Crust (B4)				nce of Reduc				Shallow Aquita		
	eposits (B5)	_,			t Iron Reduc				FAC-Neutral 7	, ,	
	ce Soil Cracks (Be	•			d or Stresse (explain in re		01) (LRR A)		Raised Ant Mo		
	ation Visible on A ely Vegetated Co	•	,	Other	(explain in re	emarks)		Ш	riosi-neave r	TUTTITIOCKS	
Field Obse			.00 (20)								
Surface Wa	ater Present?	Yes □	No ⊠	Depth	(in): -						
Water Table	e Present?	Yes □	No ⊠	Depth	(in): -		Wetland Hyd Present		Ye	s 🛛	No 🗆
Saturation I	Present?	Yes □	No ⊠	Depth	(in): -						
(includes ca	apillary fringe)										
Describe R	ecorded Data (sti	ream gauge	, monitoring	well, ae	rial photos, p	revious ins	pections), if avail	able:			
Remarks:	Geomorphic p	oosition is a	depression								
]											



Project/Site: Nisqually State Park				City/	County: F	Pierce	San	npling dat	te: <u>11-23</u>	-2020
Applicant/Owner: Washington State Parks	3					St	tate: <u>WA</u> S	ampling	Point: DP	-13
Investigator(s): Roen Hohlfeld and Jamie	Sloan			Section,	Township,	Range: S	25, T16N, R03E			
Landform (hillslope, terrace, etc): Depres	sion			Local re	lief (concav	e. convex. n	one): concave		Slope (%):	1
Subregion (LRR): A Lat: -				g: -	(001.041	o, ooo.,	Datum:		G. GP G (70).	
				y	NIVA	/I alaasifiaati				
Soil Map Unit Name: Aquic Xerofluvents.						/I classification				
Are climatic / hydrologic conditions on the sit			-							
Are Vegetation □, Soil □, or Hydrology □ s	-						present on the si	te? ⊠ Y	es ⊔ No	
Are Vegetation \square , Soil \square , or Hydrology \square n	aturally prob	ilematic?		(If ne	eded, expla	ain any answ	vers in Remarks.)			
SUMMARY OF FINDINGS - Attach	site map s	howing s	ampliı	ng point	locations,	, transects,	important featu	res, etc.		
Hydrophytic Vegetation Present?	Yes ⊠	No		_						
Hydric Soils Present?	Yes □	No	\boxtimes		the Sampl ithin a We		Yes	s 🗆	No 🛛	
Wetland Hydrology Present?	Yes □	No	\boxtimes	"	itimii a vve	cuana.				
Remarks: Click here to enter text.										
Nomans. Ones note to enter text.										
VEGETATION – Use scientific names	of plants									
- Ose scientific flames	oi piarits.					1				
Tree Stratum (Plot size: 5-m diameter)		Absolute		ominant	Indicator		ce Test workshe			
1. Populus balsamifera		% Cover 15		ecies? Yes	Status FAC		f Dominant Specie BL, FACW, or FA		3	(A)
2. Acer macrophyllum		10		Yes	FACU	Total Num	ber of Dominant		5	_ ` ′
3. 4.							cross all Strata:	_		_ (B)
4		25	= -	Total Cov	ver		f Dominant Specie BL, FACW, or FA		60%	(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diam	neter)		_				ce Index workshe			
1. Lonicera involucrata	icici)	80		Yes	FAC	Total % C			ply by:	
2. Rubus armeniacus		20		No	FAC	OBL spec		x 1 =		_
Cornus alba Physocarpus capitatus		10 5		No No	FACW FACW	FACW speci		x 2 = x 3 =		
5.				INO	TACV	FACU speci		x3=		_
		115	= -	Total Cov	ver	UPL speci		x 5 =		<u> </u>
Herb Stratum (Plot size: 1-m diameter)	·-					Column To	otals:	(A)		(B)
Rubus ursinus Phalaris arundinacea		25 20		Yes Yes	FACU FACW	Prevalenc	e Index = B/A =			
3.				165	PACW	Hydro	ophytic Vegetation	on Indica	ators:	
4.							apid Test for Hydi	. ,	/egetation	
5						-	ominance Test is			
6. 7.						1 4 _ M	revalence Index is lorphological Adar		(Provide sur	norting
8.							ata in Remarks or			
9							etland Non-Vascu			
10.						1	ematic Hydrophyt			
11.		45		Total Cov	ver		s of hydric soil and nless disturbed or			nust be
Woody Vine Stratum (Plot size: 3-m diame	ter)		_ '	· otal oo		· ·		·		
1.						Hydroph		. 🖂		1
2				Total Cov	/er	Vegetation Present?		′es ⊠	No 🗆	J
% Bare Ground in Herb Stratum: 70	-			Total Co.	VOI	1 TOOGINE	•			
Remarks:						•				
Tromano.										

			e depth	needed	to document the indic	cator	or confirm the ab	sence	of indicators.)		
Depth (inches)	Matrix Color (moist)	%	Co	olor (moi	st) Redox Features	Type	Loc ²	2	Texture	R	emarks
0-11	10YR 3/2	100				71 -			Silt loam	Redo	x in sandy clusions
11-16	10YR 3/2	92	1	10YR 3/6	6 8	С	M		Sandy loam		, doiono
¹Type: C=C	Concentration, D=	Depletion	ı, RM=Re	educed I	Matrix, CS=Covered or	Coate	d Sand Grains.	² Loc:	PL=Pore Lining	, M=Matrix.	
Hydric Soi	I Indicators: (Ap	plicable	to all LR	Rs, unl	ess otherwise noted.)			Indica	tors for Proble	matic Hyd	ric Soils³:
☐ Histos	ol (A1)			□ Sa	andy Redox (S5)			□ 2	cm Muck (A10)	-	
	Epipedon (A2)				ripped Matrix (S6)				Red Parent Mate		
	Histic (A3)				pamy Mucky Mineral (F1		cept MLRA 1)		ery Shallow Da		(TF12)
	gen Sulfide (A4)	f (A	44)		pamy Gleyed Matrix (F2	2)			Other (Explain in	Remarks)	
	ted Below Dark S Dark Surface (A1		.11)		epleted Matrix (F3) edox Dark Surface (F6)			3 Indic:	ators of hydroph	vtic vegeta	tion and
	Mucky Mineral (,			epleted Dark Surface (F	7)			etland hydrology		
	Gleyed Matrix (. ,			edox Depressions (F8)	,			sturbed or probl		
Restrictive	Layer (if prese	nt):									
Type:							Hydric soil		Yes	□ No	\boxtimes
	(inches):						present?		100		
Берит	(IIICIIC3).										
Remarks:											
HYDROLO	OGY										
	ydrology Indica licators (minimun		equired:	check al	Il that apply)			Seco	ndary Indicators	s (2 or more	required)
☐ Surfac	e water (A1)		-		Water-Stained Leaves	(exce	ot MLRA 1, 2, 4A		Water-Stained	Leaves (B	9) (MLRA 1 ,
☐ High V	Vater Table (A2)				& 4B) (B9)	` •			2, 4A & 4B)	,	, ,
☐ Satura					Salt Crust (B11)				Drainage Patte	. ,	
	Marks (B1)				Aquatic Invertebrates (E				Dry-Season W		
	ent Deposits (B2 eposits (B3)	(.)			Hydrogen Sulfide Odor Oxidized Rhizospheres	. ,	Living Poots (C3)		Saturation Visi Geomorphic P		• • • •
	Mat or Crust (B4)				Presence of Reduced I				Shallow Aquita)
_	eposits (B5)				Recent Iron Reduction	,	,		FAC-Neutral T		
	e Soil Cracks (B	6)			Stunted or Stressed Pla		` '		Raised Ant Mo	. ,	(LRR A)
☐ Inunda	ation Visible on A	erial Imag	gery (B7)		Other (explain in remark	ks)			Frost-Heave H	lummocks	
☐ Sparse	ely Vegetated Co	ncave Su	rface (B8	3)		1					
Field Obse	ervations:										
Surface Wa	ater Present?	Yes □	No		Depth (in):		Watland Hed				
Water Table	e Present?	Yes \square	No		Depth (in):		Wetland Hyd Present		Ye	s 🗌	No 🛛
Saturation I	Present? apillary fringe)	Yes □	No		Depth (in):						
		ream day	de moni	toring w	ell, aerial photos, previo	nue inc	spections) if avail-	ahle.			
Describe K	ccorueu Dala (Si	ream yau	ye, mum	wing w	cii, aciiai pilotos, pievit	Juo IIIS	specificis), ii avalli	abie.			
Remarks:	Geomorphic p	oosition is	a depres	ssion.							



Project/Site: Nisqually State Park				City/	County: F	Pierce	Samp	oling date	e: <u>11-23</u>	-2020
Applicant/Owner: Washington State Pa	ırks					Sta	te: <u>WA</u> Sai	mpling F	oint: DP	-14
Investigator(s): Roen Hohlfeld and Jam	nie Sloan			Section,	Township,	Range: S2	5, T16N, R03E			
Landform (hillslope, terrace, etc): Swa	le			Local re	lief (concav	e, convex, noi	ne): <u>concave</u>	5	Slope (%):	1
Subregion (LRR): A Lat: -				ıg: -			Datum:	_		
Soil Map Unit Name: Aquic Xerofluver						/I classification				
Are climatic / hydrologic conditions on the				r? ⊠ Yes						
Are Vegetation □, Soil □, or Hydrology □			-				resent on the site	? ⊠ Ye	s □ No	
Are Vegetation □, Soil □, or Hydrology □	-						rs in Remarks.)			
SUMMARY OF FINDINGS – Attac	ch site map	showing s	sampli			-		s, etc.		
Hydrophytic Vegetation Present?	Yes D	⊠ No								
Hydric Soils Present?	Yes 🛭	⊠ No			the Sampl ithin a We		Yes	\boxtimes	No 🗆	
Wetland Hydrology Present?	Yes 🛭	⊠ No			itimii a vvo	Juana :				
VEGETATION – Use scientific nam	nes of plants	S.								
Tree Stratum (Plot size: 5-m diameter) 1Alnus rubra		Absolute % Cove 90		ominant oecies? Yes	Indicator Status FAC	Number of I	Test worksheet Dominant Species L, FACW, or FAC:	5	3	(A)
2. 3.						Total Numb	er of Dominant ross all Strata:		3	(B)
4.				Total Cov	/er		Dominant Species L, FACW, or FAC		100%	(A/B)
Sapling/Shrub Stratum (Plot size: 3-m di	ameter)						Index workshee	et:		
Fraxinus latifolia 2.				Yes	FACW	Total % Cov OBL specie		Multip x 1 =	<u>ıly by:</u>	
3.						FACW spec		x 2 =		
4.						FAC specie				_
5		3		Total Cov	/er	FACU species UPL species		_ x 4 = x 5 =		_
Herb Stratum (Plot size: 1-m diameter)						Column Tot		(A)		(B)
2				Yes	FACW	Prevalence	Index = B/A =			
2. 3. 4.							ohytic Vegetation oid Test for Hydro			
5						4	minance Test is >			
6. 7.						4 – Mo	valence Index is ≤ rphological Adapta		Provide sup	porting
8.						☐ dat	a in Remarks or o	on a sepa	arate sheet)	
9							tland Non-Vascula matic Hydrophytic		-	in)
11.						¹ Indicators of	of hydric soil and v	wetland h	hydrology n	
Wasde Visa Statema (Blat size 2 as dis-	4 - "\	100	=	Total Cov	/er	present, unl	less disturbed or p	roblema	atic.	
Woody Vine Stratum (Plot size: 3-m diar 1.	,					Hydrophy		_	_	_
2				Total Cov	/er	Vegetation Present?	n Ye	s 🏻	No 🗆]
% Bare Ground in Herb Stratum: -										
Remarks:										

Depth (inches) Matrix (inches) Redox Features Type¹ Loc² Texture Remarks 0-5 10YR 2/2 100 Loam High OM 5-9 10YR 4/1 80 5YR 3/4 20 C M Loam High OM
0-5 10YR 2/2 100 Loam High OM
<u> </u>
33 1011C4/1 00 311C3/4 20 0 W Loam Trigit OW
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Loc: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils ³ :
☐ Histosol (A1) ☐ Sandy Redox (S5) ☐ 2cm 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) ³ Indicators of hydrophytic vegetation and
□ Sandy Mucky Mineral (S1) □ Depleted Dark Surface (F7) wetland hydrology must be present, unl
□ Sandy Gleyed Matrix (S4) □ Redox Depressions (F8) disturbed or problematic.
Restrictive Layer (if present):
noonionio Eajor in proceinji
Type: Hydric soil Yos 🕅 No 🗍
Type: Hydric soil resent? Yes ⊠ No □
Type: Hydric soil Yos 🕅 No 🗍
Type: Hydric soil resent? Yes ⊠ No □
Type: Hydric soil present? Yes ☒ No ☐
Type: Hydric soil present? Yes ☒ No ☐
Type: Hydric soil present? Yes ☒ No ☐
Type:
Type: Depth (inches): Remarks: Rock at 9-inches BSG. Hydric soils presumed to continue below rock layer. Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Secondary Indicators (2 or more required) Surface water (A1) High Water Table (A2) Saturation (A3) Saturation (A3) Aquatic Invertebrates (B13) Aquatic Invertebrates (B13) Sediment Deposits (B2) Drift Deposits (B3) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Frost-Heave Hummocks Field Observations: Hydric soil present? No Wetland: No Water Stained Leaves (except MLRA 1, 2, 4A 2, 4A & 4B) Water-Stained Leaves (B9) (MLRA 2, 4A & 4B) Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 2, 4A & 4B) Saturation (A3) Drianage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Saturation Visible on Aerial Imagery Stunted or Stressed Plants (D1) (LRR A) Frost-Heave Hummocks Field Observations:
Type: Depth (inches): Remarks: Rock at 9-inches BSG. Hydric soils presumed to continue below rock layer. HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Secondary Indicators (2 or more required) High Water Table (A2) Saturation (A3) Saturation (A3) Saturation (A3) Saturation (A3) Saturation (A3) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Prisence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Sutrate (B1) Sparsely Vegetated Concave Surface (B3) Field Observations: Surface Water Present? Yes No Depth (in): Water Table Present? Yes No Depth (in): Saturation Present? Yes No Depth (in): O"BSG No Depth (in): Water Table Present? Yes No Depth (in): O"BSG No Depth (in): O"BS
Type: Depth (inches):
Type: Depth (inches): Remarks: Rock at 9-inches BSG. Hydric soils presumed to continue below rock layer. HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Secondary Indicators (2 or more required) High Water Table (A2) Saturation (A3) Saturation (A3) Saturation (A3) Saturation (A3) Saturation (A3) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Prisence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Sutrate (B1) Sparsely Vegetated Concave Surface (B3) Field Observations: Surface Water Present? Yes No Depth (in): Water Table Present? Yes No Depth (in): Saturation Present? Yes No Depth (in): O"BSG No Depth (in): Water Table Present? Yes No Depth (in): O"BSG No Depth (in): O"BS
Type: Depth (inches):
Type:
Type: Depth (inches):



Project/Site: Nisqually State Park				City/	County: F	Pierce	Samp	ling date	e: <u>11-23</u>	-2020
Applicant/Owner: Washington State Parks	5					St	ate: <u>WA</u> Sar	npling P	oint: DP	-15
Investigator(s): Roen Hohlfeld and Jamie	Sloan			Section,	Township,	Range: S	25, T16N, R03E			
Landform (hillslope, terrace, etc):Depres	sion			Local re	lief (concav	e, convex, n	one): <u>concave</u>	§	Slope (%):	2
Subregion (LRR): A Lat: -			Lon	ıg: -			Datum:	-		
Soil Map Unit Name: Aquic Xerofluvents,							on: PSSC			
Are climatic / hydrologic conditions on the sit	e typical for	this time	of year	r? ⊠ Yes	s □ No	(If no, explai	n in remarks.)			
Are Vegetation □, Soil □, or Hydrology □ si			-				present on the site	? ⊠ Ye	s □ No	
Are Vegetation □, Soil □, or Hydrology □ n	-						rers in Remarks.)			
SUMMARY OF FINDINGS – Attach	site man s	howing s	ampli	na noint	locations	transacts	important feature	s etc		
Hydrophytic Vegetation Present?	Yes 🗵	No No		ng point	iocalions,	transects,	important leature	5, 610.		
Hydric Soils Present?	Yes □	No	\boxtimes		the Sampl		Yes	П	No 🏻	
Wetland Hydrology Present?	Yes ⊠	No		W	ithin a We	etland?	103		но д	
Remarks: Click here to enter text. VEGETATION – Use scientific names	s of plants.									
Tree Stratum (Plot size: 5-m diameter) 1. Alnus rubra		Absolute % Cover		ominant pecies? Yes	Indicator Status FAC	Number of	ce Test worksheet: f Dominant Species BL, FACW, or FAC:		3	_ (A)
2							ber of Dominant cross all Strata:		3	(B)
4		100	=	Total Cov	/er		Dominant Species BL, FACW, or FAC:		100%	(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diam 1. Rubus spectabilis 2.		30		Yes	FAC	Prevalence Total % Co		t: <u>Multip</u> x 1 =	ly by:	
3.						FACW spe	ecies	x 2 =		_
4. 5.						FAC speci FACU spe		x 3 = x 4 =		_
-		30	=	Total Cov	/er	UPL speci	es	x 5 =		
Herb Stratum (Plot size: 1-m diameter) 1. Carex obnupta		100		Yes	OBL	Column To		(A)		(B)
2		100		100	ODL	Prevalence	e Index = B/A =			
3. 4. 5. 6. 7. 8. 9. 10. 11.					/er	☐ 1 - R: ☑ 2 - D: ☐ 3 - P: ☐ 4 - M ☐ 5 - W ☐ Proble ¹Indicators	pphytic Vegetation apid Test for Hydropominance Test is > revalence Index is ≤ orphological Adapta ata in Remarks or o Yetland Non-Vascula ematic Hydrophytic of hydric soil and volless disturbed or p	ohytic Ve 50% 3.01 ations1 (Fin a sepa ar Plants Vegetati	egetation Provide suparate sheet ion¹ (Expla	in)
Woody Vine Stratum (Plot size: 3-m diame 1. 2.				Total Cov	ver	Hydroph Vegetation	on Ye	s 🛛	No □]
% Bare Ground in Herb Stratum: - Remarks:						l				

		ibe to th	ne depth	neede	ed to document the indicator	or confirm the ab	sence	of indicators.)	
Depth (inches)	Matrix Color (moist)	%	C	olor (m	Redox Features noist) % Type	Loc ²	2	Texture	Re	marks
0-8	10YR 3/2	100			31 -			Silt loam		
8-16	10YR 3/2	50						Silt loam	Mixe	ed matrix
8-16	10YR 2/1	50						Sand	Mixe	ed matrix
¹Type: C=C	Concentration, D=	Depletio	n, RM=F	Reduce	d Matrix, CS=Covered or Coate	ed Sand Grains.	² Loc: l	PL=Pore Lining	a, M=Matrix.	
					nless otherwise noted.)			tors for Probl		ic Soils ³ :
-	ol (A1)	•			Sandy Redox (S5)			cm Muck (A10)	-	
	Epipedon (A2)				Stripped Matrix (S6)			ed Parent Mat		
	Histic (A3)				Loamy Mucky Mineral (F1) (exc	cept MLRA 1)		ery Shallow Da	,	TF12)
,	gen Sulfide (A4) ted Below Dark S	urface (/	A11)		Loamy Gleyed Matrix (F2) Depleted Matrix (F3)			ther (Explain in	i Kemarks)	
	Dark Surface (A1		,		Redox Dark Surface (F6)			ators of hydrop		
	Mucky Mineral (Depleted Dark Surface (F7)			etland hydrolog		esent, unless
	Gleyed Matrix (S				Redox Depressions (F8)		uis	sturbed or prob	iemanc.	
	Layer (if preser	nt):				Hydric soil			_	_
Type:						present?		Yes	☐ No	\boxtimes
Depth	(inches):					•				
Remarks:	Rock at 9-inche	es BSG.								
HYDROLO	OGY									
	ydrology Indicat		required	check	all that apply)		Secor	ndary Indicator	s (2 or more	required)
•	e water (A1)	1 01 0110	i oquii ou		Water-Stained Leaves (exce	nt MI RA 1 2 4A		Water-Staine	-	
	Vater Table (A2)				& 4B) (B9)	pr , _ ,		2, 4A & 4B)	a 200100 (De	, (III = 10 t 1,
	ation (A3)				Salt Crust (B11)			Drainage Pat		
	Marks (B1)				Aquatic Invertebrates (B13)			Dry-Season V		
	ent Deposits (B2) eposits (B3))			Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along	Living Poots (C3)		Geomorphic I		I Imagery (C9)
	Mat or Crust (B4)				Presence of Reduced Iron (C			Shallow Aquit	` ,	
_	eposits (B5)				Recent Iron Reduction in Tille	,	\boxtimes	FAC-Neutral		
☐ Surfac	e Soil Cracks (B6				Stunted or Stressed Plants (I	01) (LRR A)		Raised Ant M	ounds (D6) (LRR A)
	ation Visible on A	erial Ima	gery (B7	•	Other (explain in remarks)			Frost-Heave I	Hummocks	
□ Sparse	ely Vegetated Co		urface (E	38)						
☐ Sparse	ely Vegetated Co	ncave S			Dooth (in)					
☐ Sparse Field Obse Surface Wa	ely Vegetated Control vervations: ater Present?	ncave S] No	\boxtimes	Depth (in):	Wetland Hyd		V	s [X]	No 🗆
☐ Sparse Field Obse Surface Wa Water Table	ely Vegetated Coervations: ater Present? e Present?	Yes [□ No	\boxtimes	Depth (in):	Wetland Hyd Present		Ye	es 🛛 🗆	No 🗆
☐ Sparse Field Obse Surface Wa Water Table Saturation I	ely Vegetated Coervations: ater Present? e Present?	ncave S	□ No	\boxtimes	. , ,			Ye	es 🗵 🗆	No 🗆
☐ Sparse Field Obse Surface Water Table Saturation I (includes ca	ely Vegetated Co ervations: ater Present? e Present? Present? apillary fringe)	Yes [Yes [Yes [Yes [Yes [Yes [Yes [Yes [No No No	× ×	Depth (in):	Present	?	Ye	es 🛛 🗆	No 🗆
Field Obset Surface Water Table Saturation I (includes ca	ely Vegetated Co ervations: ater Present? e Present? Present? apillary fringe)	Yes [Yes [Yes [Yes [Yes [Yes [Yes [Yes [No No No	× ×	Depth (in): - Depth (in): -	Present	?	Ye	es 🛛 🗆	No □
☐ Sparse Field Obse Surface Wa Water Table Saturation I (includes ca Describe Re	ely Vegetated Co ervations: ater Present? e Present? Present? apillary fringe) ecorded Data (str	Yes [Yes [Yes [Yes [Yes [Yes [Yes [Yes [No No No No uge, moi	⊠ ⊠ ⊠ nitoring	Depth (in): - Depth (in): -	Present	?	Ye	es ⊠ ∣	No 🗆
☐ Sparse Field Obse Surface Water Table Saturation I (includes ca	ely Vegetated Co ervations: ater Present? e Present? Present? apillary fringe)	Yes [Yes [Yes [Yes [Yes [Yes [Yes [Yes [No No No No uge, moi	⊠ ⊠ ⊠ nitoring	Depth (in): - Depth (in): -	Present	?	Ye	es 🛛 🗆	No 🗆



Project/Site: Nisqually State Park		City/	County: F	Pierce Sampl	ling date:	11-24-:	2020
Applicant/Owner: Washington State Parks		_		State: WA San	npling Poir	nt: DP-	16
Investigator(s): Roen Hohlfeld and Jamie Sloan		Section,	Township,	Range: S30, T16N, R04E			
Landform (hillslope, terrace, etc): Depression		Local re	lief (concav	e, convex, none): concave	Slor	pe (%):	1
Subregion (LRR): A Lat: -		 _ong: -	`	Datum:		` '	
Soil Map Unit Name: Kapowsin gravelly ashy loam, 6			NW	I classification: none			
Are climatic / hydrologic conditions on the site typical for							
Are Vegetation □, Soil □, or Hydrology □ significantly of	-			cumstances" present on the site?	2 ⊠ Voo	□ No	
Are Vegetation □, Soil □, or Hydrology □ naturally probability in the vegetation □, Soil □, or Hydrology □ naturally probability in the vegetation □, Soil □, or Hydrology □ naturally probability in the vegetation □, Soil □, or Hydrology □ naturally probability in the vegetation □, Soil □, or Hydrology □ naturally probability in the vegetation □, Soil □, or Hydrology □ naturally probability in the vegetation □, Soil □, or Hydrology □ naturally probability in the vegetation □, Soil □, or Hydrology □ naturally in the vegetation □, Soil □, or Hydrology □ naturally in the vegetation □, Soil □, or Hydrology □ naturally in the vegetation □, Soil □, or Hydrology □ naturally in the vegetation □, Soil □, or Hydrology □ naturally in the vegetation □, Soil □, or Hydrology □ naturally probability in the vegetation □, Soil □, or Hydrology □ naturally probability in the vegetation □, Soil □, or Hydrology □ naturally probability in the vegetation □, Soil □, or Hydrology □ naturally probability in the vegetation □, Soil □, or Hydrology □ naturally probability in the vegetation □, Soil □, or Hydrology □ naturally probability in the vegetation □, Soil □, or Hydrology □ naturally probability in the vegetation □, Soil □, or Hydrology □ naturally probability in the vegetation □, soil □, or Hydrology □ naturally probability in the vegetation □, soil □, or Hydrology □ naturally probability in the vegetation □, soil □, or Hydrology □ naturally probability in the vegetation □, soil □, or Hydrology □ naturally probability in the vegetation □, or Hydrology □ naturally probability in the vegetation □, or Hydrology □ naturally probability in the vegetation □, or Hydrology □ naturally probability in the vegetation □, or Hydrology □ naturally probability in the vegetation □, or Hydrology □ naturally probability in the vegetation □, or Hydrology □ naturally probability in the vegetation □, or Hydrology □ naturally probability in the vegetation □, or Hydrology □ naturally probability in the vegetation □, or Hydrology □ naturally probability in				ain any answers in Remarks.)	□ 162		
		,		,			
SUMMARY OF FINDINGS – Attach site map s			locations,	transects, important features	s, etc.		
Hydrophytic Vegetation Present? Yes ⊠	No 🗆		the Sampl	ed Area	_		
Hydric Soils Present? Yes ⊠	No 🗆		ithin a We		⊠ N	。	
Wetland Hydrology Present? Yes ⊠	No 🗆						
Remarks: Wetland II in-pit.							
VECETATION . Has accontified account allowed							
VEGETATION – Use scientific names of plants.				<u> </u>			
Tree Stratum (Plot size: 5-m diameter)	Absolute	Dominant Species 2	Indicator	Dominance Test worksheet:			
1. Fraxinus latifolia	% Cover 40	Species? Yes	Status FACW	Number of Dominant Species that are OBL, FACW, or FAC:		4	(A)
2. Frangula purshiana	25	Yes	FAC	Total Number of Dominant		5	
3				Species Across all Strata:			(B)
4	65	= Total Co	ver	Percent of Dominant Species that are OBL, FACW, or FAC:	8	80%	(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diameter)				Prevalence Index worksheet			
1. Fraxinus latifolia	80	Yes	FACW	Total % Cover of:	Multiply b	<u>эу:</u>	
2. Frangula purshiana	25	No	FAC	OBL species	x 1 =		_
3. Populus balsamifera	20	No No	FAC	FACW species	x 2 =		_
4. Symphoricarpos albus	15 12	No No	FACU FACU	FAC species	x 3 =		
Pseudotsuga menziesii Physocarpus capitatus	5	No No	FACU	FACU species	x 4 =	-	_
0. Friysocarpus capitatus	157	= Total Co		UPL species	x 5 =		_
Herb Stratum (Plot size: 1-m diameter)	101	- 10tai 00	• • • • • • • • • • • • • • • • • • • •	Column Totals:	(A)		(B)
1. Rubus ursinus	50	Yes	FACU		()		(-)
2. Carex deweyana	50	Yes	FAC	Prevalence Index = B/A =			
3. Grass species*	10	No	FAC	Hydrophytic Vegetation			
4. Polystichum munitum	5	No	FACU	☐ 1 – Rapid Test for Hydrop		ation	
5				□ 2 – Dominance Test is > 5 □ 3 – Dominance Test is > 5 □ 3 – Dominance Test is > 5 □ 4 – Dominance Test is > 5 □ 5 – Dominance Test is > 5 □ 6 – Dominance Test is > 5 □ 7 – Dominance Test is > 5 □ 8 – Dominance Test is > 5 □ 9 – Dominance Test is > 5 □ 10 – Dominance Test is > 5			
6				□ 3 – Prevalence Index is ≤□ 4 – Morphological Adapta		wido cupi	oorting
8				data in Remarks or or	n a separa	te sheet)	Jorning
9.				☐ 5 – Wetland Non-Vascula		,	
10.				☐ Problematic Hydrophytic \	√egetation	1 (Explain	n)
11.				¹ Indicators of hydric soil and w			ust be
Week Visco Otratura (Plataire O and Francis)	115	= Total Co	ver	present, unless disturbed or pr	roblematic.		
Woody Vine Stratum (Plot size: 3-m diameter) 1				Hydrophytic			
2.					s 🏻	No 🗆	
		= Total Co	ver	Present?			
% Bare Ground in Herb Stratum: -							
Remarks: *assumed FAC.							

		ibe to the d	lepth neede			or confirm the at	sence	of indicators.)		
Depth (inches)	Matrix Color (moist)	%	Color (m		ox Features % Type	Loc ²	2	Texture	Rem	narks
0-1	10YR 2/2	100			- 7/			Loam		n OM
1-7	2.5Y 3/1	100						Loam		
7-13	2.5Y 6/2	98	7.5YR	5/0	2 C	M		Loamy clay		
7-13	2.51 0/2	90	7.51K	0/0	2 C	IVI		Loanly clay		
1Type: C. C	Concentration D	Danlatian F	M Doduces	d Matrix CC	Cayorad ar Caata	d Cand Crains	21 00: [D. Dara Lining	M Matrix	
	Concentration, D=	•				d Sand Grains.		PL=Pore Lining, tors for Proble		Coilo3.
-	il Indicators: (Ap sol (A1)	piicable to		Sandy Redox	-			cm Muck (A10)	nauc nyunc	JOHS'.
	Epipedon (A2)			Stripped Matr				ed Parent Mate	ial (TF2)	
	Histic (A3)				Mineral (F1) (exc	cept MLRA 1)		ery Shallow Dar		F12)
,	gen Sulfide (A4)			Loamy Gleye				ther (Explain in	Remarks)	
	ted Below Dark S Dark Surface (A1		•	Depleted Mat Redox Dark S	, ,		3 Indias	stara of budranb	tio vo actotic	n and
	/ Mucky Mineral (,			k Surface (F7)			ators of hydrophytland hydrology		
	/ Gleyed Matrix (S			Redox Depres				turbed or proble		.,
Restrictive	Layer (if preser	nt):								
Type:						Hydric soil		Yes 2	⊠ No	
Depth	(inches):					present?				
	,									
Remarks:	Rock at 9-inche	es BSG.								
HYDROL	OGY									
	ydrology Indicat dicators (minimum		uired: check	all that apply)			Secor	ndary Indicators	(2 or more re	eauired)
	ce water (A1)					pt MLRA 1, 2, 4A		Water-Stained		
	Water Table (A2)			& 4B) (B9)	(00)	,		2, 4A & 4B)		(
	ation (A3)			Salt Crust (Drainage Patte		
	Marks (B1)				ertebrates (B13)			Dry-Season Wa		
	nent Deposits (B2) Deposits (B3)			, ,	Sulfide Odor (C1) nizospheres along	Living Poots (C3)		Saturation Visit Geomorphic Po		magery (C9)
	Mat or Crust (B4)				f Reduced Iron (C			Shallow Aquita	` ,	
_	eposits (B5)				Reduction in Tille			FAC-Neutral To		
☐ Surfac	ce Soil Cracks (B6	6)		Stunted or \$	Stressed Plants (D	01) (LRR A)		Raised Ant Mo	unds (D6) (L	RR A)
	ation Visible on A			Other (expla	ain in remarks)			Frost-Heave H	ummocks	
	ely Vegetated Co	ncave Surfa	ce (B8)							
Field Obse		· –								
Surface Wa	ater Present?	Yes □	No ⊠	Depth (in):	-	Wetland Hyd	rology	V	. 🖾 .,	
Water Tabl	e Present?	Yes	No ⊠	Depth (in):	0" BSG	Present		Yes	s 🛛 N	o 🗆
Saturation (includes c	Present? apillary fringe)	Yes □	No ⊠	Depth (in):	0" BSG					
		eam dauge	monitoring	well, aerial nh	notos, previous ins	spections), if avail	able:			
	2 2 2 2 2 2 3 3 4 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	gaago	,	, pi	, p. 3	.,				
Remarks:										



Duningt/City, Ningually Ctata Dayl		C:to./	O	Nama.	Camaniin		44.04	2020
Project/Site: Nisqually State Park		City/	County: F		Samplir	•	11-24-	
Applicant/Owner: Washington State Parks				State: \(\)	WA Sam	oling Poir	nt: <u>DP-</u>	1/
Investigator(s): Roen Hohlfeld and Jamie Sloan		Section,	Township,	Range: S30, T16N	N, R04E			
Landform (hillslope, terrace, etc): Depression		Local re	lief (concav	e, convex, none):	concave	Slo	pe (%):	3
Subregion (LRR): A Lat: -	L	_ong:		I	Datum:			
Soil Map Unit Name: Kapowsin gravelly ashy loam, 6	6 to 15 percen	nt slopes	NW	'I classification: no	one			
Are climatic / hydrologic conditions on the site typical for			s 🗆 No ((If no. explain in rema	arks.)			
Are Vegetation □, Soil □, or Hydrology □ significantly o	-			cumstances" present		⊠ Yes	□ No	
Are Vegetation □, Soil □, or Hydrology □ naturally probability				ain any answers in Re		△ 100	_ 110	
7.10 Vogetation —, con —, or rivarology — naturally pro-	nomatio:	(11.116	edeu, expie	an any answers in ite	anarks.)			
SUMMARY OF FINDINGS - Attach site map s	showing sam	pling point	locations,	transects, importa	nt features,	etc.		
Hydrophytic Vegetation Present? Yes ⊠	No 🗆							
Hydric Soils Present? Yes ⊠	No 🗆		the Sampl ithin a We		Yes 🛭	N E	。 🗆	
Wetland Hydrology Present? Yes ⊠	No 🗆		illilli a vve	tianu :				
, ,								
Remarks: Wetland H in-pit.								
VEGETATION – Use scientific names of plants.				1				
	Absolute	Dominant	Indicator	Dominance Test v	vorksheet:			
Tree Stratum (Plot size: 5-m diameter)	% Cover	Species?	Status	Number of Domina			5	(4)
Populus balsamifera Fraxinus latifolia	30 30	Yes Yes	FACW	that are OBL, FAC ¹ Total Number of Do				(A)
3		100	171011	Species Across all			5	(B)
4.				Percent of Domina		10	00%	,
	60	= Total Cov	ver	that are OBL, FAC	W, or FAC:	•		(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diameter)				Prevalence Index				
Fraxinus latifolia Spiraea douglasii	70 25	Yes Yes	FACW FACW	Total % Cover of: OBL species		$\frac{\text{Multiply I}}{\text{x 1}} =$	<u>oy:</u>	
Spiraea dougrasii Populus balsamifera	20	No	FAC	FACW species		x 2 =		_
4. Thuja plicata	5	No	FACW	FAC species		x 3 =		_
5. Lonicera involucrata	3	No	FAC	FACU species		x 4 =		_
Heads Otrodosco (Blad allocad and Inspector)	123	= Total Cov	ver	UPL species		x 5 = _		– (D)
Herb Stratum (Plot size: 1-m diameter) 1. Carex deweyana	3	Yes	FAC	Column Totals:		(A)		(B)
2	-	100	17.0	Prevalence Index =	= B/A =			
3				Hydrophytic \				
4 5.				☐ 1 – Rapid Test ☑ 2 – Dominance			etation	
6.				□ 3 – Prevalence				
7.				☐ 4 – Morpholog	ical Adaptati	ons¹ (Pro		
8.				data in Re	marks or on	•	te sheet)	
9.				□ 5 – Wetland N □ Problematic H			¹ (Explair	n)
10 11				¹ Indicators of hydric		-		
		= Total Cov	ver	present, unless dis				
Woody Vine Stratum (Plot size: 3-m diameter)								
1.				Hydrophytic Vegetation	Yes	⋈	No 🗆	
2		= Total Cov	ver	Present?	162		NO L	
% Bare Ground in Herb Stratum: 97								
Remarks:								

			the dept	h need	ed to document the indicator	or confirm the ab	osence	of indicators.)	
Depth (inches)	Matrix Color (moist)	%	, D	Color (m	noist) Redox Features Typ	e ¹ Loc ²	2	Texture	Remarks
0-4	10YR 3/2	10	00	•				Loam	60% cobble
4-14	10YR 4/2	70	<u> </u>	20YR	5/6 30 C	M		Loamy sand	
7 17	1011(4/2			20110	3/0 30 0	101		Loanly Sand	
¹Type: C=C	Concentration, D=	=Depleti	ion. RM=	Reduce	ed Matrix, CS=Covered or Coat	ed Sand Grains.	² Loc:	PL=Pore Lining	. M=Matrix.
					ınless otherwise noted.)				matic Hydric Soils ³ :
-	ol (A1)	рпоць	io to aii i		Sandy Redox (S5)			cm Muck (A10)	made riyane cono i
	Epipedon (A2)				Stripped Matrix (S6)			ted Parent Mate	rial (TF2)
	Histic (A3)				Loamy Mucky Mineral (F1) (ex	(cept MLRA 1)	\Box V	ery Shallow Da	rk Surface (TF12)
,	gen Sulfide (A4)				Loamy Gleyed Matrix (F2)			other (Explain in	Remarks)
	ted Below Dark S		(A11)		Depleted Matrix (F3)		31 11		
	Dark Surface (A1 Mucky Mineral (,			Redox Dark Surface (F6) Depleted Dark Surface (F7)				ytic vegetation and must be present, unless
	Gleyed Matrix (Redox Depressions (F8)			sturbed or probl	
	Layer (if prese				1 7				
Type:		,-				Hydric soil		Yes	⊠ No □
						present?		res	A NO L
Depth	(inches):								
Remarks:	Rock at 9-inch	es BSG	€.						
HYDROLO	OGY								
	ydrology Indica licators (minimun		e require	d: check	all that apply)		Seco	ndary Indicators	s (2 or more required)
☐ Surfac	e water (A1)		-		Water-Stained Leaves (exce	ept MLRA 1, 2, 4A		Water-Stained	Leaves (B9) (MLRA 1,
☐ High V	Vater Table (A2)				& 4B) (B9)	• , ,		2, 4A & 4B)	, , ,
□ Satura	ation (A3)				, ,			Drainage Patte	
	Marks (B1)				1 ,			•	/ater Table (C2)
	ent Deposits (B2	2)			,				ble on Aerial Imagery (C9)
	eposits (B3) Mat or Crust (B4)				'			Geomorphic P Shallow Aquita	` '
-	eposits (B5)				,	•		FAC-Neutral T	
	e Soil Cracks (B	6)							ounds (D6) (LRR A)
	ation Visible on A		nagery (B			(= :) (=:::::)		Frost-Heave H	, , , ,
	ely Vegetated Co				,				
	rvotiona								
Field Obse	i valions.								
Field Obse	ater Present?	Yes	□ No) ×	Depth (in): -	Watland Hyd	lrology.		
Field Obse	ater Present?		□ No	_	Depth (in): - Depth (in): -	Wetland Hyd Present		Ye	s ⊠ No □
Field Obse Surface Wa Water Table Saturation I	ater Present? e Present? Present?	Yes) ×	. , , ,			Ye	s⊠ No□
Field Obse Surface Wa Water Table Saturation I (includes ca	ater Present? e Present? Present? apillary fringe)	Yes Yes	□ No	o ⊠	Depth (in): - Depth (in): -	Present	?	Ye	s⊠ No□
Field Obse Surface Wa Water Table Saturation I (includes ca	ater Present? e Present? Present? apillary fringe)	Yes Yes	□ No	o ⊠	Depth (in):	Present	?	Ye	s⊠ No□
Field Obse Surface Wa Water Table Saturation I (includes ca	ater Present? e Present? Present? apillary fringe)	Yes Yes	□ No	o ⊠	Depth (in): - Depth (in): -	Present	?	Ye	s⊠ No □
Field Obse Surface Wa Water Table Saturation I (includes ca	ater Present? e Present? Present? apillary fringe)	Yes Yes ream g	□ No□ No□ No□ No□ No□ No□ No□ No□ No□ No	o ⊠ o ⊠ onitoring	Depth (in): Depth (in): well, aerial photos, previous in	Present	?	Ye	s⊠ No□
Field Obse Surface Wa Water Table Saturation I (includes ca Describe Re	ater Present? e Present? Present? apillary fringe) ecorded Data (st	Yes Yes ream g	□ No□ No□ No□ No□ No□ No□ No□ No□ No□ No	o ⊠ o ⊠ onitoring	Depth (in): Depth (in): well, aerial photos, previous in	Present	?	Ye	s⊠ No □



Project/Site: Nisqually State Park		City/	County: P	Pierce	Sampli	ing date:	11-24-2	2020
Applicant/Owner: Washington State Parks		City/	County. 1	State:	WA Sam	•		
Investigator(s): Roen Hohlfeld and Jamie Sloan		Section	Township	Range: S30, T		ipinig i oi	iii. <u>Di -</u>	10
Landform (hillslope, terrace, etc): Terrace						Clr	ope (%):	E
· · · · · · · · · · · · · · · · · · ·			eller (concave	e, convex, none):			ре (%).	_ 5
Subregion (LRR): A Lat: -	·	ong:	NIVA	// _/:	Datum:			
Soil Map Unit Name: Kapowsin gravelly ashy loam, (I classification:	none			
Are climatic / hydrologic conditions on the site typical for	•						□ N-	
Are Vegetation Soil or Hydrology significantly of				cumstances" pres		' 🗵 Yes	□ NO	
Are Vegetation \square , Soil \square , or Hydrology \square naturally prol	Jiemauc?	(IT N	ееаеа, ехріа	ain any answers ir	n Remarks.)			
SUMMARY OF FINDINGS – Attach site map s	howing sam	pling poin	t locations,	transects, impo	ortant features	s, etc.		
Hydrophytic Vegetation Present? Yes □	No 🗵							
Hydric Soils Present? Yes □	No 🗵		the Sampl ⁄ithin a We		Yes		No 🛛	
Wetland Hydrology Present? Yes □	No ⊠		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, tiuriu i				
Remarks: Click here to enter text.								
VEGETATION – Use scientific names of plants.								
	Absolute	Dominant	Indicator	Dominance Te	st worksheet			
Tree Stratum (Plot size: 5-m diameter)		Species?	Status	Number of Dom	ninant Species		2	
Populus balsamifera Fraxinus latifolia	70 5	Yes No	FAC FACW	that are OBL, F				(A)
3.	<u> </u>	INU	FACVV	Total Number o Species Across			4	(B)
4.				Percent of Dom			50%	
	75	= Total Co	ver	that are OBL, F				(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diameter) 1. Acer circinatum	40	Yes	FAC	Prevalence Inc Total % Cover of		:: Multiply	hv.	
2. Fraxinus latifolia	10	No	FACW	OBL species	0	x 1 =	0	
3. Ribes lacustre	10	No	FAC	FACW species FAC species	<u>15</u> 120	x 2 = x 3 =	30 360	_
4 5.				FACU species	75	x 4 =	300	
	60	= Total Co	ver	UPL species	0	x 5 =	0	
Herb Stratum (Plot size: 1-m diameter) 1. Rubus ursinus	60	Yes	FACU	Column Totals:	210	(A)	690	(B)
Polystichum munitum	15	Yes	FACU	Prevalence Inde		3.3		
3.				-1	tic Vegetation			
4. 5.					Test for Hydrop ance Test is > 5		etation	
6.				□ 3 – Prevale				
7. 8.					ological Adapta Remarks or or			
9.				☐ 5 – Wetlan	d Non-Vascula	r Plants ¹	·	
10.				☐ Problemati Indicators of hy	c Hydrophytic \	_		
11.		= Total Co	ver	present, unless				iusi be
Woody Vine Stratum (Plot size: 3-m diameter)								
1				Hydrophytic Vegetation	Yes	s 🗆	No 🏻	
		= Total Co	ver	Present?	100	<i>,</i> _		
% Bare Ground in Herb Stratum: 20								
Remarks:								

Profile Desc Depth	ription: (Descr Matrix	ibe to	the o	depth	neede		ent the indicator	or confirm the at	osence	of indicators.)		
(inches)	Color (moist)	(%	C	olor (m		% Type	e ¹ Loc ²	2	Texture		Rer	narks
0-11	10YR 2/1	1	00							Loamy sand		w/c	obble
¹Type: C=Co	ncentration, D=	Deple	etion, F	RM=R	educe	d Matrix, CS=	=Covered or Coate	ed Sand Grains.	² Loc:	PL=Pore Lining	g, M=Ma	atrix.	
	ndicators: (Ap									tors for Proble			c Soils ³ :
☐ Histosol	(A1)	-				Sandy Redox	x (S5)		□ 2	cm Muck (A10))	•	
	oipedon (A2)					Stripped Mat	` '			led Parent Mat	•	,	
☐ Black Hi	` '						y Mineral (F1) (ex	cept MLRA 1)		ery Shallow Da			F12)
	en Sulfide (A4)	·£	- (////	1.			ed Matrix (F2)			other (Explain in	n Rema	rks)	
	d Below Dark S ark Surface (A1		e (A11)		Depleted Mar Redox Dark S	, ,		3 Indica	ators of hydrop	hytic ya	aetatio	on and
	Mucky Mineral (,					rk Surface (F7)			etland hydrolog			
	Gleyed Matrix (S					Redox Depre				sturbed or prob			,
Restrictive L	ayer (if preser	nt):											
Type:		•						Hydric soil		Yes	П	No	M
• •								present?		162	ш	NO	
Depth (ir	nches):												
Remarks:	Rock at 11-incl	hes B	SG.										
HYDROLOG	GY												
Wetland Hyd Primary Indic	Irology Indicat ators (minimum	t ors: n of or	ne req	uired:	check	all that apply	')		Seco	ndary Indicator	s (2 or r	more r	equired)
	water (A1)							pt MLRA 1, 2, 4A	· 🗆	Water-Staine	d Leave	s (B9)	(MLRA 1,
Ü	iter Table (A2)					& 4B) (B9)				2, 4A & 4B)			
☐ Saturation	` '					Salt Crust (` '			Drainage Patt	,	,	20)
	larks (B1)	`					vertebrates (B13)			Dry-Season V Saturation Vis			
	nt Deposits (B2) posits (B3))					Sulfide Odor (C1) hizospheres along	Living Poots (C3)		Geomorphic F			imagery (C9)
	at or Crust (B4)						of Reduced Iron (0	• , ,		Shallow Aquit		` '	
_	osits (B5)						n Reduction in Till			FAC-Neutral			
	Soil Cracks (Be	3)					Stressed Plants (Raised Ant M			.RR A)
☐ Inundati	on Visible on A	erial Ir	mager	y (B7) 🗆		lain in remarks)			Frost-Heave I	Hummo	cks	
□ Sparsely	Vegetated Co	ncave	Surfa	ace (B	8)								
Field Observ	ations:												
Surface Water	er Present?	Yes		No	\boxtimes	Depth (in):	-	Wetland Hyd	Irology				_
Water Table	Present?	Yes		No	\boxtimes	Depth (in):	-	Present		Ye	es 🗆	N	lo 🏻
Saturation Pr		Yes		No	\boxtimes	Depth (in):							
	illary frings)												
	illary fringe)	roam <i>i</i>	aauaa	mon	itorina	well acrial a	hotos provious in	enactions) if avail	able:				
		ream (gauge	e, mon	itoring	well, aerial p	hotos, previous in	spections), if avail	able:				
		ream (gauge	, mon	itoring	well, aerial p	hotos, previous in	spections), if avail	able:				
		ream (gauge	e, mon	itoring	well, aerial p	hotos, previous in	spections), if avail	able:				
Describe Rec		ream (gauge	e, mon	itoring	well, aerial p	hotos, previous in	spections), if avail	able:				



Section, Township, Range: S30, T16N, R04E	Project/Site: Nisqually State Park		City/County: P	rierce Sampl	ing date: 1-13-20)21
Local rollef (concave, corvex, none): concave Slope (%): 2	Applicant/Owner: Washington State Parks			State: WA San	npling Point: DP-	19
Local rollef (concave, corvex, none): concave Slope (%): 2	Investigator(s): Roen Hohlfeld and Jamie Sloan		Section, Township,	Range: S30, T16N, R04E		
Soil Map Unit Name Kapowsin gravelly ashy loam, 6 to 15 percent slopes NWI classification: none			Local relief (concave	e, convex, none): concave	Slope (%):	2
Absolute Species Status Prevalence Pre	Subregion (LRR): A Lat: -	Lon	g:	Datum:		
Are "Normal Circumstances" present on the site?	Soil Map Unit Name: Kapowsin gravelly ashy loam, 6	to 15 percent s	lopes NW	I classification: none		
SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present?	Are climatic / hydrologic conditions on the site typical for t	this time of year	? ⊠ Yes ⊠ No ((If no, explain in remarks.)		
SUMMARY OF FINDINGS — Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No Bishes Sampled Area within a Wetland? Yes No Site Present? Yes No No Site Sampled Area within a Wetland? Yes No No Site Stratum (Plot size: 5-m diameter) No Site Sampled Area within a Wetland? Yes No No Site Stratum (Plot size: 5-m diameter) No Site Stratum (Plot size: 3-m diameter) No Site Stratum (Plot size: 3-m diameter) No Site Stratum (Plot size: 3-m diameter) No Site Stratum (Plot size: 1-m diameter) No Site Stratum (Plot size: 3-m diameter) No Site Site Site Site Site Site Site Site	Are Vegetation \square , Soil \square , or Hydrology \square significantly di	sturbed?	Are "Normal Circ	cumstances" present on the site?	'⊠ Yes □ No	
Hydrophytic Vegetation Present?	Are Vegetation \square , Soil \square , or Hydrology \square naturally probl	ematic?	(If needed, expla	in any answers in Remarks.)		
Sapiling/Shrub Stratum (Plot size: 3-m diameter) Sapiling/Shrub Stratum (Plot size: 1-m diameter) Sapiling/Shrub Stratum (Plot size: 3-m diameter) Sapi	SUMMARY OF FINDINGS – Attach site map sh	nowing sampli	ng point locations,	transects, important features	s, etc.	
Wetland Hydrology Present? Yes No Within a Wetland? Yes No Within a Wetland? Yes Within a Wetland? Yes No Within a Wetland? Yes Within a Wetland? Yes No Within a Wetland? Yes	Hydrophytic Vegetation Present? Yes ⊠	No 🗆				
	Hydric Soils Present? Yes □	No 🗵			□ No ⊠	
Absolute Dominant Indicator Species Status Number of Dominant Species Latter (Plot size: 5-m diameter) Absolute Species Status Number of Dominant Species Latter (Plot size: 5-m diameter) Latter Lat	Wetland Hydrology Present? Yes ⊠	No □				
Number of Dominant Species 2	VEGETATION – Use scientific names of plants.					
2. 3. 3. 3. 3. 3. 3. 3. 4. 4. 4. 4. 4. 5. 5. 4. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.	Tree Stratum (Plot size: 5-m diameter)	% Cover Sp	pecies? Status	Number of Dominant Species		(A)
Percent of Dominant Species that are OBL, FACW, or FAC: 100% (A/B)	2			Total Number of Dominant	2	, ,
Sapling/Shrub Stratum (Plot size: 3-m diameter) Sapling/Shrub Stratum (Plot size: 3-m diameter) Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species X 1 = Sapper Sap				'	4000/	(D)
1. Physocarpus capitatus 80 Yes FACW Total % Cover of: OBL species Multiply by: X 1 = X 1			Total Cover		100%	(A/B)
OBL species	1	00	V 540W			
3.			res FACW			
Society Soc	3			'		_
Herb Stratum (Plot size: 1-m diameter) S	-					_
1. Carex deweyana 5 Yes FAC 2. By The Valence Index = B/A = 1	_	= 08	Total Cover	UPL species	x 5 =	_
2.		5	Yes FAC		(A)	(B)
4. □ 1 - Rapid Test for Hydrophytic Vegetation 5. □ 2 - Dominance Test is > 50% 6. □ 3 - Prevalence Index is ≤ 3.0¹ 7. □ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 9. □ 5 - Wetland Non-Vascular Plants¹ 10. □ Problematic Hydrophytic Vegetation¹ (Explain) 11. □ Problematic Hydrophytic Vegetation¹ (Explain) 1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Woody Vine Stratum (Plot size: 3-m diameter) 1. □ Hydrophytic Vegetation Yes ☑ No □ Present?	2.					
5.						
7.						
8. data in Remarks or on a separate sheet) 9. Data data in Remarks or on a separate sheet) 10. Data data in Remarks or on a separate sheet) 10. Data data in Remarks or on a separate sheet) 10. Data data in Remarks or on a separate sheet) 11. Data data in Remarks or on a separate sheet) 12. Data data in Remarks or on a separate sheet) 13. Data data in Remarks or on a separate sheet) 14. Data data in Remarks or on a separate sheet) 15. Data data in Remarks or on a separate sheet) 16. Data data in Remarks or on a separate sheet) 18. Data data in Remarks or on a separate sheet) 19. Data data in Remarks or on a separate sh	_					oorting
10. □ Problematic Hydrophytic Vegetation¹ (Explain) 11. □ \$\frac{5}{5} = \text{Total Cover}\$ \[\frac{Woody Vine Stratum}{1} \text{(Plot size: 3-m diameter)} \\ 1. □ \\ 2. □ \\ \frac{-}{5} = \text{Total Cover} \\ \frac{-}{5} = Total Cove	8.			data in Remarks or or	n a separate sheet)	,orang
11						n)
Woody Vine Stratum (Plot size: 3-m diameter) 1. 2 = Total Cover % Bare Ground in Herb Stratum: 95 Hydrophytic Vegetation Present? Yes ☒ No ☐ Present?	11.			¹ Indicators of hydric soil and w	retland hydrology mu	,
1. Hydrophytic 2. Vegetation - = Total Cover % Bare Ground in Herb Stratum: 95 Hydrophytic Vegetation Present?	- Woody Vino Stratum (Diet size, 2 m diameter)	5 =	Total Cover	present, unless disturbed or pr	oblematic.	
2 = Total Cover Present? No \ 8 Bare Ground in Herb Stratum: 95	,			Hydrophytic		
% Bare Ground in Herb Stratum: 95	2.		Total Cayor		s ⊠ No □	
Remarks:	% Bare Ground in Herb Stratum: 95	 =	TOTAL COVEL	Fiesent!		
	Remarks:					

Profile Des	cription: (Desci	ribe to the	depth ne	eded to d		nt the indicator	or confirm the al	bsence	of indicators.	.)	
(inches)	Color (moist)	%	Color	(moist)	<u>Kedo/</u>		Loc	2	Texture	R	temarks
0-6	2.5Y 3/1	100							Sandy loam		
6-13	2.5Y 3/2	98	10Y	'R 3/6	2	С	М		Sandy loam		
¹Type: C=C	oncentration, D=	Depletion	, RM=Redu	ced Matri	x, CS=C	Covered or Coate	d Sand Grains.	² Loc:	PL=Pore Lining	g, M=Matrix	
	Indicators: (Ap								tors for Probl		
☐ Histos	ol (A1)			Sandy	Redox ((S5)		□ 2	cm Muck (A10)	
	Epipedon (A2)				d Matrix				Red Parent Mat		
	Histic (A3)			-	-	Mineral (F1) (exc	cept MLRA 1)		ery Shallow D		
,	gen Sulfide (A4) ed Below Dark S	Surface (A	□ 11) □	•	Gleyed ed Matri	Matrix (F2)			Other (Explain i	n Remarks)	
	Dark Surface (A1		'' <i>)</i>			urface (F6)		3 Indica	ators of hydrop	hytic veget	ation and
	Mucky Mineral (,				Surface (F7)		we	etland hydrolog	y must be p	present, unless
☐ Sandy	Gleyed Matrix (S	S4)		Redox	Depress	sions (F8)		dis	sturbed or prob	lematic.	
Restrictive	Layer (if presen	nt):									
Type:							Hydric soil		Yes		×
	(inches):						present?				_
Борин	(1101100).										
Remarks:	Rock at 13-inc	hes BSG.									
HYDROLO)GV										
	ydrology Indica	tore:									
	icators (minimun		quired: che	eck all that	apply)			Seco	ndary Indicator	rs (2 or mor	e required)
	e water (A1)					ed Leaves (exce	ot MLRA 1, 2, 4A	· 🗆	Water-Staine	d Leaves (E	39) (MLRA 1 ,
0	Vater Table (A2)			& 4B) (B9)				2, 4A & 4B)		
	tion (A3)				Crust (B				Drainage Pat		(00)
	Marks (B1) ent Deposits (B2	۸.				rtebrates (B13) ulfide Odor (C1)			Dry-Season \		al Imagery (C9)
	ent Deposits (B2 eposits (B3)	.)		•	_	` ,	Living Roots (C3)		Geomorphic		0 , , ,
	Nat or Crust (B4)					Reduced Iron (C			Shallow Aqui	`	-/
_	eposits (B5)					Reduction in Tille			FAC-Neutral		
□ Surfac	e Soil Cracks (Bo	6)		□ Stun	ted or S	tressed Plants (D	01) (LRR A)		Raised Ant M	lounds (D6)	(LRR A)
	ition Visible on A			□ Othe	r (explai	in in remarks)			Frost-Heave	Hummocks	
	ely Vegetated Co	ncave Su	face (B8)			T					
Field Obse	rvations:										
Surface Wa	iter Present?	Yes \square	No ⊠	Depth	ı (in):	-	Wetland Hyd	Irology		N7	🗖
Water Table	e Present?	Yes ⊠	No 🗆	Depth	n (in):	4" BSG	Present		Y	es 🛛	No 🗆
Saturation F (includes ca	Present? apillary fringe)	Yes ⊠	No 🗆	Depth	n (in):	0" BSG					
		ream gaud	ge, monitor	ing well, a	erial pho	otos, previous ins	spections), if avail	lable:			
	(5 - 1		,	•	• •	. ,,				
Remarks:											
1											



Project/Site: Nisqually State Park				City/	County: F	Pierce	Samp	ling date	: <u>1-13-2</u>	2021
Applicant/Owner: Washington State Park	:S					Sta	te: <u>WA</u> Sar	npling Po	oint: DP	-210
Investigator(s): Roen Hohlfeld and Jamie	Sloan			Section,	Township,	Range: S2	0, T16N, R04E			
Landform (hillslope, terrace, etc): Slope				Local re	lief (concav	e, convex, noi	ne): concave	S	lope (%):	2
Subregion (LRR): A Lat: -				ng: -	`		Datum:	-	,	
Soil Map Unit Name: Kapowsin gravelly	ashy loam. () to 6 perc			NW	/I classification	n: none			
Are climatic / hydrologic conditions on the si										
Are Vegetation \square , Soil \square , or Hydrology \square s			-				present on the site	? ⊠ Yes	s □ No	
Are Vegetation \square , Soil \square , or Hydrology \square r	-					•	rs in Remarks.)	. 🖪 100	110	
SUMMARY OF FINDINGS – Attach			samoli	•		·	•	s. etc.		
Hydrophytic Vegetation Present?	Yes 🗵	No			. 1000110110,					
Hydric Soils Present?	Yes □	No	\boxtimes		the Sampl		Yes		No 🏻	
Wetland Hydrology Present?	Yes ⊠	No		W	ithin a We	etiand?		_		
Remarks: Click here to enter text. VEGETATION – Use scientific name	s of plants.									
Tree Stratum (Plot size: 5-m diameter)		Absolute % Cove		ominant pecies?	Indicator Status		Test worksheet: Dominant Species			
1. Alnus rubra		5		Yes	FAC		L, FACW, or FAC:		6	(A)
Populus balsamifera Fraxinus latifolia		<u>5</u>		Yes Yes	FAC		er of Dominant		7	(D)
3. Fraxinus latifolia 4.		<u> </u>		res	FACW	1 '	ross all Strata: Dominant Species			_ (B)
		15	=	Total Cov	ver		L, FACW, or FAC:		86%	(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diar	neter)						Index workshee	t:		
Rosa pisocarpa Fraxinus latifolia		10 5		Yes Yes	FACW	Total % Cov OBL specie		$\frac{\text{Multiply}}{\text{x 1}} =$	y by:	
3. Amelanchier alnifolia		5		Yes	FACU	FACW spec		x 2 =		_
4.						FAC specie		x 3 =		_
5		20		Total Cov	ver	FACU species		x 4 = x 5 =		
Herb Stratum (Plot size: 1-m diameter)	•		_			Column Tot		(A)		(B)
Carex deweyana Rubus ursinus		10 trace		Yes No	FAC FAC	Prevalence	Index = B/A =			
3.		trace		INU	TAC	Hydror	ohytic Vegetation	Indicate	ors:	
4.							oid Test for Hydrop	,	getation	
5. 6.							minance Test is > evalence Index is ≤			
7.						4 – Moi	rphological Adapta			
8. 9.							a in Remarks or o tland Non-Vascula		,	
10.							natic Hydrophytic	Vegetation	on¹ (Explai	n)
11							of hydric soil and vess disturbed or p			nust be
Woody Vine Stratum (Plot size: 3-m diame	eter)	10	_ =	Total Cov	ver	present, uni	ess disturbed or p	TODIETTIAL	.10.	
1	,					Hydrophy		_		
2		_		Total Cov	/or	Vegetation Present?	n Ye	s 🏻	No 🗆	
% Bare Ground in Herb Stratum: 90	•			Total Cov	VEI	i resent:				
Remarks:										

		ibe to the	depth need		ent the indicator	or confirm the ab	sence	of indicators.)
Depth (inches)	Matrix Color (moist)	%	Color (r		ox Features % Type	1 Loc ²	2	Texture	Remarks
0-8	10YR 2/1	100						Sandy loam	
8-17	10YR 4/2	97	10YR	3/3	2 C	M		Sandy loam	
¹Type: C=C	Concentration, D=[Depletion,	RM=Reduce	ed Matrix, CS=	Covered or Coate	d Sand Grains.	² Loc: F	PL=Pore Lining	g, M=Matrix.
	l Indicators: (App						Indicat	tors for Proble	ematic Hydric Soils ³ :
☐ Histos	ol (A1)			Sandy Redox	(S5)		□ 2d	cm Muck (A10))
	Epipedon (A2)			Stripped Matr				ed Parent Mate	
	Histic (A3)				/ Mineral (F1) (exc	cept MLRA 1)			ark Surface (TF12)
, ,	gen Sulfide (A4)	urfoco (Ad	1)	Loamy Gleyer	` '		□ O	ther (Explain ir	n Remarks)
	ted Below Dark Su Dark Surface (A12		1) 🗆	Depleted Mat Redox Dark S			³ Indica	ators of hydron	hytic vegetation and
	Mucky Mineral (S	,			k Surface (F7)				y must be present, unless
	Gleyed Matrix (S			Redox Depres				turbed or prob	
Restrictive	Layer (if presen	ıt):							
Туре:						Hydric soil		Yes	□ No ⊠
	(in ab as).					present?		163	
Depth	(inches):								
Remarks:	Faint redox.								
HYDROLO	OGY								
	ydrology Indicate licators (minimum		quired: check	c all that apply))		Secor	ndary Indicator	s (2 or more required)
Primary Ind				Water-Stair) ned Leaves (exce)	ot MLRA 1, 2, 4A		-	s (2 or more required) d Leaves (B9) (MLRA 1,
Primary Ind ⊠ Surfac ⊠ High W	dicators (minimum se water (A1) Vater Table (A2)		quired: check	Water-Stair & 4B) (B9)	ned Leaves (exce	ot MLRA 1, 2, 4A		Water-Stained 2, 4A & 4B)	d Leaves (B9) (MLRA 1,
Primary Ind ⊠ Surfac ⊠ High W ⊠ Satura	dicators (minimum se water (A1) Vater Table (A2) ation (A3)			Water-Stair & 4B) (B9) Salt Crust (ned Leaves (exce) B11)	ot MLRA 1, 2, 4A		Water-Stained 2, 4A & 4B) Drainage Patt	d Leaves (B9) (MLRA 1 , terns (B10)
Primary Ind ⊠ Surfac ⊠ High W ⊠ Satura □ Water	dicators (minimum ee water (A1) Vater Table (A2) ation (A3) Marks (B1)	of one red		Water-Stair & 4B) (B9) Salt Crust (Aquatic Inve	ned Leaves (excel B11) ertebrates (B13)	ot MLRA 1, 2, 4A		Water-Stained 2, 4A & 4B) Drainage Patt Dry-Season V	d Leaves (B9) (MLRA 1, terns (B10) Vater Table (C2)
Primary Ind Surfac High V Satura Water Sedim	licators (minimum be water (A1) Vater Table (A2) Ition (A3) Marks (B1) ent Deposits (B2)	of one red		Water-Stair & 4B) (B9) Salt Crust (Indicate Investigation State In	ned Leaves (excel B11) ertebrates (B13) Sulfide Odor (C1)			Water-Stained 2, 4A & 4B) Drainage Patt Dry-Season V Saturation Vis	d Leaves (B9) (MLRA 1, terns (B10) Vater Table (C2) ible on Aerial Imagery (C9)
Primary Ind Surfac High V Satura Water Sedim Drift D	licators (minimum be water (A1) Vater Table (A2) Ition (A3) Marks (B1) ent Deposits (B2) eposits (B3)	of one red		Water-Stair & 4B) (B9) Salt Crust (Aquatic Invi Hydrogen S Oxidized Rh	ned Leaves (excel B11) ertebrates (B13) Gulfide Odor (C1) nizospheres along	Living Roots (C3)		Water-Stained 2, 4A & 4B) Drainage Patt Dry-Season V Saturation Vis Geomorphic F	d Leaves (B9) (MLRA 1, terns (B10) Vater Table (C2) ible on Aerial Imagery (C9) Position (D2)
Primary Ind Surface High W Satura Water Sedim Drift D Algal N	licators (minimum e water (A1) Vater Table (A2) Ition (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4)	of one red		Water-Stair & 4B) (B9) Salt Crust (Aquatic Invidence of Control o	ned Leaves (exception of the leaves (exception	Living Roots (C3)		Water-Stained 2, 4A & 4B) Drainage Patt Dry-Season V Saturation Vis Geomorphic F Shallow Aquit	d Leaves (B9) (MLRA 1, terns (B10) Vater Table (C2) ible on Aerial Imagery (C9) Position (D2) iard (D3)
Primary Ind Surfac High V Satura Water Sedim Drift D Algal N	licators (minimum le water (A1) Vater Table (A2) Intion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5)	of one red		Water-Stair & 4B) (B9) Salt Crust (Aquatic Invidence of Stair Crust of Stair Cru	B11) ertebrates (B13) Sulfide Odor (C1) nizospheres along of Reduced Iron (C n Reduction in Tille	Living Roots (C3) 4) ed Soils (C6)		Water-Stained 2, 4A & 4B) Drainage Patt Dry-Season V Saturation Vis Geomorphic F Shallow Aquit FAC-Neutral	d Leaves (B9) (MLRA 1, terns (B10) Vater Table (C2) ible on Aerial Imagery (C9) Position (D2) tard (D3) Test (D5)
Primary Ind Surface High V Satura Water Sedim Drift D Algal N Iron De Surface	licators (minimum e water (A1) Vater Table (A2) Ition (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4)	of one red		Water-Stair & 4B) (B9) Salt Crust (Aquatic Invidence of Stair Crust of Stair Cru	ned Leaves (exception of the leaves (exception	Living Roots (C3) 4) ed Soils (C6)		Water-Stained 2, 4A & 4B) Drainage Patt Dry-Season V Saturation Vis Geomorphic F Shallow Aquit FAC-Neutral	d Leaves (B9) (MLRA 1, terns (B10) Vater Table (C2) sible on Aerial Imagery (C9) Position (D2) tard (D3) Test (D5) ounds (D6) (LRR A)
Primary Ind Surface High W Satura Water Sedim Drift D Algal M Iron De Surface Inunda	licators (minimum le water (A1) Vater Table (A2) Intion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) le Soil Cracks (B6)	of one red b) erial Image		Water-Stair & 4B) (B9) Salt Crust (Aquatic Invidence of Stair Crust of Stair Cru	ned Leaves (exception of the leaves (exception of the leaves (exception of the leaves (exception of the leaves of	Living Roots (C3) 4) ed Soils (C6)		Water-Stained 2, 4A & 4B) Drainage Patt Dry-Season V Saturation Vis Geomorphic F Shallow Aquit FAC-Neutral Raised Ant M	d Leaves (B9) (MLRA 1, terns (B10) Vater Table (C2) sible on Aerial Imagery (C9) Position (D2) tard (D3) Test (D5) ounds (D6) (LRR A)
Primary Ind Surface High W Satura Water Sedim Drift D Algal M Iron De Surface Inunda	dicators (minimum we water (A1) Vater Table (A2) ation (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B6 ation Visible on Ae	of one red b) erial Image		Water-Stair & 4B) (B9) Salt Crust (Aquatic Invidence of Stair Crust of Stair Cru	ned Leaves (exception of the leaves (exception of the leaves (exception of the leaves (exception of the leaves of	Living Roots (C3) 4) ed Soils (C6)		Water-Stained 2, 4A & 4B) Drainage Patt Dry-Season V Saturation Vis Geomorphic F Shallow Aquit FAC-Neutral Raised Ant M	d Leaves (B9) (MLRA 1, terns (B10) Vater Table (C2) sible on Aerial Imagery (C9) Position (D2) tard (D3) Test (D5) ounds (D6) (LRR A)
Primary Ind Surface High V Satura Water Sedim Drift D Algal N Iron De Surface Inunda Sparse	licators (minimum le water (A1) Vater Table (A2) Intion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) le Soil Cracks (B6) ation Visible on Ae lely Vegetated Core	of one red b) erial Image		Water-Stair & 4B) (B9) Salt Crust (Aquatic Invidence of Stair Crust of Stair Cru	ned Leaves (exception of the leaves (exception of the leaves (exception of the leaves (exception of the leaves of	Living Roots (C3) 4) ed Soils (C6) 01) (LRR A)		Water-Stained 2, 4A & 4B) Drainage Patt Dry-Season V Saturation Vis Geomorphic F Shallow Aquit FAC-Neutral Raised Ant M Frost-Heave H	d Leaves (B9) (MLRA 1, terns (B10) Vater Table (C2) sible on Aerial Imagery (C9) Position (D2) tard (D3) Test (D5) ounds (D6) (LRR A) Hummocks
Primary Ind Surface High V Satura Water Sedim Drift D Algal N Iron De Surface Inunda Sparse	dicators (minimum we water (A1) Vater Table (A2) ation (A3) Marks (B1) ent Deposits (B2) eposits (B3) what or Crust (B4) eposits (B5) ee Soil Cracks (B6) ation Visible on Ae ely Vegetated Corervations:	of one red	ery (B7) = face (B8)	Water-Stair & 4B) (B9) Salt Crust (Aquatic Invited Presence of Recent Iron Stunted or Stunden or S	B11) ertebrates (B13) Sulfide Odor (C1) nizospheres along of Reduced Iron (C n Reduction in Tille Stressed Plants (D ain in remarks)	Living Roots (C3) 4) ed Soils (C6)	Irology	Water-Stained 2, 4A & 4B) Drainage Patt Dry-Season V Saturation Vis Geomorphic F Shallow Aquit FAC-Neutral Raised Ant M Frost-Heave H	d Leaves (B9) (MLRA 1, terns (B10) Vater Table (C2) sible on Aerial Imagery (C9) Position (D2) tard (D3) Test (D5) ounds (D6) (LRR A)
Primary Ind Surface High W Satura Water Sedim Drift D Algal N Iron De Surface Inunda Sparse Surface Water Saturation I	licators (minimum le water (A1) Vater Table (A2) Intion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) le Soil Cracks (B6 lation Visible on Aelly Vegetated Core ervations: later Present? Present?	of one rec	ery (B7)	Water-Stair & 4B) (B9) Salt Crust (Aquatic Invo Hydrogen S Oxidized Ri Presence o Recent Iron Stunted or S Other (expli	B11) ertebrates (B13) Sulfide Odor (C1) nizospheres along f Reduced Iron (C n Reduction in Tille Stressed Plants (D ain in remarks)	Living Roots (C3) 4) ed Soils (C6) 01) (LRR A) Wetland Hyd	Irology	Water-Stained 2, 4A & 4B) Drainage Patt Dry-Season V Saturation Vis Geomorphic F Shallow Aquit FAC-Neutral Raised Ant M Frost-Heave H	d Leaves (B9) (MLRA 1, terns (B10) Vater Table (C2) sible on Aerial Imagery (C9) Position (D2) tard (D3) Test (D5) ounds (D6) (LRR A) Hummocks
Primary Ind Surface High W Satura Water Sedim Algal M Iron De Surface Inunda Sparse Field Obse Surface Water Water Table Saturation I	licators (minimum le water (A1) Vater Table (A2) Ition (A3) Marks (B1) lent Deposits (B2) leposits (B3) Mat or Crust (B4) leposits (B5) lee Soil Cracks (B6 lation Visible on Aelly Vegetated Core levations: later Present? lee Present? Present? licatory (minimum) licatory (minimum	of one red s) erial Image ncave Surf Yes Yes Yes Yes X	ery (B7) = = = = = = = = = = = = = = = = = = =	Water-Stair & 4B) (B9) Salt Crust (In Aquatic Involution Involutio	B11) ertebrates (B13) Sulfide Odor (C1) nizospheres along of Reduced Iron (C n Reduction in Tille Stressed Plants (D ain in remarks) 1" 0" BSG 0" BSG	Living Roots (C3) 4) ed Soils (C6) 01) (LRR A) Wetland Hyd Present	 rology	Water-Stained 2, 4A & 4B) Drainage Patt Dry-Season V Saturation Vis Geomorphic F Shallow Aquit FAC-Neutral Raised Ant M Frost-Heave H	d Leaves (B9) (MLRA 1, terns (B10) Vater Table (C2) sible on Aerial Imagery (C9) Position (D2) tard (D3) Test (D5) ounds (D6) (LRR A) Hummocks
Primary Ind Surface High W Satura Water Sedim Algal M Iron De Surface Inunda Sparse Field Obse Surface Water Water Table Saturation I	licators (minimum le water (A1) Vater Table (A2) Ition (A3) Marks (B1) lent Deposits (B2) leposits (B3) Mat or Crust (B4) leposits (B5) lee Soil Cracks (B6 lation Visible on Aelly Vegetated Core levations: later Present? lee Present? Present? licatory (minimum) licatory (minimum	of one red s) erial Image ncave Surf Yes Yes Yes Yes X	ery (B7) = = = = = = = = = = = = = = = = = = =	Water-Stair & 4B) (B9) Salt Crust (In Aquatic Involution Involutio	B11) ertebrates (B13) Sulfide Odor (C1) nizospheres along of Reduced Iron (C n Reduction in Tille Stressed Plants (D ain in remarks)	Living Roots (C3) 4) ed Soils (C6) 01) (LRR A) Wetland Hyd Present	 rology	Water-Stained 2, 4A & 4B) Drainage Patt Dry-Season V Saturation Vis Geomorphic F Shallow Aquit FAC-Neutral Raised Ant M Frost-Heave H	d Leaves (B9) (MLRA 1, terns (B10) Vater Table (C2) sible on Aerial Imagery (C9) Position (D2) tard (D3) Test (D5) ounds (D6) (LRR A) Hummocks
Primary Ind Surface High W Satura Water Sedim Algal M Iron De Surface Inunda Sparse Field Obse Surface Water Water Table Saturation I	licators (minimum le water (A1) Vater Table (A2) Ition (A3) Marks (B1) lent Deposits (B2) leposits (B3) Mat or Crust (B4) leposits (B5) lee Soil Cracks (B6 lation Visible on Aelly Vegetated Core levations: later Present? lee Present? Present? licatory (minimum) licatory (minimum	of one red s) erial Image ncave Surf Yes Yes Yes Yes X	ery (B7) = = = = = = = = = = = = = = = = = = =	Water-Stair & 4B) (B9) Salt Crust (In Aquatic Involution Involutio	B11) ertebrates (B13) Sulfide Odor (C1) nizospheres along of Reduced Iron (C n Reduction in Tille Stressed Plants (D ain in remarks) 1" 0" BSG 0" BSG	Living Roots (C3) 4) ed Soils (C6) 01) (LRR A) Wetland Hyd Present	 rology	Water-Stained 2, 4A & 4B) Drainage Patt Dry-Season V Saturation Vis Geomorphic F Shallow Aquit FAC-Neutral Raised Ant M Frost-Heave H	d Leaves (B9) (MLRA 1, terns (B10) Vater Table (C2) sible on Aerial Imagery (C9) Position (D2) tard (D3) Test (D5) ounds (D6) (LRR A) Hummocks
Primary Ind Surface High W Satura Water Sedim Algal M Iron De Surface Inunda Sparse Field Obse Surface Water Water Table Saturation I	licators (minimum le water (A1) Vater Table (A2) Ition (A3) Marks (B1) lent Deposits (B2) leposits (B3) Mat or Crust (B4) leposits (B5) lee Soil Cracks (B6 lation Visible on Aelly Vegetated Core levations: later Present? lee Present? Present? licatory (minimum) licatory (minimum	of one red s) erial Image ncave Surf Yes Yes Yes Yes X	ery (B7) = = = = = = = = = = = = = = = = = = =	Water-Stair & 4B) (B9) Salt Crust (In Aquatic Involution Involutio	B11) ertebrates (B13) Sulfide Odor (C1) nizospheres along of Reduced Iron (C n Reduction in Tille Stressed Plants (D ain in remarks) 1" 0" BSG 0" BSG	Living Roots (C3) 4) ed Soils (C6) 01) (LRR A) Wetland Hyd Present	 rology	Water-Stained 2, 4A & 4B) Drainage Patt Dry-Season V Saturation Vis Geomorphic F Shallow Aquit FAC-Neutral Raised Ant M Frost-Heave H	d Leaves (B9) (MLRA 1, terns (B10) Vater Table (C2) sible on Aerial Imagery (C9) Position (D2) tard (D3) Test (D5) ounds (D6) (LRR A) Hummocks
Primary Ind Surface High W Satura Water Sedim Drift D Algal M Iron De Surface Inunda Sparse Field Obse Surface Water Table Saturation If (includes ca	licators (minimum le water (A1) Vater Table (A2) Ition (A3) Marks (B1) lent Deposits (B2) leposits (B3) Mat or Crust (B4) leposits (B5) lee Soil Cracks (B6 lation Visible on Aelly Vegetated Core levations: later Present? lee Present? Present? licatory (minimum) licatory (minimum	of one red s) erial Image ncave Surf Yes Yes Yes Yes X	ery (B7) = = = = = = = = = = = = = = = = = = =	Water-Stair & 4B) (B9) Salt Crust (In Aquatic Involution Involutio	B11) ertebrates (B13) Sulfide Odor (C1) nizospheres along of Reduced Iron (C n Reduction in Tille Stressed Plants (D ain in remarks) 1" 0" BSG 0" BSG	Living Roots (C3) 4) ed Soils (C6) 01) (LRR A) Wetland Hyd Present	 rology	Water-Stained 2, 4A & 4B) Drainage Patt Dry-Season V Saturation Vis Geomorphic F Shallow Aquit FAC-Neutral Raised Ant M Frost-Heave H	d Leaves (B9) (MLRA 1, terns (B10) Vater Table (C2) sible on Aerial Imagery (C9) Position (D2) tard (D3) Test (D5) ounds (D6) (LRR A) Hummocks



Project/Site: Nisqually State Park				City/	County: F	Pierce	Samp	ling date	e: <u>1-13-2</u>	2021
Applicant/Owner: Washington State Parks						State:	WA Sar	mpling P	oint: DP	-21
Investigator(s): Roen Hohlfeld and Jamie Slo	oan			Section,	Township,	Range: S20, T	16N, R04E			
Landform (hillslope, terrace, etc): Depressio	n			Local re	lief (concav	e, convex, none):	concave	5	Slope (%):	2
			Lon	ng: -	·	•	Datum:			•
Soil Map Unit Name: Kapowsin gravelly ash					NW	'I classification:	none –			
Are climatic / hydrologic conditions on the site to						•				
Are Vegetation □, Soil □, or Hydrology □ signi			-			cumstances" prese	,	? ⊠ Ye	s □ No	
Are Vegetation □, Soil □, or Hydrology □ natu	-					ain any answers in		. 🗠 10	0 = 110	
SUMMARY OF FINDINGS – Attach sit			ampli			-		s. etc.		
	Yes ⊠	No								
Hydric Soils Present?	Yes ⊠	No			the Sampl ithin a We		Yes	\boxtimes	No 🗆	
Wetland Hydrology Present?	Yes ⊠	No		W	itnin a we	etiano ?				
Remarks: Wetland A in-pit. VEGETATION – Use scientific names of	f plants.									
To a Charles (Distains 5 or disposited)		Absolute		ominant	Indicator	Dominance Tes				
Tree Stratum (Plot size: 5-m diameter) 1. Populus balsamifera		% Cover 20	>l	pecies? Yes	Status FAC	Number of Dom that are OBL, F			5	(A)
2. Fraxinus latifolia		15		Yes	FACW	Total Number of			5	- ' '
3. 4.						Species Across				_ (B)
4.		25	=	Total Cov	ver	Percent of Dom that are OBL, F			100%	(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diameter	∍r)					Prevalence Ind	ex workshee	t:		
Rosa pisocarpa Fraxinus latifolia		15 10		Yes Yes	FAC FACW	Total % Cover of OBL species	<u>of:</u>	Multip x 1 =	ly by:	
3. Amelanchier alnifolia		5		No	FACU	FACW species		x 2 =		_
4.						FAC species		x 3 =		_
5		30		Total Cov	/or	FACU species UPL species		x 4 = x 5 =		_
Herb Stratum (Plot size: 1-m diameter)	_	- 30		Total Cov	vei	Column Totals:		(A)		(B)
1. Carex obnupta		40		Yes	OBL	Prevalence Inde	ex = B/A =			
2. Rubus ursinus 3.		5		No	FACU	Hydrophyt	ic Vegetation	Indicat	ors:	
4						□ 1 – Rapid T	est for Hydro	phytic Ve		
5. 6.							nce Test is >			
6. 7.						☐ 4 – Morpho	logical Adapta	ations¹ (F		
8. 9.						data in	Remarks or o		,)
10.							Hydrophytic			n)
11.						¹ Indicators of hy				nust be
Woody Vine Stratum (Plot size: 3-m diameter)	_	45	_ = `	Total Cov	ver	present, unless	aisturbea or p	robiema	itic.	
1.	'					Hydrophytic				
2		_		Total Cou		Vegetation Present?	Ye	s 🏻	No 🗆	İ
% Bare Ground in Herb Stratum: 60	_		_ =	Total Cov	vei	Present?				
Remarks:						•				

	scription: (Desc	ribe to	the d	epth	need	ed to d			or o	r confirm the ab	sence	of indicators.)		
Depth (inches)	Matrix Color (moist)	9	%	Co	olor (r	noist)		<u>ox Features</u> % Tv	ype ¹	Loc ²	2	Texture	R	emarks
0-8	10YR 2/1		00		, <u>(.</u>			,,,	7,50			Silt loam		<u> </u>
8-17	10YR 4/1	9	93		I0YR	3/3		7	С	M		Gravelly		
0 17	1011(4/1		,,,		10110	3/3				IVI		sandy loam		
¹Type: C=C	Concentration, D=	:Deplet	tion, R	M=Re	educe	ed Matr	ix, CS=	:Covered or Coa	ated	Sand Grains.	² Loc:	PL=Pore Lining,	M=Matrix	
	l Indicators: (Ap											ators for Problen		
☐ Histos	ol (A1)					Sandy	Redox	(S5)			□ 2	2cm Muck (A10)		
	Epipedon (A2)						ed Matr					Red Parent Materi		
	Histic (A3)					-	-	/ Mineral (F1) (exce	ept MLRA 1)		ery Shallow Dark		(TF12)
	gen Sulfide (A4)	·	. (-	-	d Matrix (F2)				Other (Explain in F	Remarks)	
	ted Below Dark S Dark Surface (A1		(ATT))				rix (F3) Surface (F6)			³ Indic	ators of hydrophy	tic vegets	ation and
	Mucky Mineral (,						k Surface (F7)				etland hydrology i		
	Gleyed Matrix (ssions (F8)			di	sturbed or proble	matic.	
Restrictive	Layer (if prese	nt):												
Type:										Hydric soil		Yes 🗵	d No	. 🗆
	(inches):									present?				_
Ворит	(menes).													
Remarks:														
HYDROL	OGY													
	ydrology Indica		o rogu	irod:	obool	call tha	t apply)	\			Sooo	andary Indicators	(2 or more	roquirod)
	licators (minimun e water (A1)	n or on	e requ	iirea:	cneci							ndary Indicators	`	· /
	Vater Table (A2)						e r-Stair 3) (B9)	ned Leaves (ex	cep	! MLRA 1, 2, 4A	· 🗆	Water-Stained I 2, 4A & 4B)	_eaves (E	9) (MLRA 1,
	ation (A3)						Crust (B11)				Drainage Patter	ns (B10)	
	Marks (B1)							ertebrates (B13	3)			Dry-Season Wa	. ,	
	ent Deposits (B2	()				Hyd	rogen S	Sulfide Odor (C1	1)			Saturation Visible	le on Aeri	al Imagery (C9)
	eposits (B3)								_	iving Roots (C3)		Geomorphic Po	•	2)
_	Mat or Crust (B4)							f Reduced Iron	•	,		Shallow Aquitar		
	eposits (B5)	C)						Reduction in T		, ,		FAC-Neutral Te	` '	(LDD A)
	e Soil Cracks (Boation Visible on A		nagan	, (D7)				Stressed Plants ain in remarks)	•	I) (LRR A)		Raised Ant Mou Frost-Heave Hu		(LRR A)
	ely Vegetated Co			, ,		Othe	er (expi	alli ili lelliaiks)				riost-rieave rio	IIIIIIOCKS	
Field Obse		110010	Garia	00 (50	<i>5</i>)									
Surface Wa	ater Present?	Yes	\boxtimes	No		Dept	h (in):	2"						
Water Tabl		Yes	\boxtimes	No		•	h (in):	0" BSG		Wetland Hyd Present		Yes		No 🗆
Saturation		Yes	\boxtimes	No			h (in):	0" BSG		FIESEIII				
	apillary fringe)	100		140		БСРІ	().	<u> </u>						
Describe R	ecorded Data (st	ream g	gauge,	moni	toring	g well, a	erial pl	hotos, previous	insp	pections), if avail	able:			
Domorko														
Remarks:														



Project/Site: Nisqually State Park				City/	County: F	Pierce	Samp	ling date	e: <u>1-13-2</u>	2021
Applicant/Owner: Washington State Par	ks					Sta	ate: <u>WA</u> Sar	npling P	oint: DP	-22
Investigator(s): Roen Hohlfeld and Jamie	e Sloan			Section,	Township,	Range: S2	20, T16N, R04E			
Landform (hillslope, terrace, etc): Depre	ssion			Local re	lief (concav	e, convex, no	ne): concave	S	Slope (%):	3
				ng: -			Datum:	_	,	
Soil Map Unit Name: Kapowsin gravelly						/I classification				
Are climatic / hydrologic conditions on the s										
Are Vegetation \square , Soil \square , or Hydrology \square			-				present on the site	? ⊠ Ye	s □ No	
Are Vegetation \square , Soil \square , or Hydrology \square	-						ers in Remarks.)	. 🖪 100	, <u> </u>	
SUMMARY OF FINDINGS – Attack			sampli			-		s, etc.		
Hydrophytic Vegetation Present?	Yes ⊠				<u> </u>	·	·			
Hydric Soils Present?	Yes □	No	\boxtimes		the Sampl ithin a We		Yes		No 🛛	
Wetland Hydrology Present?	Yes ⊠	No		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	itiiii a vve	tianu:				
Remarks: Click here to enter text. VEGETATION – Use scientific name	es of plants.									
<u>Tree Stratum</u> (Plot size: 5-m diameter)		Absolute % Cover		ominant pecies?	Indicator Status		e Test worksheet: Dominant Species		4	
1. Populus balsamifera		60		Yes	FAC	1	BL, FACW, or FAC:		<u> </u>	(A)
Fraxinus latifolia		15		Yes	FACW		per of Dominant cross all Strata:		5	(B)
4.						1	Dominant Species		100%	- ` ′
		75	= -	Total Cov	ver	that are OB	BL, FACW, or FAC:		10070	(A/B)
Sapling/Shrub Stratum (Plot size: 3-m dia		50		V	E40		e Index workshee		h - h	
Acer circinatum Alnus rubra		50 10		Yes Yes	FAC FAC	Total % Co OBL specie		Multipl x 1 =	iy by:	
3.						FACW spec	cies	x 2 =		
4. 5.						FAC specie FACU spec		x 3 =		_
5		60		Total Cov	ver	UPL specie		x 4 = x 5 =		—
Herb Stratum (Plot size: 1-m diameter)						Column To		(A)		(B)
Polystichum munitum Rubus ursinus		20 5		Yes No	FACU FACU	Prevalence	Index = B/A =			
3. Carex deweyana				No	FAC	Hydro	phytic Vegetation	Indicat	ors:	
4						-	pid Test for Hydror	•	getation	
5. 6.							minance Test is > evalence Index is ≤			
7.						_ 4 − Mo	rphological Adapta	ations ¹ (F		
8. 9.						da	ta in Remarks or o etland Non-Vascula)
9							matic Hydrophytic			in)
11.							of hydric soil and v			nust be
Woody Vine Stratum (Plataire, 2 m diam	oto#\	28	_ = '	Total Cov	ver	present, un	less disturbed or p	roblema	tic.	
Woody Vine Stratum (Plot size: 3-m diam 1.	,					Hydrophy	/tic			
2.						Vegetatio	n Ye	s 🏻	No 🗆]
% Bare Ground in Herb Stratum: 75		-	_ =	Total Cov	ver	Present?				
Remarks:						1				
ixemarks.										

		ribe to the	depth nee		ument the indicator	or confirm the al	bsence	of indicators.)		
Depth (inches)	Matrix Color (moist)	%	Color (Redox Features % Typ	e ¹ Loc	2	Texture	Remarks	6
0-14	10YR 3/2	100		·				Sandy loam		
1Tunos C. C	Concentration D	Donlotion	DM Doduc	and Matrix (CC Covered or Coef	and Cond Crains	21 001	DI Doro Lining I	M. Motrix	
	il Indicators: (Ap				CS=Covered or Coat	ed Sand Grains.		PL=Pore Lining, Interpretation of the PL=Pore Lining of the PL=Pore		ile ³ .
_	sol (A1)	pricable it		Sandy Re	,			cm Muck (A10)	latic Hydric 30	
	Epipedon (A2)			,	Matrix (S6)			Red Parent Materi	al (TF2)	
☐ Black	Histic (A3)				ucky Mineral (F1) (ex	(cept MLRA 1)		ery Shallow Dark	, ,	
	gen Sulfide (A4)		1) -		eyed Matrix (F2)			Other (Explain in F	Remarks)	
	ted Below Dark S Dark Surface (A1	•	1) 🗆	•	Matrix (F3) ark Surface (F6)		3 Indic:	ators of hydrophy	tic vegetation ar	nd
	/ Mucky Mineral (Dark Surface (F7)		we	etland hydrology r	must be present,	
☐ Sandy	Gleyed Matrix (S	S4)		Redox De	pressions (F8)	1	dis	sturbed or probler	matic.	
Restrictive	e Layer (if prese	nt):				Unadala a ali				
Type:						Hydric soi present?	ı	Yes □] No ⊠	
Depth	(inches):					7				
Remarks:										
HYDROL	OGY									
Wetland H	lydrology Indica	tors:								
	dicators (minimun	n of one red	quired: ched					ndary Indicators (
	ce water (A1) Nater Table (A2)		[□ Water- \$ & 4B) (I	Stained Leaves (exc RQ)	ept MLRA 1, 2, 4A	· 🗆	Water-Stained L 2, 4A & 4B)	₋eaves (B9) (ML	RA 1,
	ation (A3)		[, ,	ust (B11)			Drainage Patter	ns (B10)	
	Marks (B1)		[Invertebrates (B13)			Dry-Season Wa	` '	
	nent Deposits (B2	2)		, ,	en Sulfide Odor (C1)			Saturation Visibl	U	ery (C9)
	Deposits (B3)				d Rhizospheres along	, ,		Geomorphic Po	` ,	
-	Mat or Crust (B4) eposits (B5)				ce of Reduced Iron (Iron Reduction in Til	•		Shallow Aquitar FAC-Neutral Te		
	ce Soil Cracks (B	6)			or Stressed Plants			Raised Ant Mou		A)
	ation Visible on A		ery (B7)		explain in remarks)			Frost-Heave Hu		,
	ely Vegetated Co	ncave Surf	ace (B8)							
Field Obse	ervations:									
Surface Wa	ater Present?	Yes	No ⊠	Depth (ii	n): <u>-</u>	Wetland Hyd	drology			_
Water Tabl	le Present?	Yes ⊠	No □	Depth (ii	n): 1" BSG	Present		Yes	⊠ No [
Saturation		Yes ⊠	No 🗆	Depth (ii	n): 0" BSG					
	apillary fringe)				 					
Describe R	tecorded Data (st	ream gaug	e, monitorir	ig well, aeria	al photos, previous in	nspections), if avail	lable:			
Remarks:										



Project/Site: Nisqually State Park		City	/County: F	Pierce	Sampling da	ate: <u>1-13-2</u>	2021
Applicant/Owner: Washington State Parks				State: WA	Sampling	Point: DP	-23
Investigator(s): Roen Hohlfeld and Jamie Sloan		Section	n, Township,	Range: S20, T16N, R	04E		
Landform (hillslope, terrace, etc): Depression		Local r	elief (concav	e, convex, none): con	cave	Slope (%):	3
Subregion (LRR): A Lat: -				Datu		,	-
Soil Map Unit Name: Kapowsin gravelly ashy loa				I classification: none			
Are climatic / hydrologic conditions on the site typical			es 🛭 No	(If no. explain in remarks)		
Are Vegetation □, Soil □, or Hydrology □ significan		-		cumstances" present on t		∕es □ No	
Are Vegetation □, Soil □, or Hydrology □ naturally	-			in any answers in Rema			
SUMMARY OF FINDINGS — Attach site ma						; .	
Hydrophytic Vegetation Present? Yes	No No		<u> </u>	, ,			
Hydric Soils Present? Yes	⊠ No		the Sampl		Yes 🛛	No 🗆	
Wetland Hydrology Present? Yes	⊠ No		WILLIIII a VVE	tuanu f			
Remarks: Wetland NN in-pit. VEGETATION – Use scientific names of plar	nts.						
	Absolute	Dominant		Dominance Test worl			
Tree Stratum (Plot size: 5-m diameter) 1. Populus balsamifera	% Cover 5	Species? Yes	Status FAC	Number of Dominant S that are OBL, FACW, or		4	(A)
2.				Total Number of Domir	nant	5	_ ` ′
3. 4.				Species Across all Stra	_		_ (B)
4	5	= Total Co	over	Percent of Dominant S that are OBL, FACW, or		100%	(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diameter)				Prevalence Index wo	rksheet:		
Fraxinus latifolia Spiraea douglasii	<u>5</u> 3	Yes Yes	FACW FACW	Total % Cover of: OBL species	<u>Mul</u> x 1 :	tiply by: -	
3. Acer circinatum	trace	No	FAC	FACW species	x 2		
4.				FAC species	x 3 :		
5	8	= Total Co	over	FACU species UPL species	x 4 : x 5 :		
Herb Stratum (Plot size: 1-m diameter)				Column Totals:	(A)		(B)
Rubus ursinus Carex deweyana	<u>15</u> 5	Yes Yes	FACU FAC	Prevalence Index = B/	A =		
3.		103	TAO	Hydrophytic Veg	etation Indic	ators:	
4.				□ 1 – Rapid Test for⊠ 2 – Dominance Te	, , ,	Vegetation	
5. 6.							
7.				4 – Morphological	Adaptations ¹	(Provide sup	porting
9				☐ data in Remar☐ 5 – Wetland Non-\)
10.				☐ Problematic Hydro	. , .	٠.	,
11	20	= Total Co	over	¹ Indicators of hydric so present, unless disturb			nust be
Woody Vine Stratum (Plot size: 3-m diameter)		= 10(a) 00	ovei.	process, armose anotars	<u></u>		
1.				Hydrophytic	, D	–	1
2	-	= Total Co	over	Vegetation Present?	Yes 🛚	No □	J
% Bare Ground in Herb Stratum: 80	-						
Remarks:							

Profile Des	scription: (Descr	ibe to the	depth need	ed to docur	nent the indicato	or or confirm the a	bsence	of indicators.)		
Depth (inches)	Matrix Color (moist)	0/	Color (m		dox Features % Tv	pe¹ Loc	.2	Texture	Pon	narks
0-3	10YR 2/1	<u>%</u> 100	Coloi (II	10151)	% Ty	pe Loc	,	Silt loam	Ken	iaiks
3-8	10YR 3/1	100						Sandy loam		
8-13	10YR 3/1	93	10YR	3/3	7 (C M		Sandy loam		
¹Type: C=C	Concentration, D=	Depletion, F	RM=Reduce	d Matrix, CS	S=Covered or Coa	ted Sand Grains.	² Loc:	PL=Pore Lining, I	M=Matrix.	
Hydric Soi	I Indicators: (Ap	plicable to	all LRRs, u	nless other	rwise noted.)		Indica	tors for Problen	natic Hydrid	Soils ³ :
	sol (A1)			Sandy Red	` '			cm Muck (A10)	- L (T EO)	
	Epipedon (A2) Histic (A3)			Stripped Ma	atrix (S6) :ky Mineral (F1) (e	vcent MI RA 1)		Red Parent Materi Yery Shallow Dark		F12\
	gen Sulfide (A4)				ed Matrix (F2)	ACCEPT WILLTON 1)		Other (Explain in F	,	1 12)
	ted Below Dark S	Surface (A11		Depleted M				` '	,	
	Dark Surface (A1	,			Surface (F6)			ators of hydrophy		
	Mucky Mineral (Gleyed Matrix (S			•	ark Surface (F7) ressions (F8)			etland hydrology r sturbed or probler		sent, uniess
	Layer (if preser			точох ворі	100010110 (1 0)			•		
Type:	Layer (II preser	11.).				Hydric soi	I	Yes 🗵	No No	П
1						present?		res 🗠	ио ио	
Depth	(inches):									
Remarks:	Redox is faint.									
HYDROLO	OGY									
	ydrology Indicat		uired: check	all that ann	lv)		Seco	ndary Indicators ((2 or more r	equired)
	ce water (A1)	r or one req				ept MLRA 1, 2, 4/		Water-Stained L		
	Vater Table (A2)			& 4B) (BS		юрг иска 1, 2, 4 <i>г</i>	'	2, 4A & 4B)	-eaves (Da)	(WILIXA I,
⊠ Satura	ation (A3)			Salt Crus	t (B11)			Drainage Patter	ns (B10)	
	Marks (B1)			•	overtebrates (B13			Dry-Season Wa		
	ent Deposits (B2))			Sulfide Odor (C1	•		Saturation Visible		magery (C9)
	eposits (B3) Mat or Crust (B4)				e of Reduced Iron	ng Living Roots (C3)		Geomorphic Po Shallow Aquitar	` '	
-	eposits (B5)				on Reduction in T			FAC-Neutral Te		
	ce Soil Cracks (Be	6)			r Stressed Plants			Raised Ant Mou	. ,	.RR A)
	ation Visible on A	_		Other (ex	plain in remarks)			Frost-Heave Hu	ımmocks	
	ely Vegetated Co	ncave Surfa	ice (B8)							
Field Obse										
Surface Wa	ater Present?	Yes ⊠	No 🗆	Depth (in):	: <u>3"</u>	Wetland Hyd	drology		.	. —
Water Tabl	e Present?	Yes ⊠	No 🗆	Depth (in):	0" BSG	Presen		Yes	M N	o 🗆
Saturation (includes ca	Present? apillary fringe)	Yes ⊠	No 🗆	Depth (in):	0" BSG					
Describe R	ecorded Data (st	ream gauge	, monitoring	well, aerial	photos, previous	inspections), if avai	lable:			
Remarks:										



Project/Site: Nisqually State Park				City/	County: F	Pierce	Samp	ling date	: <u>1-13-2</u>	2021
Applicant/Owner: Washington State Parks						State:	WA Sai	mpling P	oint: DP	-24
Investigator(s): Roen Hohlfeld and Jamie Sl	oan			Section,	Township,	Range: S20,	T16N, R04E			
Landform (hillslope, terrace, etc): Depression	on			Local re	lief (concav	e, convex, none)	: concave	S	Slope (%):	3
Subregion (LRR): A Lat: -				ng: -	•	•	Datum:	_	,	
Soil Map Unit Name: Kapowsin gravelly asl						'I classification:	none –			
Are climatic / hydrologic conditions on the site t					s □ No	(If no, explain in	remarks.)			
Are Vegetation □, Soil □, or Hydrology □ sign	• •					cumstances" pres	,	? ⊠ Ye	s □ No	
Are Vegetation □, Soil □, or Hydrology □ natu	•					in any answers i				
SUMMARY OF FINDINGS – Attach si	te map sł	nowing s	sampli			-		s, etc.		
	Yes ⊠	No				, 1		,		
Hydric Soils Present?	Yes ⊠	No			the Sampl ithin a We		Yes	\boxtimes	No 🗆	
Wetland Hydrology Present?	Yes ⊠	No		, vv	itiiii a vve	ruanu:				
Remarks: Wetland NN in-pit. VEGETATION — Use scientific names of	of plants.									
Tree Stratum (Plot size: 5-m diameter) 1. Fraxinus latifolia		Absolute % Cove 5		ominant pecies? Yes	Indicator Status FACW		est worksheet minant Species		2	(A)
2. 3.					171011	Total Number of Species Acros	of Dominant		3	- (/ (B)
4.		5		Total Cov	ver	Percent of Dor that are OBL, I	minant Species FACW, or FAC:		67%	(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diamet	er)					Prevalence In	dex workshee	t:		
Physocarpus capitatus 2.		50		Yes	FACW	Total % Cover OBL species	<u>of:</u>	Multip x 1 =	<u>ly by:</u>	
3.						FACW species	<u> </u>	x 2 =		
4. 5.						FAC species FACU species		x 3 = x 4 =		
J		50	=	Total Cov	ver	UPL species		x 5 =		
Herb Stratum (Plot size: 1-m diameter)	_	4.0		.,	E4.011	Column Totals	:	(A)		(B)
Rubus ursinus 2.		10		Yes	FACU	Prevalence Inc	dex = B/A =			
3						 □ 1 – Rapid □ 2 – Domin □ 3 – Preval □ 4 – Morph 	tic Vegetation Test for Hydron nance Test is > lence Index is ≤ nological Adapta n Remarks or o	phytic Ve 50% § 3.0 ¹ ations ¹ (F	egetation Provide sup	
9							nd Non-Vascula tic Hydrophytic			in)
10 11						¹Indicators of h	, , ,	•		,
	_	10	=	Total Cov	ver	present, unless				
Woody Vine Stratum (Plot size: 3-m diameter 12.						Hydrophytic Vegetation		s 🏻	No □	1
2	_	-	=	Total Cov	ver	Present?	10	3 KY	140 _	
% Bare Ground in Herb Stratum: 90	_		_							
Remarks:										

Depth (inches) Color (moist) % Color (moist) % Type* Loc* Texture Remarks 0-3 10 YR 3/2 100 Sit Loan 3-14 10 YR 4/2 95 10 YR 3/4 5 C M Sandy loam Type: C-Concentration, D-Deptetion, RM-Reduced Matrix, CS-Covered or Coated Sand Grains Type: C-Concentration, D-Deptetion, RM-Reduced Matrix, CS-Covered or Coated Sand Grains Type: C-Concentration, D-Deptetion, RM-Reduced Matrix, CS-Covered or Coated Sand Grains Type: C-Concentration, D-Deptetion, RM-Reduced Matrix, CS-Covered or Coated Sand Grains Type: C-Concentration, D-Deptetion, RM-Reduced Matrix, CS-Covered or Coated Sand Grains Type: C-Concentration, D-Deptetion, RM-Reduced Matrix, CS-Covered or Coated Sand Grains Type: C-Concentration, D-Deptetion, RM-Reduced Matrix, CS-Covered or Coated Sand Grains Type: C-Concentration, D-Deptetion, RM-Reduced Matrix, CS-Covered or Coated Sand Grains Type: C-Concentration, D-Deptetion, RM-Reduced Matrix, CS-Covered or Coated Sand Grains Type: C-Concentration, D-Deptetion, RM-Reduced Matrix, CS-Covered or Coated Sand Grains Type: C-Concentration, D-Deptetion, RM-Reduced Matrix, CS-Covered or Coated Sand Grains Type: C-Concentration, D-Deptetion, RM-Reduced Matrix, CS-Covered or Coated Sand Grains Indicators for Problematic Hydroic Solis*: Indicators for Hydroic Solis*: Indicator			ribe to the	e depth need		ment the indicator	or confirm the at	osence	of indicators.)	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. *Loc: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soile*: Haitic Epipedon (A2) Sandy Radox (S5) Communic (A10) Commun			%	Color (_		e ¹ Loc ²	2	Texture	Remarks
Type: CacConcentration, DaPetelston, RMa-Reduced Matrix, CSa-Covered or Coated Sand Grains. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Sandy Redox (S5) Red Patrix (FS) Red Pat		10YR 3/2	100						Silt loam	
Type: CacConcentration, DaPetelston, RMa-Reduced Matrix, CSa-Covered or Coated Sand Grains. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Sandy Redox (S5) Red Patrix (FS) Red Pat	3-14	10YR 4/2	95	10YR	3/4	5 C	M		Sandy loam	
Hydric Soil Indicators: (Applicable to all LRRK, unless otherwise noted.) Indicators for Problematic Hydric Soils? Sardy Redox (SS) Redox Parent Material (TF2) Red Parent Material (TF2)										
Hydric Soil Indicators: (Applicable to all LRRx, unless otherwise noted.) Indicators for Problematic Hydric Soils? Sardy Redox (SS) Stripped Matrix (SB) Redox Pactor (SB) Red										
Hydric Soil Indicators: (Applicable to all LRRx, unless otherwise noted.) Indicators for Problematic Hydric Soils? Sardy Redox (SS) Carm Mucky (A10) Carm M										
Hydric Soil Indicators: (Applicable to all LRRx, unless otherwise noted.) Indicators for Problematic Hydric Soils? Sardy Redox (SS) Carm Mucky (A10) Carm M										
Hydric Soil Indicators: (Applicable to all LRRx, unless otherwise noted.) Indicators for Problematic Hydric Soils? Sardy Redox (SS) Carm Mucky (A10) Carm M										
Hydric Soil Indicators: (Applicable to all LRRK, unless otherwise noted.) Indicators for Problematic Hydric Soils? Sardy Redox (SS) Redox Parent Material (TF2) Red Parent Material (TF2)										
Hydric Soil Indicators: (Applicable to all LRRK, unless otherwise noted.) Indicators for Problematic Hydric Soils? Sardy Redox (SS) Redox Parent Material (TF2) Red Parent Material (TF2)	¹Type: C=C	Concentration, D=	:Depletion	. RM=Reduc	ed Matrix. C	S=Covered or Coate	ed Sand Grains.	² Loc: F	PL=Pore Linina.	M=Matrix.
Histisce (A1)							ou curia cramo.			
Histic Epipedon (Az)	-		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,							
Hydrogen Sulfide (A4)										rial (TF2)
□ Depleted Below Dark Surface (A11) □ Depleted Matrix (F3) Thick Dark Surface (A12) □ Depleted Dark Surface (F6) □ Sandy Mucky Mineral (S1) □ Depleted Dark Surface (F7) □ Sandy Mucky Mineral (S1) □ Depleted Dark Surface (F7) □ Sandy Mucky Mineral (S1) □ Depleted Dark Surface (F7) □ Sandy Gleyed Matrix (S4) □ Redox Depressions (F8) Restrictive Layer (if present): Type: □ Depth (inches): Remarks: Hydric soil present? Yes □ No □ □ Surface water (A1) □ Water-Stained Leaves (except MLRA-1, 2, 4A & 4B) □ Surface water (A1) □ Startus (B11) □ Dapite (Parks)					Loamy Mu	cky Mineral (F1) (ex	cept MLRA 1)			
□ Thick Dark Surface (A12) □ Redox Dark Surface (F6) □ Sandy Mucky Mineral (S1) □ Depleted Dark Surface (F7) □ Redox Depressions (F8) □ Redox Depressions (F8) □ Present? □ Present, unless disturbed or problematic. Restrictive Layer (if present):	,	• ,							ther (Explain in l	Remarks)
□ Sandy Mucky Mineral (S1) □ Depleted Dark Surface (F7) Redox Depressions (F8) disturbed or problematic. Restrictive Layer (if present):			,	•		, ,		_		
Restrictive Layer (if present):		,	,			, ,				
Restrictive Layer (if present): Type:										
Type:			-		redox De	0103310113 (1 0)				
Present? Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Secondary Indicators (2 or more required)	_	- Layer (prese.	,.				Hydric soil	l	V 5	7 Na 🗆
Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Secondary Indicators (2 or more required)	1						present?		Yes 2	NO L
Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Surface water (A1) High Water Table (A2) Saturation (A3) Saturation (A3) Water Stained Leaves (except MLRA 1, 2, 4A & 4B) (B9) Saturation (A3) Saturation (A3) Saturation (A3) Saturation (A3) Aquatic Invertebrates (B13) Driangage Patterns (B10) Driangage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Sturface Soil Cracks (B6) Sturface Soil Cracks (B6) Sturface Soil Cracks (B6) Sturted or Stressed Plants (D1) (LRR A) Reised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks Field Observations: Surface Water Present? Yes No Depth (in): 0" BSG Depth (in): 0" BSG Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Depth	(inches):								
Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Secondary Indicators (2 or more required)	Remarks:									
Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Secondary Indicators (2 or more required)										
Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Secondary Indicators (2 or more required) Surface water (A1) Water-Stained Leaves (except MLRA 1, 2, 4A 8, 4B) (B9) Water-Stained Leaves (B9) (MLRA 1, 2, 4A 8, 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 Imagery (C9) Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Geomorphic Position (D2) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Iron Deposits (B5) Recent Iron Reduction in Tilled Soils (C6) FAC-Neutral Test (D5) Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A) Inundation Visible on Aerial Imagery (B7) Other (explain in remarks) Frost-Heave Hummocks Sparsely Vegetated Concave Surface (B8) Depth (in): 1" Wetland Hydrology Present? Yes No Depth (in): 1" Saturation Present? Yes No Depth (in): 0" BSG Wetland Hydrology Present? Yes No Depth (in): 1"										
Primary Indicators (minimum of one required: check all that apply) Secondary Indicators (2 or more required) Surface water (A1) High Water Table (A2) Saturation (A3) Saturation (A3) Saturation (A3) Aquatic Invertebrates (B13) Drainage Patterns (B10) Drainage Pa	HYDROLO	OGY								
Surface water (A1)				aviradi abaa	call that an	alu)		Casar	adom i Indiantoro	(2 or more required)
High Water Table (A2)			1 or one re	equirea: cnec	-				-	
Saturation (A3)		` '					pt MLRA 1, 2, 4A			Leaves (B9) (MLRA 1,
□ Water Marks (B1) □ Aquatic Invertebrates (B13) □ Dry-Season Water Table (C2) □ Sediment Deposits (B2) □ Hydrogen Sulfide Odor (C1) □ Saturation Visible on Aerial Imagery (C9) □ Drift Deposits (B3) □ Oxidized Rhizospheres along Living Roots (C3) □ Geomorphic Position (D2) □ Algal Mat or Crust (B4) □ Presence of Reduced Iron (C4) □ Shallow Aquitard (D3) □ Iron Deposits (B5) □ Recent Iron Reduction in Tilled Soils (C6) □ FAC-Neutral Test (D5) □ Surface Soil Cracks (B6) □ Stunted or Stressed Plants (D1) (LRR A) □ Raised Ant Mounds (D6) (LRR A) □ Inundation Visible on Aerial Imagery (B7) □ Other (explain in remarks) □ Frost-Heave Hummocks Field Observations: Surface Water Present? Yes ☑ No □ Depth (in): 1" Wetland Hydrology Present? Yes ☑ No □ Depth (in): 0" BSG (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	J	` ,		Г	, ,	•			. ,	rns (B10)
□ Sediment Deposits (B2) □ Hydrogen Sulfide Odor (C1) □ Saturation Visible on Aerial Imagery (C9) □ Drift Deposits (B3) □ Oxidized Rhizospheres along Living Roots (C3) □ Geomorphic Position (D2) □ Algal Mat or Crust (B4) □ Presence of Reduced Iron (C4) □ Shallow Aquitard (D3) □ Iron Deposits (B5) □ Recent Iron Reduction in Tilled Soils (C6) □ FAC-Neutral Test (D5) □ Surface Soil Cracks (B6) □ Stunted or Stressed Plants (D1) (LRR A) □ Raised Ant Mounds (D6) (LRR A) □ Inundation Visible on Aerial Imagery (B7) □ Other (explain in remarks) □ Frost-Heave Hummocks Field Observations: Surface Water Present? Yes ☑ No □ Depth (in): 1" Wetland Hydrology Present? Water Table Present? Yes ☑ No □ Depth (in): 0" BSG (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		. ,		_					_	
□ Drift Deposits (B3) □ Oxidized Rhizospheres along Living Roots (C3) □ Geomorphic Position (D2) □ Algal Mat or Crust (B4) □ Presence of Reduced Iron (C4) □ Shallow Aquitard (D3) □ Iron Deposits (B5) □ Recent Iron Reduction in Tilled Soils (C6) □ FAC-Neutral Test (D5) □ Surface Soil Cracks (B6) □ Stunted or Stressed Plants (D1) (LRR A) □ Raised Ant Mounds (D6) (LRR A) □ Inundation Visible on Aerial Imagery (B7) □ Other (explain in remarks) □ Frost-Heave Hummocks Field Observations: Surface Water Present? Yes ☑ No □ Depth (in): 1" Wetland Hydrology Present? Yes ☑ No □ Depth (in): 0" BSG Present? Yes ☑ No □ Depth (in): 0" BSG Present? Yes ☑ No □ Depth (in): 0" BSG Present? Yes ☑ No □ Depth (in): 0" BSG Present? Yes ☑ No □ Depth (in): 0" BSG Yes Includes capillary fringe)		, ,)	_		, ,				
□ Algal Mat or Crust (B4) □ Presence of Reduced Iron (C4) □ Shallow Aquitard (D3) □ Iron Deposits (B5) □ Recent Iron Reduction in Tilled Soils (C6) □ FAC-Neutral Test (D5) □ Surface Soil Cracks (B6) □ Stunted or Stressed Plants (D1) (LRR A) □ Raised Ant Mounds (D6) (LRR A) □ Inundation Visible on Aerial Imagery (B7) □ Other (explain in remarks) □ Frost-Heave Hummocks □ Frost-Heave Hummocks □ Sparsely Vegetated Concave Surface (B8) □ Depth (in): 1" Wetland Hydrology Present? Yes □ No □ Depth (in): 0" BSG □ Present? Yes □ No □ Depth (in): 0" BSG □ Present? No □ Depth (in): 0" BSG □ Present? No □ Depth (in): 0" BSG □ Present? □ Present? □ No □ Depth (in): 0" BSG □ Present? □ Present □ Present □ Present □ Present □ Present? □ Present □ Presen			,		, ,	` ,	Living Roots (C3)			
□ Surface Soil Cracks (B6) □ Stunted or Stressed Plants (D1) (LRR A) □ Raised Ant Mounds (D6) (LRR A) □ Inundation Visible on Aerial Imagery (B7) □ Other (explain in remarks) □ Frost-Heave Hummocks □ Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes ☒ No □ Depth (in): 1" Wetland Hydrology Present? Yes ☒ No □ Depth (in): 0" BSG Present? Yes ☒ No □ Depth (in): 0" BSG (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:									Shallow Aquita	rd (D3)
□ Inundation Visible on Aerial Imagery (B7) □ Other (explain in remarks) □ Frost-Heave Hummocks □ Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes ☒ No □ Depth (in): 1" Water Table Present? Yes ☒ No □ Depth (in): 0" BSG Saturation Present? Yes ☒ No □ Depth (in): 0" BSG (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	☐ Iron D	eposits (B5)			Recent I	ron Reduction in Till	ed Soils (C6)		FAC-Neutral Te	est (D5)
□ Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes ⋈ No □ Depth (in): 1" Water Table Present? Yes ⋈ No □ Depth (in): 0" BSG Present? Saturation Present? Yes ⋈ No □ Depth (in): 0" BSG (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	☐ Surfac	ce Soil Cracks (Be	6)		Stunted	or Stressed Plants (D1) (LRR A)		Raised Ant Mou	unds (D6) (LRR A)
Surface Water Present? Yes No Depth (in): 1" Water Table Present? Yes No Depth (in): 0" BSG Saturation Present? Yes No Depth (in): 0" BSG (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					Other (e	xplain in remarks)			Frost-Heave Hu	ummocks
Surface Water Present? Yes No Depth (in): 1" Water Table Present? Yes No Depth (in): O"BSG Present? Yes No Depth (in): O"BSG Saturation Present? Yes No Depth (in): O"BSG (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			ncave Sui	face (B8)						
Water Table Present? Yes No Depth (in): O"BSG Present?			Voc. ⊠	No □	Danth (in	\. 4"				
Saturation Present? Yes No Depth (in): 0" BSG (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:									Yes	. ⊠ No □
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:							Present	t?	100	
			162	INO 🗆	Depth (in). <u>U B3G</u>				
Remarks:	Describe R	ecorded Data (st	ream gaug	ge, monitorin	g well, aeria	I photos, previous in	spections), if avail	able:		
Remarks:										
remains.	Domorko									
	Remarks:									



Project/Site: Nisqually State Park				City/	County: F	Pierce	Samp	ling date	: <u>1-13-2</u>	2021
Applicant/Owner: Washington State Park	S					State:	: WA Sai	mpling P	oint: DP	-25
Investigator(s): Roen Hohlfeld and Jamie	Sloan			Section,	Township,	Range: S20,	T16N, R04E			
Landform (hillslope, terrace, etc): Depres	sion			Local re	lief (concav	e, convex, none): concave	S	lope (%):	5
					nor (corroav	o, convox, none		<u> </u>	лоро (70).	
Subregion (LRR): A Lat: -			_ Lon				Datum:			
Soil Map Unit Name: Kapowsin gravelly	-	•		•		I classification:	none			
Are climatic / hydrologic conditions on the si	te typical for	this time of	of year	? ⊠ Yes	s 🗆 No	(If no, explain in	remarks.)			
Are Vegetation \square , Soil \square , or Hydrology \square s	ignificantly d	isturbed?		Are "	Normal Circ	cumstances" pre	sent on the site	? ⊠ Yes	s □ No	
Are Vegetation \square , Soil \square , or Hydrology \square r	aturally prob	lematic?		(If ne	eded, expla	ain any answers	in Remarks.)			
SUMMARY OF FINDINGS – Attach	site map sl	howing s	ampli	ng point	locations,	transects, imp	oortant feature	s, etc.		
Hydrophytic Vegetation Present?	Yes ⊠	No								
Hydric Soils Present?	Yes □	No	\boxtimes		the Sampl ithin a We		Yes		No 🛛	
Wetland Hydrology Present?	Yes ⊠	No		"	itimi a vvo	, ciaria :				
Remarks: VEGETATION – Use scientific name:	s of plants.									
	-	Absolute	e Do	ominant	Indicator	Dominance T	est worksheet	:		
Tree Stratum (Plot size: 5-m diameter)		% Cover	Sp	pecies?	Status		minant Species		2	(4)
Fraxinus latifolia Populus balsamifera		<u>85</u> 15		Yes No	FACW FAC	that are OBL, Total Number	FACW, or FAC:			_ (A)
3.				110	170	Species Acros			6	(B)
4.							minant Species		33%	_
	-	100	_ = `	Total Cov	/er	that are OBL,	FACW, or FAC			(A/B)
Sapling/Shrub Stratum (Plot size: 3-m dian	neter)			.,	=		ndex workshee			
Symphoricarpos albus Gaultheria shallon		30 15		Yes Yes	FACU FACU	Total % Cover OBL species	<u>r of:</u>	Multipl x 1 =	<u>y by:</u>	
3. Amelanchier alnifolia		15		Yes	FACU	FACW species	s 90	x 2 =	180	
4. Fraxinus latifolia		5		No	FACW	FAC species	35	x 3 =	105	
5. Acer circinatum		5		No	FAC	FACU species	80	x 4 =	320	
Hart Otratary (Blat size of the dispersion)	-	70	_ = '	Total Cov	/er	UPL species		x 5 =		_(D)
Herb Stratum (Plot size: 1-m diameter) 1. Polystichum munitum		20		Yes	FACU	Column Totals		(A)	605	(B)
Carex deweyana		15		Yes	FAC	Prevalence In	dex = B/A =	3.0		
3.							ytic Vegetation			
4							I Test for Hydro _l nance Test is >		egetation	
5. 6.							nance resus > dence Index is ≤			
7							nological Adapta		Provide sup	porting
8						data i	in Remarks or o		,	
9.							ind Non-Vascula itic Hydrophytic			n)
10 11						1	hydric soil and v	_		
···		35	=	Total Cov	/er		s disturbed or p			iust be
Woody Vine Stratum (Plot size: 3-m diame	ter)									
1.						Hydrophytic			🔽	1
2		_		Total Cov	/er	Vegetation Present?	Ye	s 📙	No 🛚	l
% Bare Ground in Herb Stratum: 75	-		_	Total oo		1.1000				
Remarks:										
Tromane.										

		ibe to	the dept	h need	led to d		ent the indicator	or confirm the ab	sence	of indicators.)		
Depth (inches)	Matrix Color (moist)	%	5	Color (moist)		ox Features % Type	Loc ²	!	Texture	F	Remarks
0-13	10YR 2/1	10					71			Silt loam		
¹ Type: C=C	oncentration, D=	Depleti	on, RM=	Reduc	ed Matı	ix, CS=	Covered or Coate	d Sand Grains.	² Loc:	PL=Pore Lining,	M=Matri	ζ.
Hydric Soil	Indicators: (Ap	plicabl	le to all l	_RRs,	unless	otherw	vise noted.)		Indica	tors for Probler	natic Hy	dric Soils³:
☐ Histos						/ Redox				cm Muck (A10)		
	Epipedon (A2)					ed Matr		(MI DA 4)		Red Parent Mater		(TE40)
	Histic (A3) gen Sulfide (A4)						y Mineral (F1) (exo ed Matrix (F2)	cept MLRA 1)		′ery Shallow Darl other (Explain in l		, ,
, ,	ed Below Dark S	urface	(A11)				trix (F3)			otilei (Explaiii iii	Nemaiks)
	Dark Surface (A1		()				Surface (F6)			ators of hydrophy		
	Mucky Mineral (k Surface (F7)			etland hydrology		present, unless
☐ Sandy	Gleyed Matrix (S	54)			Redox	(Depre	essions (F8)		als	sturbed or proble	matic.	
Restrictive	Layer (if preser	nt):						Uvdria aail				
Type:								Hydric soil present?		Yes 🛚	□ м	o 🛛
Depth	(inches):							presenti				
Remarks:	Redox nodules	(10VD	2/2 and	10VP	2/4) ot	10"						
Remarks.	Redox flodules	(1011)	. 3/3 anu	IUIK	3/4) al	10 .						
LIVERGLA												
HYDROLO	JGY											
	ydrology Indicat icators (minimum		required	d chec	k all tha	at annly))		Seco	ndary Indicators	(2 or mo	re required)
	e water (A1)	i oi oile	required	ı. Ci iec			ned Leaves (exce	ot MI DA 1 2 4A	0600	Water-Stained	•	
	Vater Table (A2)					ег-этан В) (В9)		PL WILKA 1, 2, 4A		2, 4A & 4B)	Leaves (D9) (WILKA I,
· ·	tion (A3)					Crust (Drainage Patte	rns (B10))
□ Water	Marks (B1)				Aqu	atic Inv	ertebrates (B13)			Dry-Season Wa		
☐ Sedim	ent Deposits (B2))			•	Ū	Sulfide Odor (C1)			Saturation Visib	le on Aer	ial Imagery (C9)
	eposits (B3)						hizospheres along	• , ,		Geomorphic Po	•	2)
_	Mat or Crust (B4)						of Reduced Iron (C	•		Shallow Aquita	. ,	
	eposits (B5) e Soil Cracks (B6	3)					n Reduction in Tille Stressed Plants (I	, ,		FAC-Neutral Te Raised Ant Mou	. ,	\ (I PP A \
	tion Visible on A		agery (B				lain in remarks)	or) (LIKICA)		Frost-Heave Hu	•	,
	ely Vegetated Co					or (oxpi	all il remarks)			1 TOOL TICAVO TI	arrinoone	
Field Obse				•								
Surface Wa	iter Present?	Yes	□ No		Dept	th (in):	_					
Water Table	e Present?	Yes	⊠ No) [th (in):	0" BSG	Wetland Hyd Present		Yes		No 🗆
Saturation I			⊠ No	_		th (in):	0" BSG	11000110	•			
	apillary fringe)				Бор	().						
Describe Re	ecorded Data (sti	ream ga	auge, mo	nitorin	g well, a	aerial ph	hotos, previous in:	spections), if availa	able:			
	•	,			•	•	-	•				
Remarks:												
ĺ												



Project/Site: Nisqually State Park				City/	County: F	Pierce	Samp	ling date	: <u>1-19-2</u>	2021
Applicant/Owner: Washington State Pa	arks					State:	WA Sar	mpling Po	oint: DP	-26
Investigator(s): Roen Hohlfeld and Jan	nie Sloan			Section,	, Township,	Range: S30, 1	Γ16N, R04E			
Landform (hillslope, terrace, etc): Dep	ression			Local re	elief (concav	e, convex, none):	: concave	S	lope (%):	5
					,	, ,	Datum:		, ,	
Soil Map Unit Name: Kapowsin grave						'I classification:	none			
Are climatic / hydrologic conditions on the					-					
Are Vegetation □, Soil □, or Hydrology □			-			cumstances" pres		2 ⊠ Vas	s □ No	
Are Vegetation □, Soil □, or Hydrology □	-					ain any answers i		: 🖾 100	, 🗆 140	
						-				
SUMMARY OF FINDINGS – Atta			-	ing point	t locations,	transects, impo	ortant feature	s, etc.		
Hydrophytic Vegetation Present?	Yes 🗵	No		l Is	the Sampl	ed Area			_	
Hydric Soils Present?	Yes ⊠	No			ithin a We		Yes	X	No ∐	
Wetland Hydrology Present?	Yes ⊠	No								
Remarks: Wetland QQ in-pit.										
VEGETATION – Use scientific nam	nes of plants.					ī				
T 0 (D)		Absolute		ominant	Indicator	Dominance Te				
Tree Stratum (Plot size: 5-m diameter) 1. Alnus rubra		% Cover	· S	pecies? Yes	Status FAC	Number of Don that are OBL, F			3	(A)
2.						Total Number of	of Dominant		4	_ ` ′
3.						Species Across			•	_ (B)
4		20	=	Total Co	ver	Percent of Don that are OBL, F			75%	(A/B)
Sapling/Shrub Stratum (Plot size: 3-m di	iameter)		,			Prevalence Inc				
Physocarpus capitatus		15		Yes	FACW	Total % Cover		Multipl	y by:	
2. Populus balsamifera		3		No	FAC	OBL species		_ x 1 =		_
3. 4.						FACW species FAC species	·	x 2 = x 3 =		_
5.						FACU species		x 4 =		_
		18	=	Total Co	ver	UPL species		x 5 =		
Herb Stratum (Plot size: 1-m diameter)		10		Voc	EACH	Column Totals:	:	(A)		(B)
Rubus ursinus Carex deweyana		<u>10</u> 5		Yes Yes	FACU FAC	Prevalence Ind	lex = B/A =			
3. Polystichum munitum		trace		No	FACU		tic Vegetation			
4.							Test for Hydro	, ,	getation	
5. 6.							ance Test is > ence Index is ≤			
7						_	ological Adapta		Provide sup	porting
8						data ir	n Remarks or o)
9.							nd Non-Vascula ic Hydrophytic			in)
10 11						¹ Indicators of h		•		•
		15	=	Total Co	ver	present, unless				
Woody Vine Stratum (Plot size: 3-m dial 1.	,					Hydrophytic				
1. 2.						Vegetation		s 🗆	No 🗵]
	-	-	=	Total Co	ver	Present?	. •			
% Bare Ground in Herb Stratum: 85	5									
Remarks:										

		ribe to the	depth need		ent the indicator	or confirm the ak	sence	of indicators.)	
Depth (inches)	Matrix Color (moist)	%	Color (m		dox Features % Type	e ¹ Loc ²	2	Texture	Remarks
0-1	10YR 3/1	100		·				Sandy loam	
1-15	10YR 4/1	70	10YR	3/3	30 C	M		Sandy Ioam	
¹Type: C=0	Concentration D-	-Depletion	PM-Peduce	d Matrix CS	=Covered or Coate	ad Sand Grains	² l oc: [PL=Pore Lining,	M-Matriy
	il Indicators: (Ap					od Garia Grains.			natic Hydric Soils ³ :
-	sol (A1)	piicabic to		Sandy Redo	-			cm Muck (A10)	ialic Hydric Colls .
	Epipedon (A2)			Stripped Ma				ed Parent Mater	ial (TF2)
	Histic (A3)				ky Mineral (F1) (ex	cept MLRA 1)			Surface (TF12)
,	gen Sulfide (A4)				ed Matrix (F2)			ther (Explain in F	Remarks)
	ted Below Dark S	,	,	Depleted Ma					
	Dark Surface (A1				Surface (F6)				tic vegetation and
	/ Mucky Mineral (/ Gleyed Matrix (S			Redox Depre	rk Surface (F7)			itiand nydrology i iturbed or proble	must be present, unless matic.
	Layer (if prese	•		теаох Берг	essions (1 0)				
_	(p. 000.	,.				Hydric soil		Yes 2	No □
Type:						present?		res 🗠	NO L
Depth	(inches):								
Remarks:									
HYDROL	OGY								
	ydrology Indicat		ujrod: obook	all that apply	٨		Sacar	odani Indiantara	(2 or more required)
	dicators (minimum	TOF OHE TEC	ulieu. Crieck			(NII DA 4 0 4A		-	(2 or more required)
	Water (A1)			Water-Sta & 4B) (B9	ined Leaves (exce 1	pt MLRA 1, 2, 4A		Water-Stained I 2, 4A & 4B)	_eaves (B9) (MLRA 1,
Ŭ	ation (A3)			, ,				Drainage Patter	ns (B10)
	Marks (B1)				vertebrates (B13)			Dry-Season Wa	
	nent Deposits (B2)			Sulfide Odor (C1)				le on Aerial Imagery (C9)
	Deposits (B3)	,		Oxidized F	Rhizospheres along	Living Roots (C3)		Geomorphic Po	
☐ Algal I	Mat or Crust (B4)			Presence	of Reduced Iron (C	24)		Shallow Aquitar	rd (D3)
	eposits (B5)				n Reduction in Till			FAC-Neutral Te	, ,
	ce Soil Cracks (Be				Stressed Plants (I	D1) (LRR A)			ınds (D6) (LRR A)
	ation Visible on A			Other (exp	olain in remarks)			Frost-Heave Hu	ımmocks
☐ Spars	ely Vegetated Co	ncave Surr	ace (B8)						
	ater Present?	Yes □	No ⊠	Depth (in):	_				
	e Present?	Yes ⊠	No □	Depth (in):	0" BSG	Wetland Hyd Present		Yes	⊠ No □
Saturation		Yes ⊠	No □	Depth (in):	0" BSG	1100011	••		
	apillary fringe)			-1 - ()					
Describe R	ecorded Data (st	ream gauge	e, monitoring	well, aerial p	photos, previous in	spections), if avail	able:		
Remarks:									



Project/Site: Nisqually State Park			City/	County: F	Pierce Samp	oling date:	1-19-2	.021
Applicant/Owner: Washington State Parks					State: WA Sa	mpling Po	oint: DP-	-27
Investigator(s): Roen Hohlfeld and Jamie Sloan			Section,	Township,	Range: S30, T16N, R04E			
Landform (hillslope, terrace, etc): Hillslope			Local re	lief (concav	e, convex, none): _convex	S	lope (%):	15
Subregion (LRR): A Lat: -		Lon	ng: -		Datum:			
Soil Map Unit Name: Kapowsin gravelly ashy loam				NW	I classification: none			
Are climatic / hydrologic conditions on the site typical f								
Are Vegetation □, Soil □, or Hydrology □ significantly					cumstances" present on the site	e? ⊠ Yes	. □ No	
Are Vegetation □, Soil □, or Hydrology □ naturally pr					ain any answers in Remarks.)			
SUMMARY OF FINDINGS – Attach site map		ampli				es, etc.		
	⊠ No				·			
Hydric Soils Present? Yes	□ No	\boxtimes		the Sampl ithin a We			No 🛛	
Wetland Hydrology Present? Yes	□ No	\boxtimes	"	itiiii a vve	tiana:			
Remarks: Click here to enter text. VEGETATION – Use scientific names of plant	 s.							
Tree Stratum (Plot size: 5-m diameter)	Absolute % Cover		ominant pecies?	Indicator Status	Dominance Test worksheet Number of Dominant Species		3	
1. Frangula purshiana	70		Yes	FAC	that are OBL, FACW, or FAC	:	<u> </u>	(A)
Pseudotsuga menziesii 3.	10		No	FACU	Total Number of Dominant Species Across all Strata:		5	(B)
4.			Total Cov	ver	Percent of Dominant Species that are OBL, FACW, or FAC		60%	(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diameter)		_			Prevalence Index workshee			(,,,,,,
Physocarpus capitatus	15		Yes	FACW	Total % Cover of:	<u>Multiply</u>	y by:	
Populus balsamifera Alnus rubra	<u>5</u> 3		Yes No	FAC FAC	OBL species FACW species	_ x 1 = x 2 =		_
4.			INU	FAC	FAC species FAC species	_ x 2 = x 3 =		_
5.					FACU species	x 4 =		
Herb Stratum (Plot size: 1-m diameter)	23	<u> </u>	Total Cov	ver	UPL species Column Totals:	- x 5 = (A)		— _(B)
1. Mahonia nervosa	45		Yes	FACU	Prevalence Index = B/A =	(A)		(D)
2. Rubus ursinus	15		Yes	FACU				
3. 4.					Hydrophytic Vegetation 1 – Rapid Test for Hydro			
5.					☐ 2 – Dominance Test is >			
6. 7.					☐ 3 – Prevalence Index is: ☐ 4 – Morphological Adapt		rovide sun	norting
8.					data in Remarks or d	on a sepa	rate sheet)	
9.					□ 5 – Wetland Non-Vascul□ Problematic Hydrophytic			n)
10 11					¹ Indicators of hydric soil and	_		
	60	_ = '	Total Cov	ver	present, unless disturbed or p	oroblemat	ic.	
Woody Vine Stratum (Plot size: 3-m diameter) 1					Hydrophytic			
2.			T			es 🗆	No 🛚	
% Bare Ground in Herb Stratum: 45		_ =	Total Cov	ver	Present?			
Remarks:								

	scription: (Descr	ibe to the c	lepth need				or confirm the al	osence	of indicators.)	
Depth (inches)	Matrix Color (moist)	%	Color (n	_	Redox Features %	S Type	¹ Loc ²	2	Texture	R	emarks
0-3	10YR 2/1	100	1) 10100	10101)	70	турс	200		Loam		w/OM
3-13	10YR 3/2	100							Sandy loam		
13-15	2.5Y 4/3	98	7.5YR	3/3	2	С	M		Silt loam		
¹ Type: C=C	Concentration, D=	Depletion, F	RM=Reduce	ed Matrix, C	S=Covered or	Coate	d Sand Grains.	² Loc:	PL=Pore Lining	g, M=Matrix	
Hydric Soi	I Indicators: (Ap	plicable to	all LRRs, ι	ınless oth	erwise noted.))			tors for Proble	-	Iric Soils³:
	sol (A1)			Sandy Re Stripped M					cm Muck (A10)		
	Epipedon (A2) Histic (A3)				латпх (S6) ucky Mineral (F	1) (exc	ept MLRA 1)		ted Parent Mate ery Shallow Da	, ,	(TF12)
	gen Sulfide (A4)				eyed Matrix (F2		opt WEIGT)		ory Challow Bo Other (Explain in		
☐ Deple	ted Below Dark S	•) 🗆	Depleted	Matrix (F3)	,			` •	,	
	Dark Surface (A1	,			rk Surface (F6)	•			ators of hydrop		
	/ Mucky Mineral (\$ / Gleyed Matrix (S				Dark Surface (I pressions (F8)	,			etland hydrolog sturbed or prob		resent, uniess
		•		TCGOX DC	pressions (1 0)						
	Layer (if preser	и).					Hydric soil	l	.,	п	M
Type:	-						present?		Yes	⊔ No	×
Depth	(inches):										
Remarks:	Cobble at 15" E	BSG.									
HYDROLO	OGY										
	ydrology Indicat		dan di abasal		t- A			0		- (0	
	dicators (minimum	or one requ	urea: cneci			/	- 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		ndary Indicator		
	ce water (A1) Vater Table (A2)			**************************************		(exce	ot MLRA 1, 2, 4A		Water-Stained 2, 4A & 4B)	d Leaves (E	9) (MLRA 1,
Ŭ	ation (A3)			, ,	ıst (B11)				Drainage Patt	erns (B10)	
	Marks (B1)				Invertebrates ((B13)			Dry-Season V	, ,	
	ent Deposits (B2))		, ,	en Sulfide Odoi	` '					al Imagery (C9)
	eposits (B3)					_	Living Roots (C3)		Geomorphic F		2)
-	Mat or Crust (B4)				e of Reduced				Shallow Aquit FAC-Neutral		
	eposits (B5) ce Soil Cracks (B6	3)			Iron Reduction or Stressed PI				Raised Ant M	, ,	(IRR A)
	ation Visible on A				explain in rema	•) (_ 1111)		Frost-Heave I		(=::::/:)
	ely Vegetated Co	•	, , ,		,	-,					
Field Obse	ervations:										
Surface Wa	ater Present?	Yes □	No 🗵	Depth (ir	n): <u>-</u>						
Water Tabl	e Present?	Yes □	No ⊠	Depth (ir	n): -		Wetland Hyd Present		Υe	es 🗆	No 🛛
Saturation		Yes □	No ⊠	Depth (ir			. 1000111				
	apillary fringe)			Dopui (II	.,.						
Describe R	ecorded Data (str	ream gauge	, monitoring	well, aeria	al photos, previ	ous ins	spections), if avail	able:			
Remarks:	Soils moist thr	roughout pro	ofile								
i tomarks.	CONSTITUISE (III	oughout pit									



Project/Site: Nisqually State Park			Citv/	County: F	Pierce	Sampl	ling date	: 1-21-2	:021
Applicant/Owner: Washington State Parks			_ ′	, <u> </u>	Stat		•		
Investigator(s): Roen Hohlfeld and Sage Presster			Section	Township	Range: S20			<u> </u>	
						e): concave		lone (%):	5
				iller (coricavi	e, convex, non	· -	<u> </u>	10pe (76).	
Subregion (LRR): A Lat: -	21.2	_ Lon	·	.		Datum:	-		
Soil Map Unit Name: Kapowsin gravelly ashy loan					'I classification				
Are climatic / hydrologic conditions on the site typical		of year							
Are Vegetation □, Soil □, or Hydrology □ significant	•					esent on the site	? ⊠ Yes	s ⊔ No	
Are Vegetation □, Soil □, or Hydrology □ naturally p	roblematic?		(If ne	eeded, expla	ain any answer	s in Remarks.)			
SUMMARY OF FINDINGS - Attach site map	showing s	ampliı	ng point	locations,	transects, im	portant feature	s, etc.		
Hydrophytic Vegetation Present? Yes	□ No	\boxtimes	_						
Hydric Soils Present? Yes	□ No	\boxtimes		the Sampl rithin a We		Yes		No 🛛	
Wetland Hydrology Present? Yes	⊠ No		••						
Remarks: Click here to enter text.									
VEGETATION – Use scientific names of plant	ts.								
	Absolute	Do	minant	Indicator	Dominance	Test worksheet:			
Tree Stratum (Plot size: 5-m diameter)	% Cover	Sp	ecies?	Status		ominant Species		2	
Pseudotsuga menziesii Fraxinus latifolia	95 5		Yes No	FACU FACW	1	., FACW, or FAC: er of Dominant			(A)
3			110	171011		oss all Strata:		4	(B)
4	400		T-1-1-0			ominant Species		50%	(A (D)
	100	_ =	Total Co	ver		, FACW, or FAC:			(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diameter) 1. Acer circinatum	5		Yes	FAC	Total % Cov	Index worksheet er of:	t: Multipl	v bv:	
2. Rubus spectabilis	5		Yes	FAC	OBL species	<u> </u>	x 1 =	<u> </u>	_
3. 4.					FACW species		x 2 = x 3 =	<u>10</u> 30	_
5.					FACU species		x 4 =	440	
	10	_ = -	Total Co	ver	UPL species		x 5 =		
Herb Stratum (Plot size: 1-m diameter) 1. Polystichum munitum	15		Yes	FACU	Column Tota		(A)	480	(B)
2. Rubus ursinus	trace		No	FACU			3.8		
3.						hytic Vegetation			
4. 5.						id Test for Hydrop ninance Test is > :	-	getation	
6					_	valence Index is ≤			
7. 8.						ohological Adapta a in Remarks or o			
9.					□ 5 – Wet	land Non-Vascula	ar Plants	1 ′	
10.						atic Hydrophytic ' f hydric soil and w			
11.		=	Total Co	ver		ess disturbed or p			iusi be
Woody Vine Stratum (Plot size: 3-m diameter)									
1. 2.					Hydrophyt Vegetation		s 🗆	No 🏻	
		_ =	Total Co	ver	Present?	16	- Ш	140 🖂	ı
% Bare Ground in Herb Stratum: 85					<u> </u>				
Remarks:									

Profile Des	scription: (Desc		he depth	neede		ent the indicator	or confirm the at	osence	of indicators	.)	
(inches)	Color (moist)	%	С	olor (m		% Type	e ¹ Loc ²	2	Texture		Remarks
0-2	10YR 3/2	100)						Sandy loam		
2-18	10YR 4/3	98		7.5Y 4	1/4	2 C	M		Sandy loam		
					<u> </u>						
¹Type: C=C	concentration, D=	Depletic	n, RM=F	Reduce	d Matrix, CS=	Covered or Coate	ed Sand Grains.	² Loc:	PL=Pore Linin	g, M=Matr	ix.
	I Indicators: (Ap								tors for Probl		
-	ol (A1)	•			Sandy Redox				cm Muck (A10		
	Epipedon (A2)				Stripped Matr				ted Parent Mat		
	Histic (A3)					/ Mineral (F1) (exc	cept MLRA 1)		ery Shallow D		
,	gen Sulfide (A4)	f (^44\		Loamy Gleye	` '			ther (Explain i	n Remarks	s)
	ted Below Dark S Dark Surface (A1		A11)		Depleted Mat Redox Dark S	, ,		3 India	ators of hydrop	bytic voca	station and
	Mucky Mineral (,				k Surface (F7)					present, unless
	Gleyed Matrix (Redox Depre	, ,			sturbed or prob		
Restrictive	Layer (if prese	nt):									
Type:							Hydric soil		Yes		lo 🛛
	(inches):						present?		100		
Берип	(ITICHES).										
Remarks:											
	201										
HYDROLO											
	ydrology Indica licators (minimun		required	: check	all that apply))		Seco	ndary Indicato	rs (2 or mo	ore required)
☐ Surfac	e water (A1)				Water-Stair	ned Leaves (exce	pt MLRA 1, 2, 4A	· 🗆	Water-Staine	d Leaves	(B9) (MLRA 1 ,
J	Vater Table (A2)				& 4B) (B9)				2, 4A & 4B)		
	ition (A3)				,				Drainage Pat		
	Marks (B1)					ertebrates (B13)			Dry-Season \		
	ent Deposits (B2 eposits (B3)	2)			, ,	Sulfide Odor (C1) nizospheres along	Living Poots (C3)		Geomorphic		rial Imagery (C9)
	Mat or Crust (B4)					f Reduced Iron (C			Shallow Aqui	`)2)
_	eposits (B5)					Reduction in Tille			FAC-Neutral		
	e Soil Cracks (B	6)				Stressed Plants ([, ,		Raised Ant M		6) (LRR A)
☐ Inunda	ation Visible on A	erial Ima	agery (B7	7) \Box	Other (expl	ain in remarks)			Frost-Heave	Hummock	S
☐ Sparse	ely Vegetated Co	ncave S	urface (E	38)							
Field Obse	ervations:										
Surface Wa	ater Present?	Yes [□ No	\boxtimes	Depth (in):		Wetland Hyd	Irology			_
Water Table	e Present?	Yes 2	⊠ No		Depth (in):	16" BSG	Present		Υ	es 🛛	No 🗆
Saturation I	Present? apillary fringe)	Yes 2	⊠ No		Depth (in):	10" BSG					
		ream da	uge, moi	nitorina	well, aerial pl	hotos, previous in	spections), if avail	able:			
			J - ,o.	9	- , p .	, ,	,,,				
Remarks:											



Project/Site: Nisqually State Park			City/	County: F	Pierce S	Samplii	ng date	: <u>1-21-2</u>	2021
Applicant/Owner: _Washington State Parks					State: WA	Sam	pling P	oint: DP	-29
Investigator(s): Roen Hohlfeld and Sage Presster			Section,	Township,	Range: S20, T16N, R04	4E			
Landform (hillslope, terrace, etc): Depression			Local re	lief (concav	e, convex, none): conca	ave	S	lope (%):	5
Subregion (LRR): A Lat: -			g: -	(Datun			-1 - (/	
	O to 6 porc			NIM		·· —			
Soil Map Unit Name: Kapowsin gravelly ashy loam					·				
Are climatic / hydrologic conditions on the site typical f		-							
Are Vegetation □, Soil □, or Hydrology □ significantly					cumstances" present on the		⊠ Yes	₃ ⊔ No	
Are Vegetation \square , Soil \square , or Hydrology \square naturally pr	oblematic?		(If ne	eded, expla	iin any answers in Remark	s.)			
SUMMARY OF FINDINGS - Attach site map	showing s	samplir	ng point	locations,	transects, important fea	atures	, etc.		
Hydrophytic Vegetation Present? Yes	⊠ No								
Hydric Soils Present? Yes	⊠ No			the Sampl ithin a We		Yes [\boxtimes	No 🗆	
Wetland Hydrology Present? Yes	⊠ No		••						
Remarks: Wetland NN in-pit.									
Tremand.									
VEGETATION – Use scientific names of plants									
VEGETATION — Use scientific flames of plants									
Tree Stratum (Plot size: 5-m diameter)	Absolute		minant	Indicator	Dominance Test works				
1. Populus balsamifera	% Cover		ecies? Yes	Status FAC	Number of Dominant Sp that are OBL, FACW, or			3	(A)
2. Prunus emarginata	5		Yes	FACU	Total Number of Domina	ant		5	- ` ′
3.					Species Across all Strata				_ (B)
4	25	= 7	Total Cov	ver	Percent of Dominant Spethat are OBL, FACW, or			60%	(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diameter)		_ `	, otal oo		Prevalence Index work				(,,,_)
1. Acer circinatum	20		Yes	FAC	Total % Cover of:	Silect.	Multipl	y by:	
2. Rubus spectabilis	10		Yes	FAC	OBL species		x 1 =		
Physocarpus capitatus Populus balsamifera	3 trace		No No	FACW FAC	FACW species FAC species		x 2 = x 3 =		_
4. Populus balsamifera 5.	trace		INO	FAC	FAC species FACU species		x 4 =		
<u> </u>	33	= 7	Total Cov	ver	UPL species		x 5 =		_
Herb Stratum (Plot size: 1-m diameter)					Column Totals:		(A)		(B)
1. Rubus ursinus	15		Yes	FACU FACW	Prevalence Index = B/A	=			
Dryopteris expansa	trace		No	FACW	Hydrophytic Veget	ation	Indicate	ors:	
4.					☐ 1 – Rapid Test for H				
5					□ 2 – Dominance Tes □				
6. 7.					☐ 3 – Prevalence Inde ☐ 4 – Morphological A			Provido cur	norting
7. 8.					data in Remarks				
9					☐ 5 – Wetland Non-Va				
10.					☐ Problematic Hydrop	-	-		
11	15		Fotal Cov	/or	Indicators of hydric soil present, unless disturbed				nust be
Woody Vine Stratum (Plot size: 3-m diameter)		- - '	otal oo	VCI	p				
1					Hydrophytic		_	_	-
2	-		Fotal Co	·0*	Vegetation Present?	Yes		No 🗆	j
% Bare Ground in Herb Stratum: 85		= '	Fotal Cov	vei	riesenti				
Remarks:									

			depth need	ed to do	ocument the indicator	or confirm the al	osence	of indicators.)		
Depth (inches)	Matrix Color (moist)	%	Color (r	noist)	Redox Features % Type	e ¹ Loc ²	2	Texture	Re	emarks
0-5	10YR 2/1	100	0 0.0.		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			Sandy loam		
5-16	10YR 5/2	95	7.5Y	1/1	5 C	M		Sandy silt		
5-16	10113/2	95	7.51	4/4	<u> </u>	IVI		loam		
¹ Type: C=C	Concentration, D=	Depletion, F	RM=Reduce	ed Matrix	, CS=Covered or Coate	ed Sand Grains.	² Loc:	PL=Pore Lining	, M=Matrix.	
_	` .	plicable to	all LRRs, ι		therwise noted.)			tors for Proble	•	ric Soils³:
	sol (A1)			-	Redox (S5)			cm Muck (A10)		
	Epipedon (A2) Histic (A3)				d Matrix (S6) Mucky Mineral (F1) (ex	cent MI PA 1)		ed Parent Mate ery Shallow Da		TF12)
	gen Sulfide (A4)				Gleyed Matrix (F2)	Sept WERA 1)		ther (Explain in		11 12)
,	ted Below Dark S	Surface (A11			d Matrix (F3)			(=,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
☐ Thick	Dark Surface (A1	2)			Dark Surface (F6)			ators of hydroph		
	/ Mucky Mineral (d Dark Surface (F7)			tland hydrology		esent, unless
☐ Sandy	Gleyed Matrix (S	S4)		Redox I	Depressions (F8)		als	sturbed or probl	ematic.	
Restrictive	Layer (if prese	nt):				l leadain noil	ı			
Type:						Hydric soil present?		Yes	⊠ No	
Depth	(inches):					present				
	· · · · · ·									
Remarks:										
HYDROLO	ngy									
	ydrology Indica	tore:								
	dicators (minimun		uired: check	all that	apply)		Seco	ndary Indicators	s (2 or more	required)
☐ Surfac	ce water (A1)				r-Stained Leaves (exce	pt MLRA 1, 2, 4A	· П	Water-Stained	Leaves (B	9) (MLRA 1,
	Vater Table (A2)			& 4B)	• •		_	2, 4A & 4B)		
	ation (A3)				Crust (B11)			Drainage Patt		(00)
	Marks (B1)	۸		•	tic Invertebrates (B13)			Dry-Season W		
	ient Deposits (B2 Deposits (B3))			ogen Sulfide Odor (C1) zed Rhizospheres along	Living Poots (C3)		Saturation Visi Geomorphic P		
	Mat or Crust (B4)				ence of Reduced Iron (C			Shallow Aquita		
_	eposits (B5)				nt Iron Reduction in Tille	,		FAC-Neutral 7	, ,	
	ce Soil Cracks (B	6)		Stunt	ed or Stressed Plants (I	01) (LRR A)		Raised Ant Mo	` '	LRR A)
☐ Inunda	ation Visible on A	erial Imager	ry (B7) 🗆	Other	(explain in remarks)			Frost-Heave H	Hummocks	
☐ Spars	ely Vegetated Co	ncave Surfa	ace (B8)							
Field Obse	ervations:									
Surface Wa	ater Present?	Yes □	No 🗵	Depth	(in): <u>-</u>	Wetland Hyd	Irology		_	_
Water Tabl	e Present?	Yes ⊠	No 🗆	Depth	(in): 5" BSG	Present		Ye	s 🏻	No 🗆
Saturation (includes ca	Present? apillary fringe)	Yes ⊠	No 🗆	Depth	(in): 0" BSG					
		ream dauge	e. monitorino	ı well ac	erial photos, previous in	spections) if avail	able.			
2000110011	Data (St	. sam gaage	.,	,, ac	priotoo, proviodo iri	5,500,01,0 ₁ , 11 avail	GD10.			
Remarks:										



Project/Site: Nisqually State Park			City/	County: F	Pierce	Samp	oling date	e: <u>1-21-</u> 2	2021
Applicant/Owner: Washington State Parks					State: V	/A Sa	mpling F	Point: DP	-30
Investigator(s): Roen Hohlfeld and Sage Presster			Section,	, Township,	Range: <u>S20, T16N</u>	, R04E			
Landform (hillslope, terrace, etc): Depression			Local re	elief (concav	e, convex, none):c	oncave	(Slope (%):	2
Subregion (LRR): A Lat: -		Long	g: -			atum:	_		
Soil Map Unit Name: Kapowsin gravelly ashy loam	0 to 6 perc	ent slo	pes	NW	I classification: no	ne -			
Are climatic / hydrologic conditions on the site typical for					-	rks.)			
Are Vegetation □, Soil □, or Hydrology □ significantly					cumstances" present of	•	:? ⊠ Ye	s □ No	
Are Vegetation □, Soil □, or Hydrology □ naturally pro					in any answers in Rei				
SUMMARY OF FINDINGS – Attach site map		amplir			-		es, etc.		
Hydrophytic Vegetation Present? Yes	⊠ No								
Hydric Soils Present? Yes	⊠ No			the Sampl vithin a We		Yes	\boxtimes	No 🗆	
Wetland Hydrology Present? Yes	⊠ No		VV	ittiiii a vve	ruanu :				
Remarks: Wetland C in-pit. VEGETATION — Use scientific names of plants	S.								
<u>Tree Stratum</u> (Plot size: 5-m diameter)	Absolute % Cover		minant ecies?	Indicator Status	Dominance Test w Number of Dominar			4	
1. Fraxinus latifolia	80		Yes	FACW	that are OBL, FACV		: <u> </u>	4	(A)
2. Populus balsamifera 3.	15		No	FAC	Total Number of Do Species Across all S			5	(B)
4.		= T	Total Cov	ver	Percent of Dominan that are OBL, FACV			80%	(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diameter)		_			Prevalence Index v	vorkshee	et:		
1. Spiraea douglasii	15 15		Yes	FACU	Total % Cover of:			oly by:	
Symphoricarpos albus Malus fusca	10		Yes Yes	FACU FACW	OBL species FACW species		_ x 1 = x 2 =	_	_
4.					FAC species		x 3 =		
5	40		Total Cov	vor	FACU species UPL species		_ x 4 = x 5 =		_
Herb Stratum (Plot size: 1-m diameter)	40	<u> </u>	otal Co	VCI	Column Totals:		(A)		— (B)
1. Phalaris arundinacea			Yes	FACW	Prevalence Index =	B/A =			
2. 3. 4.					Hydrophytic V	egetation			
5					□ 2 – Dominance □ 3 – Provelence				
6. 7.					☐ 3 – Prevalence ☐ 4 – Morphologie			Provide sup	porting
8.					data in Ren	narks or c	on a sep	arate sheet	
9					☐ 5 – Wetland No☐ Problematic Hy				in)
11.					¹ Indicators of hydric	soil and	wetland	hydrology n	
Mandy Vine Stratum (Plataine) 2 m diameter)	15	<u> </u>	Total Cov	ver	present, unless dist	urbed or p	oroblema	atic.	
Woody Vine Stratum (Plot size: 3-m diameter) 1					Hydrophytic				
2.					Vegetation	Ye	s 🏻	No 🗆]
% Bare Ground in Herb Stratum: 85		= '	Total Cov	ver	Present?				
Remarks:									
Tromano.									

			e depth	needed	to document the indicato	r or confirm the al	bsence	of indicators.)	
Depth (inches)	Matrix Color (moist)	%	С	olor (mo	Redox Features vist) % Ty	pe ¹ Loc	2	Texture	Re	emarks
0-4	10YR 3/1	100						Sandy loam		
4-12	10YR 4/1	95		7.5YR 4	/4 5 () M/P	L	Sandy loam		
					<u> </u>	<u> </u>				
¹Type: C=C	Concentration, D=	=Depletio	n, RM=R	Reduced	Matrix, CS=Covered or Coa	ted Sand Grains.	² Loc:	PL=Pore Lining	g, M=Matrix.	
					less otherwise noted.)			tors for Proble		ric Soils ³ :
-	sol (A1)	•			andy Redox (S5)			cm Muck (A10)	-	
	Epipedon (A2)				tripped Matrix (S6)			ted Parent Mate		
	Histic (A3)				oamy Mucky Mineral (F1) (e	xcept MLRA 1)		ery Shallow Da		TF12)
,	gen Sulfide (A4)	N	\ 4.4.\		oamy Gleyed Matrix (F2)			other (Explain in	n Remarks)	
	ted Below Dark S Dark Surface (A1		A11)		Pepleted Matrix (F3) Redox Dark Surface (F6)		3 India	ators of hydropl	hytic vogotat	tion and
	/ Mucky Mineral (,			Depleted Dark Surface (F7)			etland hydrolog		
	Gleyed Matrix (ledox Depressions (F8)			sturbed or prob		,
Restrictive	Layer (if prese	nt):								
Туре:						Hydric soil	I	Yes	⊠ No	
	(inches):					present?				_
	(ITICITES).									
Remarks:										
HYDROLO	OGY									
Wetland H	ydrology Indica									
	dicators (minimun	n of one r	equired:	check a	all that apply)		Seco	ndary Indicator	s (2 or more	required)
	ce water (A1)				Water-Stained Leaves (exc & 4B) (B9)	ept MLRA 1, 2, 4A	· 🗆	Water-Stained	d Leaves (B	9) (MLRA 1,
0	Vater Table (A2) ation (A3)				Salt Crust (B11)			2, 4A & 4B) Drainage Patt	erne (R10)	
	Marks (B1)				Aquatic Invertebrates (B13)			Dry-Season V		(C2)
	ent Deposits (B2	2)			Hydrogen Sulfide Odor (C1					I Imagery (C9)
	eposits (B3)	•			Oxidized Rhizospheres alor	g Living Roots (C3)		Geomorphic F	Position (D2)	,
☐ Algal I	Mat or Crust (B4)				Presence of Reduced Iron	C4)		Shallow Aquit	ard (D3)	
	eposits (B5)				Recent Iron Reduction in T	, ,		FAC-Neutral		
	ce Soil Cracks (B				Stunted or Stressed Plants	(D1) (LRR A)		Raised Ant M	, ,	(LRR A)
	ation Visible on A				Other (explain in remarks)			Frost-Heave I	Hummocks	
☐ Sparse	ely Vegetated Co	ncave St	лпасе (Е	38)						
	ater Present?	Yes 🗆] No	\boxtimes	Depth (in): -					
Water Tabl		Yes 🗵		_	Depth (in): 5" BSG	Wetland Hyd		Υe	es 🏻	No 🗆
Saturation		Yes 🗵			Depth (in): 9" BSG	Present	t?		_	_
	apillary fringe)	163 🗠	110		Deptil (iii). 0 B33					
Describe R	ecorded Data (st	ream gau	ıge, mor	nitoring v	vell, aerial photos, previous	nspections), if avail	lable:			
Remarks										
Remarks:										



Project/Site: Nisqually State Park				City/	County: F	Pierce	Samp	ling date	: <u>1-21-2</u>	2021
Applicant/Owner: Washington State Parl	KS					State:	<u>WA</u> Sar	npling Po	oint: DP	-31
Investigator(s): Roen Hohlfeld and Sage	Presster			Section,	Township,	Range: S20, T	16N, R04E			
Landform (hillslope, terrace, etc): Slope				Local re	lief (concav	e, convex, none):	none	S	lope (%):	30
Subregion (LRR): A Lat: -			Long	g: -			Datum:	_		
Soil Map Unit Name: Kapowsin gravelly	ashy loam, 0	to 6 perc				I classification:	none –			
Are climatic / hydrologic conditions on the s	•	•					emarks.)			
Are Vegetation □, Soil □, or Hydrology □			-			cumstances" pres		? ⊠ Yes	s 🗆 No	
Are Vegetation □, Soil □, or Hydrology □	-					ain any answers ir				
SUMMARY OF FINDINGS – Attack			amplir			-		s. etc.		
Hydrophytic Vegetation Present?	Yes 🗵	No		9						
Hydric Soils Present?	Yes □	No	\boxtimes		the Sampl ithin a We		Yes		No 🛛	
Wetland Hydrology Present?	Yes □	No	\boxtimes	VV	itiiii a vve	tialiu:				
Remarks: VEGETATION – Use scientific name	es of plants									
VEGETATION USE SCIENTING HAITE	or plants.	Absolute	. Do	minant	Indicator	Dominance Te	st worksheet:			
Tree Stratum (Plot size: 5-m diameter)		% Cover	Sp	ecies?	Status	Number of Dom			4	(4)
Salix scouleriana Fraxinus latifolia		45 20		<u>Yes</u> Yes	FACW	that are OBL, F				_ (A)
3				100	17.01	Species Across			6	(B)
4		65	= 1	otal Cov	ver	Percent of Dom that are OBL, F			67%	(A/B)
Sapling/Shrub Stratum (Plot size: 3-m dia	meter)					Prevalence Inc				
1. Malus fusca	,	25		Yes	FACW	Total % Cover	of:	Multipl	y by:	
2. Rosa pisocarpa 3.		10		Yes	FAC	OBL species FACW species		x 1 = x 2 =		_
4.						FAC species		x 3 =		_
5						FACU species	-	x 4 =		_
Herb Stratum (Plot size: 1-m diameter)	-	35	_ = '	Total Cov	ver	UPL species Column Totals:		x 5 = (A)		— (B)
Polystichum munitum		10		Yes	FACU	Prevalence Ind	ex = B/A =	()		(-)
2. <u>Mahonia nervosa</u> 3.		5		Yes	FACU		tic Vegetation	Indicate	ors.	
4.							Test for Hydror			
5						•	ance Test is >			
6. 7.						4 – Mornho	ence Index is ≤ ological Adapta		Provide sup	porting
8.						☐ data in	Remarks or o	n a sepa	rate sheet)	
9.							d Non-Vascula c Hydrophytic			ın)
10 11						¹ Indicators of h		-		
	_	15	= T	Total Cov	ver	present, unless	disturbed or p	roblemat	tic.	
Woody Vine Stratum (Plot size: 3-m diam 1.	,					Hydrophytic				
2.						Vegetation	Ye	s 🏻	No 🗆]
0/ David Craward in Harb Chrabway	-	-	<u> </u>	Total Cov	ver	Present?				
% Bare Ground in Herb Stratum: 85						Į				
Remarks:										

	scription: (Desc		the dep	th need	ded to d			r or confirm	the ab	sence	of indicators.))		
Depth (inches)	Matrix Color (moist)	<u>.</u> %	, 0	Color (moist)		ox Features % Typ	ne ¹	Loc ²		Texture		Rema	arks
0-4	10YR 3/1	10		1 10100	moiotj		70 191	,,,			Sandy silt		TTOTTIC	ano
0-4	10113/1	10									loam			
4-16	10YR 3/2	10	0								Sandy silt loam			
											iodiii			
¹Type: C=C	Concentration, D=	=Depleti	ion RM:	=Reduc	ed Matri	x CS=	-Covered or Coa	ted Sand Gra	ains	²l oc:	PL=Pore Lining	M=Mat	trix	
	il Indicators: (A	•				-		ioa oana on	arrio.		tors for Proble	-		Soils ³ ·
_	sol (A1)	Spirous	ic to an		Sandy		•				cm Muck (A10)		iyano	
	Epipedon (A2)				•		rix (S6)				ted Parent Mate		2)	
	Histic (A3)						y Mineral (F1) (e	xcept MLRA	1)		ery Shallow Da			12)
	gen Sulfide (A4)						ed Matrix (F2)				ther (Explain in	Remarl	ks)	
	ted Below Dark S		(A11)				trix (F3)			31 "				
	Dark Surface (Ar / Mucky Mineral	,					Surface (F6) k Surface (F7)				ators of hydrophetland hydrology			
	/ Gleyed Matrix (essions (F8)				sturbed or probl		c pres	orit, uriless
	Layer (if prese					2 0p.0	(1.0)							
_	Layer (II prese	iii).						Hydri	ic soil		.,		5	7
Type:									ent?		Yes	Ш	No 🏻	
Depth	(inches):													
Remarks:														
HYDROL	nev													
	ydrology Indica	tore:												
	dicators (minimur		e require	d: chec	k all that	apply)			Seco	ndary Indicators	s (2 or m	nore red	quired)
☐ Surfac	ce water (A1)				¬ Wate	er-Stair	ned Leaves (exc	ept MLRA 1	, 2, 4A		Water-Stained	Leaves	s (B9) (MLRA 1,
☐ High V	Water Table (A2)) (B9)		•			2, 4A & 4B)		` , `	·
	ation (A3)					Crust (. ,				Drainage Patt			
	Marks (B1)	• •					rertebrates (B13)				Dry-Season W			
	nent Deposits (B2	<u>2)</u>			-	-	Sulfide Odor (C1)		to (C2)		Saturation Visi			nagery (C9)
	eposits (B3) Mat or Crust (B4)	١					hizospheres alon of Reduced Iron (is (C3)		Geomorphic F Shallow Aquita		` '	
_	eposits (B5)	'					Reduction in Ti	,	6)		FAC-Neutral 1			
	ce Soil Cracks (B	6)					Stressed Plants	`	,		Raised Ant Mo	,	,	RA)
☐ Inunda	ation Visible on A	erial Im	nagery (E	37)	Othe	r (expl	ain in remarks)				Frost-Heave H	lummoc	ks	
☐ Spars	ely Vegetated Co	oncave :	Surface	(B8)				_						
Field Obse	ervations:													
Surface Wa	ater Present?	Yes	□ N	o 🗆	Deptl	n (in):		,,,,						
Water Tabl	e Present?	Yes	□ N	o 🗆	Deptl	n (in):	-	Wetlar P	na Hydi resent	0,	Ye	s 🗌	No	
Saturation	Dresent?	Yes	□ N	0 🗆	Deptl	` '	_	1		-				
	apillary fringe)	. 00	_ '\	- ⊔	Debu	· (111 <i>)</i> ·	·							
	ecorded Data (st	tream a	auge. m	onitorin	g well. a	erial n	hotos, previous i	nspections)	if availa	able:				
	22.200 2010 (01	y			J e, u	P	, p. 0 11000 1	-r						
Remarks:	Dry througho	ut soil p	rofile.											



Project/Site: Nisqually State Park		City/County: P	rierce Samp	oling date: <u>2-19-2</u>	2021
Applicant/Owner: Washington State Parks			State: WA Sai	mpling Point: DP-	-32
Investigator(s): Roen Hohlfeld and Sam Payne		Section, Township,	Range: S20, T16N, R04E		
Landform (hillslope, terrace, etc): Slight depres	sion	Local relief (concave	e, convex, none): concave	Slope (%):	2
Subregion (LRR): A Lat: -		g:	•	· · · /	
Soil Map Unit Name: Kapowsin gravelly ashy k					
Are climatic / hydrologic conditions on the site typic			·		
Are Vegetation □, Soil □, or Hydrology □ signification □.	•		cumstances" present on the site	?⊠Yes □ No	
Are Vegetation □, Soil □, or Hydrology □ naturall	•		in any answers in Remarks.)	. 2 100 2 110	
SUMMARY OF FINDINGS — Attach site n				es, etc.	
Hydrophytic Vegetation Present? Yes	⊠ No □				
Hydric Soils Present? Yes	⊠ No □	Is the Sampl within a We		⊠ No □	
Wetland Hydrology Present? Yes	⊠ No □	within a vve	cuanu r		
VEGETATION – Use scientific names of pl	ants.				
<u>Tree Stratum</u> (Plot size: 5-m diameter) 1.		minant Indicator secies? Status	Dominance Test worksheet Number of Dominant Species that are OBL, FACW, or FAC	,	(A)
2. 3.			Total Number of Dominant Species Across all Strata:	2	(B)
4		Fotal Cover	Percent of Dominant Species that are OBL, FACW, or FAC		(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diameter) 1. Acer circinatum	70	Yes FAC	Prevalence Index workshee Total % Cover of:		
Acer circinatum Fraxinus latifolia		Yes FAC Yes FACW	OBL species	Multiply by: x 1 =	
3			FACW species	x 2 =	_
45.			FAC species FACU species	_ x 3 = x 4 =	_
		Total Cover	UPL species	x 5 =	_
Herb Stratum (Plot size: 1-m diameter) 1.			Column Totals:	(A)	(B)
2.			Prevalence Index = B/A =		
3			Hydrophytic Vegetation 1 − Rapid Test for Hydro 2 − Dominance Test is > 3 − Prevalence Index is ≤ 4 − Morphological Adaptate data in Remarks or o	phytic Vegetation 50% ≤ 3.0¹ ations¹ (Provide sup	
9.			□ 5 – Wetland Non-Vascula	ar Plants ¹	
10.			 □ Problematic Hydrophytic ¹Indicators of hydric soil and v 	•	,
11	<u> </u>	Fotal Cover	present, unless disturbed or p		iusi be
Woody Vine Stratum (Plot size: 3-m diameter) 1 2			Hydrophytic Vegetation Ye	es⊠ No□]
N/ Para Caranda III II Co	<u> </u>	Total Cover	Present?		
% Bare Ground in Herb Stratum: 100					
Remarks:					

		ribe to the	e depth n	eeded to do	ocument the indica	tor or confirm the	absence	of indicators.)	
Depth (inches)	Matrix Color (moist)	%	Colo	or (moist)	Redox Features % T	ype¹ Lo	oc ²	Texture	Remarks
0-6	10YR 3/2	100						Loam	
6-12	2.5Y 4/1	70	10	YR 3/3	30	C N	Л	Clay loam	
¹Tvpe: C=C	Concentration. D=	Depletion	. RM=Rec	luced Matrix	c, CS=Covered or Co	pated Sand Grains.	² Loc:	PL=Pore Lining,	M=Matrix.
					therwise noted.)				natic Hydric Soils ³ :
-	ol (A1)	•			Redox (S5)			cm Muck (A10)	•
	Epipedon (A2)			☐ Strippe	d Matrix (S6)		□R	Red Parent Mater	
	Histic (A3)			-	Mucky Mineral (F1)	(except MLRA 1)			k Surface (TF12)
,	gen Sulfide (A4)				Gleyed Matrix (F2)			Other (Explain in I	Remarks)
	ted Below Dark S Dark Surface (A1	,	•		ed Matrix (F3) Dark Surface (F6)		3 India	otoro of budrophy	tic vegetation and
	Mucky Mineral (ed Dark Surface (F7)				must be present, unless
	Gleyed Matrix (S				Depressions (F8)			sturbed or proble	
Restrictive	Layer (if prese	nt):							
Type:						Hydric so		Yes 2	⊠ No □
	(in all an).					present?	?	163 2	3 140 🗆
Depth	(inches):								
Remarks:									
HYDROLO	OGY								
	ydrology Indicat licators (minimum		equired: ch	neck all that	apply)		Seco	ndary Indicators	(2 or more required)
_	e water (A1)		·	Wate	r-Stained Leaves (ex	ccept MLRA 1. 2. 4	۸	-	Leaves (B9) (MLRA 1,
	Vater Table (A2)) (B9)	, ,		2, 4A & 4B)	,
Satura	ation (A3)			☐ Salt 0	Crust (B11)			Drainage Patte	rns (B10)
	Marks (B1)				tic Invertebrates (B1			Dry-Season Wa	
	ent Deposits (B2	2)		•	ogen Sulfide Odor (C	,			le on Aerial Imagery (C9)
	eposits (B3)				zed Rhizospheres al			Geomorphic Po	` '
_	Mat or Crust (B4)				ence of Reduced Iron nt Iron Reduction in			Shallow Aquita	
	eposits (B5) e Soil Cracks (B6	6)			ed or Stressed Plan	, ,		FAC-Neutral Te	unds (D6) (LRR A)
	ation Visible on A		erv (B7)		· (explain in remarks	. , . , ,		Frost-Heave Hu	, , , ,
	ely Vegetated Co			_ 0	(oxpiairiii romaine	,			
Field Obse			· · · ·						
Surface Wa	ater Present?	Yes □	No 🛭	☑ Depth	(in):				
Water Table	e Present?	Yes 🗵	No [☐ Depth	(in): 0" BSG	Wetland Hy Prese		Yes	s ⊠ No □
Saturation I		Yes ⊠	No [☐ Depth	(in): 0" BSG	_			
	apillary fringe)	room co:	ao monita	ring well as	orial photos provisco	ineportions) if an	ailabla:		
Describe R	ecorded Data (St	ream gau	ye, monito	ning well, a	erial photos, previous	s inspections), it ava	allable:		
Remarks:									



Project/Site: Nisqually State Park		City/	County: F	Pierce Sa	ampling dat	e: <u>2-19-2</u>	2021
Applicant/Owner: Washington State Parks				State: WA	Sampling F	Point: DP	-33
Investigator(s): Roen Hohlfeld and Sam Payn	ie	Section	, Township,	Range: S20, T16N, R04I	≣		
Landform (hillslope, terrace, etc): terrace		Local re	elief (concav	e, convex, none): none	:	Slope (%):	2
Subregion (LRR): A Lat: -		Long: -		Datum:		,	
Soil Map Unit Name: Kapowsin gravelly ashy	v loam, 0 to 6 perc			I classification: none			
Are climatic / hydrologic conditions on the site ty				·			
Are Vegetation □, Soil □, or Hydrology □ signif		•		cumstances" present on the	site? ⊠ Ye	es □ No	
Are Vegetation □, Soil □, or Hydrology □ natur	-			in any answers in Remarks		JO 110	
SUMMARY OF FINDINGS – Attach site				•			
Hydrophytic Vegetation Present? Y	es ⊠ No						
Hydric Soils Present? Y	es □ No		the Sampl /ithin a We		es 🗆	No 🛛	
Wetland Hydrology Present? Y	es □ No		ntiiii a vve	tianu:			
VEGETATION – Use scientific names of	plants.						
Tree Stratum (Plot size: 5-m diameter)	Absolute % Cover	Species?	Indicator Status	Dominance Test worksh Number of Dominant Spe	cies	3	(A)
Alnus rubra Pseudotsuga menziesii	60 40	Yes Yes	FAC FACU	that are OBL, FACW, or F Total Number of Dominan			_ (A)
3.				Species Across all Strata:		5	(B)
4	100	= Total Co	ver	Percent of Dominant Specthat are OBL, FACW, or F		60%	(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diamete	,			Prevalence Index works			
Acer circinatum Fraxinus latifolia	70 10	Yes Yes	FAC FACW	Total % Cover of: OBL species	Multip x 1 =	oly by:	
3.				FACW species	x 2 =		<u> </u>
4.				FAC species	x 3 =		_
5	80	= Total Co	ver	FACU species UPL species	x 4 = x 5 =		_
Herb Stratum (Plot size: 1-m diameter)				Column Totals:	(A)		(B)
Polystichum munitum 2.		Yes	FACU	Prevalence Index = B/A =			
3. 4. 5. 6. 7. 8. 9.				Hydrophytic Vegeta 1 - Rapid Test for Hy 2 - Dominance Test 3 - Prevalence Index 4 - Morphological Addata in Remarks 5 - Wetland Non-Vas Problematic Hydroph	drophytic V is > 50% is $\leq 3.0^1$ aptations ¹ (or on a sep scular Plants	regetation (Provide supparate sheet) s1)
10 11				¹ Indicators of hydric soil a	nd wetland	hydrology m	
Woody Vine Stratum (Plot size: 3-m diameter)	5	= Total Co	ver	present, unless disturbed	or problema	atic.	
1				Hydrophytic Vegetation	Yes 🏻	No 🗆	1
2	-	= Total Co	ver	Present?	res 🖂	NO L	1
% Bare Ground in Herb Stratum: 95							
Remarks:							

			depth need		ent the indicator	or confirm the ab	sence	of indicators.)	
Depth (inches)	Matrix Color (moist)	%	Color (n		dox Features % Type	e ¹ Loc ²	2	Texture	Remarks
0-7	10YR 2/1	100	,	•				Silt loam	
7-16	10YR 3/2	100						Silt loam	
¹Type: C=0	Concentration, D=	Depletion.	RM=Reduce	d Matrix, CS	=Covered or Coate	ed Sand Grains.	² l oc: l	PL=Pore Lining, M	=Matrix
	il Indicators: (Ap					od Caria Cramo.		tors for Problema	
-	sol (A1)	,,		Sandy Redo				cm Muck (A10)	
	Epipedon (A2)			Stripped Ma				ed Parent Material	(TF2)
	Histic (A3)			Loamy Muck	ky Mineral (F1) (ex	cept MLRA 1)		ery Shallow Dark S	
,	gen Sulfide (A4)				ed Matrix (F2)			ther (Explain in Re	emarks)
	ted Below Dark S		•	Depleted Ma	, ,				
	Dark Surface (A1	,		Redox Dark	, ,			ators of hydrophytic	c vegetation and ust be present, unless
	/ Mucky Mineral (/ Gleyed Matrix (S			Redox Depre	rk Surface (F7)			sturbed or problem	
·	Layer (if prese	,		Redux Depi	essions (Fo)	1		na.20a o. p.oo.o	
_	Layer (II preser	,.				Hydric soil		v	
Type:						present?		Yes □	No 🛛
Depth	(inches):								
Remarks:									
HYDROL	OGY								
	ydrology Indica				۸		C	- d- m . In dia ata na (0	
	dicators (minimun	n of one red	quirea: cneck					ndary Indicators (2	
	ce water (A1) Nater Table (A2)			Water-Sta & 4B) (B9)	ined Leaves (exce \	pt MLRA 1, 2, 4A		Water-Stained Le 2, 4A & 4B)	aves (B9) (MLRA 1,
J	ation (A3)			, , ,				Drainage Patterns	s (B10)
	Marks (B1)				vertebrates (B13)			Dry-Season Water	
	nent Deposits (B2)			Sulfide Odor (C1)				on Aerial Imagery (C9)
	Deposits (B3)	,		, ,	Rhizospheres along	Living Roots (C3)		Geomorphic Posi	
	Mat or Crust (B4)				of Reduced Iron (C			Shallow Aquitard	(D3)
☐ Iron D	eposits (B5)			Recent Iro	n Reduction in Tille	ed Soils (C6)		FAC-Neutral Test	(D5)
☐ Surfac	ce Soil Cracks (B	6)		Stunted or	Stressed Plants (I	D1) (LRR A)		Raised Ant Moun	ds (D6) (LRR A)
	ation Visible on A			Other (exp	olain in remarks)			Frost-Heave Hum	mocks
☐ Spars	ely Vegetated Co	ncave Surf	ace (B8)		T				
		Voc. □	No 🖾	Danth (in)					
	ater Present?	Yes □	No ⊠	Depth (in):	-	Wetland Hyd		Yes	□ No ⊠
	e Present?	Yes ⊠	No □	Depth (in):	13" BSG	Present	:?	103	
Saturation (includes c	apillary fringe)	Yes ⊠	No 🗆	Depth (in):	13" BSG				
Describe R	ecorded Data (st	ream gauge	e, monitoring	well, aerial p	photos, previous in	spections), if availa	able:		
Remarks:									
Tromains.									



Project/Site: Nisqually State Park		City/0	County: F	Pierce	Sampling	date:	2-19-20	021
Applicant/Owner: Washington State Parks				State:	WA Sampl	ing Point:	DP-3	34
Investigator(s): Roen Hohlfeld and Sam Payne		Section,	Township,	Range: S20, T1	6N, R04E			
Landform (hillslope, terrace, etc): terrace			lief (concav	e, convex, none):	none	Slope	e (%):	2
Subregion (LRR): A Lat: -	Lo	ong:			Datum: -			
Soil Map Unit Name: Kapowsin gravelly ashy loam,	0 to 6 percent s	slopes	NW	I classification:	none			
Are climatic / hydrologic conditions on the site typical for	r this time of ye	ar? □ Yes	s 🗵 No	(If no, explain in re	marks.)			
Are Vegetation \square , Soil \square , or Hydrology \square significantly	disturbed?	Are "	Normal Circ	cumstances" prese	nt on the site?	⊴ Yes □	□ No	
Are Vegetation \square , Soil \square , or Hydrology \square naturally pro	blematic?	(If ne	eded, expla	ain any answers in	Remarks.)			
SUMMARY OF FINDINGS – Attach site map s	showing samp	oling point	locations,	transects, impor	rtant features, e	etc.		
Hydrophytic Vegetation Present? Yes ⊠	No 🗆							
Hydric Soils Present? Yes ⊠	No 🗆		:he Sampl ithin a We		Yes 🛛	No		
Wetland Hydrology Present? Yes ⊠	No □							
VEGETATION – Use scientific names of plants.								
Trac Stratum (Diet size: 5 m diameter)		Dominant	Indicator	Dominance Tes				
Tree Stratum (Plot size: 5-m diameter) 1. Fraxinus latifolia	% Cover 30	Species? Yes	Status FACW	Number of Domi that are OBL, FA		3		(A)
2. Alnus rubra	25	Yes	FAC	Total Number of Species Across		4		(B)
3. 4.				Percent of Domi		750		(D)
		= Total Cov	/er	that are OBL, FA		759	%	(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diameter)			=.0	Prevalence Inde				
Acer circinatum Symphoricarpos albus	25 20	Yes Yes	FAC FACU	Total % Cover of OBL species		<u>fultiply by</u> 1 =	<u>:</u>	
3.				FACW species		2 =		
4. 5.				FAC species FACU species		3 = 4 =		_
·	45 :	= Total Cov	/er	UPL species	x	5 =		_
Herb Stratum (Plot size: 1-m diameter) 1. Polystichum munitum	trace	No	FACU	Column Totals:	()	A)		(B)
Polysticnum munitum 2.		110	17100	Prevalence Inde	x = B/A =			
3					c Vegetation Inc			
5				□ 1 - Rapid 1□ 2 - Dominal	est for Hydrophy nce Test is > 50%	_	111011	
6.				_	nce Index is ≤ 3.0			
7. 8.					logical Adaptation Remarks or on a			orting
9				4	Non-Vascular P		(Evalaia	.\
10 11				☐ Problematic Indicators of hydroxidesics	Hydrophytic Veodric soil and wetle	•	` '	,
	:	= Total Cov	/er	present, unless				
Woody Vine Stratum (Plot size: 3-m diameter) 1.				Hydrophytic				
2.				Vegetation	Yes	⊠ N	lo 🗆	
% Bare Ground in Herb Stratum: 100	- :	= Total Cov	/er	Present?				
Remarks:								

Profile Des	crintion: (Descr	ihe to the d	enth neede	d to docume	ent the indicator	or confirm the al	nsanca	of indicators)	
Depth	Matrix	ibe to the u	cpin necuc		ox Features	or committee as	3361166	of maleators.)	
(inches)	Color (moist)	%	Color (m	oist)	% Type	e ¹ Loc ²	2	Texture	Remarks
0-3	10YR 2/1	100						Loam	
3-8	12.5Y 4/2	50						Clay loam	Mixed matrix
3-8	10YR 3/3	50						Clay loam	Mixed matrix
8-16	2.5Y 5/2	97	2.5Y 3	/4	3 C	M		Clay loam	
17	Anna and and an	Danielas D	M. Dadasa	I Mariata CO	0	1010	21 1	DI. Dave Lieban M	NA-1-1-
	I Indicators: (Ap				Covered or Coate	a Sana Grains.		PL=Pore Lining, Ma tors for Problema	
_	ol (A1)	plicable to a	•	Sandy Redox	•			cm Muck (A10)	tic nyaric solis":
	Epipedon (A2)			Stripped Mat	` '			ed Parent Material	(TF2)
	Histic (A3)				/ Mineral (F1) (exc	cept MLRA 1)		ery Shallow Dark S	,
	gen Sulfide (A4)				d Matrix (F2)			ther (Explain in Re	, ,
	ed Below Dark S	urface (A11)		Depleted Mat	, ,			` '	,
	Dark Surface (A1	,		Redox Dark S				ators of hydrophytic	
	Mucky Mineral (•	k Surface (F7)				ust be present, unless
☐ Sandy	Gleyed Matrix (S	S4)		Redox Depre	ssions (F8)	T	als	sturbed or problema	ATIC.
Restrictive	Layer (if preser	nt):							
Туре:						Hydric soil		Yes 🛛	No 🗆
Denth	(inches):					present?			
200	(
Remarks:									
HYDROLO	nev								
i	ydrology Indicat	oroi							
	licators (minimum		ired: check	all that apply)		Seco	ndary Indicators (2	or more required)
☐ Surfac	e water (A1)			Water-Stair	ned Leaves (exce	pt MLRA 1, 2, 4A		Water-Stained Le	aves (B9) (MLRA 1 ,
	Vater Table (A2)			& 4B) (B9)	`	, ,		2, 4A & 4B)	, , , ,
⊠ Satura	tion (A3)			Salt Crust (B11)			Drainage Patterns	s (B10)
□ Water	Marks (B1)				ertebrates (B13)			Dry-Season Wate	r Table (C2)
	ent Deposits (B2)			, ,	Sulfide Odor (C1)				on Aerial Imagery (C9)
	eposits (B3)				nizospheres along			Geomorphic Posit	` '
_	Mat or Crust (B4)				of Reduced Iron (C			Shallow Aquitard	
	eposits (B5)	• •			Reduction in Tille			FAC-Neutral Test	
	e Soil Cracks (B6		(D7) □		Stressed Plants (I)1) (LRR A)		Raised Ant Mound	
	ation Visible on Ae ely Vegetated Cor		, ,	Other (expi	ain in remarks)			Frost-Heave Hum	MOCKS
Field Obse	-	icave Suriac	ъе (Бо)						
		· –							
Surface Wa		Yes □	No ⊠	Depth (in):	-	Wetland Hyd	Irology	Yes	⊠ No □
Water Table		Yes ⊠	No 🗆	Depth (in):	8" BSG	Present	t?	res	
Saturation I (includes ca	Present? apillary fringe)	Yes ⊠	No 🗆	Depth (in):	6" BSG				
		eam gauge.	monitorina	well, aerial p	hotos, previous in	spections), if avail	able:		
	(J J-,	- 9	, F	,,	. ,,	•		
Remarks:									



Project/Site: Nisqually State Park		City/	County: F	Pierce	Sampling	date:	2-19-202	21
Applicant/Owner: Washington State Parks				State:	WA Samplir	ng Point:	DP-35	5
Investigator(s): Roen Hohlfeld and Sam Payne		Section,	Township,	Range: S20, T16	6N, R04E			
Landform (hillslope, terrace, etc): Slight depression		Local re	lief (concav	re, convex, none):	concave	Slope	(%):	2
Subregion (LRR): A Lat: -		Long: -			Datum: -	_	_	
Soil Map Unit Name: Kapowsin gravelly ashy loam, (0 to 6 percen	t slopes	NW	/I classification:	none			
Are climatic / hydrologic conditions on the site typical for				_	narks.)			
Are Vegetation □, Soil □, or Hydrology □ significantly of	•			cumstances" preser	,	Yes □	l No	
Are Vegetation □, Soil □, or Hydrology □ naturally prol		(If ne	eded, expla	ain any answers in F	Remarks.)			
SUMMARY OF FINDINGS – Attach site map s	showing san	npling point	locations,	, transects, import	tant features, e	tc.		
Hydrophytic Vegetation Present? Yes ⊠	No 🗆							
Hydric Soils Present? Yes ⊠	No 🗆		the Sampl		Yes 🛛	No		
Wetland Hydrology Present? Yes ⊠	No 🗆		itmin a we	etiano?				
Remarks: Hydrologic conditions for the three-level VEGETATION – Use scientific names of plants.								
	Absolute	Dominant	Indicator	Dominance Test				
Tree Stratum (Plot size: 5-m diameter) 1. Fraxinus latifolia	% Cover 30	Species? Yes	Status FACW	Number of Domir that are OBL, FA		3	((A)
Fraxinus latirolla Alnus rubra	25	Yes	FAC	Total Number of I				(* 1)
4				1 '	•		((B)
4	-	= Total Cov	ver			60%	6 ((A/B)
Sapling/Shrub Stratum (Plot size: 3-m diameter)				Prevalence Inde	x worksheet:			
Species Across all Strata: Percent of Dominant Species that are OBL, FACW, or FAC: Gaultheria shallon Species Across all Strata: Percent of Dominant Species that are OBL, FACW, or FAC: (A/B) Prevalence Index worksheet: Total % Cover of: Multiply by:								
Fraxinus latifolia Amelanchier alnifolia	20	Yes	FACU	FACW species		1 = 2 =		•
4. Acer circinatum	5	No	FAC	FAC species		3 =		•
5. Physocarpus capitatus	trace	No	FACW	FACU species	X 4	4 =		-
Harb Christian (Diet sings 4 and diameter)	95	= Total Cov	ver	UPL species		5 =		(D)
Herb Stratum (Plot size: 1-m diameter) 1. Carex obnupta	70	No	OBL	Column Totals:	(A)		(B)
2				Prevalence Index				
3.					Vegetation Ind		tion	
5				□ I – Rapid Te	est for Hydrophyti ce Test is > 50%	_	uon	
6.				=	ce Index is ≤ 3.0			
7					ogical Adaptation			rting
8. 9.				-	Remarks or on a s Non-Vascular Pla	•	sneet)	
10.					Hydrophytic Veg		Explain)	
11				¹ Indicators of hyd			logy mus	st be
Woody Vine Stratum (Plot size: 3-m diameter)	70	= Total Cov	ver	present, unless d	isturbed or proble	ematic.		
1.				Hydrophytic	_			
2				Vegetation Present?	Yes 2	⊠ N	o 🗆	
% Bare Ground in Herb Stratum: 30		= Total Cov	v c i	i lescill!				
Remarks:								

Profile Description: (Describe to the depth needed to document the indicator	or confirm the abs	sence of indicators.)	
Depth Matrix Redox Features (inches) Color (moist) % Color (moist) % Typ	e ¹ Loc ²	Texture	Remarks
0-8 10YR 2/2 100		Silt loam	
8-14 2.5Y 3/2 85 10YR 4/6 15 C	M	Silt loam	
20102 00 101110			
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coat	ed Sand Grains.	² Loc: PL=Pore Lining, M=	=Matrix.
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	ı	ndicators for Problema	tic Hydric Soils ³ :
☐ Histosol (A1) ☐ Sandy Redox (S5)		☐ 2cm Muck (A10)	-
☐ Histic Epipedon (A2) ☐ Stripped Matrix (S6)		☐ Red Parent Material	
☐ Black Histic (A3) ☐ Loamy Mucky Mineral (F1) (ex		☐ Very Shallow Dark S	
 ☐ Hydrogen Sulfide (A4) ☐ Loamy Gleyed Matrix (F2) ☐ Depleted Below Dark Surface (A11) ☐ Depleted Matrix (F3) 	l	Other (Explain in Re	marks)
 □ Depleted Below Dark Surface (A11) □ Depleted Matrix (F3) □ Thick Dark Surface (A12) □ Redox Dark Surface (F6) 	3	Indicators of hydrophytic	vegetation and
☐ Sandy Mucky Mineral (S1) ☐ Depleted Dark Surface (F7)		wetland hydrology mu	
□ Sandy Gleyed Matrix (S4) □ Redox Depressions (F8)		disturbed or problema	
Restrictive Layer (if present):			
Type:	Hydric soil	Yes ⊠	No 🗆
Depth (inches):	present?		
Deptit (ilicites).	1		
Remarks:			
Terrains.			
Nomano.			
HYDROLOGY			
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply)		Secondary Indicators (2	or more required)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Surface water (A1) Water-Stained Leaves (exce	opt MLRA 1, 2, 4A		or more required) aves (B9) (MLRA 1 ,
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) □ Surface water (A1) □ Water-Stained Leaves (excellent the excellent that apply) □ High Water Table (A2)	pt MLRA 1, 2, 4A	Water-Stained Lea	aves (B9) (MLRA 1 ,
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) □ Surface water (A1) □ High Water Table (A2) □ Saturation (A3) □ Salt Crust (B11)	opt MLRA 1, 2, 4A	Water-Stained Lea 2, 4A & 4B) Drainage Patterns	aves (B9) (MLRA 1 ,
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) □ Surface water (A1) □ High Water Table (A2) □ Saturation (A3) □ Salt Crust (B11) □ Water Marks (B1) □ Aquatic Invertebrates (B13)	ept MLRA 1, 2, 4A	Water-Stained Lea 2, 4A & 4B) Drainage Patterns Dry-Season Water	aves (B9) (MLRA 1 , s (B10) r Table (C2)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) □ Surface water (A1) □ High Water Table (A2) □ Saturation (A3) □ Water Marks (B1) □ Water Marks (B1) □ Sediment Deposits (B2) □ Hydrogen Sulfide Odor (C1)		Water-Stained Lea 2, 4A & 4B) Drainage Patterns Dry-Season Wate Saturation Visible of	aves (B9) (MLRA 1, s (B10) or Table (C2) on Aerial Imagery (C9)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) □ Surface water (A1) □ High Water Table (A2) □ Saturation (A3) □ Water Marks (B1) □ Water Marks (B1) □ Sediment Deposits (B2) □ Drift Deposits (B3) □ Oxidized Rhizospheres along	Living Roots (C3)	Water-Stained Lea 2, 4A & 4B) Drainage Patterns Dry-Season Wate Saturation Visible of Geomorphic Posit	aves (B9) (MLRA 1, s (B10) or Table (C2) on Aerial Imagery (C9) tion (D2)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) □ Surface water (A1) □ High Water Table (A2) □ Saturation (A3) □ Salt Crust (B11) □ Water Marks (B1) □ Sediment Deposits (B2) □ Drift Deposits (B3) □ Oxidized Rhizospheres along	Living Roots (C3) C4)	Water-Stained Lea 2, 4A & 4B) Drainage Patterns Dry-Season Wate Saturation Visible of Geomorphic Posit	aves (B9) (MLRA 1, s (B10) or Table (C2) on Aerial Imagery (C9) tion (D2) (D3)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) □ Surface water (A1) □ High Water Table (A2) □ Saturation (A3) □ Water Marks (B1) □ Water Marks (B1) □ Sediment Deposits (B2) □ Drift Deposits (B3) □ Algal Mat or Crust (B4) □ Presence of Reduced Iron (6	Living Roots (C3) C4) ed Soils (C6)	Water-Stained Lea 2, 4A & 4B) Drainage Patterns Dry-Season Wate Saturation Visible of Geomorphic Posit Shallow Aquitard (aves (B9) (MLRA 1, s (B10) or Table (C2) on Aerial Imagery (C9) tion (D2) (D3) (D5)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) □ Surface water (A1) □ High Water Table (A2) □ Saturation (A3) □ Salt Crust (B11) □ Water Marks (B1) □ Sediment Deposits (B2) □ Drift Deposits (B3) □ Algal Mat or Crust (B4) □ Iron Deposits (B5) □ Recent Iron Reduction in Till □ Surface Soil Cracks (B6) □ Inundation Visible on Aerial Imagery (B7) □ Other (explain in remarks)	Living Roots (C3) C4) ed Soils (C6)	Water-Stained Lea 2, 4A & 4B) Drainage Patterns Dry-Season Wate Saturation Visible of Geomorphic Posit Shallow Aquitard (FAC-Neutral Test	aves (B9) (MLRA 1, s (B10) or Table (C2) on Aerial Imagery (C9) tion (D2) (D3) (D5) ds (D6) (LRR A)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) □ Surface water (A1) □ High Water Table (A2) □ Saturation (A3) □ Salt Crust (B11) □ Water Marks (B1) □ Sediment Deposits (B2) □ Drift Deposits (B3) □ Algal Mat or Crust (B4) □ Iron Deposits (B5) □ Recent Iron Reduction in Till □ Surface Soil Cracks (B6) □ Inundation Visible on Aerial Imagery (B7) □ Sparsely Vegetated Concave Surface (B8)	Living Roots (C3) C4) ed Soils (C6)	Water-Stained Lea 2, 4A & 4B) Drainage Patterns Dry-Season Wate Saturation Visible of Geomorphic Posit Shallow Aquitard (FAC-Neutral Test Raised Ant Mounc	aves (B9) (MLRA 1, s (B10) or Table (C2) on Aerial Imagery (C9) tion (D2) (D3) (D5) ds (D6) (LRR A)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) □ Surface water (A1) □ High Water Table (A2) □ Saturation (A3) □ Salt Crust (B11) □ Water Marks (B1) □ Prift Deposits (B2) □ Drift Deposits (B3) □ Algal Mat or Crust (B4) □ Iron Deposits (B5) □ Recent Iron Reduction in Till □ Surface Soil Cracks (B6) □ Inundation Visible on Aerial Imagery (B7) □ Sparsely Vegetated Concave Surface (B8)	Living Roots (C3) C4) ed Soils (C6)	Water-Stained Lea 2, 4A & 4B) Drainage Patterns Dry-Season Wate Saturation Visible of Geomorphic Posit Shallow Aquitard (FAC-Neutral Test Raised Ant Mounc	aves (B9) (MLRA 1, s (B10) or Table (C2) on Aerial Imagery (C9) tion (D2) (D3) (D5) ds (D6) (LRR A)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) □ Surface water (A1) □ High Water Table (A2) □ Saturation (A3) □ Salt Crust (B11) □ Water Marks (B1) □ Sediment Deposits (B2) □ Drift Deposits (B3) □ Oxidized Rhizospheres along □ Oxidized Rhizospheres along □ Presence of Reduced Iron (C11) □ Iron Deposits (B5) □ Recent Iron Reduction in Till □ Surface Soil Cracks (B6) □ Inundation Visible on Aerial Imagery (B7) □ Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes □ No ☑ Depth (in):	Living Roots (C3) C4) ed Soils (C6) D1) (LRR A) Wetland Hydr	Water-Stained Lea 2, 4A & 4B) Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Posit Shallow Aquitard (FAC-Neutral Test Raised Ant Mound Frost-Heave Humi	aves (B9) (MLRA 1, s (B10) or Table (C2) on Aerial Imagery (C9) tion (D2) (D3) (D5) ds (D6) (LRR A) mocks
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) □ Surface water (A1) □ High Water Table (A2) □ Saturation (A3) □ Salt Crust (B11) □ Water Marks (B1) □ Drift Deposits (B2) □ Drift Deposits (B3) □ Algal Mat or Crust (B4) □ Iron Deposits (B5) □ Recent Iron Reduction in Till □ Surface Soil Cracks (B6) □ Inundation Visible on Aerial Imagery (B7) □ Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes □ No □ Depth (in):	Living Roots (C3) C4) ed Soils (C6) D1) (LRR A)	Water-Stained Lea 2, 4A & 4B) Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Posit Shallow Aquitard (FAC-Neutral Test Raised Ant Mound Frost-Heave Humi	aves (B9) (MLRA 1, s (B10) or Table (C2) on Aerial Imagery (C9) tion (D2) (D3) (D5) ds (D6) (LRR A) mocks
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) □ Surface water (A1) □ High Water Table (A2) □ Saturation (A3) □ Salt Crust (B11) □ Water Marks (B1) □ Sediment Deposits (B2) □ Drift Deposits (B3) □ Oxidized Rhizospheres along □ Oxidized Rhizospheres along □ Presence of Reduced Iron (C11) □ Iron Deposits (B5) □ Recent Iron Reduction in Till □ Surface Soil Cracks (B6) □ Inundation Visible on Aerial Imagery (B7) □ Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes □ No ☑ Depth (in):	Living Roots (C3) C4) ed Soils (C6) D1) (LRR A) Wetland Hydr	Water-Stained Lea 2, 4A & 4B) Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Posit Shallow Aquitard (FAC-Neutral Test Raised Ant Mound Frost-Heave Humi	aves (B9) (MLRA 1, s (B10) or Table (C2) on Aerial Imagery (C9) tion (D2) (D3) (D5) ds (D6) (LRR A) mocks
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) □ 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 Aerial Imagery (B7) □ Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes □ No □ Depth (in): □ Water Table Present? Yes □ No □ Depth (in): □ Depth (in): □ 1" BSG □ 11 BSG	Living Roots (C3) C4) ed Soils (C6) D1) (LRR A) Wetland Hydr Present?	Water-Stained Lea 2, 4A & 4B) Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Positr Shallow Aquitard of FAC-Neutral Testr Raised Ant Mouncer Frost-Heave Humin	aves (B9) (MLRA 1, s (B10) or Table (C2) on Aerial Imagery (C9) tion (D2) (D3) (D5) ds (D6) (LRR A) mocks
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) □ 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) □ Inundation Visible on Aerial Imagery (B7) □ Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes □ No □ Depth (in): 2" BSG Saturation Present? Yes □ No □ Depth (in): 1" BSG (includes capillary fringe)	Living Roots (C3) C4) ed Soils (C6) D1) (LRR A) Wetland Hydr Present?	Water-Stained Lea 2, 4A & 4B) Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Positre Shallow Aquitard of FAC-Neutral Testre Raised Ant Mounce Frost-Heave Humin	aves (B9) (MLRA 1, s (B10) or Table (C2) on Aerial Imagery (C9) tion (D2) (D3) (D5) ds (D6) (LRR A) mocks
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) □ Surface water (A1) □ High Water Table (A2) □ Saturation (A3) □ Water Marks (B1) □ Drift Deposits (B2) □ Drift Deposits (B3) □ Oxidized Rhizospheres along Oxidized Rhizosp	Living Roots (C3) C4) ed Soils (C6) D1) (LRR A) Wetland Hydr Present?	Water-Stained Lea 2, 4A & 4B) Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Positre Shallow Aquitard of FAC-Neutral Testre Raised Ant Mounce Frost-Heave Humin	aves (B9) (MLRA 1, s (B10) or Table (C2) on Aerial Imagery (C9) tion (D2) (D3) (D5) ds (D6) (LRR A) mocks
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) □ 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) □ Recent Iron Reduction in Till □ Surface Soil Cracks (B6) □ Inundation Visible on Aerial Imagery (B7) □ Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes □ No □ Depth (in): 2" BSG Saturation Present? Yes □ No □ Depth (in): 1" BSG (includes capillary fringe)	Living Roots (C3) C4) ed Soils (C6) D1) (LRR A) Wetland Hydr Present?	Water-Stained Lea 2, 4A & 4B) Drainage Patterns Dry-Season Water Saturation Visible of Geomorphic Positre Shallow Aquitard of FAC-Neutral Testre Raised Ant Mounce Frost-Heave Humin	aves (B9) (MLRA 1, s (B10) or Table (C2) on Aerial Imagery (C9) tion (D2) (D3) (D5) ds (D6) (LRR A) mocks



Project/Site: Nisqually State Park			_ City/	County: F	Pierce	Sampl	ling date	e: <u>2-19-2</u>	2021
Applicant/Owner: Washington State Parks					State:	WA San	npling P	oint: DP	-36
Investigator(s): Roen Hohlfeld and Sam Payne			Section,	Township,	Range: S20, T	16N, R04E			
Landform (hillslope, terrace, etc): Slight depression	n		Local re	lief (concav	e, convex, none):	concave	s	Slope (%):	2
Subregion (LRR): A Lat:		Long	g: <u>-</u>			Datum:	-		
Soil Map Unit Name: Kapowsin gravelly ashy loan	n, 0 to 6 perce	– ent slop	oes	NW	I classification:	none			
Are climatic / hydrologic conditions on the site typical	for this time c	of year?	' □ Yes	s 🗵 No	(If no, explain in r	emarks.)			
Are Vegetation □, Soil □, or Hydrology □ significantl	y disturbed?	-	Are "	Normal Circ	cumstances" pres	ent on the site?	? ⊠ Ye:	s 🗆 No	
Are Vegetation \square , Soil \square , or Hydrology \square naturally p	roblematic?		(If ne	eded, expla	nin any answers ir	n Remarks.)			
SUMMARY OF FINDINGS – Attach site map	showing s	amplin	ıg point	locations,	transects, impo	ortant feature	s, etc.		
Hydrophytic Vegetation Present? Yes	□ No	\boxtimes	_						
Hydric Soils Present? Yes	□ No	\boxtimes		the Sampl ithin a We		Yes		No 🛛	
Wetland Hydrology Present? Yes	\boxtimes	••	4 ***	, iidiidi.					
VEGETATION – Use scientific names of plant	ts.				ı				
Tree Stratum (Plot size: 5-m diameter)	Absolute % Cover		minant ecies?	Indicator Status	Dominance Te Number of Dom			2	
1. Fraxinus latifolia	30		Yes	FACW	that are OBL, F	ACW, or FAC:		2	(A)
2. Alnus rubra 3.	25		Yes	FAC	Total Number of Species Across			4	(B)
4.					Percent of Dom	inant Species		50%	_ ` ′
	55	<u> </u>	otal Cov	/er	that are OBL, F				(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diameter) 1. Gaultheria shallon	100	,	Yes	FACU	Prevalence Inc Total % Cover		t: Multip	lv bv:	
2. Rubus armeniacus	2		No	FAC	OBL species		x 1 =		
3. 4.					FACW species FAC species	30 27	x 2 = x 3 =	<u>60</u> 81	
5.					FACU species	110	x 4 =	440	_
Harb Christian (Diet sings 4 to diameter)	95	= T	otal Cov	/er	UPL species Column Totals:	- 407	x 5 =		(D)
Herb Stratum (Plot size: 1-m diameter) 1. Mahonia nervosa		•	Yes	FACU	Prevalence Ind		(A) 3.5	581	(B)
2. 3. 4.					Hydrophy	tic Vegetation Test for Hydrop	Indicat		
5						ance Test is > :			
6. 7.					4 – Mornho	ence Index is ≤ ological Adapta		Provide sup	porting
8.					data in	Remarks or or	n a sepa	arate sheet)	
9						d Non-Vascula c Hydrophytic '			in)
11.					¹ Indicators of h	ydric soil and w	etland h	nydrology n	
Woody Vine Stratum (Plot size: 3-m diameter)	10	<u> </u>	otal Cov	/er	present, unless	disturbed or p	roblema	tic.	
1					Hydrophytic				
2.			-1-1-0		Vegetation	Ye	s 🗆	No 🛚]
% Bare Ground in Herb Stratum: 90		_ = '	otal Cov	/er	Present?				
Remarks:					•				

Depth Matrix Redox Features	r confirm the absence of indicators.)	
(inches) Color (moist) % Color (moist) % Type ¹	Loc ² Texture Remarks	
0-16 10YR 3/2 100	Silt loam	
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated	I Sand Grains. ² Loc: PL=Pore Lining, M=Matrix.	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils ³ :	
 ☐ Histosol (A1) ☐ Histic Epipedon (A2) ☐ Black Histic (A3) ☐ Hydrogen Sulfide (A4) ☐ Depleted Below Dark Surface (A11) ☐ Sandy Redox (S5) ☐ Stripped Matrix (S6) ☐ Loamy Mucky Mineral (F1) (excellable) ☐ Loamy Gleyed Matrix (F2) ☐ Depleted Matrix (F3) 	2cm Muck (A10)Red Parent Material (TF2)	
☐ Thick Dark Surface (A12)☐ Sandy Mucky Mineral (S1)☐ Depleted Dark Surface (F7)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unle disturbed or problematic.	ess
☐ Sandy Gleyed Matrix (S4) ☐ Redox Depressions (F8)	disturbed of problematic.	
Restrictive Layer (if present):	Hydric soil Yes □ No ☒	
Type:	present?	
Depth (inches):		
Remarks:		
HYDROLOGY		
Wetland Hydrology Indicators:	Secondary Indicators (2 or more required)	
Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Surface water (A1) Water-Stained Leaves (except	Secondary Indicators (2 or more required) t MLRA 1, 2, 4A — Water-Stained Leaves (B9) (MLRA 1	1,
Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Surface water (A1) High Water Table (A2) Water-Stained Leaves (except & 4B) (B9)	t MLRA 1, 2, 4A	1,
Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Surface water (A1) High Water Table (A2) Saturation (A3) Water-Stained Leaves (except & 4B) (B9) Salt Crust (B11)	Water-Stained Leaves (B9) (MLRA 1 2, 4A & 4B) Drainage Patterns (B10)	1,
Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Surface water (A1) High Water Table (A2) Saturation (A3) Saturation (A3) Aquatic Invertebrates (B13)	Water-Stained Leaves (B9) (MLRA 1 2, 4A & 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)	
Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Surface water (A1) High Water Table (A2) Saturation (A3) Saturation (A3) Hydrogen Sulfide Odor (C1)	Water-Stained Leaves (B9) (MLRA 1 2, 4A & 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (
Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Surface water (A1) High Water Table (A2) Saturation (A3) Saturation (A3) Hydrogen Sulfide Odor (C1) Drift Deposits (B3) Wetland Hydrology Indicators: Water Stained Leaves (except & 4B) (B9) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Li	Water-Stained Leaves (B9) (MLRA 1 2, 4A & 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Value of the company of the comp	
Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Surface water (A1) High Water Table (A2) Saturation (A3) Saturation (A3) Saturation (B1) Hydrogen Sulfide Odor (C1) Drift Deposits (B3) Wetland Hydrology Indicators: Water Stained Leaves (except & 4B) (B9) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Live	Water-Stained Leaves (B9) (MLRA 1 2, 4A & 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C2) Geomorphic Position (D2) Shallow Aquitard (D3)	
Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Surface water (A1) High Water Table (A2) Saturation (A3) Salt Crust (B11) Aquatic Invertebrates (B13) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Drift Deposits (B3) Algal Mat or Crust (B4) Weter-Stained Leaves (except & 4B) (B9) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Light Algal Mat or Crust (B4) Presence of Reduced Iron (C4)	Water-Stained Leaves (B9) (MLRA 1 2, 4A & 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Galving Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) Shallow Aquitard (D5)	
Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Surface water (A1) High Water Table (A2) Saturation (A3) Saturation (A3) Aquatic Invertebrates (B13) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Presence of Reduced Iron (C4 Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (except & 4B) (B9) Adate Crust (B11) Aquatic Invertebrates (B13) Aquatic I	Water-Stained Leaves (B9) (MLRA 1 2, 4A & 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Galving Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) Shallow Aquitard (D5)	
Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Surface water (A1) High Water Table (A2) Saturation (A3) Saturation (A3) Aquatic Invertebrates (B13) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Drift Deposits (B3) Algal Mat or Crust (B4) Presence of Reduced Iron (C4 Iron Deposits (B5) Surface Soil Cracks (B6) Stunted or Stressed Plants (D1)	Water-Stained Leaves (B9) (MLRA 1 2, 4A & 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Calciving Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) d Soils (C6) FAC-Neutral Test (D5) (LRR A) Raised Ant Mounds (D6) (LRR A)	
Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Surface water (A1) High Water Table (A2) Saturation (A3) Saturation (A3) Hydrogen Sulfide Odor (C1) Drift Deposits (B2) Hydrogen Sulfide Odor (C1) Drift Deposits (B3) Algal Mat or Crust (B4) Presence of Reduced Iron (C4 Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Water Stained Leaves (except & 4B) (B9) Rate (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Light Call (B4) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Other (explain in remarks) Field Observations:	Water-Stained Leaves (B9) (MLRA 1 2, 4A & 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Calciving Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) d Soils (C6) FAC-Neutral Test (D5) (LRR A) Raised Ant Mounds (D6) (LRR A)	
Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Surface water (A1) High Water Table (A2) Saturation (A3) Saturation (A3) Hydrogen Sulfide Odor (C1) Drift Deposits (B2) Hydrogen Sulfide Odor (C1) Drift Deposits (B3) Algal Mat or Crust (B4) Presence of Reduced Iron (C4 Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Water Stained Leaves (except & 4B) (B9) Rate (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Light Call (B4) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Other (explain in remarks) Field Observations:	Water-Stained Leaves (B9) (MLRA 1 2, 4A & 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Calciving Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) d Soils (C6) FAC-Neutral Test (D5) (LRR A) Raised Ant Mounds (D6) (LRR A)	
Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) □ Surface water (A1) □ Water-Stained Leaves (except & 4B) (B9) □ Saturation (A3) □ Salt Crust (B11) □ Water Marks (B1) □ Aquatic Invertebrates (B13) □ Drift Deposits (B2) □ Hydrogen Sulfide Odor (C1) □ Drift Deposits (B3) □ Oxidized Rhizospheres along Light (B4) □ Inon Deposits (B5) □ Recent Iron Reduction in Tilled (B4) □ Surface Soil Cracks (B6) □ Stunted or Stressed Plants (D14) □ Inundation Visible on Aerial Imagery (B7) □ Other (explain in remarks) □ Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No Depth (in): - Water Table Present? Yes No Depth (in): - Saturation Present? Yes No Depth (in): -	Water-Stained Leaves (B9) (MLRA 1 2, 4A & 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Capture Position (D2) Shallow Aquitard (D3) Shallow Aquitard (D5) FAC-Neutral Test (D5) (LRR A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks	
Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) □ Surface water (A1) □ Water-Stained Leaves (except & 4B) (B9) □ Saturation (A3) □ Salt Crust (B11) □ Water Marks (B1) □ Aquatic Invertebrates (B13) □ Drift Deposits (B2) □ Hydrogen Sulfide Odor (C1) □ Drift Deposits (B3) □ Oxidized Rhizospheres along Lincolar (C4) □ Iron Deposits (B5) □ Recent Iron Reduction in Tilled (C4) □ Iron Deposits (B5) □ Stunted or Stressed Plants (D1) □ Surface Soil Cracks (B6) □ Stunted or Stressed Plants (D1) □ Inundation Visible on Aerial Imagery (B7) □ Other (explain in remarks) □ Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes □ No ☒ Depth (in): □ Water Table Present? Yes □ No ☒ Depth (in): □ Saturation Present? Yes □ No ☒ Depth (in): □ (includes capillary fringe)	Water-Stained Leaves (B9) (MLRA 1 2, 4A & 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (Capture Position (D2) □ Shallow Aquitard (D3) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) 1) (LRR A) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks Wetland Hydrology Present? Yes □ No □	
Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) □ Surface water (A1) □ Water-Stained Leaves (except & 4B) (B9) □ Saturation (A3) □ Salt Crust (B11) □ Water Marks (B1) □ Aquatic Invertebrates (B13) □ Drift Deposits (B2) □ Hydrogen Sulfide Odor (C1) □ Drift Deposits (B3) □ Oxidized Rhizospheres along Light (B4) □ Inon Deposits (B5) □ Recent Iron Reduction in Tilled (B4) □ Surface Soil Cracks (B6) □ Stunted or Stressed Plants (D14) □ Inundation Visible on Aerial Imagery (B7) □ Other (explain in remarks) □ Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No Depth (in): - Water Table Present? Yes No Depth (in): - Saturation Present? Yes No Depth (in): -	Water-Stained Leaves (B9) (MLRA 1 2, 4A & 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (Capture Position (D2) □ Shallow Aquitard (D3) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) 1) (LRR A) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks Wetland Hydrology Present? Yes □ No □	
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Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) □ Surface water (A1) □ Water-Stained Leaves (except & 4B) (B9) □ Saturation (A3) □ Salt Crust (B11) □ Water Marks (B1) □ Aquatic Invertebrates (B13) □ Drift Deposits (B2) □ Hydrogen Sulfide Odor (C1) □ Drift Deposits (B3) □ Oxidized Rhizospheres along Lincolar (C4) □ Iron Deposits (B5) □ Recent Iron Reduction in Tilled (C4) □ Iron Deposits (B5) □ Stunted or Stressed Plants (D1) □ Surface Soil Cracks (B6) □ Stunted or Stressed Plants (D1) □ Inundation Visible on Aerial Imagery (B7) □ Other (explain in remarks) □ Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes □ No ☒ Depth (in): □ Water Table Present? Yes □ No ☒ Depth (in): □ Saturation Present? Yes □ No ☒ Depth (in): □ (includes capillary fringe)	Water-Stained Leaves (B9) (MLRA 1 2, 4A & 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (Capture Position (D2) □ Shallow Aquitard (D3) □ Shallow Aquitard (D3) □ FAC-Neutral Test (D5) 1) (LRR A) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks Wetland Hydrology Present? Yes □ No □	



Project/Site: Nisqually State Park		City/County: _ F	Pierce Samp	ling date: 2-19-2	2021
Applicant/Owner: Washington State Parks			State: WA Sar	mpling Point: DP-	-37
Investigator(s): Roen Hohlfeld and Sam Payne		Section, Township,	Range: S20, T16N, R04E		
Landform (hillslope, terrace, etc): Depression	_	Local relief (concav	e, convex, none): concave	Slope (%):	2
Subregion (LRR): A Lat: -	Lor	ng: -	• -	<u> </u>	
Soil Map Unit Name: Kapowsin gravelly ashy loa			I classification: none		
Are climatic / hydrologic conditions on the site typica					
Are Vegetation □, Soil □, or Hydrology □ significan	-		cumstances" present on the site	?⊠Yes □ No	
Are Vegetation □, Soil □, or Hydrology □ naturally	•		ain any answers in Remarks.)	. 2 100 2 110	
SUMMARY OF FINDINGS — Attach site ma				s, etc.	
Hydrophytic Vegetation Present? Yes	No □	, , , , , , , , , , , , , , , , , , ,	, I	<u>'</u>	
Hydric Soils Present? Yes	⊠ No □	Is the Sampl within a We		⊠ No □	
Wetland Hydrology Present? Yes	⊠ No □	within a vve	ruanu r		
VEGETATION – Use scientific names of plan		ominant Indicates	Dominance Test worksheet:		
<u>Tree Stratum</u> (Plot size: 5-m diameter) 1. <u>Fraxinus latifolia</u>		ominant Indicator pecies? Status Yes FACW	Number of Dominant Species that are OBL, FACW, or FAC:	3	_ (A)
2			Total Number of Dominant Species Across all Strata:	3	_ (B)
4		Total Cover	Percent of Dominant Species that are OBL, FACW, or FAC:	100%	(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diameter)	40	Van FACII	Prevalence Index workshee		
Symphoricarpos albus Rosa nutkana	40 15	Yes FACU Yes FAC	Total % Cover of: OBL species	Multiply by: x 1 =	
3.			FACW species	x 2 =	_
4 5.			FAC species FACU species	x 3 =	_
	65 =	Total Cover	UPL species	x 5 =	_
Herb Stratum (Plot size: 1-m diameter) 1.			Column Totals:	(A)	(B)
2.			Prevalence Index = B/A =		
3. 4. 5.			Hydrophytic Vegetation ☐ 1 – Rapid Test for Hydrop ☑ 2 – Dominance Test is >	ohytic Vegetation 50%	
6. 7.			□ 3 – Prevalence Index is ≤ □ 4 – Morphological Adapta		porting
8.			data in Remarks or o □ 5 – Wetland Non-Vascula)
9			☐ Problematic Hydrophytic		n)
11.			¹ Indicators of hydric soil and v		nust be
Woody Vine Stratum (Plot size: 3-m diameter)	<u> </u>	Total Cover	present, unless disturbed or p	roblematic.	
1. 2.			Hydrophytic Vegetation Ye	s⊠ No□	1
		Total Cover	Present?		'
% Bare Ground in Herb Stratum: 100					
Remarks:					

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Depth Matrix Redox Features												
(inches)	Color (moist)	%	С	olor (m		% Type	Loc ²	?	Texture		Rer	marks
0-16	10YR 2/1	100							Silt loam			
¹Type: C=Ce	oncentration. D=	Depletio	n. RM=R	Reduced	Matrix. CS=	Covered or Coate	ed Sand Grains.	² Loc:	PL=Pore Linin	a. M=M	atrix.	
	Indicators: (Ap								tors for Probl			c Soils ³ :
☐ Histoso					Sandy Redox				cm Muck (A10		,	
	Epipedon (A2)				Stripped Matr				Red Parent Mat			
	Histic (A3)					/ Mineral (F1) (exc	cept MLRA 1)		ery Shallow D			F12)
, ,	jen Sulfide (A4) ed Below Dark S	urface (111)		∟oamy Gieye Depleted Mat	d Matrix (F2)		\boxtimes C	Other (Explain i	n Kema	ırks)	
	Dark Surface (A1		,		Redox Dark S	, ,		³ Indica	ators of hydrop	hytic ve	getati	on and
	Mucky Mineral (k Surface (F7)			etland hydrolog			sent, unless
	Gleyed Matrix (S	-			Redox Depre	ssions (F8)		als	sturbed or prob	nematic		
	Layer (if preser	nt):					Hydric soil			_		_
Type:	_						present?		Yes	\boxtimes	No	
Depth (inches):						-					
Remarks:	Aquic moisture	regime	observe	d.								
	·	J										
HYDROLO	GY											
	drology Indicat		equired:	check	all that apply))		Seco	ndary Indicator	rs (2 or	more i	required)
	e water (A1)					ned Leaves (exce	pt MLRA 1, 2, 4A		Water-Staine	d Leave	es (B9)	(MLRA 1,
9	/ater Table (A2)				& 4B) (B9)	D44)			2, 4A & 4B)		140)	
	tion (A3) Marks (B1)				Salt Crust (ertebrates (B13)			Drainage Pat Dry-Season \			20)
	ent Deposits (B2))				Sulfide Odor (C1)			Saturation Vis			
	eposits (B3)				, ,	nizospheres along	Living Roots (C3)		Geomorphic			3 7 (7
-	lat or Crust (B4)					f Reduced Iron (C	•		Shallow Aqui			
	eposits (B5)	»\				Reduction in Tille	, ,		FAC-Neutral			DD A)
	e Soil Cracks (B6 tion Visible on A		aery (B7	')		Stressed Plants ([ain in remarks))1) (LRR A)		Raised Ant M Frost-Heave		. , ,	-RR A)
	ly Vegetated Co			•	Other (expi	am m remarks)			TIOSTITICAVC	i iuiiiiii	OKS	
Field Obser	-		•									
Surface Wa	ter Present?	Yes [] No	\boxtimes	Depth (in):	-						
Water Table	Present?	Yes 🛭	No No		Depth (in):	0" BSG	Wetland Hyd Present		Y	es 🏻	N	lo 🗆
Saturation F	Present? pillary fringe)	Yes D	No No		Depth (in):	0" BSG						
		eam da	ide mor	nitorina	well aerial ol	notos previous in	spections), if avail	able.				
Dosonbo Ne	Joseph Data (Sti	Juni ya	,go, 11101	omig	on, acriai pi	iotoo, provious ili	spootionoj, ii avaii	abio.				
Remarks:												



Project/Site: Nisqually State Park		City/County: _ P	Pierce	Sampling	g date: <u>2-1</u>	19-2021
Applicant/Owner: Washington State Parks			State:	WA Sampl	ling Point:	DP-38
Investigator(s): Roen Hohlfeld and Sam Payne		Section, Township,	Range: <u>S20, T16</u>	6N, R04E		
Landform (hillslope, terrace, etc):Depression		Local relief (concave	e, convex, none):	concave	Slope (%	(a): <u>2</u>
Subregion (LRR): A Lat: -	Lon	g: -		Datum: -	<u> </u>	
Soil Map Unit Name: Kapowsin gravelly ashy lo				none		
Are climatic / hydrologic conditions on the site typic			(If no, explain in rer	marks.)		
Are Vegetation □, Soil □, or Hydrology □ significa	-		cumstances" preser		⊠ Yes □ N	No.
Are Vegetation □, Soil □, or Hydrology □ naturally	problematic?	(If needed, expla	in any answers in F	Remarks.)		
SUMMARY OF FINDINGS — Attach site m	ap showing samplir	ng point locations,	transects, import	tant features,	etc.	
Hydrophytic Vegetation Present? Yes	□ No ⊠					
Hydric Soils Present? Yes	□ No ⊠	Is the Sampl within a We		Yes 🗆] No ⊠	3
Wetland Hydrology Present? Yes	□ No ⊠					
VEGETATION – Use scientific names of pla						
<u>Tree Stratum</u> (Plot size: 5-m diameter) 1. <u>Pseudotsuga menziesii</u>	% Cover Sp	minant Indicator secies? Status Yes FACU	Dominance Test Number of Domir that are OBL, FA	nant Species	0	(A)
2			Total Number of I Species Across a		3	(B)
4		Fotal Cover	Percent of Domin that are OBL, FA		0%	(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diameter) 1. Gaultheria shallon	20	Yes FACU	Prevalence Inde	<u> </u>	Multiply by:	
2. 3.			OBL species FACW species		(1 = <u> </u>	· <u> </u>
4.			FAC species			
5	20 = 7	Fotal Cover	FACU species UPL species		(4 = <u>49</u> (5 = -	
Herb Stratum (Plot size: 1-m diameter)		Total Cover	Column Totals:		A) 49	
1. Rubus ursinus 2.		Yes FACU	Prevalence Index			
3	=		☐ 1 - Rapid Te ☐ 2 - Dominan ☐ 3 - Prevalen ☐ 4 - Morpholo		rtic Vegetation % 01 ons1 (Provide a separate she Plants1 getation1 (Expland hydrolog	supporting eet) plain)
2. % Bare Ground in Herb Stratum: 0		Γotal Cover	Vegetation Present?	Yes	□ No	
Remarks: Moss in herb stratum						

Profile Des	scription: (Desc Matrix		the d	epth	need	ed to do		ent the indicato	r or c	confirm the ab	sence	of indicators.)		
(inches)	Color (moist)	%	6	Co	olor (n	noist)	_	<u>0х г еакигез</u> % Тур	oe¹	Loc ²		Texture		Rei	marks
0-10	10YR 2/2	10	00									Loam			
10-16	10YR 3/4	10	00									Sandy loam			
¹ Type: C=C	oncentration. D=	-Deplet	ion. R	M=R	educe	ed Matrix	c. CS=	Covered or Coa	ted S	and Grains.	² Loc:	PL=Pore Lining	a. M=M	atrix.	
	I Indicators: (Ap											tors for Proble			c Soils ³ :
☐ Histos	ol (A1)	•				Sandy	Redox	(S5)			□ 2	cm Muck (A10))	•	
	Epipedon (A2)					Strippe		` '				Red Parent Mat	,	,	
	Histic (A3)							y Mineral (F1) (e:	xcept	t MLRA 1)		ery Shallow Da		,	TF12)
	gen Sulfide (A4) ed Below Dark S	Surface	(A11)	١		Deplete	•	d Matrix (F2)				Other (Explain in	i Kema	irks)	
	Dark Surface (A		(,)	'				Surface (F6)			3 Indic	ators of hydrop	hytic ve	egetati	on and
-	Mucky Mineral	. ,						k Surface (F7)			We	etland hydrolog sturbed or prob	y must	be pre	esent, unless
	Gleyed Matrix (Redox	Depre	ssions (F8)	1		uis	sturbed or prob	lemane	•	
	Layer (if prese	nt):								Hydric soil		.,			⋈
Type:									4	present?		Yes	ш	No	M
Depth	(inches):														
Remarks:															
HYDROLO	OGY														
Wetland Hy Primary Ind	ydrology Indica licators (minimur	tors: n of one	e requ	iired:	check	all that	apply)			Seco	ndary Indicator	s (2 or	more	required)
☐ Surfac	e water (A1)							ned Leaves (exc	ept N	MLRA 1, 2, 4A		Water-Stained	d Leave	es (B9) (MLRA 1,
Ŭ	Vater Table (A2)					& 4B) (B9)	(5.4)				2, 4A & 4B)			
	tion (A3) Marks (B1)						Crust (B11) ertebrates (B13)				Drainage Patt Dry-Season V	,	,	23)
	ent Deposits (B2	')						Sulfide Odor (C1)				Saturation Vis			
	eposits (B3)	,				•	•	hizospheres alon	,	ing Roots (C3)	\boxtimes	Geomorphic F			
_	Nat or Crust (B4)							of Reduced Iron (. ,			Shallow Aquit			
	eposits (B5)	-						Reduction in Ti				FAC-Neutral			
	e Soil Cracks (B ation Visible on A	,	nagon	, (B7))			Stressed Plants ain in remarks)	(D1)	(LRR A)		Raised Ant M Frost-Heave I			LRR A)
	ely Vegetated Co					Othe	i (expi	alli ili remarks)			Ш	FIOSI-Heave I	Turring	CKS	
Field Obse			- Carra	55 (2)	<u> </u>										
Surface Wa	iter Present?	Yes		No	\boxtimes	Depth	(in):	-							
Water Table	e Present?	Yes		No		Depth	(in):	-		Wetland Hyde Present		Ye	es 🗆	1	No 🛛
Saturation I		Yes		No	\boxtimes	Depth	(in):	-							
	apillary fringe)							h - 1		-C	-1-1				
Describe Ri	ecoraea Data (st	ream g	auge,	mon	itoring	weii, a	enai pi	hotos, previous i	uspe	cuons), ir availa	abie:				
Remarks:	Geomorphic	position	is a d	depre	ssion.										



Project/Site: Nisqually State Park				City/Co	ounty: P	Pierce	Samp	ling date	e: <u>2-19-2</u>	2021
Applicant/Owner: Washington State Par	·ks					State	: <u>WA</u> Sar	npling F	Point: DP	-39
Investigator(s): Roen Hohlfeld and Sam	Payne			Section, T	ownship,	Range: S20,	T16N, R04E			
Landform (hillslope, terrace, etc): Slope)			Local relie	f (concave	e, convex, none	e): concave	Ş	Slope (%):	10
Subregion (LRR): A Lat: -										
Soil Map Unit Name: Kapowsin gravelly										
Are climatic / hydrologic conditions on the										
Are Vegetation \square , Soil \square , or Hydrology \square			-				esent on the site	? ⊠ Ye	s □ No	
Are Vegetation \square , Soil \square , or Hydrology \square	•					in any answers		. 🗠 10		
SUMMARY OF FINDINGS – Attac			ampli			-		s, etc.		
Hydrophytic Vegetation Present?	Yes ⊠	No								
Hydric Soils Present?	Yes ⊠	No			e Sampl hin a We		Yes	\boxtimes	No 🗆	
Wetland Hydrology Present?	Yes ⊠	No		W10	iiii a vvc	tiana:				
VEGETATION – Use scientific name	es of plants.									
Tree Stratum (Plot size: 5-m diameter) 1.		Absolute % Cover			ndicator Status	Number of Do	Test worksheet: ominant Species FACW, or FAC:		1	_ (A)
2						Total Number Species Acros		_	1	(B)
4		-	=	Total Cove	r		minant Species FACW, or FAC:		100%	(A/B)
Sapling/Shrub Stratum (Plot size: 3-m dia	ımeter)						ndex workshee	t:		
1. 2.						Total % Cove OBL species	<u>r of:</u>	Multip x 1 =	oly by:	
3.						FACW specie	s	x 2 =		_
4.						FAC species		_		_
5		-		Total Cove	<u>, </u>	FACU species UPL species	S	x 4 = x 5 =		_
Herb Stratum (Plot size: 1-m diameter)	-			Total Cove		Column Totals	s:	(A)		(B)
Grass Juncus effusus		90 10		Yes No	FAC*	Prevalence In	idex = B/A =			
3.				INU	FACW	Hydroph	ytic Vegetation	Indicat	tors:	
4							d Test for Hydror	,	egetation	
5. 6.							nance Test is > alence Index is ≤			
7.						4 – Morpl	hological Adapta	ations¹ (F		
8. 9.						data	in Remarks or o and Non-Vascula		,	ı
10.							atic Hydrophytic			n)
11.							hydric soil and v			nust be
Woody Vine Stratum (Plot size: 3-m diam	- neter)	100	_ =	Total Cove	r	present, unies	ss disturbed or p	robiema	atic.	
1	,					Hydrophytic				_
2				Total Cove	-	Vegetation Present?	Ye	s 🏻	No 🗆	İ
% Bare Ground in Herb Stratum: 0	-	-	_ =	Total Cove	l	riesent:				
Remarks: *Assumed FAC										

			depth need		nent the indicator	or confirm the at	osence	of indicators.)	
Depth (inches)	Matrix Color (moist)	%	Color (n		dox Features % Type	e ¹ Loc ²	2	Texture	Remarks
0-7	10YR 2/2	100	·					Sandy loam	
7-14	2.5YR 3/2	90	10YR	3/4	10 C	M		Sandy loam	
¹Type: C=C	Concentration, D=	Depletion.	RM=Reduce	d Matrix, CS	S=Covered or Coate	ed Sand Grains.	² l oc: F	PL=Pore Lining,	M=Matrix
	il Indicators: (Ap								natic Hydric Soils ³ :
-	sol (A1)	,p		Sandy Red				cm Muck (A10)	
	Epipedon (A2)			Stripped Ma				ed Parent Mater	rial (TF2)
	Histic (A3)			Loamy Muc	ky Mineral (F1) (ex	cept MLRA 1)			k Surface (TF12)
,	gen Sulfide (A4)				ed Matrix (F2)			ther (Explain in	Remarks)
	ted Below Dark S	,	•	Depleted M	, ,				
	Dark Surface (A1	,			Surface (F6)				tic vegetation and
	/ Mucky Mineral (/ Gleyed Matrix (S				ark Surface (F7) ressions (F8)			sturbed or proble	must be present, unless matic.
	Layer (if prese			Tredox Dep	103310113 (1 0)				
_	z <u> </u>	,.				Hydric soil	l	V 5	⊠ No □
Type:						present?		Yes 2	⊠ NO □
Depth	(inches):								
Remarks:									
HYDROLO	OGY								
	ydrology Indicat				1)		C	- d- m . l di t- u-	(2
	dicators (minimum	n or one rec	quirea: cneck					-	(2 or more required)
	ce water (A1) Nater Table (A2)			Water-Sta & 4B) (B9	ained Leaves (exce	pt MLRA 1, 2, 4A	· 🗆	Water-Stained 2, 4A & 4B)	Leaves (B9) (MLRA 1,
_	ation (A3)			, ,	•			Drainage Patte	rns (B10)
	Marks (B1)				vertebrates (B13)			Dry-Season Wa	
	nent Deposits (B2)		•	Sulfide Odor (C1)				le on Aerial Imagery (C9)
	Deposits (B3)	,			Rhizospheres along	Living Roots (C3)		Geomorphic Po	
	Mat or Crust (B4)				of Reduced Iron (C			Shallow Aquita	rd (D3)
☐ Iron D	eposits (B5)			Recent Ire	on Reduction in Till	ed Soils (C6)		FAC-Neutral Te	est (D5)
☐ Surfac	ce Soil Cracks (Be	6)		Stunted o	r Stressed Plants (D1) (LRR A)		Raised Ant Mou	unds (D6) (LRR A)
	ation Visible on A			Other (ex	plain in remarks)			Frost-Heave Hu	ummocks
☐ Sparse	ely Vegetated Co	ncave Surf	ace (B8)						
		Voc. □	No 🖾	Danth (in)					
	ater Present?	Yes □	No ⊠	Depth (in)		Wetland Hyd		Vos	s ⊠ No □
	e Present?	Yes ⊠	No □	Depth (in)		Present	t?	163	S Z NO L
Saturation (includes can	Present? apillary fringe)	Yes ⊠	No □	Depth (in)	6" BSG				
		ream gaug	e, monitoring	well, aerial	photos, previous in	spections), if avail	able:		
	`	2 0			-	•			
D									
Remarks:									



Project/Site: Nisqually State Park		City/County: Pierce	Samplii	ng date: 2-19-2021
Applicant/Owner: Washington State Parks			State: WA Sam	pling Point: DP-40
Investigator(s): Roen Hohlfeld and Sam Payne	;;	Section, Township, Range:	S20, T16N, R04E	
Landform (hillslope, terrace, etc): Slope	1	Local relief (concave, conv	ex, none): concave	Slope (%): <u>10</u>
Subregion (LRR): A Lat:	Long	: <u>-</u>	Datum:	
Soil Map Unit Name: Kapowsin gravelly ashy	loam, 0 to 6 percent slop	oes NWI classi	fication: none	
Are climatic / hydrologic conditions on the site typ	ical for this time of year?	☐ Yes ⊠ No (If no, e	xplain in remarks.)	
Are Vegetation \square , Soil \square , or Hydrology \square signifies	cantly disturbed?	Are "Normal Circumstar	nces" present on the site?	⊠ Yes □ No
Are Vegetation $\square,$ Soil $\square,$ or Hydrology \square natural	lly problematic?	(If needed, explain any	answers in Remarks.)	
SUMMARY OF FINDINGS – Attach site	map showing samplin	g point locations, transe	ects, important features	, etc.
Hydrophytic Vegetation Present? Ye	s □ No ⊠	1.4.6		
Hydric Soils Present? Ye	s □ No ⊠	Is the Sampled Are within a Wetland		□ No ⊠
Wetland Hydrology Present? Ye	s □ No ⊠			
Remarks: Hydrologic conditions for the VEGETATION — Use scientific names of p		or to the site visit were w	etter than normal.	
Tree Stratum (Plot size: 5-m diameter) 1.	% Cover Spe	ecies? Status Numl	inance Test worksheet: per of Dominant Species are OBL, FACW, or FAC:	1 (A)
2.		Total	Number of Dominant ies Across all Strata:	2 (B)
4.			ent of Dominant Species	50%
	= T	otal Cover that a	are OBL, FACW, or FAC:	(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diameter) 1.			alence Index worksheet: % Cover of:	Multiply by:
1. 2.		ODI		x 1 =
3.			V species -	x 2 =
5			species 95 J species 25	x 3 = 285 x 4 = 100
		otal Cover UPL	species -	x 5 =
Herb Stratum (Plot size: 1-m diameter) 1. Grass	90	Yes FAC	nn Totals: 120	(A) 385 (B)
Dactylis glomerata		Yes FACU Preva	alence Index = B/A = 3	3.2
3. Lotus corniculatus	5		Hydrophytic Vegetation I	
4 5			 Rapid Test for Hydroph Dominance Test is > 5 	, ,
6.			B – Prevalence Index is ≤ 3	
7. 8.			 Morphological Adaptati data in Remarks or on 	
9.			5 – Wetland Non-Vascular	• /
10		D F	Problematic Hydrophytic V	0 (1)
11.		'Indic	ators of hydric soil and we ent, unless disturbed or pro	
Woody Vine Stratum (Plot size: 3-m diameter)		1		
1.			rophytic	□ No 🏻
2	= T		etation Yes ent?	□ No 🗵
% Bare Ground in Herb Stratum: 0				
Remarks: *Assumed FAC				

Profile Des Depth	cription: (Desc Matrix		he dep	th need	ded to de		ent the indicator ox Features	or confirm the al	bsence	of indicators.)		
(inches)	Color (moist)	%		Color (moist)		% Typ	e ¹ Loc	2	Texture		Rei	marks
0-10	10YR 3/3	100)							Sandy loam			
10-14	10YR 2/1	100)							Sandy loam		w/ch	narcoal
¹Tvpe: C=C	oncentration. D=	=Depletio	on. RM=	Reduc	ed Matrix	k. CS=	Covered or Coat	ed Sand Grains.	²Loc:	PL=Pore Lining	a. M=Ma	atrix.	
	Indicators: (Ap									tors for Proble			c Soils³:
☐ Histoso	٠.	•			Sandy		,			cm Muck (A10)			
	Epipedon (A2)				Strippe		` '			Red Parent Mat	`	,	
	Histic (A3)						y Mineral (F1) (ex	cept MLRA 1)		ery Shallow Da			F12)
	gen Sulfide (A4) ed Below Dark S	Surface ((A11)		•	•	ed Matrix (F2) trix (F3)			Other (Explain in	i Kema	rks)	
	Dark Surface (A		(* * * * *)				Surface (F6)		3 Indic	ators of hydrop	hytic ve	getati	on and
-	Mucky Mineral (. ,					k Surface (F7)		We	etland hydrolog sturbed or prob	y must	be pre	esent, unless
	Gleyed Matrix (-			Redox	Depre	essions (F8)		- ui	starbed or prob	icinatio		
	Layer (if prese	111).						Hydric soi	I	V		No	
Type:								present?		Yes	Ш	NO	
Depth ((inches):												
Remarks:													
HYDROLO	OGY												
Wetland Hy Primary Indi	drology Indica icators (minimur	tors: n of one	require	d: chec	k all that	apply))		Seco	ndary Indicator	s (2 or 1	more i	equired)
	e water (A1)							ept MLRA 1, 2, 4A	, \Box	Water-Stained	d Leave	s (B9) (MLRA 1,
Ü	/ater Table (A2)				& 4B) (B9)				2, 4A & 4B)	(D	40)	
	tion (A3) Marks (B1)					Crust (itic Inv	rertebrates (B13)			Drainage Patt Dry-Season V	,	,	7.2)
	ent Deposits (B2	2)					Sulfide Odor (C1)			Saturation Vis		•	•
	eposits (B3)	,			☐ Oxidi	zed Rł	hizospheres along	Living Roots (C3)		Geomorphic F	osition	(D2)	3 , (,
_	fat or Crust (B4)						of Reduced Iron (0			Shallow Aquit			
	eposits (B5) e Soil Cracks (B	C)					n Reduction in Till Stressed Plants (FAC-Neutral			DD A\
	tion Visible on A	,	agery (F	[37) [ain in remarks)	DI) (LKK A)		Raised Ant M Frost-Heave I		. , ,	-KK A)
	ely Vegetated Co		0 , (,	_ 00	· (oxpi	an miromano,			r root riouvo i	101111110	ONO	
Field Obse				,									
Surface Wa	ter Present?	Yes [□ No	D	Depth	(in):	-	Watland Head					
Water Table	e Present?	Yes	□ No	o 🗆	Depth	(in):	_	Wetland Hyd Present		Ye	es 🗆	1	lo 🏻
Saturation F		Yes	□ No	o 🗆	Depth	(in):	-						
	pillary fringe) ecorded Data (st	ream da	nude m	onitorin	g well a	erial ni	hotos, previous in	spections), if avail	lable.				
20001100 110	2031404 Daia (31	Jann go	.ago, 1110		5 a	chai pi		, , , , , , , , , , , , , , , , , ,					
D													
Remarks:													



Project/Site: Nisqually State Park			City/	County: F	Pierce	Samplinç	g date:	2-25-2	:021
Applicant/Owner: Washington State Parks					State: V	NA Sampl	ing Point:	DP-	-41
Investigator(s): Roen Hohlfeld and Sam Payne			Section	, Township,	Range: <u>S20, T16N</u>	I, R04E			
Landform (hillslope, terrace, etc):			Local re	elief (concav	e, convex, none):	concave	Slope	e (%):	10
Subregion (LRR): A Lat: -			Long: -			Datum: -			
Soil Map Unit Name: Kapowsin gravelly ashy I									
Are climatic / hydrologic conditions on the site typi									
Are Vegetation □, Soil □, or Hydrology □ signific		-			cumstances" present of		⊠ Yes [□ No	
Are Vegetation □, Soil □, or Hydrology □ natural	lly problema	atic?	(If ne	eeded, expla	ain any answers in Re	marks.)			
SUMMARY OF FINDINGS – Attach site	map show	ing sam	npling poin	t locations,	transects, importar	nt features, o	etc.		
Hydrophytic Vegetation Present? Yes	s 🗵 l	No 🗆							
Hydric Soils Present? Yes	s 🗆 1	No 🗵		the Sampl ⁄ithin a We		Yes 🗆] No	\boxtimes	
Wetland Hydrology Present? Yes	s 🗵 l	No 🗆		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
VEGETATION – Use scientific names of p	lants.								
Tree Stratum (Plot size: 5-m diameter) 1	% (solute Cover	Dominant Species?	Indicator Status	Dominance Test w Number of Dominar that are OBL, FACV	nt Species	2	?	_ (A)
3.					Total Number of Do Species Across all		2	2	(B)
4		_	= Total Co	ver	Percent of Dominar that are OBL, FACV		100)%	(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diameter)					Prevalence Index				
Spiraea douglasii		3	Yes	FACW	Total % Cover of:	<u>N</u>	Multiply by	<u>/:</u>	
2. 3.					OBL species FACW species		11 = 12 =	-	_
4.					FAC species		3 =		_
5		3	= Total Co	ver	FACU species UPL species		4 = <u> </u>		
Herb Stratum (Plot size: 1-m diameter)		3	= 10tai 00	VCI	Column Totals:		A)		(B)
Phalaris arundinacea Rubus ursinus		100	Yes No	FACW FACU	Prevalence Index =	B/A =			
2. Rubus ursinus 3.		race	INU	FACU	Hydrophytic V	egetation In	dicators:		
4					☐ 1 – Rapid Test		_	ation	
5 6					⊠ 2 – Dominance□ 3 – Prevalence				
7.					4 – Morphologi	ical Adaptation marks or on a			
8. 9.					□ 5 – Wetland No		•	s Srieet)	
10					☐ Problematic Hy	' ' '	0	` '	,
11		100	= Total Co	ver	¹ Indicators of hydric present, unless dist			ology m	iust be
Woody Vine Stratum (Plot size: 3-m diameter) 1.					Hydrophytic				
2.					Vegetation	Yes	× I	lo □	
% Bare Ground in Herb Stratum: 0		-	= Total Co	ver	Present?				
Remarks:									

		ibe to the o	depth neede			or confirm the at	sence	of indicators.))	
Depth (inches)	Matrix Color (moist)	%	Color (m		<u>x Features</u> 6 Type	·1 Loc²	2	Texture	R	emarks
0-8	10YR 3/2	100	00101 (111	0131) /	Турс			Silt loam	10	omano
8-16	10YR 3/2	84						Silt loam	Mix	ed matrix
			10YR 3	2/4	ı C	M				
8-16	2.5Y 4/2	15	IUTR	3/4 1	C	IVI		Silt loam	IVIIX	ed matrix
1Typo: C=0	Concentration, D=	Donlotion F	PM-Poduco	Motrix CS-(Covered or Coate	d Sand Grains	21 00: 1	PL=Pore Lining	M-Matrix	
	il Indicators: (Ap					u Sanu Grains.		tors for Proble		ric Soils ³ ·
-	sol (A1)	pricable to		Sandy Redox	-			cm Muck (A10)	•	ne dons .
	Epipedon (A2)			Stripped Matri	` '			ed Parent Mate		
	Histic (A3)				Mineral (F1) (exc	cept MLRA 1)		ery Shallow Da		(TF12)
☐ Hydro	gen Sulfide (A4)			Loamy Gleyed		,	□ O	ther (Explain ir	Remarks)	
	ted Below Dark S			Depleted Matr						
	Dark Surface (A1	,		Redox Dark S	` '			ators of hydropl		
	y Mucky Mineral (y Gleyed Matrix (S			Depleted Dark Redox Depres				tland hydrolog turbed or probl		resent, uniess
	e Layer (if preser			течех Вергее	(1 0)			<u>'</u>		
_	c Layer (ii preser	11.				Hydric soil		Vaa	□ N-	
Type:						present?		Yes	⊔ No	
Depth	(inches):									
Remarks:										
HYDROL	OGY									
	lydrology Indicat			-II (b - (b A			0	a da ma ba dha dha at a m	- (0	
	dicators (minimum	n of one req	uired: check					ndary Indicators		
	ce water (A1) Nater Table (A2)			Water-Stain & 4B) (B9)	ed Leaves (exce)	pt MLRA 1, 2, 4A		Water-Stained 2, 4A & 4B)	d Leaves (B	9) (MLRA 1 ,
U	ation (A3)			Salt Crust (E	311)			Drainage Patt	erns (R10)	
	Marks (B1)				ertebrates (B13)			Dry-Season V		(C2)
	nent Deposits (B2)			ulfide Odor (C1)					al Imagery (C9)
	Deposits (B3)	,		Oxidized Rh	izospheres along	Living Roots (C3)		Geomorphic F		
☐ Algal	Mat or Crust (B4)			Presence of	Reduced Iron (C	4)		Shallow Aquit	ard (D3)	
	eposits (B5)				Reduction in Tille			FAC-Neutral	. ,	
	ce Soil Cracks (Be				Stressed Plants (D	01) (LRR A)		Raised Ant Me	, ,	(LRR A)
	ation Visible on A ely Vegetated Co			Other (expla	ain in remarks)			Frost-Heave H	Hummocks	
Field Obs		ncave Suna	ice (bo)							
	ater Present?	Yes □	No ⊠	Depth (in):	_					
				,	2" BSC	Wetland Hyd		Ye	s 🛛	No 🗆
	le Present?	Yes ⊠	No □	Depth (in):	2" BSG	Present	:?			
Saturation (includes of	eapillary fringe)	Yes ⊠	No 🗆	Depth (in):	1" BSG					
		ream gauge	, monitoring	well, aerial ph	otos, previous ins	spections), if avail	able:			
	(2	39		,	,,	, ,,				
<u> </u>										
Remarks:										
Ī										



Project/Site: Nisqually State Park		Citv/	County: F	Pierce Samr	oling date:	2-25-20)21
Applicant/Owner: Washington State Parks			_	<u> </u>	mpling Point:		
···		Coation	Township		inpining i onit.		
Investigator(s): Roen Hohlfeld and Sam Payne				Range: <u>S20, T16N, R04E</u>			_
Landform (hillslope, terrace, etc): Depression		Local re	lief (concav	e, convex, none): concave	Slope	∍ (%): _	2
Subregion (LRR): A Lat: -		Long:		Datum:	<u>-</u>		
Soil Map Unit Name: Kapowsin gravelly ashy loam,	0 to 6 percer	nt slopes	NW	I classification: none			
Are climatic / hydrologic conditions on the site typical for	r this time of	year? ☐ Yes	s 🛭 No	(If no, explain in remarks.)			
Are Vegetation \square , Soil \square , or Hydrology \square significantly	disturbed?	Are "	Normal Circ	cumstances" present on the site	? ⊠ Yes [∃ No	
Are Vegetation \square , Soil \square , or Hydrology \square naturally pro	blematic?	(If ne	eded, expla	ain any answers in Remarks.)			
OUMANA DV OF FINDINGS - 444 - 1-14							
SUMMARY OF FINDINGS – Attach site map			locations,	transects, important feature	s, etc.		
Hydrophytic Vegetation Present? Yes	No [le	the Sampl	ad Araa	_	_	
Hydric Soils Present? Yes	No [ithin a We		⊠ No		
Wetland Hydrology Present? Yes	No [
Remarks: Hydrologic conditions for the three- VEGETATION – Use scientific names of plants		од риог со и	e site visit	were wetter than normal. Wet	Tanu www in-	-pit.	
	Absoluto	Dominant	Indiantor	Dominance Test worksheet			
Tree Stratum (Plot size: 5-m diameter)	Absolute % Cover	Dominant Species?	Indicator Status	Number of Dominant Species		-	
1. Fraxinus latifolia	40	Yes	FACW	that are OBL, FACW, or FAC			(A)
2. Alnus rubra 3.	35	Yes	FAC	Total Number of Dominant Species Across all Strata:	7	,	(B)
4.				Percent of Dominant Species			(D)
	75	= Total Co	ver	that are OBL, FACW, or FAC		%	(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diameter)				Prevalence Index workshee	et:		
Fraxinus latifolia	20	Yes	FACW	Total % Cover of:	Multiply by	<u>/:</u>	
Alnus rubra Acer circinatum	<u>15</u> 5	Yes No	FAC FAC	OBL species	_ x 1 = x 2 =		_
4. Rosa nutkana	<u>5</u>	No	FAC	FAC species	_ x 2 = x 3 =		-
5.				FACU species	x 4 =		_
	45	= Total Co	ver	UPL species	x 5 =		
Herb Stratum (Plot size: 1-m diameter) 1. Cardamine hirsuta	5	Yes	FACU	Column Totals:	(A)		(B)
2. Rubus ursinus	5	Yes	FACU	Prevalence Index = B/A =			
3. Carex deweyana	5	Yes	FAC	Hydrophytic Vegetation			
4				□ 1 – Rapid Test for Hydro⊠ 2 – Dominance Test is >		ation	
5. 6.				□ 3 – Prevalence Index is			
7.				4 - Morphological Adapta			orting
8				data in Remarks or c □ 5 – Wetland Non-Vascula	•	sheet)	
9				☐ Problematic Hydrophytic		(Explain))
11.				¹ Indicators of hydric soil and v	wetland hydro		
		= Total Co	ver	present, unless disturbed or p	roblematic.		
Woody Vine Stratum (Plot size: 3-m diameter) 1.				Hydrophytic			
2.					s 🛛 N	No 🗆	
		= Total Co	ver	Present?			
% Bare Ground in Herb Stratum: 85				<u> </u>			
Remarks:							

			depth need		ment the indicator	or confirm the at	osence	of indicators.)	
Depth (inches)	Matrix Color (moist)	%	Color (n		edox Features % Type	e ¹ Loc ²	2	Texture	Remarks
0-2	10YR 2/2	100	·	·				Sandy loam	
2-12	2.5Y 5/1	90	10YR	4/3	10 C	M		Sandy loam	
¹Type: C=C	Concentration, D=	Depletion.	RM=Reduce	ed Matrix. CS	S=Covered or Coate	ed Sand Grains.	² Loc: I	PL=Pore Lining,	M=Matrix.
	il Indicators: (Ap								natic Hydric Soils ³ :
-	sol (A1)	, p		Sandy Red				cm Muck (A10)	
	Epipedon (A2)			Stripped Ma				ed Parent Mater	ial (TF2)
	Histic (A3)			Loamy Muc	ky Mineral (F1) (ex	cept MLRA 1)			k Surface (TF12)
,	gen Sulfide (A4)				yed Matrix (F2)			ther (Explain in I	Remarks)
	ted Below Dark S	•	•	Depleted M			_		
	Dark Surface (A1	,			Surface (F6)				tic vegetation and
	/ Mucky Mineral (/ Gleyed Matrix (\$				ark Surface (F7) ressions (F8)			sturbed or proble	must be present, unless matic.
	Layer (if prese			TREGOX DEP	103310113 (1 0)				
_	- Layer (p. 666)	,.				Hydric soil	l	V 5	No □
Type:						present?		Yes 2	NO L
Depth	(inches):								
Remarks:									
HYDROLO	OGY								
	ydrology Indica		wired, obool	all that ann	h.A		Casar	adam (Indiantam	(2 or more required)
	dicators (minimun	n or one red	quirea: cneck					-	(2 or more required)
	ce water (A1) Nater Table (A2)			Water-Sta & 4B) (Bs	ained Leaves (exce	ept MLRA 1, 2, 4A		Water-Stained 2, 4A & 4B)	Leaves (B9) (MLRA 1,
_	ation (A3)			, ,	•			Drainage Patte	rns (B10)
	Marks (B1)				nvertebrates (B13)			Dry-Season Wa	
	nent Deposits (B2)			Sulfide Odor (C1)				le on Aerial Imagery (C9)
	Deposits (B3)	,		, ,	Rhizospheres along	Living Roots (C3)		Geomorphic Po	
	Mat or Crust (B4)				of Reduced Iron (0			Shallow Aquitar	rd (D3)
☐ Iron D	eposits (B5)			Recent Ir	on Reduction in Till	ed Soils (C6)		FAC-Neutral Te	est (D5)
☐ Surfac	ce Soil Cracks (B	6)		Stunted of	or Stressed Plants (D1) (LRR A)		Raised Ant Mou	unds (D6) (LRR A)
	ation Visible on A			Other (ex	plain in remarks)			Frost-Heave Hu	ummocks
	ely Vegetated Co	ncave Surf	ace (B8)		Ī				
Field Obse		V	NI- 57	5 (1)					
	ater Present?	Yes □	No ⊠	Depth (in)		Wetland Hyd		Vos	s ⊠ No □
	e Present?	Yes ⊠	No □	Depth (in)		Present	t?	163	S Z NO L
Saturation (includes can	Present? apillary fringe)	Yes ⊠	No □	Depth (in)	0" BSG				
		ream gaug	e, monitoring	well, aerial	photos, previous in	spections), if avail	able:		
	`	- 0			-	•			
D									
Remarks:									



Project/Site: Nisqually State Park		City/	County: F	Pierce Sam	pling date:	2-25-20	021
Applicant/Owner: Washington State Parks				State: WA S	ampling Poin	it: <u>DP-</u> 4	43
Investigator(s): Roen Hohlfeld and Sam Payne		Section	, Township,	Range: S20, T16N, R04E			
Landform (hillslope, terrace, etc):Depression		Local re	elief (concav	e, convex, none): concave	Slop	oe (%):	2
Subregion (LRR): A Lat: -		Long: -		Datum:	<u>-</u>		
Soil Map Unit Name: Kapowsin gravelly ashy loa	_						
Are climatic / hydrologic conditions on the site typica				<u></u>			
Are Vegetation □, Soil □, or Hydrology □ significal		-		cumstances" present on the sit	e? ⊠ Yes	□ No	
Are Vegetation □, Soil □, or Hydrology □ naturally	•			ain any answers in Remarks.)			
SUMMARY OF FINDINGS – Attach site m	ap showing sa				es, etc.		
Hydrophytic Vegetation Present? Yes	⊠ No						
Hydric Soils Present? Yes	⊠ No		the Sampl ⁄ithin a We		⊠ No	o 🗆	
Wetland Hydrology Present? Yes	⊠ No		Titilii a We	ilana :			
VEGETATION – Use scientific names of pla	ınts.						
<u>Tree Stratum</u> (Plot size: 5-m diameter) 1. <u>Thuja plicata</u>	Absolute % Cover 60	Dominant Species? Yes	Indicator Status FAC	Dominance Test worksheet Number of Dominant Species that are OBL, FACW, or FAC	s	3	(A)
2. 3.				Total Number of Dominant Species Across all Strata:		3	(B)
4	60	= Total Co	ver	Percent of Dominant Specie that are OBL, FACW, or FAC		00%	(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diameter)	00	V	F40	Prevalence Index workshe			
Acer circinatum Rubus spectabilis	60 10	Yes No	FAC FAC	Total % Cover of: OBL species -	$\frac{\text{Multiply b}}{\text{x 1}} =$	<u>)y:</u> -	
3.				FACW species	x 2 =	-	_
4 5.				FAC species FACU species	_ x 3 = _ x 4 =		_
5	70	= Total Co	ver	UPL species	_ x = _		_
Herb Stratum (Plot size: 1-m diameter)			ODI	Column Totals:	(A)		(B)
Carex obnupta Rubus ursinus	90 5	Yes No	OBL FACU	Prevalence Index = B/A =			
3.				Hydrophytic Vegetation			
4 5.				□ 1 – Rapid Test for Hydromath⊠ 2 – Dominance Test is a		tation	
6				☐ 3 – Prevalence Index is			
7.				☐ 4 – Morphological Adap data in Remarks or			orting
9.				□ 5 – Wetland Non-Vascu	•	e sneet)	
10				☐ Problematic Hydrophyti	_		
11	95	= Total Co	ver	¹Indicators of hydric soil and present, unless disturbed or			ust be
Woody Vine Stratum (Plot size: 3-m diameter) 1.			vei	Hydrophytic	<u> </u>		
2.					es 🏻	No 🗆	
% Bare Ground in Herb Stratum: 10		_ = Total Co	ver	Present?			
Remarks:							

		ribe to the	depth need		ment the indicator	or confirm the at	osence	of indicators.)	
Depth (inches)	Matrix Color (moist)	%	Color (n		edox Features % Type	e ¹ Loc ²	2	Texture	Remarks
0-2	2.5Y 3/2	100	·					Sandy loam	
2-14	2.5Y 5/1	80	10YR	4/6	20 C	M		Clay loam	
¹Type: C=C	Concentration, D=	:Depletion	RM=Reduce	ed Matrix. C	S=Covered or Coate	ed Sand Grains.	²l oc: l	PL=Pore Lining, I	M=Matrix
	I Indicators: (Ap								natic Hydric Soils ³ :
_	ol (A1)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Sandy Red	-			cm Muck (A10)	
	Epipedon (A2)			Stripped M				ed Parent Materi	al (TF2)
	Histic (A3)			Loamy Mud	cky Mineral (F1) (ex	cept MLRA 1)		ery Shallow Dark	
,	gen Sulfide (A4)			,	yed Matrix (F2)			ther (Explain in F	Remarks)
	ted Below Dark S	•	•	Depleted M			_		
	Dark Surface (A1				k Surface (F6)				tic vegetation and must be present, unless
	Mucky Mineral (Gleyed Matrix (S				ark Surface (F7) ressions (F8)			sturbed or probler	
	Layer (if prese	-		Nedox Dep	ressions (i o)				
_	Layer (ii presei	,.				Hydric soil	l	v N	No □
Type:						present?		Yes 🗵	NO L
Depth	(inches):								
Remarks:									
HYDROLO	OGY								
	ydrology Indicat				4.0		C	- d- m . lo di- et- ne . ((2 d)
	licators (minimum	or one rec	quirea: cneck						(2 or more required)
	e water (A1) Vater Table (A2)			Water-St & 4B) (B	ained Leaves (exce o)	ept MLRA 1, 2, 4A		Water-Stained L 2, 4A & 4B)	Leaves (B9) (MLRA 1,
Ŭ	tion (A3)			, ,	•			Drainage Patter	ns (B10)
	Marks (B1)				nvertebrates (B13)			Dry-Season Wa	
	ent Deposits (B2)			n Sulfide Odor (C1)				e on Aerial Imagery (C9)
	eposits (B3)	,		, ,	Rhizospheres along	Living Roots (C3)		Geomorphic Po	
	Mat or Crust (B4)				e of Reduced Iron (0			Shallow Aquitar	d (D3)
☐ Iron D	eposits (B5)			Recent Ir	on Reduction in Till	ed Soils (C6)		FAC-Neutral Te	st (D5)
☐ Surfac	e Soil Cracks (Be	6)		Stunted of	or Stressed Plants (D1) (LRR A)		Raised Ant Mou	ınds (D6) (LRR A)
	ation Visible on A			Other (ex	plain in remarks)			Frost-Heave Hu	mmocks
	ely Vegetated Co	ncave Surf	ace (B8)		I				
Field Obse		V □	NI- 57	5					
	ater Present?	Yes □	No ⊠	Depth (in)		Wetland Hyd		Yes	⊠ No □
Water Table		Yes ⊠	No □	Depth (in)		Present	t?	163	
Saturation (includes ca	Present? apillary fringe)	Yes ⊠	No □	Depth (in)	: 4" BSG				
Describe R	ecorded Data (st	ream gaug	e, monitorino	well, aerial	photos, previous in	spections), if avail	able:		
	`				•	•			
Domesti									
Remarks:									
I									



Project/Site: Nisqually State Park		City/	County: F	Pierce	Sampl	ing date:	2-25-2	2021
Applicant/Owner: Washington State Parks				State:	WA Sam	npling Po	int: DP	-44
Investigator(s): Roen Hohlfeld and Sam Payne		Section	, Township,	Range: S20, T1	6N, R04E			
Landform (hillslope, terrace, etc): Hillslope		Local re	elief (concav	e, convex, none):	none	Slo	ope (%):	5
Subregion (LRR): A Lat: -		Long: -		,	Datum:		,	
Soil Map Unit Name: Kapowsin gravelly ashy loam	. 0 to 6 perce			'I classification:	none	-		
Are climatic / hydrologic conditions on the site typical for			-	_				
Are Vegetation □, Soil □, or Hydrology □ significantly				cumstances" preser		? ⊠ Yes	□ No	
Are Vegetation □, Soil □, or Hydrology □ naturally pr				in any answers in I				
SUMMARY OF FINDINGS – Attach site map	showing sa			-		s, etc.		
Hydrophytic Vegetation Present? Yes	□ No [\boxtimes						
Hydric Soils Present? Yes	□ No □		the Sampl rithin a We		Yes		No 🏻	
Wetland Hydrology Present? Yes	□ No □	⊠	itiiii a vve	ruanu:				
VEGETATION – Use scientific names of plants								
Tree Stratum (Plot size: 5-m diameter) 1. Pseudotsuga menziesii	Absolute % Cover 75	Dominant Species? Yes	Indicator Status FACU	Number of Domir that are OBL, FA	nant Species		0	(A)
2. 3.				Total Number of Species Across a	Dominant		3	(B)
4.	75	= Total Co	ver	Percent of Domir that are OBL, FA			0%	(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diameter)				Prevalence Inde	x worksheet	:		
Gaultheria shallon Acer circinatum	90 15	Yes No	FACU FAC	Total % Cover of OBL species	<u>:</u> -	$\frac{\text{Multiply}}{\text{x 1}} =$	<u>by:</u>	
3. Fraxinus latifolia	10	No	FACW	FACW species	10	x 2 =	20	_
4.				FAC species	15	x 3 =	45	
5	115	= Total Co	ver	FACU species UPL species	<u>170</u>	x 4 = x 5 =	680	
Herb Stratum (Plot size: 1-m diameter)			FAOU	Column Totals:	195	(A)	745	(B)
Polystichum munitum 2.	5	Yes	FACU	Prevalence Index	c = B/A = 3	3.8		
3			ver	☐ 1 - Rapid Te ☐ 2 - Dominan ☐ 3 - Prevalen ☐ 4 - Morpholo	nce Test is > 5 nce Index is ≤ ogical Adapta Remarks or or Non-Vascula Hydrophytic \ dric soil and w	ohytic Veg 50% 3.0¹ tions¹ (Pr n a separa r Plants¹ Vegetatio vetland hy	petation rovide sup ate sheet) n¹ (Explai	n)
1		_ = Total Co	ver	Hydrophytic Vegetation Present?	Yes	s 🗆	No 🛚	
Remarks:				1				

		ribe to the o	depth neede	ed to document the		or confirm the ab	sence o	of indicators.)	
Depth (inches)	Matrix Color (moist)	%	Color (m	oist) Redox Featu	<u>ures</u> Type¹	Loc ²		Texture	Remarks
0-6	2.5Y 3/2	100	,	•				Silt loam	
6-16	2.5Y 4/3	100						Silt loam	
0.0									
1T C C	Damaantustian D	Danistian I	OM Daduca	d Matrix CC Cavana	d Ct	d Canad Casina	21 5	N. Dane Lining M	1. Matrix
				d Matrix, CS=Covere		d Sand Grains.		PL=Pore Lining, N	
-		plicable to		nless otherwise not	ied.)				atic Hydric Soils ³ :
	sol (A1) Epipedon (A2)			Sandy Redox (S5) Stripped Matrix (S6)				m Muck (A10) ed Parent Materia	I (TE2)
	Histic (A3)			Loamy Mucky Minera	al (F1) (exc	ent MIRA 1)		ery Shallow Dark	
	gen Sulfide (A4)			Loamy Gleyed Matrix		opt were i)		her (Explain in Re	` ,
,	ted Below Dark S	Surface (A11		Depleted Matrix (F3)			_	(=,,p,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	oao,
	Dark Surface (A1		,	Redox Dark Surface			³ Indica	tors of hydrophyti	c vegetation and
□ Sandy	/ Mucky Mineral (S1)		Depleted Dark Surface	ce (F7)				ust be present, unless
☐ Sandy	Gleyed Matrix (S	54)		Redox Depressions ((F8)		dist	turbed or problem	atic.
Restrictive	E Layer (if presei	nt):							
Type:						Hydric soil		Yes □	No 🛛
1	('a ab a a)					present?		103 🗀	110 23
Depth	(inches):								
Remarks:									
HYDROLO	OGY								
	lydrology Indicat	tors:							
	dicators (minimum		uired: check	all that apply)			Secon	dary Indicators (2	or more required)
	ce water (A1)			Water-Stained Lea	ves (excep	t MLRA 1, 2, 4A	1 1		eaves (B9) (MLRA 1,
J	Nater Table (A2)			& 4B) (B9)			_	2, 4A & 4B)	
	ation (A3)			Salt Crust (B11)	(5.46)			Drainage Pattern	
	Marks (B1)	,		Aquatic Invertebrat	, ,			Dry-Season Wate	
	nent Deposits (B2)		Hydrogen Sulfide C		: D ((00)			on Aerial Imagery (C9)
	Deposits (B3)			Oxidized Rhizosphe	_			Geomorphic Pos	` '
_	Mat or Crust (B4)			Presence of Reduction Recent Iron Reduction				Shallow Aquitard FAC-Neutral Tes	• •
	eposits (B5) ce Soil Cracks (B6	8)		Stunted or Stresse		, ,		Raised Ant Mour	· ,
	ation Visible on A	•		Other (explain in re		I) (LIXIX A)		Frost-Heave Hun	
	ely Vegetated Co			Other (explain in re	ziriaiks)			1 103t-1 leave 1 luii	IIIIOONS
Field Obse			(20)						
Surface Wa	ater Present?	Yes □	No ⊠	Depth (in): -					
Water Tabl	le Present?	Yes □	No ⊠	Depth (in):		Wetland Hyd Present		Yes	□ No ⊠
Saturation	Present?	Yes □	No ⊠	Depth (in):			-		
(includes c	apillary fringe)			,					
Describe R	Recorded Data (st	ream gauge	, monitoring	well, aerial photos, p	revious ins	pections), if availa	able:		
_									
Remarks:									



Project/Site: Nisqually State Park				City/	County: F	Pierce	Samp	ling date	e: <u>4-15-2</u>	2021
Applicant/Owner: Washington State Par	rks					Sta	ate: <u>WA</u> Sai	mpling P	oint: DP	-45
Investigator(s): Roen Hohlfeld and Jami	ie Sloan			Section,	Township,	Range: S	20, T16N, R04E			
Landform (hillslope, terrace, etc): Depre	ession			Local re	lief (concav	e, convex, no	one): concave		Slope (%):	5
					,			-	,	
Soil Map Unit Name: Kapowsin gravelly						'I classificatio				
Are climatic / hydrologic conditions on the					—— s □ No ((If no, explair	n in remarks.)			
Are Vegetation □, Soil □, or Hydrology □	• •		-			•	present on the site	? ⊠ Ye	s □ No	
Are Vegetation □, Soil □, or Hydrology □	-						ers in Remarks.)			
SUMMARY OF FINDINGS – Attac			ampli	,		·	,	s. etc.		
Hydrophytic Vegetation Present?	Yes 🗵	No		ng pome	. 10001101	transcoto,	portant roataro			
Hydric Soils Present?	Yes ⊠	No			the Sampl ithin a We		Yes	\boxtimes	No 🗆	
Wetland Hydrology Present?	Yes ⊠	No		W	illilli a vve	tuanu t				
Remarks: Wetland B in-pit. VEGETATION – Use scientific name	es of plants.									
Tree Stratum (Plot size: 5-m diameter) 1. Fraxinus latifolia		Absolute % Cover 20		ominant pecies? Yes	Indicator Status FACW	Number of	e Test worksheet Dominant Species BL, FACW, or FAC:		4	(A)
2.					PACVV	Total Num	ber of Dominant cross all Strata:		4	– ^(A) (B)
4.		20		Total Cov	ver	Percent of	Dominant Species BL, FACW, or FAC		100%	(A/B)
Sapling/Shrub Stratum (Plot size: 3-m dia	- ameter)						e Index workshee			(/
1. Fraxinus latifolia		20		Yes	FACW	Total % Co	over of:	Multip	ly by:	
Acer circinatum 3.		15		Yes	FAC	OBL specie FACW spe		x 1 = x 2 =		_
4.						FAC speci	es	x 3 =		
5		25		Total Ca		FACU spec		x 4 =		
Herb Stratum (Plot size: 1-m diameter)	-	35	_ =	Total Cov	ver	UPL specie Column To		_ x 5 = (A)		— (B)
4 Olevania manfaliata		5		Yes	FAC		e Index = B/A =	()		,
3. 4. 5. 6. 7. 8. 9. 10. 11.					ver	☐ 1 - Ra ☐ 2 - Do ☐ 3 - Pr ☐ 4 - Mo ☐ da ☐ 5 - Wo ☐ Proble ¹Indicators	pphytic Vegetation apid Test for Hydropominance Test is > evalence Index is strophological Adaptata in Remarks or oetland Non-Vasculate matic Hydrophytic of hydric soil and valess disturbed or person apid Test Index of Pydric Soil and valess disturbed or person apid Test Index of Pydric Soil and Valess disturbed or person apid Test Index of Pydric Soil and Valess disturbed or person apid Test Index of Pydric Soil and Valess disturbed or person apid Test Index of Pydric Soil and Vales Index of Pydric Soil Index of Pydric Index of Pydric Index of Pydric Index of Pydric Index of Pydric Index of Pydric Index of Pydric Index of Pydric Index of Pydric Index of Pydric Index of Pydric Index of Pydric Index of Pydric Index of Pydric Index of Pydric Index o	phytic Ve 50% ≤ 3.0¹ ations¹ (Fon a sepa ar Plants Vegetati wetland h	Provide suparate sheet) on1 (Explainydrology n	in)
Woody Vine Stratum (Plot size: 3-m diam 1. 2. % Bare Ground in Herb Stratum: 95			_ =	Total Cov	ver	Hydroph Vegetation Present?	on Ye	s 🗵	No 🗆]
Remarks:	,					<u>I</u>				

		ribe to the	depth neede			or confirm the al	bsence	of indicators.)		
Depth (inches)	Matrix Color (moist)	%	Color (m		ox Features % Type	e ¹ Loc	2	Texture	Rer	marks
0-8	2.5Y 3/2	100	00101 (111	10101)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			Sandy silt	1101	Harto
0-6	2.51 3/2	100						loam		
8-17	2.5Y 3/2	95	10YR 4	4/6	5 C	M		Sandy silt loam		
								IOaiii		
¹Type: C=0	Concentration, D=	:Depletion.	RM=Reduce	d Matrix. CS=	Covered or Coate	ed Sand Grains.	² Loc:	PL=Pore Lining,	M=Matrix.	
	il Indicators: (Ap			•				tors for Probler		c Soils ³ :
_	sol (A1)	,p	•	Sandy Redox	•			cm Muck (A10)		
	Epipedon (A2)			Stripped Matr	` '			ed Parent Mater	ial (TF2)	
	Histic (A3)			Loamy Mucky	Mineral (F1) (ex	cept MLRA 1)	□ V	ery Shallow Darl	k Surface (T	F12)
	gen Sulfide (A4)			Loamy Gleye				other (Explain in	Remarks)	
	ted Below Dark S			Depleted Mat			31			
	Dark Surface (A1 Mucky Mineral (Redox Dark S	k Surface (F6)			ators of hydrophy etland hydrology		
	y Gleyed Matrix (S			Redox Depre	, ,			sturbed or proble		oon, anooc
	e Layer (if prese	•			()			<u> </u>		
	e Layer (II preser	ii.j.				Hydric soi	l	F	.	
Type:						present?		Yes 2	⊠ No	Ш
Depth	(inches):									
Remarks:										
HYDROL	0CV									
r	lydrology Indicat	tore:								
	dicators (minimum		uired: check	all that apply)		Seco	ndary Indicators	(2 or more r	equired)
	ce water (A1)		-			pt MLRA 1, 2, 4A		Water-Stained	`	' '
	Water Table (A2)			& 4B) (B9)	iod Edditoo (Oxeo	pt III.2.0 (1, 2, 1)		2, 4A & 4B)	200100 (20)	, (,
⊠ Satura	ation (A3)			Salt Crust (B11)			Drainage Patte	rns (B10)	
	Marks (B1)			•	ertebrates (B13)			Dry-Season Wa		
	nent Deposits (B2)			Sulfide Odor (C1)			Saturation Visib		Imagery (C9)
	Deposits (B3)				nizospheres along	• , ,		Geomorphic Po		
_	Mat or Crust (B4) Deposits (B5)				f Reduced Iron (C Reduction in Tille	,		Shallow Aquita FAC-Neutral Te		
	ce Soil Cracks (B6	6)			Stressed Plants (I	` ,		Raised Ant Mo	` '	RR A)
	ation Visible on A	,			ain in remarks)	31) (= 111171)		Frost-Heave Hu	, , ,	
	ely Vegetated Co	Ū	, ,	` '	,					
Field Obse	ervations:									
Surface W	ater Present?	Yes □	No ⊠	Depth (in):	-	Watland Hyd	Irology			
Water Tab	le Present?	Yes ⊠	No 🗆	Depth (in):	7" BSG	Wetland Hyd Present	0,	Yes	s 🛛 N	lo 🗌
Saturation		Yes ⊠	No □	Depth (in):	0" BSG					
	apillary fringe)	room cove	monitoris -	المسال ممتنما المسا	notos provious in	apostions) if a :=:	loble:			
Describe R	kecorded Data (St	ream gauge	e, monitoring	weii, aeriai pi	iolos, previous in	spections), if avail	abie:			
Remarks:										



Project/Site: Nisqually State Park				City/	County: F	Pierce	Samp	ling date:	4-15-2	2021
Applicant/Owner: Washington State Par	ks					State	e: <u>WA</u> Sar	mpling Po	oint: DP	-46
Investigator(s): Roen Hohlfeld and Jami	e Sloan			Section,	Township,	Range: S20	, T16N, R04E			
Landform (hillslope, terrace, etc): Toe of	of slope			Local re	lief (concav	e, convex, none	e): concave	S	lope (%):	2
Subregion (LRR): A Lat: -			Lon	ıg: -	•		Datum:	-	,	•
Soil Map Unit Name: Kapowsin gravelly	v ashv loam. () to 6 perc	_		NW	I classification:				
Are climatic / hydrologic conditions on the										
Are Vegetation \square , Soil \square , or Hydrology \square			-				esent on the site	? ⊠ Yes	. □ No	
Are Vegetation □, Soil □, or Hydrology □	-					ain any answers				
SUMMARY OF FINDINGS – Attac			ampli			•		s, etc.		
Hydrophytic Vegetation Present?	Yes 🗆	No					·			
Hydric Soils Present?	Yes ⊠	No			the Sampl ithin a We		Yes		No 🛛	
Wetland Hydrology Present?	Yes \square	No	\boxtimes	"	itimii a vvo	, ciaria :				
Remarks:										
VEGETATION – Use scientific name	es of plants.	••••				Dtu	T 4			
Tree Stratum (Plot size: 5-m diameter)		Absolute % Cover		ominant oecies?	Indicator Status		Test worksheet: ominant Species		0	
Pseudotsuga menziesii		90		Yes	FACU	that are OBL	, FACW, or FAC:		2	(A)
Populus balsamifera 3.		15		No	FAC	Total Numbe Species Acro	r of Dominant oss all Strata:		6	(B)
4.						1	ominant Species		33%	_ (-)
		105	=	Total Cov	ver	that are OBL	, FACW, or FAC:			(A/B)
Sapling/Shrub Stratum (Plot size: 3-m dia	ımeter)	40		V	FACIL		Index workshee			
Gaultheria shallon Acer circinatum		10 10		Yes Yes	FACU FAC	Total % Cove OBL species		$\frac{Multiply}{x 1 = }$	<u>y by:</u> -	
3. Frangula purshiana		5		Yes	FAC	FACW specie	es <u>-</u>	x 2 =	_	_
4. 5.						FAC species FACU specie		x 3 = x 4 =	45 780	_
J		25	= .	Total Cov	ver	UPL species		x 5 =	- 700	_
Herb Stratum (Plot size: 1-m diameter)	•		,			Column Tota	ls: 225	(A)	825	(B)
Polystichum munitum Mahonia nervosa		60 35		Yes Yes	FACU FACU	Prevalence I	ndex = B/A =	3.7		
3.							nytic Vegetation			
4.							d Test for Hydrop inance Test is >	. ,	getation	
5. 6.							alence Index is ≤			
7							phological Adapta			
8. 9.							in Remarks or o and Non-Vascula		,	1
10.							atic Hydrophytic			n)
11							hydric soil and was disturbed or p			nust be
Woody Vine Stratum (Plot size: 3-m diam	neter)	95	_ =	Total Cov	ver	present, unie	ss disturbed or p	robiemai	IC.	-
1	,					Hydrophyt				_
2				Total Cov	uor.	Vegetation Present?	Ye	s 🗆	No 🛚	j
% Bare Ground in Herb Stratum: 10	-		_ =	TOLAI COV	vei	riesenti				
Remarks:						•				

Depth			•			or committee at	bsence of indicators.)
(inches)	Matrix Color (moist)	%	С	olor (mo	Redox Features pist) % Typ	e ¹ Loc ²	² Texture Remarks
0-8	10YR 3/2	100		`	, ,		Sandy silt loam
8-17	10YR 3/2	95		7.5YR 3	/4 5 C	M	Sandy silt loam
¹Type: C=C	oncentration, D=	Depletion	ı, RM=F	Reduced	Matrix, CS=Covered or Coat	ed Sand Grains.	² Loc: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Ap	plicable	to all L	RRs, un	less otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
☐ Histos	, ,				Sandy Redox (S5)		□ 2cm Muck (A10)
	Epipedon (A2)				Stripped Matrix (S6)		Red Parent Material (TF2)
	Histic (A3)				oamy Mucky Mineral (F1) (exoamy Gleyed Matrix (F2)	(cept MLRA 1)	□ Very Shallow Dark Surface (TF12)□ Other (Explain in Remarks)
	gen Sulfide (A4) ed Below Dark S	Surface (A	(11)		Depleted Matrix (F3)		☐ Other (Explain in Remarks)
	Dark Surface (A1		,		Redox Dark Surface (F6)		³ Indicators of hydrophytic vegetation and
□ Sandy	Mucky Mineral (S1)			Depleted Dark Surface (F7)		wetland hydrology must be present, unless
☐ Sandy	Gleyed Matrix (S4)		□ R	Redox Depressions (F8)	_	disturbed or problematic.
Restrictive	Layer (if prese	nt):					
Type:						Hydric soil	l Yes ⊠ No □
	(inches):					present?	.00 🚨 🗀
Берит	(inches):						
Remarks:							
HYDROLO							
	ydrology Indica icators (minimun						
		n of one re	equired:	check a	all that apply)		Secondary Indicators (2 or more required)
☐ Surfac	e water (A1)	n of one re	equired:		,	ept MLRA 1, 2, 4A	Water-Stained Leaves (R9) (MLRA 1
☐ High W	e water (A1) Vater Table (A2)	n of one r	equired:		Water-Stained Leaves (exc. & 4B) (B9)	ept MLRA 1, 2, 4A	Water-Stained Leaves (B9) (MLRA 1, 2, 4A & 4B)
	e water (A1) Vater Table (A2)	n of one r	equired:		Water-Stained Leaves (exc. & 4B) (B9) Salt Crust (B11)	ept MLRA 1, 2, 4A	Water-Stained Leaves (B9) (MLRA 1, 2, 4A & 4B) Drainage Patterns (B10)
☐ High W☐ Satura☐ Water	e water (A1) Vater Table (A2) tion (A3) Marks (B1)		equired:		Water-Stained Leaves (exc. & 4B) (B9) Salt Crust (B11) Aquatic Invertebrates (B13)		Water-Stained Leaves (B9) (MLRA 1, 2, 4A & 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
☐ High V☐ Satura☐ Water☐ Sedim	e water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2		equired:		Water-Stained Leaves (exc. & 4B) (B9) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1)		Water-Stained Leaves (B9) (MLRA 1, 2, 4A & 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9)
☐ High W ☐ Satura ☐ Water ☐ Sedim ☐ Drift D	e water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3))	equired:		Water-Stained Leaves (exc. & 4B) (B9) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along	g Living Roots (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A & 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2)
High V Satura Water Sedim Drift D Algal N	e water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Vat or Crust (B4))	equired:		Water-Stained Leaves (exc. & 4B) (B9) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Presence of Reduced Iron (g Living Roots (C3)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A & 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3)
High W Satura Water Sedim Drift D Algal N	e water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Vat or Crust (B4) eposits (B5))	equired:		Water-Stained Leaves (exc. & 4B) (B9) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Presence of Reduced Iron (Recent Iron Reduction in Til	g Living Roots (C3) C4) led Soils (C6)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A & 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)
High W Satura Water Sedim Drift D Algal N Iron De Surface	e water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Vat or Crust (B4)	6)			Water-Stained Leaves (exc. & 4B) (B9) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Presence of Reduced Iron (g Living Roots (C3) C4) led Soils (C6)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A & 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3)
High W Satura Water Sedim Drift D Algal M Iron De Surfac	e water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Vat or Crust (B4) eposits (B5) e Soil Cracks (B) 6) erial Imaç	gery (B7)	Water-Stained Leaves (exc. & 4B) (B9) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Presence of Reduced Iron (Recent Iron Reduction in Til Stunted or Stressed Plants	g Living Roots (C3) C4) led Soils (C6)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A & 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)
High W Satura Water Sedim Drift D Algal M Iron De Surfac	e water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B tion Visible on A) 6) erial Imaç	gery (B7)	Water-Stained Leaves (exc. & 4B) (B9) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Presence of Reduced Iron (Recent Iron Reduction in Til Stunted or Stressed Plants	g Living Roots (C3) C4) led Soils (C6)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A & 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)
High W Satura Water Sedim Drift D Algal N Iron De Surfac Inunda Sparse	e water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B tion Visible on A) 6) erial Imaç	gery (B7 urface (B		Water-Stained Leaves (exc. & 4B) (B9) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Presence of Reduced Iron (Recent Iron Reduction in Til Stunted or Stressed Plants	g Living Roots (C3) C4) led Soils (C6) (D1) (LRR A)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A & 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
High W Satura Water Sedim Drift D Algal N Iron De Surfac Inunda Sparse	e water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B tion Visible on A ely Vegetated Co rvations:	6) erial Imag encave Su	gery (B7 Irface (B)	Water-Stained Leaves (exc. & 4B) (B9) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Presence of Reduced Iron (Recent Iron Reduction in Til Stunted or Stressed Plants Other (explain in remarks)	g Living Roots (C3) C4) led Soils (C6)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A & 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
High W Satura Water Sedim Sedim Algal M Iron De Surface Inunda Sparse Field Obse Surface Water Table Saturation I	e water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Vat or Crust (B4) eposits (B5) e Soil Cracks (B tion Visible on A ely Vegetated Co rvations: eter Present? e Present?) 6) erial Imaç incave Su Yes □	gery (B7 urface (B No)	Water-Stained Leaves (exc. & 4B) (B9) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Presence of Reduced Iron (Recent Iron Reduction in Til Stunted or Stressed Plants Other (explain in remarks) Depth (in):	g Living Roots (C3) C4) led Soils (C6) (D1) (LRR A) Wetland Hyd	Water-Stained Leaves (B9) (MLRA 1, 2, 4A & 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
High W Satura Water Sedim Drift D Algal M Iron De Surfac Inunda Sparse Field Obse Surface Wa Water Table Saturation I (includes ca	e water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B tion Visible on A ely Vegetated Co rvations: ater Present? e Present? epillary fringe)	6) erial Imagencave Surves Yes Yes Yes Yes	gery (B7 Irface (B No No) (88)	Water-Stained Leaves (exc. & 4B) (B9) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres alone Presence of Reduced Iron (Recent Iron Reduction in Til Stunted or Stressed Plants Other (explain in remarks) Depth (in):	g Living Roots (C3) C4) led Soils (C6) (D1) (LRR A) Wetland Hyd Present	Water-Stained Leaves (B9) (MLRA 1, 2, 4A & 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 drology t? Yes No
High W Satura Water Sedim Drift D Algal M Iron De Surfac Inunda Sparse Field Obse Surface Wa Water Table Saturation I (includes ca	e water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B tion Visible on A ely Vegetated Co rvations: ater Present? e Present? epillary fringe)	6) erial Imagencave Surves Yes Yes Yes Yes	gery (B7 Irface (B No No) (88)	Water-Stained Leaves (exc. & 4B) (B9) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Presence of Reduced Iron (Recent Iron Reduction in Til Stunted or Stressed Plants Other (explain in remarks) Depth (in):	g Living Roots (C3) C4) led Soils (C6) (D1) (LRR A) Wetland Hyd Present	Water-Stained Leaves (B9) (MLRA 1, 2, 4A & 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 drology t? Yes No
High W Satura Water Sedim Drift D Algal M Iron De Surfac Inunda Sparse Field Obse Surface Wa Water Table Saturation I (includes ca	e water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B tion Visible on A ely Vegetated Co rvations: ater Present? e Present? epillary fringe)	6) erial Imagencave Surves Yes Yes Yes Yes	gery (B7 Irface (B No No) (88)	Water-Stained Leaves (exc. & 4B) (B9) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres alone Presence of Reduced Iron (Recent Iron Reduction in Til Stunted or Stressed Plants Other (explain in remarks) Depth (in):	g Living Roots (C3) C4) led Soils (C6) (D1) (LRR A) Wetland Hyd Present	Water-Stained Leaves (B9) (MLRA 1, 2, 4A & 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 drology t? Yes No
High W Satura Water Sedim Drift D Algal M Iron De Surfac Inunda Sparse Field Obse Surface Wa Water Table Saturation I (includes ca	e water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B ation Visible on A ely Vegetated Co rvations: ter Present? e Present? epillary fringe) ecorded Data (st	6) erial Imaç incave Su Yes Yes Yes Team gau	gery (B7 rrface (B No No No)	Water-Stained Leaves (exc. & 4B) (B9) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres alone Presence of Reduced Iron (Recent Iron Reduction in Til Stunted or Stressed Plants Other (explain in remarks) Depth (in):	g Living Roots (C3) C4) led Soils (C6) (D1) (LRR A) Wetland Hyd Present	Water-Stained Leaves (B9) (MLRA 1, 2, 4A & 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 drology t? Yes No
High W Satura Water Sedim Drift D Algal M Iron De Surface Inunda Sparse Field Obse Surface Water Table Saturation If (includes ca	e water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) e Soil Cracks (B ation Visible on A ely Vegetated Co rvations: ter Present? e Present? epillary fringe) ecorded Data (st	6) erial Imaç incave Su Yes Yes Yes Team gau	gery (B7 rface (B No No No)	Water-Stained Leaves (exc. & 4B) (B9) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Presence of Reduced Iron (Recent Iron Reduction in Til Stunted or Stressed Plants Other (explain in remarks) Depth (in): Depth (in): Depth (in):	g Living Roots (C3) C4) led Soils (C6) (D1) (LRR A) Wetland Hyd Present	Water-Stained Leaves (B9) (MLRA 1, 2, 4A & 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 drology t? Yes No



Project/Site: Nisqually State Park			City/	County: F	Pierce	Samp	ling date	e: <u>4-20-2</u>	2021
Applicant/Owner: Washington State Parks					State:	WA Sar	mpling P	oint: DP	-47
Investigator(s): Roen Hohlfeld and Jamie Sloan			Section,	Township,	Range: S20, T1	6N, R04E			
Landform (hillslope, terrace, etc): Depression			Local re	lief (concav	e, convex, none):	concave	S	Slope (%):	5
Subregion (LRR): A Lat: -			ıg: -		•	Datum:	_		•
Soil Map Unit Name: Kapowsin gravelly ashy loam,		•			/I classification:	none			
Are climatic / hydrologic conditions on the site typical for					_				
Are Vegetation □, Soil □, or Hydrology □ significantly		. you.			cumstances" presei		? ⊠ Ye:	s 🗆 No	
Are Vegetation □, Soil □, or Hydrology □ naturally pro					ain any answers in				
SUMMARY OF FINDINGS — Attach site map s		ampli					s, etc.		
Hydrophytic Vegetation Present? Yes ⊠					·				
Hydric Soils Present? Yes ⊠	No			the Sampl ithin a We		Yes	\boxtimes	No 🗆	
Wetland Hydrology Present? Yes ⊠	No			itiiii a vve	ruanu:				
Remarks: Wetland YY in-pit. VEGETATION — Use scientific names of plants.									
TECETATION OSC SCIENTIFIC NAMES OF PLANS.	Absolute	Do	ominant	Indicator	Dominance Tes	t worksheet:	<u> </u>		
Tree Stratum (Plot size: 5-m diameter)	% Cover	Sp	oecies?	Status	Number of Domin			4	(4)
Populus balsamifera Fraxinus latifolia	20 15		Yes Yes	FACW	that are OBL, FA Total Number of				_ (A)
3.					Species Across a			4	(B)
4	35	= .	Total Cov	ver	Percent of Domir that are OBL, FA			100%	(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diameter)					Prevalence Inde				(, , _ /
Physocarpus capitatus	10		Yes	FACW	Total % Cover of		<u>Multip</u>	ly by:	
Fraxinus latifolia 3.	5		Yes	FACW	OBL species FACW species		x 1 = x 2 =		_
4.					FAC species		x 2 = x 3 =		_
5.					FACU species		x 4 =		_
	15	_ = .	Total Cov	ver	UPL species		x 5 =		— (5)
Herb Stratum (Plot size: 1-m diameter) 1.					Column Totals:		(A)		(B)
2.					Prevalence Index				
3.					Hydrophytic	Ū			
4 5					☐ 1 – Rapid Te ☑ 2 – Dominar			egetation	
6.					☐ 3 – Prevaler				
7. 8.					☐ 4 – Morphole	ogical Adapta Remarks or o			
9.					□ 5 – Wetland				!
10.					☐ Problematic	Hydrophytic	Vegetati	on¹ (Explai	n)
11					¹ Indicators of hyd present, unless of				nust be
Woody Vine Stratum (Plot size: 3-m diameter)		_ =	Total Cov	ver	present, unless t	iisturbed or p	TODICITIA		
1					Hydrophytic		_		_
2	-		Total Cov	/Ar	Vegetation Present?	Ye	s 🏻	No 🗆	İ
% Bare Ground in Herb Stratum: 100			Total Cov	vei	i resent:				
Remarks:									

	scription: (Descr	ibe to the d	epth neede			or confirm the at	sence	of indicators.)	
Depth (inches)	Matrix Color (moist)	%	Color (m		ox Features % Type	·1 Loc²	2	Texture	Remarks
0-5	10YR 2/1	100	00101 (111	olot)	у турс			Loam	High OM
									- Ingir Oivi
5-10	10YR 2/1	100						Loamy sand	
10-16	10YR 4/2	90	10YR 3	3/4 1	0 C	M		Loamy sand	
¹Type: C=0	Concentration, D=	Depletion, R	M=Reduced	d Matrix, CS=	Covered or Coate	ed Sand Grains.	² l oc: F	PL=Pore Lining, M	∕I=Matrix.
	il Indicators: (Ap					d Carla Craino.			atic Hydric Soils ³ :
-	sol (A1)	,		Sandy Redox	-			cm Muck (A10)	
☐ Histic	Epipedon (A2)		□ ;	Stripped Matr	ix (S6)		□ R	ed Parent Materia	al (TF2)
	Histic (A3)				Mineral (F1) (exc	cept MLRA 1)		ery Shallow Dark	. ,
,	ogen Sulfide (A4)	fa.a.a (A.4.4)		Loamy Gleye	` '		□ O	ther (Explain in R	emarks)
	eted Below Dark S Dark Surface (A1	, ,		Depleted Mat Redox Dark S			³ Indica	ators of hydrophyti	ic vegetation and
	y Mucky Mineral (\$	•			k Surface (F7)				nust be present, unless
	y Gleyed Matrix (S			Redox Depre				turbed or problem	
Restrictive	e Layer (if preser	nt):							
Type:						Hydric soil		Yes 🏻	No 🗆
	(inches):					present?			
Ворин	(mones).								
Remarks:									
HYDROL	OGY								
	lydrology Indicat dicators (minimum		iired: check	all that annly)			Secor	ndany Indicators (3	2 or more required)
	ce water (A1)	i oi one requ	illed. Crieck			ot MI DA 1 2 4A			
	Water Table (A2)			**************************************	ieu Leaves (exce	pt MLRA 1, 2, 4A		2, 4A & 4B)	eaves (B9) (MLRA 1,
	ation (A3)			Salt Crust (B11)			Drainage Pattern	ns (B10)
	Marks (B1)				ertebrates (B13)			Dry-Season Wat	
	nent Deposits (B2))		Hydrogen S	Sulfide Odor (C1)			Saturation Visible	e on Aerial Imagery (C9)
	Deposits (B3)				nizospheres along			Geomorphic Pos	` '
_	Mat or Crust (B4)				f Reduced Iron (C			Shallow Aquitard	• •
	eposits (B5) ce Soil Cracks (B6	:)			Reduction in Tille Stressed Plants (D			FAC-Neutral Tes	it (D5) nds (D6) (LRR A)
	ation Visible on A	•			ain in remarks)	OT) (LKK A)		Frost-Heave Hur	, , , ,
	ely Vegetated Cor			Other (expir	am m romano,			1 100t Floave Flai	imooko
	ervations:		, ,						
Surface W	ater Present?	Yes □	No 🗵	Depth (in):	_				
	le Present?	Yes □	No ⊠	Depth (in):	_	Wetland Hyd		Yes	⊠ No □
				,	5" 500	Present	ſ		
Saturation (includes of	Present? apillary fringe)	Yes ⊠	No 🗆	Depth (in):	5" BSG				
	Recorded Data (str	eam gauge.	monitorina	well, aerial pl	notos, previous ins	spections), if avail	able:		
		3-1-90,	9	. , pi	, բ	, ,			
Remarks:									
1									



Applicant/Owner: Washington State Parks Name	
Landform (hillslope, terrace, etc): Hillslope	5
Landform (hillslope, terrace, etc): Hillslope	5
Subregion (LRR): A Lat: - Long: - Datum: - Soil Map Unit Name: Kapowsin gravelly ashy loam, 0 to 6 percent slopes	
Soil Map Unit Name: Kapowsin gravelly ashy loam, 0 to 6 percent slopes NWI classification: none Are climatic / hydrologic conditions on the site typical for this time of year?	
Are climatic / hydrologic conditions on the site typical for this time of year?	
Are Vegetation □, Soil □, or Hydrology □ significantly disturbed? Are "Normal Circumstances" present on the site? ☑ Yes □ No Are Vegetation □, Soil □, or Hydrology □ naturally problematic? (If needed, explain any answers in Remarks.)	
Are Vegetation □, Soil □, or Hydrology □ naturally problematic? (If needed, explain any answers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.	
Hydrophytic Vegetation Present? Yes ⊠ No □	
Hydric Soils Present? Yes □ No ☒ Is the Sampled Area within a Wetland? Yes □ No ☒	
Wetland Hydrology Present? Yes □ No ☒	
Remarks: Click here to enter text. VEGETATION – Use scientific names of plants.	
Absolute Dominant Indicator Dominance Test worksheet:	
Tree Stratum (Plot size: 5-m diameter) % Cover Species? Status Number of Dominant Species that are OBL, FACW, or FAC:	(A)
2 Total Number of Dominant 3 Species Across all Strata:	(B)
4. Percent of Dominant Species that are OBL, FACW, or FAC:	(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diameter) Prevalence Index worksheet:	
1. Acer circinatum 45 Yes FAC Total % Cover of: Multiply by:	
2. Symphoricarpos albus 5 No FACU OBL species x 1 =	_
3. Corylus cornuta 3 No FACU FACW species x 2 = 4. Oemleria cerasiformis trace No FACU FAC species x 3 =	_
5. FACU species x 4 =	_
= Total Cover	_
Herb Stratum (Plot size: 1-m diameter) Column Totals: (A)	(B)
1. <u>Viola sp.</u> 40 <u>Yes FAC*</u> 2. <u>Carex deweyana</u> 15 <u>Yes FAC</u> Prevalence Index = B/A =	
3. Vancouveria hexandra 5 No NL** Hydrophytic Vegetation Indicators:	
4	
5 \overline 2 - Dominance Test is > 50%	
6.	ortina
7 4 - Morphological Adaptations¹ (Provide supplement) 8 data in Remarks or on a separate sheet)	orting
9.	
10 Problematic Hydrophytic Vegetation¹ (Explain	
11	ust be
Woody Vine Stratum (Plot size: 3-m diameter)	
1. Hydrophytic	
2. Vegetation Yes No 🗆	
- = Total Cover Present?	
·	
Remarks: *Assumed FAC. **Non-listed plants assumed to be UPL.	

Profile Description: (Describe to the depth needed to document the indicator	or confirm the absence of indicators.)
Depth Matrix Redox Features (inches) Color (moist) % Color (moist) % Typ	e ¹ Loc ² Texture Remarks
0-5 10YR 2/1 100	Sandy loam
5-9 10YR 2/1 100	Loamy sand
9-14 10YR 2/2 100	Loamy sand
314 1011(2/2 100	Loanly Sand
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coat	ed Sand Grains. ² Loc: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils ³ :
☐ Histosol (A1) ☐ Sandy Redox (S5)	□ 2cm Muck (A10)
☐ Histic Epipedon (A2) ☐ Stripped Matrix (S6)	□ Red Parent Material (TF2)
☐ Black Histic (A3) ☐ Loamy Mucky Mineral (F1) (ex	
☐ 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)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless
□ Sandy Mucky Mineral (S1) □ Depleted Dark Surface (F7) □ Sandy Gleyed Matrix (S4) □ Redox Depressions (F8)	disturbed or problematic.
Restrictive Layer (if present):	
Type:	Hydric soil Yes □ No ☒
	present?
Depth (inches):	
Remarks:	
Remarks:	
Remarks:	
Remarks: HYDROLOGY	
HYDROLOGY Wetland Hydrology Indicators:	Secondary Indicators (2 or more required)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply)	Secondary Indicators (2 or more required)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Surface water (A1) Water-Stained Leaves (exce	ept MLRA 1, 2, 4A Water-Stained Leaves (B9) (MLRA 1,
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Surface water (A1) High Water Table (A2) Water-Stained Leaves (excellent) By	water-Stained Leaves (B9) (MLRA 1, 2, 4A & 4B)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Surface water (A1) High Water Table (A2) Saturation (A3) Water-Stained Leaves (exect & 4B) (B9) Saturation (B11)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A & 4B) □ Drainage Patterns (B10)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Surface water (A1) High Water Table (A2) Saturation (A3) Saturation (B11)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A & 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Surface water (A1) High Water Table (A2) Saturation (A3) Saturation (A3) Water-Stained Leaves (excellent) 4 4B) (B9) Aguatic Invertebrates (B13)	water-Stained Leaves (B9) (MLRA 1, 2, 4A & 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Surface water (A1) High Water Table (A2) Saturation (A3) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) HYDROLOGY Water Apply Water Apply Saturation (A1) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Presence of Reduced Iron (C	Water-Stained Leaves (B9) (MLRA 1, 2, 4A & 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Living Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Surface water (A1) High Water Table (A2) Saturation (A3) Saturation (A3) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Wetland Hydrogen Sulfide Odor (C1) Presence of Reduced Iron (C1) Recent Iron Reduction in Till	Water-Stained Leaves (B9) (MLRA 1, 2, 4A & 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Living Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) led Soils (C6) FAC-Neutral Test (D5)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Surface water (A1) High Water Table (A2) Saturation (A3) Saturation (A3) Saturation (B1) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Drift Deposits (B3) Algal Mat or Crust (B4) Fresence of Reduced Iron (C1) Iron Deposits (B5) Surface Soil Cracks (B6) Surface Soil Cracks (B6)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A & 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Living Roots (C3) □ Geomorphic Position (D2) C4) □ Shallow Aquitard (D3) led Soils (C6) □ FAC-Neutral Test (D5) D1) (LRR A) □ Raised Ant Mounds (D6) (LRR A)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Surface water (A1) High Water Table (A2) Saturation (A3) Saturation (A3) Saturation (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Fresence of Reduced Iron (C1) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Water Stained Leaves (excellence (excellence) Water Stained Leaves (excellence) ### Audit Invertebrates (B13) Oxidized Rhizospheres along Recent Iron Reduction in Till Surface Soil Cracks (B6) Other (explain in remarks)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A & 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Living Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) led Soils (C6) FAC-Neutral Test (D5)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Surface water (A1) High Water Table (A2) Saturation (A3) Saturation (A3) Saturation (B1) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Drift Deposits (B3) Algal Mat or Crust (B4) Fresence of Reduced Iron (C1) Iron Deposits (B5) Surface Soil Cracks (B6) Surface Soil Cracks (B6)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A & 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Living Roots (C3) □ Geomorphic Position (D2) C4) □ Shallow Aquitard (D3) led Soils (C6) □ FAC-Neutral Test (D5) D1) (LRR A) □ Raised Ant Mounds (D6) (LRR A)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Surface water (A1) High Water Table (A2) Saturation (A3) Saturation (A3) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Water-Stained Leaves (exect & 4B) Water Stained Leaves (exect & 4B) Wate	Water-Stained Leaves (B9) (MLRA 1, 2, 4A & 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Living Roots (C3) □ Geomorphic Position (D2) C4) □ Shallow Aquitard (D3) led Soils (C6) □ FAC-Neutral Test (D5) D1) (LRR A) □ Raised Ant Mounds (D6) (LRR A)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A & 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Q Living Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) led Soils (C6) FAC-Neutral Test (D5) D1) (LRR A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Surface water (A1) Water-Stained Leaves (excess 4B) (B9) Saturation (A3) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Drift Deposits (B2) Hydrogen Sulfide Odor (C1) Drift Deposits (B3) Oxidized Rhizospheres along Algal Mat or Crust (B4) Presence of Reduced Iron (C1) Iron Deposits (B5) Recent Iron Reduction in Till Surface Soil Cracks (B6) Stunted or Stressed Plants (C2) Inundation Visible on Aerial Imagery (B7) Other (explain in remarks) Field Observations: Surface Water Present? Yes No Depth (in): Water Table Present? Yes No Depth (in): Depth (in): C2	Wetland Hydrology Water-Stained Leaves (B9) (MLRA 1, 2, 4A & 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
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply)	Water-Stained Leaves (B9) (MLRA 1, 2, 4A & 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Q Living Roots (C3) Geomorphic Position (D2) Shallow Aquitard (D3) led Soils (C6) FAC-Neutral Test (D5) D1) (LRR A) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Surface water (A1) Water-Stained-Leaves (excellenge 4B) (B9) Saturation (A3) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Drift Deposits (B2) Hydrogen Sulfide Odor (C1) Drift Deposits (B3) Oxidized Rhizospheres along Algal Mat or Crust (B4) Presence of Reduced Iron (C1) Iron Deposits (B5) Recent Iron Reduction in Till Surface Soil Cracks (B6) Stunted or Stressed Plants (Inundation Visible on Aerial Imagery (B7) Other (explain in remarks) Sparsely Vegetated Concave Surface (B8) Depth (in): Saturation Present? Yes No Depth (in): Depth (in): Saturation Present? Yes No Depth (in):	Water-Stained Leaves (B9) (MLRA 1, 2, 4A & 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Living Roots (C3) □ Geomorphic Position (D2) C4) □ Shallow Aquitard (D3) led Soils (C6) □ FAC-Neutral Test (D5) D1) (LRR A) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks Wetland Hydrology Present? Yes □ No ☑
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Surface water (A1) Water-Stained Leaves (excess 4B) (B9) Saturation (A3) Salt Crust (B11) Aquatic Invertebrates (B13) Drift Deposits (B2) Hydrogen Sulfide Odor (C1) Drift Deposits (B3) Oxidized Rhizospheres along Algal Mat or Crust (B4) Presence of Reduced Iron (C1) Iron Deposits (B5) Recent Iron Reduction in Till Surface Soil Cracks (B6) Stunted or Stressed Plants (C2) Inundation Visible on Aerial Imagery (B7) Other (explain in remarks) Sparsely Vegetated Concave Surface (B8) Depth (in): Surface Water Present? Yes No Depth (in): Saturation Present? Yes No Depth (in): S	Water-Stained Leaves (B9) (MLRA 1, 2, 4A & 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Living Roots (C3) □ Geomorphic Position (D2) C4) □ Shallow Aquitard (D3) led Soils (C6) □ FAC-Neutral Test (D5) D1) (LRR A) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks Wetland Hydrology Present? Yes □ No ☑
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) □ 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) □ Recent Iron Reduction in Till □ Surface Soil Cracks (B6) □ Inundation Visible on Aerial Imagery (B7) □ Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes □ No ☒ Depth (in): Saturation Present? Yes □ No ☒ Depth (in): Saturation Present? Yes □ No ☒ Depth (in): Saturation Present? Yes □ No ☒ Depth (in): □ Cincludes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous in	Water-Stained Leaves (B9) (MLRA 1, 2, 4A & 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Living Roots (C3) □ Geomorphic Position (D2) C4) □ Shallow Aquitard (D3) led Soils (C6) □ FAC-Neutral Test (D5) D1) (LRR A) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks Wetland Hydrology Present? Yes □ No ☑
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Surface water (A1) Water-Stained Leaves (excelled 4B) (B9) Saturation (A3) Salt Crust (B11) Aquatic Invertebrates (B13) Drift Deposits (B2) Hydrogen Sulfide Odor (C1) Drift Deposits (B3) Oxidized Rhizospheres along Algal Mat or Crust (B4) Presence of Reduced Iron (C1) Iron Deposits (B5) Recent Iron Reduction in Till Surface Soil Cracks (B6) Stunted or Stressed Plants (C2) Inundation Visible on Aerial Imagery (B7) Other (explain in remarks) Field Observations: Surface Water Present? Yes No ⊠ Depth (in): - Saturation Present? Yes No ⊠ Depth (in): - (includes capillary fringe) Surface Soil Crack? Yes No ⊠ Depth (in): - (includes capillary fringe) Surface Soil Crack? Yes No ⊠ Depth (in): - (includes capillary fringe) Surface Soil Crack? Yes No ⊠ Depth (in): - (includes capillary fringe) Surface Soil Crack? Yes No ⊠ Depth (in): - (includes capillary fringe) Surface Soil Crack? Yes No ⊠ Depth (in): - (includes capillary fringe) Surface Soil Crack? Yes No ⊠ Depth (in): - (includes capillary fringe) Yes No ⊠ Depth (in): - (includes capillary fringe) Yes No ⊠ Depth (in): - (includes capillary fringe) Yes No ⊠ Depth (in): - (includes capillary fringe) Yes Yes No ⊠ Depth (in): - (includes capillary fringe) Yes	Water-Stained Leaves (B9) (MLRA 1, 2, 4A & 4B) □ Drainage Patterns (B10) □ Dry-Season Water Table (C2) □ Saturation Visible on Aerial Imagery (C9) □ Living Roots (C3) □ Geomorphic Position (D2) C4) □ Shallow Aquitard (D3) led Soils (C6) □ FAC-Neutral Test (D5) D1) (LRR A) □ Raised Ant Mounds (D6) (LRR A) □ Frost-Heave Hummocks Wetland Hydrology Present? Yes □ No ☑



Project/Site: Nisqually State Park		City/County: F	Pierce Sampli	ing date: 4-20-2021
Applicant/Owner: Washington State Parks			State: WA Sam	npling Point: DP-49
Investigator(s): Roen Hohlfeld and Jamie Sloan		Section, Township,	Range: S20, T16N, R04E	
Landform (hillslope, terrace, etc): Depression			ve, convex, none): concave	Slope (%): 2
Subregion (LRR): A Lat:	Lor	ng: <u>-</u>	Datum:	
Soil Map Unit Name: Kapowsin gravelly ashy loam,	0 to 6 percent slo	opes NW	/I classification: none	
Are climatic / hydrologic conditions on the site typical fo	r this time of yea	r? ⊠ Yes □ No	(If no, explain in remarks.)	
Are Vegetation $\square,$ Soil $\square,$ or Hydrology \square significantly	disturbed?	Are "Normal Cire	cumstances" present on the site?	⊠ Yes □ No
Are Vegetation \square , Soil \square , or Hydrology \square naturally pro	blematic?	(If needed, expla	ain any answers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map	showing sampl	ing point locations	, transects, important features	s, etc.
Hydrophytic Vegetation Present? Yes ⊠	l No □	la tha Cama	lad Avaa	
Hydric Soils Present? Yes ⊠	l No □	Is the Samp within a We		⊠ No □
Wetland Hydrology Present? Yes ⊠	l No □			
VEGETATION – Use scientific names of plants				
<u>Tree Stratum</u> (Plot size: 5-m diameter) 1. <u>Fraxinus latifolia</u>		ominant Indicator pecies? Status FACW	Dominance Test worksheet: Number of Dominant Species that are OBL, FACW, or FAC:	3 (A)
2. 3.			Total Number of Dominant Species Across all Strata:	3 (B)
4.			Percent of Dominant Species	100%
	65 =	Total Cover	that are OBL, FACW, or FAC:	(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diameter) 1. Fraxinus latifolia	5	Yes FACW	Prevalence Index worksheet Total % Cover of:	: Multiply by:
2.			OBL species -	x 1 =
3. 4.			FACW species FAC species	x 2 = x 3 =
5.			FACU species	x 4 =
Herb Stratum (Plot size: 1-m diameter)	=	Total Cover	UPL species Column Totals:	x 5 = (B)
Carex deweyana	5	Yes FAC	Prevalence Index = B/A =	(,,)
2. 3.			Hydrophytic Vegetation	Indicators:
4.			☐ 1 – Rapid Test for Hydrop	
5. 6.			 2 – Dominance Test is > 5 3 – Prevalence Index is ≤	
7.			4 – Morphological Adapta	tions ¹ (Provide supporting
8. 9.			data in Remarks or or 5 – Wetland Non-Vascular	. ,
9			☐ Problematic Hydrophytic \	
11		Total Cover	¹ Indicators of hydric soil and w present, unless disturbed or pr	
Woody Vine Stratum (Plot size: 3-m diameter)	=	Total Cover	process, among distances of pr	obioinatio.
1			Hydrophytic Vegetation Yes	s 🛛 No 🗆
2		Total Cover	Present?) [2] NO [1]
% Bare Ground in Herb Stratum: 95				
Remarks:				

Donth	cription: (Descr Matrix	ibe to the	depth need	ed to document the indicator	or or confirm the at	sence	of indicators.)	
Depth (inches)	Color (moist)	%	Color (n		pe ¹ Loc ²	2	Texture	Remarks
0-5	10YR 2/1	100	,	,	•		Loam	High OM
5-14	10YR 2/1	100					Loom	<u> </u>
5-14	101 K 2/1	100					Loam	
1Typo: C=C	oncontration D-	Donlotion	PM-Poduce	ed Matrix, CS=Covered or Coa	atod Sand Grains	21 00: 1	PIPoro Lining MMa	triv
					alea Sana Grains.		PL=Pore Lining, M=Ma tors for Problematic I	
-		piicable to	D all LKKS, t	unless otherwise noted.) Sandy Redox (S5)			cm Muck (A10)	nyuric Solis":
	Epipedon (A2)			Stripped Matrix (S6)			ed Parent Material (TF	(2)
	Histic (A3)			Loamy Mucky Mineral (F1) (6	except MLRA 1)		ery Shallow Dark Surfa	
☐ Hydro(gen Sulfide (A4)			Loamy Gleyed Matrix (F2)	,		ther (Explain in Remar	
	ed Below Dark S	,	1) 🗆	Depleted Matrix (F3)				
	Dark Surface (A1	,		Redox Dark Surface (F6)			ators of hydrophytic veg	
	Mucky Mineral (S Gleyed Matrix (S			Depleted Dark Surface (F7) Redox Depressions (F8)			tland hydrology must b turbed or problematic.	be present, unless
		-		Nedox Depressions (1 0)			naibea er presioniane.	
	Layer (if preser	it):			Hydric soil		_	_
Type:					present?		Yes 🛚	No 🗆
Depth	(inches):				•			
Remarks:	High organic m	atter conte	ant macking	edox; presumed to meet indic	rator F6			
rtomanto.	riigir organio m	attor cornt	ont maoking i	caox, produtted to fricot franc	ator i o.			
HYDROLO)GY							
	drology Indicat	ors:						
	icators (minimum		quired: check	all that apply)		Secor	ndary Indicators (2 or n	nore required)
☐ Surfac	e water (A1)			Water-Stained Leaves (exc	ept MLRA 1, 2, 4A		Water-Stained Leaves	s (B9) (MLRA 1,
0	Vater Table (A2)			& 4В) (В9)			2, 4A & 4B)	
	tion (A3)			, ,			Drainage Patterns (B	
	Marks (B1)			')		Dry-Season Water Ta	ible (C2)
	ent Deposits (B2)						•	
☐ Drift D	oposito (P2)	1		,	,		Saturation Visible on A	Aerial Imagery (C9)
	eposits (B3)			Oxidized Rhizospheres alor	ng Living Roots (C3)		Saturation Visible on A Geomorphic Position	Aerial Imagery (C9) (D2)
☐ Algal N	Mat or Crust (B4)			Oxidized Rhizospheres alor Presence of Reduced Iron	ng Living Roots (C3) (C4)		Saturation Visible on A Geomorphic Position Shallow Aquitard (D3)	Aerial Imagery (C9) (D2)
☐ Algal N☐ Iron De	Mat or Crust (B4) eposits (B5)			Oxidized Rhizospheres alor Presence of Reduced Iron Recent Iron Reduction in T	ng Living Roots (C3) (C4) illed Soils (C6)		Saturation Visible on A Geomorphic Position Shallow Aquitard (D3 FAC-Neutral Test (D5	Aerial Imagery (C9) (D2))
☐ Algal N☐ Iron De☐ Surfac	Mat or Crust (B4)	5)		Oxidized Rhizospheres alor Presence of Reduced Iron Recent Iron Reduction in T Stunted or Stressed Plants	ng Living Roots (C3) (C4) illed Soils (C6)		Saturation Visible on A Geomorphic Position Shallow Aquitard (D3)	Aerial Imagery (C9) (D2) (D) (D6) (LRR A)
☐ Algal N☐ Iron De☐ Surfac☐ Inunda	Mat or Crust (B4) eposits (B5) e Soil Cracks (B6	s) erial Image	======================================	Oxidized Rhizospheres alor Presence of Reduced Iron Recent Iron Reduction in T Stunted or Stressed Plants	ng Living Roots (C3) (C4) illed Soils (C6)		Saturation Visible on A Geomorphic Position Shallow Aquitard (D3 FAC-Neutral Test (D5 Raised Ant Mounds (I	Aerial Imagery (C9) (D2) (D) (D6) (LRR A)
☐ Algal N☐ Iron De☐ Surfac☐ Inunda	Mat or Crust (B4) eposits (B5) e Soil Cracks (B6 tion Visible on Ac ely Vegetated Cor	s) erial Image	======================================	Oxidized Rhizospheres alor Presence of Reduced Iron Recent Iron Reduction in T Stunted or Stressed Plants	ng Living Roots (C3) (C4) illed Soils (C6)		Saturation Visible on A Geomorphic Position Shallow Aquitard (D3 FAC-Neutral Test (D5 Raised Ant Mounds (I	Aerial Imagery (C9) (D2) (D) (D6) (LRR A)
Algal March Property	Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) tion Visible on Acely Vegetated Courvations:	s) erial Image	======================================	Oxidized Rhizospheres alor Presence of Reduced Iron Recent Iron Reduction in T Stunted or Stressed Plants	ng Living Roots (C3) (C4) illed Soils (C6) (D1) (LRR A)		Saturation Visible on A Geomorphic Position Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (I Frost-Heave Hummor	Aerial Imagery (C9) (D2)))) D6) (LRR A) cks
Algal March Property	Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) tion Visible on Acely Vegetated Convertions: http://www.atter.com/	s) erial Image ncave Surl	ery (B7) = face (B8)	Oxidized Rhizospheres alor Presence of Reduced Iron Recent Iron Reduction in T Stunted or Stressed Plants Other (explain in remarks)	ng Living Roots (C3) (C4) illed Soils (C6)	lrology	Saturation Visible on A Geomorphic Position Shallow Aquitard (D3 FAC-Neutral Test (D5 Raised Ant Mounds (I	Aerial Imagery (C9) (D2) (D) (D6) (LRR A)
Algal M Algal	Mat or Crust (B4) eposits (B5) e Soil Cracks (B6 tion Visible on Ace ely Vegetated Con rvations: ter Present? e Present?	s) erial Image ncave Surl Yes □	ery (B7)	Oxidized Rhizospheres alor Presence of Reduced Iron Recent Iron Reduction in T Stunted or Stressed Plants Other (explain in remarks) Depth (in):	ng Living Roots (C3) (C4) illed Soils (C6) (D1) (LRR A)	lrology	Saturation Visible on A Geomorphic Position Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (I Frost-Heave Hummor	Aerial Imagery (C9) (D2)))) D6) (LRR A) cks
Algal March Iron De Surface Ununda Sparse Field Obse Surface Was Water Table Saturation Fincludes ca	Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) tion Visible on Acely Vegetated Convations: atter Present? e Present? epillary fringe)	s) erial Image ncave Surl Yes □ Yes ⊠ Yes ⊠	ery (B7) = face (B8) No	Oxidized Rhizospheres alor Presence of Reduced Iron Recent Iron Reduction in T Stunted or Stressed Plants Other (explain in remarks) Depth (in):	ng Living Roots (C3) (C4) illed Soils (C6) (D1) (LRR A) Wetland Hyd Present	lrology	Saturation Visible on A Geomorphic Position Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (I Frost-Heave Hummor	Aerial Imagery (C9) (D2)))) D6) (LRR A) cks
Algal March Iron De Surface Ununda Sparse Field Obse Surface Was Water Table Saturation Fincludes ca	Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) tion Visible on Acely Vegetated Convations: atter Present? e Present? epillary fringe)	s) erial Image ncave Surl Yes □ Yes ⊠ Yes ⊠	ery (B7) = face (B8) No	Oxidized Rhizospheres alor Presence of Reduced Iron Recent Iron Reduction in T Stunted or Stressed Plants Other (explain in remarks) Depth (in): Depth (in): _5" BSG	ng Living Roots (C3) (C4) illed Soils (C6) (D1) (LRR A) Wetland Hyd Present	lrology	Saturation Visible on A Geomorphic Position Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (I Frost-Heave Hummor	Aerial Imagery (C9) (D2)))) D6) (LRR A) cks
Algal March Iron De Surface Ununda Sparse Field Obse Surface Was Water Table Saturation Fincludes ca	Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) tion Visible on Acely Vegetated Convations: atter Present? e Present? epillary fringe)	s) erial Image ncave Surl Yes □ Yes ⊠ Yes ⊠	ery (B7) = face (B8) No	Oxidized Rhizospheres alor Presence of Reduced Iron Recent Iron Reduction in T Stunted or Stressed Plants Other (explain in remarks) Depth (in):	ng Living Roots (C3) (C4) illed Soils (C6) (D1) (LRR A) Wetland Hyd Present	lrology	Saturation Visible on A Geomorphic Position Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (I Frost-Heave Hummor	Aerial Imagery (C9) (D2)))) D6) (LRR A) cks
Algal March Iron De Surface Ununda Sparse Field Obse Surface Was Water Table Saturation Fincludes ca	Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) tion Visible on Acely Vegetated Convations: atter Present? e Present? epillary fringe)	s) erial Image ncave Surl Yes □ Yes ⊠ Yes ⊠	ery (B7) = face (B8) No	Oxidized Rhizospheres alor Presence of Reduced Iron Recent Iron Reduction in T Stunted or Stressed Plants Other (explain in remarks) Depth (in):	ng Living Roots (C3) (C4) illed Soils (C6) (D1) (LRR A) Wetland Hyd Present	lrology	Saturation Visible on A Geomorphic Position Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (I Frost-Heave Hummor	Aerial Imagery (C9) (D2)))) D6) (LRR A) cks
Algal March Property	Mat or Crust (B4) eposits (B5) e Soil Cracks (B6) tion Visible on Acely Vegetated Convations: atter Present? e Present? epillary fringe)	s) erial Image ncave Surl Yes □ Yes ⊠ Yes ⊠	ery (B7) = face (B8) No	Oxidized Rhizospheres alor Presence of Reduced Iron Recent Iron Reduction in T Stunted or Stressed Plants Other (explain in remarks) Depth (in):	ng Living Roots (C3) (C4) illed Soils (C6) (D1) (LRR A) Wetland Hyd Present	lrology	Saturation Visible on A Geomorphic Position Shallow Aquitard (D3) FAC-Neutral Test (D5) Raised Ant Mounds (I Frost-Heave Hummor	Aerial Imagery (C9) (D2)))) D6) (LRR A) cks



Project/Site: Nisqually State Park				City/	County: F	Pierce	Samp	ling date	: <u>4-28-2</u>	2021
Applicant/Owner: Washington State Pa	rks					State:	WA Sar	mpling Po	oint: DP	-50
Investigator(s): Roen Hohlfeld and Jam	ie Sloan			Section,	Township,	Range: S20, T1	16N, R04E			
Landform (hillslope, terrace, etc): Depr	ession			Local re	lief (concav	e, convex, none):	concave	s	lope (%):	5
Subregion (LRR): A Lat:			Lon	ng:			Datum:	-		
Soil Map Unit Name: Kapowsin gravell	ly ashy loam, 0	to 6 perc	= :ent slc	pes	NW	I classification:	none			
Are climatic / hydrologic conditions on the	site typical for	this time	of year	r? ⊠ Yes	s 🗆 No	If no, explain in re	emarks.)			
Are Vegetation □, Soil □, or Hydrology □	significantly d	isturbed?		Are "	Normal Circ	cumstances" prese	ent on the site	? ⊠ Yes	s □ No	
Are Vegetation □, Soil □, or Hydrology □	naturally prob	lematic?		(If ne	eded, expla	ain any answers in	Remarks.)			
SUMMARY OF FINDINGS – Attack	ch site map s	howing s	ampli	ing point	locations,	transects, impo	rtant feature	s, etc.		
Hydrophytic Vegetation Present?	Yes □	No	\boxtimes							
Hydric Soils Present?	Yes □	No	\boxtimes		the Sampl ithin a We		Yes		No 🛛	
Wetland Hydrology Present?	Yes □	No	\boxtimes							
VEGETATION – Use scientific nam	es of plants.									
Tree Stratum (Plot size: 5-m diameter)		Absolute % Cover		ominant pecies?	Indicator Status	Dominance Tes	inant Species		0	(4)
 Pseudotsuga menziesii Pseudotsuga menziesii 		75		Yes	FACU	that are OBL, FA		-	5	_ (A)
3.						Species Across	all Strata:		<u> </u>	(B)
4		75		Total Cov	ver	Percent of Domi that are OBL, FA			0%	(A/B)
Sapling/Shrub Stratum (Plot size: 3-m dia	ameter)					Prevalence Inde		t:		
Gaultheria shallon Holodiscus discolor		80 55		Yes Yes	FACU FACU	Total % Cover of OBL species	<u>f:</u> -	$\frac{\text{Multiply}}{\text{x 1}} =$	<u>y by:</u> -	
3.						FACW species		x 2 =		_
4. 5.						FAC species FACU species	220	x 3 = x 4 =	880	_
5.		135	=	Total Cov	ver	UPL species	-	x 5 =	-	_
Herb Stratum (Plot size: 1-m diameter)	-			V	FAOU	Column Totals:	220	(A)	880	(B)
Pteridium aquilinum Rubus ursinus		<u>5</u> 5		Yes Yes	FACU FACU	Prevalence Inde	ex = B/A =	4		
3.							ic Vegetation			
4. 5.							est for Hydrop nce Test is >		getation	
6.						☐ 3 – Prevale	nce Index is ≤	≤ 3.0¹		
7. 8.							logical Adapta Remarks or o			
9.						☐ 5 – Wetland	d Non-Vascula	ar Plants ¹	1	
10.						☐ Problemation Indicators of hypersections	Hydrophytic	-		
11		10	=	Total Cov	ver	present, unless				iusi be
Woody Vine Stratum (Plot size: 3-m dian 1.	,					Hydrophytic			_	
2				Total Cov	./or	Vegetation Present?	Ye	s 🗆	No 🗵	1
% Bare Ground in Herb Stratum: 90)			Total Oo	VCI	resenti				
Remarks:										

		ibe to the	depth need	led to do	ocument the indicator	or confirm the at	sence	of indicators.)		
Depth (inches)	Matrix Color (moist)	%	Color (noist)	Redox Features % Type	e ¹ Loc ²	2	Texture	Re	emarks
0-6	10YR 3/2	100	,	,				Silt loam		
6-14	10YR 3/3	97	10YR	3/4	3 C	M		Silt loam		
¹Type: C=0	Concentration, D=	Depletion.	RM=Reduc	ed Matrix	c, CS=Covered or Coate	ed Sand Grains.	² Loc: F	PL=Pore Lining	. M=Matrix.	
		-			therwise noted.)			tors for Proble		ric Soils ³ :
-	sol (A1)				Redox (S5)			cm Muck (A10)		
	Epipedon (A2)				d Matrix (S6)			ed Parent Mate	rial (TF2)	
	Histic (A3)			Loamy	Mucky Mineral (F1) (ex	cept MLRA 1)		ery Shallow Da		TF12)
,	gen Sulfide (A4)				Gleyed Matrix (F2)			ther (Explain in	Remarks)	
	ted Below Dark S		•		ed Matrix (F3)					
	Dark Surface (A1	,			Dark Surface (F6)			ators of hydroph		
	/ Mucky Mineral (/ Gleyed Matrix (S				ed Dark Surface (F7) Depressions (F8)			tland hydrology turbed or proble		eseni, uniess
		•		NCGOX	Depressions (1 0)					
_	e Layer (if preser	ıı).				Hydric soil		[-	57
Type:						present?		Yes	⊥ No	\boxtimes
Depth	(inches):									
Remarks:	Redox is faint.									
	r todor to rainti									
HYDROL	OGY									
	lydrology Indicat	tors:								
	dicators (minimum		quired: chec	k all that	apply)		Secor	ndary Indicators	(2 or more	required)
	ce water (A1)				r-Stained Leaves (exce	ept MLRA 1, 2, 4A	П	Water-Stained	Leaves (B9	9) (MLRA 1,
J	Nater Table (A2)			& 4B	· · ·		_	2, 4A & 4B)		
	ation (A3)				Crust (B11)			Drainage Patte		
	Marks (B1)	`	L		tic Invertebrates (B13)			Dry-Season W		
	nent Deposits (B2))	L	,	ogen Sulfide Odor (C1)	Living Doots (CO)		Saturation Visil		
	Deposits (B3) Mat or Crust (B4)				zed Rhizospheres along ence of Reduced Iron (0			Geomorphic P Shallow Aquita	, ,	
_	eposits (B5)				nt Iron Reduction in Till	•		FAC-Neutral T	` ,	
	ce Soil Cracks (B6	3)			ed or Stressed Plants (, ,		Raised Ant Mo		(IRRA)
	ation Visible on A	,			(explain in remarks)	DI) (LIKEA)		Frost-Heave H		
	ely Vegetated Co	_			(
Field Obse	ervations:									
Surface Wa	ater Present?	Yes □	No ⊠	Depth	(in): <u>-</u>	Wetlend Hud	lualamı.			
Water Tabl	le Present?	Yes □	No 🗵	Depth	(in): <u>-</u>	Wetland Hyd Present		Ye	s 🗆	No 🏻
Saturation	Present? apillary fringe)	Yes \square	No 🗵	Depth	(in): <u>-</u>					
		ream daile	ie monitorin	n well ag	erial photos, previous in	spections) if avail	ahle.			
Describe K	loooraea Dala (Sii	i vaini yaug	,0, 1110111101111	y won, at	mai priotos, previous III	opeonons, ii avali	abie.			
Remarks:	Soils moist the	roughout p	rofile. Geom	orphic p	osition is a depression.					
I										



Project/Site: Nisqually State Park				City/	County: F	Pierce	Samp	ling date	e: <u>4-28-2</u>	2021
Applicant/Owner: Washington State Parks						State:	WA Sar	mpling P	oint: DP	-51
Investigator(s): Roen Hohlfeld and Jamie S	Sloan			Section,	Township,	Range: S20, T	16N, R04E			
Landform (hillslope, terrace, etc): Depress	ion			Local re	lief (concav	e, convex, none):	concave	ξ	Slope (%):	5
Subregion (LRR): A Lat: -				ng: -			Datum:	_		
Soil Map Unit Name: Kapowsin gravelly a										
Are climatic / hydrologic conditions on the site						•				
Are Vegetation □, Soil □, or Hydrology □ sig	• •		•			cumstances" prese	,	? ⊠ Ye	s □ No	
Are Vegetation □, Soil □, or Hydrology □ na	-					in any answers in				
SUMMARY OF FINDINGS – Attach s	site map sl	howing s	ampli			-		s, etc.		
Hydrophytic Vegetation Present?	Yes ⊠	No								
Hydric Soils Present?	Yes ⊠	No			the Sampl ithin a We		Yes	\boxtimes	No 🗆	
Wetland Hydrology Present?	Yes ⊠	No		. "	itimii a vvo	tiaria :				
Remarks: Wetland AAA in-pit. VEGETATION – Use scientific names	of plants.									
<u>Tree Stratum</u> (Plot size: 5-m diameter) 1.		Absolute % Cover		ominant pecies?	Indicator Status	Dominance Tes Number of Dom that are OBL, FA	inant Species		2	(A)
2. 3.						Total Number of Species Across			2	(B)
4	-	-	=	Total Cov	ver	Percent of Domi that are OBL, FA			100%	(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diame	eter)					Prevalence Ind		t:		
Malus fusca Rosa nutkana		90 15		Yes No	FACW FAC	Total % Cover of OBL species	<u>f:</u>	Multip x 1 =	<u>ıly by:</u>	
3.						FACW species		x 2 =		
4.						FAC species		x 3 =		_
5		105		Total Cov	ver	FACU species UPL species		x 4 = x 5 =		_
Herb Stratum (Plot size: 1-m diameter)	=					Column Totals:		(A)		(B)
Carex obnupta Polystichum munitum		60 5		Yes No	OBL FACU	Prevalence Inde	ex = B/A =			
3. Polystichum munitum				INU	TACO	Hydrophyt	ic Vegetation	Indicat	tors:	
4							est for Hydro nce Test is >		egetation	
5. 6.							nce Testis > nce Index is ≤			
7.							logical Adapta			
8. 9.							Remarks or o		,)
10.							Hydrophytic	Vegetati	ion¹ (Explai	in)
11						¹ Indicators of hy present, unless				nust be
Woody Vine Stratum (Plot size: 3-m diamete	er) _	65	_ =	Total Cov	ver	present, unless	uisturbeu or p	ТОВІЕПТА	ilic.	
1	′					Hydrophytic			_	_
2				Total Cov	/Or	Vegetation Present?	Ye	s 🏻	No 🗆	J
% Bare Ground in Herb Stratum: 35	=			Total Co	vei	i resent:				
Remarks:										

Depth		ibe to the	depth need	ed to document the indicato	or or confirm the al	bsence	of indicators.)	
(inches)	Matrix Color (moist)	%	Color (m	Redox Features noist) % Ty	pe¹ Loc	2	Texture	Remarks
0-2	10YR2/1	100					Silt loam	
2-9	10YR 2/1	97	10YR	3/3 3 (С		Silt loam	
2 0	1011(2/1			0 0	, ivi		Circ localiti	
1Typo: C=C	Concentration D-	-Donlotion	PM-Poduce	ed Matrix, CS=Covered or Coa	atod Sand Grains	² l oc: F	PL=Pore Lining, M=M	otriv
				ınless otherwise noted.)	ited Sand Grains.		tors for Problematic	
-	ol (A1)	piicable to		Sandy Redox (S5)			cm Muck (A10)	nyuric soils.
	Epipedon (A2)			Stripped Matrix (S6)			ed Parent Material (TI	F2)
	Histic (A3)			Loamy Mucky Mineral (F1) (e	except MLRA 1)		ery Shallow Dark Surf	
☐ Hydro	gen Sulfide (A4)			Loamy Gleyed Matrix (F2)	,		ther (Explain in Rema	
	ted Below Dark S	•	,	Depleted Matrix (F3)				
	Dark Surface (A1			Redox Dark Surface (F6)			tors of hydrophytic ve	
	Mucky Mineral (S Gleyed Matrix (S			Depleted Dark Surface (F7) Redox Depressions (F8)			tland hydrology must turbed or problematic	
		-		Nedox Depressions (Fo)	1	4.0	tarboa or problematio	•
	Layer (if preser	1t):			Hydric soil	ı	_	_
Type:					present?	•	Yes 🛚	No 🗆
Depth	(inches):							
Remarks:	Refusal at 9" B							
Remarks.	Reiusai at 9 B	3 G.						
HYDROLO	OGY							
	ydrology Indicat							
,	dicators (minimum	n of one red						
☐ Surfac	e water (A1)		quirea: check	11 77			ndary Indicators (2 or	more required)
			quired: check	Water-Stained Leaves (exc	ept MLRA 1, 2, 4A		Water-Stained Leave	
Ū	Vater Table (A2)			Water-Stained Leaves (exc & 4B) (B9)	ept MLRA 1, 2, 4A	· 🗆	Water-Stained Leave 2, 4A & 4B)	es (B9) (MLRA 1 ,
□ Satura	ation (A3)		· 	Water-Stained Leaves (exc & 4B) (B9) Salt Crust (B11)		·	Water-Stained Leave 2, 4A & 4B) Drainage Patterns (B	es (B9) (MLRA 1 ,
□ Satura □ Water	ation (A3) Marks (B1)	1		Water-Stained Leaves (exc & 4B) (B9) Salt Crust (B11) Aquatic Invertebrates (B13))		Water-Stained Leave 2, 4A & 4B) Drainage Patterns (E Dry-Season Water T	es (B9) (MLRA 1 , 310) able (C2)
□ Satura □ Water □ Sedim	ation (A3) Marks (B1) ent Deposits (B2))		Water-Stained Leaves (exc & 4B) (B9) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1))		Water-Stained Leave 2, 4A & 4B) Drainage Patterns (B Dry-Season Water T Saturation Visible on	es (B9) (MLRA 1, B10) able (C2) Aerial Imagery (C9)
□ Satura □ Water □ Sedim □ Drift D	ation (A3) Marks (B1)	,		Water-Stained Leaves (exc & 4B) (B9) Salt Crust (B11) Aquatic Invertebrates (B13 Hydrogen Sulfide Odor (C1 Oxidized Rhizospheres alor)) ig Living Roots (C3)		Water-Stained Leave 2, 4A & 4B) Drainage Patterns (E Dry-Season Water T	es (B9) (MLRA 1, B10) able (C2) Aerial Imagery (C9) (D2)
□ Satura □ Water □ Sedim □ Drift D □ Algal N	ation (A3) Marks (B1) Juent Deposits (B2) Deposits (B3)	,		Water-Stained Leaves (exc & 4B) (B9) Salt Crust (B11) Aquatic Invertebrates (B13 Hydrogen Sulfide Odor (C1 Oxidized Rhizospheres alor Presence of Reduced Iron)) ng Living Roots (C3) (C4)		Water-Stained Leave 2, 4A & 4B) Drainage Patterns (E Dry-Season Water T Saturation Visible on Geomorphic Position	es (B9) (MLRA 1, 810) able (C2) Aerial Imagery (C9) (D2) 8)
Satura Water Sedim Drift D Algal N Iron De Surface	ation (A3) Marks (B1) Hent Deposits (B2) Heposits (B3) Mat or Crust (B4) Heposits (B5) Heposits (B5) Heposits (B6) Heposits (B6) Heposits (B6)	6)		Water-Stained Leaves (exc & 4B) (B9) Salt Crust (B11) Aquatic Invertebrates (B13 Hydrogen Sulfide Odor (C1 Oxidized Rhizospheres alor Presence of Reduced Iron Recent Iron Reduction in T Stunted or Stressed Plants)) ng Living Roots (C3) (C4) illed Soils (C6)		Water-Stained Leave 2, 4A & 4B) Drainage Patterns (E Dry-Season Water T Saturation Visible on Geomorphic Position Shallow Aquitard (D3	es (B9) (MLRA 1, 810) able (C2) Aerial Imagery (C9) (D2) 8)
Satura Water Sedim Drift D Algal N Iron De Surface Inunda	ation (A3) Marks (B1) Hent Deposits (B2) Heposits (B3) Mat or Crust (B4) Heposits (B5) Heposits (B5) Heposits (B6) Heposits (B6) Heposits (B6) Heposits (B6) Heposits (B6) Heposits (B6) Heposits (B6) Heposits (B6) Heposits (B6) Heposits (B6) Heposits (B6) Heposits (B6) Heposits (B6)	6) erial Image		Water-Stained Leaves (exc & 4B) (B9) Salt Crust (B11) Aquatic Invertebrates (B13 Hydrogen Sulfide Odor (C1 Oxidized Rhizospheres alor Presence of Reduced Iron Recent Iron Reduction in T Stunted or Stressed Plants)) ng Living Roots (C3) (C4) illed Soils (C6)		Water-Stained Leave 2, 4A & 4B) Drainage Patterns (E Dry-Season Water T Saturation Visible on Geomorphic Position Shallow Aquitard (D3 FAC-Neutral Test (D	es (B9) (MLRA 1, 810) able (C2) Aerial Imagery (C9) (D2) 8) 5) (D6) (LRR A)
Satura Water Sedim Drift D Algal N Iron Do Surface Inunda	ation (A3) Marks (B1) lent Deposits (B2) leposits (B3) Mat or Crust (B4) leposits (B5) le Soil Cracks (B6 lation Visible on A6 lely Vegetated Core	6) erial Image		Water-Stained Leaves (exc & 4B) (B9) Salt Crust (B11) Aquatic Invertebrates (B13 Hydrogen Sulfide Odor (C1 Oxidized Rhizospheres alor Presence of Reduced Iron Recent Iron Reduction in T Stunted or Stressed Plants)) ng Living Roots (C3) (C4) illed Soils (C6)		Water-Stained Leave 2, 4A & 4B) Drainage Patterns (E Dry-Season Water T Saturation Visible on Geomorphic Position Shallow Aquitard (D3 FAC-Neutral Test (D Raised Ant Mounds	es (B9) (MLRA 1, 810) able (C2) Aerial Imagery (C9) (D2) 8) 5) (D6) (LRR A)
Satura Water Sedim Drift D Algal N Iron De Surface Inunda	ation (A3) Marks (B1) lent Deposits (B2) leposits (B3) Mat or Crust (B4) leposits (B5) le Soil Cracks (B6 lation Visible on A6 lely Vegetated Core	6) erial Image ncave Surl	ery (B7)	Water-Stained Leaves (exc & 4B) (B9) Salt Crust (B11) Aquatic Invertebrates (B13 Hydrogen Sulfide Odor (C1 Oxidized Rhizospheres alor Presence of Reduced Iron Recent Iron Reduction in T Stunted or Stressed Plants)) ng Living Roots (C3) (C4) illed Soils (C6)		Water-Stained Leave 2, 4A & 4B) Drainage Patterns (E Dry-Season Water T Saturation Visible on Geomorphic Position Shallow Aquitard (D3 FAC-Neutral Test (D Raised Ant Mounds	es (B9) (MLRA 1, 810) able (C2) Aerial Imagery (C9) (D2) 8) 5) (D6) (LRR A)
Satura Water Sedim Drift D Algal N Iron De Surface Inunda Sparse	ation (A3) Marks (B1) Ment Deposits (B2) Meposits (B3) Mat or Crust (B4) Mat or Crus	6) erial Image		Water-Stained Leaves (exc & 4B) (B9) Salt Crust (B11) Aquatic Invertebrates (B13 Hydrogen Sulfide Odor (C1 Oxidized Rhizospheres alor Presence of Reduced Iron Recent Iron Reduction in T Stunted or Stressed Plants)) ng Living Roots (C3) (C4) illed Soils (C6) (D1) (LRR A)		Water-Stained Leave 2, 4A & 4B) Drainage Patterns (E Dry-Season Water T Saturation Visible on Geomorphic Position Shallow Aquitard (D3 FAC-Neutral Test (D Raised Ant Mounds (Frost-Heave Hummo	es (B9) (MLRA 1, 810) able (C2) Aerial Imagery (C9) (D2) 8) 5) (D6) (LRR A)
Satura Water Sedim Drift D Algal N Iron Do Surface Inunda Sparse Surface Water Table	ation (A3) Marks (B1) Ment Deposits (B2) Meposits (B3) Mat or Crust (B4) Mat or Crus	6) erial Image ncave Surf Yes Yes Yes	ery (B7)	Water-Stained Leaves (exc & 4B) (B9) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1 Oxidized Rhizospheres alor Presence of Reduced Iron Recent Iron Reduction in T Stunted or Stressed Plants Other (explain in remarks) Depth (in):)) ng Living Roots (C3) (C4) illed Soils (C6)	drology	Water-Stained Leave 2, 4A & 4B) Drainage Patterns (E Dry-Season Water T Saturation Visible on Geomorphic Position Shallow Aquitard (D3 FAC-Neutral Test (D Raised Ant Mounds	es (B9) (MLRA 1, 810) able (C2) Aerial Imagery (C9) (D2) 8) 5) (D6) (LRR A)
Satura Water Sedim Drift D Algal N Iron Do Surface Inunda Sparse Surface Water Table Saturation I	ation (A3) Marks (B1) Ment Deposits (B2) Meposits (B3) Mat or Crust (B4) Mat or Crus	6) erial Image ncave Surl	ery (B7)	Water-Stained Leaves (exc & 4B) (B9) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1 Oxidized Rhizospheres alor Presence of Reduced Iron Recent Iron Reduction in T Stunted or Stressed Plants Other (explain in remarks) Depth (in):	y Living Roots (C3) (C4) (C4) (C6) (C1) (LRR A) Wetland Hyd	drology	Water-Stained Leave 2, 4A & 4B) Drainage Patterns (E Dry-Season Water T Saturation Visible on Geomorphic Position Shallow Aquitard (D3 FAC-Neutral Test (D Raised Ant Mounds (Frost-Heave Hummo	es (B9) (MLRA 1, 810) able (C2) Aerial Imagery (C9) (D2) 8) 5) (D6) (LRR A)
Satura Water Sedim Drift D Algal N Iron Do Surface Inunda Sparse Field Obse Surface Wa Water Table Saturation I (includes ca	ation (A3) Marks (B1) Ment Deposits (B2) Meposits (B3) Mat or Crust (B4) Mat or Crust (B4) Mat or Crust (B5) Me Soil Cracks (B6 Mation Visible on Acely Vegetated Core Provations: ater Present? Present? publication (A3) Present? Present?	6) erial Image ncave Surf Yes Yes Yes Yes	ery (B7)	Water-Stained Leaves (exc & 4B) (B9) Salt Crust (B11) Aquatic Invertebrates (B13 Hydrogen Sulfide Odor (C1 Oxidized Rhizospheres alor Presence of Reduced Iron Recent Iron Reduction in T Stunted or Stressed Plants Other (explain in remarks) Depth (in):	y (C4) (C4) (illed Soils (C6) (D1) (LRR A) Wetland Hydersen	drology	Water-Stained Leave 2, 4A & 4B) Drainage Patterns (E Dry-Season Water T Saturation Visible on Geomorphic Position Shallow Aquitard (D3 FAC-Neutral Test (D Raised Ant Mounds (Frost-Heave Hummo	es (B9) (MLRA 1, 810) able (C2) Aerial Imagery (C9) (D2) 8) 5) (D6) (LRR A)
Satura Water Sedim Drift D Algal N Iron Do Surface Inunda Sparse Field Obse Surface Wa Water Table Saturation I (includes ca	ation (A3) Marks (B1) Ment Deposits (B2) Meposits (B3) Mat or Crust (B4) Mat or Crust (B4) Mat or Crust (B5) Me Soil Cracks (B6 Mation Visible on Acely Vegetated Core Provations: ater Present? Present? publication (A3) Present? Present?	6) erial Image ncave Surf Yes Yes Yes Yes	ery (B7)	Water-Stained Leaves (exc & 4B) (B9) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1 Oxidized Rhizospheres alor Presence of Reduced Iron Recent Iron Reduction in T Stunted or Stressed Plants Other (explain in remarks) Depth (in):	y (C4) (C4) (illed Soils (C6) (D1) (LRR A) Wetland Hydersen	drology	Water-Stained Leave 2, 4A & 4B) Drainage Patterns (E Dry-Season Water T Saturation Visible on Geomorphic Position Shallow Aquitard (D3 FAC-Neutral Test (D Raised Ant Mounds (Frost-Heave Hummo	es (B9) (MLRA 1, 810) able (C2) Aerial Imagery (C9) (D2) 8) 5) (D6) (LRR A)
Satura Water Sedim Drift D Algal N Iron Do Surface Inunda Sparse Field Obse Surface Wa Water Table Saturation I (includes ca	ation (A3) Marks (B1) Ment Deposits (B2) Meposits (B3) Mat or Crust (B4) Mat or Crust (B4) Mat or Crust (B5) Me Soil Cracks (B6 Mation Visible on Acely Vegetated Core Provations: ater Present? Present? publication (A3) Present? Present?	6) erial Image ncave Surf Yes Yes Yes Yes	ery (B7)	Water-Stained Leaves (exc & 4B) (B9) Salt Crust (B11) Aquatic Invertebrates (B13 Hydrogen Sulfide Odor (C1 Oxidized Rhizospheres alor Presence of Reduced Iron Recent Iron Reduction in T Stunted or Stressed Plants Other (explain in remarks) Depth (in):	y (C4) (C4) (illed Soils (C6) (D1) (LRR A) Wetland Hydersen	drology	Water-Stained Leave 2, 4A & 4B) Drainage Patterns (E Dry-Season Water T Saturation Visible on Geomorphic Position Shallow Aquitard (D3 FAC-Neutral Test (D Raised Ant Mounds (Frost-Heave Hummo	es (B9) (MLRA 1, 810) able (C2) Aerial Imagery (C9) (D2) 8) 5) (D6) (LRR A)
Satura Water Sedim Drift D Algal N Iron Do Surface Inunda Sparse Field Obse Surface Wa Water Table Saturation I (includes ca	ation (A3) Marks (B1) Ment Deposits (B2) Meposits (B3) Mat or Crust (B4) Mat or Crust (B4) Mat or Crust (B5) Me Soil Cracks (B6 Mation Visible on Acely Vegetated Core Provations: ater Present? Present? publication (A3) Present? Present?	erial Image ncave Surf Yes Yes Yes Team gaug	ery (B7) No No No No No No No No No No	Water-Stained Leaves (exc & 4B) (B9) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres alor Presence of Reduced Iron Recent Iron Reduction in T Stunted or Stressed Plants Other (explain in remarks) Depth (in): Depth (in): Depth (in):	y (C4) (C4) (illed Soils (C6) (D1) (LRR A) Wetland Hydersen	drology	Water-Stained Leave 2, 4A & 4B) Drainage Patterns (E Dry-Season Water T Saturation Visible on Geomorphic Position Shallow Aquitard (D3 FAC-Neutral Test (D Raised Ant Mounds (Frost-Heave Hummo	es (B9) (MLRA 1, 810) able (C2) Aerial Imagery (C9) (D2) 8) 5) (D6) (LRR A)
Satura Water Sedim Drift D Algal M Iron Do Surface Inunda Sparse Field Obse Surface Water Table Saturation I (includes ca	ation (A3) Marks (B1) lent Deposits (B2) leposits (B3) Mat or Crust (B4) leposits (B5) le Soil Cracks (B6 letion Visible on Acely Vegetated Core leter Present? leter Present? leter Present? leter Present? leter Present? leter Present (Street) leter (Street) leter (B1) leter (B2) leter (B3) leter (B4) leter	erial Image ncave Surf Yes Yes Yes Team gaug	ery (B7) No No No No No No No No No No	Water-Stained Leaves (exc & 4B) (B9) Salt Crust (B11) Aquatic Invertebrates (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres alor Presence of Reduced Iron Recent Iron Reduction in T Stunted or Stressed Plants Other (explain in remarks) Depth (in): Depth (in): Depth (in):	y (C4) (C4) (illed Soils (C6) (D1) (LRR A) Wetland Hydersen	drology	Water-Stained Leave 2, 4A & 4B) Drainage Patterns (E Dry-Season Water T Saturation Visible on Geomorphic Position Shallow Aquitard (D3 FAC-Neutral Test (D Raised Ant Mounds (Frost-Heave Hummo	es (B9) (MLRA 1, 810) able (C2) Aerial Imagery (C9) (D2) 8) 5) (D6) (LRR A)



Project/Site: Nisqually State Park		City/	County: F	Pierce	Sampling d	late: 4-2	8-2021
Applicant/Owner: _Washington State Parks		_		State:	WA Samplin	g Point: _ I	DP-52
Investigator(s): Roen Hohlfeld and Jamie Sloan		Section,	Township,	Range: S20, T16	N, R04E		
Landform (hillslope, terrace, etc): Depression			lief (concav	e, convex, none):	concave	Slope (%): 2
Subregion (LRR): A Lat: -				_	Datum: -	='	
Soil Map Unit Name: Kapowsin gravelly ashy loam, 0				'I classification: n	one		
Are climatic / hydrologic conditions on the site typical for			 s □ No ((If no, explain in rema	arks.)		
Are Vegetation □, Soil □, or Hydrology □ significantly d	•			cumstances" present		Yes □ N	lo
Are Vegetation □, Soil □, or Hydrology □ naturally prob	lematic?	(If ne	eded, expla	ain any answers in Re	emarks.)		
SUMMARY OF FINDINGS – Attach site map s	howing sam	pling point	locations,	transects, importa	nt features, et	c.	
Hydrophytic Vegetation Present? Yes ⊠	No 🗆						
Hydric Soils Present? Yes ⊠	No 🗆		the Sampl ithin a We		Yes 🛛	No □]
Wetland Hydrology Present? Yes ⊠	No 🗆	, w	illilli a vve	stialiu s			
Remarks: Wetland BBB in-pit.		,					
WEGETATION III I I I I I I I I I I I I I I I I							
VEGETATION – Use scientific names of plants.				I			
Tree Stratum (Plot size: 5-m diameter)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test v			
1. Populus balsamifera	30	Yes	FAC	Number of Domina that are OBL, FAC		6	(A)
2. Fraxinus latifolia	20	Yes	FACW	Total Number of De		7	(D)
Frangula purshiana 4.	10	No	FAC	Species Across all Percent of Domina	-		(B)
	60	= Total Cov	/er	that are OBL, FAC		86%	(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diameter)				Prevalence Index			
Acer circinatum Fraxinus latifolia	20	Yes Yes	FAC FACW	Total % Cover of: OBL species	<u>Mu</u> x 1	Itiply by:	
3.	-	103	TAOW	FACW species	x 2		
4				FAC species	x 3		
5	40	= Total Cov	/or	FACU species UPL species	x 4 x 5		
Herb Stratum (Plot size: 1-m diameter)	40	= 10tai 00t	701	Column Totals:			(B)
1. Carex obnupta	15	Yes	OBL	Prevalence Index =	= B/A =		
Phalaris arundinacea Rubus ursinus	<u>5</u> 5	Yes Yes	FACW FACU	Hydrophytic '	Vegetation Indi	cators:	
4.				☐ 1 – Rapid Tes	t for Hydrophytic		า
5.				 □ 2 – Dominance □ 3 – Prevalence 	e Test is $> 50\%$ e Index is $\leq 3.0^1$		
6. 7.				4 – Morpholog	ical Adaptations	1 (Provide s	supporting
8				data in Re	marks or on a s	eparate she	
9.				4	on-Vascular Pla vdrophytic Vege		nlain)
10 11				¹ Indicators of hydri	, , , ,	` '	,
		= Total Cov	/er	present, unless dis	turbed or proble	matic.	
Woody Vine Stratum (Plot size: 3-m diameter)				Hydrophytic			
1. 2.				Vegetation	Yes 🗵	No No	
9/ Para Craund in Harb Stratum. CO	-	= Total Cov	/er	Present?			
% Bare Ground in Herb Stratum: 80				l			
Remarks:							

	cription: (Desc	ribe to	the d	lepth	neede	d to do	cume	ent the indicat	tor o	or confirm the ab	sence	of indicators.)			
Depth (inches)	Matrix Color (moist)		%	C	olor (mo	oict)		ox Features % T	уре	¹ Loc ²		Texture		Pon	narks
0-7	10YR2/1		00	C	וטוכ (וווכ	JISI)		70 I	уре	LOC		Silt loam		Ken	iaiks
0-7	101 K2/1	- 11	00									Sandy silt			
7-16	10YR 3/1	9	90		10YR 2	/2	1	10	С	М		loam			
¹ Type: C=C	oncentration, D=	=Deple	tion, R	RM=R	educed	l Matrix,	CS=	Covered or Co	oate	d Sand Grains.	² Loc:	PL=Pore Lining	, M=Ma	atrix.	
Hydric Soil	Indicators: (Ap	plicat	ole to	all LF	RRs, un	less ot	herw	rise noted.)			Indica	itors for Proble	matic	Hydrid	: Soils3:
☐ Histos	ol (A1)					Sandy R						cm Muck (A10)			
	Epipedon (A2)					Stripped						Red Parent Mate			
	Histic (A3)							/ Mineral (F1)	(exc	cept MLRA 1)		ery Shallow Da		,	F12)
	gen Sulfide (A4) ed Below Dark \$	Surface	Δ11	١		Depleted		d Matrix (F2)			\boxtimes C	Other (Explain in	Rema	rks)	
	Dark Surface (A		<i>(</i> /\\\\\	,				Surface (F6)			3 Indic	ators of hydroph	vtic ve	aetatio	on and
□ Sandy	Mucky Mineral	(S1)						k Surface (F7))		We	etland hydrology	must	be pre	
☐ Sandy	Gleyed Matrix (S4)				Redox D	epres	ssions (F8)	-		dis	sturbed or proble	ematic.		
Restrictive	Layer (if prese	nt):													
Type:										Hydric soil		Yes	\boxtimes	No	
Depth	(inches):									present?					
	,														
Remarks:	Redox is faint.	Aquic	moist	ure re	egime o	bserved									
HYDROLO	GY														
		10.00													
	/drology Indica icators (minimur		ie requ	uired:	check a	all that a	pply))			Seco	ndary Indicators	(2 or r	more r	equired)
	e water (A1)								xcer	ot MLRA 1, 2, 4A		Water-Stained			
☐ High W	/ater Table (A2)					& 4B)		`	•	, ,		2, 4A & 4B)		,	,
	tion (A3)					Salt C	,	,				Drainage Patte	,	,	
	Marks (B1)							ertebrates (B1				Dry-Season W			
	ent Deposits (B2	<u>2)</u>						Sulfide Odor (C		Living Boots (C2)		Saturation Visi			magery (C9)
	eposits (B3) fat or Crust (B4)							f Reduced Iror	_	Living Roots (C3)		Geomorphic P Shallow Aquita		` '	
	eposits (B5)	'						Reduction in	•	•		FAC-Neutral T			
	e Soil Cracks (B	6)						Stressed Plant				Raised Ant Mo	•	,	.RR A)
☐ Inunda	tion Visible on A	erial Ir	mager	y (B7)) 🗆	Other	(expl	ain in remarks))			Frost-Heave H	lummo	cks	
☐ Sparse	ely Vegetated Co	oncave	Surfa	ce (B	8)										
Field Obse	rvations:														
Surface Wa	ter Present?	Yes		No	\boxtimes	Depth (in):	_			_				
Water Table	e Present?	Yes		No	\boxtimes	Depth (in):	-		Wetland Hyd Present		Ye	s 🏻	N	o 🗆
Saturation F		Yes	\boxtimes	No		Depth (3"		ricociii	•				
	pillary fringe)	103		140		Берш	111).								
		ream o	gauge.	. mon	itorina v	well. aer	ial ph	notos, previous	s ins	spections), if availa	able:				
	(0)	3	, ,	,		- ,	- F.			,,					
Remarks:															
I															



Project/Site: Nisqually State Park		City/	County: F	Pierce	Samplin	g date:	8-4-202	21
Applicant/Owner: Washington State Parks		_		State:	WA Samp	oling Point	: <u>DP-</u> {	53
Investigator(s): Roen Hohlfeld and Jamie Sloan		Section,	Township,	Range: S20,	T16N, R04E			
Landform (hillslope, terrace, etc): Depression		Local re	lief (concav	e, convex, none): concave	Slop	e (%):	5
Subregion (LRR): A Lat: -	L	 .ong: -		•	Datum: -			
Soil Map Unit Name: Barneston gravelly ashy coarse				/I classification:	none			
Are climatic / hydrologic conditions on the site typical for	•			(If no, explain in	remarks.)			
Are Vegetation □, Soil □, or Hydrology □ significantly d	•				sent on the site?	⊠ Yes I	□ No	
Are Vegetation □, Soil □, or Hydrology □ naturally prob		(If ne	eded, expla	ain any answers	in Remarks.)			
SUMMARY OF FINDINGS – Attach site map s	howing sam	pling point	locations,	transects, imp	oortant features,	etc.		
Hydrophytic Vegetation Present? Yes ⊠	No 🗆							
Hydric Soils Present? Yes □	No 🗵		the Sampl ithin a We		Yes [□ No		
Wetland Hydrology Present? Yes □	No 🗵	, w	itiiii a vve	tianu :				
Remarks: Click here to enter text. VEGETATION – Use scientific names of plants.								
	Absolute	Dominant	Indicator	Dominance T	est worksheet:			
Tree Stratum (Plot size: 5-m diameter) 1. Fraxinus latifolia	% Cover	Species?	Status		minant Species FACW, or FAC:	2	2	(A)
Fraxinus latifolia Populus balsamifera	95 15	Yes No	FACW FAC	Total Number				(A)
3.				Species Acros	ss all Strata:		<u> </u>	(B)
4	110	= Total Cov	/er		minant Species FACW, or FAC:	40)%	(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diameter)					ndex worksheet:			()
Gaultheria shallon	40	Yes	FACU	Total % Cover	r of:	Multiply by	_	
Fraxinus latifolia Prunus emarginata	<u>5</u> 3	No No	FACW FACU	OBL species FACW species		x 1 = x 2 =	15 200	_
4. Rubus parviflorus	trace	No	FACU	FAC species		x3=	60	_
5.				FACU species		x 4 =	252	_
Herb Stratum (Plot size: 1-m diameter)	48	= Total Cov	/er	UPL species Column Totals		x 5 = (A)	- 527	— _(B)
1. Carex obnupta	15	Yes	OBL	Prevalence In			02.	(2)
2. Galium aparine	10 10	Yes Yes	FACU		ytic Vegetation I			
Rubus ursinus Maianthemum dilatatum	5	No	FACU FAC		Test for Hydroph			
5.				-	nance Test is > 50			
6. 7.				4 – Morni	llence Index is ≤ 3 nological Adaptatio		ide supr	ortina
8.				☐ data i	in Remarks or on	a separate		701 til
9.				-1	ind Non-Vascular latic Hydrophytic Ve		(Evnlain)
10 11				-1	hydric soil and we	J	` '	,
		= Total Cov	/er	present, unles	s disturbed or pro	blematic.		
Woody Vine Stratum (Plot size: 3-m diameter) 1				Hydrophytic	•			
2.				Vegetation	Yes	⊠ ı	No 🗆	
% Bare Ground in Herb Stratum: 65		= Total Cov	/er	Present?				
Remarks:				1				
nomans.								

		ribe to t	he depti	n neede	d to document the indicator	or confirm the ab	sence	of indicators.)	
Depth (inches)	Matrix Color (moist)	%	C	Color (m	Redox Features oist) % Type	Loc ²		Texture	Re	marks
0-7	10YR 2/1	100			, 21			Loam		
7-13	10YR 2/2	97		7.5YR 2	.5/3 3 C	М		Loam		
					,.	•••				
¹Type: C=C	Concentration, D=	:Depletio	on, RM=F	Reduced	d Matrix, CS=Covered or Coate	d Sand Grains.	² Loc: F	PL=Pore Lining	a, M=Matrix.	
					nless otherwise noted.)			tors for Probl		ic Soils ³ :
-	ol (A1)				Sandy Redox (S5)			cm Muck (A10)	-	
	Epipedon (A2)				Stripped Matrix (S6)		□ R	ed Parent Mat	erial (TF2)	
	Histic (A3)				Loamy Mucky Mineral (F1) (exc	cept MLRA 1)		ery Shallow Da		TF12)
, ,	gen Sulfide (A4)	· · · · · · · · · · · · · · · · · · ·	(0.4.4)		Loamy Gleyed Matrix (F2)			ther (Explain i	n Remarks)	
	ted Below Dark S Dark Surface (A1		(A11)		Depleted Matrix (F3) Redox Dark Surface (F6)		3 Indica	ators of hydrop	hytic vogotat	ion and
	Mucky Mineral (Depleted Dark Surface (F7)			tland hydrolog		
	Gleyed Matrix (S				Redox Depressions (F8)			turbed or prob		•
Restrictive	Layer (if prese	nt):								
Туре:		•				Hydric soil		Yes	□ No	×
	(inches):					present?		163	_ 140	
Depth	(inches):									
Remarks:	Redox is faint.	Refusal	l at 13" B	SG.						
HYDROLO	OGY									
	ydrology Indicat licators (minimum		required	: check	all that apply)		Secor	ndary Indicator	s (2 or more	required)
☐ Surfac	e water (A1)		<u> </u>		Water-Stained Leaves (exce	ot MLRA 1. 2. 4A		Water-Staine		
	Vater Table (A2)				& 4B) (B9)	, , , , , , , , , , , , , , , , , , ,		2, 4A & 4B)		, (,
□ Satura	ation (A3)				Salt Crust (B11)			Drainage Pat		
	Marks (B1)	_			Aquatic Invertebrates (B13)			Dry-Season V	,	
	ent Deposits (B2)			Hydrogen Sulfide Odor (C1)	Lister Deets (00)		Saturation Vis		Imagery (C9)
	eposits (B3) Mat or Crust (B4)				Oxidized Rhizospheres along	Living Roots (C3)		Geomorphic I	osition (D2)	
	viai ui Giusi (D4)							Shallow Aquit	ard (D3)	
-					Presence of Reduced Iron (C	4)		Shallow Aquit		
☐ Iron De	eposits (B5)				Recent Iron Reduction in Tille	4) ed Soils (C6)		FAC-Neutral	Test (D5)	LRR A)
☐ Iron De☐ Surfac	eposits (B5) e Soil Cracks (B6	6)	agery (B7		Recent Iron Reduction in Tille Stunted or Stressed Plants (I	4) ed Soils (C6)			Test (D5) ounds (D6) (LRR A)
☐ Iron De☐ Surfac☐ Inunda	eposits (B5)	6) erial Ima		7)	Recent Iron Reduction in Tille	4) ed Soils (C6)		FAC-Neutral Raised Ant M	Test (D5) ounds (D6) (LRR A)
☐ Iron De☐ Surfac☐ Inunda	eposits (B5) e Soil Cracks (Bo ation Visible on A ely Vegetated Co	6) erial Ima		7)	Recent Iron Reduction in Tille Stunted or Stressed Plants (I	4) ed Soils (C6)		FAC-Neutral Raised Ant M	Test (D5) ounds (D6) (LRR A)
☐ Iron De ☐ Surfac ☐ Inunda ☐ Sparse Field Obse	eposits (B5) e Soil Cracks (Bo ation Visible on A ely Vegetated Co	6) erial Ima ncave S		7)	Recent Iron Reduction in Tille Stunted or Stressed Plants (I	4) ed Soils (C6) 01) (LRR A)		FAC-Neutral Raised Ant M	Test (D5) ounds (D6) (Hummocks	·
☐ Iron De ☐ Surfac ☐ Inunda ☐ Sparse Field Obse	eposits (B5) Le Soil Cracks (B6 Lation Visible on A Lely Vegetated Co Lervations: Later Present?	6) erial Ima ncave S Yes [Surface (E	7)	Recent Iron Reduction in Tille Stunted or Stressed Plants (I Other (explain in remarks)	4) ed Soils (C6)	rology	FAC-Neutral Raised Ant M Frost-Heave I	Test (D5) ounds (D6) (Hummocks	LRR A)
☐ Iron De☐ Surfac☐ Inunda☐ Sparse Field Obse Surface Wa Water Table Saturation I	eposits (B5) the Soil Cracks (Bt ation Visible on A thely Vegetated Co theretail the control of the control the control of the control of the control the control of the co	6) erial Ima ncave S Yes [Surface (E	7)	Recent Iron Reduction in Tille Stunted or Stressed Plants (I Other (explain in remarks) Depth (in):	4) ed Soils (C6) D1) (LRR A) Wetland Hyd	rology	FAC-Neutral Raised Ant M Frost-Heave I	Test (D5) ounds (D6) (Hummocks	·
☐ Iron De☐ Surface☐ Inunda☐ Sparse Field Obse Surface Wa Water Table Saturation If (includes ca	eposits (B5) se Soil Cracks (B6 ation Visible on A ely Vegetated Co ervations: ater Present? e Present? Present? apillary fringe)	erial Imancave S Yes [Yes [Yes [Gurface (I □ No □ No □ No		Recent Iron Reduction in Tille Stunted or Stressed Plants (I Other (explain in remarks) Depth (in): Depth (in): Depth (in):	4) ed Soils (C6) D1) (LRR A) Wetland Hyd Present	rology ?	FAC-Neutral Raised Ant M Frost-Heave I	Test (D5) ounds (D6) (Hummocks	·
☐ Iron De☐ Surface☐ Inunda☐ Sparse Field Obse Surface Wa Water Table Saturation If (includes ca	eposits (B5) se Soil Cracks (B6 ation Visible on A ely Vegetated Co ervations: ater Present? e Present? Present? apillary fringe)	erial Imancave S Yes [Yes [Yes [Gurface (I □ No □ No □ No		Recent Iron Reduction in Tille Stunted or Stressed Plants (I Other (explain in remarks) Depth (in): Depth (in): -	4) ed Soils (C6) D1) (LRR A) Wetland Hyd Present	rology ?	FAC-Neutral Raised Ant M Frost-Heave I	Test (D5) ounds (D6) (Hummocks	·
☐ Iron De☐ Surface☐ Inunda☐ Sparse Field Obse Surface Wa Water Table Saturation If (includes ca	eposits (B5) se Soil Cracks (B6 ation Visible on A ely Vegetated Co ervations: ater Present? e Present? Present? apillary fringe)	erial Imancave S Yes [Yes [Yes [Gurface (I □ No □ No □ No		Recent Iron Reduction in Tille Stunted or Stressed Plants (I Other (explain in remarks) Depth (in): Depth (in): Depth (in):	4) ed Soils (C6) D1) (LRR A) Wetland Hyd Present	rology ?	FAC-Neutral Raised Ant M Frost-Heave I	Test (D5) ounds (D6) (Hummocks	·
☐ Iron De☐ Surface☐ Inunda☐ Sparse Field Obse Surface Wa Water Table Saturation If (includes ca	eposits (B5) se Soil Cracks (B6 ation Visible on A ely Vegetated Co ervations: ater Present? e Present? Present? apillary fringe)	erial Imancave S Yes [Yes [Yes [Yes [Surface (B	7)	Recent Iron Reduction in Tille Stunted or Stressed Plants (I Other (explain in remarks) Depth (in): Depth (in): Depth (in):	4) ed Soils (C6) D1) (LRR A) Wetland Hyd Present	rology ?	FAC-Neutral Raised Ant M Frost-Heave I	Test (D5) ounds (D6) (Hummocks	·
☐ Iron De☐ Surface☐ Inunda☐ Sparse Field Obse Surface Wa Water Table Saturation F (includes ca Describe Re	eposits (B5) ee Soil Cracks (B6 ation Visible on A ely Vegetated Co ervations: ater Present? ee Present? Present? apillary fringe) ecorded Data (st	erial Imancave S Yes [Yes [Yes [Yes [Surface (B	7)	Recent Iron Reduction in Tille Stunted or Stressed Plants (I Other (explain in remarks) Depth (in): Depth (in): Depth (in):	4) ed Soils (C6) D1) (LRR A) Wetland Hyd Present	rology ?	FAC-Neutral Raised Ant M Frost-Heave I	Test (D5) ounds (D6) (Hummocks	·



Project/Site: Nisqually State Park		City/	County: F	Pierce Sa	mpling dat	e: 8-4-20)21
Applicant/Owner: Washington State Parks					Sampling F	Point: DP	-54
Investigator(s): Roen Hohlfeld and Jamie Sloan		Section,	, Township,	Range: S20, T16N, R04E			
Landform (hillslope, terrace, etc): Depression			elief (concav	e, convex, none): concav	e !	Slope (%):	5
Subregion (LRR): A Lat: -	L	ong: -		Datum:			
Soil Map Unit Name: Barneston gravelly ashy coa							
Are climatic / hydrologic conditions on the site typical							
Are Vegetation □, Soil □, or Hydrology □ significantl	•			cumstances" present on the s	site? ⊠ Y∈	es □ No	
Are Vegetation □, Soil □, or Hydrology □ naturally p				in any answers in Remarks.			
SUMMARY OF FINDINGS – Attach site map	o showing samլ						
Hydrophytic Vegetation Present? Yes	⊠ No □						
Hydric Soils Present? Yes	⊠ No □		the Sampl		s 🛛	No 🗆	
 	⊠ No □	w	ithin a We	etiand?	_		
The same of the sa							
Remarks: Wetland CCC in-pit.							
VEGETATION – Use scientific names of plant	ts.						
	Absolute	Dominant	Indicator	Dominance Test worksho	et:		
Tree Stratum (Plot size: 5-m diameter) 1. Populus balsamifera	% Cover 45	Species? Yes	Status FAC	Number of Dominant Specthat are OBL, FACW, or FA		5	(A)
Populus balsamifera Fraxinus latifolia	20	Yes	FACW	Total Number of Dominant		5	_ (/\)
3.				Species Across all Strata:		<u> </u>	(B)
4		= Total Co	ver	Percent of Dominant Spec that are OBL, FACW, or FA		100%	(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diameter)				Prevalence Index worksh			(,,,,)
1. Fraxinus latifolia	20	Yes	FACW	Total % Cover of:		oly by:	
2. Rosa nutkana	7	Yes	FAC	OBL species	x 1 =		_
3. Lonicera involucrata	5	No	FAC	FACW species	x 2 =		
Amelanchier alnifolia Rubus spectabilis	3 trace	No No	FACU FAC	FAC species FACU species	x 3 = x 4 =		
6. Spiraea douglasii	trace	No	FACW	1 A00 species	^-	-	_
		= Total Co	ver	UPL species	x 5 =		
Herb Stratum (Plot size: 1-m diameter)				Column Totals:	(A)		(B)
1. Carex obnupta	45	Yes	OBL OBL	Prevalence Index = B/A =			
Oenanthe sarmentosa Juncus effusus	10 5	No No	FACW	Hydrophytic Vegetat	ion Indica	tors:	
4. Carex deweyana	5	No	FAC	☐ 1 – Rapid Test for Hyd			
5. Epilobium ciliatum	trace	No	FACW	□			
6				☐ 3 – Prevalence Index		·	
7. 8.				☐ 4 – Morphological Ada data in Remarks o	iptations' (or on a sep	Provide sup arate sheet	porting
9.				☐ 5 – Wetland Non-Vaso			
10.				□ Problematic Hydrophy	tic Vegetat	tion¹ (Explai	in)
11				¹ Indicators of hydric soil ar			nust be
Woody Vino Stratum (Blat size: 2 m diameter)	65	= Total Co	ver	present, unless disturbed of	r problema	atic.	
Woody Vine Stratum (Plot size: 3-m diameter) 1.				Hydrophytic			
2.					Yes 🛛	No □]
		= Total Co	ver	Present?			
% Bare Ground in Herb Stratum: 40							
Remarks:							
1							

			depth need		ment the indicator	or confirm the ab	osence (of indicators.)	
Depth (inches)	Matrix Color (moist)	%	Color (n		dox Features % Type	e ¹ Loc ²	2	Texture	Remarks
0-3	10YR 2/1	100						Loam	
3-14	10YR 2/1	95	7.5YR	3/4	5 C	M		Loam	
¹Type: C=0	Concentration, D=	Depletion.	RM=Reduce	ed Matrix. CS	S=Covered or Coate	ed Sand Grains.	² Loc: F	PL=Pore Lining, I	M=Matrix.
	il Indicators: (Ap								natic Hydric Soils ³ :
-	sol (A1)	рош		Sandy Red				cm Muck (A10)	
	Epipedon (A2)			Stripped Ma				ed Parent Materi	al (TF2)
	Histic (A3)			Loamy Muc	ky Mineral (F1) (ex	cept MLRA 1)		ery Shallow Dark	
,	gen Sulfide (A4)				ed Matrix (F2)			ther (Explain in F	Remarks)
	eted Below Dark S	,	,	Depleted M	, ,		_		
	Dark Surface (A1	,			Surface (F6)				tic vegetation and
	y Mucky Mineral (y Gleyed Matrix (\$				ark Surface (F7) ressions (F8)			turbed or probler	must be present, unless matic.
	· · · · · · · · · · · · · · · · · · ·			течех Бер	103310113 (1 0)				
	e Layer (if prese	nt):				Hydric soil	I		. –
Type:						present?		Yes 🗵	No □
Depth	(inches):					-			
Remarks:	Refusal at 14"	BSG.							
	rtordodi dt i i	200.							
HADBOL	0CV								
HYDROL									
	lydrology Indicat dicators (minimun		quired: check	all that app	ly)		Secon	ndary Indicators (2 or more required)
☐ Surfac	ce water (A1)			Water-Sta	ained Leaves (exce	ept MLRA 1, 2, 4A		Water-Stained L	eaves (B9) (MLRA 1,
☐ High \	Water Table (A2)			& 4B) (B9		• , ,		2, 4A & 4B)	, , , ,
☐ Satura	ation (A3)			Salt Crus	t (B11)			Drainage Patter	ns (B10)
	r Marks (B1)			•	overtebrates (B13)			Dry-Season Wa	
	nent Deposits (B2	2)			Sulfide Odor (C1)				e on Aerial Imagery (C9)
	Deposits (B3)				Rhizospheres along			Geomorphic Po	` '
_	Mat or Crust (B4)				of Reduced Iron (0	•		Shallow Aquitar	, ,
	Deposits (B5)	C)			on Reduction in Till	, ,		FAC-Neutral Te	
	ce Soil Cracks (Bo ation Visible on A		□ erv (B7) □		or Stressed Plants (plain in remarks)	DI) (LRK A)		Frost-Heave Hu	inds (D6) (LRR A)
	ely Vegetated Co			Other (ex	piaiii iii remarks)			riost-rieave riu	IIIIIOCKS
Field Obse			.400 (20)						
Surface Wa	ater Present?	Yes □	No ⊠	Depth (in)	: <u>-</u>				
Water Tabl	le Present?	Yes □	No ⊠	Depth (in)	: -	Wetland Hyd Present		Yes	⊠ No □
Saturation		Yes □	No ⊠	Depth (in)	: <u>-</u>				
	apillary fringe)								
I Describe R	kecorded Data (st	ream gaug	je, monitoring	y well, aerial	photos, previous in	spections), if availa	able:		
Remarks:	Geomorphic r	position is	a depression						
Remarks:	Geomorphic p	position is	a depression.						



Project/Site: Nisqually State Park		City/C	ounty: P	ierce	Sampling da	ate: <u>8-9-20</u>	021
Applicant/Owner: Washington State Parks				State: V	VA Sampling	Point: DP	-55
Investigator(s): Roen Hohlfeld and Nell Lund		Section, 7	Township,	Range: <u>S20, T16N</u>	, R04E		
Landform (hillslope, terrace, etc): Depression		Local relie	ef (concave	e, convex, none):	concave	Slope (%):	5
Subregion (LRR): A Lat: -	Lo	ong:			Datum: -		
Soil Map Unit Name: Kapowsin gravelly ashy loam, () to 6 percent s	slopes	NW	I classification:no	ne		
Are climatic / hydrologic conditions on the site typical for	this time of ye	ar? ⊠ Yes	 □ No (If no, explain in rema	rks.)		
Are Vegetation \square , Soil \square , or Hydrology \square significantly of	listurbed?	Are "N	ormal Circ	umstances" present o	on the site? 🗵 🗅	Yes □ No	
Are Vegetation \square , Soil \square , or Hydrology \square naturally prob	olematic?	(If nee	ded, expla	in any answers in Re	marks.)		
SUMMARY OF FINDINGS – Attach site map s	howing samp	oling point l	ocations,	transects, importar	nt features, etc).	
Hydrophytic Vegetation Present? Yes ⊠	No 🗆						
Hydric Soils Present? Yes ⊠	No 🗆		ie Sampl hin a We		Yes 🛚	No 🗆	
Wetland Hydrology Present? Yes ⊠	No 🗆						
Remarks: Wetland Z in-pit VEGETATION – Use scientific names of plants.							
	Absolute	Dominant	Indicator	Dominance Test w	orksheet:		
Tree Stratum (Plot size: 5-m diameter) 1. Fraxinus latifolia	% Cover 90	Species? Yes	Status FACW	Number of Dominar that are OBL, FACV		5	(A)
1. Fraxinus latirolia 2.			17.000	Total Number of Do		5	_ (//)
3. 4.				Species Across all S	_		_ (B)
4		= Total Cove	er	Percent of Dominar that are OBL, FACV		100%	(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diameter)	_			Prevalence Index v	worksheet:		
1. Acer circinatum 2.		Yes	FAC	Total % Cover of: OBL species	<u>Mult</u> x 1 :	tiply by: -	
3.				FACW species	x 2 :		
4.				FAC species	x 3		_
5	25 :	= Total Cove	er	FACU species UPL species	x 4 : x 5 :	= =	_
Herb Stratum (Plot size: 1-m diameter)				Column Totals:	(A)		(B)
Glyceria X occidentalis Carex sp.	25 15	Yes Yes	OBL FACW*	Prevalence Index =	B/A =		
3. <i>Poa</i> sp.	15	Yes	FAC**		egetation Indic		
Rubus ursinus Polystichum munitum	<u>5</u> 2	No No	FACU FACU	□ 1 – Rapid Test⊠ 2 – Dominance	for Hydrophytic	Vegetation	
6	2	140	1700	☐ 3 – Prevalence	Index is ≤ 3.0¹		
7					cal Adaptations ¹ narks or on a se		
8. 9.					on-Vascular Plar	•	,
10					drophytic Veget	` .	,
11.		= Total Cove	er	¹ Indicators of hydric present, unless dist			nust be
Woody Vine Stratum (Plot size: 3-m diameter)							
1				Hydrophytic Vegetation	Yes 🏻	l No □	1
		= Total Cove	er	Present?	.00 🖂		-
% Bare Ground in Herb Stratum: 40							
Remarks: *Assumed FACW. **Assumed FAC.							

			the dept	h need		ent the indicator	or confirm the ak	sence	of indicators.)	
Depth (inches)	Matrix Color (moist)	%	,	Color (m		<u>ox Features</u> % Type	Loc ²	2	Texture	Re	marks
0-12	10YR 3/2	95		10YR	/	5 C	M		Loam		
											
¹ Type: C=C	oncentration, D=	-Depleti	on, RM=	Reduce	d Matrix, CS=	Covered or Coate	d Sand Grains.	² Loc:	PL=Pore Lining	g, M=Matrix.	
Hydric Soil	Indicators: (Ap	plicabl	le to all l	_RRs, u	nless otherw	ise noted.)		Indica	tors for Probl	ematic Hydr	ic Soils³:
☐ Histoso	ol (A1)				Sandy Redox	(S5)			cm Muck (A10)		
	Epipedon (A2)				Stripped Mat				ed Parent Mat	, ,	
	Histic (A3)					y Mineral (F1) (exc	cept MLRA 1)		ery Shallow Da	,	TF12)
, ,	gen Sulfide (A4)		(4.44)		Loamy Gleye				ther (Explain in	n Remarks)	
	ed Below Dark S Dark Surface (A1		(A11)		Depleted Mar Redox Dark S	` '		3 India	ators of hydrop	hutia va satat	ion and
	Mucky Mineral (,				k Surface (F7)			etland hydrolog		
	Gleyed Matrix (Redox Depre	` '			sturbed or prob		coorn, arness
-		-				()			<u> </u>		
	Layer (if prese	nı.					Hydric soil				
Type:							present?		Yes	⊠ No	Ш
Depth ((inches):						•				
Domorko											
Remarks:											
HYDROLO)GY										
	drology Indica									(0	
,	icators (minimun	n of one	e required	d: check	117	,			ndary Indicator		
	e water (A1)				Water-Stail	ned Leaves (exce)	ot MLRA 1, 2, 4A		Water-Staine	d Leaves (B	9) (MLRA 1,
•	/ater Table (A2)				, , ,				2, 4A & 4B)	torno (P10)	
	tion (A3) Marks (B1)					ertebrates (B13)			Drainage Pati Dry-Season V		(C2)
	ent Deposits (B2	2)				Sulfide Odor (C1)			•		I Imagery (C9)
	eposits (B3)	-)			, ,	hizospheres along	Living Roots (C3)		Geomorphic I		i iiilagery (05)
	fat or Crust (B4)					of Reduced Iron (C			Shallow Aquit	` ,	
-	eposits (B5)					Reduction in Tille	•	\boxtimes	FAC-Neutral		
	e Soil Cracks (B	6)				Stressed Plants (D			Raised Ant M	. ,	LRR A)
	tion Visible on A		agery (B	7) 🗆		ain in remarks)	, , ,		Frost-Heave I	Hummocks	,
□ Sparse	ly Vegetated Co	ncave S	Surface (B8)							
Field Obser	rvations:										
Surface Wa	ter Present?	Yes	□ No) ×	Depth (in):		Mada ad Dad				
Water Table	Present?	Yes	□ No) ×	Depth (in):		Wetland Hyd Present		Ye	es 🛛	No 🗆
Saturation F		Yes	□ No		Depth (in):						
	pillary fringe)										
Describe Re	ecorded Data (st	ream ga	auge, mo	nitoring	well, aerial p	hotos, previous ins	spections), if avail	able:			
Dorectic	Cocreti	0.00 [4]	la cultur	****							
Remarks:	Geomorphic _I	position	is a dep	ression.							



Project/Site: Nisqually State Park		City	/County: F	Pierce	Sampling dat	te: 8-23-2	2021
Applicant/Owner: Washington State Parks					Sampling F		-56
Investigator(s): Roen Hohlfeld and Jamie Sloan	,	Section	. Township.	Range: S20, T16N, R			
Landform (hillslope, terrace, etc): Depression				e, convex, none): con		Slone (%):	5
Subregion (LRR): A Lat: -		Long: -	clici (coricav	Datu		Glope (70).	
			NIVA		·····		
Soil Map Unit Name: Kapowsin gravelly ashy loam,				I classification: none	`		
Are climatic / hydrologic conditions on the site typical for	•					D N-	
Are Vegetation □, Soil □, or Hydrology □ significantly o				cumstances" present on t		∋s ⊔ No	
Are Vegetation □, Soil □, or Hydrology □ naturally prol	olematic?	(If n	eeded, expla	ain any answers in Rema	rks.)		
SUMMARY OF FINDINGS - Attach site map s	showing san	npling poin	t locations,	transects, important for	eatures, etc.		
Hydrophytic Vegetation Present? Yes ⊠	No 🗆						
Hydric Soils Present? Yes □	No ⊠		the Sampl vithin a We		Yes □	No 🛛	
Wetland Hydrology Present? Yes ⊠	No 🗆		· · · · · · · · · · · · · · · · · · ·	, tidira i			
Remarks: Click here to enter text.		•					
VEGETATION – Use scientific names of plants.							
· ·		Dania ant	La d'a atan	Dominance Test work			
Tree Stratum (Plot size: 5-m diameter)	Absolute % Cover	Dominant Species?	Indicator Status	Number of Dominant S		3	
1. Populus balsamifera	95	Yes	FAC	that are OBL, FACW, o		<u> </u>	(A)
2. <u>Fraxinus latifolia</u> 3.	15	No	FACW	Total Number of Domir Species Across all Stra		3	(B)
4.				Percent of Dominant S		100%	_ ` ′
	110	= Total Co	over	that are OBL, FACW, o	r FAC:	10070	(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diameter)	40	V	E4 0)4/	Prevalence Index wor			
Fraxinus latifolia Acer circinatum	10 2	Yes No	FACW FAC	Total % Cover of: OBL species	<u>Multip</u> x 1 =	ply by:	
3.				FACW species	x 2 =		
4				FAC species	x 3 =		
5	12	= Total Co	over	FACU species UPL species	x 4 = x 5 =		_
Herb Stratum (Plot size: 1-m diameter)				Column Totals:	(A)	-	(B)
1. Carex deweyana 2.		Yes	FAC	Prevalence Index = B/A	<i>\</i> =		
3.				Hydrophytic Veg	etation Indica	itors:	
4.				☐ 1 – Rapid Test for		egetation/	
5. 6.				 □ 2 – Dominance Te □ 3 – Prevalence Inc			
7.				4 – Morphological	Adaptations ¹ (
8. 9.				data in Remar □ 5 – Wetland Non-\		,	1
10.				☐ Problematic Hydro	phytic Vegeta	tion¹ (Explai	n)
11				¹ Indicators of hydric so present, unless disturb			nust be
Woody Vine Stratum (Plot size: 3-m diameter)	15	= Total Co	over	present, unless disturb	ad of problems	alic.	
1				Hydrophytic	_	_	_
2		= Total Co	over	Vegetation Present?	Yes 🛚	No 🗆	l
% Bare Ground in Herb Stratum: 95		- 10tai 00		i resent:			
Remarks:							

Profile Des			ne depth	neede			or confirm the ab	sence	of indicators	.)		
Depth (inches)	Matrix Color (moist)	%	(color (m		<u>Features</u> Type	1 Loc ²	2	Texture		Remarks	
0-6	10YR 2/1	97		10YR	/	C Type	M		Loam		Kemana	,
6-11	10YR 3/3	100							Sandy loam			
1Typo: C-C	`anaantration D	Doplotio	n DM_E	Paduas	d Matrix CS_Ca	word or Coato	d Cand Crains	21 00:	DI _Doro Linin	a NA-Natri	·	
					d Matrix, CS=Co		a Sana Grains.		PL=Pore Linin			lo3.
-	ol (A1)	рпсавіе	to all L		nless otherwise Sandy Redox (S	-			tors for Problem Muck (A10	-	aric Soi	is":
	Epipedon (A2)				Stripped Matrix (,			ted Parent Mat			
	Histic (A3)				Loamy Mucky M		ept MLRA 1)		ery Shallow D			
	gen Sulfide (A4)				Loamy Gleyed M		,		ther (Explain i			
	ted Below Dark S	,	411)		Depleted Matrix	` '						
	Dark Surface (A				Redox Dark Surf	, ,			ators of hydrop			
	Mucky Mineral (Depleted Dark S				etland hydrolog sturbed or prob		present,	unless
	Gleyed Matrix (Redox Depression	ons (Fo)		- Cit	starbed or prot	nomatio.		
	Layer (if prese	nt):					Hydric soil			_		
Туре:							present?		Yes	□ N	lo 🛛	
Depth	(inches):						•					
Remarks:	Redox is faint.	Pofucal	ot 11" D	96								
ixemaiks.	Nedox is fairt.	Refusal	מנוו ט	JO.								
HYDROLO	OGY											
	ydrology Indica	tors:										
	licators (minimur		required	: check	all that apply)			Seco	ndary Indicato	rs (2 or mo	re requir	ed)
	e water (A1)					Leaves (excer	ot MLRA 1, 2, 4A		Water-Staine	d Leaves (B9) (ML	RA 1,
Ü	Vater Table (A2)				& 4B) (B9)				2, 4A & 4B)			
	ation (A3)				Salt Crust (B1				Drainage Pat			
	Marks (B1) ent Deposits (B2)\			Aquatic Inverte Hydrogen Sulfi				Dry-Season Vis			on. (CO)
	eposits (B3)	-)			, 0	` ,	Living Roots (C3)		Geomorphic		Ū	ery (Ca)
	Mat or Crust (B4))				educed Iron (C			Shallow Aqui	`	<i>'-</i>)	
_	eposits (B5)					eduction in Tille	•	\boxtimes	FAC-Neutral			
	e Soil Cracks (B	6)				essed Plants (D			Raised Ant M	lounds (De	6) (LRR A	A)
	ation Visible on A			•	Other (explain	in remarks)			Frost-Heave	Hummock	3	
☐ Sparse	ely Vegetated Co	oncave S	urface (E	38)								
Field Obse	ervations:											
Surface Wa	ater Present?	Yes [□ No	\boxtimes	Depth (in):	-	Wetland Hyd	rology				
Water Table	e Present?	Yes [□ No	\boxtimes	Depth (in):		Present		Y	es 🏻	No [
Saturation I	Present? apillary fringe)	Yes [□ No		Depth (in):							
		ream da	ide moi	nitorina	well aerial photo	ns previous ins	pections), if availa	able.				
. Doddibe IX	230.434 Data (31	Jani gai	-go, 11101	oring	, aonai priot	oo, provious ilic	podionoj, ii avali					
Remarks:	Geomorphic	position is	s a depr	ession.								



Project/Site: Nisqually State Park		City/	County: F	Pierce	Sampling da	ate: <u>9-16-2</u>	2021
Applicant/Owner: Washington State Parks				State: WA	Sampling	Point: DP	-57
Investigator(s): Roen Hohlfeld and Jamie Sloan		Section	, Township,	Range: S20, T16N, R	 :04E		
Landform (hillslope, terrace, etc): Depression				e, convex, none): con		Slope (%):	5
Subregion (LRR): A Lat: -			,		um: -	0.000 (70).	
Soil Map Unit Name: Kapowsin gravelly ashy loa	om Oto 6 porco						
Are climatic / hydrologic conditions on the site typica		-				, –	
Are Vegetation □, Soil □, or Hydrology □ significar	-			cumstances" present on		res ⊔ No	
Are Vegetation \square , Soil \square , or Hydrology \square naturally	problematic?	(If ne	eeded, expla	ain any answers in Rema	ırks.)		
SUMMARY OF FINDINGS — Attach site ma	ap showing sa	ampling point	t locations,	transects, important f	eatures, etc	; <u>.</u>	
Hydrophytic Vegetation Present? Yes	⊠ No						
Hydric Soils Present? Yes	□ No		the Sampl vithin a We		Yes 🗌	No 🛛	
Wetland Hydrology Present? Yes	⊠ No	_ \ \	illilli a vve	euanu r			
VEGETATION – Use scientific names of plan	nts.			r			
Tree Stratum (Plot size: 5-m diameter)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test work Number of Dominant S			
Populus balsamifera	45	Yes	FAC	that are OBL, FACW, of		3	(A)
2.				Total Number of Domi		4	-
3. 4.				Species Across all Stra Percent of Dominant S			_ (B)
· ·	45	= Total Co	ver	that are OBL, FACW, of		75%	(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diameter)				Prevalence Index wo	rksheet:		
1. Gaultheria shallon	35	Yes	FACU	Total % Cover of:		tiply by:	
Fraxinus latifolia Spiraea douglasii	20 10	Yes No	FACW FACW	OBL species FACW species	x 1 : x 2 :		_
Prunus emarginata	trace	No	FACU	FAC species	x 3 :		_
5				FACU species	x 4 :		_
Herb Stratum (Plot size: 1-m diameter)	65	_ = Total Co	ver	UPL species Column Totals:	x 5 :	=	
1. Carex obnupta	65	Yes	OBL		(A)		(B)
2. Rubus ursinus	trace	No	FACU	Prevalence Index = B/			
3. 4.				Hydrophytic Veg ☐ 1 – Rapid Test for			
5.				□ 1 = Rapid Test for□ 2 = Dominance Test	, , ,	vegetation	
6.				☐ 3 – Prevalence In			
7. 8.				4 – Morphological data in Rema	Adaptations ¹	Provide sup	porting
9.				□ 5 – Wetland Non-			,
10				☐ Problematic Hydro	. , .		,
11			vor	¹ Indicators of hydric so present, unless disturb			nust be
Woody Vine Stratum (Plot size: 3-m diameter)	65	_ = Total Co	vei	present, unless distant	ca or problem	nauc.	
1				Hydrophytic	_		-
2	-	= Total Co	VAr	Vegetation Present?	Yes 🛚	No □]
% Bare Ground in Herb Stratum: 35		_ = 10tal C0	v GI	i resent:			
Remarks:				•			

	cription: (Desci		the dep	th need		ent the indicator ox Features	or confirm the ak	sence	of indicators	.)	
Depth (inches)	Color (moist)	%	,	Color (m		% Type	1 Loc ²	2	Texture	R	emarks
0-9	10YR 2/1	9		10YR		1 C	М		Loam		
1= 0.0	5							2.			
						Covered or Coate	d Sand Grains.		PL=Pore Linin		
-	Indicators: (Ap	plicab	le to all						tors for Probl	-	ric Soils ³ :
☐ Histoso ☐ Histic B	ol (A1) Epipedon (A2)				Sandy Redox Stripped Mate	` '			cm Muck (A10 led Parent Mat	,	
	Histic (A3)					y Mineral (F1) (exc	cept MLRA 1)		ery Shallow D		(TF12)
	en Sulfide (A4)				Loamy Gleve		70pt W.Er () ()		ory Challon D Other (Explain i		(2)
, ,	ed Below Dark S	Surface	(A11)		Depleted Mat	trix (F3)			` '	,	
	Dark Surface (A1	,			Redox Dark S	, ,			ators of hydrop		
	Mucky Mineral (k Surface (F7)			etland hydrolog sturbed or prob		resent, unless
	Gleyed Matrix (S	-			Redox Depre	essions (F6)		- GIC	narboa or proc	nomatio.	
	Layer (if prese	nt):					Hydric soil			_	_
Type:							present?		Yes	☐ No	> ⊠
Depth (inches):						-				
Remarks:	Redox is faint.	Refusa	al at 9" B	SG							
rtomanto.	rtodox io idini.	rtordoc									
HYDROLO)GY										
	drology Indica	tors:									
	cators (minimun		e require	d: check	all that apply)		Seco	ndary Indicato	rs (2 or more	e required)
☐ Surface	e water (A1)					ned Leaves (exce)	pt MLRA 1, 2, 4A		Water-Staine	d Leaves (B	9) (MLRA 1 ,
J	ater Table (A2)				& 4B) (B9)				2, 4A & 4B)		
	tion (A3)								Drainage Pat		(00)
	Marks (B1) ent Deposits (B2) \				rertebrates (B13) Sulfide Odor (C1)			Dry-Season Vis		al Imagery (C9)
	ent Deposits (B2 eposits (B3)	-)			, ,	hizospheres along	Living Roots (C3)		Geomorphic		0 , , ,
	lat or Crust (B4)					of Reduced Iron (C			Shallow Aqui	,	,
_	posits (B5)					n Reduction in Tille	,	\boxtimes	FAC-Neutral		
	e Soil Cracks (B					Stressed Plants (D	01) (LRR A)		Raised Ant M	lounds (D6)	(LRR A)
	tion Visible on A			,	Other (expl	ain in remarks)			Frost-Heave	Hummocks	
	ly Vegetated Co	ncave :	Surface	(B8)							
Field Obser	rvations:										
Surface Wa	ter Present?	Yes) X	Depth (in):		Wetland Hyd	rology			
Water Table	Present?	Yes) X	Depth (in):	-	Present		Y	es 🏻	No 🗆
Saturation F	Present? pillary fringe)	Yes) ×	Depth (in):	-					
		ream a	auge. m	onitoring	well, aerial n	hotos, previous ins	spections), if avail	able:			
	2000 (00	·· 9			, p	, p. 57.505 III	.,				
Remarks:	Geomorphic p	position	is a dep	ression.							



Project/Site: Nisqually State Park		City	/County: F	Pierce Sam	pling date: 9-	16-2021
Applicant/Owner: Washington State Parks				State: WA S	ampling Point:	DP-58
Investigator(s): Roen Hohlfeld and Jamie Sloan		Section	n, Township,	Range: S20, T16N, R04E		
Landform (hillslope, terrace, etc): Depression		Local r	elief (concav	e, convex, none): concave	Slope (^c	%): 2
Subregion (LRR): A Lat: -		Long: -		Datum:	-	
Soil Map Unit Name: Kapowsin gravelly ashy loa		<u> </u>				
Are climatic / hydrologic conditions on the site typica				·		
Are Vegetation □, Soil □, or Hydrology □ significan		-		cumstances" present on the sit	e? ⊠ Yes □	No
Are Vegetation □, Soil □, or Hydrology □ naturally	•	(If n	eeded, expla	ain any answers in Remarks.)		
SUMMARY OF FINDINGS – Attach site ma	ap showing sa	ampling poir	nt locations,	transects, important featur	es, etc.	
Hydrophytic Vegetation Present? Yes	⊠ No					
Hydric Soils Present? Yes	⊠ No		the Sampl vithin a We		□ No 🏻	\boxtimes
Wetland Hydrology Present? Yes	⊠ No			, iidiid .		
VEGETATION – Use scientific names of plan	nts.			Γ		
Tree Stratum (Plot size: 5-m diameter) 1. Fraxinus latifolia	Absolute % Cover 85	Dominant Species? Yes	Indicator Status FACW	Dominance Test workshee Number of Dominant Specie that are OBL, FACW, or FAC	s 5	(A)
2				Total Number of Dominant Species Across all Strata:	5	(B)
4	85	_ = Total Co	over	Percent of Dominant Specie that are OBL, FACW, or FAC		(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diameter)	40	V	EAC)4/	Prevalence Index workshe		
Spiraea douglasii Populus balsamifera	10 3	Yes Yes	FACW FAC	Total % Cover of: OBL species	Multiply by: x 1 =	
3.				FACW species	x 2 =	
5.				FAC species FACU species	_ x 3 = x 4 =	
	13	= Total Co	over	UPL species	x 5 =	
Herb Stratum (Plot size: 1-m diameter) 1. Oenanthe sarmentosa	5	Yes	OBL	Column Totals:	(A)	(B)
2. Poa sp.	3	Yes	FAC*	Prevalence Index = B/A =		
3.				Hydrophytic Vegetatio		
4. 5				□ 1 – Rapid Test for Hydromath⊠ 2 – Dominance Test is a		on
6.				☐ 3 – Prevalence Index is	≤ 3.0 ¹	
7. 8.				4 – Morphological Adap data in Remarks or		
9.				☐ 5 – Wetland Non-Vascu	ılar Plants ¹	,
10.				☐ Problematic Hydrophytic Indicators of hydric soil and	-	
11	8	= Total Co	over	present, unless disturbed or		gy must be
Woody Vine Stratum (Plot size: 3-m diameter) 1.				Hydrophytic		
2	_	= Total Co	over	Vegetation Y Present?	es 🛛 No	
% Bare Ground in Herb Stratum: 92						
Remarks: *Assumed FAC.						

			he depth	neede	d to document the in		or confirm the ab	sence	of indicators.)	
Depth (inches)	Matrix Color (moist)	%	C	color (m	Redox Featu oist) %	<u>res</u> Type¹	Loc ²	2	Texture	R	emarks
0-9	10YR 3/1	90		7.5YR		C	M		Loam		
_								_			
					d Matrix, CS=Covered		d Sand Grains.		PL=Pore Lining		
-		pplicable	to all L		nless otherwise note	ed.)			tors for Probl	-	ric Soils³:
☐ Histoso	` '				Sandy Redox (S5)				cm Muck (A10)	,	
	Epipedon (A2) Histic (A3)				Stripped Matrix (S6) _oamy Mucky Mineral	I (F1) (eyc	ent MIRA 1)		ed Parent Mat ery Shallow Da		(TF12)
	gen Sulfide (A4)				_oamy Gleyed Matrix		opt were t		ory oriallow by other (Explain i		(11 12)
, ,	ed Below Dark S	Surface (A11)		Depleted Matrix (F3)	(- –)			(,	
	Dark Surface (A1	,			Redox Dark Surface (,			ators of hydrop		
	Mucky Mineral (Depleted Dark Surfac				etland hydrolog sturbed or prob		resent, unless
-	Gleyed Matrix (Redox Depressions (F	-8) 		uic	sturbed of prob	ilematic.	
Restrictive	Layer (if prese	nt):					Hydric soil				
Type:							present?		Yes	⊠ No	. 🗆
Depth ((inches):										
Remarks:	Redox is faint.	Pofusal	at 0" BS	G							
Nemarks.	Nedox is fairle.	Refusal	at a bo	О.							
HYDROLO)GV										
		4									
	drology Indica icators (minimun		required	: check	all that apply)			Secor	ndary Indicator	s (2 or more	e required)
☐ Surface	e water (A1)		•		Water-Stained Leav	es (excen	t MLRA 1. 2. 4A		Water-Staine	•	
	/ater Table (A2)				& 4B) (B9)	(, _, _,		2, 4A & 4B)		-, (,
☐ Saturat	tion (A3)				Salt Crust (B11)				Drainage Pat		
	Marks (B1)				Aquatic Invertebrate				Dry-Season V		. ,
	ent Deposits (B2	2)			Hydrogen Sulfide O	` ,	i da a Danta (CO)				al Imagery (C9)
	eposits (B3) fat or Crust (B4)				Oxidized Rhizosphe Presence of Reduce				Geomorphic I Shallow Aquit	`)
-	eposits (B5)	1			Recent Iron Reducti	,	•		FAC-Neutral		
	e Soil Cracks (B	6)			Stunted or Stressed				Raised Ant M	, ,	(LRR A)
	tion Visible on A		agery (B7	7) 🗆	Other (explain in rer		, ,		Frost-Heave		,
☐ Sparse	ely Vegetated Co	ncave S	urface (E	38)							
Field Obser	rvations:										
Surface Wa	ter Present?	Yes [□ No	\boxtimes	Depth (in): -						
Water Table	e Present?	Yes [□ No	\boxtimes	Depth (in):		Wetland Hyd Present		Y	es 🛛	No 🗆
Saturation F		Yes [\boxtimes	Depth (in): -		rresent	•			
	pillary fringe)	163	_ INO		Берит (ш).						
		ream ga	uge, moi	nitorina	well, aerial photos, pr	evious ins	pections), if availa	able:			
		3-	J , -	3			. ,,				
Remarks:	Geomorphic p	position i	s a depr	ession.							
i											



Project/Site: Nisqually State Park		City/	County: F	Pierce	Samplin	g date:	9-16-2	021
Applicant/Owner: Washington State Parks				State:	WA Samp	_		
Investigator(s): Roen Hohlfeld and Jamie Sloan		Section	. Township.	Range: S20, T1		Ü		
				e, convex, none):		Slor	ne (%):	2
Subregion (LRR): A Lat: -		Long: -		o, ooon,oo).	Datum: -		70 (70).	
Soil Map Unit Name: Kapowsin gravelly ashy loam.			NW	/I classification:	none			
Are climatic / hydrologic conditions on the site typical for				-				
Are Vegetation □, Soil □, or Hydrology □ significantly				cumstances" prese		⊠ Yes	□ No	
Are Vegetation □, Soil □, or Hydrology □ naturally pro				ain any answers in				
				-				
SUMMARY OF FINDINGS – Attach site map		 	t locations,	transects, impor	rtant features,	etc.		
Hydrophytic Vegetation Present? Yes		ls.	the Sampl	led Area				
Hydric Soils Present? Yes	_	w	ithin a We		Yes 🗆	」 No	o 🛛	
Wetland Hydrology Present? Yes	□ No ▷							
Remarks: Hydrologic conditions for the three	-month perio	d prior to th	e site visit	were drier than n	ormal.			
VEGETATION – Use scientific names of plants	S			T				
T 0 (D	Absolute	Dominant	Indicator	Dominance Tes				
Tree Stratum (Plot size: 5-m diameter) 1. Fraxinus latifolia	% Cover 90	Species? Yes	Status FACW	Number of Domi that are OBL, FA			2	(A)
2.				Total Number of			4	• · · /
3. 4.				Species Across Percent of Domi				(B)
	90	= Total Co	ver	that are OBL, FA		5	60%	(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diameter)				Prevalence Inde	ex worksheet:			
Gaultheria shallon Rosa nutkana	15 3	Yes No	FACU FAC	Total % Cover of OBL species		Multiply b	<u>)y:</u>	
3	<u> </u>	NO	170	FACW species		x 2 = _	180	
4.				FAC species		x 3 =	18	
5	18	= Total Co	ver	FACU species UPL species		x 4 = x 5 =	80	_
Herb Stratum (Plot size: 1-m diameter)		•		Column Totals:		(A)	278	(B)
Linnaea borealis Carex deweyana	<u>5</u> 3	Yes Yes	FACU FAC	Prevalence Inde	x = B/A = 2	4		
3			17.0	Hydrophyti	c Vegetation Ir	ndicators	S:	
4 5.					est for Hydrophy nce Test is > 50		etation	
6.								
7.					ogical Adaptation			
9.				☐ 5 – Wetland	Non-Vascular I	Plants ¹	·	
10				1	Hydrophytic Ve			
11	8	= Total Co	ver	Indicators of hypersent, unless of present, unless of the present.				iust be
Woody Vine Stratum (Plot size: 3-m diameter)	·	_						
1. 2.				Hydrophytic Vegetation	Yes	M	No □	
	_	= Total Co	ver	Present?	162	لاع	.10	
% Bare Ground in Herb Stratum: 92								
Remarks:								
1								

		ribe to	the dep	th need		ent the indicator	or confirm the at	osence	of indicators.)		
Depth (inches)	Matrix Color (moist)	%		Color (n		ox Features % Type	e ¹ Loc ²	2	Texture	Re	emarks
0-7	10YR 2/1	98		10YR	•	2 C	М		Silt loam		
¹Type: C=C	oncentration, D=	:Depleti	on. RM=	Reduce	ed Matrix, CS=	Covered or Coate	ed Sand Grains	²l oc:	PL=Pore Lining,	M=Matrix	
	Indicators: (Ap								tors for Proble		ric Soils ³ :
☐ Histose	ol (A1)				Sandy Redox	(S5)		□ 2	cm Muck (A10)	•	
	Epipedon (A2) Histic (A3)				Stripped Mate	` '	pont MI DA 1)		Red Parent Mate	, ,	TE12\
	gen Sulfide (A4)				Loamy Gleye	y Mineral (F1) (exc ed Matrix (F2)	cept MLRA 1)		/ery Shallow Dai Other (Explain in		11-12)
☐ Deplet	ed Below Dark S		(A11)		Depleted Mat	trix (F3)			` .	,	
	Dark Surface (A1 Mucky Mineral (,			Redox Dark S	Surface (F6) k Surface (F7)			ators of hydroph etland hydrology		
	Gleyed Matrix (,			Redox Depre	, ,			sturbed or proble		esent, unless
Restrictive	Layer (if prese	nt):									
Type:							Hydric soil present?		Yes [□ No	\boxtimes
Depth ((inches):						present				
Remarks:	Redox is faint.	Pofusa	d at 7" R	96							
Nomano.	redox is fairit.	rtcrusa	ii at i D	00.							
HYDROLO	GY										
Wetland Hy	drology Indica	tors:				,		_		' 2	,
-	icators (minimun e water (A1)	n of one	require	d: check					ndary Indicators		
	/ater Table (A2)				water-Stall & 4B) (B9)	ned Leaves (exce	pt IVILKA 1, 2, 4A		Water-Stained 2, 4A & 4B)	Leaves (B	9) (WILKA 1,
_	tion (A3)				Salt Crust ((B11)			Drainage Patte	erns (B10)	
	Marks (B1)					rertebrates (B13)			Dry-Season W		
	ent Deposits (B2 eposits (B3))			, ,	Sulfide Odor (C1) hizospheres along	Living Poots (C2)		Saturation Visit Geomorphic P		0 , ,
	eposits (ธร) fat or Crust (B4)					of Reduced Iron (C	• , ,		Shallow Aquita	` ,	1
_	eposits (B5)					Reduction in Tille	•		FAC-Neutral T		
	e Soil Cracks (B	,				Stressed Plants (I	01) (LRR A)		Raised Ant Mo		(LRR A)
	tion Visible on A				Other (expl	ain in remarks)			Frost-Heave H	ummocks	
☐ Sparse	ely Vegetated Co	ncave s	Surrace	(B8)							
	ter Present?	Yes	□ No	o 🗵	Depth (in):						
Water Table			□ N	_	Depth (in):		Wetland Hyd Present		Ye	s 🗆	No 🛛
Saturation F			□ N		Depth (in):		Present			_	_
	pillary fringe)	100			Deptii (iii).						
Describe Re	ecorded Data (st	ream ga	auge, m	onitoring	well, aerial p	hotos, previous in	spections), if avail	able:			
Remarks:	Geomorphic p	osition	is a dep	ression							



Project/Site: Nisqually State Park		City/	County: F	Pierce	Sampling d	late: <u>9-17</u>	7-2021	
Applicant/Owner: Washington State Parks				State: \	NA Sampling	g Point: [P-60	
Investigator(s): Roen Hohlfeld and Katy Crandall		Section,	Township,	Range: S25, T16N	I, R03E			
Landform (hillslope, terrace, etc):	Local re	Local relief (concave, convex, none): concave Slope (%): 2						
Subregion (LRR): A Lat: -		Long: -]	Datum: -			
Soil Map Unit Name: Pilchuck fine sand				/I classification: no	·			
Are climatic / hydrologic conditions on the site typical fo	r this time of y	/ear? □ Yes						
Are Vegetation \square , Soil \square , or Hydrology \square significantly	disturbed?	Are "	Normal Circ	cumstances" present	on the site?	Yes □ No	0	
Are Vegetation \square , Soil \square , or Hydrology \square naturally pro	blematic?	(If ne	eded, expla	ain any answers in Re	emarks.)			
SUMMARY OF FINDINGS – Attach site map	showing san	npling point	locations,	transects, importa	nt features, et	c.		
Hydrophytic Vegetation Present? Yes ⊠	No 🗆]						
Hydric Soils Present? Yes ⊠	No 🗆		the Sampl ithin a We		Yes 🛛	No 🗆		
Wetland Hydrology Present? Yes ⊠	No 🗆		itiiiii a vve	stiana:				
Remarks: Hydrologic conditions for the three- VEGETATION – Use scientific names of plants.								
Tree Stratum (Plot size: 5-m diameter) 1	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test w Number of Dominal that are OBL, FAC	nt Species	4	(A)	
2.				Total Number of Do	ominant	4	— (N) (B)	
3. 4.				Percent of Dominar	_	4000/	(B)	
		= Total Cov	/er	that are OBL, FAC		100%	(A/B)	
Sapling/Shrub Stratum (Plot size: 3-m diameter)				Prevalence Index				
Rubus spectabilis Acer circinatum	30 25	Yes Yes	FAC FAC	Total % Cover of: OBL species	<u>Mu</u> x 1	ltiply by:		
3. Oplopanax horridus	10	No	FAC	FACW species	x 2			
4. Symphoricarpos albus	5	No	FACU	FAC species	x 3			
5	70	= Total Cov	/er	FACU species UPL species	x 4 x 5	=		
Herb Stratum (Plot size: 1-m diameter)				Column Totals:	(A)		(B)	
Athyrium filix-femina Urtica dioica	25 10	Yes Yes	FAC FAC	Prevalence Index =	: B/A =			
3.		163	TAC	Hydrophytic \	/egetation Indi	cators:		
4					for Hydrophytic	: Vegetation		
5. 6.				 □ 2 – Dominance □ 3 – Prevalence				
7.				☐ 4 – Morpholog	ical Adaptations			
8.				data in Re	marks or on a se on-Vascular Pla	•	et)	
9				4	ydrophytic Vege		lain)	
11.				¹ Indicators of hydric			/ must be	
Woody Vine Stratum (Plot size: 3-m diameter)	35	= Total Cov	/er	present, unless dist	urbed or proble	matic.		
1.				Hydrophytic				
2.		TatalOa		Vegetation	Yes 🗵	No l		
% Bare Ground in Herb Stratum: 70		= Total Cov	ver	Present?				
Remarks:				•				

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)										
Depth (inches)	Matrix Color (moist)	%	Color (n		Redox Features % Typ	pe¹ Loc⁴	2	Texture	Remarks	
0-6	10YR 2/2	100	•	,				Silt loam		
6-12	10YR 3/2	88	10YR	3/6	12 0	Э М		Silt loam		
¹Tvpe: C=0	Concentration, D=	Depletion.	RM=Reduce	d Matrix.	CS=Covered or Coa	ted Sand Grains.	² Loc:	PL=Pore Lining,	M=Matrix.	
	il Indicators: (Ap								natic Hydric Soils ³ :	
-	sol (A1)				edox (S5)			cm Muck (A10)		
	Epipedon (A2)				Matrix (S6)			led Parent Mater	ial (TF2)	
	Histic (A3)				lucky Mineral (F1) (e	xcept MLRA 1)			k Surface (TF12)	
☐ Hydro	gen Sulfide (A4)				Bleyed Matrix (F2)	. ,		ther (Explain in I	Remarks)	
☐ Deple	ted Below Dark S	urface (A1	1) 🗆	Depleted	Matrix (F3)					
	Dark Surface (A1	,	\boxtimes		ark Surface (F6)				tic vegetation and	
	y Mucky Mineral (Dark Surface (F7)				must be present, unles	SS
☐ Sandy	y Gleyed Matrix (S	S4)		Redox D	epressions (F8)	1	als	sturbed or proble	matic.	
Restrictive	e Layer (if preser	nt):								
Type:						Hydric soil	l	Yes 2	⊠ No □	
	(inches):					present?				
Remarks:	Redox is faint.	Refusal at	7" BSG.							
HYDROL	OGY									
	lydrology Indicat		ruiradi abaal	all that a	annia)		Casas	ndom i Indiantom	(2 or more required)	
	dicators (minimum	or one rec	quirea: cneck					-	(2 or more required)	
	ce water (A1) Nater Table (A2)			Water-	Stained Leaves (exc (B9)	ept MLRA 1, 2, 4A		Water-Stained 2, 4A & 4B)	Leaves (B9) (MLRA 1,	,
J	ation (A3)			,	rust (B11)			Drainage Patte	rns (B10)	
	Marks (B1)				c Invertebrates (B13)			Dry-Season Wa		
	nent Deposits (B2))			gen Sulfide Odor (C1				le on Aerial Imagery (C	29)
	Deposits (B3)	,		Oxidize	ed Rhizospheres alon	g Living Roots (C3)	\boxtimes	Geomorphic Po		,
	Mat or Crust (B4)				nce of Reduced Iron (Shallow Aquitar	rd (D3)	
☐ Iron D	eposits (B5)			Recen	t Iron Reduction in Ti	lled Soils (C6)		FAC-Neutral Te	est (D5)	
☐ Surfac	ce Soil Cracks (B6	6)		Stunte	d or Stressed Plants	(D1) (LRR A)		Raised Ant Mou	unds (D6) (LRR A)	
☐ Inunda	ation Visible on A	erial Image	ery (B7)	Other	(explain in remarks)			Frost-Heave Hu	ımmocks	
☐ Spars	ely Vegetated Co	ncave Sur	ace (B8)			-				
Field Obse	ervations:									
Surface Wa	ater Present?	Yes □	No 🗵	Depth ((in): <u>-</u>	Wetland Hyd	Irology			
Water Tabl	le Present?	Yes □	No ⊠	Depth ((in): <u>-</u>	Present		Yes	s ⊠ No □	
Saturation (includes c	Present? apillary fringe)	Yes □	No ⊠	Depth ((in): <u>-</u>	<u> </u>				
		ream gaug	e, monitoring	well, aer	rial photos, previous i	nspections), if avail	lable:			
	`	2 0				•				
Remarks:	Geomorphic p	osition is a	a depression.	Hydrolog	gical conditions drier	than normal.				
I										



Project/Site: Nisqually State Park		City/	County: F	Pierce	_ Sampling (date: <u>9-17-</u> 2	2021
Applicant/Owner: Washington State Parks				State: W	_ A Samplin	ng Point: DP	P-61
Investigator(s): Roen Hohlfeld and Katy Cranda	II	Section	, Township,	Range: S25, T16N,	R03E		
Landform (hillslope, terrace, etc): Hillslope		Local re	elief (concav	e, convex, none): no	ne	Slope (%):	15
Subregion (LRR): A Lat: -				· -	atum: -	(/	
Soil Map Unit Name: Pilchuck fine sand	-			I classification: non			
Are climatic / hydrologic conditions on the site typi	cal for this time of y	/ear? □ Ye					
Are Vegetation □, Soil □, or Hydrology □ signific	_			cumstances" present or	,	Yes □ No	
Are Vegetation □, Soil □, or Hydrology □ natural	-			ain any answers in Rem		100 = 110	
SUMMARY OF FINDINGS — Attach site r		 	t locations,	transects, important	features, et	tc.	
Hydrophytic Vegetation Present? Yes	_	le ·	the Sampl	ed Area		🔽	
Hydric Soils Present? Yes	_	w	ithin a We		Yes 🗌	No 🛚	
Wetland Hydrology Present? Yes	s □ No ⊠						
VEGETATION – Use scientific names of p	ants.						
T 0 (D	Absolute	Dominant	Indicator	Dominance Test wo			
Tree Stratum (Plot size: 5-m diameter) 1Acer macrophyllum	% Cover 90	Species? Yes	Status FACU	Number of Dominant that are OBL, FACW,		3	(A)
2				Total Number of Dom	ninant -	5	_ ` _ `
3. 4.				Species Across all St Percent of Dominant	-		_ (B)
4	90	= Total Co	ver	that are OBL, FACW,		60%	(A/B)
Sapling/Shrub Stratum (Plot size: 3-m diameter)				Prevalence Index w	orksheet:		
Acer circinatum Thuja plicata	30 15	Yes Yes	FAC FAC	Total % Cover of: OBL species		<u>ultiply by:</u> 1 =	
3. Oplopanax horridus	10	No	FAC	FACW species		2 =	
4.				FAC species		3 =	
5	 55	= Total Co	ver	FACU species UPL species	x 4	4 = 5 =	
Herb Stratum (Plot size: 1-m diameter)		_ 10tai 00	• • • • • • • • • • • • • • • • • • • •	Column Totals:	(A)	,	(B)
Polystichum munitium Hydrophyllum tenuipes	25 10	Yes Yes	FACU FAC	Prevalence Index = E	3/A =		
Hydrophyllum tenuipes Urtica dioica	5	No	FAC	Hydrophytic Ve	getation Indi	icators:	
4.				☐ 1 – Rapid Test fo	, , ,	J	
5							
7.				4 – Morphologica			
8. 9.				data in Rema		separate sheet ants¹	1)
10.				☐ Problematic Hyd			iin)
11				¹ Indicators of hydric s present, unless distu			must be
Woody Vine Stratum (Plot size: 3-m diameter)	40	= Total Co	vei	present, unless dista	bed of proble	mado.	
1				Hydrophytic	r	a c	7
2	-	= Total Co	ver	Vegetation Present?	Yes 2	⊠ No L	_
% Bare Ground in Herb Stratum: 35	-		-				
Remarks:							

Depth (inches) Color (moist) W. Calor (moist) W. Ecolor (m	Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
G-9 10YR 2/3 50 Sandy loam Mixed matrix 9-14 10YR 4/3 100 Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Costed Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Costed Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Costed Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Costed Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Costed Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Costed Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Costed Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Costed Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Costed Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Costed Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Costed Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Costed Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Costed Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Costed Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Costed Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Costed Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Costed Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Costed Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or RM=Reduced Reduced Final Cs] Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or RM=Reduced Reduced Final Reduced Reduc			%	Color (m		rpe¹ Loc	2	Texture	Re	marks
Type: CaConcentration, DeDepletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. -Loc: PLe-Pore Lining, M=Matrix.		, ,				,				
Type: CaConcentration, DeDepletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. -Loc: PLe-Pore Lining, M=Matrix.	0-9	10YR 3/3	50					Sandy loam	Mixe	ed matrix
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion (Ap) Helstoel (Ap) Helstoel (Ap) Black Heistic (Ap) Black Heistic (Ap) Depletied Matrix (Ap) Depletied Matrix (Ap) Depletied Matrix (Ap) Depletied Matrix (Ap) Depletied Matrix (Ap) Sandy Mucky (Menal (S1)) Depletied Matrix (Ap) Redox Depressions (FB) Redox Depressions (FB) Redox Depressions (FB) Redox Depressions (FB) Hydric soil present? Hydric soil prese	9-14	10YR 4/3	100							
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosoe (A1)										
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosoe (A1)										
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosoe (A1)										
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosoe (A1)										
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosoi (A1)										
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosoi (A1)										
Histisce (A1)	¹ Type: C=0	Concentration, D=E	Depletion, R	M=Reduced	Matrix, CS=Covered or Co	ated Sand Grains.	² Loc: F	PL=Pore Lining	, M=Matrix.	
Histic Epipedon (Az)	Hydric So	il Indicators: (App	olicable to a	all LRRs, uı	nless otherwise noted.)		Indicat	ors for Proble	matic Hydr	ic Soils³:
Black Histic (A3)		` '								
Hydrogen Sulfide (A4)										== . ()
□ Depleted Below Dark Surface (A11) □ Depleted Matrix (F3) Thick Dark Surface (A12) □ Redox Dark Surface (F6) □ Sandy Mucky Mineral (S1) □ Depleted Dark Surface (F7) Redox Depressions (F8) Restrictive Layer (if present): Type: □ Depth (inches): Remarks: Hydric soil present? Yes □ No ☑		` '				except MLRA 1)		•	,	TF12)
Thick Dark Surface (A12)	,	. ,	ırface (Δ11)		, ,			tner (Explain in	Remarks)	
Sandy Mucky Mineral (S1)			, ,				³ Indica	tors of hydroph	vtic vegetat	ion and
Restrictive Layer (if present): Type: Depth (inches): Remarks: Hydric soil present? Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Secondary Indicators (2 or more required) Water-Stained Leaves (except MLRA 1, 2, 4A		•	,		. ,		we	tland hydrology	must be pr	
Type:		Gleyed Matrix (S	4)		Redox Depressions (F8)		dis	turbed or proble	ematic.	
Depth (inches): Present? Pre	Restrictive	e Layer (if presen	t):							
Depth (inches):	Type:						ı	Yes [□ No	\boxtimes
Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Secondary Indicators (2 or more required)	Depth	(inches):				- present?				
Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Surface water (A1) High Water Table (A2) Saturation (A3) Saturation (A3) Sediment Deposits (B2) Drift Deposits (B3) No Zurface Soil Cracks (B6) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Surface Water Narka (B1) Sparsely Vegetated Concave Surface (B8) Wetland Hydrology Water Table (A2) Saturation Present? Surface Water No Surface (B1) Sediment Deposits (B2) Drift Deposits (B2) Drift Deposits (B3) Drift Deposits (B4) Drift Deposits (B5) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Surface Water Present? Sparsely Vegetated Concave Surface (B8) Wetland Hydrology Present? Wetland Hydrology Present? Wetland Hydrology Present? Wetland Hydrology Present? Wetland Hydrology Present? Yes No Surface (B1) Depth (in): Saturation Present? Yes No Surface (B1) Secondary Indicators (2 or more required) Water Table Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		,								
Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Surface water (A1) High Water Table (A2) Saturation (A3) Saturation (A3) Saturation (A3) Saturation (B2) Hydrogen Sulfide Odor (C1) Drift Deposits (B3) Aquatic Irvertebrates (B13) Dry-Season Water Table (C2) Sediment Deposits (B3) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Characteristic Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No Depth (in): Saturation Present? Yes No Depth (in): Saturation Present? Yes No Depth (in): Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A 8, 4B) (B9) C, 4A & 4B) Saturation Present (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) (LRR A) Prost-Heave Hummocks Wetland Hydrology Present? Yes No No Depth (in): Saturation Present? Yes No No Depth (in): Saturation Present? Yes No No Depth (in): Saturation Previous inspections), if available:	Remarks:									
Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Surface water (A1) High Water Table (A2) Saturation (A3) Saturation (A3) Saturation (A3) Saturation (B2) Hydrogen Sulfide Odor (C1) Drift Deposits (B3) Aquatic Irvertebrates (B13) Dry-Season Water Table (C2) Sediment Deposits (B3) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Characteristic Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No Depth (in): Saturation Present? Yes No Depth (in): Saturation Present? Yes No Depth (in): Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A 8, 4B) (B9) C, 4A & 4B) Saturation Present (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) (LRR A) Prost-Heave Hummocks Wetland Hydrology Present? Yes No No Depth (in): Saturation Present? Yes No No Depth (in): Saturation Present? Yes No No Depth (in): Saturation Previous inspections), if available:										
Wetland Hydrology Indicators: Primary Indicators (minimum of one required: check all that apply) Surface water (A1) High Water Table (A2) Saturation (A3) Saturation (A3) Saturation (A3) Saturation (B2) Hydrogen Sulfide Odor (C1) Drift Deposits (B3) Aquatic Irvertebrates (B13) Dry-Season Water Table (C2) Sediment Deposits (B3) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Characteristic Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No Depth (in): Saturation Present? Yes No Depth (in): Saturation Present? Yes No Depth (in): Secondary Indicators (2 or more required) Water-Stained Leaves (B9) (MLRA 1, 2, 4A 8, 4B) (B9) C, 4A & 4B) Saturation Present (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C9) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) (LRR A) Prost-Heave Hummocks Wetland Hydrology Present? Yes No No Depth (in): Saturation Present? Yes No No Depth (in): Saturation Present? Yes No No Depth (in): Saturation Previous inspections), if available:										
Primary Indicators (minimum of one required: check all that apply) Secondary Indicators (2 or more required) Surface water (A1) High Water Table (A2) Saturation (A3) Saturation (A3) Saturation (A3) Aquatic Invertebrates (B13) Aquatic Invertebrates (B13) Drainage Patterns (B10) Drainage Patte										
Surface water (A1) High Water Table (A2) Saturation (A3) Saturation (B10) Drainage Patterns (B10) Drainage Patterns (B10) Drainage Patterns (B10) Drainage Patterns (B10) Saturation Visible on Aerial Imagery (C9) Saturation Visible on Aerial Imagery (C9) Saturation (C4) Saturation (C4) Shallow Aquitard (D3) FAC-Neutral Test (D5) Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No Depth (in): Saturation Present? Yes No Depth (in): Saturation Present? Yes No Depth (in): Cincludes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				ired: check	all that apply)		Secon	ndary Indicators	(2 or more	required)
High Water Table (A2)			01 0110 1040	iii oa. onook		cent MI PA 1 2 4A				
Water Marks (B1)		` ,				copt MEICA 1, 2, 4A	· 🗆		LCavC3 (DC) (MEICA I,
□ Sediment Deposits (B2) □ Hydrogen Sulfide Odor (C1) □ Saturation Visible on Aerial Imagery (C9) □ Drift Deposits (B3) □ Oxidized Rhizospheres along Living Roots (C3) □ Geomorphic Position (D2) □ Algal Mat or Crust (B4) □ Presence of Reduced Iron (C4) □ Shallow Aquitard (D3) □ Iron Deposits (B5) □ Recent Iron Reduction in Tilled Soils (C6) □ FAC-Neutral Test (D5) □ Surface Soil Cracks (B6) □ Stunted or Stressed Plants (D1) (LRR A) □ Raised Ant Mounds (D6) (LRR A) □ Inundation Visible on Aerial Imagery (B7) □ Other (explain in remarks) □ Frost-Heave Hummocks Field Observations: Surface Water Present? Yes □ No ☑ Depth (in): - Wetland Hydrology Present? Saturation Present? Yes □ No ☑ Depth (in): - Wetland Hydrology Present? Saturation Present? Yes □ No ☑ Depth (in): - Wetland Hydrology Present? Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	☐ Satura	ation (A3)			Salt Crust (B11)			Drainage Patte	erns (B10)	
□ Drift Deposits (B3) □ Oxidized Rhizospheres along Living Roots (C3) □ Geomorphic Position (D2) □ Algal Mat or Crust (B4) □ Presence of Reduced Iron (C4) □ Shallow Aquitard (D3) □ Iron Deposits (B5) □ Recent Iron Reduction in Tilled Soils (C6) □ FAC-Neutral Test (D5) □ Surface Soil Cracks (B6) □ Stunted or Stressed Plants (D1) (LRR A) □ Raised Ant Mounds (D6) (LRR A) □ Inundation Visible on Aerial Imagery (B7) □ Other (explain in remarks) □ Frost-Heave Hummocks Field Observations: Surface Water Present? Yes □ No □ Depth (in): □ Wetland Hydrology Present? Yes □ No □ Depth (in): □ Other (explain in remarks) Other (explain in remark	□ Water	Marks (B1)			Aquatic Invertebrates (B13	3)				
□ Algal Mat or Crust (B4) □ Presence of Reduced Iron (C4) □ Shallow Aquitard (D3) □ Iron Deposits (B5) □ Recent Iron Reduction in Tilled Soils (C6) □ FAC-Neutral Test (D5) □ Surface Soil Cracks (B6) □ Stunted or Stressed Plants (D1) (LRR A) □ Raised Ant Mounds (D6) (LRR A) □ Inundation Visible on Aerial Imagery (B7) □ Other (explain in remarks) □ Frost-Heave Hummocks □ Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes □ No ☑ Depth (in): - Wetland Hydrology Present? Saturation Present? Yes □ No ☑ Depth (in): - Wetland Hydrology Present? Saturation Present? Yes □ No ☑ Depth (in): - Wetland Hydrology Present? Saturation Present? Yes □ No ☑ Depth (in): - Wetland Hydrology Present? Saturation Present? Yes □ No ☑ Depth (in): - Wetland Hydrology Present?					, ,	•				
□ Iron Deposits (B5) □ Recent Iron Reduction in Tilled Soils (C6) □ FAC-Neutral Test (D5) □ Surface Soil Cracks (B6) □ Stunted or Stressed Plants (D1) (LRR A) □ Raised Ant Mounds (D6) (LRR A) □ Inundation Visible on Aerial Imagery (B7) □ Other (explain in remarks) □ Frost-Heave Hummocks □ Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes □ No ☑ Depth (in): - Wetland Hydrology Present? Yes □ No ☑ Depth (in): - Wetland Hydrology Present? Yes □ No ☑ Depth (in): - Wetland Hydrology Present? Yes □ No ☑ Depth (in): - Wetland Hydrology Present? Yes □ No ☑ Depth (in): - Wetland Hydrology Present? Yes □ No ☑ Depth (in): - Yes □ No ☑				_				•	, ,	
□ Surface Soil Cracks (B6) □ Stunted or Stressed Plants (D1) (LRR A) □ Raised Ant Mounds (D6) (LRR A) □ Inundation Visible on Aerial Imagery (B7) □ Other (explain in remarks) □ Frost-Heave Hummocks □ Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes □ No ☒ Depth (in): - Wetland Hydrology Present? Yes □ No ☒ Depth (in): - (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	_			_				•	. ,	
□ Inundation Visible on Aerial Imagery (B7) □ Other (explain in remarks) □ Frost-Heave Hummocks □ Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes □ No ☒ Depth (in): - Water Table Present? Yes □ No ☒ Depth (in): - Saturation Present? Yes □ No ☒ Depth (in): - (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			١	_		, ,			, ,	I DD A)
□ Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes □ No ☒ Depth (in): - Water Table Present? Yes □ No ☒ Depth (in): - Saturation Present? Yes □ No ☒ Depth (in): - (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		•				(DI) (LKK A)				LKK A)
Field Observations: Surface Water Present? Yes					other (explain in remains)		_	1 100t 1 loave 11	Idililiooko	
Water Table Present? Yes □ No ☒ Depth (in): - Present? Yes □ No ☒ Depth (in): - Includes capillary fringe) Wetland Hydrology Present? Yes □ No ☒ Depth (in): - Includes capillary fringe) Wetland Hydrology Present? Yes □ No ☒ Depth (in): - Includes capillary fringe) No ☒ Depth (in): - Includes capi				, ,						
Water Table Present? Yes □ No ☒ Depth (in): - Present? Yes □ No ☒ Depth (in): - Includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Surface Wa	ater Present?	Yes □	No ⊠	Depth (in):					
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(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					• • • •					
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Remarks:	Describe R	Recorded Data (stre	eam gauge,	monitoring	well, aerial photos, previous	inspections), if avail	lable:			
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