

Project Name: Florence LWI

		Wetland Code:	Wetland 1
Date(s) of assessment:	July 16, 2010	Size (acres):	8.11
Data Sheet Number(s):	9	Cowardin Class(es):	PEMC, PFO4C
Investigator(s):	A. Hawkins / S. Eisner	HGM Class(es):	DCNP

TRS quarter section tax lot: 1812120000702, 1812141000113, 1812141000300

Street address or location: East end of 18th Street and Willow

Latitude: **44.012201**° Longitude: **-124.090047**°

Locally Significant?: Yes

Hydrologic basin: **171002060804**

Soil -- Mapped series: Heceta fine sand, Dune land

Hydrologic Source: Groundwater

TREES / SHRUB	S	VINES / HERBS		
Pinus contorta	Shore pine	Juncus nevadensis	Sierra Rush	
Spirea douglasii	Douglas spirea	Juncus ensifolius	Dagger-Leaf Rush	
Salix hookeriana	Hooker's willow	Juncus falcatus	Sickle-Leaf Rush	
		Carex sitchensis	Sitka Sedge	

Comments:

Complex of several depressional areas, inundated during the winter and spring. These wetlands were grouped because they are located in the same geomorphic position, are influenced by the local groundwater table, and have similar adjacent land use patterns. These wetlands are dominated by herbaceous vegetation, but with a scattered overstory of Pinus contorta at the north end of the wetland. Adjacent upland is mostly bare sand. Bordered to west by residential development and to the east by parking lots. Portions of this wetland obtained concurrence for a prior wetland delineation: WD1999-0356 & WD2003-0416. The boundary along the northwest extent was confirmed by DSL just prior to LWI approval: WD2013-0142.

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	PUB = palustrine unconsolidated bottom
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
	S = Slope	FI = Flats	

Florence Local Wetland Inventory

SPECIFIC FUNCTIONS	Relative Effectiveness of the Function	Relative Values of the Function
Water Storage & Delay (WS)	5.75	3.67
Sediment Retention & Stabilization (SR)	10.00	5.29
Phosphorus Retention (PR)	10.00	7.19
Nitrate Removal & Retention (NR)	10.00	4.76
Thermoregulation (T)	0.00	0.00
Carbon Sequestration (CS)	1.25	
Organic Matter Export (OE)	0.00	
Aquatic Invertebrate Habitat (INV)	4.13	6.00
Anadromous Fish Habitat (FA)	0.00	4.88
Non-anadromous Fish Habitat (FR)	5.87	10.00
Amphibian & Reptile Habitat (AM)	1.74	6.67
Waterbird Feeding Habitat (WBF)	4.88	4.00
Waterbird Nesting Habitat (WBN)	0.00	6.67
Songbird, Raptor, & Mammal Habitat (SBM)	3.21	6.67
Pollinator Habitat (POL)	2.71	3.06
Native Plant Diversity (PD)	5.94	6.67

GROUPED FUNCTIONS	Group Scores (functions)	Group Scores (values)
Hydrologic Function (WS)	5.75	3.67
Water Quality Group (WQ)	10.00	7.19
Carbon Sequestration (CS)	1.25	
Fish Support Group (FISH)	5.87	10.00
Aquatic Support Group (AQ)	4.88	6.67
Terrestrial Support Group (TERR)	5.94	6.67
Public Use & Recognition (PU)		2.38
Provisioning Services (PS)		0.00

OTHER ATTRIBUTES	
Wetland Ecological Condition	6.54
Wetland Stressors	5.54
Wetland Sensitivity	10.00

HGM Class - Relative Probabilities (select max)	
Estuarine	0.00
Riverine	0.00
Slope	0.00
Flat	0.00
Depressional	0.00
Lacustrine	0.00



Project Name: Florence LWI

		Wetland Code:	Wetland 2
Date(s) of assessment:	July 16 & August 11, 2010	Size (acres):	2.59
Data Sheet Number(s):	7, 11	Cowardin Class(es):	PSS1C
Investigator(s):	A. Hawkins / S. Eisner	HGM Class(es):	Slope

 $TRS \; quarter \; section \; tax \; lot: \; \textbf{1812040000117}, \; \textbf{1812041300077}, \; \textbf{1812041402100}, \; \textbf{1812041402200}, \; \textbf{1812041402301}, \; \textbf{1812041402301}, \; \textbf{1812041402301}, \; \textbf{1812041402301}, \; \textbf{1812041402300}, \; \textbf{18120414000000}, \; \textbf{18120414000000}, \; \textbf{18120414000000}, \; \textbf{181204140000000000},$

1812041402303, 1812044200077

Street address or location: East of 4th Avenue; north of Heceta Beach Road

Latitude: **44.036084**° Longitude: **-124.128587**°

Locally Significant?: Yes

Hydrologic basin: 171002050704

Soil -- Mapped series: Yaquina loamy fine sand, Waldport fine sand

Hydrologic Source: Groundwater, Surface

Dominant Wetland Vegetation

TREES / SHRUBS VINES / HERBS

TREED / DIIRCED		VIIVES / ITEMPS		
Spiraea douglasii	Douglas' Spirea	Carex obnupta	Slough Sedge	
Salix hookeriana	Hooker willow	Nuphar luteum	Yellow Cow-Lily	
Malus fusca	Pacific Crabapple			
Lonicera involucrata	Bearberry honeysuckle			

Comments:

The northern wetland boundaries are generally defined by steep banks. The western portion includes a small pond on its north end. High quality wetland; including numerous snags and dense emergent vegetation in the understory. The wetland is crossed by two driveways off of Rhododendron Drive/4th Avenue. Adjacent upland species include: Vaccinium ovatum, Gaultheria shallon, Pinus contorta, Myrica californica, Picea sitchensis.

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	PUB = palustrine unconsolidated bottom
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
	S = Slope	FL= Flats	

Florence Local Wetland Inventory

SPECIFIC FUNCTIONS	Relative Effectiveness of the Function	Relative Values of the Function
Water Storage & Delay (WS)	2.67	3.08
Sediment Retention & Stabilization (SR)	5.43	5.34
Phosphorus Retention (PR)	2.89	6.07
Nitrate Removal & Retention (NR)	5.12	5.25
Thermoregulation (T)	3.89	3.33
Carbon Sequestration (CS)	2.18	
Organic Matter Export (OE)	5.42	
Aquatic Invertebrate Habitat (INV)	4.82	6.37
Anadromous Fish Habitat (FA)	0.00	4.20
Non-anadromous Fish Habitat (FR)	3.91	3.33
Amphibian & Reptile Habitat (AM)	6.37	7.33
Waterbird Feeding Habitat (WBF)	4.20	4.00
Waterbird Nesting Habitat (WBN)	0.00	6.67
Songbird, Raptor, & Mammal Habitat (SBM)	4.42	6.67
Pollinator Habitat (POL)	3.96	5.00
Native Plant Diversity (PD)	6.63	6.67

GROUPED FUNCTIONS	Group Scores (functions)	Group Scores (values)
Hydrologic Function (WS)	2.67	3.08
Water Quality Group (WQ)	5.43	6.07
Carbon Sequestration (CS)	2.18	
Fish Support Group (FISH)	3.91	4.20
Aquatic Support Group (AQ)	6.37	7.33
Terrestrial Support Group (TERR)	6.63	6.67
Public Use & Recognition (PU)		0.71
Provisioning Services (PS)		0.00

OTHER ATTRIBUTES	
Wetland Ecological Condition	4.43
Wetland Stressors	3.14
Wetland Sensitivity	5.71

HGM Class - Relative Probabilities (select max)	
Estuarine	0.00
Riverine	1.50
Slope	2.44
Flat	0.00
Depressional	0.00
Lacustrine	0.00



Project Name: Florence LWI

		Wetland Code:	Wetland 3
Date(s) of assessment:	August 12, 2010	Size (acres):	4.59
Data Sheet Number(s):	16, 17	Cowardin Class(es):	PFO4C
Investigator(s):	A. Hawkins / S. Eisner	HGM Class(es):	Slope / Flats

TRS quarter section tax lot: 1812120000702, 1812141000113, 1812141000300

Street address or location: Northwest of Munsel Lake Road

Latitude: **44.012201**° Longitude: **-124.090047**°

Locally Significant?: No

Hydrologic basin: 171002060804

Soil -- Mapped series: Heceta fine sand, Dune land

Hydrologic Source: Precipitation

Dominant Wetland Vegetation

TREES / SHRUBS VINES / HERBS

TREES / STIRCES	S VIVES / HERDS		
Pinus contorta	Shore pine	Carex obnupta	Slough sedge
Vaccinium uliginosum	Bog bilberry	Juncus falcatus	Sickle-leaved rush
Spiraea douglasii	Douglas spirea	Juncus nevadensis	Sierra rush

Comments:

Complex of forested and emergent wetlands west of an advancing dune and northwest of Munsel Lake. Several of these wetlands are seasonally inundated, but dry out in the early spring and summer. Most are depressional and lack a surface connection though adjacent features may be tied to the same groundwater table. These wetlands were grouped because of their geomorphic similiarities and proximity.

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	PUB = palustrine unconsolidated bottom
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
	S = Slope	FL= Flats	

Florence Local Wetland Inventory

SPECIFIC FUNCTIONS	Relative Effectiveness of the Function	Relative Values of the Function
Water Storage & Delay (WS)	7.00	4.72
Sediment Retention & Stabilization (SR)	10.00	5.29
Phosphorus Retention (PR)	10.00	6.19
Nitrate Removal & Retention (NR)	10.00	4.76
Thermoregulation (T)	0.00	0.00
Carbon Sequestration (CS)	1.20	
Organic Matter Export (OE)	0.00	
Aquatic Invertebrate Habitat (INV)	6.37	6.89
Anadromous Fish Habitat (FA)	0.00	4.85
Non-anadromous Fish Habitat (FR)	2.16	6.67
Amphibian & Reptile Habitat (AM)	6.89	6.67
Waterbird Feeding Habitat (WBF)	4.85	4.00
Waterbird Nesting Habitat (WBN)	5.24	6.67
Songbird, Raptor, & Mammal Habitat (SBM)	5.26	6.67
Pollinator Habitat (POL)	6.55	0.00
Native Plant Diversity (PD)	5.27	6.67

GROUPED FUNCTIONS	Group Scores (functions)	Group Scores (values)
Hydrologic Function (WS)	7.00	4.72
Water Quality Group (WQ)	10.00	6.19
Carbon Sequestration (CS)	1.20	
Fish Support Group (FISH)	2.16	6.67
Aquatic Support Group (AQ)	6.89	6.67
Terrestrial Support Group (TERR)	6.55	6.67
Public Use & Recognition (PU)		1.55
Provisioning Services (PS)		0.00

OTHER ATTRIBUTES	
Wetland Ecological Condition	6.68
Wetland Stressors	3.75
Wetland Sensitivity	10.00

HGM Class - Relative Probabilities (select max)	
Estuarine	0.00
Riverine	2.50
Slope	1.81
Flat	0.00
Depressional	0.00
Lacustrine	0.00



Project Name: Florence LWI

		Wetland Code:	Wetland 4
Date(s) of assessment:	August 11, 2010	Size (acres):	19.20
Data Sheet Number(s):	12	Cowardin Class(es):	PFO4C, PSS1C
Investigator(s):	A. Hawkins / S. Eisner	HGM Class(es):	Riverine; Slope

TRS quarter section tax lot: 1812230000400, 1812230000900, 1812231400100, 1812240000077, 1812240000088,

 $1812240001100, 1812240001101, 1812240001102, 1812240001200, 1812242302000, \\ 1812242302001, 1812242302002, 1812242302100, 1812243201300, 1812242301400, \\ 1812243201500, 1812243201600, 1812243201700, 1812243202200, 1812243202300$

Street address or location: West of N. Fork Siuslaw Rd.

Latitude: **43.9869**Longitude: **-124.0838**

Locally Significant?: Yes

Hydrologic basin: 171002060702

Soil -- Mapped series: Waldport fine sand, Yaquina loamy fine sand

Hydrologic Source: Surface, Groundwater

TREES / SHRUBS		VINES / HERBS	
Thuja plicata	Western Red Cedar	Lysichitum americanum	American Skunk-Cabbage
Myrica californica	Pacific Wax-Myrtle	Blechnum spicant	Deer Fern
Pinus contorta	Shore Pine	Darlingtonia californica	California Pitcher-Plant
Rubus spectabilis	Salmonberry	Drosera rotundifolia	Round-Leaf Sundew
Vaccinium ovatum	Evergreen Huckleberry	Sphagnum sp.	Moss
Gaultheria shallon	Salal		
Ledum glandulosum	Smooth Labrador-Tea		

Comments:

Part of large forested wetland. Water drains to the south eventually flowing into the North Fork Siuslaw beneath N. Fork Siuslaw Road. Upland vegetation is Acer macrophyllum, Polystichum munitum, Rubus spectabilis. Southern portion of wetland is mature forested wetland. The 1996 inventory noted that this wetland includes an uncommon plant community of Ledum and Sphagnum; as well as sundew and Darlingtonia. Portions of this wetland obtained concurrence for a prior wetland delineation: WD2007-0746.

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	PUB = palustrine unconsolidated bottom
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
	S = Slope	FL= Flats	

Florence Local Wetland Inventory

SPECIFIC FUNCTIONS	Relative Effectiveness of the Function	Relative Values of the Function
Water Storage & Delay (WS)	2.31	7.64
Sediment Retention & Stabilization (SR)	5.48	6.44
Phosphorus Retention (PR)	6.05	6.18
Nitrate Removal & Retention (NR)	6.17	5.23
Thermoregulation (T)	3.78	7.50
Carbon Sequestration (CS)	3.48	
Organic Matter Export (OE)	6.11	
Aquatic Invertebrate Habitat (INV)	5.47	6.78
Anadromous Fish Habitat (FA)	6.56	10.00
Non-anadromous Fish Habitat (FR)	3.21	6.67
Amphibian & Reptile Habitat (AM)	4.38	7.33
Waterbird Feeding Habitat (WBF)	5.63	10.00
Waterbird Nesting Habitat (WBN)	5.42	7.17
Songbird, Raptor, & Mammal Habitat (SBM)	6.78	7.33
Pollinator Habitat (POL)	7.61	5.00
Native Plant Diversity (PD)	7.46	7.51

GROUPED FUNCTIONS	Group Scores (functions)	Group Scores (values)
Hydrologic Function (WS)	2.31	7.64
Water Quality Group (WQ)	6.17	7.50
Carbon Sequestration (CS)	3.48	
Fish Support Group (FISH)	6.56	10.00
Aquatic Support Group (AQ)	6.11	10.00
Terrestrial Support Group (TERR)	7.61	7.51
Public Use & Recognition (PU)		0.00
Provisioning Services (PS)		0.00

OTHER ATTRIBUTES	
Wetland Ecological Condition	5.07
Wetland Stressors	4.36
Wetland Sensitivity	10.00

HGM Class - Relative Probabilities (select max)	
Estuarine	0.00
Riverine	5.50
Slope	3.69
Flat	0.00
Depressional	0.00
Lacustrine	0.00



Project Name: Florence LWI

		Wetland Code:	Wetland 5
Date(s) of assessment:	Fall 2010	Size (acres):	50.36
Data Sheet Number(s):	5	Cowardin Class(es):	PABH, PEMJ, PFO1C, PFO1J, PFO4C, PSS1J
Investigator(s):	A. Hawkins / S. Eisner	HGM Class(es):	Riverine; Slope

TRS quarter section tax lot: 1812130001700, 1812144000200, 1812240000077, 1812240000406, 1812240000614, 1812240000619,

 $1812240000700, 1812240000900, 1812240000902, 1812240001100, 1812242300077, 1812242300102, \\1812242300104, 1812242300105, 1812242301200, 1812242301300, 1812242301900, 1812242302300, \\1812242302400, 1812242302500, 1812242302600, 1812242302700, 1812242302800, 1812242302900, \\1812242303000, 1812243200077, 1812243200100, 1812243200200, 1812243200300, 1812243202100$

Street address or location: East of Munsel Lake Rd.

Latitude: **43.9972**Longitude: **-124.083**

Locally Significant?: Yes

Hydrologic basin: **171002060702**

Soil -- Mapped series: Yaquina loamy fine sand, Brallier variant muck, Waldport fine sand

Hydrologic Source: Surface, Groundwater

Dominant Wetland Vegetation

TREES / SHRUBS	VINES / HERBS
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Alnus rubra	Red Alder	Carex obnupta	Slough sedge
Thuja plicata	Wester red cedar	Athyrium filix-femina	Subarctic Lady Fern
		Lysichitum americanum	American Skunk-Cabbage
		Oenanthe sarmentosa	Water-Parsley
		Deschampsia cespitosa	Tufted Hairgrass
		Potentilla anserina	Silverweed
		Agrostis alba	Redtop

Comments:

Large forested wetland east of Munsel Lake Road. Southern limits extend to the edge of the study area, to the limits of estuarine influence. Except for the extreme north end, north of North Fork Siuslaw River Road, the wetland is bordered to the west by residential development; as is a portion of its east side. Red alder is the dominant tree cover, with western red cedar and spruce. Adjacent upland vegetation includes Douglas fir, big leaf maple, salmonberry and sword fern. Portions of this wetland obtained concurrence for a prior wetland delineation: WD1996-0268.

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	PUB = palustrine unconsolidated bottom
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
	S = Slope	FL= Flats	

Florence Local Wetland Inventory

SPECIFIC FUNCTIONS	Relative Effectiveness of the Function	Relative Values of the Function
Water Storage & Delay (WS)	3.09	7.22
Sediment Retention & Stabilization (SR)	5.27	6.66
Phosphorus Retention (PR)	4.55	6.18
Nitrate Removal & Retention (NR)	5.09	6.06
Thermoregulation (T)	7.39	7.50
Carbon Sequestration (CS)	2.42	
Organic Matter Export (OE)	7.52	
Aquatic Invertebrate Habitat (INV)	6.13	7.89
Anadromous Fish Habitat (FA)	7.89	10.00
Non-anadromous Fish Habitat (FR)	3.50	6.67
Amphibian & Reptile Habitat (AM)	4.75	7.33
Waterbird Feeding Habitat (WBF)	6.56	7.33
Waterbird Nesting Habitat (WBN)	5.59	5.50
Songbird, Raptor, & Mammal Habitat (SBM)	7.36	6.67
Pollinator Habitat (POL)	8.79	5.00
Native Plant Diversity (PD)	8.10	10.00

GROUPED FUNCTIONS	Group Scores (functions)	Group Scores (values)
Hydrologic Function (WS)	3.09	7.22
Water Quality Group (WQ)	7.39	7.50
Carbon Sequestration (CS)	2.42	
Fish Support Group (FISH)	7.89	10.00
Aquatic Support Group (AQ)	7.52	7.33
Terrestrial Support Group (TERR)	8.79	10.00
Public Use & Recognition (PU)		0.00
Provisioning Services (PS)		0.00

OTHER ATTRIBUTES	
Wetland Ecological Condition	7.29
Wetland Stressors	2.85
Wetland Sensitivity	10.00

HGM Class - Relative Probabilities (select max)	
Estuarine	0.00
Riverine	4.50
Slope	10.00
Flat	0.00
Depressional	0.00
Lacustrine	0.00



Project Name: Florence LWI

Date(s) of assessment:August 2010Size (acres):30.72Data Sheet Number(s):NoneCowardin Class(es):PSS1C, PEMC, PFO4CInvestigator(s):A. Hawkins / S. EisnerHGM Class(es):Riverine, Slope

TRS quarter section tax lot: 1812144000200, 1812230000100, 1812230000102, 1812232105608, 1812232105619,

1812232105700, 1812232107300, 1812232107400, 1812232107500, 1812232402800,

1812232402900, 1812232407600

Street address or location: Munsell Creek County Park (and north)

Latitude: **43.9936**Longitude: **-124.0939**

Locally Significant?: Yes

Hydrologic basin: 171002060804

Soil -- Mapped series: Yaquina loamy fine sand, Waldport fine sand, Dune land

Hydrologic Source: Groundwater, Precipitation

Dominant Wetland Vegetation

TREES / SHRUBS VINES / HERBS

			, _ , _ , ,		
Pinus contorta	Shore pine	Carex obnupta	Slough sedge		
Vaccinium uliginosum	Bog bilberry				
Spiraea douglasii	Douglas spirea				
Salix sp.	Willow				

Comments:

The southern extent of this wetland is located in Munsell Creek County Park and continues northward into undeveloped shrub land to the north. Munsel Creek flows southward through the western portion of the wetland. The greater wetland area is bounded by residential development along its west side with sand dunes to the east. Portions of this wetland obtained concurrence for a prior wetland delineation: WD2009-0011.

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	PUB = palustrine unconsolidated bottom
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
	S = Slope	FL= Flats	

Florence Local Wetland Inventory

SPECIFIC FUNCTIONS	Relative Effectiveness of the Function	Relative Values of the Function
Water Storage & Delay (WS)	1.77	2.17
Sediment Retention & Stabilization (SR)	4.77	6.51
Phosphorus Retention (PR)	2.59	5.68
Nitrate Removal & Retention (NR)	4.84	5.39
Thermoregulation (T)	3.39	7.50
Carbon Sequestration (CS)	2.77	
Organic Matter Export (OE)	7.39	
Aquatic Invertebrate Habitat (INV)	5.39	6.95
Anadromous Fish Habitat (FA)	6.95	10.00
Non-anadromous Fish Habitat (FR)	3.38	6.67
Amphibian & Reptile Habitat (AM)	4.03	7.33
Waterbird Feeding Habitat (WBF)	5.66	4.00
Waterbird Nesting Habitat (WBN)	5.63	6.67
Songbird, Raptor, & Mammal Habitat (SBM)	6.54	6.67
Pollinator Habitat (POL)	7.51	5.00
Native Plant Diversity (PD)	6.94	7.43

GROUPED FUNCTIONS	Group Scores (functions)	Group Scores (values)
Hydrologic Function (WS)	1.77	2.17
Water Quality Group (WQ)	4.84	7.50
Carbon Sequestration (CS)	2.77	
Fish Support Group (FISH)	6.95	10.00
Aquatic Support Group (AQ)	7.39	7.33
Terrestrial Support Group (TERR)	7.51	7.43
Public Use & Recognition (PU)		0.00
Provisioning Services (PS)		0.00

OTHER ATTRIBUTES	
Wetland Ecological Condition	5.70
Wetland Stressors	4.41
Wetland Sensitivity	10.00

HGM Class - Relative Probabilities (select max)	
Estuarine	0.00
Riverine	3.50
Slope	2.19
Flat	0.00
Depressional	0.00
Lacustrine	0.00



Project Name: Florence LWI

		Wetland Code:	Wetland 7
Date(s) of assessment:	August 2010	Size (acres):	2.75
Data Sheet Number(s):	None	Cowardin Class(es):	PFO1C
Investigator(s):	A. Hawkins / S. Eisner	HGM Class(es):	Flat

TRS quarter section tax lot: 1812033400077, 1812033400900, 1812102100077, 1812102104700, 1812402104800,

1812102105700, 1812102105800, 1812102106100

Street address or location: South of Heceta Beach Road

Latitude: **44.027360°** Longitude: **-124.117013°**

Locally Significant?: Yes

Hydrologic basin: 171002060804

Soil -- Mapped series: 140 Yaquina loamy fine sand

Hydrologic Source: Groundwater

Dominant Wetland Vegetation				
TREES / SHI	RUBS	VINES / HERBS		
Salix sp.	Willow			

Comments:

South of Heceta Beach Road, between Windleaf and Heceta Park Roads. Isolated forested wetland dominated by willows.

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	PUB = palustrine unconsolidated bottom
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
	S = Slope	FL= Flats	

Florence Local Wetland Inventory

SPECIFIC FUNCTIONS	Relative Effectiveness of the Function	Relative Values of the Function
Water Storage & Delay (WS)	6.00	3.17
Sediment Retention & Stabilization (SR)	10.00	4.73
Phosphorus Retention (PR)	10.00	6.03
Nitrate Removal & Retention (NR)	10.00	4.13
Thermoregulation (T)	0.00	0.00
Carbon Sequestration (CS)	2.15	
Organic Matter Export (OE)	0.00	
Aquatic Invertebrate Habitat (INV)	4.95	6.41
Anadromous Fish Habitat (FA)	0.00	4.58
Non-anadromous Fish Habitat (FR)	2.21	6.67
Amphibian & Reptile Habitat (AM)	6.41	7.33
Waterbird Feeding Habitat (WBF)	4.58	4.00
Waterbird Nesting Habitat (WBN)	0.00	6.67
Songbird, Raptor, & Mammal Habitat (SBM)	4.23	6.67
Pollinator Habitat (POL)	5.23	5.00
Native Plant Diversity (PD)	4.63	6.67

GROUPED FUNCTIONS	Group Scores (functions)	Group Scores (values)
Hydrologic Function (WS)	6.00	3.17
Water Quality Group (WQ)	10.00	6.03
Carbon Sequestration (CS)	2.15	
Fish Support Group (FISH)	2.21	6.67
Aquatic Support Group (AQ)	6.41	7.33
Terrestrial Support Group (TERR)	5.23	6.67
Public Use & Recognition (PU)		10.00
Provisioning Services (PS)		0.00

OTHER ATTRIBUTES	
Wetland Ecological Condition	3.72
Wetland Stressors	4.50
Wetland Sensitivity	10.00

HGM Class - Relative Probabilities (select max)	
Estuarine	0.00
Riverine	0.50
Slope	2.38
Flat	6.46
Depressional	5.28
Lacustrine	0.00



Project Name: Florence LWI

		Wetland Code:	Wetland 8
Date(s) of assessment:	August 2010	Size (acres):	1.78
Data Sheet Number(s):	None	Cowardin Class(es):	PFO4B
Investigator(s):	A. Hawkins / S. Eisner	HGM Class(es):	Flat

TRS quarter section tax lot: 1812273100055, 1812273100077, 1812273100300, 1812273100900, 1812273101902

Street address or location: North of 9th Street

Latitude: **43.9761**Longitude: **-124.1171**

Locally Significant?: Yes

Hydrologic basin: 171002060804

Soil -- Mapped series: Waldport fine sand

Hydrologic Source: Groundwater

Dominant Wetland Vegetation

TREES / SHRUI	BS	VINES / HERBS		
Pinus contorta	Shore pine			

Comments:

This wetland is identified on the National Wetland Inventory and the 1996 inventory. Its presence or absence could not be confirmed from off-site observations. The limits of this feature as identified for the inventory are based on air photo interpretation.

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	PUB = palustrine unconsolidated bottom
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
	S = Slope	FL= Flats	

Florence Local Wetland Inventory

SPECIFIC FUNCTIONS	Relative Effectiveness of the Function	Relative Values of the Function
Water Storage & Delay (WS)	3.50	3.08
Sediment Retention & Stabilization (SR)	10.00	5.15
Phosphorus Retention (PR)	10.00	6.03
Nitrate Removal & Retention (NR)	10.00	4.33
Thermoregulation (T)	0.00	0.00
Carbon Sequestration (CS)	2.58	
Organic Matter Export (OE)	0.00	
Aquatic Invertebrate Habitat (INV)	6.72	6.66
Anadromous Fish Habitat (FA)	0.00	4.26
Non-anadromous Fish Habitat (FR)	0.67	6.67
Amphibian & Reptile Habitat (AM)	6.66	6.67
Waterbird Feeding Habitat (WBF)	4.26	4.00
Waterbird Nesting Habitat (WBN)	0.00	6.67
Songbird, Raptor, & Mammal Habitat (SBM)	5.76	6.67
Pollinator Habitat (POL)	5.99	0.83
Native Plant Diversity (PD)	5.11	6.67

GROUPED FUNCTIONS	Group Scores (functions)	Group Scores (values)
Hydrologic Function (WS)	3.50	3.08
Water Quality Group (WQ)	10.00	6.03
Carbon Sequestration (CS)	2.58	
Fish Support Group (FISH)	0.67	6.67
Aquatic Support Group (AQ)	6.72	6.67
Terrestrial Support Group (TERR)	5.99	6.67
Public Use & Recognition (PU)		0.00
Provisioning Services (PS)		0.00

OTHER ATTRIBUTES	
Wetland Ecological Condition	7.46
Wetland Stressors	3.06
Wetland Sensitivity	10.00

HGM Class - Relative Probabilities (select max)	
Estuarine	0.00
Riverine	0.50
Slope	2.38
Flat	6.67
Depressional	3.06
Lacustrine	0.00



Project Name: Florence LWI

		Wetland Code:	Wetland 9
Date(s) of assessment:	August 2010	Size (acres):	0.69
Data Sheet Number(s):	None	Cowardin Class(es):	PFO1B
Investigator(s):	A. Hawkins / S. Eisner	HGM Class(es):	Slope

TRS quarter section tax lot: **1812260000077**, **1812260000100**Street address or location: W. of N. Fork Siuslaw River Rd.

Latitude: **43.9781**

Locally Significant?: **No**

Hydrologic basin: **171002060702**

Soil -- Mapped series: Waldport fine sand

Hydrologic Source: Groundwater

Dominant Wetland Vegetation

TREES / SHRUBS VINES / HERBS

TREES / SHIRODS		VII (LD) / IILKDD	
Malus fusca	Pacific Crabapple	Phalaris arundiancea	Reed Canary Grass
Salix hookeriana	Hooker Willow	Rubus ursinus	Califnornia Dewberry
Spiraea douglasii	Douglas' Spirea	Carex obnupta	Sough Sedge
Lonicera involucrata	Bearberry Honeysuckle	Oenanthe sarmentosa	Water-Parsley

Comments:

Scrub shrub (willow) dominated wetland west of North Fork Siuslaw River Road. Wetland drains beneath the road through a small culvert. Adjacent upland species include Picea sitchensis, Gaultheria shallon, Vaccinium ovatum, Myrica californica.

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	PUB = palustrine unconsolidated bottom
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
	S = Slope	FL= Flats	

Florence Local Wetland Inventory

SPECIFIC FUNCTIONS	Relative Effectiveness of the Function	Relative Values of the Function
Water Storage & Delay (WS)	3.46	2.17
Sediment Retention & Stabilization (SR)	7.37	4.95
Phosphorus Retention (PR)	5.40	5.28
Nitrate Removal & Retention (NR)	5.70	4.38
Thermoregulation (T)	0.42	1.25
Carbon Sequestration (CS)	2.99	
Organic Matter Export (OE)	5.47	
Aquatic Invertebrate Habitat (INV)	6.69	7.12
Anadromous Fish Habitat (FA)	0.00	4.55
Non-anadromous Fish Habitat (FR)	2.30	6.67
Amphibian & Reptile Habitat (AM)	7.12	4.00
Waterbird Feeding Habitat (WBF)	4.55	4.00
Waterbird Nesting Habitat (WBN)	0.00	3.00
Songbird, Raptor, & Mammal Habitat (SBM)	5.67	6.67
Pollinator Habitat (POL)	7.01	1.67
Native Plant Diversity (PD)	7.90	6.67

GROUPED FUNCTIONS	Group Scores (functions)	Group Scores (values)
Hydrologic Function (WS)	3.46	2.17
Water Quality Group (WQ)	7.37	5.28
Carbon Sequestration (CS)	2.99	
Fish Support Group (FISH)	2.30	6.67
Aquatic Support Group (AQ)	7.12	4.00
Terrestrial Support Group (TERR)	7.90	6.67
Public Use & Recognition (PU)		0.71
Provisioning Services (PS)		0.00

OTHER ATTRIBUTES	
Wetland Ecological Condition	6.19
Wetland Stressors	3.52
Wetland Sensitivity	5.12

HGM Class - Relative Probabilities (select max)	
Estuarine	0.00
Riverine	0.90
Slope	2.69
Flat	0.00
Depressional	0.00
Lacustrine	0.00



Project Name: Florence LWI

		Wetland Code:	Wetland 10
Date(s) of assessment:	August 2010	Size (acres):	1.34
Data Sheet Number(s):	None	Cowardin Class(es):	PSS1C
Investigator(s):	A. Hawkins / S. Eisner	HGM Class(es):	Slope

TRS quarter section tax lot: 1812260000077, 1812260000100

Street address or location: West of North Fork Siuslaw River Road and Munsel Lake Rd.

Latitude: **43.9795**Longitude: **-124.0833**

Locally Significant?: No

Hydrologic basin: 171002060702

Soil -- Mapped series: Waldport fine sand

Hydrologic Source: Groundwater

Dominant Wetland Vegetation

TREES / SHRUBS VINES / HERBS

TREES / SHRUDS		VINES / HERDS	VINES / HERDS		
Ledum glandulosum	Smooth Labrador-Tea	Sphagnum sp.	Moss		
Spiraea douglasii	Douglas' Spirea	Drosera rotundifolia	Round-Leaf Sundew		
Salix hookeriana	Hooker Willow				

Comments:

Wetland on tribal property west of North Fork Siuslaw River. Dominated by a variety of native shrub and emergent vegetation.

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	PUB = palustrine unconsolidated bottom
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
	S = Slope	FL= Flats	

Florence Local Wetland Inventory

SPECIFIC FUNCTIONS	Relative Effectiveness of the Function	Relative Values of the Function	
Water Storage & Delay (WS)	4.50	2.17	
Sediment Retention & Stabilization (SR)	10.00	5.43	
Phosphorus Retention (PR)	10.00	5.40	
Nitrate Removal & Retention (NR)	10.00	4.50	
Thermoregulation (T)	0.00	0.00	
Carbon Sequestration (CS)	2.56		
Organic Matter Export (OE)	0.00		
Aquatic Invertebrate Habitat (INV)	7.40	7.87	
Anadromous Fish Habitat (FA)	0.00	6.23	
Non-anadromous Fish Habitat (FR)	3.69	6.67	
Amphibian & Reptile Habitat (AM)	7.87	4.00	
Waterbird Feeding Habitat (WBF)	6.23	4.00	
Waterbird Nesting Habitat (WBN)	5.56	3.00	
Songbird, Raptor, & Mammal Habitat (SBM)	5.90	6.67	
Pollinator Habitat (POL)	7.39	1.67	
Native Plant Diversity (PD)	5.98	6.67	

GROUPED FUNCTIONS	Group Scores (functions)	Group Scores (values)
Hydrologic Function (WS)	4.50	2.17
Water Quality Group (WQ)	10.00	5.43
Carbon Sequestration (CS)	2.56	
Fish Support Group (FISH)	3.69	6.67
Aquatic Support Group (AQ)	7.87	4.00
Terrestrial Support Group (TERR)	7.39	6.67
Public Use & Recognition (PU)		10.00
Provisioning Services (PS)		0.00

OTHER ATTRIBUTES	
Wetland Ecological Condition	6.94
Wetland Stressors	3.40
Wetland Sensitivity	10.00

HGM Class - Relative Probabilities (select max)	
Estuarine	0.00
Riverine	0.00
Slope	3.75
Flat	0.00
Depressional	0.00
Lacustrine	0.00



Project Name: Florence LWI

Wetland Code:Wetland 11Date(s) of assessment:August 2010Size (acres):7.49Data Sheet Number(s):NoneCowardin Class(es):PFO4C, PUBHxInvestigator(s):A. Hawkins / S. EisnerHGM Class(es):Slope

TRS quarter section tax lot: 1812144000200, 1812231100100, 1812231100101

Street address or location: West of Munsel Lake Road north of Rhodo Dunes Golf Course

Latitude: **43.9994**Longitude: **-124.0865**

Locally Significant?: Yes

Hydrologic basin: 171002060702

Soil -- Mapped series: Yaquina loamy fine sand, Waldport fine sand, Netarts fine sand, Dune land

Hydrologic Source: Surface, Groundwater

Dominant Wetland Vegetation

TREES / SHRUBS	VINES / HERBS
TREEL SHRIBS	VINES/HERKS

TREES / SHRUB	S	VINES / HERE	BS	
Pinus contorta	Shore pine	Carex obnupta	Slough sedge	
Alnus rubra	Red alder			
Rubus spectabilis	Salmonberry			
		1		

Comments:

Offsite assessment performed utilizing air photos. This wetland adjoins residential development at the north end of Ocean Dunes Golf Links. The two forested portions are undeveloped, but the ponded portion is bordered to the east by a residential subdivision. One of the golf course's tees is located west of the pond, with its associated fairway to the south. Portions of this wetland obtained concurrence for prior wetland delineations; the most recent being WD2009-0011.

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	PUB = palustrine unconsolidated bottom
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
	S = Slope	FL= Flats	

Florence Local Wetland Inventory

SPECIFIC FUNCTIONS	Relative Effectiveness of the Function	Relative Values of the Function
Water Storage & Delay (WS)	2.76	6.81
Sediment Retention & Stabilization (SR)	6.93	5.59
Phosphorus Retention (PR)	5.15	5.51
Nitrate Removal & Retention (NR)	6.58	5.26
Thermoregulation (T)	2.78	2.50
Carbon Sequestration (CS)	2.50	
Organic Matter Export (OE)	4.86	
Aquatic Invertebrate Habitat (INV)	5.86	7.35
Anadromous Fish Habitat (FA)	0.00	4.52
Non-anadromous Fish Habitat (FR)	2.83	6.67
Amphibian & Reptile Habitat (AM)	4.86	7.33
Waterbird Feeding Habitat (WBF)	4.52	4.00
Waterbird Nesting Habitat (WBN)	4.36	3.00
Songbird, Raptor, & Mammal Habitat (SBM)	7.35	6.67
Pollinator Habitat (POL)	9.01	5.00
Native Plant Diversity (PD)	7.40	7.72

GROUPED FUNCTIONS	Group Scores (functions)	Group Scores (values)	
Hydrologic Function (WS)	2.76	6.81	
Water Quality Group (WQ)	6.93	5.59	
Carbon Sequestration (CS)	2.50		
Fish Support Group (FISH)	2.83	6.67	
Aquatic Support Group (AQ)	5.86	7.33	
Terrestrial Support Group (TERR)	9.01	7.72	
Public Use & Recognition (PU)		0.95	
Provisioning Services (PS)		0.00	

OTHER ATTRIBUTES		
Wetland Ecological Condition	Į.	5.32
Wetland Stressors		3.16
Wetland Sensitivity	1	0.00

HGM Class - Relative Probabilities (select max)	
Estuarine	0.00
Riverine	0.00
Slope	0.00
Flat	0.00
Depressional	1.31
Lacustrine	0.00



Project Name: Florence LWI

		Wetland Code:	Wetland 12
Date(s) of assessment:	Fall 2010	Size (acres):	56.30
Data Sheet Number(s):	None	Cowardin Class(es):	PEMC, PFO4C, PSS1C
Investigator(s):	A. Hawkins / S. Eisner	HGM Class(es):	Depressional, Flats

TRS quarter section tax lot: 1812110000077, 1812110000100, 1812110000200, 1812110000201, 1812110000202,

1812110001300, 1812110001302, 1812110001800, 1812110002000, 1812110002300,

 $1812110002300,\, 1812110002400,\, 1812110002500,\, 1812113200300,\, 1812113200400,\,$

1812113201600, 1812113300100, 1812120000702

Street address or location: **South of Taylor Road.**

Latitude: **44.0181**Longitude: **-124.0942**

Locally Significant?: Yes

Hydrologic basin: 171002060804

Soil -- Mapped series: Yaquina loamy fine sand, Netarts fine sand, Dune land

Hydrologic Source: Groundwater

Dominant Wetland Vegetation				
TREES / SHRUBS		VINES / HERBS		
Pinus contorta	Shore Pine	Carex obnupta	Slough Sedge	
Vaccinium uliginosum	Bog Blueberry	Juncus falcatus	Sickle-Leaf Rush	
Spiraea douglasii	Douglas' Spirea	Claytonia sibirica	Western Springbeauty	
Salix hookeriana	Hooker Willow	Carex viridula	Little Green Sedge	
		Deschampsia cespitosa	Tufted Hairgrass	
· 				

Comments:

Complex of primarily forested wetlands located in largely undeveloped areas east of Hwy 101. Includes areas of open water. Areas without a shore pine overstory are often dominated by bog blueberry and sedges and rushes. Seasonally inundated by a shallow groundwater table. Portions of this wetland obtained concurrence for a prior wetland delineation: WD2001-0264, WD2002-0108 & WD2009-0009.

COWARDIN CODES: E2FO = estuarine forested E2SS = estuarine scrub shrub E2EM = estuarine emergent

Florence Local Wetland Inventory

SPECIFIC FUNCTIONS	Relative Effectiveness of the Function	Relative Values of the Function
Water Storage & Delay (WS)	3.25	2.17
Sediment Retention & Stabilization (SR)	10.00	4.92
Phosphorus Retention (PR)	10.00	4.94
Nitrate Removal & Retention (NR)	10.00	4.44
Thermoregulation (T)	0.00	0.00
Carbon Sequestration (CS)	2.34	
Organic Matter Export (OE)	0.00	
Aquatic Invertebrate Habitat (INV)	7.48	8.39
Anadromous Fish Habitat (FA)	0.00	5.79
Non-anadromous Fish Habitat (FR)	3.33	6.67
Amphibian & Reptile Habitat (AM)	8.39	7.33
Waterbird Feeding Habitat (WBF)	5.79	4.00
Waterbird Nesting Habitat (WBN)	6.17	6.67
Songbird, Raptor, & Mammal Habitat (SBM)	7.53	6.67
Pollinator Habitat (POL)	7.76	5.00
Native Plant Diversity (PD)	7.50	7.77

GROUPED FUNCTIONS	Group Scores (functions)	Group Scores (values)	
Hydrologic Function (WS)	3.25	2.17	
Water Quality Group (WQ)	10.00	4.94	
Carbon Sequestration (CS)	2.34		
Fish Support Group (FISH)	3.33	6.67	
Aquatic Support Group (AQ)	8.39	7.33	
Terrestrial Support Group (TERR)	7.76	7.77	
Public Use & Recognition (PU)		0.00	
Provisioning Services (PS)		0.00	

OTHER ATTRIBUTES	
Wetland Ecological Condition	6.70
Wetland Stressors	3.44
Wetland Sensitivity	10.00

HGM Class - Relative Probabilities (select max)	
Estuarine	0.00
Riverine	0.50
Slope	1.50
Flat	5.52
Depressional	6.11
Lacustrine	0.00



Project Name: Florence LWI

Wetland Code:Wetland 13Date(s) of assessment:August 2010Size (acres):17.44Data Sheet Number(s):NoneCowardin Class(es):PEMC, PFO4C, PSS1CInvestigator(s):A. Hawkins / S. EisnerHGM Class(es):Flat

TRS quarter section tax lot: 1812020000204, 1812020000205, 1812020000403, 1812110000100, 1812110000202,

1812110002200

Street address or location: North of Munsel Lake Road, south of Taylor Road

Latitude: **44.0255**Longitude: **-124.0885**

Locally Significant?: No

Hydrologic basin: 171002060804

Soil -- Mapped series: Waldport fine sand, Dune land

Hydrologic Source: Groundwater

Dominant Wetland Vegetation

TREES / SHRUBS VINES / HERBS

TREES / SHRODS		VIIVES / HEXDS	
Spiraea douglasii	Douglas' Spirea	Carex viridula	Little Green Sedge
		Juncus falcatus	Sickle-Leaf Rush
		Eleocharis ovata	Ovate Spikerush
		Ranunculus flammula	Spearwort Butter-Cup
		Potentilla anserina	Silverweed

Comments:

Complex of wetlands isolated hydrologically from each other. These wetlands are shallow depressions in the sand, seasonally inundated and dominated by low growing herbaceous vegetation. They have been grouped because they are similar in character, being located at the eastern edge of the forested west portion of the large dunal area west of Collard and Clear Lakes. Portions of this wetland obtained concurrence for a prior wetland delineation: WD2001-0264.

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	PUB = palustrine unconsolidated bottom
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
	S = Slope	FL= Flats	

Florence Local Wetland Inventory

SPECIFIC FUNCTIONS	Relative Effectiveness of the Function	Relative Values of the Function
Water Storage & Delay (WS)	5.75	2.17
Sediment Retention & Stabilization (SR)	10.00	5.35
Phosphorus Retention (PR)	10.00	5.82
Nitrate Removal & Retention (NR)	10.00	4.49
Thermoregulation (T)	0.00	0.00
Carbon Sequestration (CS)	1.70	
Organic Matter Export (OE)	0.00	
Aquatic Invertebrate Habitat (INV)	5.25	7.01
Anadromous Fish Habitat (FA)	0.00	5.36
Non-anadromous Fish Habitat (FR)	2.32	6.67
Amphibian & Reptile Habitat (AM)	7.01	6.67
Waterbird Feeding Habitat (WBF)	5.36	4.00
Waterbird Nesting Habitat (WBN)	5.45	6.67
Songbird, Raptor, & Mammal Habitat (SBM)	5.35	6.67
Pollinator Habitat (POL)	4.59	0.00
Native Plant Diversity (PD)	5.90	6.67

GROUPED FUNCTIONS	Group Scores (functions)	Group Scores (values)
Hydrologic Function (WS)	5.75	2.17
Water Quality Group (WQ)	10.00	5.82
Carbon Sequestration (CS)	1.70	
Fish Support Group (FISH)	2.32	6.67
Aquatic Support Group (AQ)	7.01	6.67
Terrestrial Support Group (TERR)	5.90	6.67
Public Use & Recognition (PU)		0.48
Provisioning Services (PS)		0.00

OTHER ATTRIBUTES	
Wetland Ecological Condition	7.46
Wetland Stressors	5.27
Wetland Sensitivity	10.00

HGM Class - Relative Probabilities (select max)	
Estuarine	0.00
Riverine	0.00
Slope	0.00
Flat	10.00
Depressional	0.00
Lacustrine	0.00



Project Name: Florence LWI

		Wetland Code:	Wetland 14
Date(s) of assessment:	August 2010	Size (acres):	23.78
Data Sheet Number(s):	None	Cowardin Class(es):	PEMC, PFO4C
Investigator(s):	A. Hawkins / S. Eisner	HGM Class(es):	Depressional, Flats

TRS quarter section tax lot: 1812020000200, 1812020000205, 1812020000400, 1812020000402, 1812020000403,

1812020000601, 1812110000100

Street address or location: Confined by east end of Friendly Acres and dune complex west of Clear Lake

Latitude: **44.0341**Longitude: **-124.0899**

Locally Significant?: No

Hydrologic basin: 171002060804

Soil -- Mapped series: Waldport fine sand, Yaquina loamy fine sand

Hydrologic Source: Groundwater

Dominant Wetland Vegetation

TREES / SHRUBS VINES / HERBS

TREES / SHRUBS		VINES / HERDS	
Vaccinium uliginosum	Bog Blueberry	Carex obnupta	Slough Sedge
Spiraea douglasii	Douglas Spirea	Deschampsia cespitosa	Tufted Hairgrass
Pinus contorta	Shore Pine	Juncus balticus	Baltic Rush
		Juncus acuminatus	Taper-Tip Rush
		Juncus effusus	Soft Rush
		Juncus falcatus	Sickle-Leaf Rush

Comments:

Complex of isolated wetlands dominated by bog blueberry and Douglas spirea with an overstory of Pinus contorta. Seasonally inundated. These wetlands were grouped because they are located in the same geomorphic position, are influenced by the local groundwater table, and have similar adjacent land use patterns.

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	PUB = palustrine unconsolidated bottom
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
	S = Slope	FL= Flats	

Florence Local Wetland Inventory

SPECIFIC FUNCTIONS	Relative Effectiveness of the Function	Relative Values of the Function
Water Storage & Delay (WS)	4.25	2.17
Sediment Retention & Stabilization (SR)	10.00	5.07
Phosphorus Retention (PR)	10.00	4.94
Nitrate Removal & Retention (NR)	10.00	4.11
Thermoregulation (T)	0.00	0.00
Carbon Sequestration (CS)	1.97	
Organic Matter Export (OE)	0.00	
Aquatic Invertebrate Habitat (INV)	7.29	8.04
Anadromous Fish Habitat (FA)	0.00	5.04
Non-anadromous Fish Habitat (FR)	3.52	6.67
Amphibian & Reptile Habitat (AM)	8.04	6.67
Waterbird Feeding Habitat (WBF)	5.04	4.00
Waterbird Nesting Habitat (WBN)	5.44	6.67
Songbird, Raptor, & Mammal Habitat (SBM)	6.66	6.67
Pollinator Habitat (POL)	6.94	0.00
Native Plant Diversity (PD)	6.16	6.67

GROUPED FUNCTIONS	Group Scores (functions)	Group Scores (values)
Hydrologic Function (WS)	4.25	2.17
Water Quality Group (WQ)	10.00	5.07
Carbon Sequestration (CS)	1.97	
Fish Support Group (FISH)	3.52	6.67
Aquatic Support Group (AQ)	8.04	6.67
Terrestrial Support Group (TERR)	6.94	6.67
Public Use & Recognition (PU)		0.00
Provisioning Services (PS)		0.00

OTHER ATTRIBUTES	
Wetland Ecological Condition	7.46
Wetland Stressors	1.56
Wetland Sensitivity	10.00

HGM Class - Relative Probabilities (select max)	
Estuarine	0.00
Riverine	1.00
Slope	1.25
Flat	4.74
Depressional	10.28
Lacustrine	0.00



Project Name: Florence LWI

Wetland 15 Wetland Code: Size (acres): 3.83 Date(s) of assessment: August 2010 Data Sheet Number(s): None Cowardin Class(es): PFO4C A. Hawkins / S. Eisner HGM Class(es): Lacustrine Investigator(s):

TRS quarter section tax lot: 1812010000200, 1812010000206

Street address or location: West edge of Collard Lake

> Latitude: 44.0363 -124.0799 Longitude:

Locally Significant?: No

> Hydrologic basin: 171002060804

Soil -- Mapped series: **Bullards-Ferrelo loams**

Hydrologic Source: Groundwater

Dominant Wetland Vegetation

TREES / SHRUBS		VINES / HERBS		
D'	Cl			

TREES / STINCE	<i>3</i>	VII (LO) IILINDO	
Pinus contorta	Shore pine		
Tsuga heterophylla	Western hemlock		
·			

Comments:

Forested wetland along the west edge of Collard Lake. Likely dominated by spruce and shore pine. Wetland assessment was completed entirely from offsite; mostly from aerial photo interpretation.

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	PUB = palustrine unconsolidated bottom
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
	S = Slope	FL= Flats	

Florence Local Wetland Inventory

SPECIFIC FUNCTIONS	Relative Effectiveness of the Function	Relative Values of the Function
Water Storage & Delay (WS)	2.63	2.33
Sediment Retention & Stabilization (SR)	5.09	4.85
Phosphorus Retention (PR)	2.55	5.33
Nitrate Removal & Retention (NR)	4.66	4.69
Thermoregulation (T)	3.28	6.67
Carbon Sequestration (CS)	2.38	
Organic Matter Export (OE)	7.14	
Aquatic Invertebrate Habitat (INV)	5.54	6.99
Anadromous Fish Habitat (FA)	6.68	10.00
Non-anadromous Fish Habitat (FR)	3.80	6.67
Amphibian & Reptile Habitat (AM)	4.47	6.67
Waterbird Feeding Habitat (WBF)	5.46	4.00
Waterbird Nesting Habitat (WBN)	5.21	6.67
Songbird, Raptor, & Mammal Habitat (SBM)	6.99	6.67
Pollinator Habitat (POL)	7.02	0.00
Native Plant Diversity (PD)	7.84	6.67

GROUPED FUNCTIONS	Group Scores (functions)	Group Scores (values)
Hydrologic Function (WS)	2.63	2.33
Water Quality Group (WQ)	5.09	6.67
Carbon Sequestration (CS)	2.38	
Fish Support Group (FISH)	6.68	10.00
Aquatic Support Group (AQ)	7.14	6.67
Terrestrial Support Group (TERR)	7.84	6.67
Public Use & Recognition (PU)		0.48
Provisioning Services (PS)		0.00

OTHER ATTRIBUTES	
Wetland Ecological Condition	6.18
Wetland Stressors	1.10
Wetland Sensitivity	10.00

HGM Class - Relative Probabilities (select max)	
Estuarine	0.00
Riverine	0.00
Slope	0.00
Flat	0.00
Depressional	0.00
Lacustrine	10.00



Project Name: Florence LWI

Wetland Code:Wetland 16Date(s) of assessment:August 2010Size (acres):2.93Data Sheet Number(s):NoneCowardin Class(es):PEMC, PFO4CInvestigator(s):A. Hawkins / S. EisnerHGM Class(es):Flat

TRS quarter section tax lot: 1812020000400, 1812020000402, 1812020000601, 1812023005602

Street address or location: End of Friendly Acres Road

Latitude: **44.0317**Longitude: **-124.0936**

Locally Significant?: No

Hydrologic basin: 171002060804

Soil -- Mapped series: Yaquina loamy fine sand, Waldport fine sand

Hydrologic Source: Groundwater

Dominant Wetland Vegetation

TREES / SHRUBS VINES / HERBS

TREES / STREES			, D	
Pinus contorta	Shore pine	Carex obnupta	Slough Sedge	
Spiraea douglasii	Douglas' Spirea	Juncus sp.	Rush	
Vaccinium uliginosum	Bog Blueberry			

Comments:

Isolated wetland dominated by bog blueberry and Douglas' spirea with an overstory of Pinus contorta. These wetlands are seasonally inundated.

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	PUB = palustrine unconsolidated bottom
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
	S = Slope	FL= Flats	

Florence Local Wetland Inventory

SPECIFIC FUNCTIONS	Relative Effectiveness of the Function	Relative Values of the Function
Water Storage & Delay (WS)	3.25	2.17
Sediment Retention & Stabilization (SR)	10.00	4.85
Phosphorus Retention (PR)	10.00	5.07
Nitrate Removal & Retention (NR)	10.00	4.57
Thermoregulation (T)	0.00	0.00
Carbon Sequestration (CS)	2.26	
Organic Matter Export (OE)	0.00	
Aquatic Invertebrate Habitat (INV)	6.00	7.67
Anadromous Fish Habitat (FA)	0.00	4.35
Non-anadromous Fish Habitat (FR)	0.74	6.67
Amphibian & Reptile Habitat (AM)	7.67	7.33
Waterbird Feeding Habitat (WBF)	4.35	4.00
Waterbird Nesting Habitat (WBN)	0.00	6.67
Songbird, Raptor, & Mammal Habitat (SBM)	6.31	6.67
Pollinator Habitat (POL)	6.15	5.00
Native Plant Diversity (PD)	6.68	6.70

GROUPED FUNCTIONS	Group Scores (functions)	Group Scores (values)
Hydrologic Function (WS)	3.25	2.17
Water Quality Group (WQ)	10.00	5.07
Carbon Sequestration (CS)	2.26	
Fish Support Group (FISH)	0.74	6.67
Aquatic Support Group (AQ)	7.67	7.33
Terrestrial Support Group (TERR)	6.68	6.70
Public Use & Recognition (PU)		0.00
Provisioning Services (PS)		0.00

OTHER ATTRIBUTES	
Wetland Ecological Condition	6.30
Wetland Stressors	3.08
Wetland Sensitivity	10.00

HGM Class - Relative Probabilities (select max)	
Estuarine	0.00
Riverine	0.50
Slope	1.75
Flat	6.46
Depressional	1.94
Lacustrine	0.00



Project Name: Florence LWI

Wetland Code:Wetland 17Date(s) of assessment:August 2010Size (acres):2.49Data Sheet Number(s):NoneCowardin Class(es):PFO4C, PEMYInvestigator(s):A. Hawkins / S. EisnerHGM Class(es):Flat

TRS quarter section tax lot: 1812020000200, 1812022000402, 1812022402300, 181202402400, 1812022402500,

1812022402600, 1812022402700

Street address or location: North of Brownings Corner

Latitude: **44.0374**Longitude: **-124.0938**

Locally Significant?: No

Hydrologic basin: 171002060804

Soil -- Mapped series: Yaquina loamy fine sand, Waldport fine sand, Dune land

Hydrologic Source: Groundwater

Dominant Wetland Vegetation

TREES / SHRUBS VINES / HERBS

TREES / SHRUDS		VII (ES) / HERD	Ю
Pinus contorta	Shore Pine	Carex obnupta	Slough Sedge
Vaccinium uliginosum	Bog Blueberry	Juncus effusus	Soft Rush
		Juncus falcatus	Sickle-Leaf Rush
		Polytrichum sp.	Moss

Comments:

Isolated wetlands dominated by Pinus contorta in the overstory. These wetlands were grouped because they are located in the same geomorphic position, are influenced by the local groundwater table, and have similar adjacent land use patterns. North of the road in an interdunal area. Portions of this wetland obtained concurrence for a prior wetland delineation: WD2000-0275

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	PUB = palustrine unconsolidated bottom
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
	S = Slope	FL= Flats	

Florence Local Wetland Inventory

SPECIFIC FUNCTIONS	Relative Effectiveness of the Function	Relative Values of the Function
Water Storage & Delay (WS)	3.25	2.17
Sediment Retention & Stabilization (SR)	10.00	5.33
Phosphorus Retention (PR)	10.00	5.57
Nitrate Removal & Retention (NR)	10.00	4.90
Thermoregulation (T)	0.00	0.00
Carbon Sequestration (CS)	2.59	0.00
Organic Matter Export (OE)	0.00	0.00
Aquatic Invertebrate Habitat (INV)	6.06	7.87
Anadromous Fish Habitat (FA)	0.00	4.61
Non-anadromous Fish Habitat (FR)	2.05	6.67
Amphibian & Reptile Habitat (AM)	7.87	7.33
Waterbird Feeding Habitat (WBF)	4.61	4.00
Waterbird Nesting Habitat (WBN)	0.00	6.67
Songbird, Raptor, & Mammal Habitat (SBM)	6.67	6.67
Pollinator Habitat (POL)	6.67	5.00
Native Plant Diversity (PD)	7.09	6.99

GROUPED FUNCTIONS	Group Scores (functions)	Group Scores (values)
Hydrologic Function (WS)	3.25	2.17
Water Quality Group (WQ)	10.00	5.57
Carbon Sequestration (CS)	2.59	0.00
Fish Support Group (FISH)	2.05	6.67
Aquatic Support Group (AQ)	7.87	7.33
Terrestrial Support Group (TERR)	7.09	6.99
Public Use & Recognition (PU)	0.00	0.00
Provisioning Services (PS)	0.00	0.00

OTHER ATTRIBUTES	
Wetland Ecological Condition	5.30
Wetland Stressors	5.01
Wetland Sensitivity	10.00

HGM Class - Relative Probabilities (select max)	
Estuarine	0.00
Riverine	0.50
Slope	1.75
Flat	5.83
Depressional	5.28
Lacustrine	0.00



Project Name: Florence LWI

Wetland Code:Wetland 18Date(s) of assessment:August 2010Size (acres):0.58Data Sheet Number(s):NoneCowardin Class(es):PFO4CInvestigator(s):A. Hawkins / S. EisnerHGM Class(es):Depressional outflow

TRS quarter section tax lot: 1812022400100, 1812022400500, 1812022402001

Street address or location: North of Brownings Corner, east of Hwy 101

Latitude: **44.0366**Longitude: **-124.0983**

Locally Significant?: No

Hydrologic basin: 171002060804

Soil -- Mapped series: Yaquina loamy fine sand

Hydrologic Source: Groundwater

Dominant Wetland Vegetation

TREES / SHRUBS VINES / HERBS

TREES / SHRUDS		VIIVES / HERI	סט
Malus fusca	Pacific Crabapple	Carex obnupta	Slough Sedge
Spiraea douglasii	Douglas' Spirea		
Lonicera involucrata	Bearberry Honeysuckle		

Comments:

Dunal depressions with seasonal ponded water. Culverted under Brownings Corner, drains to south.

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	PUB = palustrine unconsolidated bottom
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
	S = Slope	FL= Flats	

Florence Local Wetland Inventory

SPECIFIC FUNCTIONS	Relative Effectiveness of the Function	Relative Values of the Function
Water Storage & Delay (WS)	3.85	2.33
Sediment Retention & Stabilization (SR)	6.46	5.31
Phosphorus Retention (PR)	4.78	5.78
Nitrate Removal & Retention (NR)	5.16	4.83
Thermoregulation (T)	0.83	1.67
Carbon Sequestration (CS)	3.08	
Organic Matter Export (OE)	5.81	
Aquatic Invertebrate Habitat (INV)	5.56	6.92
Anadromous Fish Habitat (FA)	0.00	3.89
Non-anadromous Fish Habitat (FR)	1.59	6.67
Amphibian & Reptile Habitat (AM)	6.92	7.33
Waterbird Feeding Habitat (WBF)	3.89	4.00
Waterbird Nesting Habitat (WBN)	0.00	6.67
Songbird, Raptor, & Mammal Habitat (SBM)	5.85	6.67
Pollinator Habitat (POL)	6.25	5.00
Native Plant Diversity (PD)	7.71	6.67

GROUPED FUNCTIONS	Group Scores (functions)	Group Scores (values)
Hydrologic Function (WS)	3.85	2.33
Water Quality Group (WQ)	6.46	5.78
Carbon Sequestration (CS)	3.08	
Fish Support Group (FISH)	1.59	6.67
Aquatic Support Group (AQ)	6.92	7.33
Terrestrial Support Group (TERR)	7.71	6.67
Public Use & Recognition (PU)		1.19
Provisioning Services (PS)		0.00

OTHER ATTRIBUTES	
Wetland Ecological Condition	5.18
Wetland Stressors	2.93
Wetland Sensitivity	5.08

HGM Class - Relative Probabilities (select max)	
Estuarine	0.00
Riverine	0.90
Slope	2.38
Flat	5.42
Depressional	3.06
Lacustrine	0.00



Project Name: Florence LWI

Date(s) of assessment: July 15, 2010 Size (acres): 4.47

Data Sheet Number(s): 3 Cowardin Class(es): PFO4C

Investigator(s): A. Hawkins / S. Eisner HGM Class(es): Depressional

TRS quarter section tax lot: 1812023002000, 1812023002100, 1812023005300, 1812023005400, 1812023005500

Street address or location: South of Friendly Acres, east of Hwy. 101

Latitude: **44.0318**Longitude: **-124.0983**

Locally Significant?: No

Hydrologic basin: 171002060804

Soil -- Mapped series: Waldport fine sand, Yaquina loamy fine sand

Hydrologic Source: Groundwater, Precipitation

Dominant Wetland Vegetation

TREES / SHRUBS	VINES / HERBS
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TILDED / DILLICED		, 11 (12) , 1121122	
Pinus contorta	Shore Pine		
Ledum glandulosum	Smooth Labrador-Tea		
Vaccinium uliginosum	Bog Blueberry		
Salix hookeriana	Hooker Willow		

Comments:

Forested shrub wetland in depression east of Hwy 101. Wetland is bordered on all sides by residential development. Adjacent upland species include Pinus contorta, Vaccinium ovatum, Rhododendron macrophyllum. All or a portion of this wetland obtained concurrence for a prior wetland delineation: WD2005-0281.

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	PUB = palustrine unconsolidated bottom
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
	S = Slope	FL= Flats	

Florence Local Wetland Inventory

SPECIFIC FUNCTIONS	Relative Effectiveness of the Function	Relative Values of the Function
Water Storage & Delay (WS)	3.25	2.17
Sediment Retention & Stabilization (SR)	10.00	5.04
Phosphorus Retention (PR)	10.00	5.36
Nitrate Removal & Retention (NR)	10.00	4.49
Thermoregulation (T)	0.00	0.00
Carbon Sequestration (CS)	2.14	
Organic Matter Export (OE)	0.00	
Aquatic Invertebrate Habitat (INV)	6.32	7.31
Anadromous Fish Habitat (FA)	0.00	5.11
Non-anadromous Fish Habitat (FR)	2.64	3.33
Amphibian & Reptile Habitat (AM)	7.31	6.67
Waterbird Feeding Habitat (WBF)	5.11	4.00
Waterbird Nesting Habitat (WBN)	5.19	6.67
Songbird, Raptor, & Mammal Habitat (SBM)	5.89	6.67
Pollinator Habitat (POL)	6.53	0.00
Native Plant Diversity (PD)	6.17	6.67

GROUPED FUNCTIONS	Group Scores (functions)	Group Scores (values)
Hydrologic Function (WS)	3.25	2.17
Water Quality Group (WQ)	10.00	5.36
Carbon Sequestration (CS)	2.14	
Fish Support Group (FISH)	2.64	5.11
Aquatic Support Group (AQ)	7.31	6.67
Terrestrial Support Group (TERR)	6.53	6.67
Public Use & Recognition (PU)		0.71
Provisioning Services (PS)		0.00

OTHER ATTRIBUTES		
Wetland Ecological Condition	6.16	
Wetland Stressors	2.65	
Wetland Sensitivity	10.00	

HGM Class - Relative Probabilities (select max)	
Estuarine	0.00
Riverine	0.50
Slope	1.25
Flat	5.36
Depressional	6.94
Lacustrine	0.00



Project Name: Florence LWI

		Wetland Code:	Wetland 20
Date(s) of assessment:	August 2010	Size (acres):	1.97
Data Sheet Number(s):	None	Cowardin Class(es):	PFO4C
Investigator(s):	A. Hawkins / S. Eisner	HGM Class(es):	Flat

TRS quarter section tax lot: 1812023002500, 1812023002501, 1812023002700, 1812023005601, 1812023005602

Street address or location: South of Friendly Acres, eat of Hwy. 101

Latitude: **44.03**

Longitude: -124.0967

Locally Significant?: No

Hydrologic basin: 171002060804

Soil -- Mapped series: Waldport fine sand

Hydrologic Source: Groundwater, Precipitation

Dominant Wetland Vegetation

TREES / SHRUBS VINES / HERBS

TREES / SHRUDS	VIIVES / HERDS		
Ledum glandulosum	Smooth Labrador-Tea	Deschampsia cespitosa	Tufted Hairgrass
Vaccinium uliginosum	Bog Blueberry	Juncus acuminatus	Taper-Tip Rush
Spiraea douglasii	Douglas' Spirea		

Comments:

Includes isolated wetland with seasonal inundation just east of Hwy 101, as well as smaller, apparently isolated wetlands to the east. Residential development common in the vicinity of these wetlands. Adjacent upland species include: Pinus contorta, Vaccinium ovatum, Rhododendron macrophyllum. These wetlands were grouped because they are located in the same geomorphic position, have similar vegatation communities and have similar adjoining land use patterns.

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	PUB = palustrine unconsolidated bottom
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
	S = Slope	FL= Flats	

Florence Local Wetland Inventory

SPECIFIC FUNCTIONS	Relative Effectiveness of the Function	Relative Values of the Function
Water Storage & Delay (WS)	3.25	2.17
Sediment Retention & Stabilization (SR)	10.00	5.02
Phosphorus Retention (PR)	10.00	5.36
Nitrate Removal & Retention (NR)	10.00	4.49
Thermoregulation (T)	0.00	0.00
Carbon Sequestration (CS)	2.41	
Organic Matter Export (OE)	0.00	
Aquatic Invertebrate Habitat (INV)	5.80	7.34
Anadromous Fish Habitat (FA)	0.00	4.37
Non-anadromous Fish Habitat (FR)	0.83	6.67
Amphibian & Reptile Habitat (AM)	7.34	7.33
Waterbird Feeding Habitat (WBF)	4.37	4.00
Waterbird Nesting Habitat (WBN)	0.00	6.67
Songbird, Raptor, & Mammal Habitat (SBM)	6.06	6.67
Pollinator Habitat (POL)	6.01	5.00
Native Plant Diversity (PD)	6.05	6.67

GROUPED FUNCTIONS	Group Scores (functions)	Group Scores (values)
Hydrologic Function (WS)	3.25	2.17
Water Quality Group (WQ)	10.00	5.36
Carbon Sequestration (CS)	2.41	
Fish Support Group (FISH)	0.83	6.67
Aquatic Support Group (AQ)	7.34	7.33
Terrestrial Support Group (TERR)	6.06	6.67
Public Use & Recognition (PU)		1.19
Provisioning Services (PS)		0.00

OTHER ATTRIBUTES		
Wetland Ecological Condition	4.68	
Wetland Stressors	3.46	
Wetland Sensitivity	10.00	

HGM Class - Relative Probabilities (select max)	
Estuarine	0.00
Riverine	0.50
Slope	1.75
Flat	6.46
Depressional	1.94
Lacustrine	0.00



Project Name: Florence LWI

		Wetland Code:	Wetland 21
Date(s) of assessment:	August 2010	Size (acres):	23.01
Data Sheet Number(s):	None	Cowardin Class(es):	PFO4C
Investigator(s):	A. Hawkins / S. Eisner	HGM Class(es):	Slope

TRS quarter section tax lot: 1712350003400, 1712350003500, 1812022001901, 1812022003600, 1812022003700,

1812022003800, 1812022003900, 1812023005700, 1812023005800, 1812023005900,

1812023006000, 1812030000100

Street address or location: West of Brownings Corner, west of Hwy 101

Latitude: **44.0368**Longitude: **-124.1025**

Locally Significant?: No

Hydrologic basin: 171002060804

Soil -- Mapped series: Waldport fine sand, Yaquina loamy fine sand, Netarts fine sand

Hydrologic Source: Groundwater, Precipitation

Dominant Wetland Vegetation				
TREES / SHRUB	S	VINES / HERBS		
Pinus contorta	Shore pine	Carex obnupta	Slough sedge	
Salix spp.	Willow			

Comments:

Area to north of old horseradish nursery. These wetlands were grouped because they are located in the same geomorphic position and have similar adjacent land use patterns. Northern end is mostly undisturbed; southern portion less so due to proximity to nursery and other development. Large high quality wetland which extends north, flanked by dune on the west. Wetland boundaries determined primarily through air photo interpretation. Portions of this wetland obtained concurrence for a prior wetland delineation: WD2007-0674 & WD2007-0255.

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	PUB = palustrine unconsolidated bottom
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
	S = Slope	FL= Flats	

Florence Local Wetland Inventory

SPECIFIC FUNCTIONS	Relative Effectiveness of the Function	Relative Values of the Function
Water Storage & Delay (WS)	4.50	3.58
Sediment Retention & Stabilization (SR)	10.00	5.50
Phosphorus Retention (PR)	10.00	6.49
Nitrate Removal & Retention (NR)	10.00	4.97
Thermoregulation (T)	0.00	0.00
Carbon Sequestration (CS)	2.05	0.00
Organic Matter Export (OE)	0.00	0.00
Aquatic Invertebrate Habitat (INV)	5.93	7.84
Anadromous Fish Habitat (FA)	0.00	4.91
Non-anadromous Fish Habitat (FR)	2.95	6.67
Amphibian & Reptile Habitat (AM)	7.84	7.33
Waterbird Feeding Habitat (WBF)	4.91	4.00
Waterbird Nesting Habitat (WBN)	0.00	6.67
Songbird, Raptor, & Mammal Habitat (SBM)	6.99	6.67
Pollinator Habitat (POL)	6.97	5.00
Native Plant Diversity (PD)	6.30	7.22

GROUPED FUNCTIONS	Group Scores (functions)	Group Scores (values)
Hydrologic Function (WS)	4.50	3.58
Water Quality Group (WQ)	10.00	6.49
Carbon Sequestration (CS)	2.05	0.00
Fish Support Group (FISH)	2.95	6.67
Aquatic Support Group (AQ)	7.84	7.33
Terrestrial Support Group (TERR)	6.99	7.22
Public Use & Recognition (PU)	0.00	0.00
Provisioning Services (PS)	0.00	0.00

OTHER ATTRIBUTES	
Wetland Ecological Condition	3.68
Wetland Stressors	4.60
Wetland Sensitivity	10.00

HGM Class - Relative Probabilities (select max)	
Estuarine	0.00
Riverine	0.50
Slope	1.81
Flat	0.00
Depressional	0.00
Lacustrine	0.00



Project Name: Florence LWI

Wetland Code:Wetland 22Date(s) of assessment:7/15/2010Size (acres):1.56Data Sheet Number(s):4Cowardin Class(es):L2ABYInvestigator(s):A. Hawkins / S. EisnerHGM Class(es):Lacustrine

TRS quarter section tax lot: 1812141000113, 1812141000114, 1812141001200, 1812141001300, 1812141001400,

1812141001500, 1812141001500, 1812141001600

Street address or location: Northwest end of Munsel Lake

Latitude: **44.00888**Longitude: **-124.08714**

Locally Significant?: No

Hydrologic basin: 171002060804

Soil -- Mapped series: Waldport fine sand

Hydrologic Source: Surface

Dominant Wetland Vegetation

TREES / SHRUBS VINES / HERBS

TREES / STRUBS		VINES / HERDS	VIIVES / HERBS		
Alnus rubra	red alder	Scirpus micrpcarpus	Small fruited bulrush		
Salix sp.	willow	Carex obnupta	slough sedge		
Thuja plicata	western red cedar				

Comments:

Northwest end of Munsel Lake. Begins near 48-inch culvert beneath Martin Road. This wetland is the littoral area of the lake. Banks are relatively steep. Area is inundated year-round.

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	PUB = palustrine unconsolidated bottom
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
	S = Slope	FL= Flats	

Florence Local Wetland Inventory

SPECIFIC FUNCTIONS	Relative Effectiveness of the Function	Relative Values of the Function
Water Storage & Delay (WS)	3.13	2.67
Sediment Retention & Stabilization (SR)	4.21	4.60
Phosphorus Retention (PR)	1.58	6.11
Nitrate Removal & Retention (NR)	4.05	4.52
Thermoregulation (T)	3.67	6.67
Carbon Sequestration (CS)	1.40	
Organic Matter Export (OE)	6.97	
Aquatic Invertebrate Habitat (INV)	5.25	7.06
Anadromous Fish Habitat (FA)	7.06	10.00
Non-anadromous Fish Habitat (FR)	5.45	7.86
Amphibian & Reptile Habitat (AM)	3.51	6.67
Waterbird Feeding Habitat (WBF)	5.71	4.00
Waterbird Nesting Habitat (WBN)	5.92	6.67
Songbird, Raptor, & Mammal Habitat (SBM)	4.12	6.67
Pollinator Habitat (POL)	3.63	0.83
Native Plant Diversity (PD)	6.34	6.67

GROUPED FUNCTIONS	Group Scores (functions)	Group Scores (values)
Hydrologic Function (WS)	3.13	2.67
Water Quality Group (WQ)	4.21	6.67
Carbon Sequestration (CS)	1.40	
Fish Support Group (FISH)	7.06	10.00
Aquatic Support Group (AQ)	6.97	6.67
Terrestrial Support Group (TERR)	6.34	6.67
Public Use & Recognition (PU)		1.19
Provisioning Services (PS)		2.00

OTHER ATTRIBUTES	
Wetland Ecological Condition	7.79
Wetland Stressors	3.65
Wetland Sensitivity	3.75

HGM Class - Relative Probabilities (select max)	
Estuarine	0.00
Riverine	0.00
Slope	0.00
Flat	0.00
Depressional	0.00
Lacustrine	10.00



Project Name: Florence LWI

Wetland Code:Wetland 23Date(s) of assessment:Fall 2010Size (acres):60.57Data Sheet Number(s):6Cowardin Class(es):PEMC, PEMY, PFO1C, PFO4CInvestigator(s):A. Hawkins / S. EisnerHGM Class(es):DCNP, DCP, Slope

TRS quarter section tax lot: 1712340000400, 1812030000100, 1812030000200, 1812033400402

Street address or location: North of Heceta Beach Road

Latitude: **44.0378**Longitude: **-124.112**

Locally Significant?: No

Hydrologic basin: 171002050704

Soil -- Mapped series: Waldport fine sand, Yaquina loamy fine sand, Dune land

Hydrologic Source: Groundwater, Precipitation

Dominant Wetland Vegetation

TREES / SHRUBS

VINES / HERBS

TREES / SHRUDS		VINES / HENDS	VINES / HERBS		
Pinus contorta	Shore pine	Carex obnupta	Slough sedge		
Salix spp	Willows	Scirpus microcarpus	Smallfruit bulrush		

Comments:

Large high quality wetland north of Heceta Beach Road. Margins defined by active to partially stabilized dunes. Lots of snags, structurally diverse vegetation dominated by shore pine, though lowlands are dominated by willow. Extensive seasonal, and in some depressions annual, ponding.

PFO = palustrine forested PSS = palustrine scrub-shrub PEM = palustrine emergent PUB = palustrine unconsolidated bottom HGM CODES: EFB = Estuarine Fringe Embayment EFR = Estuarine Fringe Riverine RFT = Riverine Flow Through LFH = Lacustrine Fringe Headwater LFV = Lacustrine Fringe Valley DB = Depressional Bog DA- Depressional Alkaline DO = Depressional Outflow DCP = Depressional Closed Permanent S = Slope FL= Flats	COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
RI = River Impounding LFH = Lacustrine Fringe Headwater LFV = Lacustrine Fringe Valley DB = Depressional Bog DA- Depressional Alkaline DO = Depressional Outflow DCP = Depressional Closed Permanent DCNP = Depressional Nonpermanent	PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	PUB = palustrine unconsolidated bottom
DA- Depressional Alkaline DO = Depressional Outflow DCP = Depressional Closed Permanent DCNP = Depressional Nonpermanent	HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
	RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
S = Slope $FL = Flats$	DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
		S = Slope	FL= Flats	

Florence Local Wetland Inventory

SPECIFIC FUNCTIONS	Relative Effectiveness of the Function	Relative Values of the Function
Water Storage & Delay (WS)	4.50	2.17
Sediment Retention & Stabilization (SR)	10.00	5.45
Phosphorus Retention (PR)	10.00	5.44
Nitrate Removal & Retention (NR)	10.00	4.11
Thermoregulation (T)	0.00	0.00
Carbon Sequestration (CS)	1.67	0.00
Organic Matter Export (OE)	0.00	0.00
Aquatic Invertebrate Habitat (INV)	5.88	8.28
Anadromous Fish Habitat (FA)	0.00	5.47
Non-anadromous Fish Habitat (FR)	4.26	3.33
Amphibian & Reptile Habitat (AM)	8.28	7.33
Waterbird Feeding Habitat (WBF)	5.47	5.11
Waterbird Nesting Habitat (WBN)	5.48	6.67
Songbird, Raptor, & Mammal Habitat (SBM)	6.66	6.67
Pollinator Habitat (POL)	6.72	5.00
Native Plant Diversity (PD)	6.38	7.21

GROUPED FUNCTIONS	Group Scores (functions)	Group Scores (values)
Hydrologic Function (WS)	4.50	2.17
Water Quality Group (WQ)	10.00	5.45
Carbon Sequestration (CS)	1.67	0.00
Fish Support Group (FISH)	4.26	5.47
Aquatic Support Group (AQ)	8.28	7.33
Terrestrial Support Group (TERR)	6.72	7.21
Public Use & Recognition (PU)	0.00	10.00
Provisioning Services (PS)	0.00	0.00

OTHER ATTRIBUTES	
Wetland Ecological Condition	5.93
Wetland Stressors	4.23
Wetland Sensitivity	10.00

HGM Class - Relative Probabilities (select max)	
Estuarine	0.00
Riverine	0.00
Slope	0.00
Flat	0.00
Depressional	0.00
Lacustrine	0.00



Project Name: Florence LWI

Wetland 24 Wetland Code: August 12, 2010 Size (acres): 46.66 Date(s) of assessment: Data Sheet Number(s): 14 Cowardin Class(es): PFO4C, PSS1C, PUBH Investigator(s): A. Hawkins / S. Eisner HGM Class(es): **DCP**

TRS quarter section tax lot: 1812030000200, 1812030000300, 1812030000300, 1812033300100, 1812033300200, 1812033300300. 1812033300400, 1812033400077, 1812033400200, 1812033400300, 1812033400401, 1812033400402, 1812033400405, 1812033400503, 1812041100077, 1812041100600, 1812041100700, 1812041104701,1812041104705, 1812041104710, 1812041402302, 1812041402304, 1812100000102, 1812100000104, 1812100000106, 1812100000120, 1812100000121, 1812101000077, 1812101000700, 1812101000800,1812101001300, 1812101001400, 1812101001500, 1812101001600, 1812101001700, 1812101001800,1812101001900, 1812101002000, 1812101010400, 1812101010400, 1812101200077, 1812101200100,1812101200200, 1812101200300, 1812101200400, 1812101200500, 1812101201100, 1812101201200, 1812101201600, 1812101300100, 1812101300200, 1812101300500, 1812102100300, 1812102100400,

1812104000200

Street address or location: North of Heceta Beach Road, Heceta Lake

> Latitude: 44.0312 Longitude: -124.1188

Locally Significant?: Yes

Hydrologic basin: 171002050704

Waldport fine sand, Yaquina loamy fine sand, Dune land Soil -- Mapped series:

Hydrologic Source: **Groundwater**, Precipitation

Dominant Wetland Vegetation

TREES / SHRUBS

TREES / SHRUB	S	VINES / HERBS		
Pinus contorta	Shore pine	Carex obnupta	Slough sedge	
Salix hookeriana	Hookers willow			
Spiraea douglasii	Douglas spirea			
Alnus rubra	Red alder			

Comments:

A grouping of wetlands in the bottom of interdunal swales. These wetlands were grouped because they are located in the same geomorphic position and have similar adjacent land use patterns. This is a large, high quality wetland with perennial open water through the deepest depressions. The remaining areas are generally only seasonally inundated. Residential development to south. Largely forested or shrubby, except where inundation is common, this wetland has an abundance of snags. Portions of this wetland obtained concurrence for a prior wetland delineation: WD2001-0297 & WD2001-0401.

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	PUB = palustrine unconsolidated bottom
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
	S = Slope	FL= Flats	

Florence Local Wetland Inventory

SPECIFIC FUNCTIONS	Relative Effectiveness of the Function	Relative Values of the Function
Water Storage & Delay (WS)	5.75	2.17
Sediment Retention & Stabilization (SR)	10.00	5.31
Phosphorus Retention (PR)	10.00	5.61
Nitrate Removal & Retention (NR)	10.00	4.24
Thermoregulation (T)	0.00	0.00
Carbon Sequestration (CS)	1.47	0.00
Organic Matter Export (OE)	0.00	0.00
Aquatic Invertebrate Habitat (INV)	6.29	7.82
Anadromous Fish Habitat (FA)	0.00	4.95
Non-anadromous Fish Habitat (FR)	3.54	6.67
Amphibian & Reptile Habitat (AM)	7.82	7.33
Waterbird Feeding Habitat (WBF)	4.95	4.00
Waterbird Nesting Habitat (WBN)	4.44	6.67
Songbird, Raptor, & Mammal Habitat (SBM)	6.34	6.67
Pollinator Habitat (POL)	7.08	5.00
Native Plant Diversity (PD)	5.72	7.09

GROUPED FUNCTIONS	Group Scores (functions)	Group Scores (values)
Hydrologic Function (WS)	5.75	2.17
Water Quality Group (WQ)	10.00	5.61
Carbon Sequestration (CS)	1.47	0.00
Fish Support Group (FISH)	3.54	6.67
Aquatic Support Group (AQ)	7.82	7.33
Terrestrial Support Group (TERR)	7.08	7.09
Public Use & Recognition (PU)	0.00	0.48
Provisioning Services (PS)	0.00	0.00

OTHER ATTRIBUTES	
Wetland Ecological Condition	6.05
Wetland Stressors	2.23
Wetland Sensitivity	10.00

HGM Class - Relative Probabilities (select max)	
Estuarine	0.00
Riverine	0.00
Slope	0.00
Flat	0.00
Depressional	0.00
Lacustrine	0.00



Project Name: Florence LWI

Wetland Code:Wetland 25Date(s) of assessment:Fall 2010Size (acres):9.69Data Sheet Number(s):8Cowardin Class(es):PSS1C, PFO4CInvestigator(s):A. Hawkins / S. EisnerHGM Class(es):Slope

TRS quarter section tax lot: 1812030000200, 1812033300500, 1812033300600, 1812040000102, 1812040000110,

1812040000120, 1812040000121, 1812041402305, 1812044404300, 1812044404400

Street address or location: North of Heceta Beach Road

Latitude: **44.0333**Longitude: **-124.1251**

Locally Significant?: Yes

Hydrologic basin: 171002050704

Soil -- Mapped series: Waldport fine sand, Yaquina loamy fine sand

Hydrologic Source: Groundwater, Precipitation

Dominant Wetland Vegetation

TREES / SHRUBS VINES / HERBS

111257 5111625			
Pinus contorta	Shore Pine	Carex obnupta	Slough Sedge
Malus fusca	Pacific Crabapple	Potentila palustris	Marsh cinquefoil
Ledum glandulosum	Smooth Labrador-Tea	Carex sitchensis	Sitka Sedge
Myrica californica	Pacific Wax-Myrtle	Eleocharis sp.	Spikerush
Salix hookeriana	Hooker Willow	Juncus sp.	Rush
Lonicera involucrata	Bearberry honeysuckle	Lysichitum americanum	American Skunk-Cabbage
Spiraea douglasii	Douglas' Spirea		

Comments:

Predominantly forest and scrub shrub wetland, with open water and emergent components. Drains west in channel that is culverted under 4th Street, drains to ocean. Upland species: Vaccinium ovatum, Gaultheria shallon, Pinus contorta.

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	PUB = palustrine unconsolidated bottom
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
	S = Slope	FL= Flats	

Florence Local Wetland Inventory

SPECIFIC FUNCTIONS	Relative Effectiveness of the Function	Relative Values of the Function
Water Storage & Delay (WS)	3.00	2.17
Sediment Retention & Stabilization (SR)	5.52	5.02
Phosphorus Retention (PR)	2.59	5.28
Nitrate Removal & Retention (NR)	5.11	4.38
Thermoregulation (T)	1.39	3.33
Carbon Sequestration (CS)	1.56	
Organic Matter Export (OE)	7.23	
Aquatic Invertebrate Habitat (INV)	5.90	6.98
Anadromous Fish Habitat (FA)	0.00	5.41
Non-anadromous Fish Habitat (FR)	2.59	3.33
Amphibian & Reptile Habitat (AM)	6.98	7.33
Waterbird Feeding Habitat (WBF)	5.41	4.00
Waterbird Nesting Habitat (WBN)	5.09	6.67
Songbird, Raptor, & Mammal Habitat (SBM)	5.55	6.67
Pollinator Habitat (POL)	5.83	5.00
Native Plant Diversity (PD)	3.50	6.70

GROUPED FUNCTIONS	Group Scores (functions)	Group Scores (values)
Hydrologic Function (WS)	3.00	2.17
Water Quality Group (WQ)	5.52	5.28
Carbon Sequestration (CS)	1.56	
Fish Support Group (FISH)	2.59	5.41
Aquatic Support Group (AQ)	7.23	7.33
Terrestrial Support Group (TERR)	5.83	6.70
Public Use & Recognition (PU)		1.19
Provisioning Services (PS)		0.00

OTHER ATTRIBUTES	
Wetland Ecological Condition	5.18
Wetland Stressors	3.73
Wetland Sensitivity	3.45

HGM Class - Relative Probabilities (select max)	
Estuarine	0.00
Riverine	1.50
Slope	1.81
Flat	0.00
Depressional	0.00
Lacustrine	0.00



Project Name: Florence LWI

Date(s) of assessment:August 2010Size (acres):1.23Data Sheet Number(s):NoneCowardin Class(es):PFO4CInvestigator(s):A. Hawkins / S. EisnerHGM Class(es):Slope

TRS quarter section tax lot: 1812033300077, 1812033302201, 1812033302300, 1812033302400, 1812033302500,

1812033302600, 1812033400077, 1812033400600, 1812033401000

Street address or location: South of Heceta Beach Road

Latitude: **44.0296**Longitude: **-124.1201**

Locally Significant?: Yes

Hydrologic basin: 171002060804

Soil -- Mapped series: Yaquina loamy fine sand, Waldport fine sand, Netarts fine sand

Hydrologic Source: Groundwater

Dominant Wetland Vegetation

TREES / SHRUBS

VINES / HERRS

TREES / SHRUDS		VINES / HERI	VINES / HERBS	
Pinus contorta	Shore Pine	Carex obnupta	Slough Sedge	
Salix hookeriana	Hooker Willow			

Comments:

Series of small, apparently isolated forested wetlands south of Heceta Beach Road. Dominated by willows. Adjacent upland species: Myrica californica, Gaultheria shallon, Rhamnus purshiana, Spiraea douglasii.

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	PUB = palustrine unconsolidated bottom
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
	S = Slope	FL= Flats	

Florence Local Wetland Inventory

SPECIFIC FUNCTIONS	Relative Effectiveness of the Function	Relative Values of the Function
Water Storage & Delay (WS)	3.25	2.42
Sediment Retention & Stabilization (SR)	10.00	5.03
Phosphorus Retention (PR)	10.00	5.57
Nitrate Removal & Retention (NR)	10.00	3.99
Thermoregulation (T)	0.00	0.00
Carbon Sequestration (CS)	1.64	
Organic Matter Export (OE)	0.00	
Aquatic Invertebrate Habitat (INV)	5.11	6.00
Anadromous Fish Habitat (FA)	0.00	4.19
Non-anadromous Fish Habitat (FR)	2.89	6.67
Amphibian & Reptile Habitat (AM)	5.98	6.67
Waterbird Feeding Habitat (WBF)	4.19	4.00
Waterbird Nesting Habitat (WBN)	0.00	6.67
Songbird, Raptor, & Mammal Habitat (SBM)	4.04	6.67
Pollinator Habitat (POL)	4.36	0.00
Native Plant Diversity (PD)	5.95	6.67

GROUPED FUNCTIONS	Group Scores (functions)	Group Scores (values)
Hydrologic Function (WS)	3.25	2.42
Water Quality Group (WQ)	10.00	5.57
Carbon Sequestration (CS)	1.64	
Fish Support Group (FISH)	2.89	6.67
Aquatic Support Group (AQ)	5.98	6.67
Terrestrial Support Group (TERR)	5.95	6.67
Public Use & Recognition (PU)		1.19
Provisioning Services (PS)		0.00

OTHER ATTRIBUTES	
Wetland Ecological Condition	4.35
Wetland Stressors	3.36
Wetland Sensitivity	10.00

HGM Class - Relative Probabilities (select max)	
Estuarine	0.00
Riverine	0.50
Slope	1.81
Flat	0.00
Depressional	0.00
Lacustrine	0.00



Tufted Hairgrass

Project Name: Florence LWI

		Wetland Code:	Wetland 27
Date(s) of assessment:	August 12, 2010	Size (acres):	89.97
Data Sheet Number(s):	15	Cowardin Class(es):	PEMC, PEMY, PFO4C
Investigator(s):	A. Hawkins / S. Eisner	HGM Class(es):	Flat

TRS quarter section tax lot:

 $1812023002901, 1812023003000, 1812023003100, 1812023003300, 1812023003400, 1812023003500, \\ 1812023003700, 1812023003800, 1812023003805, 1812030000300, 1812030000500, 1812101000077, \\ 1812101000200, 1812101000900, 1812101002300, 1812101002400, 1812101002500, 1812101003000, \\ 1812101003300, 1812101003400, 1812101003500, 1812101003600, 1812101003700, 1812101003800, \\ 1812101004600, 1812101004700, 1812101004900, 1812101005000, 1812101005100, 1812101005200, \\ 1812101005300, 1812101005400, 1812101005500, 1812101005600, 1812101005700, 1812101005800, \\ 1812101005900, 1812101006000, 1812101006900, 1812101007100, 1812101007200, 1812101007300, \\ 1812101007400, 1812101007500, 1812101007600, 1812101007700, 1812101008100, 1812101008200, \\ 1812101008300, 1812101008400, 1812101008500, 1812101008600, 1812101008700, 1812101008800, \\ 1812101008900, 1812101009000, 1812101009100, 1812101009200, 1812101009300, 1812101009500, \\ 1812101009600, 1812101009800, 1812101009900, 1812101000000, 181210100200, 181210100200, 1812101009500, \\ 1812101009600, 1812101009800, 1812101009900, 1812101000000, 181210100200, 181210100200, 181210100200, 181210100200, 181210100200, 1812101009500, 1812101009000, 1812101009000, 1812101000000, 181210100200, 181210002700, 1812100000077, 181210000000, 18121100001500, 1812110002600, 1812110002700, 18121100026$

1812110002800, 1812110002900, 1812110003000

Street address or location: West of Hwy 101 North of Heceta Beach Road

Latitude: **44.0277**Longitude: **-124.1062**

Locally Significant?: Yes

Hydrologic basin: **171002060804**

Soil -- Mapped series: Dune land, Yaquina loamy fine sand, Netarts fine sand, Waldport fine sand

Hydrologic Source: Groundwater, Precipitation

Shore pine

Dominant Wetland Vegetation TREES / SHRUBS **VINES / HERBS** Spiraea douglasii Douglas' Spirea Carex obnupta Slough Sedge Ledum glandulosum Smooth Labrador-Tea Juncus ensifolius Dagger-Leaf Rush Vaccinium uliginosum **Bog Blueberry** Lysichitum americanum American Skunk-Cabbage Salix hookeriana **Hooker Willow** Blechnum spicant **Deer Fern**

Deschampsia cespitosa

Comments:

Pinus contorta

Large high quality wetland. These wetlands were grouped because they are located in the same geomorphic position, are influenced by the local groundwater table, and have similar adjacent land use patterns. Northern portion is located on BLM land; the southern portion is surrounded by a developing residential area. A 0.6 acre wetland mitigation site is located in the southern portion of the wetland, north of the development. Dunes border the wetland on all sides across its northern extent. Adjacent upland species include: Pinus contorta, Gaultheria shallon, Vaccinium ovatum, Rhododendron, Rhamnus. Portions of this wetland obtained concurrence for a prior wetland delineation: WD1997-0286 & WD2001-0401.

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	PUB = palustrine unconsolidated bottom
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
	S = Slope	FL= Flats	

Florence Local Wetland Inventory

SPECIFIC FUNCTIONS	Relative Effectiveness of the Function	Relative Values of the Function
Water Storage & Delay (WS)	3.50	2.67
Sediment Retention & Stabilization (SR)	10.00	5.50
Phosphorus Retention (PR)	10.00	6.28
Nitrate Removal & Retention (NR)	10.00	4.88
Thermoregulation (T)	0.00	0.00
Carbon Sequestration (CS)	1.93	
Organic Matter Export (OE)	0.00	
Aquatic Invertebrate Habitat (INV)	5.00	6.78
Anadromous Fish Habitat (FA)	0.00	4.73
Non-anadromous Fish Habitat (FR)	3.22	2.36
Amphibian & Reptile Habitat (AM)	6.78	7.33
Waterbird Feeding Habitat (WBF)	4.73	7.33
Waterbird Nesting Habitat (WBN)	4.84	6.67
Songbird, Raptor, & Mammal Habitat (SBM)	5.23	6.67
Pollinator Habitat (POL)	5.35	5.00
Native Plant Diversity (PD)	5.34	6.67

GROUPED FUNCTIONS	Group Scores (functions)	Group Scores (values)
Hydrologic Function (WS)	3.50	2.67
Water Quality Group (WQ)	10.00	6.28
Carbon Sequestration (CS)	1.93	
Fish Support Group (FISH)	3.22	4.73
Aquatic Support Group (AQ)	6.78	7.33
Terrestrial Support Group (TERR)	5.35	6.67
Public Use & Recognition (PU)		1.90
Provisioning Services (PS)		0.00

OTHER ATTRIBUTES	
Wetland Ecological Condition	4.85
Wetland Stressors	3.33
Wetland Sensitivity	10.00

HGM Class - Relative Probabilities (select max)	
Estuarine	0.00
Riverine	0.00
Slope	0.00
Flat	10.00
Depressional	0.00
Lacustrine	0.00



Project Name: Florence LWI

Wetland Code:Wetland 28Date(s) of assessment:August 2010Size (acres):5.85Data Sheet Number(s):NoneCowardin Class(es):PFO1C, PFO4C, PUBHInvestigator(s):A. Hawkins / S. EisnerHGM Class(es):Slope

TRS quarter section tax lot: 1812104000077, 1812104000101, 1812104000605, 1812104000702, 1812104000703,

1812113200077, 1812113200200, 1812113200900, 1812113201000, 1812113201400,

1812113201500, 1812113202100

Street address or location: North of Heceta Beach Road, west of Hwy 101

Latitude: **44.0191**Longitude: **-124.1046**

Locally Significant?: Yes

Hydrologic basin: 171002060804

Soil -- Mapped series: Netarts fine sand, Yaquina loamy fine sand, Waldport find sand

Hydrologic Source: Groundwater, Precipitation

Dominant Wetland Vegetation

TREES / SHRUBS VINES / HERBS

Spiraea douglasii	Douglas' Spirea	Carex sp.	Sedge
Vaccinium uliginosum	Bog Blueberry	Juncus effusus	Soft Rush
Ledum glandulosum	Smooth Labrador-Tea	Juncus acuminatus	Taper-Tip Rush
Pinus contorta	Shore Pine	Juncus ensifolius	Dagger-Leaf Rush
Salix hookeriana	Hooker Willow		
Salix lasiandra	Pacific Willow		

Comments:

Series of scrub shrub wetlands. Some evidence of ponded water, but no outlet. These wetlands were grouped because they are located in the same geomorphic position and have similar adjacent land use patterns. Adjacent upland includes Vaccinium ovatum, Gaultheria shallon, Cytisus scoparius, Pinus contorta, and Rhododendron macrophyllum. Portions of this wetland obtained concurrence for a prior wetland delineation: WD2006-0116.

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	PUB = palustrine unconsolidated bottom
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
	S = Slope	FL= Flats	

Florence Local Wetland Inventory

SPECIFIC FUNCTIONS	Relative Effectiveness of the Function	Relative Values of the Function
Water Storage & Delay (WS)	2.25	2.17
Sediment Retention & Stabilization (SR)	10.00	5.04
Phosphorus Retention (PR)	10.00	5.28
Nitrate Removal & Retention (NR)	10.00	4.71
Thermoregulation (T)	0.00	0.00
Carbon Sequestration (CS)	1.84	
Organic Matter Export (OE)	0.00	
Aquatic Invertebrate Habitat (INV)	5.97	6.38
Anadromous Fish Habitat (FA)	0.00	3.63
Non-anadromous Fish Habitat (FR)	3.90	6.67
Amphibian & Reptile Habitat (AM)	6.38	7.33
Waterbird Feeding Habitat (WBF)	3.63	4.00
Waterbird Nesting Habitat (WBN)	4.77	6.67
Songbird, Raptor, & Mammal Habitat (SBM)	4.37	6.67
Pollinator Habitat (POL)	5.72	5.00
Native Plant Diversity (PD)	5.85	6.67

GROUPED FUNCTIONS	Group Scores (functions)	Group Scores (values)
Hydrologic Function (WS)	2.25	2.17
Water Quality Group (WQ)	10.00	5.28
Carbon Sequestration (CS)	1.84	
Fish Support Group (FISH)	3.90	6.67
Aquatic Support Group (AQ)	6.38	7.33
Terrestrial Support Group (TERR)	5.85	6.67
Public Use & Recognition (PU)		1.19
Provisioning Services (PS)		0.00

OTHER ATTRIBUTES	
Wetland Ecological Condition	4.97
Wetland Stressors	3.19
Wetland Sensitivity	10.00

HGM Class - Relative Probabilities (select max)	
Estuarine	0.00
Riverine	0.50
Slope	2.19
Flat	0.00
Depressional	0.00
Lacustrine	0.00



Common Spikerush
Spearwort Butter-Cup

Sitka Sedge

Project Name: Florence LWI

		Wetland Code:	Wetland 29
Date(s) of assessment:	August 2010	Size (acres):	65.14
Data Sheet Number(s):	None	Cowardin Class(es):	PEMC, PFO1C, PFO4C, PSS1C, PUBH
Investigator(s):	A. Hawkins / S. Eisner	HGM Class(es):	Depressional, Slope

TRS quarter section tax lot: 1812101301400, 1812104000077, 1812104000100, 1812104000400, 1812104000500,

1812104000800, 1812104000900, 1812104001000, 1812104001100, 1812104001300, 1812104001402, 1812104001500, 1812104001600, 1812104001701, 1812104001800,

1812113200077, 1812150000200, 1812150000300, 1812150001700

Street address or location: South of Heceta Beach Road, west of Hwy 101

Latitude: **44.0166**Longitude: **-124.1109**

Locally Significant?: No

Dominant Wetland Vegetation

Hydrologic basin: 171002060804

Soil -- Mapped series: Yaquina loamy fine sand, Waldport find sand, Dune land, Netarts fine sand

Hydrologic Source: Groundwater, Precipitation

TREES / SHRUBS **VINES / HERBS** Vaccinium uliginosum **Bog Blueberry** Carex obnupta Slough Sedge Salix hookeriana **Hooker Willow Red Fescue** Festuca rubra Juncus sp. Rush Little Green Sedge Carex viridula Juncus leseurii Salt Rush

Eleocharis palustris

Ranunculus flammula
Carex sitchensis

Comments:

Large, high quality wetland with a variety of open water, scrub shrub and emergent communities. These wetlands were grouped because they are located in the same geomorphic position, are influenced by the local groundwater table, and have similar adjacent land use patterns. Northern portion is located on private property; the central and southern portions are located on County property. The southern wetlands are generally defined topographically by stabilized and advancing sand dunes. Adjacent upland species: Pinus contorta, Myrica californica, Gaultheria shallon, Vaccinium ovatum, Spiraea douglasii. Portions of this wetland obtained concurrence for a prior wetland delineation: WD2007-0745 & WD2007-0747.

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	PUB = palustrine unconsolidated bottom
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
	S = Slope	FL= Flats	

Florence Local Wetland Inventory

SPECIFIC FUNCTIONS	Relative Effectiveness of the Function	Relative Values of the Function
Water Storage & Delay (WS)	4.50	2.17
Sediment Retention & Stabilization (SR)	10.00	5.13
Phosphorus Retention (PR)	10.00	5.36
Nitrate Removal & Retention (NR)	10.00	4.83
Thermoregulation (T)	0.00	0.00
Carbon Sequestration (CS)	1.53	
Organic Matter Export (OE)	0.00	
Aquatic Invertebrate Habitat (INV)	5.22	6.41
Anadromous Fish Habitat (FA)	0.00	4.33
Non-anadromous Fish Habitat (FR)	3.33	6.67
Amphibian & Reptile Habitat (AM)	6.41	7.33
Waterbird Feeding Habitat (WBF)	4.33	4.00
Waterbird Nesting Habitat (WBN)	4.32	6.67
Songbird, Raptor, & Mammal Habitat (SBM)	4.71	6.67
Pollinator Habitat (POL)	4.31	5.00
Native Plant Diversity (PD)	5.43	6.67

GROUPED FUNCTIONS	Group Scores (functions)	Group Scores (values)
Hydrologic Function (WS)	4.50	2.17
Water Quality Group (WQ)	10.00	5.36
Carbon Sequestration (CS)	1.53	
Fish Support Group (FISH)	3.33	6.67
Aquatic Support Group (AQ)	6.41	7.33
Terrestrial Support Group (TERR)	5.43	6.67
Public Use & Recognition (PU)		1.90
Provisioning Services (PS)		0.00

OTHER ATTRIBUTES	
Wetland Ecological Condition	6.07
Wetland Stressors	2.59
Wetland Sensitivity	10.00

HGM Class - Relative Probabilities (select max)	
Estuarine	0.00
Riverine	0.00
Slope	0.00
Flat	0.00
Depressional	0.00
Lacustrine	0.00



Project Name: Florence LWI

Date(s) of assessment:August 2010Size (acres):6.88Data Sheet Number(s):NoneCowardin Class(es):PFO1CInvestigator(s):A. Hawkins / S. EisnerHGM Class(es):Depressional

TRS quarter section tax lot: 1812104001600, 1812150001700

Street address or location: On County property between Hwy 101 and Shelter Cove Subdivision

Latitude: **44.0117**Longitude: **-124.1129**

Locally Significant?: No

Hydrologic basin: 171002060804

Soil -- Mapped series: Waldport fine sand, Yaquina loamy fine sand

Hydrologic Source: Groundwater

Dominant Wetland Vegetation

TREES / SHRUBS VINES / HERBS

TREES / STREES			
Pinus contorta	Shore Pine	Rubus ursinus	California Dewberry
Spiraea douglasii	Douglas' spirea	Rubus discolor	Himalayan Blackberry
Vaccinium uliginosum	Bog Blueberry	Deschampsia cespitosa	Tufted Hairgrass
Alnus rubra	Red Alder	Carex obnupta	Slough Sedge
Salix hookeriana	Hooker Willow	Juncus effusus	Soft Rush
Rubus spectabilis	Salmonberry	Juncus sp.	Rush

Comments:

Series of interdunal swales surrounded by Pinus and Gaultheria dominated upland. Dominant groundcover includes Deschampsia and Vaccinium. Wetland fringes are dominated by willows. These wetlands were grouped because they are located in the same geomorphic position and have similar vegetation communities.

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	PUB = palustrine unconsolidated bottom
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
	S = Slope	FL= Flats	

Florence Local Wetland Inventory

SPECIFIC FUNCTIONS	Relative Effectiveness of the Function	Relative Values of the Function
Water Storage & Delay (WS)	3.50	1.67
Sediment Retention & Stabilization (SR)	10.00	5.00
Phosphorus Retention (PR)	10.00	5.11
Nitrate Removal & Retention (NR)	10.00	4.33
Thermoregulation (T)	0.00	0.00
Carbon Sequestration (CS)	1.93	
Organic Matter Export (OE)	0.00	
Aquatic Invertebrate Habitat (INV)	5.70	7.42
Anadromous Fish Habitat (FA)	0.00	4.75
Non-anadromous Fish Habitat (FR)	3.97	6.67
Amphibian & Reptile Habitat (AM)	7.42	7.33
Waterbird Feeding Habitat (WBF)	4.75	4.00
Waterbird Nesting Habitat (WBN)	5.32	6.67
Songbird, Raptor, & Mammal Habitat (SBM)	5.10	6.67
Pollinator Habitat (POL)	5.40	5.00
Native Plant Diversity (PD)	6.16	6.67

GROUPED FUNCTIONS	Group Scores (functions)	Group Scores (values)
Hydrologic Function (WS)	3.50	1.67
Water Quality Group (WQ)	10.00	5.11
Carbon Sequestration (CS)	1.93	
Fish Support Group (FISH)	3.97	6.67
Aquatic Support Group (AQ)	7.42	7.33
Terrestrial Support Group (TERR)	6.16	6.67
Public Use & Recognition (PU)		0.00
Provisioning Services (PS)		0.00

OTHER ATTRIBUTES	
Wetland Ecological Condition	4.43
Wetland Stressors	2.75
Wetland Sensitivity	10.00

HGM Class - Relative Probabilities (select max)	
Estuarine	0.00
Riverine	0.50
Slope	1.88
Flat	5.36
Depressional	13.61
Lacustrine	0.00



Project Name: Florence LWI

		Wetland Code:	Wetland 31
Date(s) of assessment:	August 2010	Size (acres):	89.33
Data Sheet Number(s):	None	Cowardin Class(es):	PABH, PFO4C, PSS1C, PUBH
Investigator(s):	A. Hawkins / S. Eisner	HGM Class(es):	Depressional open, Slope

TRS quarter section tax lot: 1812040000200, 1812044300077, 1812044302600, 1812044303500, 1812090000240,

 $1812090000241, 1812090000242, 1812090000243, 1812090000244, 1812090000246, \\1812090000247, 1812090000250, 1812090000251, 1812090000500, 1812090000602$

Street address or location: Either side of N Jetty Road; east to base of terrace (below Rhododendron Drive)

Latitude: **44.0233**Longitude: **-124.1312**

Locally Significant?: No

Hydrologic basin: **171002060804**

Soil -- Mapped series: Heceta fine sand, Waldport fine sand, Dune land

Hydrologic Source: Groundwater, Precipitation

Dominant Wetland V	egetation //		
TREES / SHRUBS		VINES / HERBS	
Pinus contorta	Shore pine		
Salix spp.	Willow		

Comments:

Large wetland complex on State property; located primarily east of N Jetty Road. Wetland maintains a seasonal hydrologic connection to the Siuslaw River via culverts under Jetty Road. These wetlands were grouped because they are located in the similar geomorphic positions and are hydrologically connected.

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strine emergent PUB = palustrine unconsolidated bottom
arine Fringe Riverine RFT = Riverine Flow Through
strine Fringe Valley DB = Depressional Bog
ressional Closed Permanent DCNP = Depressional Nonpermanent
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Florence Local Wetland Inventory

SPECIFIC FUNCTIONS	Relative Effectiveness of the Function	Relative Values of the Function
Water Storage & Delay (WS)	2.71	2.92
Sediment Retention & Stabilization (SR)	5.89	5.24
Phosphorus Retention (PR)	2.48	5.78
Nitrate Removal & Retention (NR)	6.17	4.13
Thermoregulation (T)	5.44	7.50
Carbon Sequestration (CS)	2.55	
Organic Matter Export (OE)	5.70	
Aquatic Invertebrate Habitat (INV)	5.89	7.93
Anadromous Fish Habitat (FA)	7.93	10.00
Non-anadromous Fish Habitat (FR)	6.98	6.67
Amphibian & Reptile Habitat (AM)	4.40	7.33
Waterbird Feeding Habitat (WBF)	5.74	7.33
Waterbird Nesting Habitat (WBN)	4.63	6.67
Songbird, Raptor, & Mammal Habitat (SBM)	6.30	6.67
Pollinator Habitat (POL)	6.06	5.00
Native Plant Diversity (PD)	5.64	7.03

GROUPED FUNCTIONS	Group Scores (functions)	Group Scores (values)
Hydrologic Function (WS)	2.71	2.92
Water Quality Group (WQ)	6.17	7.50
Carbon Sequestration (CS)	2.55	
Fish Support Group (FISH)	7.93	10.00
Aquatic Support Group (AQ)	5.89	7.33
Terrestrial Support Group (TERR)	6.30	7.03
Public Use & Recognition (PU)		0.95
Provisioning Services (PS)		0.00

OTHER ATTRIBUTES	
Wetland Ecological Condition	6.02
Wetland Stressors	2.80
Wetland Sensitivity	10.00

HGM Class - Relative Probabilities (select max)	
Estuarine	0.00
Riverine	0.00
Slope	0.00
Flat	0.00
Depressional	0.00
Lacustrine	0.00



Project Name: Florence LWI

Wetland 32 Wetland Code: 8.76 Date(s) of assessment: August 2010 Size (acres): Data Sheet Number(s): None Cowardin Class(es): L2ABH, PFO4C A. Hawkins / S. Eisner Investigator(s): HGM Class(es): Lacustrine

TRS quarter section tax lot: 1812120000701, 1812120000702, 1812130001000, 1812130001800, 1812141000104,

1812141000113, 1812141000202

Street address or location: **Ackerley Lake**

> Latitude: 44.0116 Longitude: -124.0849

Locally Significant?: No

> Hydrologic basin: 171002060804

Soil -- Mapped series: Netarts fine sand, Bullards-Ferrelo loams

Hydrologic Source: Surface

Dominant Wetland Vegetation

TREES / SHRUBS VINES / H			IERBS	
Pinus contorta	Shore pine	Carex obnupta	Slough sedge	
Alnus rubra	Red alder			

Comments:

This wetland includes an aquatic and forested area along the west side of Ackerley Lake south to Munsel Lake as well as three forested areas adjoining Munsel Lake. The lacustrine portion begins at the confluence of the Clear Lake drainage channel and Ackerley Lake. Vegetation identified above has not been confirmed but is presumed to be present based upon observation of similar habitats in the Florence area.

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	PUB = palustrine unconsolidated bottom
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
	S = Slope	FL= Flats	

Florence Local Wetland Inventory

SPECIFIC FUNCTIONS	Relative Effectiveness of the Function	Relative Values of the Function
Water Storage & Delay (WS)	2.26	2.00
Sediment Retention & Stabilization (SR)	4.46	4.88
Phosphorus Retention (PR)	5.56	5.92
Nitrate Removal & Retention (NR)	5.05	4.33
Thermoregulation (T)	3.61	6.67
Carbon Sequestration (CS)	2.18	
Organic Matter Export (OE)	6.90	
Aquatic Invertebrate Habitat (INV)	5.33	7.65
Anadromous Fish Habitat (FA)	6.64	10.00
Non-anadromous Fish Habitat (FR)	4.70	7.73
Amphibian & Reptile Habitat (AM)	5.52	7.33
Waterbird Feeding Habitat (WBF)	5.46	4.00
Waterbird Nesting Habitat (WBN)	5.26	6.67
Songbird, Raptor, & Mammal Habitat (SBM)	7.65	6.67
Pollinator Habitat (POL)	8.73	5.00
Native Plant Diversity (PD)	6.59	7.96

GROUPED FUNCTIONS	Group Scores (functions)	Group Scores (values)
Hydrologic Function (WS)	2.26	2.00
Water Quality Group (WQ)	5.56	6.67
Carbon Sequestration (CS)	2.18	
Fish Support Group (FISH)	6.64	10.00
Aquatic Support Group (AQ)	6.90	7.33
Terrestrial Support Group (TERR)	8.73	7.96
Public Use & Recognition (PU)		2.22
Provisioning Services (PS)		2.00

OTHER ATTRIBUTES	
Wetland Ecological Condition	6.77
Wetland Stressors	1.48
Wetland Sensitivity	3.37

HGM Class - Relative Probabilities (select max)	
Estuarine	0.00
Riverine	0.00
Slope	0.00
Flat	0.00
Depressional	0.00
Lacustrine	10.00

Wetland Characterization Sheet



Project Name: Florence LWI

Date(s) of assessment:August 2010Size (acres):0.61Data Sheet Number(s):NoneCowardin Class(es):PFO4CInvestigator(s):A. Hawkins / S. EisnerHGM Class(es):Flat, depressional

TRS quarter section tax lot: **1812150001600**

Street address or location: Wetland between Hwy 101 and Shelter Cove Subdivision

Latitude: **44.0071**Longitude: **-124.1173**

Locally Significant?: Yes

Hydrologic basin: **171002060804**

Soil -- Mapped series: Yaquina loamy fine sand

Hydrologic Source: Groundwater

Dominant Wetland Vegetation

TREES / SHRUBS VINES / HERBS

TREES / STITLE S			
Pinus contorta	Shore Pine	Deschampsia cespitosa	Tufted Hairgrass
Spiraea douglasii	Douglas' Spirea	Carex obnupta	Slough Sedge
Vaccinium uliginosum	Bog Blueberry	Juncus effusus	Soft Rush
Salix sp.	Willow		

Comments:

Interdunal swale surrounded by Pinus and Gaultheria dominated upland. Wetland is dominated by tufted hairgrass and bog blueberry. Wetland fringe is dominated by shrubs (willows).

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	PUB = palustrine unconsolidated bottom
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
	S = Slope	FL= Flats	

Florence Local Wetland Inventory

SPECIFIC FUNCTIONS	Relative Effectiveness of the Function	Relative Values of the Function
Water Storage & Delay (WS)	4.50	1.67
Sediment Retention & Stabilization (SR)	10.00	4.77
Phosphorus Retention (PR)	10.00	4.69
Nitrate Removal & Retention (NR)	10.00	3.86
Thermoregulation (T)	0.00	0.00
Carbon Sequestration (CS)	1.99	
Organic Matter Export (OE)	0.00	
Aquatic Invertebrate Habitat (INV)	6.46	7.36
Anadromous Fish Habitat (FA)	0.00	4.27
Non-anadromous Fish Habitat (FR)	1.22	6.67
Amphibian & Reptile Habitat (AM)	7.36	7.33
Waterbird Feeding Habitat (WBF)	4.27	4.00
Waterbird Nesting Habitat (WBN)	0.00	6.67
Songbird, Raptor, & Mammal Habitat (SBM)	6.55	6.67
Pollinator Habitat (POL)	7.09	5.00
Native Plant Diversity (PD)	5.99	6.97

GROUPED FUNCTIONS	Group Scores (functions)	Group Scores (values)
Hydrologic Function (WS)	4.50	1.67
Water Quality Group (WQ)	10.00	4.77
Carbon Sequestration (CS)	1.99	
Fish Support Group (FISH)	1.22	6.67
Aquatic Support Group (AQ)	7.36	7.33
Terrestrial Support Group (TERR)	7.09	6.97
Public Use & Recognition (PU)		10.00
Provisioning Services (PS)		0.00

OTHER ATTRIBUTES	
Wetland Ecological Condition	6.64
Wetland Stressors	3.19
Wetland Sensitivity	10.00

HGM Class - Relative Probabilities (select max)	
Estuarine	0.00
Riverine	0.50
Slope	1.50
Flat	6.15
Depressional	2.78
Lacustrine	0.00



Project Name: Florence LWI

		Wetland Code:	Wetland 34
Date(s) of assessment:	August 11, 2010	Size (acres):	1.88
Data Sheet Number(s):	10	Cowardin Class(es):	PFO1C
Investigator(s):	A. Hawkins / S. Eisner	HGM Class(es):	Riverine

 $TRS \; quarter \; section \; tax \; lot: \; \textbf{1812222302000}, \; \textbf{1812222302100}, \; \textbf{1812222301201}, \; \textbf{18122223333703}, \; \textbf{18122220000701}, \; \textbf{1812222302100}, \; \textbf{181222230000}, \; \textbf{1812222300000}, \; \textbf{181222230000}, \; \textbf{18122223000000}, \; \textbf{181222230000}, \; \textbf{181222230000}, \; \textbf{181222230000}, \;$

1812222100066

Street address or location: East and west of Rhododendron Drive south of 35th

Latitude: **43.9952**Longitude: **-124.1176**

Locally Significant?: Yes

Hydrologic basin: 171002060804

Soil -- Mapped series: Yaquina-Urban land complex, Dune lands

Hydrologic Source: Groundwater, Surface

Dominant Wetland Vegetation

TREES / SHRUBS VINES / HERBS

TREES / SHRUDS		VIIIES / HERDS	
Lonicera involucrata	Bearberry Honeysuckle	Rubus discolor	Himalayan Blackberry
Alnus rubra	Red Alder	Juncus effusus	Soft Rush
Salix hookeriana	Hooker Willow	Holcus lanatus	Common Velvet Grass
		Erechitites minima	Burnweed
		Equisetum arvense	Field Horsetail
		Epilobium watsonii	Watson's Willow-Herb

Comments:

Wetland at valley bottom associated with stream east of Rhododendron Drive. Northern portion is confined by residential development on both sides. West of the wetland the stream enters a culvert which outlets into the Siuslaw River. Portions of this feature have been delineated and received concurrence from DSL (WD#'s 2006-0740 & 1999-0227).

COWARDIN CODES:	E2FO = estuarine forested	E2SS = estuarine scrub shrub	E2EM = estuarine emergent
PFO = palustrine forested	PSS = palustrine scrub-shrub	PEM = palustrine emergent	PUB = palustrine unconsolidated bottom
HGM CODES:	EFB = Estuarine Fringe Embayment	EFR = Estuarine Fringe Riverine	RFT = Riverine Flow Through
RI = River Impounding	LFH = Lacustrine Fringe Headwater	LFV = Lacustrine Fringe Valley	DB = Depressional Bog
DA- Depressional Alkaline	DO = Depressional Outflow	DCP = Depressional Closed Permanent	DCNP = Depressional Nonpermanent
	S = Slope	FL= Flats	

Florence Local Wetland Inventory

SPECIFIC FUNCTIONS	Relative Effectiveness of the Function	Relative Values of the Function
Water Storage & Delay (WS)	1.64	1.67
Sediment Retention & Stabilization (SR)	5.03	6.64
Phosphorus Retention (PR)	2.60	5.76
Nitrate Removal & Retention (NR)	4.66	4.68
Thermoregulation (T)	4.94	5.00
Carbon Sequestration (CS)	3.15	
Organic Matter Export (OE)	6.06	
Aquatic Invertebrate Habitat (INV)	4.21	6.00
Anadromous Fish Habitat (FA)	0.00	4.16
Non-anadromous Fish Habitat (FR)	2.57	6.67
Amphibian & Reptile Habitat (AM)	2.88	6.67
Waterbird Feeding Habitat (WBF)	4.16	4.00
Waterbird Nesting Habitat (WBN)	0.00	6.67
Songbird, Raptor, & Mammal Habitat (SBM)	4.55	6.67
Pollinator Habitat (POL)	4.66	0.83
Native Plant Diversity (PD)	4.53	6.67

GROUPED FUNCTIONS	Group Scores (functions)	Group Scores (values)
Hydrologic Function (WS)	1.64	1.67
Water Quality Group (WQ)	5.03	6.64
Carbon Sequestration (CS)	3.15	
Fish Support Group (FISH)	2.57	6.67
Aquatic Support Group (AQ)	6.06	6.67
Terrestrial Support Group (TERR)	4.66	6.67
Public Use & Recognition (PU)		0.00
Provisioning Services (PS)		0.00

OTHER ATTRIBUTES	
Wetland Ecological Condition	7.46
Wetland Stressors	3.79
Wetland Sensitivity	5.06

HGM Class - Relative Probabilities (select max)	
Estuarine	0.00
Riverine	3.50
Slope	1.44
Flat	0.00
Depressional	0.00
Lacustrine	0.00

PHS#

4611

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: Florence I	_WI	City/County:	Fic	orence/Lane	Sampling Date:	7/8	3/2010
Applicant/Owner: City of Floren	ce			State:	OR	Sampling Point:	1
Investigator(s): CR//	ΛΗ	Section, To	wnship, Range:	Sect	tion 22, T 18 South	, R 12 West	
Landform (hillslope, terrace, etc.:)	swale	<u> </u>	Local relief (co	ncave, convex, none):		Slope (%):	
Subregion (LRR):	RR A	Lat:		Long:		Datum:	
Soil Map Unit Name:	Waldp	ort fine sand			assification:		
Are climatic/hydrologic conditions on the			Yes	X No	(if no, exp	lain in Remarks)	
Are vegetation Soil o	or Hydrology	significantly dis	turbed?	Are "Normal Circumstan	nces" present? (Y/N)	Υ	
Are vegetation Soil o							•
<u> </u>		_					
SUMMARY OF FINDINGS - A	Attach site ma	p showing sa	ampling poir	nt locations, transec	ts, important fe	atures, etc.	
Hydrophytic Vegetation Present? Yes	X No		Is Sampled A	rea within			
Hydric Soil Present? Yes	X No		a Wetla		X	No	<u>-</u>
Wetland Hydrology Present? Yes	X No						
Remarks:							
VEGETATION - Use scientific	•		Indiactes	Dominanas Tastas	rkohoo*-		
	absolute % cover	Dominant Species?	Indicator Status	Dominance Test wo	rksneet:		
Tree Stratum (plot size: 30)	opedes:	Otatus	Number of Dominant Spe	ecies		
1 Pinus contorta	′ 	Х	FAC	That are OBL, FACW, or		3	(A)
2							. ()
3				Total Number of Domina	nt		
4				Species Across All Strata	a:	3	(B)
	50	= Total Cover			·		•
Sapling/Shrub Stratum (plot size:	5)			Percent of Dominant Spe	ecies		
1 Salix sitchensis		Х	FACW	That are OBL, FACW, o		100%	(A/B)
2	_						.` ′
3				Prevalence Index W	orksheet:		
4				Total % Cover of	Multiply b	y:	
5				OBL Species	x 1 =	0	<u>-</u>
	3	= Total Cover		FACW species	x 2 =	0	_
20	,			FAC Species	x 3 =	0	
Herb Stratum (plot size: 30 1 Carex obnupta	_)	.,	0.01	FACU Species	x 4 =		•
•	95	X	OBL	UPL Species	0 (A)		· (D)
2				Column Totals	0 (A)		(B)
4				Prevalence Index =	=R/Δ = :	#DIV/0!	
5				1 Tovalonee maex		,,,,,,,	•
6				Hydrophytic Vegeta	tion Indicators:		
7				x	Dominance Test is >5	60%	
8				-	Prevalence Index is ≤	3.0 ¹	
	95	= Total Cover			Morphological Adapta		
					data in Remarks or or		t)
Woody Vine Stratum (plot size:)				Wetland Non-Vascula		
1					Problematic Hydrophy	ytic Vegetation' (E	Explain)
				1			.1
2							uniess
2	0	= Total Cover		¹ Indicators of hydric soil		must be present,	
2	0	= Total Cover		'Indicators of hydric soil disturbed or problematic. Hydrophytic		must be present,	
2	0	= Total Cover		disturbed or problematic		No	

			_		•		
	ription: (Describe to the	he depth	needed to docume		onfirm the absen	ce of indicators.)	
Depth	Matrix	0/	0.1(Redox Features	Loc ²	T . (P d .
(Inches)	Color (moist)	%	Color (moist)	% Type'	LOC	Texture	Remarks
0-2	10YR 2/2	100			· -	Sandy Loam	
2-18	2.5Y 5/3	95	10YR 4/6		<u> </u>	Sand	organic streaking
	·						
						_	
	ncentration, D=Depletion Indicators: (Applicators)					Indica	² Location: PL=Pore Lining, M=Matrix. ators for Problematic Hydric Soils ³ :
-	Histosol (A1)			Sandy Redo			2 cm Muck (A10)
	Histic Epipedon (A2)			Stripped Ma			Red Parent Material (TF2)
	Black Histic (A3)				ky Mineral (F1)(e	except MLRA 1)	X Other (explain in Remarks)
	Hydrogen Sulfide (A4)	١			ved Matrix (F2)	F	Carlot (explain in Fernance)
	Depleted Below Dark		(11)	Depleted M	` ,		
	•	-	(11)				
	Thick Dark Surface (A	•			Surface (F6)		³ Indicators of hydrophytic vegetation and wetland
	Sandy Mucky Mineral	` '			ark Surface (F7)		hydrology must be present, unless disturbed or
	Sandy Gleyed Matrix ((S4)		Redox Depi	ressions (F8)		problematic.
Depth (inche Remarks:	e is a depressional	area tha			nd wetland hy		
Depth (inche Remarks:	e is a depressional	area tha	at meets hydrop		nd wetland hy	drology indicate	ors. Prominent concentrations in the form
Depth (inche Remarks: Sample site of streaks of	e is a depressional of organic material	area tha	at meets hydrop		nd wetland hy	drology indicate	ors. Prominent concentrations in the form
Depth (inche Remarks: Sample site of streaks of HYDROLO Vetland Hy	e is a depressional of organic material DGY	area tha	at meets hydrop ndy soil were ob	served. Despite no	nd wetland hy	drology indicate	brs. Prominent concentrations in the form bove, the observed soils are hydric.
Depth (inche Remarks: Sample site of streaks of HYDROLO Vetland Hy	e is a depressional of organic material	area tha	at meets hydrop ndy soil were ob	nat apply)	nd wetland hy	rdrology indicato y of the criteria a	ors. Prominent concentrations in the form
Depth (inche Remarks: Sample site of streaks of HYDROLO Vetland Hy	e is a depressional of organic material OGY //drology Indicators icators (minimum of Surface Water (A1)	area thi in a sar s:	at meets hydrop ndy soil were ob	nat apply)	nd wetland hy ot meeting any ed Leaves (B9) (I	rdrology indicato y of the criteria a	ors. Prominent concentrations in the form bove, the observed soils are hydric. Secondary Indicators (2 or more required)
Depth (inche lemarks: Sample site of streaks of HYDROLO Vetland Hy	e is a depressional of organic material OGY vdrology Indicators icators (minimum of Surface Water (A1) High Water Table (A2)	area thi in a sar s:	at meets hydrop ndy soil were ob	nat apply) Water stain 1, 2, 4A, an	nd wetland hy ot meeting any ed Leaves (B9) (F d 4B)	rdrology indicato y of the criteria a	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)
Depth (inche lemarks: Sample site of streaks of HYDROLO Vetland Hy	e is a depressional of organic material OGY /drology Indicators icators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3)	area thi in a sar s:	at meets hydrop ndy soil were ob	nat apply) Water stain 1, 2, 4A, an Salt Crust (I	nd wetland hy ot meeting any ed Leaves (B9) (E d 4B)	rdrology indicato y of the criteria a	Secondary Indicators (2 or more required) X Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)
emarks: sample site f streaks of	e is a depressional of organic material OGY vdrology Indicators icators (minimum of Surface Water (A1) High Water Table (A2)	area thin a sar	at meets hydrop ndy soil were ob	nat apply) Water stain 1, 2, 4A, an Salt Crust (I	nd wetland hy ot meeting any ed Leaves (B9) (I d 4B) B11) ertebrates (B13)	rdrology indicato y of the criteria a	Secondary Indicators (2 or more required) X Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) X Drainage Patterns (B10) Dry-Season Water Table (C2)
emarks: ample site f streaks of	e is a depressional of organic material OGY /drology Indicators icators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	area thin a sar	at meets hydrop ndy soil were ob	nat apply) Water stain 1, 2, 4A, an Salt Crust (I Aquatic Inve	nd wetland hy ot meeting any ed Leaves (B9) (I d 4B) B11) ertebrates (B13) sulfide Odor (C1)	rdrology indicato y of the criteria a	Secondary Indicators (2 or more required) X Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) X Drainage Patterns (B10) Dry-Season Water Table (C2)
emarks: sample site f streaks of	e is a depressional of organic material organic mate	area thi in a sar	at meets hydrop ndy soil were ob	nat apply) Water stain: 1, 2, 4A, an Salt Crust (I Aquatic Inve	nd wetland hy ot meeting any ed Leaves (B9) (I d 4B) B11) ertebrates (B13) sulfide Odor (C1)	rdrology indicatory of the criteria a	Secondary Indicators (2 or more required) X Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) X Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery
Depth (incher demarks: Sample site of streaks of HYDROLO Vetland Hy	e is a depressional of organic material of organic material of organic material organic mat	area thi in a sar	at meets hydrop ndy soil were ob	mat apply) Water stain 1, 2, 4A, an Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rh Presence of	ed Leaves (B9) (Bd 4B) B11) ertebrates (B13) sulfide Odor (C1) nizospheres along	rdrology indicatory of the criteria a	Secondary Indicators (2 or more required) X Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) X Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2)
Depth (inche Remarks: Sample site of streaks of HYDROLO Wetland Hy	e is a depressional of organic material of organic material of organic material of organic material organic	area thin a sar	at meets hydrop ndy soil were ob	mat apply) Water stain 1, 2, 4A, an Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron	ed Leaves (B9) (Id 4B) B11) ertebrates (B13) sulfide Odor (C1) nizospheres along f Reduced Iron (C	rdrology indicatory of the criteria a Except MLRA g Living Roots (C3) (24) wed Soils (C6)	Secondary Indicators (2 or more required) X Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) X Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3)
Depth (inche Remarks: Sample site of streaks of HYDROLO Vetland Hy	e is a depressional of organic material of organic material of organic material organic mat	area thi in a sar	at meets hydrop ndy soil were ob uired; check all th	mat apply) Water stain: 1, 2, 4A, an Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rt Presence of Recent Iron Stunted or S	ed Leaves (B9) (Industrial designation of the desig	rdrology indicatory of the criteria a Except MLRA g Living Roots (C3) (24) wed Soils (C6)	Secondary Indicators (2 or more required) X Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) X Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5)
Depth (incher demarks: Sample site of streaks of HYDROLO Vetland Hy	e is a depressional of organic material of organic material of organic material of organic material organic	area thi in a sar s: one requ	at meets hydrop ndy soil were ob uired; check all th	mat apply) Water stain: 1, 2, 4A, an Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rt Presence of Recent Iron Stunted or S	ed Leaves (B9) (Fed 4B) B11) Britebrates (B13) Sulfide Odor (C1) Dizospheres along of Reduced Iron (C) Reduction in Plo	rdrology indicatory of the criteria a Except MLRA g Living Roots (C3) (24) wed Soils (C6)	Secondary Indicators (2 or more required) X Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) X Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Depth (inche Remarks: Sample site of streaks of HYDROLO Vetland Hy Primary Indi	e is a depressional of organic material of organic material of organic material of organic material organic	area thi in a sar s: one requ	at meets hydrop ndy soil were ob uired; check all th	mat apply) Water stain: 1, 2, 4A, an Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rt Presence of Recent Iron Stunted or S	ed Leaves (B9) (Fed 4B) B11) Britebrates (B13) Sulfide Odor (C1) Dizospheres along of Reduced Iron (C) Reduction in Plo	rdrology indicatory of the criteria a Except MLRA g Living Roots (C3) (24) wed Soils (C6)	Secondary Indicators (2 or more required) X Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) X Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Depth (inche Remarks: Sample site of streaks of HYDROLO Wetland Hy Primary Indi	e is a depressional of organic material of organic material of organic material of organic material organic	area thi in a sar s: one requ	at meets hydrop ndy soil were ob uired; check all th	mat apply) Water stain: 1, 2, 4A, an Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rt Presence of Recent Iron Stunted or S	ed Leaves (B9) (Fed 4B) B11) Britebrates (B13) Sulfide Odor (C1) Dizospheres along of Reduced Iron (C) Reduction in Plo	rdrology indicatory of the criteria a Except MLRA g Living Roots (C3) (24) wed Soils (C6)	Secondary Indicators (2 or more required) X Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) X Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Depth (inche Remarks: Sample site of streaks of HYDROLO Wetland Hy Primary Indi Field Obset Surface Wate	e is a depressional of organic material of organic material of organic material of organic material organic	area thi in a sar s: one requ	at meets hydrop ndy soil were ob uired; check all th gery (B7) urface (B8)	mat apply) Water stain: 1, 2, 4A, an Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Expl.)	ed Leaves (B9) (Fed 4B) B11) Britebrates (B13) Sulfide Odor (C1) Dizospheres along of Reduced Iron (C) Reduction in Plo	rdrology indicatory of the criteria a Except MLRA g Living Roots (C3) (24) wed Soils (C6) D1) (LRR A)	Secondary Indicators (2 or more required) X Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) X Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Primary Indi Field Observator Table Formation Presentation Presentati	e is a depressional of organic material of organic material of organic material of organic material organic	area thi in a sar s: one requ	gery (B7) urface (B8)	mat apply) Water stain 1, 2, 4A, an Salt Crust (I Aquatic Inve Hydrogen S Oxidized Rt Presence of Recent Iron Stunted or S Other (Expl.)	ed Leaves (B9) (Fed 4B) B11) Britebrates (B13) Sulfide Odor (C1) Dizospheres along of Reduced Iron (C) Reduction in Plo	rdrology indicatory of the criteria a Except MLRA g Living Roots (C3) (24) wed Soils (C6) D1) (LRR A)	Secondary Indicators (2 or more required) X Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) X Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Depth (inche Remarks: Sample site of streaks of HYDROLO Wetland Hy Primary Indi Field Obse Surface Wate Nater Table F Saturation Pre includes capilla	e is a depressional of organic material of organic material of organic material of organic material organic	area that in a sar	gery (B7) urface (B8) No X No X No X	mat apply) Water stain 1, 2, 4A, an Salt Crust (I Aquatic Inve Hydrogen S Oxidized Ri Presence of Recent Iron Stunted or S Other (Expli	ed Leaves (B9) (Ed 4B) B11) Bulfide Odor (C1) Dizospheres along f Reduced Iron (C) Reduction in Plo Stressed Plants (I	rdrology indicatory of the criteria a Except MLRA g Living Roots (C3) (C4) wed Soils (C6) D1) (LRR A) Wetland Hydrology indicatory in the criteria a	Secondary Indicators (2 or more required) X Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) X Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Depth (inche Remarks: Sample site of streaks of HYDROLO Wetland Hy Primary Indi Field Obse Surface Wate Water Table F Saturation Pre includes capilla Describe Rec	e is a depressional of organic material organ	area that in a sar	gery (B7) urface (B8) No X No X No X	mat apply) Water stain 1, 2, 4A, an Salt Crust (I Aquatic Inve Hydrogen S Oxidized Ri Presence of Recent Iron Stunted or S Other (Expli	ed Leaves (B9) (Ed 4B) B11) Bulfide Odor (C1) Dizospheres along f Reduced Iron (C) Reduction in Plo Stressed Plants (I	rdrology indicatory of the criteria a Except MLRA g Living Roots (C3) (C4) wed Soils (C6) D1) (LRR A) Wetland Hydrology indicatory in the criteria a	Secondary Indicators (2 or more required) X Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) X Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
HYDROLC Wetland Hy Primary Indi Field Obse Surface Wate Water Table F Saturation Pre includes capilla	e is a depressional of organic material organ	area that in a sar	gery (B7) urface (B8) No X No X No X	mat apply) Water stain 1, 2, 4A, an Salt Crust (I Aquatic Inve Hydrogen S Oxidized Ri Presence of Recent Iron Stunted or S Other (Expli	ed Leaves (B9) (Ed 4B) B11) Bulfide Odor (C1) Dizospheres along f Reduced Iron (C) Reduction in Plo Stressed Plants (I	rdrology indicatory of the criteria a Except MLRA g Living Roots (C3) (C4) wed Soils (C6) D1) (LRR A) Wetland Hydrology indicatory in the criteria a	Secondary Indicators (2 or more required) X Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) X Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)

PHS#

4611

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site:	Florence L	.WI	City/County:	FI	orence/Lane	Samp	ling Date:	7/8	3/2010
Applicant/Owner:	City of Florence	e			Stat	e: OR	S	ampling Point:	2
nvestigator(s):	CR/A	М	Section,	Township, Range:	Se	ction 22, T	18 South, F	R 12 West	
andform (hillslope, ter	race, etc.:)			Local relief (co	oncave, convex, none):			Slope (%):	
Subregion (LRR):	LR	RR A	Lat:	: <u> </u>	Lon	g:		Datum:	
Soil Map Unit Name:		Wa	aldport fine sand	l		Classification:			
are climatic/hydrologic	conditions on the	site typical for	this time of year?	Yes	XN	lo	(if no, explai	n in Remarks)	
Are vegetation	Soil o	r Hydrology	significantly d	listurbed?	Are "Normal Circumst	ances" presen	t? (Y/N)	Υ	_
Are vegetation	Soil o	r Hydrology	naturally prob	elematic? If needed	d, explain any answers in	Remarks.)			
			-	sampling poir	nt locations, transe	ects, impo	rtant feati	ures, etc.	
Hydrophytic Vegetation			No	Is Sampled A	rea within				
Hydric Soil Present?	Yes		No X	_ a Wetla	nd?	es	, Ne	o X	-
Vetland Hydrology Pre	sent? Yes		No X	-					
Remarks:									
/EGETATION - U	lse scientific	names of	plants.						
		absolu	•	Indicator	Dominance Test w	orksheet:			
		% cove	er Species?	Status					
ree Stratum (plot si	ze: 30)			Number of Dominant S	Species			
1 Pinus contorta		95	X	FAC	That are OBL, FACW,	or FAC:		1	(A)
2				_					
3		_			Total Number of Domi			4	(D)
4		95	- Total Cayor		Species Across All Stra	ata:		1	(B)
			= Total Cover						
apling/Shrub Stratum	(plot size:)			Percent of Dominant S	•			
1		_			That are OBL, FACW,	or FAC:	1(00%	(A/B)
<u> </u>				-	Prevalence Index	Workshoot:			
					Total % Cover of		Multiply by:		
5					OBL Species	_	x 1 =	0	
			= Total Cover	r	FACW species		x 2 =	0	-
					FAC Species		x 3 =	0	•
erb Stratum (plot si	ze:	_)			FACU Species		x 4 =	0	-
ļ - 					UPL Species		x 5 =	0	-
					Column Totals	0	(A)	0	(B)
3 4				-	Prevalence Inde		#D	IV/0!	
·				_	rievalence inde.	X -D/A -	#0	1470:	•
					Hydrophytic Vege	tation Indica	ators:		
7				_	x		Test is >50%	6	
3						Prevalence	Index is ≤ 3.	01	
		0	= Total Cover	r		Morphologi	cal Adaptatio	ns ¹ (provide su	pporting
	7-1-1-2							separate shee	et)
oody Vine Stratum	(plot size:)					on-Vascular F		Evoloio\
					·	Problematio	- myuropnytic	: Vegetation ¹ (E	:xpiain)
			= Total Cover	<u> </u>	¹ Indicators of hydric so	il and wetland	hydrology m	ust he present	unless
			Total Cover		disturbed or problemat		, arology III	ast so present	, 4111000
					Hydrophytic				
					Vegetation	Yes	X	No	
% Bare Ground in Herb	Stratum	100	-		Present?	. 00			

SOIL			PHS #					
Profile Descri	ption: (Describe to t	he depth i	needed to do	cument t	he indicator or co	onfirm the absen	ce of indicators.)	
Depth	Matrix				Redox Features			
(Inches)	Color (moist)	%	Color (moi	st)	% Type ¹	Loc ²	Texture	Remarks
3-0	Duff	100		— —				
0-18	2.5Y 5/3	100					Sand	
							_	-
Type: C=Cope	centration, D=Depletic	on BM=Bc	aduood Matrix		erod or Coatod Sa	nd Crains	_	² Location: PL=Pore Lining, M=Matrix.
	Indicators: (Appli						Indic	ators for Problematic Hydric Soils ³ :
-	Histosol (A1)				Sandy Redo			2 cm Muck (A10)
	Histic Epipedon (A2)				Stripped Ma			Red Parent Material (TF2)
	Black Histic (A3)				Loamy Muc	ky Mineral (F1) (e:	xcept MLRA 1)	Other (explain in Remarks)
	Hydrogen Sulfide (A4	.)			Loamy Gley	red Matrix (F2)		
	Depleted Below Dark	•	\11)		Depleted Ma	` '		
	Thick Dark Surface (A	\12)			Redox Dark	Surface (F6)		
	Sandy Mucky Mineral	· ·				ark Surface (F7)		³ Indicators of hydrophytic vegetation and wetland
	Sandy Gleyed Matrix			_		ressions (F8)		hydrology must be present, unless disturbed or problematic.
	Layer (if present):	:						
Restrictive L								
		No	one					
Гуре: Depth (inches	s):	No.	one				Hydric Soil Pre	sent? Yes X No
Гуре: Depth (inches Remarks:		<u>No</u>	one				Hydric Soil Pre	sent? Yes X No
Type: Depth (inches Remarks:			one				Hydric Soil Pre	sent? Yes X No
Type: Depth (inches Remarks: HYDROLO Wetland Hyd	GY	s:		all that a				Secondary Indicators (2 or more required)
Type: Depth (inches Remarks: HYDROLO Vetland Hyde Primary Indic	drology Indicators cators (minimum of Surface Water (A1)	s: f one requ		all that a	Water staine	ed Leaves (B9) (E		Secondary Indicators (2 or more required) Water stained Leaves (B9)
lype: Depth (inches Depth (inc	drology Indicators cators (minimum of Surface Water (A1) High Water Table (A2	s: f one requ		all that a	Water staine	ed Leaves (B9) (E d 4B)		Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)
Type: Depth (inches Demarks: D	drology Indicators cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3)	s: f one requ		all that a	Water staine 1, 2, 4A, and Salt Crust (E	ed Leaves (B9) (E d 4B) B11)		Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10)
Type: Depth (inchestemarks: HYDROLO Vetland Hyderimary Indicates)	drology Indicators cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1)	s: f one requ		all that a	Water staine 1, 2, 4A, and Salt Crust (E	ed Leaves (B9) (E d 4B) B11) ertebrates (B13)		Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
Type: Depth (inches Remarks: HYDROLO Vetland Hyd Primary India	drology Indicators cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B	s: f one requ		all that a	Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve	ed Leaves (B9) (E d 4B) B11) ertebrates (B13) sulfide Odor (C1)	Except MLRA	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery
Pype: Pepth (inches Pemarks: PyproLO Petland Hyd Primary Indic	drology Indicators cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3)	s: f one requ		all that a	Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh	ed Leaves (B9) (E d 4B) B11) ertebrates (B13) sulfide Odor (C1) nizospheres along	Except MLRA	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2)
lype: Pepth (inchesemarks: IYDROLO Vetland Hyderimary Indicates in the second	cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3)	s: f one requ		all that a	Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of	ed Leaves (B9) (E d 4B) B11) ertebrates (B13) sulfide Odor (C1) nizospheres along f Reduced Iron (C	Except MLRA g Living Roots (C3)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3)
Type: Depth (inches Remarks: HYDROLO Vetland Hyd Primary India S	drology Indicators cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5)	s: f one requ 2) 32)		all that a	Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron	ed Leaves (B9) (E d 4B) B11) ertebrates (B13) iulfide Odor (C1) nizospheres along f Reduced Iron (C Reduction in Plo	Except MLRA g Living Roots (C3) (24) wed Soils (C6)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5)
Type: Depth (inches Remarks: HYDROLO Vetland Hyd Primary India	drology Indicators cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) Surface Soil Cracks (I	s: f one requ 2) 32) 4)	uired; check	all that a	Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S	ed Leaves (B9) (Ed 4B) B11) ertebrates (B13) sulfide Odor (C1) nizospheres along f Reduced Iron (C) Reduction in Plotestressed Plants (E)	Except MLRA g Living Roots (C3) (24) wed Soils (C6)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Primary Indic	drology Indicators cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5)	s: f one requ 2) 32) 4) B6) Aerial Imag	uired; check	c all that a	Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S	ed Leaves (B9) (E d 4B) B11) ertebrates (B13) iulfide Odor (C1) nizospheres along f Reduced Iron (C Reduction in Plo	Except MLRA g Living Roots (C3) (24) wed Soils (C6)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5)
Type: Depth (inches Remarks: HYDROLO Vetland Hyd Primary India	drology Indicators cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) Surface Soil Cracks (I Inundation Visible on Sparsely Vegetated C	s: f one requ 2) 32) 4) B6) Aerial Imag	uired; check	call that a	Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S	ed Leaves (B9) (Ed 4B) B11) ertebrates (B13) sulfide Odor (C1) nizospheres along f Reduced Iron (C) Reduction in Plotestressed Plants (E)	Except MLRA g Living Roots (C3) (24) wed Soils (C6)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Type: Depth (inches Remarks: HYDROLO Wetland Hyd Primary Indic	drology Indicators cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) Surface Soil Cracks (I Inundation Visible on Sparsely Vegetated Covations:	s: f one requ 2) 32) 4) B6) Aerial Imag	uired; check		Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S	ed Leaves (B9) (Ed 4B) B11) ertebrates (B13) sulfide Odor (C1) nizospheres along f Reduced Iron (C) Reduction in Plotestressed Plants (E)	Except MLRA g Living Roots (C3) (24) wed Soils (C6)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Type: Depth (inches Remarks: HYDROLO Vetland Hyd Primary India	drology Indicators cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) Surface Soil Cracks (I Inundation Visible on Sparsely Vegetated Covations: Present? Yes	s: f one requ 2) 32) 4) B6) Aerial Imag	uired; check gery (B7) urface (B8)		Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Explain	ed Leaves (B9) (Ed 4B) B11) ertebrates (B13) sulfide Odor (C1) nizospheres along f Reduced Iron (C) Reduction in Plotestressed Plants (E)	Except MLRA g Living Roots (C3) (24) wed Soils (C6) (C1) (LRR A)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Field Observ Surface Water Table Pressuration Press	drology Indicators cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) Surface Soil Cracks (I Inundation Visible on Sparsely Vegetated C vations: Present? Yes resent? Yes sent? Yes	s: f one requ 2) 32) 4) B6) Aerial Imag	uired; check gery (B7) urface (B8) NoX		Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Explain	ed Leaves (B9) (Ed 4B) B11) ertebrates (B13) sulfide Odor (C1) nizospheres along f Reduced Iron (C) Reduction in Plotestressed Plants (E)	Except MLRA g Living Roots (C3) (24) wed Soils (C6) (C1) (LRR A)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Field Observator Table Processincludes capillary	cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated Covations: Present? Yes resent? Yes sent? Yes yfringe)	s: f one requ 2) 32) 4) B6) Aerial Imag	gery (B7) urface (B8) No X No X		Water stains 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Explain	ed Leaves (B9) (Ed 4B) B11) ertebrates (B13) sulfide Odor (C1) nizospheres along f Reduced Iron (C) Reduction in Plot Stressed Plants (I ain in Remarks)	Except MLRA g Living Roots (C3) 64) wed Soils (C6) D1) (LRR A) Wetland Hyc	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Type: Depth (inches Remarks: HYDROLO Wetland Hyd Primary Indic S Field Observ Sourface Water Water Table Pr Saturation Presincludes capillary	drology Indicators cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) Surface Soil Cracks (I Inundation Visible on Sparsely Vegetated C vations: Present? Yes resent? Yes sent? Yes	s: f one requ 2) 32) 4) B6) Aerial Imag	gery (B7) urface (B8) No X No X		Water stains 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Explain	ed Leaves (B9) (Ed 4B) B11) ertebrates (B13) sulfide Odor (C1) nizospheres along f Reduced Iron (C) Reduction in Plot Stressed Plants (I ain in Remarks)	Except MLRA g Living Roots (C3) 64) wed Soils (C6) D1) (LRR A) Wetland Hyc	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)

4611

Project/Site:	Flore	nce LW	<u> </u>	_	City/County:	Fle	orence/Lane		Samp	ling Date:		7/15/2010
Applicant/Owner:	City of Flo	orence						State:	OR		Sampling Po	oint: 3
Investigator(s):		AH/SE			Section, To	wnship, Range:		Sectio	n 2, T 1	8 South,	R 12 West	
Landform (hillslope, t	errace, etc.:)				-	Local relief (co	ncave, convex, r	ione):			Slope	(%):
Subregion (LRR):		LRR	Α		Lat:			Long:			 Dat	um:
Soil Map Unit Name:			Yaqı	uina lo	amy fine san	d		NWI Class	ification:		— PEN	IC
Are climatic/hydrolog	ic conditions	on the sit				Yes	X				lain in Remar	ks)
Are vegetation					significantly dist	urbed?	Are "Normal (Circumstances		• •		,
Are vegetation	_	_			naturally proble					(,		
		_	yarology		Tratarany problem	mado. Il ficodo	a, explain any an		iarro.)			
SUMMARY OF	FINDINGS	– Att	ach site	map	showing sa	mpling poir	nt locations,	transects	, impo	rtant fea	tures, etc	: .
Hydrophytic Vegetati	on Present?	Yes	Х	No								
Hydric Soil Present?		Yes	Х	No		Is Sampled A a Wetla		Yes	X		No	
Netland Hydrology P	resent?	Yes	Х	No						•		
Remarks:												
/EGETATION -	Use scie	ntific n	ames of	f plar	its.							
			absolu	ute	Dominant	Indicator	Dominance	Test works	sheet:			
			% cov	/er	Species?	Status						
<u>Free Stratum</u> (plot	size:)	1				Number of Do	•				
1							That are OBL,	FACW, or FA	AC:		2	(A)
2												
3							Total Number					(5)
4							Species Acros	s All Strata:			2	(B)
			0		= Total Cover							
Sapling/Shrub Stratu	m (plot size	: 5)				Percent of Do	minant Specie	es			
1 Spiraea doug	lasii		30		X	FACW	That are OBL,	FACW, or FA	AC:		100%	(A/B)
2 Myrica califor	nica		70		X	FACW						
3							Prevalence	Index Worl	ksheet:			
4							Total % Cover	of		Multiply by	<u>/:</u>	
5							OBL Spe			x 1 =	0	
			100	<u> </u>	= Total Cover		FACW sp	_		x 2 =	0	
Herb Stratum (plot	size.	,)				FACU Sp			x 3 = x 4 =	0	
1	. 0.20.		,				UPL Spe			. x5=	0	
2						-	Column 7		0	(A)	0	(B)
							00.0			.(,,		(=)
4							Prevaler	ice Index =B/	A =	#	DIV/0!	
5												
6				_			Hydrophyti	c Vegetatio	n Indic	ators:		
7								X Do	ominance	Test is >5	0%	
8								Pr	evalence	Index is ≤	3.0 ¹	
			0		= Total Cover			Mo	orphologi	cal Adapta	tions ¹ (provid	e supporting
				_							a separate s	sheet)
Voody Vine Stratum	(plot size:		_)							on-Vascula		1
1								Pr	oblemation	c Hydrophy	tic Vegetatio	n' (Explain)
2							1					
			0		= Total Cover		¹ Indicators of I		d wetland	hydrology	must be pres	sent, unless
							disturbed or po					
							Vegetation	-	Yes	Х		No
% Bare Ground in He	erb Stratum						vegetation		163	^		No

		the depth I	needed to docume			absence of indicators.)	
Depth	Matrix	0/	Calar (maist)	Redox Fe	atures Type ¹ Loc		Demondo
(Inches)	Color (moist)	%	Color (moist)	%	Type Loc	Texture	Remarks
3-0	Duff 40VP 4/2	400					-
0-3	10YR 4/2	100				sand	
3-18	10YR 4/2	30	10YR 4/6		C M	sand	soft masses
			10YR 4/4		С М		soft masses
							
							_
	·						_
Type: C=Cor	ncentration, D=Depleti	on, RM=Re	educed Matrix, CS=	Covered or Co	ated Sand Grains.		² Location: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Appl	icable to	all LRRs, unles	s otherwise	noted.)	Indi	cators for Problematic Hydric Soils ³ :
	Histosol (A1)			X San	dy Redox (S5)		2 cm Muck (A10)
	Histic Epipedon (A2)			Strip	oped Matrix (S6)		Red Parent Material (TF2)
	Black Histic (A3)					(F1)(except MLRA 1)	Other (explain in Remarks)
	Hydrogen Sulfide (A4	1)			my Gleyed Matrix		
	Depleted Below Dark	-	(11)		leted Matrix (F3)	· =/	
	Thick Dark Surface (A	•	(11)		ox Dark Surface (- 6)	
	•	•			leted Dark Surface	•	³ Indicators of hydrophytic vegetation and wetland
	Sandy Mucky Minera					,	hydrology must be present, unless disturbed or
	Sandy Gleyed Matrix	. (54)		Red	ox Depressions (F	0)	problematic.
Depth (inche	s):	No	one			Hydric Soil Pre	esent? Yes X No
Depth (inche	s):	No	one			Hydric Soil Pro	esent? Yes X No
Depth (inche Remarks:	DGY		one			Hydric Soil Pro	esent? Yes X No
Depth (inche Remarks: HYDROLO Wetland Hy	DGY /drology Indicator	rs:		nat apply)		Hydric Soil Pro	
Depth (inche Remarks: HYDROLO Wetland Hy	DGY /drology Indicator icators (minimum o	rs:			er stained Leaves	· ·	Secondary Indicators (2 or more required)
Depth (inche Remarks: HYDROLC Wetland Hy Primary Ind	OGY /drology Indicator icators (minimum o Surface Water (A1)	r s: If one requ		Wat		Hydric Soil Pro	Secondary Indicators (2 or more required) Water stained Leaves (B9)
Depth (inche Remarks: HYDROLO Wetland Hy Primary Ind	OGY /drology Indicator icators (minimum of Surface Water (A1) High Water Table (A2)	r s: If one requ		Wat	, 4A, and 4B)	· ·	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)
Depth (inche Remarks: HYDROLC Wetland Hy Primary Ind	OGY /drology Indicator icators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3)	r s: If one requ		Wat	, 4A , and 4B) Crust (B11)	(B9) (Except MLRA	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10)
Depth (inche Remarks: HYDROLO Wetland Hy Primary Ind	DGY /drology Indicator icators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	r s: If one requ		Wat 1, 2,SaltAqu	Crust (B11) atic Invertebrates	(B9) (Except MLRA	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
Depth (inche Remarks: HYDROLO Wetland Hy Primary Ind	OGY /drology Indicator icators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B	r s: If one requ		Wat 1, 2 Salt Aqu Hyd	AA, and 4B) Crust (B11) atic Invertebrates rogen Sulfide Odo	(B9) (Except MLRA	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery
Depth (inche Remarks: HYDROLO Wetland Hy Primary Ind	DGY /drology Indicator icators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3)	rs: of one requestions:		Wat 1, 2 Salt Aqu Hyd Oxid	, 4A, and 4B) Crust (B11) atic Invertebrates rogen Sulfide Odo	(B9) (Except MLRA (B13) r (C1) s along Living Roots (C3	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery X Geomorphic Position (D2)
Depth (inche Remarks: HYDROLO Wetland Hy Primary Ind	DGY /drology Indicator icators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B	rs: of one requestions:		Wat 1, 2 Salt Aqu Hyd Oxic Pres	AA, and 4B) Crust (B11) atic Invertebrates rogen Sulfide Odo dized Rhizosphere sence of Reduced	(B9) (Except MLRA (B13) r (C1) s along Living Roots (C3 Iron (C4)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery X Geomorphic Position (D2) Shallow Aquitard (D3)
Depth (inche Remarks: HYDROLO Wetland Hy Primary Ind	DGY /drology Indicator icators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B1) Iron Deposits (B5)	rs: If one requestion (2) 32)		Wat 1, 2. Salt Aqu Hyd Oxio Pres	AA, and 4B) Crust (B11) atic Invertebrates rogen Sulfide Odo dized Rhizosphere sence of Reduced ent Iron Reduction	(B9) (Except MLRA (B13) r (C1) s along Living Roots (C3 Iron (C4) in Plowed Soils (C6)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5)
Depth (inche Remarks: HYDROLO Wetland Hy Primary Ind	DGY rdrology Indicator icators (minimum of Surface Water (A1)) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B1) Iron Deposits (B5) Surface Soil Cracks (A1)	rs: If one requestions are selected as a se	uired; check all th	Wat 1, 2, Salt Aqu Hyd Oxic Pres Rec Stur	crust (B11) atic Invertebrates rogen Sulfide Odo dized Rhizosphere sence of Reduced ent Iron Reduction nted or Stressed P	(B9) (Except MLRA (B13) r (C1) s along Living Roots (C3 Iron (C4) in Plowed Soils (C6) lants (D1) (LRR A)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Depth (inche Remarks: HYDROLO Wetland Hy Primary Ind	OGY /drology Indicator icators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B1) Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on	rs: If one requestions of the second	uired; check all th	Wat 1, 2, Salt Aqu Hyd Oxic Pres Rec Stur	AA, and 4B) Crust (B11) atic Invertebrates rogen Sulfide Odo dized Rhizosphere sence of Reduced ent Iron Reduction	(B9) (Except MLRA (B13) r (C1) s along Living Roots (C3 Iron (C4) in Plowed Soils (C6) lants (D1) (LRR A)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5)
Depth (inche Remarks: HYDROLC Wetland Hy Primary Ind X X	DGY /drology Indicator icators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B1) Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated (Indicator)	rs: If one requestions of the second	uired; check all th	Wat 1, 2, Salt Aqu Hyd Oxic Pres Rec Stur	crust (B11) atic Invertebrates rogen Sulfide Odo dized Rhizosphere sence of Reduced ent Iron Reduction nted or Stressed P	(B9) (Except MLRA (B13) r (C1) s along Living Roots (C3 Iron (C4) in Plowed Soils (C6) lants (D1) (LRR A)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Depth (inche Remarks: HYDROLO Wetland Hy Primary Ind X X	OGY /drology Indicator icators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B1) Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated (Invations:	rs: If one requestions of the second	uired; check all th	Wat 1, 2, Salt Aqu Hyd Oxio Pres Rec Stur Othe	crust (B11) atic Invertebrates rogen Sulfide Odo dized Rhizosphere sence of Reduced ent Iron Reduction nted or Stressed P er (Explain in Rem	(B9) (Except MLRA (B13) r (C1) s along Living Roots (C3 Iron (C4) in Plowed Soils (C6) lants (D1) (LRR A)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Depth (inche Remarks: HYDROLO Wetland Hy Primary Ind X X Field Obse Surface Wate	DGY /drology Indicator icators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B3) Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated (Inundation Visible on Visible on Sparsely Vegetated (Inundation Visible on Visi	rs: of one requests 2) 32) 4) (B6) Aerial Image	uired; check all the gery (B7) urface (B8)	Wat 1, 2, Salt Aqu Hyd Oxio Pres Rec Stur Othe	crust (B11) atic Invertebrates rogen Sulfide Odo dized Rhizosphere sence of Reduced ent Iron Reduction nted or Stressed P er (Explain in Rem	(B9) (Except MLRA (B13) r (C1) s along Living Roots (C3) Iron (C4) in Plowed Soils (C6) lants (D1) (LRR A) arks)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
HYDROLO Wetland Hy Primary Ind X X Field Obse Surface Water Table F	DGY rdrology Indicator icators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B3) Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated (Inundation Visible on Visible	rs: If one required to the second of the se	gery (B7) urface (B8) No X No	Wat 1, 2, Salt Aqu Hyd Oxic Pres Rec Stur Othe	crust (B11) atic Invertebrates rogen Sulfide Odo dized Rhizosphere sence of Reduced ent Iron Reduction nted or Stressed P er (Explain in Rem	(B9) (Except MLRA (B13) r (C1) s along Living Roots (C3) Iron (C4) in Plowed Soils (C6) lants (D1) (LRR A) arks)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Primary Ind X X Field Obse Surface Water Table F Saturation Pre	DGY /drology Indicator icators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B3) Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated (Inundation Visible on Visible on Sparsely Vegetated (Inundation Visible on Visib	rs: of one requests 2) 32) 4) (B6) Aerial Image	uired; check all the gery (B7) urface (B8)	Wat 1, 2, Salt Aqu Hyd Oxio Pres Rec Stur Othe	crust (B11) atic Invertebrates rogen Sulfide Odo dized Rhizosphere sence of Reduced ent Iron Reduction nted or Stressed P er (Explain in Rem	(B9) (Except MLRA (B13) r (C1) s along Living Roots (C3) Iron (C4) in Plowed Soils (C6) lants (D1) (LRR A) arks)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Primary Ind X X Field Obse Surface Water Water Table F Saturation Pre (includes capilla	DGY /drology Indicator icators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B1) Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated (Inundation Visible on	rs: If one required to the second se	gery (B7) urface (B8) No X No No No	Wat 1, 2, Salt Aqu Hyd Oxio Pres Rec Stur Othe Depth (incl Depth (incl	crust (B11) atic Invertebrates rogen Sulfide Odo dized Rhizosphere sence of Reduced ent Iron Reduction nted or Stressed P er (Explain in Rem nes): nes): 7 nes): 0	(B9) (Except MLRA (B13) r (C1) s along Living Roots (C3 Iron (C4) in Plowed Soils (C6) lants (D1) (LRR A) arks) Wetland Hy	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Primary Ind X X Field Obse Surface Water Table F Saturation Pre (includes capilla) Describe Rec	DGY /drology Indicator icators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B3) Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated (Inundation Visible on Visible on Sparsely Vegetated (Inundation Visible on Visib	rs: If one required to the second se	gery (B7) urface (B8) No X No No No	Wat 1, 2, Salt Aqu Hyd Oxio Pres Rec Stur Othe Depth (incl Depth (incl	crust (B11) atic Invertebrates rogen Sulfide Odo dized Rhizosphere sence of Reduced ent Iron Reduction nted or Stressed P er (Explain in Rem nes): nes): 7 nes): 0	(B9) (Except MLRA (B13) r (C1) s along Living Roots (C3 Iron (C4) in Plowed Soils (C6) lants (D1) (LRR A) arks) Wetland Hy	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Primary Ind X X X Field Obse Surface Water Water Table F Saturation Pre (includes capilla	DGY /drology Indicator icators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B1) Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated (Inundation Visible on	rs: If one required to the second se	gery (B7) urface (B8) No X No No No	Wat 1, 2, Salt Aqu Hyd Oxio Pres Rec Stur Othe Depth (incl Depth (incl	crust (B11) atic Invertebrates rogen Sulfide Odo dized Rhizosphere sence of Reduced ent Iron Reduction nted or Stressed P er (Explain in Rem nes): nes): 7 nes): 0	(B9) (Except MLRA (B13) r (C1) s along Living Roots (C3 Iron (C4) in Plowed Soils (C6) lants (D1) (LRR A) arks) Wetland Hy	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)

4611

Project/Site:	Florer	nce LW	1	_	City/County:	Fle	orence/Lane		San	npling Date:		7/15/2010	
Applicant/Owner:	City of Flo	rence						State:	OR	_	Sampling	Point: 4	4
Investigator(s):		AH/SE			Section, To	wnship, Range:		Secti	ion 14,	 Γ 18 South	, R 12 We	est	
Landform (hillslope, ten	race, etc.:)					Local relief (co	ncave, convex,	none):			Slope	e (%):	
Subregion (LRR):		LRR	Α		Lat:			Long:				atum:	
Soil Map Unit Name:			w	aldpo	ort fine sand			-		n:	 L2/		
- Are climatic/hydrologic						Yes	Х			(if no, exp		arks)	
Are vegetation					-	urbed?	Are "Normal	-				•	
Are vegetation					_					(,			
		_	yarology		- naturally problem	natio. Il ficodo	z, explain any a	noworo in re	omarko.)				
SUMMARY OF FI	NDINGS	– Att	ach site	map	showing sa	mpling poir	nt locations	, transec	ts, imp	ortant fea	atures, e	tc.	
Hydrophytic Vegetation	Present?	Yes	Х	No									
Hydric Soil Present?		Yes	Х	No		Is Sampled A		Yes	Х		No		
Wetland Hydrology Pre	sent?	Yes	Х	No				•					
Remarks:				_									
tomano.													
VEGETATION - U	lse scier	ıtific n	ames of	plar	nts.								
			absolu		Dominant	Indicator	Dominance	e Test wor	ksheet:				
		••	% cov	er_	Species?	Status							
Tree Stratum (plot si		30	,		.,		Number of D	•			_	44.	
1 Rhamnus pursi	hiana		15		X	FAC	That are OBL	., FACW, or	FAC:		5	(A)	
2 Thuja plicata			20		X	FAC	L						
3							Total Numbe				_	(D)	
4					- Total Cours		Species Acro	ss All Strata	:		5	(B)	
			35		= Total Cover								
Sapling/Shrub Stratum	(plot size	:5	_)				Percent of Do	ominant Spe	cies				
1 Rubus spectab			2			FAC	That are OBL	., FACW, or	FAC:		100%	(A/B)	
2 Spiraea dougla	sii		15		<u>X</u>	FACW	_						
3 Malus fusca			15		X	FACW	Prevalence		orkshee				
4 Gaultheria shal	lon		3			FACU	Total % Cove			Multiply by			
5							OBL Sp	-		_ x1=	0		
			35		= Total Cover		FACW s			_ x2= x3=	0		
Herb Stratum (plot si	ze:	5)				FACU S	_		_ x4=	0		
1 Carex obnupta			93		X	OBL	UPL Sr	-		x 5 =	0		
2 Hedera helix			2			UPL	Column	Totals	0	(A)	0	(B)	
Oenanthe sarm	entosa		3			OBL		-		_ ` `			
4							Prevale	nce Index =	B/A =	#	#DIV/0!		
5													
6							Hydrophyt	ic Vegetat	ion Indi	cators:			
7								Х	Dominan	ce Test is >5	0%		
8										ce Index is ≤			
			98		= Total Cover							ide supporting	
Manda Mark	(plot si==:		,							emarks or or		sheet)	
	(plot size:		_'				_			Non-Vascula		on ¹ (Evalain)	
1				_			_		riobiema	ilic Hyaroph)	ruc vegetati	on ¹ (Explain)	
2				_	= Total Carra		¹ Indicators of	hydric soil o	nd wetter	nd hydrology	must be an	esent, unless	
			0		= Total Cover		disturbed or	-	iiu wellal	ia riyurology	πιασι νε βι	cociii, uiiiess	
							Hydrophyt	ic					
% Bare Ground in Herb	Stratum			_			Vegetation Present?	ı	Ye	sX		No	

		he depth	needed to docu			sence of indicators.)	
Depth (Inches)	Matrix	0/	Color (moint)	Redox F	eatures Type ¹ Loc ²		Domorko
(Inches)	7.5YR 2.5/1	100	Color (moist)		Type Loc	Texture Sand	Remarks fine, silty. High oreganic content.
8-12		100			: ·		
0-12	2.5Y 4/1	100				Sand	fine.
						<u> </u>	
						_	
T		DM-D	-durand Makin C				21 Manual Control of the Contr
	Indicators: (Appli					Indic	² Location: PL=Pore Lining, M=Matrix. ators for Problematic Hydric Soils ³ :
,	Histosol (A1)		.,		ndy Redox (S5)		2 cm Muck (A10)
	Histic Epipedon (A2)				ipped Matrix (S6)		Red Parent Material (TF2)
	Black Histic (A3)				amy Mucky Mineral (F	1) (except MI RA 1)	Other (explain in Remarks)
Х	Hydrogen Sulfide (A4	`					Other (explain in Nemarks)
^		•	144)		amy Gleyed Matrix (F2	2)	
	Depleted Below Dark		A11)		pleted Matrix (F3)		
	Thick Dark Surface (A	•			dox Dark Surface (F6)		³ Indicators of hydrophytic vegetation and wetland
	Sandy Mucky Mineral	(S1)		De	pleted Dark Surface (I	F7)	hydrology must be present, unless disturbed or
	Sandy Gleyed Matrix	(S4)		Re	dox Depressions (F8)		problematic.
Depth (inche	s):	140	one			Hydric Soil Pres	sent? Yes <u>X</u> No
Depth (inche Remarks:		IV.	one			Hydric Soil Pres	sent? Yes X No
Depth (inche Remarks:			one			Hydric Soil Pres	sent? Yes X No
Depth (inche Remarks: HYDROLO Wetland Hy	DGY	s:		- - 7/			Secondary Indicators (2 or more required)
Depth (inche Remarks: HYDROLC Wetland Hy Primary Indi	OGY rdrology Indicators cators (minimum of Surface Water (A1)	s: f one req		Wa	ater stained Leaves (B		Secondary Indicators (2 or more required) Water stained Leaves (B9)
Depth (inche Remarks: HYDROLO Wetland Hy Primary Indi	OGY rdrology Indicator: cators (minimum of Surface Water (A1) High Water Table (A2	s: f one req		Wa	2, 4A, and 4B)		Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)
Depth (inche Remarks: HYDROLC Wetland Hy Primary Indi	ody Indicators cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3)	s: f one req		Wa 1, 2	2, 4A, and 4B) It Crust (B11)	9) (Except MLRA	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10)
Depth (inche Remarks: HYDROLO Wetland Hy Primary Indi	cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1)	s: f one req		Wa Sa Aq	2, 4A, and 4B) It Crust (B11) uatic Invertebrates (B	9) (Except MLRA	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
Depth (inche Remarks: HYDROLO Wetland Hy Primary Indi	ody rdrology Indicator: cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B	s: f one req			2, 4A, and 4B) It Crust (B11) uatic Invertebrates (B1 drogen Sulfide Odor (13) C1)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (
Depth (inche Remarks: HYDROLO Wetland Hy Primary Indi	cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3)	s: f one req		Wa 1, : Sa Aq Hy Ox	2, 4A, and 4B) It Crust (B11) uatic Invertebrates (B drogen Sulfide Odor (i	9) (Except MLRA 13) C1) along Living Roots (C3)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2)
Depth (inche Remarks: HYDROLC Wetland Hy Primary Indi	cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3)	s: f one req		Wa 1, 2 Sa Aq Hy	2, 4A, and 4B) It Crust (B11) uatic Invertebrates (Badrogen Sulfide Odor (didized Rhizospheres absence of Reduced Iron	13) C1) along Living Roots (C3) on (C4)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3)
Depth (inche Remarks: HYDROLC Wetland Hy Primary Indi	cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5)	s: f one req		Wa 1, 2 Sa Aq Hy Ox Pre	2, 4A, and 4B) It Crust (B11) uatic Invertebrates (B- drogen Sulfide Odor (i idized Rhizospheres a esence of Reduced Iro cent Iron Reduction in	13) C1) along Living Roots (C3) on (C4) a Plowed Soils (C6)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5)
Depth (inche Remarks: HYDROLC Wetland Hy Primary Indi	Cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (I	s: f one req () (2) (4)	uired; check al	Wa 1, 2 Sa Aq Hy:	2, 4A, and 4B) It Crust (B11) uatic Invertebrates (B drogen Sulfide Odor (i idized Rhizospheres a esence of Reduced Iro cent Iron Reduction in unted or Stressed Plar	13) C1) along Living Roots (C3) on (C4) a Plowed Soils (C6) ats (D1) (LRR A)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Depth (inche Remarks: HYDROLO Wetland Hy Primary Indi	cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5)	s: f one req () (2) (4) (B6) Aerial Ima	uired; check al	Wa 1, 2 Sa Aq Hy:	2, 4A, and 4B) It Crust (B11) uatic Invertebrates (B- drogen Sulfide Odor (i idized Rhizospheres a esence of Reduced Iro cent Iron Reduction in	13) C1) along Living Roots (C3) on (C4) a Plowed Soils (C6) ats (D1) (LRR A)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5)
Depth (inche Remarks: HYDROLC Wetland Hy Primary Indi X X	cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) Surface Soil Cracks (I Inundation Visible on Sparsely Vegetated C	s: f one req () (2) (4) (B6) Aerial Ima	uired; check al	Wa 1, 2 Sa Aq Hy:	2, 4A, and 4B) It Crust (B11) uatic Invertebrates (B drogen Sulfide Odor (i idized Rhizospheres a esence of Reduced Iro cent Iron Reduction in unted or Stressed Plar	13) C1) along Living Roots (C3) on (C4) a Plowed Soils (C6) ats (D1) (LRR A)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Depth (inche Remarks: HYDROLC Wetland Hy Primary Indi X X	cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated Corvations:	s: f one req () (2) (4) (B6) Aerial Ima	uired; check al	Wa 1, 2 Sa Aq Hy:	2, 4A, and 4B) It Crust (B11) uatic Invertebrates (Bidrogen Sulfide Odor (didized Rhizospheres alesence of Reduced Irocent Iron Reduction in unted or Stressed Planner (Explain in Remarks)	13) C1) along Living Roots (C3) on (C4) a Plowed Soils (C6) ats (D1) (LRR A)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Depth (inche Remarks: HYDROLC Wetland Hy Primary Indi X X	cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated Corvations:	s: f one req () (2) (4) (B6) Aerial Ima	uired; check al gery (B7) urface (B8)	Wa 1, 2 Sa Aq Hy Ox Pre	2, 4A, and 4B) It Crust (B11) uatic Invertebrates (B: drogen Sulfide Odor (i idized Rhizospheres a esence of Reduced Iro cent Iron Reduction in unted or Stressed Plar ner (Explain in Remark	13) C1) along Living Roots (C3) on (C4) a Plowed Soils (C6) ots (D1) (LRR A)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Primary Indi X X Field Obsel Surface Water Table F Saturation Pre	cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated Corvations: The Present? Yes Present? Yes Present? Yes Present? Yes	s: f one req () (2) 4) B6) Aerial Ima	gery (B7) urface (B8)	Wa 1, 2 Sa Aq Hy Ox Pre Re Stu	2, 4A, and 4B) It Crust (B11) uatic Invertebrates (B1) drogen Sulfide Odor (didized Rhizospheres a esence of Reduced Irocent Iron Reduction in unted or Stressed Planner (Explain in Remark Ches): Ches): 2, 4A, and 4B) drogen Sulfide	13) C1) along Living Roots (C3) on (C4) a Plowed Soils (C6) ots (D1) (LRR A)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Field Obsel Surface Wate Water Table F Saturation Pre	cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated Corvations: The Present? Yes Present? Yes Present? Yes Present? Yes	s: f one req 1) 12) 4) Aerial Ima concave S X X	gery (B7) urface (B8) No X No No	Wa 1, 2 Sa Aq Hy Ox Pre Re Stu Ott Depth (inc	2, 4A, and 4B) If Crust (B11) uatic Invertebrates (Bidrogen Sulfide Odor (didized Rhizospheres a esence of Reduced Irocent Iron Reduction in unted or Stressed Planner (Explain in Remarks): ches): ches): 3 ches): 0	9) (Except MLRA 13) C1) along Living Roots (C3) on (C4) a Plowed Soils (C6) ats (D1) (LRR A) KS) Wetland Hyd	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Depth (inche Remarks: HYDROLC Wetland Hy Primary Indi X X X Field Obser Surface Wate Water Table F Saturation Pre includes capilla	cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (I Inundation Visible on Sparsely Vegetated Corvations: In Present? Yes	s: f one req 1) 12) 4) Aerial Ima concave S X X	gery (B7) urface (B8) No X No No	Wa 1, 2 Sa Aq Hy Ox Pre Re Stu Ott Depth (inc	2, 4A, and 4B) If Crust (B11) uatic Invertebrates (Bidrogen Sulfide Odor (didized Rhizospheres a esence of Reduced Irocent Iron Reduction in unted or Stressed Planner (Explain in Remarks): ches): ches): 3 ches): 0	9) (Except MLRA 13) C1) along Living Roots (C3) on (C4) a Plowed Soils (C6) ats (D1) (LRR A) KS) Wetland Hyd	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)

4611

roject/Site:	Florence	LWI		City/County:	FI	orence/Lane		Sampling Da	ite:	7/1	5/2010
pplicant/Owner: City	of Flore	nce					State: O	R	Sa	mpling Point:	5
vestigator(s):	AH	I/SE		Section, To	wnship, Range:		Section 2	4, T 18 So	uth, R	12 West	
andform (hillslope, terrace	e, etc.:)				Local relief (co	oncave, convex, nor	ne):			Slope (%):	
ubregion (LRR):	1	LRR A		Lat:			Long:			Datum:	
oil Map Unit Name:		Ya	aquina l	- oamy fine san	d		NWI Classifica	ation:		None	
e climatic/hydrologic con-	ditions on t	he site typica	al for this	time of year?	Yes	X	No	(if no,	explain	in Remarks)	
e vegetation Sc	oil	or Hydrolog	ıy	significantly dist	turbed?	Are "Normal Cir	cumstances" p	resent? (Y/I	N)	Υ	
e vegetation Sc		or Hydrolog		naturally proble	matic? If needed	d, explain any answ	ers in Remark	s.)	•		ı
				_							
UMMARY OF FIND	DINGS –	Attach s	ite map	showing sa	mpling poir	nt locations, tr	ansects, in	nportant	featu	res, etc.	
drophytic Vegetation Pre	esent? Ye	es X	No		Is Sampled A	rea within					
dric Soil Present?	Ye	es X	No		a Wetla		Yes X	<u> </u>	No		į
etland Hydrology Presen	t? Ye	es X	No								
emarks:					<u> </u>						
EGETATION - Use	scientif		•		las eller et	Dag::!::- =		-4-			
			solute	Dominant Species?	Indicator	Dominance T	est workshe	et:			
ee Stratum (plot size:	30)	cover	Species?	Status	Number of Domi	nant Species				
Alnus rubra		_ ′ ,	60	Х	FAC	That are OBL, F	•		5	5	(A)
Tsuga heterophylla	 'a		5		FACU		,				()
<u></u>						Total Number of	Dominant				
						Species Across	All Strata:		5	5	(B)
			65	= Total Cover		'					
apling/Shrub Stratum (բ	olot sizo:	5)				Percent of Domi	ant Species				
Rubus spectabilis			20	Х	FAC	That are OBL, F	•		100	1 %	(A/B)
rabus speciabilis					170	That are OBE, 17	1011, 011710.			<i>3</i> 70	(700)
-						Prevalence In	dex Worksh	eet:			
						Total % Cover of		Multip	ly by:		
						OBL Speci	es	х	1 =	0	
			20	= Total Cover		FACW spec	ies	x	2 =	0	
						FAC Speci	es	x	3 =	0	•
erb Stratum (plot size:)				FACU Spec		x	4 =	0	i
Equisetum arvens			5	X	FAC	UPL Speci			5 =	0	•
Lysichiton america Athyrium filix-femi			10	X	OBL	Column Tot	als 0	(A)	•	0	(B)
Polystichum muni			5	X	FAC		54		#DI		
1 Orysticham mani	- Carri		3		<u>FACU</u>	Prevalence	e Index =B/A =		#DI\	V/U!	
						Hydrophytic \	/egetation l	ndicators:			
							•	nance Test is			
								lence Index		1	
1			23	= Total Cover		·	Morph	nological Ada	aptation	s ¹ (provide su	pporting
								_		eparate shee	
oody Vine Stratum (plo	ot size:)					Wetla	nd Non-Vas	cular Pla	ants ¹	
							Proble	ematic Hydro	ophytic \	Vegetation ¹ (E	xplain)
						_					
			0	= Total Cover		¹ Indicators of hyd		tland hydrol	ogy mu	st be present,	unless
						disturbed or prob Hydrophytic	nematic.				
		20				Vegetation		Yes	X	No	
Bare Ground in Herb Str	ratum	20									

SOIL			PHS#	4611			Sampling Point: 5
		he depth	needed to docum			bsence of indicators.)	
Depth	Matrix		6.1	Redox Fe	eatures Type ¹ Loc ²	_	-
(Inches)	Color (moist)	<u>%</u>	Color (moist)	<u></u> %	Type Loc	Texture	Remarks
0-13	7.5YR 2.5/1	100		- — —		Sandy Loam	fine, with high organic content.
			•			<u> </u>	
				- —— — - —— —			
	. <u> </u>						2
	ncentration, D=Depletion Indicators: (Appli					Indic	² Location: PL=Pore Lining, M=Matrix. ators for Problematic Hydric Soils ³ :
•	Histosol (A1)		.,		ndy Redox (S5)		2 cm Muck (A10)
	Histic Epipedon (A2)				pped Matrix (S6)		Red Parent Material (TF2)
	Black Histic (A3)				my Mucky Mineral (F1) (except MI RA 1)	Other (explain in Remarks)
Х	Hydrogen Sulfide (A4	`			my Gleyed Matrix (I	,, ,	Other (explain in Kemarks)
		,	۸44)		,	-2)	
	Depleted Below Dark	•	411)		oleted Matrix (F3)	٥,	
	Thick Dark Surface (A	•			dox Dark Surface (F		³ Indicators of hydrophytic vegetation and wetland
	Sandy Mucky Mineral				oleted Dark Surface	` '	hydrology must be present, unless disturbed or
	Sandy Gleyed Matrix	(S4)		Red	dox Depressions (F8	3)	problematic.
ype: Depth (inche	es):	N	one			Hydric Soil Pres	sent? Yes <u>X</u> No
ype: Depth (inche		<u>N</u>	one			Hydric Soil Pres	sent? Yes <u>X</u> No
Type: Depth (inche Remarks:	DGY		one			Hydric Soil Pres	sent? Yes X No
Type: Depth (inche Remarks: HYDROLO Vetland Hy		s:		that apply)		Hydric Soil Pres	Secondary Indicators (2 or more required)
Type: Depth (inched) Remarks: HYDROLO Vetland Hy	DGY ydrology Indicator	s:		Wat	ter stained Leaves (Secondary Indicators (2 or more required) Water stained Leaves (B9)
Type: Depth (inche emarks: SYDROLO Vetland Hy Trimary Ind	DGY ydrology Indicators icators (minimum of	s: f one req		Wat	ter stained Leaves (Secondary Indicators (2 or more required)
Type: Depth (inched lemarks: HYDROLO Vetland Hy	DGY ydrology Indicators icators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3)	s: f one req		Wat 1, 2 Salt	t, 4A , and 4B)	B9) (Except MLRA	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10)
Type: Depth (inche emarks: SYDROLO Vetland Hy Trimary Ind	pogy indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	s: f one requ		WatSaltAqu	t Crust (B11) atic Invertebrates (I	B9) (Except MLRA	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
Type: Depth (inched) Remarks: HYDROLO Vetland Hy Primary Ind X	pdy ydrology Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B	s: f one requ		Wat 1, 2 Salt Aqu Hyd	t, 4A, and 4B) t Crust (B11) uatic Invertebrates (I	B9) (Except MLRA 313) (C1)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery
Type: Depth (inched) Remarks: HYDROLO Vetland Hy Primary Ind X	DGY ydrology Indicators icators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3)	s: f one requ		Wat 1, 2 Salt Aqu Hyd	t Crust (B11) actic Invertebrates (I drogen Sulfide Odor dized Rhizospheres	B9) (Except MLRA B13) (C1) along Living Roots (C3)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2)
Type: Depth (inched) Remarks: HYDROLO Vetland Hy Primary Ind X	pogy ydrology Indicators icators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3) Algal Mat or Crust (B4)	s: f one requ		Wat 1, 2 Salt Aqu Hyd Oxic	t Crust (B11) Intercept (B11)	B9) (Except MLRA B13) (C1) along Living Roots (C3) ron (C4)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3)
Type: Depth (inche Remarks: HYDROLO Vetland Hy Primary Ind X X	pogy Idrology Indicators Idr	s: f one requ 2) 32)		Wat 1, 2 Salt Aqu Hyd Oxic	t Crust (B11) It Crus	B9) (Except MLRA B13) (C1) along Living Roots (C3) ron (C4) in Plowed Soils (C6)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5)
Type: Depth (incher Remarks: HYDROLO Vetland Hy Primary Ind	JOGY ydrology Indicators icators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) Surface Soil Cracks (I	s: f one requal 2) 32) 4)	uired; check all	Wat 1, 2 Salt Aqu Hyd Oxio Pres Rec Stur	t Crust (B11) actic Invertebrates (I drogen Sulfide Odor dized Rhizospheres sence of Reduced I cent Iron Reduction inted or Stressed Pla	B9) (Except MLRA 313) (C1) along Living Roots (C3) ron (C4) in Plowed Soils (C6) ants (D1) (LRR A)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Type: Depth (inched lemarks: HYDROLO Vetland Hy Primary Ind X X	DGY ydrology Indicators icators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) Surface Soil Cracks (I Inundation Visible on	s: f one required: 2) 32) 4) B6) Aerial Ima	uired; check all	Wat 1, 2 Salt Aqu Hyd Oxio Pres Rec Stur	t Crust (B11) It Crus	B9) (Except MLRA 313) (C1) along Living Roots (C3) ron (C4) in Plowed Soils (C6) ants (D1) (LRR A)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5)
Type: Depth (inchester inchester inches	pogy Idrology Indicators Idr	s: f one required: 2) 32) 4) B6) Aerial Ima	uired; check all	Wat 1, 2 Salt Aqu Hyd Oxio Pres Rec Stur	t Crust (B11) actic Invertebrates (I drogen Sulfide Odor dized Rhizospheres sence of Reduced I cent Iron Reduction inted or Stressed Pla	B9) (Except MLRA 313) (C1) along Living Roots (C3) ron (C4) in Plowed Soils (C6) ants (D1) (LRR A)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
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4611

Project/Site:	Floren	ce LWI	1	_	City/County:	Flo	rence/Lane	Sam	npling Date:	7/1	16/2010
Applicant/Owner: C	City of Flo	rence					Sta	ate: OR	_	Sampling Point	: 6
Investigator(s):	ļ	AH/SE			Section, To	ownship, Range:		Section 3, T	18 South,	R 12 West	
Landform (hillslope, terr	race, etc.:)					Local relief (con	cave, convex, none):			Slope (%)	i
Subregion (LRR):		LRR	A		Lat:		Lo	ng:		 Datum	:
Soil Map Unit Name:				Dur	ne land			I Classification	n:	PSSC	
Are climatic/hydrologic o	conditions or	n the site	e typical fo	r this tir	ne of year?	Yes	X	No	(if no, expla	ain in Remarks)	
Are vegetation	Soil	or H	ydrology	,	significantly dis	turbed?	Are "Normal Circums	stances" prese	ent? (Y/N)	Υ	
Are vegetation		•					explain any answers i	n Remarks.)		-	_
SUMMARY OF FI			ach site			ampling point	locations, trans	ects, imp	ortant fea	tures, etc.	
Hydrophytic Vegetation	Present?	Yes _	Х	_ No _		Is Sampled Are	ea within				
Hydric Soil Present?		Yes	Х	No		a Wetlan		Yes X	_ '	No	_
Wetland Hydrology Pres	sent?	Yes	Х	No							
Remarks:											
1											
VEGETATION - U	lse scient	tific na	ames of	nlan							
VEOLIATION 0	30 301011		absolu	•	Dominant	Indicator	Dominance Test	worksheet:			
1			% cov	er	Species?	Status					
Tree Stratum (plot siz	ze: 3)					Number of Dominant	Species			
1 Pinus contorta			30		Х	FAC	That are OBL, FACW	, or FAC:		3	_(A)
2											
3							Total Number of Dom				
4							Species Across All St	rata:		3	_ ^(B)
			30	— '	= Total Cover						
Sapling/Shrub Stratum	(plot size:	5	_)				Percent of Dominant	Species			
1 Salix sp.			15		X	(FAC to FACW)	That are OBL, FACW	, or FAC:		100%	_(A/B)
2				— -			Dua valamaa lu dav	Mouleshaa			
3				— -			Prevalence Index Total % Cover of	worksnee			
5				— -			OBL Species	_	Multiply by: x 1 =	<u>. </u>	
		_	15		= Total Cover		FACW species	-	x 2 =	0	_
				_			FAC Species		x 3 =	0	<u>-</u>
Herb Stratum (plot siz	ze:	5)									
1 Scirpus microca		<u> </u>	•				FACU Species		x 4 =	0	_
· 		<u>, </u>	40		Х	OBL	FACU Species UPL Species		x 4 = x 5 =	0	- -
2			40	<u> </u>	Х	OBL		0			(B)
2 3	arpus		40	<u> </u>	X	OBL	UPL Species Column Totals		x 5 =	0	_ _ _(B)
234	arpus		40	 	X	OBL	UPL Species		x 5 =	0	- _(B)
2	arpus		40	: : :	x	OBL	UPL Species Column Totals Prevalence Inde	ex =B/A =	x 5 =(A) #	0	(B)
2 3 4 5 6	arpus		40		x	OBL	UPL Species Column Totals Prevalence Inde	ex =B/A = etation Indi	x 5 =(A) #	0 0 0	(B)
2 3 4 5 6	arpus		40		X	OBL	UPL Species Column Totals Prevalence Inde	ex =B/A = etation Indi	x 5 =(A) #	0 0 0	(B)
2	arpus		40	— -	X = Total Cover	OBL	UPL Species Column Totals Prevalence Inde	ex =B/A = etation Indi Dominand Prevalence	x 5 = (A) # icators: ce Test is >50 ce Index is ≤ 3	0 0 0	-
2 3 4 5 6 7	arpus			— -		OBL	UPL Species Column Totals Prevalence Inde	ex =B/A = etation Indi Dominanc Prevalenc Morpholo data in Re	x 5 = (A) # icators: ce Test is >50 ce Index is ≤ 3 gical Adaptati emarks or on	0 0 0 DIV/0!	upporting
2	arpus			— -		OBL	UPL Species Column Totals Prevalence Inde	ex =B/A = etation Indi Dominand Prevalend Morpholo data in Re Wetland I	x 5 = (A) # icators: ce Test is >50 ce Index is ≤ 3 ogical Adaptate emarks or on Non-Vascular	0 0 0 DIV/0! 0% 3.0¹ cions¹ (provide s a separate shere Plants¹	upporting et)
2	arpus			— -		OBL	UPL Species Column Totals Prevalence Inde	ex =B/A = etation Indi Dominand Prevalend Morpholo data in Re Wetland I	x 5 = (A) # icators: ce Test is >50 ce Index is ≤ 3 ogical Adaptate emarks or on Non-Vascular	0 0 0 DIV/0!	upporting et)
2	arpus		40		= Total Cover	OBL	UPL Species Column Totals Prevalence Inde Hydrophytic Vege X	ex =B/A = etation Indi Dominand Prevalend Morpholo data in Re Wetland I Problema	x 5 = (A) # icators: ce Test is >50 ce Index is ≤ 3 ogical Adaptate emarks or on Non-Vascular atic Hydrophyt	0 0 0 DIV/0! 0% 3.0¹ cions¹ (provide s a separate sheet Plants¹ tic Vegetation¹ (upporting et) Explain)
2	arpus					OBL	UPL Species Column Totals Prevalence Inde	ex =B/A = etation Indi Dominand Prevalend Morpholo data in Re Wetland I Problema	x 5 = (A) # icators: ce Test is >50 ce Index is ≤ 3 ogical Adaptate emarks or on Non-Vascular atic Hydrophyt	0 0 0 DIV/0! 0% 3.0¹ cions¹ (provide s a separate sheet Plants¹ tic Vegetation¹ (upporting et) Explain)
2	(plot size:				= Total Cover	OBL	UPL Species Column Totals Prevalence Inde Hydrophytic Vege X Indicators of hydric sedisturbed or problems Hydrophytic	ex =B/A = etation Indi Dominano Prevaleno Morpholo data in Ro Wetland I Problema soil and wetlar atic.	x 5 = (A) # icators: ce Test is >50 ce Index is ≤ 3 ogical Adaptati emarks or on Non-Vascular atic Hydrophyt and hydrology i	0 0 0 DIV/0!	upporting et) Explain) t, unless
2	(plot size:		40		= Total Cover	OBL	UPL Species Column Totals Prevalence Inde Hydrophytic Vege X Indicators of hydric sedisturbed or problems	ex =B/A = etation Indi Dominano Prevaleno Morpholo data in Ro Wetland I Problema soil and wetlar atic.	x 5 = (A) # icators: ce Test is >50 ce Index is ≤ 3 ogical Adaptate emarks or on Non-Vascular atic Hydrophyt	0 0 0 DIV/0! 0% 3.0¹ cions¹ (provide s a separate sheet Plants¹ tic Vegetation¹ (upporting et) Explain) t, unless

1-0 Duff 0-12 10YR 4/2 100 1-Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grate Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Sandy Redox (S5 Histic Epipedon (A2) Stripped Matrix (S Black Histic (A3) Loamy Mucky Min X Hydrogen Sulfide (A4) Loamy Gleyed Matrix (Factor of Coated Sand Grate) Sandy Mucky Mineral (S1) Depleted Matrix (Factor of Coated Sand Grate) Sandy Mucky Mineral (S1) Depleted Dark Surface (A11) Depleted Dark Surface (A12) Redox Dark Surface (A12) Redox Depression Sandy Gleyed Matrix (S4) Redox Depression Restrictive Layer (if present): Type: None Depth (inches): Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Surface Water (A1) Water Stained Lea X High Water Table (A2) 1, 2, 4A, and 4B) X Saturation (A3) Salt Crust (B11) Water Marks (B1) Aquatic Invertebra Sediment Deposits (B2) X Hydrogen Sulfide Dirift Deposits (B3) Oxidized Rhizospi Algal Mat or Crust (B4) Presence of Redu	Texture Remarks Sand
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Histic Epipedon (A2) Black Histic (A3) Loamy Mucky Min X Hydrogen Sulfide (A4) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Redox Depression Restrictive Layer (if present): Type: None Pepth (inches): Permary Indicators (minimum of one required; check all that apply) Surface Water (A1) X High Water Table (A2) X Saturation (A3) Salt Crust (B11) Water Marks (B1) Sediment Deposits (B2) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Stunted or Stresse	Indicators for Problematic Hydric Soils ³ :
Black Histic (A3) X Hydrogen Sulfide (A4) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Redox Depression Restrictive Layer (if present): Type: None Depth (inches): Temarks: Primary Indicators (minimum of one required; check all that apply) Surface Water (A1) X High Water Table (A2) X Saturation (A3) Salt Crust (B11) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) I Loamy Mucky Min Loamy Gleyed Matrix (Park) Redox Depression Redox Depression Redox Depression None Prepleted Dark Surface Valve Sedox Depression Redox Depression	2 cm Muck (A10)
X Hydrogen Sulfide (A4) Depleted Below Dark Surface (A11) Depleted Matrix (F Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Redox Depression Restrictive Layer (if present): Type: None Depth (inches): Remarks: Redox Dark Surface Matrix (Fig. 1) Water stained Lea 1, 2, 4A, and 4B) X Salt Crust (B1) Aquatic Invertebra Aquatic Invertebra Remarks: Remarks: Remarks: Redox Depression	Red Parent Material (TF2)
Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Redox Dark Surface (A12) Pepleted Dark Surface (A12) Redox Depression Restrictive Layer (if present): Restrictive Layer (if present): Republic Matrix (S4) Redox Depression Restrictive Layer (if present): Republic Matrix (S4) Redox Depression	(F1)(except MLRA 1) Other (explain in Remarks)
Thick Dark Surface (A12) Redox Dark Surface Sandy Mucky Mineral (S1) Depleted Dark Surface Sandy Gleyed Matrix (S4) Redox Depression Restrictive Layer (if present): Present Present	(F2)
Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Redox Depression Restrictive Layer (if present): Type: None Pepth (inches): Remarks: Redox Depression Redox Depression Redox Depression None Remarks: Remark	
Sandy Gleyed Matrix (S4) Redox Depression Restrictive Layer (if present): Type: None Depth (inches): Remarks: Recent Iron Reduction Reductio	F6) 3Indicators of hydrophytic vegetation and wetland
Restrictive Layer (if present): Type: None Depth (inches): Remarks: RYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Surface Water (A1) Water stained Lea X High Water Table (A2) 1, 2, 4A, and 4B) X Saturation (A3) Salt Crust (B11) Water Marks (B1) Aquatic Invertebra Sediment Deposits (B2) X Hydrogen Sulfide Drift Deposits (B3) Oxidized Rhizospi Algal Mat or Crust (B4) Presence of Redu Iron Deposits (B5) Recent Iron Redu Surface Soil Cracks (B6) Stunted or Stresse	e (F7) hydrology must be present, unless disturbed or
None Pepth (inches): Pepth (inches):	78) problematic.
Primary Indicators (minimum of one required; check all that apply) Surface Water (A1) Water stained Lea 1, 2, 4A, and 4B) X Saturation (A3) Salt Crust (B11) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Surface Soil Cracks (B6)	
Surface Water (A1) X High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Water stained Lea 1, 2, 4A, and 4B) Aquatic Invertebra X Hydrogen Sulfide Oxidized Rhizospi Presence of Redu Recent Iron Redu Stunted or Stresse	
X High Water Table (A2) 1, 2, 4A, and 4B) X Saturation (A3) Salt Crust (B11) Water Marks (B1) Aquatic Invertebra Sediment Deposits (B2) X Hydrogen Sulfide Drift Deposits (B3) Oxidized Rhizospl Algal Mat or Crust (B4) Presence of Redulation Recent Iron Redulation Recent Iron Redulation Surface Soil Cracks (B6) Stunted or Stresser	Consendant Indiantes (Consenses 11 E
X Saturation (A3) Salt Crust (B11) Water Marks (B1) Aquatic Invertebra Sediment Deposits (B2) X Hydrogen Sulfide Drift Deposits (B3) Oxidized Rhizospl Algal Mat or Crust (B4) Presence of Redu Iron Deposits (B5) Recent Iron Redu Surface Soil Cracks (B6) Stunted or Stresse	Secondary Indicators (2 or more required)
Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Aquatic Invertebra X Hydrogen Sulfide Oxidized Rhizospl Presence of Redu Recent Iron Redu	(B9) (Except MLRA Water stained Leaves (B9)
Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) X Hydrogen Sulfide Oxidized Rhizospi Presence of Redu Recent Iron Redu Stunted or Stresse	(B9) (Except MLRA Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)
Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Oxidized Rhizospl Presence of Redu Recent Iron Redu Stunted or Stresse	(B9) (Except MLRA Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10)
Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Presence of Redu Recent Iron Redu Stunted or Stresse	(B9) (Except MLRA Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
Iron Deposits (B5) Recent Iron Redu Surface Soil Cracks (B6) Stunted or Stresse	(B9) (Except MLRA Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) (B13) Dry-Season Water Table (C2) Tr (C1) Saturation Visible on Aerial Imagery
Surface Soil Cracks (B6) Stunted or Stresse	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) or (C1) Saturation Visible on Aerial Imagery s along Living Roots (C3) X Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7) Other (Explain in I	(B9) (Except MLRA Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) or (C1) s along Living Roots (C3) X Geomorphic Position (D2) Iron (C4) Shallow Aquitard (D3)
	(B9) (Except MLRA Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) or (C1) s along Living Roots (C3) X Geomorphic Position (D2) Iron (C4) Shallow Aquitard (D3)
Sparsely Vegetated Concave Surface (B8)	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) or (C1) Saturation Visible on Aerial Imagery s along Living Roots (C3) X Geomorphic Position (D2) Iron (C4) Shallow Aquitard (D3) In Plowed Soils (C6) X Fac-Neutral Test (D5) Iants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A)
ield Observations:	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) or (C1) Saturation Visible on Aerial Imagery s along Living Roots (C3) X Geomorphic Position (D2) Iron (C4) Shallow Aquitard (D3) In Plowed Soils (C6) X Fac-Neutral Test (D5) Iants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A)
Surface Water Present? Yes NoX Depth (inches):	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) or (C1) Saturation Visible on Aerial Imagery s along Living Roots (C3) X Geomorphic Position (D2) Iron (C4) Shallow Aquitard (D3) In Plowed Soils (C6) X Fac-Neutral Test (D5) Iants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A)
Vater Table Present? Yes X No Depth (inches):	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) or (C1) Saturation Visible on Aerial Imagery s along Living Roots (C3) X Geomorphic Position (D2) Iron (C4) Shallow Aquitard (D3) In Plowed Soils (C6) X Fac-Neutral Test (D5) Iants (D1) (LRR A) Raised Ant Mounds (D6) (LRR A)
Saturation Present? Yes X No Depth (inches):	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery s along Living Roots (C3) Iron (C4) Shallow Aquitard (D3) Sin Plowed Soils (C6) A Fac-Neutral Test (D5) Iants (D1) (LRR A) Water stained Leaves (B9) Water Stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Saturation Visible on Aerial Imagery Shallow Aquitard (D2) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections),	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery s along Living Roots (C3) Iron (C4) Shallow Aquitard (D3) A in Plowed Soils (C6) In Plowed Soils (C6) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
None	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery s along Living Roots (C3) Iron (C4) Shallow Aquitard (D3) A in Plowed Soils (C6) A Fac-Neutral Test (D5) Iants (D1) (LRR A) Prost-Heave Hummocks (D7) Wetland Hydrology Present? Yes x No
	Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery s along Living Roots (C3) Iron (C4) Shallow Aquitard (D3) A in Plowed Soils (C6) A Fac-Neutral Test (D5) Iants (D1) (LRR A) Prost-Heave Hummocks (D7) Wetland Hydrology Present? Yes x No

4611

Project/Site:	Florence	LWI	City/County:	Flo	rence/Lane	Sam	pling Date:	7/16	6/2010
Applicant/Owner:	City of Floren	ce				State: OR	_	Sampling Point:	7
nvestigator(s):	AH/	SE	Section, T	ownship, Range:		Section 4, T	18 South,	R 12 West	
Landform (hillslope,	terrace, etc.:)			Local relief (con-	cave, convex, none)	<u> </u>		Slope (%):	
Subregion (LRR):	L	RR A	Lat:			_ong:		Datum:	
Soil Map Unit Name	: <u>- </u>	Yaquina	_ loamy fine sa	nd	N\	VI Classification	ii _	None	
Are climatic/hydrolog	gic conditions on the	e site typical for this	time of year?	Yes	X	No	(if no, expla	in in Remarks)	
Are vegetation	Soil	or Hydrology	significantly dis	sturbed?	Are "Normal Circur	nstances" prese	ent? (Y/N)	Y	
Are vegetation	Soil	or Hydrology	naturally probl	ematic? If needed,	explain any answers	s in Remarks.)		<u> </u>	
			_						
			p showing s	ampling point	locations, trar	isects, impo	ortant feat	ures, etc.	
lydrophytic Vegetat				Is Sampled Are	ea within				
lydric Soil Present?				a Wetland		Yes X	1	No	
Vetland Hydrology F	Present? Yes	s X No	·						
Remarks:									
/FGETATION :	- Use scientifi	c names of pla	ints						
LOLIATION	Occ colonial	absolute	Dominant	Indicator	Dominance Tes	t worksheet:			
		% cover	Species?	Status					
ree Stratum (plo	t size: 30)			Number of Dominar	nt Species			
1 Salix sp.		70	X	(FAC to FACW)	That are OBL, FAC	W, or FAC:		5	(A)
2									
3					Total Number of Do			_	
4					Species Across All	Strata:		5	(B)
		70	= Total Cover						
apling/Shrub Stratu	um (plot size:	5)			Percent of Dominar	t Species			
Spiraea doug		3		FACW	That are OBL, FAC	W, or FAC:	1	00%	(A/B)
Vaccinium o		5		UPL	D	\\			
Ledum gland		<u>30</u> 25	X	FACW FAC	Prevalence Inde	x Worksheet			
Lonicera invo	Diuciala	20	X	(FAC to FACW)	Total % Cover of OBL Species		Multiply by: x 1 =	_ 0	
Gallx Sp.		83	= Total Cover	(I AO IO I AOI	FACW species		x 2 =	0	
			10141 00101		FAC Species		x 3 =	0	
erb Stratum (plo)			FACU Species		x 4 =	0	
Carex obnup	ta	30	X	OBL	UPL Species		x 5 =	0	
					Column Totals	0	(A)	0	(B)
3									
4 5					Prevalence In	dex =B/A =	#1	DIV/0!	
·					Hydrophytic Ve	gotation India	natore:		
7					X	_	e Test is >50	%	
 3				<u> </u>			e Index is ≤ 3		
		30	= Total Cover			Morpholog	gical Adaptati	ons ¹ (provide su	pporting
								a separate shee	t)
loody Vine Stratum	n (plot size:)					lon-Vascular		
						Problemat	tic Hydrophyt	ic Vegetation ¹ (E	xplain)
2					1		46.2.3		.1.
		0	= Total Cover		¹ Indicators of hydric disturbed or probler		a hydrology r	nust be present,	unless
					Hydrophytic				
		40			Vegetation	Yes	s X	No	
6 Bare Ground in H	erb Stratum	40			Present?				

SOIL								
Profile Descri	ption: (Describe to	the depth	needed to docu	ment the indi	cator or conf	firm the absen	ce of indicators.)	
Depth	Matrix				Features			
(Inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-5	7.5YR 3/3	100	'					muck; nearly all organic material
5-8	5Y 2.5/1	100					Sand	mucky
8-12	2.5Y 3/1	100					Sand	fine sand, no organics
						, ,		-
						, ,		
						, ,		
Type: C=Cond	centration, D=Deplet	ion, RM=Re	educed Matrix, C	S=Covered or	Coated Sand	I Grains.		² Location: PL=Pore Lining, M=Matrix.
lydric Soil	Indicators: (Appl	icable to	all LRRs, unle	ess otherwi	se noted.)		Indic	ators for Problematic Hydric Soils ³ :
	Histosol (A1)			5	Sandy Redox	(S5)		2 cm Muck (A10)
Х	Histic Epipedon (A2))			Stripped Matrix	ix (S6)		Red Parent Material (TF2)
	Black Histic (A3)				oamy Mucky	Mineral (F1) (ex	xcept MLRA 1)	Other (explain in Remarks)
Х	Hydrogen Sulfide (A	4)		ι	oamy Gleyed	d Matrix (F2)		
	Depleted Below Dark	k Surface (A	1 11)		Depleted Matri	rix (F3)		
	Thick Dark Surface (A12)		F	Redox Dark S	Surface (F6)		
	Sandy Mucky Minera	al (S1)			Depleted Dark	Surface (F7)		³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or
	Sandy Gleyed Matrix	(S4)		F	Redox Depres	ssions (F8)		problematic.
Restrictive	Layer (if present)):						
		N	one					
vne.								
epth (inches	s):				· ·		Hydric Soil Pre	sent? Yes X No
Depth (inches	·						Hydric Soil Pre	sent? Yes X No
Depth (inches Remarks: HYDROLO Wetland Hy	GY drology Indicato	rs:					Hydric Soil Pre	
Depth (inches Remarks: HYDROLO Vetland Hydrimary India	OGY drology Indicator cators (minimum c	rs:	uired; check all					Secondary Indicators (2 or more required)
Primary Indic	drology Indicator cators (minimum of Surface Water (A1)	rs: of one requ	uired; check all	V		Leaves (B9) (B		Secondary Indicators (2 or more required) Water stained Leaves (B9)
Pepth (inches Pepth (inches Pertand Hydrimary India X	drology Indicator cators (minimum of Surface Water (A1) High Water Table (A	rs: of one requ	uired; check all	V	I, 2, 4A, and 4	Leaves (B9) (E		Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)
Pepth (inches Itemarks: HYDROLO Vetland Hy Primary Indic X X	drology Indicator cators (minimum of Surface Water (A1) High Water Table (A Saturation (A3)	rs: of one requ	uired; check all	V 1	I, 2, 4A, and 4 Salt Crust (B1	Leaves (B9) (E 4B) 1)		Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10)
HYDROLO Vetland Hy rimary Indic	drology Indicator cators (minimum of Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1)	rs: of one requ	uired; check all	V 1 S	I, 2, 4A, and 4 Salt Crust (B1 Aquatic Inverte	Leaves (B9) (E 4B) 1) ebrates (B13)		Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
Pepth (inches emarks: IYDROLO Vetland Hydrimary India X X	drology Indicator cators (minimum of Surface Water (A1) High Water Table (A Saturation (A3)	rs: of one requ	uired; check all		I, 2, 4A, and 4 Salt Crust (B1 Aquatic Inverte Hydrogen Sulf	Leaves (B9) (E4B) 1) ebrates (B13) fide Odor (C1)		Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
HYDROLO Vetland Hydrimary India X X	drology Indicator cators (minimum of Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (rs: of one required: 2) B2)	uired; check all	V	I, 2, 4A, and 4 Salt Crust (B1 Aquatic Inverte Hydrogen Sulf Oxidized Rhize	Leaves (B9) (E4B) 1) ebrates (B13) fide Odor (C1)	Except MLRA	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery
HYDROLO Vetland Hy Trimary India X X	drology Indicator cators (minimum of Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (I Drift Deposits (B3)	rs: of one required: 2) B2)	uired; check al.	X H	I, 2, 4A, and 4 Salt Crust (B1 Aquatic Inverte Hydrogen Sulf Dxidized Rhize Presence of R	Leaves (B9) (E4B) 1) ebrates (B13) fide Odor (C1) cospheres along	Except MLRA J Living Roots (C3)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2)
Primary Indicates X	drology Indicators (minimum of Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (E	rs: of one requ 2) B2)	uired; check al	V 1	A, 2, 4A, and 4 Salt Crust (B1 Aquatic Inverted Hydrogen Sulf Dxidized Rhize Presence of R Recent Iron Re	Leaves (B9) (E4B) 1) ebrates (B13) fide Odor (C1) ospheres along	Except MLRA J Living Roots (C3) (4) wed Soils (C6)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3)
HYDROLO Vetland Hydrimary India X X	drology Indicator cators (minimum of Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B Iron Deposits (B5)	rs: of one requ 2) B2) B4) (B6)		X H	Aquatic Inverted Hydrogen Sulf Dixidized Rhized Presence of Recent Iron Research or Street	Leaves (B9) (E 4B) 1) ebrates (B13) fide Odor (C1) cospheres along Reduced Iron (C deduction in Ploy	Except MLRA J Living Roots (C3) (4) wed Soils (C6)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5)
IYDROLO Vetland Hy rimary India X X	drology Indicator cators (minimum of Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (E Iron Deposits (B5) Surface Soil Cracks	rs: of one required: 2) B2) B4) (B6) In Aerial Ima	gery (B7)	X H	Aquatic Inverted Hydrogen Sulf Dixidized Rhized Presence of Recent Iron Research or Street	Leaves (B9) (E4B) 1) ebrates (B13) fide Odor (C1) cospheres along Reduced Iron (C eduction in Plovessed Plants (E	Except MLRA J Living Roots (C3) (4) wed Soils (C6)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Pepth (inches Remarks: HYDROLO Vetland Hy X X	drology Indicator cators (minimum of Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B Iron Deposits (B5) Surface Soil Cracks Inundation Visible or Sparsely Vegetated	rs: of one required: 2) B2) B4) (B6) In Aerial Ima	gery (B7)	X H	Aquatic Inverted Hydrogen Sulf Dixidized Rhized Presence of Recent Iron Research or Street	Leaves (B9) (E4B) 1) ebrates (B13) fide Odor (C1) cospheres along Reduced Iron (C eduction in Plovessed Plants (E	Except MLRA J Living Roots (C3) (4) wed Soils (C6)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Primary India X X	drology Indicators (minimum of Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B Iron Deposits (B5) Surface Soil Cracks Inundation Visible or Sparsely Vegetated wations:	rs: of one required: 2) B2) B4) (B6) In Aerial Ima	gery (B7)	X H	Aquatic Inverted Hydrogen Sulf Dixidized Rhized Presence of Recent Iron Research or Street	Leaves (B9) (E4B) 1) ebrates (B13) fide Odor (C1) cospheres along Reduced Iron (C eduction in Plovessed Plants (E	Except MLRA J Living Roots (C3) (4) wed Soils (C6)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Pepth (inches Remarks: HYDROLO Vetland Hy Timary India X X	drology Indicator cators (minimum of Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B Iron Deposits (B5) Surface Soil Cracks Inundation Visible or Sparsely Vegetated vations: Present? Yes	rs: of one required: 2) B2) B4) (B6) In Aerial Ima	igery (B7) urface (B8)	X H	I, 2, 4A, and 4 Salt Crust (B1 Aquatic Inverte Hydrogen Sulf Dxidized Rhize Presence of R Recent Iron Re Stunted or Stre Other (Explain	Leaves (B9) (E4B) 1) ebrates (B13) fide Odor (C1) cospheres along Reduced Iron (C eduction in Plovessed Plants (E	Living Roots (C3) (4) wed Soils (C6) (C1) (LRR A)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Primary India X X Field Obser Surface Water Vater Table P Saturation Pre	drology Indicator cators (minimum of Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B1) Iron Deposits (B5) Surface Soil Cracks Inundation Visible or Sparsely Vegetated vations: Present? Yes resent? Yes sent? Yes	rs: of one required: 2) B2) B4) (B6) n Aerial Ima Concave Si	igery (B7) urface (B8) No X	V	Aquatic Inverted Aquatic Inverted Aquatic Inverted Aydrogen Sulffortiesence of Recent Iron Restanted or Street (Explain Inches):	Leaves (B9) (E 4B) 1) ebrates (B13) fide Odor (C1) cospheres along Reduced Iron (C reduction in Plovessed Plants (E in in Remarks)	Living Roots (C3) (4) wed Soils (C6) (C1) (LRR A)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
X X X Field Obser Surface Water Water Table P Saturation Pre includes capillar	drology Indicator cators (minimum of Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B1) Iron Deposits (B5) Surface Soil Cracks Inundation Visible or Sparsely Vegetated vations: Present? Yes resent? Yes sent? Yes	rs: of one required 2) B2) B4) (B6) n Aerial Ima Concave St X X	gery (B7) urface (B8) No X No No	X H X H C F S C Depth (i	I, 2, 4A, and 4 Salt Crust (B1 Aquatic Inverte Hydrogen Sulf Dxidized Rhize Presence of R Recent Iron Re Stunted or Stre Dther (Explain inches): inches):	Leaves (B9) (E4B) 1) ebrates (B13) fide Odor (C1) cospheres along Reduced Iron (C eduction in Plot ressed Plants (En in Remarks)	Except MLRA J Living Roots (C3) 4) wed Soils (C6) D1) (LRR A) Wetland Hyc	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Primary India X X X Field Obser Surface Water Vater Table P Saturation Pre Sincludes capillar	drology Indicators (minimum of Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B Iron Deposits (B5) Surface Soil Cracks Inundation Visible or Sparsely Vegetated of Vations: Present? Yes resent? Yes sent? Yes yfringe)	rs: of one required 2) B2) B4) (B6) n Aerial Ima Concave St X X	gery (B7) urface (B8) No X No No	X H X H C F S C Depth (i	I, 2, 4A, and 4 Salt Crust (B1 Aquatic Inverte Hydrogen Sulf Dxidized Rhize Presence of R Recent Iron Re Stunted or Stre Dther (Explain inches): inches):	Leaves (B9) (E4B) 1) ebrates (B13) fide Odor (C1) cospheres along Reduced Iron (C eduction in Plot ressed Plants (En in Remarks)	Except MLRA J Living Roots (C3) 4) wed Soils (C6) D1) (LRR A) Wetland Hyc	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)

4611

Project/Site: FI	orence LW	I	City/Count	y: Fl	orence/Lane	Sai	mpling Date:	7/1	6/2010
Applicant/Owner: City o	f Florence				Sta	ate: OR		Sampling Point	. 8
Investigator(s):	AH/SE		Section	, Township, Range:		Section 4,	Γ 18 South, F	R 12 West	
Landform (hillslope, terrace, e	tc.:)			Local relief (co	oncave, convex, none):			Slope (%)	:
Subregion (LRR):	LRR	Α	La	nt:	Lo	ng:		Datum	:
Soil Map Unit Name:		Yaqu	ina loamy fine s	sand			on:		
Are climatic/hydrologic conditi	ons on the sit	e typical fo	this time of year?	Yes	Х	No	(if no, explai	n in Remarks)	
Are vegetation Soil	or H	lydrology	significantly	disturbed?	Are "Normal Circums	stances" pres	sent? (Y/N)	Y	
Are vegetation Soil	or H	lydrology	naturally pro	oblematic? If neede	d, explain any answers i	n Remarks.)			_
SUMMARY OF FINDIN		ach site		ı sampling poir	nt locations, trans	ects, imp	ortant feat	ures, etc.	
Hydrophytic Vegetation Prese	nt? Yes	Х	No	Is Sampled A	rea within				
Hydric Soil Present?	Yes	Х	No	a Wetla		res X	N	0	_
Wetland Hydrology Present?	Yes	Х	No	_					
Remarks:				•					
VEGETATION - Use se	siontific n	amos of	nlante						
VLGLIATION - 036 3	JIETHING II	absolu	•	t Indicator	Dominance Test	worksheet	<u>.</u>		
		% cov					-		
Tree Stratum (plot size:	30)			Number of Dominant	Species			
1 Myrica californica		40	X	FACW	That are OBL, FACW	, or FAC:		5	_(A)
2 Picea sitchensis		20	X	FAC					
3 Picea sp.		5		(FAC)	Total Number of Dom	inant			
4					Species Across All St	rata:		5	_(B)
		65	= Total Cov	er					
Sapling/Shrub Stratum (plot	size: 5)			Percent of Dominant	Species			
1 Spiraea douglasii		15	X	FACW	That are OBL, FACW	, or FAC:	1	00%	(A/B)
2 Salix sp.		20	X	(FAC to FACV					
3 Myrica californica		20	X	FACW	Prevalence Index	Workshee			
4				_	Total % Cover of	_	Multiply by:		
5					OBL Species		x1=	0	-
		55	= Total Cov	er	FACW species FAC Species		x 2 = x 3 =	0	_
Herb Stratum (plot size:)			FACU Species		x 4 =	0	-
1					UPL Species		x 5 =	0	- -
2					Column Totals	0	(A)	0	(B)
3									
4				_	Prevalence Inde	ex =B/A =	#D	IV/0!	_
5									
6					Hydrophytic Veg				
7					X	_	nce Test is >509		
8			- Total Cov		· -		nce Index is ≤ 3. ogical Adaptatio		innorting
			= Total Cov	eı			Remarks or on a		
		\					Non-Vascular I	• .	,
Woody Vine Stratum (plot s	ize:)			-	Droblom	atic Hydrophytic	c Vegetation ¹ (I	Explain)
Woody Vine Stratum (plot s	ize:	<u>-</u> '		<u> </u>		Problem			
	ze:	, 				Problem	,,		
1	ze:		= Total Cov	er	¹ Indicators of hydric s	oil and wetla		,	, unless
1	ze:		= Total Cov	er	disturbed or problema	oil and wetla		,	, unless
			= Total Cove	er	disturbed or problema Hydrophytic	oil and wetla	and hydrology m	ust be present	
1			= Total Cov	er	disturbed or problema	oil and wetla	and hydrology m	,	

			PHS #	4611			Sampling Point: 8
Profile Descri	iption: (Describe	to the depth	needed to docume	nt the indicator or co	nfirm the absen	ce of indicators.)	
Depth	Mai	rix		Redox Features	2		
(Inches)	Color (moist) %	Color (moist)	% Type ¹	Loc ²	Texture	Remarks
8-0	Duff						
0-4	10YR 2/2	100				Sandy Loam	high organic content
4-10	2.5Y 3/2	95	7.5YR 2.5/3		<u> </u>	Sand	
			· · · · · · · · · · · · · · · · · · ·	Covered or Coated San otherwise noted.)		Indic	² Location: PL=Pore Lining, M=Matrix. ators for Problematic Hydric Soils ³ :
-	Histosol (A1)	ppiicabie to	ran Errivs, umess	X Sandy Redo		maio	2 cm Muck (A10)
	Histic Epipedon (A2)		Stripped Mat			Red Parent Material (TF2)
	Black Histic (A3)	· · · · ·		 ··	xy Mineral (F1) (e	except MLRA 1)	Other (explain in Remarks)
	Hydrogen Sulfide	. (Δ1)			ed Matrix (F2)	Acopt meter 1)	Other (explain in Nemarks)
	Depleted Below [Δ11)	Depleted Ma			
	Thick Dark Surfa	,	AII)	 ·	Surface (F6)		
	Sandy Mucky Mir				rk Surface (F7)		³ Indicators of hydrophytic vegetation and wetland
	Sandy Gleyed Ma			Redox Depre	* *		hydrology must be present, unless disturbed or problematic.
	Layer (if prese	 ent):					
Restrictive		-					
		N	lone				
Type: Depth (inches	s):	<u>N</u>	lone			Hydric Soil Pres	sent? Yes X No
Type: Depth (inches Remarks:		N	lone			Hydric Soil Pres	sent? Yes <u>X</u> No
Type: Depth (inches Remarks: HYDROLO Wetland Hy	OGY drology Indica	ators:				Hydric Soil Pres	sent? Yes X No
Type: Depth (inches Remarks: HYDROLO Wetland Hy Primary India	OGY drology Indica cators (minimu	ators: m of one req	quired; check all th				Secondary Indicators (2 or more required)
Type: Depth (inches Remarks: HYDROLO Wetland Hy Primary India	DGY drology Indica cators (minimu Surface Water (A	ators: m of one req		Water staine	d Leaves (B9) (1		Secondary Indicators (2 or more required) Water stained Leaves (B9)
Type: Depth (inches Remarks: HYDROLO Wetland Hy Primary India	OGY drology Indica cators (minimu Surface Water (A High Water Table	ators: m of one req		Water staine	d Leaves (B9) (I		Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)
Type: Depth (inches Remarks: HYDROLO Wetland Hy Primary India	drology Indica cators (minimul Surface Water (A High Water Table Saturation (A3)	ators: m of one req (1) e (A2)		Water staine 1, 2, 4A, and Salt Crust (B	d Leaves (B9) (I i 4B) i:11)		Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10)
Type: Depth (inches Remarks: HYDROLO Wetland Hy Primary India	drology Indica cators (minimul Surface Water (A High Water Table Saturation (A3) Water Marks (B1	ators: m of one req (1) e (A2)		Water staine 1, 2, 4A, and Salt Crust (B	d Leaves (B9) (I I 4B) :11) rtebrates (B13)		Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
Type: Depth (inches Remarks: HYDROLO Wetland Hy Primary India	drology Indica cators (minimul Surface Water (A High Water Table Saturation (A3) Water Marks (B1 Sediment Deposi	m of one req		Water staine 1, 2, 4A, and Salt Crust (B Aquatic Inve	d Leaves (B9) (I i 4B) :11) rtebrates (B13) ulfide Odor (C1)	Except MLRA	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (6
Type: Depth (inches Remarks: HYDROLO Wetland Hy Primary India	drology Indica cators (minimul Surface Water (A High Water Table Saturation (A3) Water Marks (B1 Sediment Deposits (B3	ators: m of one req (1) e (A2)) its (B2)		Water staine 1, 2, 4A, and Salt Crust (B Aquatic Inve Hydrogen Su Oxidized Rhi	d Leaves (B9) (I I 4B) (11) rtebrates (B13) ulfide Odor (C1) izospheres along	Except MLRA g Living Roots (C3)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Cartering Company)
Type: Depth (inches Remarks: HYDROLO Wetland Hy Primary India	drology Indica cators (minimul Surface Water (A High Water Table Saturation (A3) Water Marks (B1 Sediment Deposit Drift Deposits (B3 Algal Mat or Crus	ators: m of one req (1) e (A2)) its (B2) 3) st (B4)		Water staine 1, 2, 4A, and Salt Crust (B Aquatic Invertigation Hydrogen St Oxidized Rhi Presence of	d Leaves (B9) (I I 4B) :11) rtebrates (B13) ulfide Odor (C1) izospheres along Reduced Iron (C	Except MLRA g Living Roots (C3)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Carter of the Carter of Carter
Type: Depth (inches Remarks: HYDROLO Wetland Hy Primary India	drology Indica cators (minimul Surface Water (A High Water Table Saturation (A3) Water Marks (B1 Sediment Deposit Drift Deposits (B3 Algal Mat or Crus Iron Deposits (B3	ators: m of one req (1) e (A2)) its (B2) 3) et (B4)		Water staine 1, 2, 4A, and Salt Crust (B Aquatic Invel Hydrogen St Oxidized Rhi Presence of Recent Iron	d Leaves (B9) (I I 4B) I11) Intebrates (B13) Ilfide Odor (C1) Izospheres along Reduced Iron (C) Reduction in Plo	Except MLRA g Living Roots (C3) C4) wwed Soils (C6)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5)
Type: Depth (inches Remarks: HYDROLO Wetland Hy Primary India	drology Indica cators (minimul Surface Water (A High Water Table Saturation (A3) Water Marks (B1 Sediment Deposit Drift Deposits (B3 Algal Mat or Crus Iron Deposits (B3 Surface Soil Crad	ators: m of one req (1) e (A2)) its (B2) (3) et (B4) (6) cks (B6)	quired; check all th	Water staine 1, 2, 4A, and Salt Crust (B Aquatic Inve Hydrogen St Oxidized Rhi Presence of Recent Iron I Stunted or S	d Leaves (B9) (I I 4B) III) Itebrates (B13) Ilfide Odor (C1) Izospheres along Reduced Iron (C Reduction in Plo	Except MLRA g Living Roots (C3) C4) wwed Soils (C6)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Type: Depth (inches Remarks: HYDROLO Wetland Hy Primary India	drology Indica cators (minimul Surface Water (A High Water Table Saturation (A3) Water Marks (B1 Sediment Deposit Drift Deposits (B3 Algal Mat or Crus Iron Deposits (B3	ators: m of one req a1) e (A2)) its (B2) B) st (B4) b) cks (B6) e on Aerial Ima	quired; check all th	Water staine 1, 2, 4A, and Salt Crust (B Aquatic Inve Hydrogen St Oxidized Rhi Presence of Recent Iron I Stunted or S	d Leaves (B9) (I I 4B) I11) Intebrates (B13) Ilfide Odor (C1) Izospheres along Reduced Iron (C) Reduction in Plo	Except MLRA g Living Roots (C3) C4) wwed Soils (C6)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5)
Type: Depth (inches Remarks: HYDROLO Wetland Hy Primary India	drology Indica cators (minimus Surface Water (A High Water Table Saturation (A3) Water Marks (B1 Sediment Deposit Drift Deposits (B3 Algal Mat or Crus Iron Deposits (B5 Surface Soil Crac Inundation Visible Sparsely Vegetat	ators: m of one req a1) e (A2)) its (B2) B) st (B4) b) cks (B6) e on Aerial Ima	quired; check all th	Water staine 1, 2, 4A, and Salt Crust (B Aquatic Inve Hydrogen St Oxidized Rhi Presence of Recent Iron I Stunted or S	d Leaves (B9) (I I 4B) III) Itebrates (B13) Ilfide Odor (C1) Izospheres along Reduced Iron (C Reduction in Plo	Except MLRA g Living Roots (C3) C4) wwed Soils (C6)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Type: Depth (inches Remarks: HYDROLO Wetland Hy Primary India X Field Obser	drology Indica cators (minimul Surface Water (A High Water Table Saturation (A3) Water Marks (B1 Sediment Deposit Drift Deposits (B3 Algal Mat or Crus Iron Deposits (B5 Surface Soil Crad Inundation Visible Sparsely Vegetat	ators: m of one req a1) e (A2)) its (B2) B) st (B4) b) cks (B6) e on Aerial Ima	quired; check all th	Water staine 1, 2, 4A, and Salt Crust (B Aquatic Inve Hydrogen St Oxidized Rhi Presence of Recent Iron I Stunted or S	d Leaves (B9) (I I 4B) III) Itebrates (B13) Ilfide Odor (C1) Izospheres along Reduced Iron (C Reduction in Plo	Except MLRA g Living Roots (C3) C4) wwed Soils (C6)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Type: Depth (inches Remarks: HYDROLO Wetland Hy Primary India X Field Obser Surface Water	drology Indicators (minimum Surface Water (A High Water Table Saturation (A3) Water Marks (B1 Sediment Deposits (B3 Algal Mat or Cruston Deposits (B5 Surface Soil Cracton Inundation Visible Sparsely Vegetativations:	ators: m of one req a1) e (A2)) its (B2) B) st (B4) b) cks (B6) e on Aerial Ima	quired; check all th agery (B7) Surface (B8)	Water staine 1, 2, 4A, and Salt Crust (B Aquatic Inveity Hydrogen St. Oxidized Rhi Presence of Recent Iron I Stunted or S Other (Explain	d Leaves (B9) (I I 4B) III) Itebrates (B13) Ilfide Odor (C1) Izospheres along Reduced Iron (C Reduction in Plo	g Living Roots (C3) C4) wed Soils (C6) D1) (LRR A)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Type: Depth (inches Remarks: HYDROLO Wetland Hy Primary India X	drology Indicators (minimum Surface Water (A High Water Table Saturation (A3) Water Marks (B1 Sediment Deposits (B5 Algal Mat or Crustling Iron Deposits (B5 Surface Soil Cractlinundation Visible Sparsely Vegetativations: Present? Yes seent? Yes seent? Yes	entors: m of one requal) e (A2) its (B2) its (B4) its (B6) e on Aerial Image of Concave S	quired; check all th agery (B7) Surface (B8)	Water staine 1, 2, 4A, and Salt Crust (B Aquatic Inveited Hydrogen Staine) Oxidized Rhited Presence of Recent Iron In Stunted or S Other (Explaine) Depth (inches):	d Leaves (B9) (I 1 4B) 111) rtebrates (B13) ulfide Odor (C1) izospheres along Reduced Iron (C Reduction in Plo tressed Plants (I in in Remarks)	g Living Roots (C3) C4) wed Soils (C6) D1) (LRR A)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Carried Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Type: Depth (inches Remarks: HYDROLO Wetland Hy Primary India X Field Obser Surface Water Water Table P Saturation Pre (includes capillar	drology Indicators (minimular Surface Water (A High Water Table Saturation (A3) Water Marks (B1 Sediment Deposits (B3 Algal Mat or Crust Iron Deposits (B5 Surface Soil Cract Inundation Visible Sparsely Vegetat Vations: Present? Yes Present? Yes Sesent? Yes Sesent? Yes Sy fringe)	ators: m of one req (1) e (A2)) its (B2) B) st (B4) b) cks (B6) e on Aerial Imaged Concave S X X	agery (B7) Surface (B8) No X No No	Water staine 1, 2, 4A, and Salt Crust (B Aquatic Inve Hydrogen St Oxidized Rhi Presence of Recent Iron (S Stunted or S Other (Expla) Depth (inches): Depth (inches):	d Leaves (B9) (I 1 4B) i11) retebrates (B13) ulfide Odor (C1) izospheres along Reduced Iron (C Reduction in Plot tressed Plants (I in in Remarks)	g Living Roots (C3) C4) wed Soils (C6) D1) (LRR A) Wetland Hyd	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Cartille Control Cont
Type: Depth (inches Remarks: HYDROLO Wetland Hy Primary India X Field Obser Surface Water Water Table P Saturation Pre (includes capillar	drology Indicators (minimular Surface Water (A High Water Table Saturation (A3) Water Marks (B1 Sediment Deposits (B3 Algal Mat or Crust Iron Deposits (B5 Surface Soil Cract Inundation Visible Sparsely Vegetat Vations: Present? Yes Present? Yes Sesent? Yes Sesent? Yes Sy fringe)	ators: m of one req (1) e (A2)) its (B2) B) st (B4) b) cks (B6) e on Aerial Imaged Concave S X X	agery (B7) Surface (B8) No X No No	Water staine 1, 2, 4A, and Salt Crust (B Aquatic Invel Hydrogen St Oxidized Rhi Presence of Recent Iron I Stunted or S Other (Expla	d Leaves (B9) (I 1 4B) i11) retebrates (B13) ulfide Odor (C1) izospheres along Reduced Iron (C Reduction in Plot tressed Plants (I in in Remarks)	g Living Roots (C3) C4) wed Soils (C6) D1) (LRR A) Wetland Hyd	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Cartille Control Cont

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site:	Flore	nce LWI		_	City/County:	Flo	orence/Lane		Sampling Date	:	7/16/2010
Applicant/Owner:	City of Flo	orence						State: (OR	Sampling	Point: 9
Investigator(s):		AH/SE			Section, To	wnship, Range:		Section	26 T 18 Sout	h, R 12 We	est
Landform (hillslope, t	terrace, etc.:)		depi	essio	n	Local relief (co	ncave, convex, n	one):	convex	Slop	e (%):
Subregion (LRR):		LRR	A		Lat:			Long:		D	atum:
Soil Map Unit Name:				Du	ne land			NWI Classific	cation:	— Pl	JSC
Are climatic/hydrolog	jic conditions	on the site	e typical fo	r this ti	ime of year?	Yes	X	No	(if no, ex	plain in Rem	arks)
Are vegetation	Soil	or Hy	ydrology		significantly dist	urbed?	Are "Normal C	ircumstances"	present? (Y/N)	Y	•
Are vegetation	_										
SUMMARY OF					•					eatures, e	tc.
Hydrophytic Vegetati			Х	No				·	•		
Hydric Soil Present?		Yes	Х	– No		Is Sampled Ar		Yes	Х	No	
Wetland Hydrology F		Yes	Х	- No		a Wellai	iiu :				
Remarks:											
Nemarks.											
VEGETATION -	Use scie	ntific na	ames of	plar	nts.						
			absolu	ute	Dominant	Indicator	Dominance	Test worksh	eet:		
			% cov	er_	Species?	Status					
Tree Stratum (plot	t size:)					Number of Don	ninant Species			
1							That are OBL,	FACW, or FAC	:	1	(A)
2											
3							Total Number of			_	(5)
4							Species Across	s All Strata:		2	(B)
			0		= Total Cover						
Sapling/Shrub Stratu	ı <u>m</u> (plot size	e:	_)				Percent of Don	ninant Species			
1							That are OBL,	FACW, or FAC	D:	50%	(A/B)
2											
3							Prevalence		heet:		
4							Total % Cover		Multiply		
5							OBL Spe		x 1 :		
			0		= Total Cover		FACW spe		x 2 : x 3 :		
Herb Stratum (plot	t size:	5)					FACU Spe		x 4		
1 Unidentified I		<u> </u>	13		Х	unknown	UPL Spe		x 5		
2 Salix sp.			5		X	(FACW)	Column T		0 (A)		(B)
3 (presumably	S. hookeri	ana)									
4							Prevalen	ce Index =B/A	=	#DIV/0!	
5											
6							Hydrophytic	Vegetation	Indicators:		
7								Dom	inance Test is >	·50%	
8								Prev	alence Index is	≤ 3.0 ¹	
			18		= Total Cover				ohological Adap		
	7 . L . L L		,						in Remarks or		sheet)
Woody Vine Stratum	(plot size:		_)						and Non-Vascu		:1 (5)
1								X Prob	lematic Hydrop	iytic vegetat	ıorı (⊏xpıaın)
2					= Tatal Or		1 Indicators of h	vdric soil and ::	etland hydrolog	w must be se	recent unless
			0		= Total Cover		disturbed or pro	-	vetland hydrolog	y musi be pr	esem, uniess
							Hydrophytic				
% Bare Ground in He	erb Stratum	90	to 95	_			Vegetation		Yes X		No
Remarks:							Present?				

Though Pinus contorta is common along the edges of this wetland, the interior is sparsely vegetated. The apparent combined result of seasonal ponding and sandy soils. Other species in the vicinity: S. hookeriana shrubs, Spiraea douglasii, and several species of rushes.

			PHS #	4611			Sampling Point: 9
	•	the depth	needed to docume			sence of indicators.)	
Depth (Inches)	Color (moist)	%	Color (moist)	Redox Fea	tures Type ¹ Loc ²	 Texture	Remarks
0-18	10YR 4/3	96	10YR 4/6	4	C M	Sand	Remarks
0-10	1011 4/3	90	101K 4/0			Sanu	
						_	
						_	
ype: C=Co	ncentration, D=Deplet	ion, RM=Re	educed Matrix, CS=	Covered or Coa	ated Sand Grains.		² Location: PL=Pore Lining, M=Matrix.
ydric Soi	I Indicators: (Appl	licable to	all LRRs, unles	s otherwise ı	noted.)	Indica	ators for Problematic Hydric Soils ³ :
	Histosol (A1)			Sand	dy Redox (S5)		2 cm Muck (A10)
	Histic Epipedon (A2)				ped Matrix (S6)		Red Parent Material (TF2)
	Black Histic (A3)				ny Mucky Mineral (F1		Other (explain in Remarks)
	Hydrogen Sulfide (A	•			ny Gleyed Matrix (F2)	
	Depleted Below Dark	•	A11)		eted Matrix (F3)		
	Thick Dark Surface (ox Dark Surface (F6)		³ Indicators of hydrophytic vegetation and wetland
	Sandy Mucky Minera Sandy Gleyed Matrix	` '			eted Dark Surface (F ox Depressions (F8)	7)	hydrology must be present, unless disturbed or problematic.
	Layer (if present)				Depressions (1 0)	r	problematic.
epth (inche emarks: ample sit hallow sa	e fails to meet any	the grow	ing season are	likely. Two w	eeks of saturatio		table indicates that extended periods of ng season is sufficient to develop
epth (inche emarks: ample sit hallow sa naerobic	e fails to meet any turation earlier in conditions and th	the grow	ing season are	likely. Two w	eeks of saturatio	dry season water	table indicates that extended periods of
epth (inche emarks: ample sit hallow sa naerobic	e fails to meet any turation earlier in conditions and th	the grow erefore n	ing season are	likely. Two w	eeks of saturatio	dry season water	table indicates that extended periods of
epth (inche emarks: ample sit hallow sa haerobic YDROLO	e fails to meet any turation earlier in conditions and th	the grow erefore m	ing season are neet the definition	likely. Two w on of a hydrid	eeks of saturatio	dry season water	table indicates that extended periods of
epth (inche emarks: ample sit hallow sa haerobic YDROLO	e fails to meet any turation earlier in conditions and th DGY ydrology Indicator	the grow erefore m	ing season are neet the definition	likely. Two won of a hydrid	eeks of saturations soil.	dry season water on during the growing	table indicates that extended periods of ng season is sufficient to develop Secondary Indicators (2 or more required) Water stained Leaves (B9)
epth (inche emarks: ample sit nallow sa naerobic YDROLO	e fails to meet any turation earlier in conditions and th DGY ydrology Indicator icators (minimum c	the grow erefore n rs:	ing season are neet the definition	likely. Two won of a hydrid	eeks of saturatio s soil.	dry season water on during the growing	table indicates that extended periods of ng season is sufficient to develop Secondary Indicators (2 or more required)
epth (inche emarks: ample sit nallow sa naerobic YDROLO (etland H	e fails to meet any turation earlier in conditions and the DGY ydrology Indicator icators (minimum c	the grow erefore n rs:	ing season are neet the definition	nat apply) Wate 1, 2, Salt	er stained Leaves (BS 4A, and 4B)	dry season water on during the growing the	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10)
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Pepth (inche Remarks: Bample sits shallow sa	e fails to meet any turation earlier in conditions and the DGY ydrology Indicators (minimum of Surface Water (A1) High Water Table (A) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B) Iron Deposits (B5) Surface Soil Cracks Inundation Visible on Sparsely Vegetated (C) Present? Yes Present? Yes Present? Yes esent? Yes ary fringe)	the growerefore management of one requestion (B6) Acrial Ima Concave S X X	gery (B7) urface (B8) No X No No No	hat apply) Wate 1, 2, Salt Aqua Pres Recca Stun Other	er stained Leaves (BS 4A, and 4B) Crust (B11) atic Invertebrates (B1 rogen Sulfide Odor (C ized Rhizospheres al ence of Reduced Iron ent Iron Reduction in ted or Stressed Plant er (Explain in Remark er (Explain in Remar	a dry season water on during the growing the growing the growing the growing the growing the growing that the growing the growing that the growing that the growing that the growing the growing the growing the growing the growing that the growing the growi	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) X Saturation Visible on Aerial Imagery X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Pepth (inche lemarks: Bample sitchallow sa lemareobic lemary Index lemary Index lemary Index lemareobic lemary Index lemareobic lemary Index lemareobic lemary Index lemareobic	e fails to meet any turation earlier in conditions and the DGY ydrology Indicator icators (minimum of Surface Water (A1) High Water Table (A) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B) Iron Deposits (B5) Surface Soil Cracks Inundation Visible on Sparsely Vegetated (C) Present? Yes Present? Yes esent? Yes	the growerefore management of one requestion (B6) Acrial Ima Concave S X X	gery (B7) urface (B8) No X No No No	hat apply) Wate 1, 2, Salt Aqua Pres Recca Stun Other	er stained Leaves (BS 4A, and 4B) Crust (B11) atic Invertebrates (B1 rogen Sulfide Odor (C ized Rhizospheres al ence of Reduced Iron ent Iron Reduction in ted or Stressed Plant er (Explain in Remark er (Explain in Remar	a dry season water on during the growing the growing the growing the growing the growing the growing that the growing the growing that the growing that the growing that the growing the growing the growing the growing the growing that the growing the growi	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) X Saturation Visible on Aerial Imagery X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Shallow sa anaerobic HYDROLO Vetland Hy Primary Indo X X X Sield Observator Table Saturation Princludes capilla	e fails to meet any turation earlier in conditions and the DGY ydrology Indicators (minimum of Surface Water (A1) High Water Table (A) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B) Iron Deposits (B5) Surface Soil Cracks Inundation Visible on Sparsely Vegetated (C) Present? Yes Present? Yes Present? Yes esent? Yes ary fringe)	the growerefore management of one requestion (B6) Acrial Ima Concave S X X	gery (B7) urface (B8) No X No No No	hat apply) Wate 1, 2, Salt Aqua Pres Recca Stun Other	er stained Leaves (BS 4A, and 4B) Crust (B11) atic Invertebrates (B1 rogen Sulfide Odor (C ized Rhizospheres al ence of Reduced Iron ent Iron Reduction in ted or Stressed Plant er (Explain in Remark er (Explain in Remar	a dry season water on during the growing the growing the growing the growing the growing the growing that the growing the growing that the growing that the growing that the growing the growing the growing the growing the growing that the growing the growi	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) X Saturation Visible on Aerial Imagery X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)

4611

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site:	Flore	nce LWI	I	City/County	: Flo	orence/Lane	Sampling Date	te:	3/11/2010
Applicant/Owner:	City of FI	orence		-		State:	OR	Sampling Po	int: 10
Investigator(s):		AH/SE		Section,	Township, Range:	 -	 ion 22, T 18 Sou		
Landform (hillslope, t						ncave, convex, none):	,	Slope (
Subregion (LRR):	,	LRR	A	Lat	- `	Long:		Datu	
Soil Map Unit Name:				Dune land	·		assification:		
Are climatic/hydrolog		on the site	e typical fo		Yes	X No		explain in Remark	_
Are vegetation			lydrology	significantly o		Are "Normal Circumstan	, ,	•	(3)
	Soil		lydrology			d, explain any answers in Ro	. ,	/ <u> </u>	
Are vegetation			yurology	naturally prot	Jiemanc: Il fieedec	a, explain any answers in re	ciliaiks.)		
SUMMARY OF	FINDINGS	S – Atta	ach site	map showing	sampling poin	nt locations, transec	ts, important	eatures, etc	
Hydrophytic Vegetati	ion Present?	Yes	X	No	Is Sampled A	roo within			
Hydric Soil Present?		Yes	Х	No	_ a Wetlai		X	No	
Wetland Hydrology F	Present?	Yes	Х	No	_				
Remarks:					<u> </u>				
				-					
VEGETATION -	· Use scie	ntific n		-		In			
			absolu % cov		Indicator	Dominance Test wor	rksneet:		
Tree Stratum (plot	t size:	30)	<u>% cov</u>	er Species?	Status	Number of Dominant Spe	cies		
1 Alnus rubra			10	х	FAC	That are OBL, FACW, or		5	(A)
2 Salix sp.			40	X	(FAC to FACW	•			(,
3					_ `	Total Number of Dominar	nt		
4						Species Across All Strata	ı	6	(B)
			50	= Total Cove	r				
Sapling/Shrub Stratu	ım (plot size	e: 5)			Percent of Dominant Spe	cies		
1 Rubus specta	**		′ 10	X	FAC	That are OBL, FACW, or		83%	(A/B)
2 Rubus discol			3	x	FACU				``
3						Prevalence Index Wo	orksheet:		
4						Total % Cover of	Multiply	y by:	
5						OBL Species	x 1	1 =0	
			13	= Total Cove	r	FACW species		2 = 0	
	. .:	.				FAC Species	x3		
Herb Stratum (plot 1 Equisetum ar	t size: vense	5)) 25	v	FAC	FACU Species	X		
2 Carex unilate			35 15	x	FACW	UPL Species Column Totals	0 (A)	5 = 0	(B)
3 Carex obnup			10		OBL	Columni Totals	(A)		(B)
4						Prevalence Index =	B/A =	#DIV/0!	
5									
6						Hydrophytic Vegetat	ion Indicators:		
7							Dominance Test is	>50%	
8							Prevalence Index i	$s \le 3.0^{1}$	
			60	= Total Cove	r		Morphological Ada	ptations ¹ (provide	supporting
							data in Remarks o	• .	heet)
Woody Vine Stratum	(plot size:		_)			<u> </u>	Wetland Non-Vaso		1
1							Problematic Hydro	pnytic Vegetation	ı (Expiain)
2				- T-4-1-0:		1 Indicators of hydric acil a	and wetland budgets	nav must be pres	ent unless
			0	= Total Cove	Γ	¹ Indicators of hydric soil a	ina weliana nyarok	yy must be pres	ent, unless
						disturbed of problematic.			
						disturbed or problematic. Hydrophytic			
% Bare Ground in He	erb Stratum		30	_		•	Yes	<u>{ </u>	No

Additional wetland vegetation: 2 Salix sp., Gaultheria shallon, Polystichum munitum, Cytisus scoparius, Rubus ursinus, Lonicera involucrata, Pinus contorta, Lotus corniculatus, Myrica californica.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Sandy Redox (S5) Black Histosol (A2) Stripped Matrix (S6) Black Histos (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Pepleted Below Dark Surface (A11) Depleted Matrix (F2) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Sandy Mucky Mineral (F1) Sandy Mucky Mineral (F1) Sandy Mucky Mineral (F1) Sandy Mucky Mineral (F1) Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) Pepleted Dark Surface (F7) Again Gleyed Matrix (S4) Redox Depressions (F8) Proper Soil Present): Type: None Depth (inches): None Depth (inches): Sample site fails to meet any specific hydric soil indicator. However, saturation into mid-summer indicates that extended periods of can be presumed. Two weeks of saturation during the growing season is sufficient to develop anaerobic conditions and therefore medefinition of a hydric soil. HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more surface) Surface Water (A1) Water stained Leaves (B9) (Except MLRA Water stained Leaves (B9) (Except MLRA Water stained Leaves (B9) (Except MLRA Aligh Water Table (A2) Aligh Water Table (A2) Aquatic Invertebrates (B13) Depression (B13) Privaceson Water Table Sediment Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Geomorphic Position (C4) Prift Deposits (B3) Aquatic Invertebrates (B10) (LRRA) Redox Depression (C4) Agai Mat or Crust (B4) Presence of Reduced Iron (C4) Surface Water (A1) Redox Derived Wetland (D3) Redox Derived Wetland (D3) Redox Derived Water (A1) Redox Deri				PHS #	4611				Sampling Point:	10
Color (moist) % Color (moist) % Type Loc Treature Remarks	rofile Descrip	ption: (Describe to	the depth	needed to docume	ent the indicat	tor or con	firm the abse	nce of indicators.)		
Syrg 2.572 100 Sandy Loam Sandy Loam Sandy Loam Syrg 2.572 100 Syrg 2.573 98 10YR 4/6 2 C M Sand filine Sand Syrg 2.573 Syrg 2.573 Syrg 2.573 Syrg 2.573 Syrg 2.573 Syrg 2.573 Syrg 3 Syrg 2.573 Syrg 2	•			<u> </u>			12			
3-12 SY 5/3 98 10YR 4/6 2 C M Sand fine 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, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, GS=Covered or Coated Sand Grains. Type: C=Concentration, D=Depletion, RM=Reduced Matrix, GS=Covered or Coated Sand Grains. Type: Shipped Matrix (SS) Sandy Redox (SS) Sandy Redox (SS) Sandy Macky Mineral (T1) Depletid Matrix (F2) Depletid Matrix (F2) Sandy Macky Mineral (S1) Sandy Macky Mineral (S1) Sandy Macky Mineral (S1) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Redox Depr				Color (moist)	<u></u> %	Туре	LOC		Remarks	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. **Location: PL=Pore Lining, M=Matrix Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted.) Historic Soil Indicators (Applicable to all LRRs, unless otherwise noted.) Historic Expedent (A2) Shipped Matrix (SB) Black Histo (A3) Loarny Mucky Mineral (F1)(except MLRA 1) Thick Dark Surface (A12) Depleted Black Dark Surface (A12) Sandy Mucky Mineral (F1)(except MLRA 1) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Thick Dark Surface (A12) Redox Dark Surface (F8) Probleted Dark Surface (F8) **Indicators of hydrophytic vegetation: hydrology must be present, unless of problematic. **Restrictive Layer (if present):** Type: None Depleted Obarks Surface (F8) **Problematic Soil Present? Yes X No_ Bepth non-bes): Hydric Soil Present? Yes X No_ Bepth non-bes): HYDROLOGY Water stained Leeves (IS9) (Except MLRA (MLRA) (MLRA); A4, and 48) X Seturation (A3) Surface Water (A1) X Seturation (A3) Salk Crust (B11) Drainage Patterns (B10) Algal Mat or Crust (B4) Presence of Reduced fron (C4) Sharped Vater Posent? Yes X No_ Depth (Inches): None Depth (Inches): Surface Water (A1) Agalt Nator Crust (B4) Presence of Reduced fron (C4) Sharped Water Posent? Yes X No_ Depth (Inches): Surface Nater Posent? Yes X No_ Depth (Inches): Surface Nater Posent? Yes X No_ Depth (Inches): Yes X										
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histoc Spindon (A2) Loamy Mucky Mineral (F1)(except MLRA 1) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A12) Sandy Redox Dark Surface (F1) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Proper Redox Dark Surface (F7) Proper Popht (inches): None Hydric Soil Present? Yes X No Redox Dark Surface (F7) Hydric Soil Present? Yes X No Remarks: Sandy Selved Matrix (S4) Redox Dark Surface (F7) Hydric Soil Present? Yes X No Remarks: Sand be presumed. Two weeks of saturation during the growing season is sufficient to develop anaerobic conditions and therefore metrinition of a hydric soil. HYDROLOGY Wetter stained Leaves (89) (Except MLRA Hydric Soil Present? Yes X No Surface Water (A1) Water stained Leaves (89) (Except MLRA High Water Table (A2) Salt Gruss (B11) Drainage Patterns (B10) Secondary Indicators (2 or more surface (B11) Drainage Patterns (B10) Mider Marks (B1) Aquatic Invertebrates (B13) Dry Season Water Table Sediment Deposits (B2) Hydrogen Sulfice Otor (C1) Saturation (Na) Sediment Deposits (B3) Oddized Rhizsophers along Living Roots (C3) Sediment Deposits (B3) Oddized Rhizsophers along Living Roots (C3) Saturation (Na) Frost-Heave Hummock Sparsely Vegetated Concave Surface (B8) Field Observations: Wetter Table Present? Yes X No Depth (inches): 5 Wettand Hydrology Present? Yes X No Depth (inches): 5 Surface Water Present? Yes X No Depth (inches): 5 Surface Board Present? Yes X No Depth (inches): 5 Depth (inches): 6 Depth (inches): 6 Depth (inches): 7 Depth (inches): 6 Depth (inches): 7 Depth (inches):	3-12	5Y 5/3	98	10YR 4/6		<u> </u>	M	Sand	fine	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosoi (A1) Sandy Redox (S5) 2 cm Muck (A10) Histosoi (A1) Sandy Redox (S5) 2 cm Muck (A10) Histosoi (A1) Sandy Redox (S5) 2 cm Muck (A10) Histosoi (A1) Sandy Redox (S5) 2 cm Muck (A10) Hydrogen Suifide (A4) Loarry Mucky Mineral (F1) (except MLRA 1) X Other (explain in Remark Hydrogen Suifide (A4) Depleted Matrix (F2) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Depleted Below Dark Surface (A12) Redox Dark Surface (F7) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Problematic Restrictive Layer (if present): Westerictive Layer (if present): Wester stained Leaves (B9) (Except MLRA Water stained Leav										
Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Sol										
Indicators: (Applicable to all LRRs, unless otherwise noted.)										
Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Sol										
Secondary Seco										
Indicators: (Applicable to all LRRs, unless otherwise noted.)										
Histosol (A1) Histo Epipedon (A2) Stripped Matrix (S6) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Thick Dark Surface (A11) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (F1) (except MLRA 1) Thick Dark Surface (A12) Sandy Mucky Mineral (F1) (except MLRA 1) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Redox Dark Surface (F6) Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) Inydrology must be present, unless of sandy Gleyed Matrix (S4) Redox Dark Surface (F7) Problematic. Redox Depressions (F8) Redox Depression (F8	Гуре: C=Conc	entration, D=Depleti	on, RM=Re	educed Matrix, CS=	Covered or Co	oated Sand	d Grains.		² Location: PL=Pore Lining, M=Matrix.	
Histic Epipedon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) Hydrogen Sulfide (A4) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Redox Dark Surface (F5) Sandy Gleyed Matrix (S4) Redox Dark Surface (F7) Probleted Bark Surface (F7) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Redox Depleted Dark Surface (F7) Redox Dark Surface (F7) Probleted Bark Surface (F7) Problematic. Interpretable (A2) Problematic. Probleted Bark Surface (F7) Problematic. Interpretable (A2) Problematic. Interpretable (A2) Water Matrix (B4) Water Stained Leaves (B9) (Except MLRA High Water Table (A2) Water Matrix (B4) Water Matrix (B4) Water Stained Leaves (B9) (Except MLRA Water Stained Leaves (B9) (Except MLRA Water Stained Leaves (B9) Water Marks (B1) Secondary Indicators (20 or more Stained Leaves (B9) (Except MLRA Water Stained Leaves (B9) Water Marks (B1) Water Marks (B1) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Satitude Office (C1) Sediment Deposits (B3) Ovidized Rhizospheres along Living Roots (C3) Geomorphic Position (C4) Shallow Aquatar (Novel C1) Shallow Aquatar (Novel C1) Shallow Aquatar (Novel C1) Surface Soil Cracks (B6) Surface Water Freent? Yes X No Depth (inches): Very Season Water (A8) Water Marks (B1) Sparsely Vegetated Concave Surface (B8) Presence of Reduced Iron (C4) Sparsely Vegetated Concave Surface (B8) Wetland Hydrology Present? Ves X No Depth (inches): Ves X No Depth (inche	lydric Soil I	ndicators: (Appl	icable to	all LRRs, unles	s otherwise	noted.)		Indica	ators for Problematic Hydric Soils ³ :	
Black Histic (A3) Loamy Mucky Mineral (F1) (except MLRA 1) X Other (explain in Remain Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2)	ŀ	Histosol (A1)			Sar	ndy Redox	(S5)		2 cm Muck (A10)	
Hydrogen Suffide (A4) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A12) Pereleted Matrix (F3) Pereleted Matrix (F3) Pereleted Matrix (F3) Pereleted Dark Surface (F6) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Pereleted Dark Surface (F7) Pereleted Dark Surface (F8) Pereleted Dark Surfa	ŀ	Histic Epipedon (A2)			Stri	ipped Matri	rix (S6)		Red Parent Material (TF2)	
Depleted Below Dank Surface (A11) Thick Dank Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Redox Dank Surface (F6) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Hydric Soil Present? Yes X No mample site falls to meet any specific hydric soil indicator. However, saturation into mid-summer indicates that extended periods of an be presumed. Two weeks of saturation during the growing season is sufficient to develop anaerobic conditions and therefore methicition of a hydric soil. HyDROLOGY	F	Black Histic (A3)			Loa	amy Mucky	Mineral (F1)	except MLRA 1)	X Other (explain in Remarks)	
Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Redox Dark Surface (F6) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Redox Depressions (F8) Redox Depressions (F8) Redox Depressions (F8) Hydric Soil Present? Yes X Nome		Hydrogen Sulfide (A4	1)		Loa	amy Gleyed	d Matrix (F2)			
Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sestrictive Layer (if present): Popeleted Dark Surface (F7) Popeleted Dark Surface (F8) Popeleted Dark Surface (F7) Popeleted Dark Surface (F8) Popeleted Dark Surface (F7) Popeleted Dark Surface (F8) Popeleted Dark Surface (F7) Popeleted Dark Surface (F8) Popeleted Dark S		,	•	A11)						
Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) hydrology must be present, unless of problematic. Sandy Gleyed Matrix (S4) Redox Depressions (F8) Problematic. Redox Depressions (F8) Problematic Problematic. Redox Depressions (F8) Problematic Problematic Problematics (P7) Problematic Prob		·	•	,		•				
Sandy Gleyed Matrix (S4) Redox Depressions (F8) problematic. Restrictive Layer (if present):			·						³ Indicators of hydrophytic vegetation and v	
restrictive Layer (if present): Specific (inches):						•	` ′		hydrology must be present, unless disturt	bed or
repth (inches):						чем верге	0010110 (1 0)	_	problematic.	
Petland Hydrology Indicators: rimary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or more Surface Water (A1) High Water Table (A2) Naturation (A3) Salt Crust (B11) Paquatic Invertebrates (B13) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Inagery (B7) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Indicators (2 or more Water stained Leaves (B9) (Except MLRA Water stained Leaves (B9) (Except MLRA Mater stained Leaves (B19) (Except MLRA Mater stained Leaves (B19) (Except MLRA Mater stained Leaves (B19) (B1) Drainge Patterns (B10 Presence of Reduced Iron (C1) Saturation Present? Yes No Yes No Yes No No Depth (inches): 12 Wetland Hydrology Present? Yes X No Service Stained Inches (B10) (Inches): 12 Yes X No Secondary Indicators (2 or more stained Except MLRA Mater stained Leaves (B10) (Except MLRA Mater stained Leaves (B10) (Except MLRA Mater stained Leaves (B10) (CI) Saturation Present? Yes X No Depth (inches): 12 Wetland Hydrology Present? Yes X No Secondary Indicators	emarks: ample site	fails to meet any	-	-				mid-summer ind	icates that extended periods of satu	
Surface Water (A1) Water stained Leaves (B9) (Except MLRA Water stained Leaves (BY) X High Water Table (A2) 1, 2, 4A, and 4B) Water Marks (B1) Water Marks (B1) Salt Crust (B11) Porainage Patterns (B10 Aquatic Invertebrates (B13) Dry-Season Water Table Sediment Deposits (B2) Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Wetland Hydrology Present? Yes X No Depth (inches): atter Table Present? Yes X No Depth (inches): Surface Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	emarks: ample site an be presi efinition of	fails to meet any umed. Two week a hydric soil.	-	-				mid-summer ind	icates that extended periods of satu	
X High Water Table (A2)	emarks: cample site an be presi efinition of	fails to meet any umed. Two week a hydric soil. GY	s of satu	-				mid-summer ind	icates that extended periods of satu	
X Saturation (A3) Salt Crust (B11) Drainage Patterns (B10 Water Marks (B1) Aquatic Invertebrates (B13) Dry-Season Water Table Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Saturation Visible on Ae Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) Geomorphic Position (D Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Iron Deposits (B5) Recent Iron Reduction in Plowed Soils (C6) X Fac-Neutral Test (D5) Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds (D6) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Frost-Heave Hummocks Sparsely Vegetated Concave Surface (B8) ield Observations: urface Water Present? Yes X No Depth (inches): dater Table Present? Yes X No Depth (inches): 12 Wetland Hydrology Present? Attraction Present? Yes X No Depth (inches): 5 Yes X No No No Depth (inches): 15 Yes X No No No No No Depth (inches): 16 Yes X No	emarks: sample site an be presu efinition of IYDROLOG Vetland Hyc	fails to meet any umed. Two week a hydric soil. GY drology Indicator	s of satu	ration during th	e growing s			mid-summer ind	icates that extended periods of satu	the
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lone	Remarks: Sample site can be presidefinition of HYDROLO Vetland Hyo Primary Indic X X X S S S Sield Observ Surface Water Vater Table President Pres	fails to meet any umed. Two week a hydric soil. GY drology Indicator cators (minimum of Surface Water (A1) digh Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B ron Deposits (B5) Surface Soil Cracks (nundation Visible on Sparsely Vegetated (Covations: Present? Yes sent? Yes	rs: If one required to the second se	gery (B7) urface (B8) NoX	e growing s nat apply) Wa 1, 2 Sal Aqu Hyo Oxi Pre Rec Stu Oth	ater stained 2, 4A, and It Crust (B1 uatic Invert drogen Sul idized Rhiz esence of F cent Iron R unted or Str ner (Explair	d Leaves (B9) (4B) 11) Itebrates (B13) Iffide Odor (C1) zospheres alor Reduced Iron (Reduction in Planessed Plants in Remarks)	mid-summer ind o develop anaero Except MLRA g Living Roots (C3) C4) owed Soils (C6) (D1) (LRR A)	Secondary Indicators (2 or more reconditions and therefore meet water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial I Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LF) Frost-Heave Hummocks (D7) Prology Present?	quired) 2) magery
	Remarks: Sample site can be presudefinition of HYDROLOG Vetland Hydrox X	fails to meet any umed. Two week a hydric soil. GY drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B3) For Deposits (B5) Surface Soil Cracks (nundation Visible on Sparsely Vegetated (Catoria) Vations: Present? Yes	rs: of one req 2) 32) 4) (B6) Aerial Ima Concave S	gery (B7) urface (B8) No X No N	nat apply) Wa 1, 2 Sal Aqu Hyc Oxi Pre Rec Stu Oth Depth (inc	ater stained 2, 4A, and It Crust (B1 uatic Invert drogen Sul idized Rhiz esence of F cent Iron R unted or Str her (Explair	d Leaves (B9) (4B) (11) (d Leaves (B9) (4B) (11) (d Leaves (B13) (B13) (d Leaves (B13) (B13) (d Leaves (B9) (B13) (d Leaves (B13) (d Leaves (B9) (B13) (d Leaves (B13) (d Leav	mid-summer ind o develop anaero Except MLRA g Living Roots (C3) C4) bwed Soils (C6) (D1) (LRR A) Wetland Hyd	Secondary Indicators (2 or more reconditions and therefore meet water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial I Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LF) Frost-Heave Hummocks (D7) Prology Present?	quired) 2) magery
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Project/Site:	Flore	nce LW	/1	_	City/County:	Flo	rence/Lane	Sa	ampling Date:	8/1	11/2010
Applicant/Owner:	City of FI	orence						State: OR	(Sampling Point	:: 11
Investigator(s):		AH/SE			Section, To	ownship, Range:		Section 4,	T 18 South,	R 12 West	
Landform (hillslope, te	errace, etc.:)					Local relief (con	ncave, convex, nor	ne):		Slope (%)):
Subregion (LRR):		LRR	A A		Lat:			Long:		Datum	:
Soil Map Unit Name:			Yaqu	ina loa	amy fine san	ıd		NWI Classificat			
Are climatic/hydrologi	c conditions	on the si				Yes	X	No	(if no, expl	ain in Remarks)	
Are vegetation					=	turbed?	Are "Normal Circ				
Are vegetation											_
		_	,		7,		, , , , , , , , , , , , , , , , , , , ,		,		
SUMMARY OF I	FINDINGS	3 – Att	tach site	map s	showing sa	ampling poin	t locations, tr	ansects, im	portant fea	tures, etc.	
Hydrophytic Vegetation	on Present?	Yes	Х	No		Is Sampled Are	oo within				
Hydric Soil Present?		Yes	Х	No		a Wetlan		Yes X		No	_
Wetland Hydrology Pr	resent?	Yes	Х	No							
Remarks:											
1											
VEGETATION -	Use scie	ntific n		•			- -				
1			absolu		Dominant	Indicator	Dominance To	est workshee	:t:		
Tree Stratum (plot	size:	30	% cove	ei _	Species?	Status	Number of Domir	nant Species			
1 Pinus contorta			.′ 10		X	FAC	That are OBL, FA	•		5	(A)
2	-							,			_(' ')
3			-				Total Number of	Dominant			
4							Species Across A	All Strata:		5	(B)
			10		= Total Cover						_
Sapling/Shrub Stratur	n (nlot size	e· 5)				Percent of Domir	nant Species			
1 Salix sp.	<u></u> (plot 3i2t	<i>.</i>	—′ 15		((FAC to FACW	That are OBL, FA	•		100%	(A/B)
2 Ledum glandu	ılosum		20		X	FACW	1	,			_(/
3 Spiraea dougl			35		Х	FACW	Prevalence In	dex Workshe	et:		
4 Vaccinium ova	atum		15			UPL	Total % Cover of	<u> </u>	Multiply by	<u>":</u>	
5 Crataegus dou	uglasii		5			FAC	OBL Specie	es	x 1 =	0	_
			90	=	= Total Cover		FACW spec	ies	x 2 =	0	_
							E400				
							FAC Specie	-	x 3 =	0	_
	size:)			(540)	FACU Spec	cies	x 4 =	0	- -
1 Festuca sp.			10			(FAC)	FACU Spec	es	x 4 = x 5 =	0	- - -
1 Festuca sp. 2 Juncus balticu	us	<u> </u>	30	<u> </u>	X	FACW	FACU Spec	es	x 4 =	0	(B)
Festuca sp. Juncus balticu Carex obnupta	us		. —	— - — -	X X		FACU Speci UPL Specie Column Tot	es o	x 4 = x 5 =	0 0 0	- - - (B)
Festuca sp. Juncus balticu Garex obnupta	us		30	 		FACW	FACU Speci UPL Specie Column Tot	es	x 4 = x 5 =	0	- - _ (B)
Festuca sp. Juncus balticu Carex obnupta	us		30	 		FACW	FACU Spec UPL Speci Column Tot Prevalence	es als 0	x 4 = x 5 = (A)	0 0 0	(B)
Festuca sp. Juncus balticu Garex obnupta Garex obnupta	us a		30	 		FACW	FACU Speci UPL Specie Column Tot Prevalence	es e	x 4 = x 5 = (A)	0 0 0	- - (B)
Festuca sp. Juncus balticu Garex obnupta Garex obnupta	us		30	 		FACW	FACU Speci UPL Specie Column Tot Prevalence	es e	x 4 = x 5 = (A) #	0 0 0 0	- - _(B)
Festuca sp. Juncus balticu Garex obnupta Garex obnupta Garex obnupta	us a		30	 		FACW	FACU Speci UPL Specie Column Tot Prevalence	eies es el Index =B/A = Vegetation Inc X Domina Prevale	x 4 = x 5 = (A) # dicators: ance Test is >50 ence Index is < 3	0 0 0 0	-
Festuca sp. Juncus balticu Garex obnupta Garex obnupta Garex obnupta	us a		30 25		X	FACW	FACU Speci UPL Specie Column Tot Prevalence	es e	x 4 = x 5 = (A) # dicators: ance Test is >50 ence Index is ≤ 3 ological Adaptat Remarks or on	0 0 0 EDIV/0!	upporting
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Festuca sp. Juncus balticu Garex obnupta Carex obnupta Carex obnupta Moody Vine Stratum 1	us a		30 25		X	FACW	FACU Speci UPL Specie Column Tot Prevalence	es e	x 4 = x 5 = (A) # dicators: ance Test is >50 ence Index is ≤ 30 blogical Adaptat Remarks or on d Non-Vascular	0 0 0 EDIV/0!	upporting et)
Pestuca sp. Juncus balticu Carex obnupta Carex obnupta Substituting the stratum of the strat	us a		30 25 65		X = Total Cover	FACW	FACU Speci UPL Specia Column Tot Prevalence	e Index =B/A = Vegetation Inc X Domina Prevale Morpho data in Wetland Probler	x 4 = x 5 = (A) # dicators: ance Test is >50 ence Index is < 3 ological Adaptat Remarks or on d Non-Vascular matic Hydrophyl	0 0 0 stDIV/0! 0% 3.0¹ tions¹ (provide s a separate she r Plants¹ tic Vegetation¹ (upporting et) Explain)
Festuca sp. Juncus balticu Garex obnupta Carex obnupta Festuca sp. Carex obnupta Carex obnupta Festuca sp. Carex obnupta	us a		30 25		X	FACW	FACU Spec UPL Specia Column Tot Prevalence Hydrophytic \ \frac{1}{2} \displays 1 \dint 1 \displays 1 \displays 1 \displays 1 \displays 1 \displays 1	eses es als 0 e Index =B/A = Vegetation Inc X Domina Prevale Morpho data in Wetland Probler	x 4 = x 5 = (A) # dicators: ance Test is >50 ence Index is < 3 ological Adaptat Remarks or on d Non-Vascular matic Hydrophyl	0 0 0 stDIV/0! 0% 3.0¹ tions¹ (provide s a separate she r Plants¹ tic Vegetation¹ (upporting et) Explain)
Festuca sp. Juncus balticu Garex obnupta Carex obnupta Festuca sp. Carex obnupta Carex obnupta Festuca sp. Carex obnupta	us a		30 25 65		X = Total Cover	FACW	FACU Speci UPL Specia Column Tot Prevalence	eses es als 0 e Index =B/A = Vegetation Inc X Domina Prevale Morpho data in Wetland Probler	x 4 = x 5 = (A) # dicators: ance Test is >50 ence Index is < 3 ological Adaptat Remarks or on d Non-Vascular matic Hydrophyl	0 0 0 stDIV/0! 0% 3.0¹ tions¹ (provide s a separate she r Plants¹ tic Vegetation¹ (upporting et) Explain)
Festuca sp. Juncus balticu Garex obnupta Carex obnupta Festuca sp. Carex obnupta Carex obnupta Festuca sp. Carex obnupta	(plot size:		30 25 65		X = Total Cover	FACW	FACU Spec UPL Specia Column Tot Prevalence Hydrophytic \ \(\) \[\]	es e	x 4 = x 5 = (A) # dicators: ance Test is >50 ence Index is < 3 ological Adaptat Remarks or on d Non-Vascular matic Hydrophyl	0 0 0 stDIV/0! 0% 3.0¹ tions¹ (provide s a separate she r Plants¹ tic Vegetation¹ (upporting et) Explain) t, unless

			PHS #	4611			Sampling Point: 11
	. ,	the depth	needed to docume			sence of indicators.)	
Depth	Matrix		0.1(Redox Fe	atures Type ¹ Loc ²		Power de
(Inches)	Color (moist)	400	Color (moist)	<u></u> %	Type Loc	Texture	Remarks
0-3	10YR 2/1	100	40/5 0/4			Sandy Loam	
3-19	2.5Y 4/3	96	10YR 3/4		C M	Sand	fine to coarse mottles
Type: C=Con	centration, D=Depletion	on, RM=Re	educed Matrix, CS=	Covered or Co	ated Sand Grains.		² Location: PL=Pore Lining, M=Matrix.
lydric Soil	Indicators: (Appli	icable to	all LRRs, unles	s otherwise	noted.)	Indic	ators for Problematic Hydric Soils ³ :
	Histosol (A1)			San	dy Redox (S5)		2 cm Muck (A10)
	Histic Epipedon (A2)			Strip	oped Matrix (S6)		Red Parent Material (TF2)
	Black Histic (A3)			Loa	my Mucky Mineral (F	1)(except MLRA 1)	X Other (explain in Remarks)
	Hydrogen Sulfide (A4	.)		Loa	my Gleyed Matrix (F2	2)	
	Depleted Below Dark	-	A11)		leted Matrix (F3)	,	
	Thick Dark Surface (A	•	,		ox Dark Surface (F6	1	
		•			leted Dark Surface (I		³ Indicators of hydrophytic vegetation and wetland
	Sandy Mucky Minera				,	•	hydrology must be present, unless disturbed or
	Sandy Gleyed Matrix Layer (if present):				ox Depressions (F8)		problematic.
Depth (inche Remarks: Sample site shallow sat	fails to meet any	specific	ing season are	likely. Two v	veeks of saturation		table indicates that extended periods of ing season is sufficient to develop
Depth (inche Remarks: Sample site shallow sat unaerobic c	e fails to meet any uration earlier in conditions and the	specific	hydric soil indi	likely. Two v	veeks of saturation	a dry season water	table indicates that extended periods of
Depth (inche Remarks: Sample site shallow sat anaerobic c	e fails to meet any uration earlier in conditions and the	specific the grow erefore m	hydric soil indi	likely. Two v	veeks of saturation	a dry season water	table indicates that extended periods of
Depth (inche Remarks: Sample site shallow sate anaerobic of HYDROLC Wetland Hy	e fails to meet any uration earlier in conditions and the	specific the grow erefore m	hydric soil indi ing season are neet the definition	likely. Two v on of a hydri	veeks of saturation	a dry season water	table indicates that extended periods of
Depth (inche Remarks: Sample site shallow sat anaerobic o HYDROLC Wetland Hy	e fails to meet any uration earlier in conditions and the OGY drology Indicator	specific the grow erefore m	hydric soil indi ing season are neet the definition	likely. Two von of a hydri	veeks of saturation c soil.	a dry season water on during the grow	table indicates that extended periods of ing season is sufficient to develop Secondary Indicators (2 or more required) X Water stained Leaves (B9)
Depth (inche Remarks: Sample site shallow sate anaerobic of HYDROLC Wetland Hy	e fails to meet any uration earlier in conditions and the DGY drology Indicator cators (minimum o	specific the grow erefore m s: f one req	hydric soil indi ing season are neet the definition	likely. Two von of a hydri	veeks of saturation	a dry season water on during the grow	table indicates that extended periods of ing season is sufficient to develop Secondary Indicators (2 or more required)
Depth (inche Remarks: Sample site shallow sate anaerobic of HYDROLC Wetland Hy	e fails to meet any uration earlier in conditions and the conditions are conditions and the conditions are conditions and the conditions are conditional conditions.	specific the grow erefore m s: f one req	hydric soil indi ing season are neet the definition	nat apply) Wat	veeks of saturation c soil.	a dry season water on during the grow	table indicates that extended periods of ing season is sufficient to develop Secondary Indicators (2 or more required) X Water stained Leaves (B9)
Depth (inche Remarks: Sample site shallow sat anaerobic o HYDROLC Wetland Hy	e fails to meet any uration earlier in a conditions and the conditions and the conditions and the decrease of the conditions and the conditions and the conditions and the conditions and the conditions are conditions and the conditions are conditions and the conditions are conditionally conditions are conditionally conditions are conditionally conditionally conditions are conditionally conditionally conditions are conditionally conditionally conditions are conditionally conditionally conditions.	specific the grow erefore m s: f one req	hydric soil indi ing season are neet the definition	nat apply) Wat 1, 2	veeks of saturation c soil. er stained Leaves (B , 4A, and 4B)	a dry season water on during the grow	Secondary Indicators (2 or more required) X Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)
Depth (inche Remarks: Sample site shallow sat anaerobic o HYDROLC Wetland Hy	e fails to meet any uration earlier in a conditions and the OGY drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3)	specific the grow erefore m s: f one requ	hydric soil indi ing season are neet the definition	nat apply) Wat 1, 2 Salt	er stained Leaves (B, 4A, and 4B) Crust (B11)	a dry season water on during the growing t	Secondary Indicators (2 or more required) X Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) X Dry-Season Water Table (C2)
Depth (inche Remarks: Sample site shallow sat anaerobic o HYDROLC Wetland Hy	e fails to meet any uration earlier in a conditions and the OGY drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3)	specific the grow erefore m s: f one requ	hydric soil indi ing season are neet the definition	nat apply) Wat 1, 2 Aqu Hydri	er stained Leaves (B , 4A, and 4B) Crust (B11) atic Invertebrates (B	a dry season water on during the growing t	Secondary Indicators (2 or more required) X Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) X Dry-Season Water Table (C2)
Depth (inche Remarks: Sample site shallow sat anaerobic o HYDROLC Wetland Hy	e fails to meet any uration earlier in a conditions and the conditions are conditions and the conditions are conditions and the conditions are conditions and the conditions and the conditions are conditions and the conditions are conditions and the conditions are conditions ar	specific the grow erefore m s: f one requ 2)	hydric soil indi ing season are neet the definition	nat apply) Wat 1, 2 Salt Aqu Hyd	er stained Leaves (B , 4A, and 4B) Crust (B11) atic Invertebrates (B	a dry season water on during the growing 9) (Except MLRA	Secondary Indicators (2 or more required) X Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) X Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (
Depth (inche Remarks: Sample site shallow sat anaerobic of HYDROLO Wetland Hy Primary Indi	e fails to meet any uration earlier in a conditions and the conditions are cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3)	specific the grow erefore m s: f one requ 2)	hydric soil indi ing season are neet the definition	nat apply) Wat 1, 2 Salt Aqu Hyd Oxid	er stained Leaves (B., 4A, and 4B) Crust (B11) atic Invertebrates (B. rogen Sulfide Odor (dized Rhizospheres a	a dry season water on during the growing the growing the growing the growing season water 9) (Except MLRA 13) C1) along Living Roots (C3) on (C4)	Secondary Indicators (2 or more required) X Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) X Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2)
Depth (inche Remarks: Sample site shallow sat anaerobic of HYDROLO Wetland Hy Primary Indi	e fails to meet any uration earlier in a conditions and the conditions are conditions and the conditions are conditions and the conditions are conditions are conditions are conditions and the conditions are conditions and the conditions and the conditions are conditions are conditions and the conditions are conditional conditions are conditio	specific the grow erefore m s: f one requ 2)	hydric soil indi ing season are neet the definition	nat apply) Wat 1, 2 Salt Aqu Hyd Oxic Pres	veeks of saturation c soil. eer stained Leaves (B 4A, and 4B) Crust (B11) atic Invertebrates (B rogen Sulfide Odor (dized Rhizospheres a sence of Reduced Irogense soil (B)	a dry season water on during the growing the growing the growing 9) (Except MLRA 13) C1) along Living Roots (C3) on (C4) Plowed Soils (C6)	Secondary Indicators (2 or more required) X Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) X Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3)
Depth (inche Remarks: Sample site shallow sat anaerobic of HYDROLO Wetland Hy Primary Indi	e fails to meet any uration earlier in a conditions and the organization of the organization (A2) and the organization (A3) and the organization (A3) and the organization (A3) are marks (B1) and the organization (B2) and the organization (B3) and the organization (B4) and the o	specific the grow erefore m s: f one requ 2) 32) 4)	hydric soil indi ing season are neet the definition	nat apply) Wat 1, 2 Salt Aqu Hyd Oxid Pres Rec Stur	er stained Leaves (B., 4A, and 4B) Crust (B11) atic Invertebrates (B. rogen Sulfide Odor (dized Rhizospheres assence of Reduced Iron Reduction in	a dry season water on during the growing the growing the growing states of the growing s	Secondary Indicators (2 or more required) X Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) X Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5)
Depth (inche Remarks: Sample site shallow sat anaerobic of HYDROLO Wetland Hy Primary Indi	e fails to meet any uration earlier in a conditions and the conditions are conditions and the conditions are conditions and the conditions and the conditions are conditions and the conditions and the conditions are conditions and the conditions are c	specific the grow erefore m s: f one requ 2) 32) 4) B6) Aerial Ima	hydric soil indi ing season are neet the definition	nat apply) Wat 1, 2 Salt Aqu Hyd Oxid Pres Rec Stur	er stained Leaves (B., 4A, and 4B) Crust (B11) atic Invertebrates (B. rogen Sulfide Odor (dized Rhizospheres asence of Reduced Iroent Iron Reduction inted or Stressed Plan	a dry season water on during the growing the growing the growing states of the growing s	Secondary Indicators (2 or more required) X Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) X Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Depth (inche Remarks: Sample site shallow sat anaerobic of HYDROLO Wetland Hy Primary Indi	e fails to meet any uration earlier in a conditions and the conditions are cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated C	specific the grow erefore m s: f one requ 2) 32) 4) B6) Aerial Ima	hydric soil indi ing season are neet the definition	nat apply) Wat 1, 2 Salt Aqu Hyd Oxid Pres Rec Stur	er stained Leaves (B., 4A, and 4B) Crust (B11) atic Invertebrates (B. rogen Sulfide Odor (dized Rhizospheres asence of Reduced Iroent Iron Reduction inted or Stressed Plan	a dry season water on during the growing the growing the growing states of the growing s	Secondary Indicators (2 or more required) X Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) X Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
shallow sat anaerobic o HYDROLC Wetland Hy Primary Indi	e fails to meet any uration earlier in a conditions and the conditions are conditions and the conditions and the conditions are conditions and the conditions are conditions and the conditions and the conditions are conditions are conditions and the conditions are	specific the grow erefore m s: f one requ 2) 32) 4) B6) Aerial Ima	hydric soil indi ing season are neet the definition	nat apply) Wat 1, 2 Salt Aqu Hyd Oxid Pres Rec Stur	er stained Leaves (B., 4A, and 4B) Crust (B11) atic Invertebrates (B., 4E) rogen Sulfide Odor (dized Rhizospheres a sence of Reduced Ironent Iron Reduction in the dor Stressed Planer (Explain in Remark	a dry season water on during the growing the growing the growing states of the growing s	Secondary Indicators (2 or more required) X Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) X Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
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Depth (inche Remarks: Sample site shallow sate anaerobic of HYDROLO Wetland Hy Primary Indi X Field Obsel Surface Water Water Table F Saturation Pre includes capilla	e fails to meet any uration earlier in a conditions and the conditions are conditions and the conditions and the conditions are conditions and the conditions and the conditions and the conditions are conditions and the conditions and the conditions are conditions and the conditions are	specific the grow erefore mess: f one required as the second of the sec	hydric soil indi ing season are neet the definition uired; check all the gery (B7) urface (B8) No	nat apply) Wat 1, 2 Salt Aqu Hyd Oxic Pres Rec Stur Othe Depth (incl Depth (incl	er stained Leaves (B., 4A, and 4B) Crust (B11) atic Invertebrates (B. rogen Sulfide Odor (dized Rhizospheres assence of Reduced Ironent Iron Reduction in the dor Stressed Planer (Explain in Remarker (Explain in Remarker): hes): hes): 19 hes): 16	a dry season water on during the growing the growing the growing season water on during season water of during season water on during season water on during season water of during season water on during season water of during season water of during season water of during season water of during season water	Secondary Indicators (2 or more required) X Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) X Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
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4611

Project/Site: Florence LW	<u> </u>	City/County:	FI	orence/Lane	Sampling Date:	8/1	1/2010
Applicant/Owner: City of Florence				State:	OR	Sampling Point:	12
Investigator(s): AH/SE		Section, To	wnship, Range:	Sect	ion 24, T 18 South	, R 12 West	
Landform (hillslope, terrace, etc.:)			Local relief (co	ncave, convex, none):		Slope (%):	
Subregion (LRR): LRR	Α	Lat:		Long:		Datum:	
Soil Map Unit Name:	Wald	 lport fine sand			assification:		
Are climatic/hydrologic conditions on the sit			Yes	X No	(if no, expl	lain in Remarks)	
Are vegetation Soil or H		-	turbed?	Are "Normal Circumstan		·	
Are vegetation Soil or H							
				-, -	,		
SUMMARY OF FINDINGS - Att	ach site m	ap showing sa	ampling poir	nt locations, transec	ts, important fea	tures, etc.	
Hydrophytic Vegetation Present? Yes	X	No	Is Sampled A	ree within			
Hydric Soil Present? Yes		No	a Wetla		X	No	
Wetland Hydrology Present? Yes	1 X	No					
Remarks:							
VEGETATION - Use scientific n	•			T			
	absolute	Dominant	Indicator	Dominance Test wo	rksheet:		
Tree Stratum (plot size: 30	% cover	Species?	Status	Number of Dominant Spe	ooloo		
1 Thuja plicata	45	X	FAC	That are OBL, FACW, or		4	(A)
2 Tsuga heterophylla	35		FACU	That are obe, 1710vv, or	17.0.	<u> </u>	(7.1)
3 Pinus contorta	2		FAC	Total Number of Dominar	nt		
4 Myrica californica	20		FACW	Species Across All Strata		7	(B)
	102	= Total Cover					. ,
Sapling/Shrub Stratum (plot size: 5	`	=		Percent of Dominant Spe	veige		
1 Myrica californica	′ 15	X	FACW	That are OBL, FACW, or		57%	(A/B)
2 Gaultheria shallon	40		FACU	That are obe, thow, or		0170	(700)
3				Prevalence Index We	orksheet:		
4				Total % Cover of	Multiply by	<i>/</i> :	
5				OBL Species	x 1 =	0	
	55	= Total Cover		FACW species	x 2 =	0	
	'	_		FAC Species	x 3 =	0	
Herb Stratum (plot size: 5)			FACU Species	x 4 =	0	
1 Lysichiton americanum 2 Gaultheria shallon	30	X	OBL	UPL Species	x 5 =	0	
3 Blechnum spicant	15		FACU	Column Totals	0 (A)	0	(B)
4	20		FAC	Prevalence Index =	.D/A - +	DIV/0!	
5				Frevalence index -	-D/A - #	·DIV/U:	
6				Hydrophytic Vegeta	tion Indicators:		
7					Dominance Test is >5	0%	
8					Prevalence Index is ≤	3.0 ¹	
	65	= Total Cover			Morphological Adapta	tions ¹ (provide su	pporting
		_			data in Remarks or on	a separate shee	t)
Woody Vine Stratum (plot size:	_)				Wetland Non-Vascula		
1					Problematic Hydrophy	rtic Vegetation¹ (E	xplain)
2				1			
	0	= Total Cover		¹ Indicators of hydric soil a disturbed or problematic.		must be present,	unless
				Hydrophytic			
% Bare Ground in Herb Stratum	10			Vegetation Present?	Yes X	No	

Profile Descr	iption: (Describe to t	he depth	needed to docu			ence of indicators.)	
Depth	Matrix			Redox Feature	4 0		
(Inches)	Color (moist)	%	Color (moist)	% Туре	Loc ²	Texture	Remarks
0-3	10YR 2/1	100				Loam	high organic
3-8	7.5YR 2.5/2	100					muck
8-15	10YR 4/1	100				Sand	fine
	- <u></u>						
	<u> </u>						
	<u> </u>						
	. <u> </u>						
	<u> </u>						
Гуре: C=Con	ncentration, D=Depletion	on, RM=Re	educed Matrix, C	S=Covered or Coated	Sand Grains.		² Location: PL=Pore Lining, M=Matrix.
ydric Soil	Indicators: (Appli	cable to	all LRRs, unl	ess otherwise not	ed.)	Indica	ators for Problematic Hydric Soils ³ :
	Histosol (A1)			Sandy F	Redox (S5)		2 cm Muck (A10)
Χ	Histic Epipedon (A2)			Stripped	Matrix (S6)		Red Parent Material (TF2)
	Black Histic (A3)			Loamy N	Mucky Mineral (F1)	(except MLRA 1)	Other (explain in Remarks)
	Hydrogen Sulfide (A4	.)		Loamy (Gleyed Matrix (F2)		
	Depleted Below Dark	Surface (A	A11)	Depleted	d Matrix (F3)		
	Thick Dark Surface (A	A12)		Redox D	Oark Surface (F6)		
	Sandy Mucky Mineral	I (S1)		Depleted	d Dark Surface (F7))	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or
	Sandy Gleyed Matrix	(S4)		Redox D	Depressions (F8)		problematic.
ype: Oepth (inche	s):	N-	one			Hydric Soil Pres	sent? Yes <u>X</u> No
Type: Depth (inchedemarks:	DGY		one			Hydric Soil Pres	sent? Yes X No
ype: Depth (inche emarks: IYDROLO Vetland Hy	DGY /drology Indicator	s:		that apply)		Hydric Soil Pres	
ype: Depth (inche emarks: IYDROLO Vetland Hy	OGY /drology Indicators icators (minimum of	s:		11 37	tained Leaves (B9)		Secondary Indicators (2 or more required)
ype: epth (inche emarks: YDROLC /etland Hy	OGY /drology Indicators icators (minimum of Surface Water (A1)	s: f one req		Water st	ained Leaves (B9)		
ype: epth (inche emarks: YDROLC /etland Hy rimary Indi	OGY /drology Indicators icators (minimum of	s: f one req		Water st	, and 4B)		Secondary Indicators (2 or more required Water stained Leaves (B9)
ype: epth (inche emarks: YDROLC /etland Hy rimary Indi	OGY /drology Indicator: icators (minimum of Surface Water (A1) High Water Table (A2	s: f one req		Water st 1, 2, 4A Salt Cru	, and 4B)	(Except MLRA	Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)
ype: epth (inche emarks: YDROLC /etland Hy rimary Indi	OGY /drology Indicators icators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3)	s: f one requ		Water st 1, 2, 4A, Salt Cru Aquatic	st (B11)	(Except MLRA	Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
ype: epth (inche emarks: YDROLC fetland Hy rimary Indi	DGY /drology Indicators icators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1)	s: f one requ		Water st 1, 2, 4A Salt Cru Aquatic Hydroge	st (B11) Invertebrates (B13) en Sulfide Odor (C1	(Except MLRA	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
ype: epth (inche emarks: YDROLC /etland Hy rimary Indi X X	OGY /drology Indicators icators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B	s: f one requ		Water si 1, 2, 4A Salt Cru Aquatic Hydroge Oxidized	st (B11) Invertebrates (B13) en Sulfide Odor (C1	(Except MLRA))) ng Living Roots (C3)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery
ype: epth (inche emarks: IYDROLC /etland Hy rimary Indi X X	DGY /drology Indicators icators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3)	s: f one requ		Water st 1, 2, 4A Salt Cru Aquatic Hydroge Oxidized Presence	and 4B) st (B11) Invertebrates (B13) en Sulfide Odor (C1 d Rhizospheres alo	(Except MLRA)) ng Living Roots (C3) (C4)	Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2)
ype: lepth (inche emarks: IYDROLO fetland Hy rimary Indi X X	DGY /drology Indicators icators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3) Algal Mat or Crust (B4)	s: f one requ		Water st 1, 2, 4A Salt Cru Aquatic Hydroge Oxidized Presence Recent I	and 4B) st (B11) Invertebrates (B13) en Sulfide Odor (C1 d Rhizospheres aloue of Reduced Iron	(Except MLRA)) ng Living Roots (C3) (C4) lowed Soils (C6)	Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imager Geomorphic Position (D2) Shallow Aquitard (D3)
ype: epth (inche emarks: YDROLC /etland Hy rimary Indi X X	DGY /drology Indicators icators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5)	s: f one request 2) 32) 4) B6)	uired; check al	Water st 1, 2, 4A Salt Cru Aquatic Hydroge Oxidized Presenc Recent I	and 4B) st (B11) Invertebrates (B13) sn Sulfide Odor (C1 d Rhizospheres aloue of Reduced Iron (Iron Reduction in P	(Except MLRA))) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A)	Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imager Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5)
ype: epth (inche emarks: YDROLC /etland Hy rimary Indi X X	OGY rdrology Indicators icators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) Surface Soil Cracks (I	s: f one required: 2) 32) 4) B6) Aerial Ima	uired; check al	Water st 1, 2, 4A Salt Cru Aquatic Hydroge Oxidized Presenc Recent I	and 4B) st (B11) Invertebrates (B13) en Sulfide Odor (C1 d Rhizospheres aloue of Reduced Iron eron Reduction in P or Stressed Plants	(Except MLRA))) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A)	Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imager Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
ype: lepth (inche emarks: IYDROLC Vetland Hy rimary Indi X X	DGY /drology Indicators icators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) Surface Soil Cracks (I Inundation Visible on Sparsely Vegetated C	s: f one required: 2) 32) 4) B6) Aerial Ima	uired; check al	Water st 1, 2, 4A Salt Cru Aquatic Hydroge Oxidized Presenc Recent I	and 4B) st (B11) Invertebrates (B13) en Sulfide Odor (C1 d Rhizospheres aloue of Reduced Iron eron Reduction in P or Stressed Plants	(Except MLRA))) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A)	Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imager Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
ype: epth (inche emarks: YDROLC /etland Hy rimary Indi X X	JOGY /drology Indicators icators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) Surface Soil Cracks (I Inundation Visible on Sparsely Vegetated Corvations:	s: f one required: 2) 32) 4) B6) Aerial Ima	uired; check al	Water st 1, 2, 4A Salt Cru Aquatic Hydroge Oxidized Presenc Recent I	and 4B) st (B11) Invertebrates (B13) en Sulfide Odor (C1 d Rhizospheres alore e of Reduced Iron Iron Reduction in P or Stressed Plants explain in Remarks)	(Except MLRA))) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A)	Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
ype: lepth (inche emarks: IYDROLC Vetland Hy rimary Indi X X	JOGY /drology Indicators icators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) Surface Soil Cracks (I Inundation Visible on Sparsely Vegetated Corvations: r Present? Yes	s: f one required: 2) 32) 4) B6) Aerial Ima	uired; check al gery (B7) urface (B8)	Water st 1, 2, 4A, Salt Cru Aquatic Hydroge Oxidized Presence Recent I Stunted Other (E	st (B11) Invertebrates (B13) In Sulfide Odor (C1 Id Rhizospheres alone of Reduced Iron Iron Reduction in P or Stressed Plants Explain in Remarks)	(Except MLRA)) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Primary Indi X X X Sield Observator Table Fraturation Pre-	DGY /drology Indicators icators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) Surface Soil Cracks (I Inundation Visible on Sparsely Vegetated C rvations: r Present? Yes esent? Yes	s: f one required 2) 32) 4) B6) Aerial Ima Concave Si	uired; check al gery (B7) urface (B8)	Water st 1, 2, 4A Salt Cru Aquatic Hydroge Oxidized Presence Recent I Stunted Other (E	and 4B) st (B11) Invertebrates (B13) en Sulfide Odor (C1 d Rhizospheres alore of Reduced Iron eron Reduction in P or Stressed Plants explain in Remarks)	(Except MLRA)) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Field Obser Surface Water Vater Table F Saturation Pre Includes capilla	DGY /drology Indicators icators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) Surface Soil Cracks (I Inundation Visible on Sparsely Vegetated C rvations: r Present? Yes esent? Yes	s: f one required: 2) 32) 4) B6) Aerial Ima Concave Si X X	gery (B7) urface (B8) No X No No	Water st 1, 2, 4A Salt Cru Aquatic Hydroge Oxidized Presence Recent I Stunted Other (E	and 4B) st (B11) Invertebrates (B13) en Sulfide Odor (C1 d Rhizospheres alore of Reduced Iron Iron Reduction in P or Stressed Plants explain in Remarks)	(Except MLRA))) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A) Wetland Hyd	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Type: Depth (inche Remarks: HYDROLC Vetland Hy Primary Indi X X X Field Observation Presentuation Presentuatio	JOGY /drology Indicators icators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) Surface Soil Cracks (I Inundation Visible on Sparsely Vegetated Corvations: r Present? Yes	s: f one required: 2) 32) 4) B6) Aerial Ima Concave Si X X	gery (B7) urface (B8) No X No No	Water st 1, 2, 4A Salt Cru Aquatic Hydroge Oxidized Presence Recent I Stunted Other (E	and 4B) st (B11) Invertebrates (B13) en Sulfide Odor (C1 d Rhizospheres alore of Reduced Iron Iron Reduction in P or Stressed Plants explain in Remarks)	(Except MLRA))) ng Living Roots (C3) (C4) lowed Soils (C6) (D1) (LRR A) Wetland Hyd	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)

IS# 4680

oject/Site:	Brandt Prope	erty	City/County:	Flo	orence/Lane	Sampling Date:	7/6/	/2010
plicant/Owner:	Craig & Kathlee	n Brandt			State:	OR	Sampling Point:	13
vestigator(s):	AH/CF	₹	Section, To	wnship, Range:	Sect	ion 14, T 18 South	, R 12 West	
ndform (hillslope, te	errace, etc.:)	toe of slope	e	Local relief (co	ncave, convex, none):	none	Slope (%):	< 20
bregion (LRR):	LRF	R A	Lat:	44.00	98 Long:	124.0865	Datum:	DD.DD
il Map Unit Name:		Netarts	fine sand		NWI CI	assification:	None	
e climatic/hydrologi	c conditions on the s	site typical for this tin	ne of year?	Yes	X No	(if no, exp	lain in Remarks)	
e vegetation	Soil or	Hydrologys	significantly dist	urbed?	Are "Normal Circumstar	ces" present? (Y/N)	ΥΥ	
vegetation	Soil or	Hydrology r	naturally proble	matic? If needed	d, explain any answers in R	emarks.)		
			showing sa	ımpling poin T	nt locations, transec	ts, important fea	itures, etc.	
drophytic Vegetation	on Present? Yes	No _	X	Is Sampled A	rea within			
dric Soil Present?	Yes	No _	Х	a Wetla			No <u>X</u>	
tland Hydrology Pr	resent? Yes	No _	X					
marks:				•				
CETATION	llaa aalamtifia .	nomes of plant	.					
GETATION -	Use scientific I	absolute	Dominant	Indicator	Dominance Test wo	rkshoot:		
		% cover	Species?	Status	Dominance rest wo	resilect.		
e Stratum (plot	size: 30)	орос.ост		Number of Dominant Spe	ecies		
Pinus contorta	<u></u> а	5	X	FAC	That are OBL, FACW, or		2	(A)
								. ,
					Total Number of Domina	nt		
					Species Across All Strata	ı:	5	(B)
		5 =	= Total Cover				_	
oling/Shrub Stratur	m (plot size: 5)			Percent of Dominant Spe	ecies		
Gaultheria sha		′ 	X	FACU	That are OBL, FACW, o		40%	(A/B)
Rhamnus purs		20		FAC				()
Ledum glandu		30	Х	FACW	Prevalence Index W	orksheet:		
Spiraea dougl	asii	3		FACW	Total % Cover of	Multiply by	<u>/:</u>	
Vaccinium ova	atum	30	Х	UPL	OBL Species	x 1 =	0	
		133 =	= Total Cover		FACW species	x 2 =	0	
					FAC Species	x 3 =	0	
<u>b Stratum</u> (plot Polystichum n		_)			FACU Species	x 4 =	0	
Polystichum	numum	15	Х	FACU	UPL Species	x 5 =		
		 -			Column Totals	0 (A)	0	(B)
					Dravalance Index	.D/A - 4	DIV/0!	
					Prevalence Index =	-B/A =	FDIV/U:	
					Hydrophytic Vegeta	tion Indicators:		
						Dominance Test is >5	0%	
						Prevalence Index is ≤		
		15 =	= Total Cover			Morphological Adapta	tions ¹ (provide sup	oporting
						data in Remarks or or	a separate sheet)
ody Vine Stratum	(plot size:)				Wetland Non-Vascula	r Plants ¹	
						Problematic Hydrophy	rtic Vegetation ¹ (E	xplain)
		=	= Total Cover		¹ Indicators of hydric soil		must be present,	unless
					disturbed or problematic. Hydrophytic			
						.,		
Bare Ground in He	rb Stratum				Vegetation	Yes	No	Х

-										
	otion: (Describe to t	the depth	needed to	docume			nfirm the abse	nce of indicators.)		
Depth (Inches)	Color (moist)	%	Color (ı	moist)	Redo:	Features Type ¹	Loc ²	Texture	Remarks	
0-10	10YR 2/1	100	10100	niolot)	70			loam	loamy duff	
10-18	10YR 2/2	100						Sand	lounly dun	
Type: C=Conc	entration, D=Depletion	on, RM=Re	educed Ma	atrix, CS=	Covered o	Coated Sa	nd Grains.		² Location: PL=Pore Lining, M=Matr	ix.
lydric Soil I	ndicators: (Appli	icable to	all LRRs	s, unles	otherw	ise noted.)	Indica	ators for Problematic Hydric S	ioils ³ :
	Histosol (A1)					Sandy Redo	x (S5)		2 cm Muck (A10)	
	Histic Epipedon (A2)					Stripped Ma	trix (S6)		Red Parent Material (TF2)
E	Black Histic (A3)					Loamy Mucl	ky Mineral (F1)	except MLRA 1)	Other (explain in Rem	arks)
	Hydrogen Sulfide (A4	-)				Loamy Gley	ed Matrix (F2)			
	Depleted Below Dark	Surface (A	\11)			Depleted Ma	atrix (F3)			
Т	hick Dark Surface (A	A12)				Redox Dark	Surface (F6)		31	
s	Sandy Mucky Mineral	I (S1)				Depleted Da	rk Surface (F7)		³ Indicators of hydrophytic vegetation hydrology must be present, unless	
8	Sandy Gleyed Matrix	(S4)				Redox Depr	essions (F8)		problematic.	
ype: epth (inches)):	n	one			-		Hydric Soil Pres	ent? Yes No	X
ype: Depth (inches) emarks:		ne	one			-		Hydric Soil Pres	eent? Yes No	X
Type: Depth (inches) Remarks: HYDROLOG Vetland Hyd	GY drology Indicator	s:				-		Hydric Soil Pres		
Type: Depth (inches)	GY drology Indicator ators (minimum o	s:		eck all th					Secondary Indicators (2 or mo	
ype: epth (inches) emarks: YDROLOG /etland Hyd rimary Indic	GY drology Indicator ators (minimum o	s: f one req		eck all th			ed Leaves (B9) (ore required)
ype: epth (inches) emarks: YDROLOG /etland Hyd rimary Indic	GY drology Indicator ators (minimum o	s: f one req		eck all th		Water staine	d 4B)		Secondary Indicators (2 or mo	ore required) (B9) 4B)
ype: epth (inches) emarks: YDROLOG /etland Hyd rimary Indic	GY drology Indicator ators (minimum of Surface Water (A1) digh Water Table (A2	s: f one req		eck all th		Water staine 1, 2, 4A, and Salt Crust (E	d 4B)	Except MLRA	Secondary Indicators (2 or mo	ore required) (B9) 4B)
ype: epth (inches) emarks: YDROLOG /etland Hyd rimary Indic	GY Irology Indicator ators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3)	s: f one requ		eck all th		Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve	d 4B) 311)	Except MLRA	Secondary Indicators (2 or mo Water stained Leaves (MLRA1, 2, 4A, and Drainage Patterns (Br	ore required) (B9) 4B) (10) ble (C2)
ype: epth (inches) emarks: YDROLOG /etland Hyd rimary Indic S H S V	GY drology Indicator ators (minimum of Surface Water (A1) digh Water Table (A2 Saturation (A3) Water Marks (B1)	s: f one requ		eck all th		Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen S	d 4B) 311) rtebrates (B13) ulfide Odor (C1)	Except MLRA	Secondary Indicators (2 or mo Water stained Leaves (MLRA1, 2, 4A, and Drainage Patterns (B'	ore required) (B9) 4B) 10) ble (C2) Aerial Imagery
epth (inches) emarks: YDROLOG /etland Hyd rimary Indic S V S V S	GY drology Indicator ators (minimum of Surface Water (A1) digh Water Table (A2 Saturation (A3) Vater Marks (B1) Sediment Deposits (B	s: f one requ		eck all th		Water staine 1, 2, 4A, and Salt Crust (E Aquatic Invel Hydrogen S Oxidized Rh	d 4B) 311) rtebrates (B13) ulfide Odor (C1)	Except MLRA	Secondary Indicators (2 or mo Water stained Leaves (MLRA1, 2, 4A, and Drainage Patterns (B' Dry-Season Water Ta	ore required) (B9) 4B) 10) ble (C2) Aerial Imagery (D2)
ype: Pepth (inches) Pemarks: IYDROLOG Vetland Hyd Irimary Indic S V S V S C A	GY drology Indicator ators (minimum of Surface Water (A1) digh Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B Orift Deposits (B3)	s: f one requ		eck all th		Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of	d 4B) 311) rtebrates (B13) ulfide Odor (C1) izospheres alon Reduced Iron (6	Except MLRA	Secondary Indicators (2 or mo Water stained Leaves (MLRA1, 2, 4A, and Drainage Patterns (B' Dry-Season Water Ta Saturation Visible on a Geomorphic Position	ore required) (B9) 4B) 10) ble (C2) Aerial Imagery (D2)
Primary Indic	GY Irology Indicator Lators (minimum of Burface Water (A1) High Water Table (A2 Baturation (A3) Water Marks (B1) Bediment Deposits (B3) Algal Mat or Crust (B4)	s: f one requ 2) 32)		eck all th		Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron	d 4B) 311) rtebrates (B13) ulfide Odor (C1) izospheres alon Reduced Iron (6	Except MLRA g Living Roots (C3) C4) owed Soils (C6)	Secondary Indicators (2 or mo Water stained Leaves (MLRA1, 2, 4A, and Drainage Patterns (Br Dry-Season Water Ta Saturation Visible on a Geomorphic Position Shallow Aquitard (D3)	ore required) (B9) 4B) (I0) ble (C2) Aerial Imagery (D2)
emarks: SYDROLOG Vetland Hyd Primary Indic S V S S S S S S S S S S S S S S S S S	GY drology Indicator ators (minimum of Surface Water (A1) digh Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 ron Deposits (B5)	s: f one requal 2) 32) 4)	uired; che	eck all th		Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S	d 4B) state (B13) ulfide Odor (C1) izospheres alon Reduced Iron (G) Reduction in Pla	Except MLRA g Living Roots (C3) C4) owed Soils (C6)	Secondary Indicators (2 or mo Water stained Leaves (MLRA1, 2, 4A, and Drainage Patterns (B' Dry-Season Water Ta Saturation Visible on Geomorphic Position Shallow Aquitard (D3)	ore required) (B9) 4B) (I0) ble (C2) Aerial Imagery (D2)
lype: Pepth (inches) Pemarks: IYDROLOG Vetland Hyd Primary Indic S S II II S II S S S S	GY drology Indicator ators (minimum of Surface Water (A1) digh Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Fron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated (Interpretation (A)	s: f one required: 2) 32) 4) B6) Aerial Ima	uired; che			Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S	d 4B) state (B13) ulfide Odor (C1) izospheres alon Reduced Iron (C1) Reduction in Plot tressed Plants (C1)	Except MLRA g Living Roots (C3) C4) owed Soils (C6)	Secondary Indicators (2 or moderate Mater stained Leaves (MLRA1, 2, 4A, and Drainage Patterns (Branch Dry-Season Water Tasaturation Visible on Geomorphic Position Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (I	ore required) (B9) 4B) (I0) ble (C2) Aerial Imagery (D2)
ype: lepth (inches) lemarks: IYDROLOG Vetland Hyd rimary Indic S IV S I	GY drology Indicator sators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Vater Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 ron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated Covations:	s: f one required: 2) 32) 4) B6) Aerial Ima	uired; che gery (B7) urface (B8)		Water stains 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Expla	d 4B) state (B13) ulfide Odor (C1) izospheres alon Reduced Iron (C1) Reduction in Plot tressed Plants (C1)	Except MLRA g Living Roots (C3) C4) owed Soils (C6)	Secondary Indicators (2 or moderate Mater stained Leaves (MLRA1, 2, 4A, and Drainage Patterns (Branch Dry-Season Water Tasaturation Visible on Geomorphic Position Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (I	ore required) (B9) 4B) (I0) ble (C2) Aerial Imagery (D2)
Primary Indic	GY drology Indicator ators (minimum of curface Water (A1) digh Water Table (A2) Saturation (A3) Vater Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) ron Deposits (B5) Surface Soil Cracks (inundation Visible on Sparsely Vegetated Corations: Present? Yes	s: f one required: 2) 32) 4) B6) Aerial Ima	gery (B7) urface (B8) X	Depth	Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Explain	d 4B) state (B13) ulfide Odor (C1) izospheres alon Reduced Iron (C1) Reduction in Plot tressed Plants (C1)	g Living Roots (C3) C4) Dowed Soils (C6) (D1) (LRR A)	Secondary Indicators (2 or mo Water stained Leaves (MLRA1, 2, 4A, and Drainage Patterns (B' Dry-Season Water Ta Saturation Visible on a Geomorphic Position Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (I	ore required) (B9) 4B) (I0) ble (C2) Aerial Imagery (D2)
Primary Indices Primary Indices Primary Indices Primary Indices In Section	GY drology Indicator ators (minimum of Surface Water (A1) digh Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 ron Deposits (B5) Surface Soil Cracks (nundation Visible on Sparsely Vegetated C vations: Present? Yes sent? Yes	s: f one required: 2) 32) 4) B6) Aerial Ima	uired; che gery (B7) urface (B8)	Depth	Water stains 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Expla	d 4B) state (B13) ulfide Odor (C1) izospheres alon Reduced Iron (C1) Reduction in Plot tressed Plants (C1)	g Living Roots (C3) C4) Dowed Soils (C6) (D1) (LRR A)	Secondary Indicators (2 or moderate Mater stained Leaves (MLRA1, 2, 4A, and Drainage Patterns (Branch Dry-Season Water Tasaturation Visible on Geomorphic Position Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (I	ore required) (B9) 4B) (I0) ble (C2) Aerial Imagery (D2) (D6) (LRR A) cks (D7)
Primary Indic Primary Indic Primary Indic S II S Field Observe Surface Water I Vater Table Presencludes capillary	GY Inclogy Indicator Surface Water (A1) High Water Table (A2) Saturation (A3) Vater Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Fron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated Covations: Present? Yes Seent? Yes Seringe)	s: f one required: 2) 32) 4) B6) Aerial Ima Concave Si	gery (B7) urface (B8 No No No No	x x x	Depth Depth Depth	Water stains 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Explain) (inches): (inches): (inches):	d 4B) states (B13) ulfide Odor (C1) izospheres alon Reduced Iron (i Reduction in Platessed Plants (i in in Remarks)	Except MLRA Ig Living Roots (C3) C4) Dived Soils (C6) (D1) (LRR A) Wetland Hydr	Secondary Indicators (2 or mo Water stained Leaves (MLRA1, 2, 4A, and Drainage Patterns (B' Dry-Season Water Ta Saturation Visible on a Geomorphic Position Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (I Frost-Heave Hummod	ore required) (B9) 4B) (I0) ble (C2) Aerial Imagery (D2) (D6) (LRR A) cks (D7)
Primary Indic S S Field Observ Surface Water I Vater Table Pro Saturation Pres Includes capillary	GY drology Indicator ators (minimum of Surface Water (A1) digh Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 ron Deposits (B5) Surface Soil Cracks (nundation Visible on Sparsely Vegetated C vations: Present? Yes sent? Yes	s: f one required: 2) 32) 4) B6) Aerial Ima Concave Si	gery (B7) urface (B8 No No No No	x x x	Depth Depth Depth	Water stains 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Explain) (inches): (inches): (inches):	d 4B) states (B13) ulfide Odor (C1) izospheres alon Reduced Iron (i Reduction in Platessed Plants (i in in Remarks)	Except MLRA Ig Living Roots (C3) C4) Dived Soils (C6) (D1) (LRR A) Wetland Hydr	Secondary Indicators (2 or mo Water stained Leaves (MLRA1, 2, 4A, and Drainage Patterns (B' Dry-Season Water Ta Saturation Visible on a Geomorphic Position Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (I Frost-Heave Hummod	ore required) (B9) 4B) (I0) ble (C2) Aerial Imagery (D2) (D6) (LRR A) cks (D7)

PHS #

4611

oject/Site:	Florer	nce LWI		_	City/County:	FI	orence/Lane	Samp	ling Date:	8/12/	2010
plicant/Owner:	City of Flo	orence					Stat	e: OR	S	Sampling Point:	14
estigator(s):		AH/SE			Section, To	wnship, Range:	Se	ection 3, T 1	8 South, R	R 12 West	
ndform (hillslope, te	errace, etc.:)		s	wale		Local relief (co	oncave, convex, none):			Slope (%):	
bregion (LRR):		LRR	A		Lat:		Lon	g:		Datum:	
il Map Unit Name:			Yaqı	uina lo	oamy fine san	d	NWI	Classification:		PUBH	
climatic/hydrologi	ic conditions	on the site	typical fo	or this t	ime of year?	Yes	X	lo	(if no, explai	n in Remarks)	
evegetation	Soil	or Hy	/drology		significantly dist	urbed?	Are "Normal Circumst	ances" presen	t? (Y/N)	Υ	
vegetation	Soil	or Hy	/drology		naturally probler	natic? If neede	d, explain any answers in	Remarks.)			
		_			_				_		
						mpling poir	nt locations, transe	ects, impoi	rtant feati	ures, etc.	
drophytic Vegetation						Is Sampled A	rea within	.,			
dric Soil Present?		Yes _		_		a Wetla	ınd?	es X	N	0	
tland Hydrology P	resent?	Yes _	Х	_ No							
marks:											
GETATION -	Use scier	ntific na	ames o	f plar	nts.						
			absol	•	Dominant	Indicator	Dominance Test w	orksheet:			
			% cov	ver	Species?	Status					
ee Stratum (plot	size:)					Number of Dominant S	pecies			
							That are OBL, FACW,	or FAC:		2 (/	A)
							Total Number of Domir			2 (1	2)
					= Total Cover		Species Across All Stra	ata:		2 (1	3)
					- Total Cover						
pling/Shrub Stratur		: 5		_	v	E4 014	Percent of Dominant S	•			. (D)
Spiraea dougl			100	<u> </u>	X	FACW	That are OBL, FACW,	or FAC:	10	00% (/	√B)
Salix Hookeria	ша					FACV	Prevalence Index	Worksheet:			
							Total % Cover of		Multiply by:		
-							OBL Species	_	x 1 =	0	
			105	5	= Total Cover		FACW species		x 2 =	0	
				,			FAC Species		x 3 =	0	
rb Stratum (plot		5)					FACU Species		x 4 =	0	
Carex obnupte	<u>а</u> 		20	<u> </u>	X	OBL	UPL Species		x 5 =	0	
							Column Totals	0	(A)	(E	3)
							. Provolonos Indo	, -D/A -	#D	IV/0!	
							Prevalence Index	(=B/A =	#0	117/U:	
							Hydrophytic Vege	tation Indica	ators:		
							. x		Test is >50%	%	
				<u>'</u>				Prevalence	Index is ≤ 3.	01	
			20)	= Total Cover			Morphologi	cal Adaptatio	ons ¹ (provide supp	orting
										separate sheet)	
ody Vine Stratum	(plot size:		_)					_	n-Vascular F		1-1-3
							· ———	Problematio	Hydrophytic	c Vegetation¹ (Exp	nain)
					= Total Cover		. ¹ Indicators of hydric so	il and wetland	hydrology m	ust he present	nless
					- rotal Cover		disturbed or problemat		yarology III	asi se present, u	11000
							Hydrophytic				
							Vegetation	Yes	X	No	
Bare Ground in He	rb Stratum						. 5				

			PHS #	4611			Sampling Point:	
		he depth	needed to docum	ent the indicator or co	nfirm the absen	ce of indicators.)		
Depth	Matrix		0.1	Redox Features	Loc ²			
(Inches)	Color (moist)	<u>%</u>	Color (moist)	% Type¹	Loc	Texture	Remarks	
0-3	10YR 2/1	100					muck	
3-13	7.5YR 3/2	100		· 		Sand	fine	
	· -			· — — —				
	<u> </u>							
				=Covered or Coated Sar			² Location: PL=Pore Lining, M=Matri	
lydric Soil		cable to	all LRRs, unles	ss otherwise noted.		Indica	ators for Problematic Hydric S	oils³:
	Histosol (A1)			Sandy Redo			2 cm Muck (A10)	
	Histic Epipedon (A2)			Stripped Ma	trix (S6)		Red Parent Material (1	ΓF2)
	Black Histic (A3)			Loamy Mucl	ky Mineral (F1) (e	xcept MLRA 1)	Other (explain in Rem	arks)
	Hydrogen Sulfide (A4	•)		Loamy Gley	ed Matrix (F2)			
	Depleted Below Dark	Surface (A	A11)	Depleted Ma	atrix (F3)			
	Thick Dark Surface (A	A12)		Redox Dark	Surface (F6)		2	
Х	Sandy Mucky Mineral	I (S1)		Depleted Da	ark Surface (F7)		³ Indicators of hydrophytic vegetation hydrology must be present, unless	
	Sandy Gleyed Matrix	(S4)		Redox Depr	essions (F8)		problematic.	distarbed or
Restrictive	Layer (if present):							
		NI.						
ype:		14	one					
epth (inche	s):	140	one			Hydric Soil Pres	sent? Yes X No	
Depth (inche Remarks:	OGY		one			Hydric Soil Pres	sent? Yes X No	
Depth (inche Remarks: HYDROLO Wetland Hy	DGY /drology Indicator	s:		that apply)		Hydric Soil Pres		re required)
Depth (inche Remarks: HYDROLO Vetland Hy	OGY	s:			ed Leaves (B9) (F		Secondary Indicators (2 or mo	· · · ·
Depth (inche Remarks: HYDROLC Vetland Hy	OGY odrology Indicators icators (minimum of	s: f one req			ed Leaves (B9) (E		Secondary Indicators (2 or mo	(B9)
Oepth (inche Remarks: HYDROLC Vetland Hy Primary Indi	OGY vdrology Indicators cators (minimum of Surface Water (A1)	s: f one req		Water staine	ed Leaves (B9) (E d 4B)		Secondary Indicators (2 or mo	(B9) 4B)
Depth (inche Remarks: HYDROLO Wetland Hy Primary Indi	OGY rdrology Indicators icators (minimum of Surface Water (A1) High Water Table (A2)	s: f one req		Water staine 1, 2, 4A, and Salt Crust (E	ed Leaves (B9) (E d 4B)		Secondary Indicators (2 or mo Water stained Leaves (MLRA1, 2, 4A, and 4	(B9) 4B) 0)
Depth (inche Remarks: HYDROLC Wetland Hy Primary Indi X X	ogy vdrology Indicators icators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3)	s: f one requ		Water staine 1, 2, 4A, and Salt Crust (E	ed Leaves (B9) (E d 4B) B11)		Secondary Indicators (2 or mo Water stained Leaves (MLRA1, 2, 4A, and 4 Drainage Patterns (B1	(B9) 4 B) 0) ble (C2)
Depth (inche Remarks: HYDROLC Wetland Hy Primary Indi X X	OGY Idrology Indicators Ideators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1)	s: f one requ		Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve	ed Leaves (B9) (E d 4B) B11) entebrates (B13) ulfide Odor (C1)		Secondary Indicators (2 or mo Water stained Leaves (MLRA1, 2, 4A, and 4 Drainage Patterns (B1 Dry-Season Water Tal	(B9) 4B) 0) ble (C2) Aerial Imagery (
HYDROLO Wetland Hy Primary Indi X X X	ordrology Indicators (cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B	s: f one requ		Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh	ed Leaves (B9) (E d 4B) B11) entebrates (B13) ulfide Odor (C1)	Except MLRA g Living Roots (C3)	Secondary Indicators (2 or mo Water stained Leaves (MLRA1, 2, 4A, and 4 Drainage Patterns (B1 Dry-Season Water Tal Saturation Visible on A	(B9) 4B) 0) ble (C2) Aerial Imagery (CD2)
HYDROLO Wetland Hy Primary Indi X X X	OGY /drology Indicators /cators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3)	s: f one requ		Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of	ed Leaves (B9) (E d 4B) 311) ertebrates (B13) ulfide Odor (C1) izospheres along	Except MLRA g Living Roots (C3)	Secondary Indicators (2 or mo Water stained Leaves (MLRA1, 2, 4A, and 4 Drainage Patterns (B1 Dry-Season Water Tal Saturation Visible on A X Geomorphic Position ((B9) 4B) 0) ble (C2) Aerial Imagery (
Primary Indi X X X	ocators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4	s: f one requ		Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron	ed Leaves (B9) (Ed 4B) B11) ertebrates (B13) ulfide Odor (C1) ulzospheres along Reduced Iron (C	Except MLRA g Living Roots (C3) (24) wed Soils (C6)	Secondary Indicators (2 or mo Water stained Leaves (MLRA1, 2, 4A, and 4 Drainage Patterns (B1 Dry-Season Water Tal Saturation Visible on A X Geomorphic Position (Shallow Aquitard (D3)	(B9) 4B) 0) ble (C2) Aerial Imagery (D2)
HYDROLO Wetland Hy Primary Indi X X X	JOGY Ardrology Indicators Cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on	s: f one required: 2) 32) 4) B6) Aerial Ima	uired; check all f	Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S	ed Leaves (B9) (£ d 4B) 311) ertebrates (B13) ulfide Odor (C1) izospheres along Reduced Iron (C	Except MLRA g Living Roots (C3) (24) wed Soils (C6)	Secondary Indicators (2 or mo Water stained Leaves (MLRA1, 2, 4A, and 4 Drainage Patterns (B1 Dry-Season Water Tal Saturation Visible on A X Geomorphic Position (Shallow Aquitard (D3) X Fac-Neutral Test (D5)	(B9) 4B) 0) ble (C2) Aerial Imagery (D2)
Primary Indi X X X	DGY Idrology Indicators Id	s: f one required: 2) 32) 4) B6) Aerial Ima	uired; check all f	Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S	ed Leaves (B9) (Ed 4B) 311) ertebrates (B13) ulfide Odor (C1) izospheres along Reduced Iron (C Reduction in Plo	Except MLRA g Living Roots (C3) (24) wed Soils (C6)	Secondary Indicators (2 or mo Water stained Leaves (MLRA1, 2, 4A, and 4 Drainage Patterns (B1 Dry-Season Water Tal Saturation Visible on A X Geomorphic Position (Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D	(B9) 4B) 0) ble (C2) Aerial Imagery (D2)
Primary Indi X X X X	Cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated Corvations:	s: f one required: 2) 32) 4) B6) Aerial Ima	uired; check all f	Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Expla	ed Leaves (B9) (Ed 4B) 311) ertebrates (B13) ulfide Odor (C1) izospheres along Reduced Iron (C Reduction in Plo	Except MLRA g Living Roots (C3) (24) wed Soils (C6)	Secondary Indicators (2 or mo Water stained Leaves (MLRA1, 2, 4A, and 4 Drainage Patterns (B1 Dry-Season Water Tal Saturation Visible on A X Geomorphic Position (Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D	(B9) 4B) 0) ble (C2) Aerial Imagery (D2)
Depth (inche Remarks: HYDROLC Wetland Hy Primary Indi X X X X X Sield Obset Surface Wate	Cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated Corvations:	s: f one required 2) 32) 4) B6) Aerial Ima Concave Si	uired; check all f	Water stains 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Explain	ed Leaves (B9) (Ed 4B) B11) ertebrates (B13) ulfide Odor (C1) izospheres along Reduced Iron (C) Reduction in Plo Stressed Plants (I) ain in Remarks)	Except MLRA g Living Roots (C3) (24) wed Soils (C6) D1) (LRR A)	Secondary Indicators (2 or mo Water stained Leaves (MLRA1, 2, 4A, and 4 Drainage Patterns (B1 Dry-Season Water Tal Saturation Visible on A X Geomorphic Position (Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D Frost-Heave Hummoc	(B9) 4B) 0) ble (C2) Aerial Imagery (D2)
Depth (inche Remarks: HYDROLC Wetland Hy Primary Indi X X X X X Sield Obset Surface Wate	Cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated Corvations:	s: f one required: 2) 32) 4) B6) Aerial Ima Concave Si	uired; check all f	Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Expla	ed Leaves (B9) (Ed 4B) 311) ertebrates (B13) ulfide Odor (C1) izospheres along Reduced Iron (C Reduction in Plo	Except MLRA g Living Roots (C3) (24) wed Soils (C6) D1) (LRR A)	Secondary Indicators (2 or mo Water stained Leaves (MLRA1, 2, 4A, and 4 Drainage Patterns (B1 Dry-Season Water Tal Saturation Visible on A X Geomorphic Position (Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D	(B9) 4B) 0) ble (C2) Aerial Imagery (D2)
Depth (inche Remarks: HYDROLC Wetland Hy Primary Indi X X X	DGY Idrology Indicators Idrators (minimum of Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4 Iron Deposits (B5) Surface Soil Cracks (I Inundation Visible on Sparsely Vegetated Corvations: In Present? Yes Present? Yes Present? Yes Present? Yes	s: f one required 2) 32) 4) B6) Aerial Ima Concave Si	uired; check all f	Water stains 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Explain	ed Leaves (B9) (Ed 4B) B11) ertebrates (B13) ulfide Odor (C1) izospheres along Reduced Iron (C) Reduction in Plo Stressed Plants (I) ain in Remarks)	Except MLRA g Living Roots (C3) (24) wed Soils (C6) D1) (LRR A)	Secondary Indicators (2 or mo Water stained Leaves (MLRA1, 2, 4A, and 4 Drainage Patterns (B1 Dry-Season Water Tal Saturation Visible on A X Geomorphic Position (Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D Frost-Heave Hummoc	(B9) 4B) 0) ble (C2) Aerial Imagery (D2)
Depth (inche Remarks: HYDROLO Wetland Hy Primary Indi X X X X X Field Obsel Surface Wate Water Table F Saturation Pre includes capilla	Cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (I) Inundation Visible on Sparsely Vegetated Corvations: r Present? Yes	s: f one required: 2) 32) 4) B6) Aerial Ima Concave Si X X	uired; check all f	Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Explain	ed Leaves (B9) (Ed 4B) B11) B11) B11) B11) B11) B11) B11) B	Except MLRA g Living Roots (C3) 64) wed Soils (C6) D1) (LRR A) Wetland Hyd	Secondary Indicators (2 or mo Water stained Leaves (MLRA1, 2, 4A, and 4 Drainage Patterns (B1 Dry-Season Water Tal Saturation Visible on A X Geomorphic Position (Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D Frost-Heave Hummoc	(B9) 4B) 0) ble (C2) Aerial Imagery (D2)
Depth (inche Remarks: HYDROLO Wetland Hy Primary Indi X X X X X Field Obsel Surface Wate Water Table F Saturation Pre includes capilla	Cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (I) Inundation Visible on Sparsely Vegetated Corvations: r Present? Yes	s: f one required: 2) 32) 4) B6) Aerial Ima Concave Si X X	uired; check all f	Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Explain Depth (inches): Depth (inches):	ed Leaves (B9) (Ed 4B) B11) B11) B11) B11) B11) B11) B11) B	Except MLRA g Living Roots (C3) 64) wed Soils (C6) D1) (LRR A) Wetland Hyd	Secondary Indicators (2 or mo Water stained Leaves (MLRA1, 2, 4A, and 4 Drainage Patterns (B1 Dry-Season Water Tal Saturation Visible on A X Geomorphic Position (Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D Frost-Heave Hummoc	(B9) 4B) 0) ble (C2) Aerial Imagery (D2)
Depth (inche Remarks: HYDROLC Wetland Hy Primary Indi X X X X X Field Obsel Surface Wate Water Table F Saturation Pre includes capilla Describe Reco	Cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (I) Inundation Visible on Sparsely Vegetated Corvations: r Present? Yes	s: f one required: 2) 32) 4) B6) Aerial Ima Concave Si X X	uired; check all f	Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen S Oxidized Rh Presence of Recent Iron Stunted or S Other (Explain Depth (inches): Depth (inches):	ed Leaves (B9) (Ed 4B) B11) B11) B11) B11) B11) B11) B11) B	Except MLRA g Living Roots (C3) 64) wed Soils (C6) D1) (LRR A) Wetland Hyd	Secondary Indicators (2 or mo Water stained Leaves (MLRA1, 2, 4A, and 4 Drainage Patterns (B1 Dry-Season Water Tal Saturation Visible on A X Geomorphic Position (Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D Frost-Heave Hummoc	(B9) 4B) 0) ble (C2) Aerial Imagery (D2)

4611

Project/Site:	Florence LWI		City/County:	Fle	orence/Lane	Samplin	g Date:	8/12/	2010
applicant/Owner:	City of Florence				State	OR	Sa	ampling Point:	15
vestigator(s):	AH/SE		Section, To	wnship, Range:	Sec	tion 11, T 18	South, R	12 West	
andform (hillslope, ter	race, etc.:)			Local relief (co	ncave, convex, none):			Slope (%):	
subregion (LRR):	LRR	Α	Lat:		Long	:			
oil Map Unit Name:		Yaquina	_ loamy fine san	d	NWI C	lassification:		PFOC	
re climatic/hydrologic	conditions on the site	e typical for this	time of year?	Yes	X) (if	no, explain	in Remarks)	
re vegetation	Soil or Hy	ydrology	significantly dist	urbed?	Are "Normal Circumsta	nces" present?	(Y/N)	Υ	
re vegetation	Soil or Hy	ydrology	naturally proble	matic? If needed	d, explain any answers in F	Remarks.)			
			_						
SUMMARY OF F	INDINGS – Atta	ach site ma	p showing sa	mpling poir	nt locations, transe	cts, importa	ant featu	ires, etc.	
ydrophytic Vegetatior	n Present? Yes	X No		Is Sampled A	rea within				
ydric Soil Present?	Yes _	X No		a Wetla		<u> </u>	No		
etland Hydrology Pre	esent? Yes	X No							
emarks:									
EGETATION - U	lee ecientific na	amos of nis	inte						
LOCIATION - C	Joe Joienanie He	absolute	Dominant	Indicator	Dominance Test wo	orksheet:			
		% cover	Species?	Status					
ree Stratum (plot s	ize: 30)				Number of Dominant Sp	ecies			
Pinus contorta		10	X	FAC	That are OBL, FACW, o	r FAC:	;	3(A)
2									
3					Total Number of Domina	ant			
1	_				Species Across All Strat	ta:		3(B)
		10	= Total Cover						
apling/Shrub Stratum	(plot size: 5	_)			Percent of Dominant Sp	ecies			
Ledum glandul		10		FACW	That are OBL, FACW, of	or FAC:	10	0%(A/B)
Vaccinium ulig		60	X	FACW					
Spiraea dougla	ISII	15		FACW	Prevalence Index W		10.1.1		
4 5					Total % Cover of OBL Species	<u>M</u>	ultiply by: x 1 =	- 0	
,		85	= Total Cover		FACW species		x 2 =	0	
			- Total Cover		FAC Species		x 3 =	0	
erb Stratum (plot s					FACU Species		x 4 =	0	
Unidentified gr	ass	20	X	(FAC)	UPL Species		x 5 =	0	
Juncus tenuis		10		FACW	Column Totals	0 (A	۸)	<u> </u>	B)
Carex obnupta		10		OBL					
1					Prevalence Index	=B/A =	#DI	V/0!	
<u> </u>									
·	-				Hydrophytic Vegeta				
3					x	Dominance To Prevalence In			
,		40	= Total Cover			-		ns ¹ (provide sup	portina
			. 3.01 30101			_		separate sheet)	
oody Vine Stratum	(plot size:	_)				Wetland Non-	Vascular Pl	lants ¹	
I						Problematic F	Hydrophytic	Vegetation ¹ (Ex	plain)
2									
		0	= Total Cover		¹ Indicators of hydric soil	·-	ydrology mu	ıst be present, ι	ınless
					disturbed or problematic Hydrophytic).			
					, a. opiny ac				
6 Bare Ground in Herb	o Stratum :	30*			Vegetation	Yes	X	No	

			PHS #	46				Sampling Point: 15
Profile Descr	iption: (Describe to t	he depth	needed to docume	ent the ind	licator or cor	nfirm the absen	ce of indicators.)	
Depth	Matrix				x Features	. 2		
(Inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type	Loc ²	Texture	Remarks
0-18	10YR 4/3	80	10YR 4/6	20		cs	Sand	
								-
	-							
	·							
Гуре: C=Con	ncentration, D=Depletion	on, RM=R	educed Matrix, CS=	=Covered o	r Coated San	nd Grains.		² Location: PL=Pore Lining, M=Matrix.
lydric Soil	Indicators: (Appli	cable to	all LRRs, unles	s otherw	ise noted.)		Indica	ators for Problematic Hydric Soils ³ :
	Histosol (A1)			X	Sandy Redo	x (S5)		2 cm Muck (A10)
	Histic Epipedon (A2)				Stripped Mat	trix (S6)		Red Parent Material (TF2)
	Black Histic (A3)				Loamy Muck	xy Mineral (F1) (e	except MLRA 1)	Other (explain in Remarks)
Х	Hydrogen Sulfide (A4)			Loamy Gleye	ed Matrix (F2)		
	Depleted Below Dark	Surface (A	\ 11)		Depleted Ma	trix (F3)		
	Thick Dark Surface (A	112)			Redox Dark	Surface (F6)		3 Indicators of hydrophytic verstation and watland
	Sandy Mucky Minera	(S1)			Depleted Da	rk Surface (F7)		³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or
	Sandy Gleyed Matrix	(S4)			Redox Depre	essions (F8)		problematic.
ype: epth (inche	(s):	N ———	one		-		Hydric Soil Pres	sent? Yes X No
ype: Depth (inche Bemarks:		<u>N</u>	one		<u>-</u>		Hydric Soil Pres	sent? Yes <u>X</u> No
Type: Depth (inche			one		-		Hydric Soil Pres	sent? Yes X No
Type: Depth (inche lemarks: HYDROLO	DGY	s:		117/				Secondary Indicators (2 or more required)
ype: lepth (inche emarks: IYDROLC Vetland Hy rimary Indi	OGY /drology Indicator icators (minimum o Surface Water (A1)	s: f one req			Water staine	d Leaves (B9) (I		Secondary Indicators (2 or more required) Water stained Leaves (B9)
ype: epth (inche emarks: YDROLO fetland Hy rimary Indi	OGY /drology Indicator icators (minimum o Surface Water (A1) High Water Table (A2	s: f one req			Water staine	rd Leaves (B9) (I 1 4B)		Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)
ype: epth (inche emarks: YDROLC /etland Hy rimary Indi X X	OGY /drology Indicator icators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3)	s: f one req			Water staine 1, 2, 4A, and Salt Crust (B	d Leaves (B9) (I d 4B)		Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10)
ype: epth (inche emarks: YDROLC /etland Hy rimary Indi X X X	DGY /drology Indicator icators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1)	s: f one requ			Water staine 1, 2, 4A, and Salt Crust (B Aquatic Inve	rd Leaves (B9) (I i 4B) i 111) rtebrates (B13)		Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
ype: epth (inche emarks: IYDROLO /etland Hy rimary Indi X X	OGY /drology Indicator icators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (E	s: f one requ		x	Water staine 1, 2, 4A, and Salt Crust (B Aquatic Inve	ed Leaves (B9) (I d 4B) d11) rtebrates (B13) ulfide Odor (C1)	Except MLRA	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery
ype: epth (inche emarks: IYDROLO fetland Hy rimary Indi X X X	OGY /drology Indicator icators (minimum of Surface Water (A1)) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3)	s: f one requ		x	Water staine 1, 2, 4A, and Salt Crust (B Aquatic Inverted Hydrogen St Oxidized Rhi	d Leaves (B9) (I 1 4B) 311) rtebrates (B13) ulfide Odor (C1) izospheres along	Except MLRA g Living Roots (C3)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery X Geomorphic Position (D2)
lype: Depth (inche emarks: IYDROLC Vetland Hy Trimary Indi X X X	DGY /drology Indicator icators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3) Algal Mat or Crust (B	s: f one requ		x	Water staine 1, 2, 4A, and Salt Crust (B Aquatic Inveited Hydrogen Stain Oxidized Rhi Presence of	d Leaves (B9) (I 1 4B) 111) rtebrates (B13) ulfide Odor (C1) izospheres along Reduced Iron (C	Except MLRA g Living Roots (C3)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery X Geomorphic Position (D2) Shallow Aquitard (D3)
Primary Indi X X X X	DGY /drology Indicator icators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	s: f one requ 2) 32)		x	Water staine 1, 2, 4A, and Salt Crust (B Aquatic Inveitydrogen St Oxidized Rhi Presence of Recent Iron	d Leaves (B9) (I 1 4B) 311) rtebrates (B13) ulfide Odor (C1) izospheres along	Except MLRA g Living Roots (C3) (24) wed Soils (C6)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery X Geomorphic Position (D2)
Pepth (inche lemarks: HYDROLO Vetland Hy Primary Indi X X X	DGY /drology Indicator icators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3) Algal Mat or Crust (B	s: f one requal 2) 32) 4)	uired; check all tl	x	Water staine 1, 2, 4A, and Salt Crust (B Aquatic Inve Hydrogen St Oxidized Rhi Presence of Recent Iron I Stunted or S	rd Leaves (B9) (I 1 4B) 311) rtebrates (B13) ulfide Odor (C1) izospheres along Reduced Iron (C	Except MLRA g Living Roots (C3) (24) wed Soils (C6)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5)
ype: epth (inche emarks: IYDROLO fetland Hy rimary Indi X X X	OGY rdrology Indicator icators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (s: f one required: 2) 32) 4) B6) Aerial Ima	uired; check all tl	x	Water staine 1, 2, 4A, and Salt Crust (B Aquatic Inve Hydrogen St Oxidized Rhi Presence of Recent Iron I Stunted or S	d Leaves (B9) (I d 4B) d11) rtebrates (B13) ulfide Odor (C1) izospheres along Reduced Iron (C Reduction in Plo tressed Plants (I	Except MLRA g Living Roots (C3) (24) wed Soils (C6)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Type: Depth (inche Remarks: HYDROLO Vetland Hy Primary Indi X X X X	DGY /drology Indicator icators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated C	s: f one required: 2) 32) 4) B6) Aerial Ima	uired; check all tl	x	Water staine 1, 2, 4A, and Salt Crust (B Aquatic Inve Hydrogen St Oxidized Rhi Presence of Recent Iron I Stunted or S	d Leaves (B9) (I d 4B) d11) rtebrates (B13) ulfide Odor (C1) izospheres along Reduced Iron (C Reduction in Plo tressed Plants (I	Except MLRA g Living Roots (C3) (24) wed Soils (C6)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Perimary Indi X X X X X X X X X X X X X	OGY /drology Indicator icators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B- Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated Corvations:	s: f one required: 2) 32) 4) B6) Aerial Ima	uired; check all tl	x	Water staine 1, 2, 4A, and Salt Crust (B Aquatic Inve Hydrogen St Oxidized Rhi Presence of Recent Iron I Stunted or S	d Leaves (B9) (I d 4B) d11) rtebrates (B13) ulfide Odor (C1) izospheres along Reduced Iron (C Reduction in Plo tressed Plants (I	Except MLRA g Living Roots (C3) (24) wed Soils (C6)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Type: Depth (inche Remarks: HYDROLO Vetland Hy Primary Indi X X X X X X X X X X X X X X	DGY /drology Indicator icators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B Drift Deposits (B3) Algal Mat or Crust (B- Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated C rvations: r Present? Yes	s: f one required: 2) 32) 4) B6) Aerial Ima	uired; check all tl	X	Water staine 1, 2, 4A, and Salt Crust (B Aquatic Inveitydrogen St Oxidized Rhi Presence of Recent Iron I Stunted or S Other (Expla	d Leaves (B9) (I d 4B) d11) rtebrates (B13) ulfide Odor (C1) izospheres along Reduced Iron (C Reduction in Plo tressed Plants (I	g Living Roots (C3) C4) wed Soils (C6) D1) (LRR A)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Pepth (inche lemarks: HYDROLO Vetland Hy Primary Indi X X X X X X A X A A A A A A	DGY /drology Indicator icators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated Corvations: r Present? Yes Present? Yes esent? Yes	s: f one required 2) 32) 4) B6) Aerial Ima Concave Si	uired; check all the second se	X Depth Depth	Water staine 1, 2, 4A, and Salt Crust (B Aquatic Inveited Hydrogen Stain Countries of Recent Iron In Stunted or S Other (Explain (inches):	rd Leaves (B9) (I 1 4B) 311) rtebrates (B13) ulfide Odor (C1) izospheres along Reduced Iron (C Reduction in Plo tressed Plants (I iin in Remarks)	g Living Roots (C3) C4) wed Soils (C6) D1) (LRR A)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
X X X X X X X A X X A X A X X A X X X X	DGY /drology Indicator icators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated Corvations: r Present? Yes Present? Yes esent? Yes	s: f one required: 2) 32) 4) B6) Aerial Ima Concave Si X X	uired; check all the second se	Depth Depth	Water staine 1, 2, 4A, and Salt Crust (B Aquatic Inveity Hydrogen St. Oxidized Rhi Presence of Recent Iron I Stunted or S Other (Explain (inches): (inches): (inches):	d Leaves (B9) (I 1 4B) 111) Intebrates (B13) Idfide Odor (C1) Izospheres along Reduced Iron (C Reduction in Plotressed Plants (I In in Remarks)	g Living Roots (C3) C4) wed Soils (C6) D1) (LRR A) Wetland Hyd	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
ield Observater Table Faturation Prescued attraction Prescued attr	DGY /drology Indicator icators (minimum o Surface Water (A1) High Water Table (A2 Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B- Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated C rvations: r Present? Yes	s: f one required: 2) 32) 4) B6) Aerial Ima Concave Si X X	uired; check all the second se	Depth Depth	Water staine 1, 2, 4A, and Salt Crust (B Aquatic Inveity Hydrogen St. Oxidized Rhi Presence of Recent Iron I Stunted or S Other (Explain (inches): (inches): (inches):	d Leaves (B9) (I 1 4B) 111) Intebrates (B13) Idfide Odor (C1) Izospheres along Reduced Iron (C Reduction in Plotressed Plants (I In in Remarks)	g Living Roots (C3) C4) wed Soils (C6) D1) (LRR A) Wetland Hyd	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)

4611

Project/Site:	Florence L	.WI	City/County:	Fle	orence/Lane	Sampling	Date:	8/12	/2010
Applicant/Owner: Ci	ity of Florenc	e	-		State:	OR	Sam	pling Point:	16
Investigator(s):	AH/S	E	Section, To	ownship, Range:	Sect	tion 14, T 18 \$	South, R 1	2 West	
Landform (hillslope, terra	ce, etc.:)			Local relief (co	ncave, convex, none):			Slope (%):	
Subregion (LRR):	LR	RR A	Lat:		Long:			Datum:	
Soil Map Unit Name:			Dune land			assification:		None	
Are climatic/hydrologic co	onditions on the	site typical for		Yes	X No	(if r	o, explain in	Remarks)	
Are vegetation			-	turbed?	Are "Normal Circumstan		-	-	
					d, explain any answers in R		′ -		
		,			.,,	,			
SUMMARY OF FIN	IDINGS - A	ttach site	map showing sa	ampling poir	nt locations, transec	ts, importa	nt feature	es, etc.	
Hydrophytic Vegetation F	Present? Yes	X	No	Is Sampled A	roo within				
Hydric Soil Present?	Yes	Х	No	a Wetla		X	No_		
Wetland Hydrology Prese	ent? Yes	Х	No						
Remarks:				ı					
I									
VEGETATION - Us	e scientific		•		T				
1		absolu % oov		Indicator	Dominance Test wo	rksneet:			
Tree Stratum (plot size	e: 30	% cov	er Species?	Status	Number of Dominant Spo	ecies			
1 Pinus contorta	·	_′ 20	х	FAC	That are OBL, FACW, or		4		(A)
2					That are obe, i now, or		<u> </u>		(* 1)
3					Total Number of Domina	nt			
4		_			Species Across All Strata	a:	4		(B)
		20	= Total Cover						
Sapling/Shrub Stratum	(nlot size:)			Percent of Dominant Spe	ecies			
1	(piot 3izc.	 ′			That are OBL, FACW, o		100%	6	(A/B)
2									()
3		_			Prevalence Index W	orksheet:			
4					Total % Cover of	Mul	tiply by:		
5		_			OBL Species		x 1 =	0	
		0	= Total Cover		FACW species		x 2 =	0	
	_				FAC Species		x 3 =	0	
Herb Stratum (plot size 1 Carex obnupta	e: 5	_)		001	FACU Species		x 4 =	0	
2 Juncus falcatus			x	OBL	UPL Species	0 (A)	x 5 =	0	(D)
3 Juncus nevaden	sis	35		FACW FACW	Column Totals	0 (A)	_		(B)
4				TAON	Prevalence Index =	=R/A =	#DIV/	' 01	
5					Trovalonee maex			<u>. </u>	
6					Hydrophytic Vegeta	tion Indicator	rs:		
7					x	Dominance Tes			
8		_				Prevalence Ind	ex is ≤ 3.0 ¹		
		80	= Total Cover			Morphological A	Adaptations ¹	(provide sup	porting
						data in Remark)
	olot size:)				Wetland Non-V			
1			<u> </u>			Problematic Hy	drophytic Ve	egetation' (Ex	xplain)
2			<u> </u>		11-2			h = === · · · · ·	
		0	= Total Cover		¹ Indicators of hydric soil disturbed or problematic.	-	rology must	pe present,	uniess
					Hydrophytic				
						V	v	NI.	
% Bare Ground in Herb S	Stratum	20	_		Vegetation Present?	Yes	X	No_	

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators: Percentage (Inches)	SOIL			PHS#	461					Sampling Point:	16
Color (moist) 56 Color (moist) 56 Color (moist) 56 Spre* Loc* Texture Remarks		. ,	he depth	needed to docume			firm the abse	ence of indicators.)			
Type: C-Concentration, D-Depletion, RNA-Reduced Matrix, CS-Covered or Coated Sand Grains. Coastion PL-Pose Lining, M-Matrix, CS-Covered or Coated Sand Grains. Coastion PL-Pose Lining, M-Matrix, CS-Covered or Coated Sand Grains. Coastion PL-Pose Lining, M-Matrix, CS-Covered or Coated Sand Grains. Coastion PL-Pose Lining, M-Matrix, CS-Covered or Coated Sand Grains. Coastion PL-Pose Lining, M-Matrix, CS-Covered or Coated Sand Grains. Coastion PL-Pose Lining, M-Matrix, CS-Covered or Coated Sand Grains. Coastion PL-Pose Lining, M-Matrix, CS-Covered or Coated Sand Grains. Coastion PL-Pose Lining, M-Matrix, CS-Covered or Coated Sand Grains. Coastion PL-Pose Lining, M-Matrix, CS-Covered or Coated Sand Grains. Coastion PL-Pose Lining, M-Matrix, CS-Covered Or Coated Sand Grains. Coastion PL-Pose Lining, M-Matrix, CS-Covered Or Coated Sand Grains. Coastion PL-Pose Lining, M-Matrix, CS-Covered Or Coated Sand Grains. Coastion PL-Pose Lining, M-Matrix, CS-Covered Or Coated Sand Grains. Coastion PL-Pose Lining, M-Matrix, CS-Covered Or Coated Sand Grains. Coastion PL-Pose Lining, M-Matrix, CS-Covered Or Coated Sand Grains. Coastion PL-Pose Lining, M-Matrix, CS-Covered Or Coated Sand Grains. Coastion PL-Pose Lining, M-Matrix, CS-Covered Or Coated Sand Grains. Coastion PL-Pose Lining, M-Matrix, CS-Covered Or Placed	•		0/	Color (moist)			Loc ²	Touture		Domorko	
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. The Histor Expect of CA1	,	- 								Remarks	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Sandy Redox (S5) 2 cm Muck (A10) Histosol (A2) Stripped Matrix (S6) Red Parent Material Black Histo (A3) Loamy Mucky Mineral (F1) (except MLRA 1) X Other (explain in Re Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Matrix (F3) Sandy Mucky Mineral (S1) Depleted Matrix (F3) Redox Dark Surface (F7) Problematic P	0-18	101R 4/3	70	101K 4/6	30			Sand			
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Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Present of hydropytic vegetation and well and hydrology must be present, unless problematic. Sandy Gleyed Matrix (S4) Redox Depressions (F8) Redox Depressions (F8)		Depleted Below Dark	Surface (A	A11)		Depleted Ma	trix (F3)				
Sandy Micro (Seyed Matrix (S4)		Thick Dark Surface (A	(12)		F	Redox Dark	Surface (F6)				
Sandy Gleyed Matrix (S4) Redox Depressions (F8) problematic. Peth (Inches):		Sandy Mucky Mineral	(S1)			Depleted Dar	k Surface (F7))			
repth (inches): emarks: ample site is a depressional area that meets hydrophytic vegetation and wetland hydrology indicators. Prominent concentration of coated sand grains were observed. Despite not meeting any of the criteria above, the observed soils are hydric. IVDROLOGY Vettand Hydrology Indicators: rrimary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or m. 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 Plowed Soils (C6) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Surface Water (B7) Other (Explain in Remarks) Wetland Hydrology Present? Yes No X Depth (inches): Wetland Hydrology Present? Yes No X Depth (inches): Yes X No Recent Provided Soils (Save) Wetland Hydrology Present? Yes No X Depth (inches): Yes X No Recent Provided Soils (Save) Wetland Hydrology Present? Yes No X Depth (inches): Yes X No Recent Present? Yes No X Depth (inches): Yes X No Recent Provided Soils (Save) Wetland Hydrology Present? Yes No X Depth (inches): Yes X No Recent Present? Yes No X Depth (inches): Yes X No Recent Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		Sandy Gleyed Matrix	(S4)		F	Redox Depre	essions (F8)		riyarolog	·	33 disturbed of
epth (inches): Hydric Soil Present? Yes	estrictive	Layer (if present):									
repth (inches): Image site is a depressional area that meets hydrophytic vegetation and wetland hydrology indicators. Prominent concentration of coated sand grains were observed. Despite not meeting any of the criteria above, the observed soils are hydric. IMDROLOGY Vettand Hydrology Indicators: Image: Primary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or m. Surface Water (A1) High Water Table (A2) Saturation (A3) Salt Crust (B11) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B2) Algal Mat or Crust (B4) Frost-Neutral Test (D4) Iron Deposits (B5) Recent Iron Reduction in Plowed Soils (C6) Surface Soil Cracks (B6) Surface Water Present? Yes No X Depth (inches): Wetland Hydrology Present? Yes No X Depth (inches): Wetland Hydrology Present? Yes No X Depth (inches): Yes No X Depth (inches): Wetland Hydrology Present? Yes No X Depth (inches): John Carlottons, if available:	vne.		N	one							
emarks: lample site is a depressional area that meets hydrophytic vegetation and wetland hydrology indicators. Prominent concentration of coated sand grains were observed. Despite not meeting any of the criteria above, the observed soils are hydric. IYDROLOGY Wetland Hydrology Indicators: Trimary Indicators (minimum of one required; check all that apply) Secondary Indicators (2 or m Surface Water (A1) High Water Table (A2) Saturation (A3) Salt Crust (B11) Drainage Patterns (E Water Marks (B1) Aquatic Invertebrates (B13) Dry-Season Water T Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Saturation Visible or Oxidized Rhizospheres along Living Roots (C3) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D: Iron Deposits (B5) Recent Iron Reduction in Plowed Soils (C6) X Fac-Neutral Test (D: Surface Soil Cracks (B6) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Frost-Heave Hummon Sparsely Vegetated Concave Surface (B8) Ield Observations: Wetland Hydrology Present? Yes No X Depth (inches): Wetland Hydrology Present? Yes No X Depth (inches): Yes X No Yes Yes No X Depth (inches): Yes No X Depth (inches): Yes No Yes X No Yes Yes X No Yes X No Yes X No Yes Yes Yes Yes Yes Yes Yes Ye	• •							Uvdria Cail Dras		. V N	۱۵
Vertland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) Surface Water (A1) Surface Water (A2) High Water Table (A2) Saturation (A3) Salt Crust (B11) Mater Marks (B1) Sediment Deposits (B2) Hydrogen Sulfide Odor (C1) Saturation Visible or Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Surface Soil Cracks (B8) Sparsely Vegetated Concave Surface (B8) Verticate Water Present? Yes No X Depth (inches): Verticate Water Present? Yes No X Depth (inches): Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:											
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Sediment Deposits (B2) Drift Deposits (B3) Oxidized Rhizospheres along Living Roots (C3) 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) Tield Observations: urface Water Present? Yes No X Depth (inches): Vater Table Present? Yes No X Depth (inches): Vater Table Present? Yes No X Depth (inches): Vescribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		Saturation (A3)			s	Salt Crust (B	11)			Drainage Patterns (B10)
Drift Deposits (B3) Algal Mat or Crust (B4) Presence of Reduced Iron (C4) Shallow Aquitard (D3) Iron Deposits (B5) Recent Iron Reduction in Plowed Soils (C6) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) ield Observations: Vater Table Present? Yes No X Depth (inches): Vater Table Present? Yes No X Depth (inches): Vater Table Present? Yes No X Depth (inches): Vesecribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		Water Marks (B1)				Aquatic Inver	tebrates (B13))		Dry-Season Water	Table (C2)
Algal Mat or Crust (B4) Iron Deposits (B5) Recent Iron Reduction in Plowed Soils (C6) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) ield Observations: Vater Table Present? Yes No X Depth (inches): Vater Table Present? Yes No X No X Depth (inches): Vater Table Present? Yes No X No X Depth (inches): Vater Table Present? Yes No X No X Depth (inches): Vater Table Present? Yes No X No X Depth (inches): Vater Table Present? Yes No X No X Depth (inches): Vater Table Present? Yes No X No X Depth (inches): Vater Table Present? Yes No X No X Depth (inches): Vater Table Present? Yes No X No X Depth (inches): Vater Table Present? Yes No X No X Depth (inches): Vater Table Present? Yes No X No X Depth (inches): Vater Table Present? Yes No X No X Depth (inches): Vater Table Present? Yes No X No X Depth (inches): Vater Table Present? Yes No X No X Depth (inches): Vater Table Present? Yes No X No X Depth (inches): Vater Table Presen		Sediment Deposits (B	2)			Hydrogen Su	Ifide Odor (C1)		Saturation Visible o	n Aerial Imagery
Iron Deposits (B5) Surface Soil Cracks (B6) Sundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) ield Observations: urface Water Present? Yes No X Depth (inches): //ater Table Present? Yes No X Depth (inches): water Table Present? Yes No X Depth (inches): //ater Table Present?		Drift Deposits (B3)				Oxidized Rhi	zospheres alor	ng Living Roots (C3)	X	Geomorphic Position	on (D2)
Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Ideld Observations: Urface Water Present? Yes No X Depth (inches): Inaturation Present? Yes No X Depth (inches): Inundation Visible on Aerial Imagery (B7) Includes Capillary fringe) Stunted or Stressed Plants (D1) (LRR A) Raised Ant Mounds Frost-Heave Hummon Control (Explain in Remarks) Wetland Hydrology Present? Yes No X Depth (inches): Yes X No Remarks Yes X No Remarks Frost-Heave Hummon Control (Explain in Remarks) Frost-Heave Hummon Control (Explain in		Algal Mat or Crust (B4	1)		F	Presence of I	Reduced Iron ((C4)		Shallow Aquitard (D	03)
Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) ield Observations: urface Water Present? Yes		Iron Deposits (B5)						• •	X	Fac-Neutral Test (D	05)
Sparsely Vegetated Concave Surface (B8) ield Observations: urface Water Present? Yes		-	-			Stunted or St	ressed Plants	(D1) (LRR A)		Raised Ant Mounds	(D6) (LRR A)
ield Observations: urface Water Present? Yes		_		. ,		Other (Explai	n in Remarks)		-	Frost-Heave Humm	ocks (D7)
urface Water Present? Yes No X Depth (inches): //ater Table Present? Yes No X Depth (inches): //aturation Present? Yes No X Depth (inches): //aturation Present? Yes No X Depth (inches): // Aturation Present? Yes No X D			oncave S	ипасе (В8)				1			
Adter Table Present? Yes No X Depth (inches): Wetland Hydrology Present? Adturation Present? Yes No X Depth (inches): Yes X No Concludes capillary fringe) Bescribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				No. V	D						
aturation Present? Yes No X Depth (inches): Yes X No Coludes capillary fringe) escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		•				_					
ncludes capillary fringe) lescribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		•				_		Wetland Hyd			
		i i		No <u>X</u>	Depth (inches):			Y	es <u> X </u>	
None	Describe Rec	corded Data (stream ga	uge, moni	toring well, aerial ph	notos, previo	ous inspection	ons), if availabl	e:			
	_	· ·		·							
emarks:											

4611

Project/Site:	Floren	ce LWI	1		City/County:	Flo	orence/Lane		Samplir	ng Date:	8	3/12/2010	
Applicant/Owner:	City of Flo	rence		_				State:	OR		Sampling Po	int: 17	
Investigator(s):		AH/SE			Section, To	wnship, Range:		Section	 n 14, T 18		R 12 West		
Landform (hillslope, to				depres	ssion	Local relief (co	ncave, convex, n	one):			Slope (%):	
Subregion (LRR):		LRR	A		Lat:								
Soil Map Unit Name:			F	leceta	fine sand			NWI Classi			 '	С	
Are climatic/hydrologi				r this tin	ne of year?	Yes	X		_		ain in Remark	(s)	
Are vegetation	Soil	or H	ydrology	5	significantly dist	urbed?	Are "Normal C	Circumstances	s" present?	(Y/N)	Υ		
Are vegetation		_					d, explain any ans	swers in Rem	arks.)				
SUMMARY OF	FINDINGS	– Atta	ach site	map	showing sa	mpling poin	t locations,	transects	, import	ant fea	tures, etc		
Hydrophytic Vegetation		Yes _	Х	No _		Is Sampled Ar	rea within						
Hydric Soil Present?		Yes _	Х	No _		a Wetlai		Yes	<u>X</u>	1	No		
Wetland Hydrology P	resent?	Yes _	Х	No _									
Remarks:													
1													
VEGETATION -	llse scien	tific n	ames of	nlant	te								
	200 301 0 11		absolu	_	Dominant	Indicator	Dominance	Test works	sheet:				
			% cov	er	Species?	Status							
Tree Stratum (plot	size:)	1				Number of Dor	minant Specie	es				
1							That are OBL,	FACW, or FA	.C:		2	(A)	
2													
3							Total Number				•	(D)	
4			0		- Total Cavar		Species Acros	s All Strata:	_		2	(B)	
					= Total Cover								
Sapling/Shrub Stratu		5	_				Percent of Don	•					
1 Vaccinium uli	•		80		X	FACW	That are OBL,	FACW, or FA	AC: _		100%	(A/B)	
2 Spiraea doug	iasii		5			FACW	Prevalence	Inday Wark	rehoot:				
4							Total % Cover			fultiply by			
5			-				OBL Spe			x 1 =	0		
			85		= Total Cover		FACW sp			x 2 =	0		
							FAC Spe	ecies		x 3 =	0	_	
Herb Stratum (plot		5))				FACU Sp	ecies		x 4 =	0		
1 Juncus falcat	us		10		Х	FACW	UPL Spe			x 5 =	0	_	
2							Column T	otals	0 (۹)	0	(B)	
3			-				Provalon	ce Index =B/A	۸ –	#	DIV/0!		
5							Fievaleii	ce muex -b/F	` -	#	DIV/U:		
6							Hydrophytic	Vegetatio	n Indicat	ors:			
7		-						_	minance 1)%		
8								Pre	evalence I	ndex is≤3	3.0 ¹		
			10	:	= Total Cover			Mo	orphologica	al Adaptat	ions¹ (provide	supporting	
											a separate s	heet)	
Woody Vine Stratum	(plot size:		_)						etland Non			1,=	
1								Pro	obiematic	⊣yarophyt	tic Vegetation	ı (Explain)	
2					= Total Cover		¹ Indicators of h	ovdric soil and	l wetland h	vdrology	must he nree	ent unless	
					- TOTAL COVEL		disturbed or pr		uuriu II	, ar orogy i	dot be pies	o.n, amoss	
							Hydrophytic	:		•			
							Vegetation		Yes	Х		No	
% Bare Ground in He	erb Stratum			-			Present?		_				

		PHS #	4611			Sampling Point:	
rofile Description: (Describ	e to the denth	needed to docum	ent the indicator or co	nfirm the absen	ce of indicators)		
• •	trix	noodod to doodin	Redox Features		oo or maroaroror,		
(Inches) Color (mois	t) %	Color (moist)	% Type ¹	Loc ²	Texture	Remarks	
0-20 10YR 4/3	100				Sand		
Type: C=Concentration, D=De	epletion, RM=Re	educed Matrix, CS=	=Covered or Coated Sar	nd Grains.	_	² Location: PL=Pore Lining, M=Matrix.	
lydric Soil Indicators: (/	•				Indic	ators for Problematic Hydric Soi	
Histosol (A1)			Sandy Redo	x (S5)		2 cm Muck (A10)	
Histic Epipedon	(A2)		Stripped Mar			Red Parent Material (TF	2)
Black Histic (A3				xy Mineral (F1) (ex	xcept MLRA 1)	X Other (explain in Remark	ks)
Hydrogen Sulfid				ed Matrix (F2)	•		•
Depleted Below		A11)	Depleted Ma				
Thick Dark Surfa	•	,	Redox Dark	Surface (F6)			
Sandy Mucky M				rk Surface (F7)		³ Indicators of hydrophytic vegetation a	
Sandy Gleyed M	, ,		Redox Depre	, ,		hydrology must be present, unless di problematic.	sturbed or
estrictive Layer (if pres				. ,			
	•						
ype:	N	one					
epth (inches):							
emarks: he sample site has stro ry at the time of assess xtending into the early	ment, the gro summer. Pho	ound surface ha	as an algal mat laye	iods of pondi	as. An air photo	epths likely approaching 2 feet. from June 2006 indicates pondi	ing
emarks: The sample site has stro	ment, the gro summer. Pho	ound surface ha	as an algal mat laye	iods of pondi	ng with water deas. An air photo	epths likely approaching 2 feet. from June 2006 indicates pondi	ing
emarks: The sample site has stro Iry at the time of assess xtending into the early bresence of at least seas	ment, the gro summer. Pho sonally satura	ound surface ha	as an algal mat laye	iods of pondi	ng with water deas. An air photo	epths likely approaching 2 feet. from June 2006 indicates pondi	ing
emarks: The sample site has stro ry at the time of assess xtending into the early resence of at least seas IYDROLOGY Vetland Hydrology Indic	ment, the grosummer. Pho conally satura	ound surface ha otos from other ated soils.	as an algal mat laye years show no evid	iods of pondi	ng with water deas. An air photo	epths likely approaching 2 feet. from June 2006 indicates pondi	ing e
emarks: he sample site has stro ry at the time of assess xtending into the early resence of at least seas IYDROLOGY /etland Hydrology Indic	ment, the ground the g	ound surface ha otos from other ated soils.	as an algal mat laye years show no evid hat apply)	iods of pondi	ng with water do as. An air photo ing in August. C	epths likely approaching 2 feet. from June 2006 indicates pondi	e required)
emarks: he sample site has stro ry at the time of assess xtending into the early resence of at least seas YDROLOGY //etland Hydrology Indic	ment, the grosummer. Phosummer. Phosummer. Phosumer. ators: ators: ator of one requal.	ound surface ha otos from other ated soils.	as an algal mat laye years show no evid hat apply)	iods of pondi r in many area lence of pond	ng with water do as. An air photo ing in August. C	epths likely approaching 2 feet. from June 2006 indicates pondion between vegetation confirms the Secondary Indicators (2 or more	e required)
emarks: the sample site has strong at the time of assess stending into the early resence of at least seasy YDROLOGY retland Hydrology Indicators (minimumary Indicators (minimumary Surface Water (January Indicators (Minimumary Ind	ment, the grosummer. Phosummer. Phosummer. Phosumer. ators: ators: ator of one requal.	ound surface ha otos from other ated soils.	hat apply) Water staine	iods of pondi r in many area lence of pond	ng with water do as. An air photo ing in August. C	epths likely approaching 2 feet. from June 2006 indicates pondion between vegetation confirms the Secondary Indicators (2 or more Water stained Leaves (E	e required)
emarks: he sample site has stro ry at the time of assess xtending into the early a resence of at least seas IYDROLOGY //etland Hydrology Indic rimary Indicators (minimumary Indicator	ment, the grosummer. Phosomally saturators: ators: am of one requal. (A1) e (A2)	ound surface ha otos from other ated soils.	hat apply) Water staine 1, 2, 4A, and Salt Crust (E	iods of pondi r in many area lence of pond	ng with water do as. An air photo ing in August. C	epths likely approaching 2 feet. from June 2006 indicates pondional description confirms the Secondary Indicators (2 or more Water stained Leaves (E. (MLRA1, 2, 4A, and 4B)	e required)
he sample site has stro ry at the time of assess xtending into the early a resence of at least seas IYDROLOGY /etland Hydrology Indic rimary Indicators (minimus Surface Water (A High Water Tab Saturation (A3)	ment, the grosummer. Phosummer. Phosummer. Phosumer. Phosumer. The second secon	ound surface ha otos from other ated soils.	hat apply) Water staine 1, 2, 4A, and Salt Crust (E	iods of pondi r in many area lence of pond d Leaves (B9) (E d 4B)	ng with water do as. An air photo ing in August. C	Secondary Indicators (2 or more Water stained Leaves (E (MLRA1, 2, 4A, and 4B Drainage Patterns (B10)	e required) 39) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c
emarks: he sample site has stro ry at the time of assess xtending into the early of	ment, the grosummer. Phosummer. Phosummer. Phosumer. Pho	ound surface ha otos from other ated soils.	hat apply) Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen St Oxidized Rh	iods of pondi r in many area lence of pond d Leaves (B9) (E d 4B) st11) rtebrates (B13) ulfide Odor (C1) izospheres along	ng with water do as. An air photo ing in August. C	Secondary Indicators (2 or more Water stained Leaves (E (MLRA1, 2, 4A, and 4B Drainage Patterns (B10) X Dry-Season Water Table Saturation Visible on Ae X Geomorphic Position (D)	e required) 39) 3) e (C2) rial Imagery (C
he sample site has stro ry at the time of assess ktending into the early of the time of assess resence of at least seas YDROLOGY Vetland Hydrology Indice rimary Indicators (minimus Surface Water (A. High Water Tab Saturation (A3) Water Marks (B. Sediment Deposits (E. X. Algal Mat or Cru	ment, the grosummer. Phosummer. Phosummer. Phosummer. Phosumer. Ph	ound surface ha otos from other ated soils.	hat apply) Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen St Oxidized Rh Presence of	iods of pondir in many area lence of pond ded Leaves (B9) (Ed 4B) 111) Intebrates (B13) alfide Odor (C1) dizospheres along Reduced Iron (C	ng with water do as. An air photo ing in August. C Except MLRA	Secondary Indicators (2 or more Water stained Leaves (E (MLRA1, 2, 4A, and 4B Drainage Patterns (B10) X Dry-Season Water Table Saturation Visible on Ae X Geomorphic Position (D: Shallow Aquitard (D3)	e required) 39) 3) e (C2) rial Imagery (
emarks: he sample site has stro ry at the time of assess xtending into the early stresence of at least seast YDROLOGY /etland Hydrology Indic rimary Indicators (minimus Surface Water (A.) High Water Table Saturation (A.3) Water Marks (B.) Sediment Deposits (B.) X Algal Mat or Cru Iron Deposits (B.)	ment, the grosummer. Phosummer. Phosummer. Phosummer. Phosummer. Phosummer. Phosumer.	ound surface ha otos from other ated soils.	hat apply) Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen St Oxidized Rh Presence of Recent Iron	iods of pondir in many area lence of pond ded Leaves (B9) (Edd 4B) at 1) rebrates (B13) ulfide Odor (C1) izospheres along Reduced Iron (C) Reduction in Plor	ng with water do as. An air photo ing in August. C	Secondary Indicators (2 or more Water stained Leaves (E (MLRA1, 2, 4A, and 4B Drainage Patterns (B10) X Dry-Season Water Table Saturation Visible on Ae X Geomorphic Position (D: Shallow Aquitard (D3) X Fac-Neutral Test (D5)	e required) 39) (c) (c) (c) (c) (d) (d) (d) (e) (d) (e) (e) (f) (f) (f) (f) (f) (f) (f) (f) (f) (f
remarks: The sample site has stro Iry at the time of assess Iry at the sample site of assess Iry at the time of assess Iry at the sample site has stro Iry at the sample site has strongle	ators: am of one requal (A1) e (A2) iits (B2) 3) st (B4) 5) cks (B6)	ound surface had been sound surface had soils. uired; check all t	hat apply) Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen St Oxidized Rh Presence of Recent Iron Stunted or S	iods of pondir in many area lence of pond ded Leaves (B9) (Edd 4B) and the leaves (B13) alfide Odor (C1) alfode Odor (C1) alf	ng with water do as. An air photo ing in August. C	Secondary Indicators (2 or more Water stained Leaves (E (MLRA1, 2, 4A, and 4B Drainage Patterns (B10) X Dry-Season Water Table Saturation Visible on Ae X Geomorphic Position (D) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6)	e required) 39) 39) 10 (C2) 11 (C2) 12 (C2)
remarks: The sample site has stro Iry at the time of assess In a stending into the early stresence of at least seast seast In a stending into the early stresence of at least seast sea	ators: am of one requals ations ation	ound surface had toos from other ated soils. uired; check all t	hat apply) Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen St Oxidized Rh Presence of Recent Iron Stunted or S	iods of pondir in many area lence of pond ded Leaves (B9) (Edd 4B) at 1) rebrates (B13) ulfide Odor (C1) izospheres along Reduced Iron (C) Reduction in Plor	ng with water do as. An air photo ing in August. C	Secondary Indicators (2 or more Water stained Leaves (E (MLRA1, 2, 4A, and 4B Drainage Patterns (B10) X Dry-Season Water Table Saturation Visible on Ae X Geomorphic Position (D: Shallow Aquitard (D3) X Fac-Neutral Test (D5)	e required) 39) 39) 6 (C2) rial Imagery (C2)
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emarks: The sample site has stro ry at the time of assess xtending into the early a resence of at least seas IYDROLOGY Vetland Hydrology Indice Trimary Indicators (minimulation (A3) Water Marks (B Sediment Deposits (B X Algal Mat or Cru Iron Deposits (B Surface Soil Cra Inundation Visib Sparsely Vegeta iteld Observations: urface Water Present?	ment, the grosummer. Phosummer. Phosummer. Phosummer. Phosummer. Phosumer. P	ound surface had been atted soils. uired; check all tage.	hat apply) Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen St Oxidized Rh Presence of Recent Iron Stunted or S Other (Expla	iods of pondir in many area lence of pond ded Leaves (B9) (Edd 4B) and the leaves (B13) alfide Odor (C1) alfode Odor (C1) alf	ng with water do as. An air photo ing in August. C Except MLRA	Secondary Indicators (2 or more Water stained Leaves (E (MLRA1, 2, 4A, and 4B Drainage Patterns (B10) X Dry-Season Water Table Saturation Visible on Ae X Geomorphic Position (D) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6)	e required) 39) 39) 6 (C2) rial Imagery (C2)
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remarks: The sample site has stro Iry at the time of assess In the sample site has stro Iry at the time of assess Iry at t	ment, the grosummer. Phosummer. Phosummer. Phosummer. Phosumer. Ph	uired; check all t	hat apply) Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen St Oxidized Rh Presence of Recent Iron Stunted or S Other (Expla	iods of pondir in many area lence of pondir deleaves (B9) (Ed 4B) it11) retebrates (B13) ulfide Odor (C1) izospheres along Reduced Iron (Cillow) Reduction in Plore tressed Plants (Lillow) in in Remarks)	ng with water doas. An air photo ing in August. Control of the con	Secondary Indicators (2 or more Water stained Leaves (E (MLRA1, 2, 4A, and 4B Drainage Patterns (B10) X Dry-Season Water Table Saturation Visible on Ae X Geomorphic Position (D) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6 Frost-Heave Hummocks	e required) 39) 39) 6 (C2) rial Imagery (C2)
remarks: The sample site has stro Iry at the time of assess In a stro Iry at the time of assess	ment, the grosummer. Phosummer. Phosummer. Phosummer. Phosumer. Ph	uired; check all t	hat apply) Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen St Oxidized Rh Presence of Recent Iron Stunted or S Other (Expla	iods of pondir in many area lence of pondir deleaves (B9) (Ed 4B) it11) retebrates (B13) ulfide Odor (C1) izospheres along Reduced Iron (Cillow) Reduction in Plore tressed Plants (Lillow) in in Remarks)	ng with water doas. An air photo ing in August. Control of the con	Secondary Indicators (2 or more Water stained Leaves (E (MLRA1, 2, 4A, and 4B Drainage Patterns (B10) X Dry-Season Water Table Saturation Visible on Ae X Geomorphic Position (D) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6 Frost-Heave Hummocks	e required) 39) 39) 10 (C2) 11 (C2) 12 (C2)
remarks: The sample site has stro Iry at the time of assess In a sample site has stro Iry at the time of assess Iry at the	ment, the grosummer. Phosummer. Phosummer. Phosummer. Phosumer. Ph	uired; check all t	hat apply) Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen St Oxidized Rh Presence of Recent Iron Stunted or S Other (Expla	iods of pondir in many area lence of pondir deleaves (B9) (Ed 4B) it11) retebrates (B13) ulfide Odor (C1) izospheres along Reduced Iron (Cillow) Reduction in Plore tressed Plants (Lillow) in in Remarks)	ng with water doas. An air photo ing in August. Control of the con	Secondary Indicators (2 or more Water stained Leaves (E (MLRA1, 2, 4A, and 4B Drainage Patterns (B10) X Dry-Season Water Table Saturation Visible on Ae X Geomorphic Position (D) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6 Frost-Heave Hummocks	e required) 39) 39) 10 (C2) 11 (C2) 12 (C2)
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IS#

4680

Not Map unit Name: Net arise fine sand	Project/Site:	Brandt	Proper	rty	_	City/County:	Flo	orence/Lar	ne	Sa	mpling Date:	7/	6/2010
Landform (hillistope, terrace, etc.) wetland fringe	Applicant/Owner:	Craig & K	Cathleer	n Brandt					State	e: OR		Sampling Poin	t: 18
Subsequence Lar.	Investigator(s):		AH/CR			Section, To	wnship, Range:		Sec	ction 14,	T 18 South,	R 12 West	
Note Name	Landform (hillslope,	terrace, etc.:)		wetla	nd frii	nge	Local relief (co	ncave, conve	ex, none):		none	Slope (%): O
Are viginatichydrologic conditions on the site typical for bits time of year? Yes X No (if no, explain in Remarks) Are vegetation Soil or Hydrology agenticarity disturbed? Are "Normal Circumstances" present? (V/N) Y 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. Hydrochyte Vegetation Present? Yes X No Set A	Subregion (LRR):		LRR	Α		Lat:	44.009	98	Long	g: '	124.0865	 Datum	DD.DD
Are viginatichydrologic conditions on the site typical for bits time of year? Yes X No (if no, explain in Remarks) Are vegetation Soil or Hydrology agenticarity disturbed? Are "Normal Circumstances" present? (V/N) Y 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. Hydrochyte Vegetation Present? Yes X No Set A	Soil Map Unit Name:	:			letart	s fine sand			NWI C	Classificati	on:	— L2ABH	
Are vegetation Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? (Y/N) Y 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 X No	Are climatic/hydrolog	ic conditions	on the sit				Yes	Х	N	0	(if no, expla	in in Remarks)
South Sout						-	turbed?	Are "Norm	nal Circumsta	ances" pre			
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.		_				•							_
Hydric Stratum (plot size:			_	.,				.,	,		,		
Is Sampled Area within a Wetland? Yes X No No No No No No No	SUMMARY OF	FINDINGS	S – Att	ach site	map	showing sa	mpling poin	t location	ns, transe	cts, im	portant feat	ures, etc.	
Wetsand Hydrology Present? Yes X No No No No	Hydrophytic Vegetat	ion Present?	Yes	Х	No		la Campled A						
Number of Dominant Species Status Species S	Hydric Soil Present?		Yes	Х	No				Ye	s X		lo	_
April	Wetland Hydrology F	Present?	Yes	Х	No								
absolute	Remarks:												
absolute													
absolute	<u> </u>												
Number of Dominant Species That are OBL, FACW, or FAC: 2	VEGETATION -	Use scie	ntific n		-			1					
Number of Dominant Species	1							Dominar	nce Test w	orkshee	t:		
That are OBL, FACW, or FAC: 2 (A) 2	Tree Stratum (nlo	t cizo:		% COV	/er_	Species?	Status	Number of	f Dominant S	nasiaa			
Total Number of Dominant Species Across All Strata: 1	``	. 5126.		,								2	(A)
Total Number of Dominant Species Across All Strata: 2 (B)								That are C	DBL, FACW, (JI FAC.	-		_(A)
Species Across All Strata: 2 (B)				-				Total Num	ber of Domin	ant			
Percent of Dominant Species	4											2	(B)
Percent of Dominant Species That are OBL, FACW, or FAC: 100% (A/B)				0		= Total Cover					1		_(-)
That are OBL, FACW, or FAC: 100% (A/B)	Conling/Chrub Strati	ım (datalı							· D				
Prevalence Index Worksheet: Total % Cover of Multiply by:		iiii (piot size	e:	_'							4	000/	(A/P)
Prevalence Index Worksheet: Total % Cover of Multiply by: OBL Species x 1 = O FACW species x 2 = O FAC Species x 4 = O FAC Species X 5 = O Species X 5 = O FAC Species X 5 = O	· 							That are C	JBL, FACW,	OI FAC.		00%	_(A/B)
Total % Cover of Multiply by: OBL Species								Prevaler	nce Index V	Vorkshe	et·		
DBL Species													
Name	5									_		_ 0	
FACU Species	•			0		= Total Cover			-			0	_
Juncus falcatus								FAC	Species		x 3 =	0	- -
2 Juncus effusus 10			5)				FACL	J Species		x 4 =	0	
A grostis tenuis A grostis A g	·			70		X	FACW	UPL	Species		x 5 =	0	_
Prevalence Index =B/A = #DIV/0! Hydrophytic Vegetation Indicators: X Dominance Test is >50% Prevalence Index is ≤ 3.0¹ Morphological Adaptations¹ (provide supporting data in Remarks or on a separate sheet) Wetland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain) Problematic Hydrophytic Vegetation¹ (Explain) Problematic Hydrophytic Vegetation								Colur	mn Totals	0	(A)	0	_(B)
S	<u> </u>	IIS		20		X	FAC				_		
Hydrophytic Vegetation Indicators: X Dominance Test is >50%								Prev	alence Index	=B/A =	#E	DIV/0!	_
X Dominance Test is >50%								l la color o colo		-t! l	l: t - u		
8 Prevalence Index is ≤ 3.0¹ Morphological Adaptations¹ (provide supporting data in Remarks or on a separate sheet) Wedland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain) 1 Problematic Hydrophytic Vegetation¹ (Explain) 1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Yes X No								пуагорп	-			0/	
Morphological Adaptations¹ (provide supporting data in Remarks or on a separate sheet) Woody Vine Stratum (plot size:) Wetland Non-Vascular Plants¹								-	^	_			
Moody Vine Stratum (plot size:) Metland Non-Vascular Plants¹ Problematic Hydrophytic Vegetation¹ (Explain) The stratum	·			100		= Total Cover		-		_			unnorting
Problematic Hydrophytic Vegetation¹ (Explain) 1						- Total Cover		-		_			
2	Woody Vine Stratum	(plot size:)								• .	•
0 = Total Cover Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Yes X No	1									Problem	natic Hydrophyti	c Vegetation ¹ (Explain)
disturbed or problematic. Hydrophytic Separation Yes X No	2							_		_			
## Hydrophytic Wegetation Yes X No				0		= Total Cover			-		and hydrology n	nust be presen	t, unless
% Bare Ground in Herb Stratum Vegetation Yes X No					_				-	C.			
	% Bare Ground in H	erb Stratum								٧	es X	N)
Present?	2a.o Ground III II				_			_		•	<u>^</u>	_ '''	
Remarks:	Remarks:												

Profile Descri	ntion: (Describe to	the depth	needed to docum	ent the indicator or co	onfirm the abser	ce of indicators.)	
Depth	Matrix	ino dopin	noodod to doodin	Redox Features	Jim in the about	ioo or maioatoroly	
(Inches)	Color (moist)	%	Color (moist)	% Type ¹	Loc ²	Texture	Remarks
0-18	10YR 3/2	50	10YR 3/4	10 C	М	Sand	mixed soil profile
0-18	10YR 4/2	40				Sand	mixed soil profile
							<u> </u>
Type: C=Cond	contration D-Danlet	ion DM-D	aduced Matrix, CS-	Covered or Coated Sa	and Grains		² Location: PL=Pore Lining, M=Matrix.
			· · · · · · · · · · · · · · · · · · ·	s otherwise noted		Indica	ators for Problematic Hydric Soils ³ :
-	Histosol (A1)		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	X Sandy Red			2 cm Muck (A10)
	Histic Epipedon (A2)			Stripped Ma			Red Parent Material (TF2)
	Black Histic (A3)			Loamy Muc	ky Mineral (F1) (e	except MLRA 1)	Other (explain in Remarks)
_	Hydrogen Sulfide (A4	4)		Loamy Gley	yed Matrix (F2)		
	Depleted Below Dark	Surface (A11)	Depleted M	atrix (F3)		
-	Thick Dark Surface (A12)		Redox Dark	Surface (F6)		
	Sandy Mucky Minera	al (S1)		Depleted D	ark Surface (F7)		³ Indicators of hydrophytic vegetation and wetland
	Sandy Gleyed Matrix	(S4)		Redox Dep	ressions (F8)		hydrology must be present, unless disturbed or problematic.
Restrictive I	Layer (if present)):					
	, , ,						
		n	one				
Type: Depth (inches Remarks:		n	one			Hydric Soil Pres	sent? Yes <u>X</u> No
Type: Depth (inches Remarks: HYDROLO Wetland Hyd	GY drology Indicator	rs:				Hydric Soil Pres	
Type: Depth (inches Remarks: HYDROLO Wetland Hyde Primary Indic	GY drology Indicator cators (minimum c	rs:			ed Leaves (B9) (Secondary Indicators (2 or more required)
Type: Depth (inches Remarks: HYDROLO Vetland Hyde Primary India	drology Indicator cators (minimum o	rs: of one req			ed Leaves (B9) (I		
Type: Depth (inches Remarks: HYDROLO Wetland Hyd Primary Indic	GY drology Indicator cators (minimum c	rs: of one req		Water stain	nd 4B)		Secondary Indicators (2 or more required) Water stained Leaves (B9)
Type: Depth (inches Remarks: HYDROLO Wetland Hyde Primary Indic X X	drology Indicator cators (minimum c Surface Water (A1) High Water Table (A	rs: of one req		Water stain 1, 2, 4A, an Salt Crust (nd 4B)		Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)
Type: Depth (inches Remarks: HYDROLO Wetland Hyd Primary India X X	drology Indicator cators (minimum o Surface Water (A1) High Water Table (At Saturation (A3)	r s: of one req 2)		Water stain 1, 2, 4A, an Salt Crust (Aquatic Inv	nd 4B) B11)		Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
Type: Depth (inches Remarks: HYDROLO Wetland Hyd Primary India X X	drology Indicator cators (minimum of Surface Water (A1) High Water Table (A) Saturation (A3) Water Marks (B1)	r s: of one req 2)		Water stain 1, 2, 4A, an Salt Crust (Aquatic Invo	ad 4B) B11) ertebrates (B13) Sulfide Odor (C1)		Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
Type: Depth (inches Remarks: HYDROLO Wetland Hyd Trimary Indic X X X	drology Indicator cators (minimum of Surface Water (A1) High Water Table (A) Saturation (A3) Water Marks (B1) Sediment Deposits (I	rs: of one req		Water stain 1, 2, 4A, an Salt Crust (Aquatic Invo Hydrogen S Oxidized RI	ad 4B) B11) ertebrates (B13) Sulfide Odor (C1)	Except MLRA g Living Roots (C3)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (
Type: Depth (inches Remarks: HYDROLO Wetland Hyd Primary India X X	drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3)	rs: of one req		Water stain 1, 2, 4A, an Salt Crust (Aquatic Invented By State Control Advantage State Control Advant	nd 4B) B11) ertebrates (B13) Gulfide Odor (C1) hizospheres along	Except MLRA g Living Roots (C3) C4)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (X Geomorphic Position (D2)
Type: Depth (inches Remarks: HYDROLO Wetland Hyd Primary Indic	drology Indicators Cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B	rs: of one req 2) B2)		Water stain 1, 2, 4A, an Salt Crust (Aquatic Inventoring State of the stain of the	ad 4B) B11) ertebrates (B13) Sulfide Odor (C1) hizospheres along	Except MLRA g Living Roots (C3) C4) owed Soils (C6)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (X Geomorphic Position (D2) Shallow Aquitard (D3)
Type: Depth (inches Remarks: HYDROLO Wetland Hyd Trimary India X X S	drology Indicator cators (minimum of Surface Water (A1) High Water Table (A: Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B Iron Deposits (B5)	rs: of one req 2) B2) 44) (B6)	uired; check all tl	Water stain 1, 2, 4A, an Salt Crust (Aquatic Inv Hydrogen S Oxidized RI Presence o Recent Iron Stunted or S	ad 4B) B11) ertebrates (B13) Sulfide Odor (C1) hizospheres along f Reduced Iron (C) Reduction in Plo	Except MLRA g Living Roots (C3) C4) owed Soils (C6)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5)
Type: Depth (inches Remarks: HYDROLO Wetland Hyd X X X	drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B3) Iron Deposits (B5) Surface Soil Cracks	rs: of one req 2) B2) 44) (B6) Aerial Ima	uired; check all tl	Water stain 1, 2, 4A, an Salt Crust (Aquatic Inv Hydrogen S Oxidized RI Presence o Recent Iron Stunted or S	ad 4B) B11) ertebrates (B13) Sulfide Odor (C1) hizospheres along f Reduced Iron (C) Reduction in Plo	Except MLRA g Living Roots (C3) C4) owed Soils (C6)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Type: Depth (inches Remarks: HYDROLO Wetland Hyd Primary India X X	drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B3) Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated (Inundation Visible on	rs: of one req 2) B2) 44) (B6) Aerial Ima	uired; check all tl	Water stain 1, 2, 4A, an Salt Crust (Aquatic Inv Hydrogen S Oxidized RI Presence o Recent Iron Stunted or S	ad 4B) B11) ertebrates (B13) Sulfide Odor (C1) hizospheres along f Reduced Iron (C) Reduction in Plo	Except MLRA g Living Roots (C3) C4) owed Soils (C6)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Type: Depth (inches Remarks: HYDROLO Wetland Hyd X X X S Field Observ	drology Indicators Cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B1) Iron Deposits (B5) Surface Soil Cracks of Inundation Visible on Sparsely Vegetated (Vations:	rs: of one req 2) B2) 44) (B6) I Aerial Ima	uired; check all ti	Water stain 1, 2, 4A, an Salt Crust (Aquatic Inv Hydrogen S Oxidized RI Presence o Recent Iron Stunted or S	ad 4B) B11) ertebrates (B13) Sulfide Odor (C1) hizospheres along f Reduced Iron (C n Reduction in Plo Stressed Plants (ain in Remarks)	g Living Roots (C3) C4) owed Soils (C6) D1) (LRR A)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (C2) X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Type: Depth (inches Remarks: HYDROLO Wetland Hyd Primary India X X S Field Observ Surface Water	cators (minimum of Surface Water (A1) High Water Table (A) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B) Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated (Vations: Present? Yes	rs: of one req 2) B2) 44) (B6) Aerial Ima	uired; check all the	Water stain 1, 2, 4A, an Salt Crust (Aquatic Invented in the stain of	ad 4B) B11) ertebrates (B13) Sulfide Odor (C1) hizospheres along f Reduced Iron (C) Reduction in Plo	g Living Roots (C3) C4) owed Soils (C6) D1) (LRR A)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Type: Depth (inches Remarks: HYDROLO Wetland Hyd Primary Indic X X S Field Observ Surface Water Water Table Pr Saturation Pres	drology Indicator cators (minimum of Surface Water (A1) High Water Table (A) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated (Inundation Visible on Vations: Present? Yes resent? Yes sent? Yes	rs: of one req 2) B2) 44) (B6) I Aerial Ima	uired; check all ti	Water stain 1, 2, 4A, an Salt Crust (Aquatic Invented in the stain of	ad 4B) B11) ertebrates (B13) Sulfide Odor (C1) hizospheres along f Reduced Iron (C n Reduction in Plo Stressed Plants (ain in Remarks)	g Living Roots (C3) C4) owed Soils (C6) D1) (LRR A)	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (VI) X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Type: Depth (inchest Remarks: HYDROLO Wetland Hyde X X X Field Obsert Surface Water Water Table Posaturation Presincludes capillary	drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B1) Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated (C1) vations: Present? Yes resent? Yes sent? Yes y fringe)	rs: of one req 2) B2) 44) (B6) Aerial Ima Concave S	uired; check all the second se	Water stain 1, 2, 4A, an Salt Crust (Aquatic Inv. Hydrogen S Oxidized RI Presence o Recent Iron Stunted or S Other (Expl	ad 4B) B11) ertebrates (B13) Sulfide Odor (C1) hizospheres along f Reduced Iron (C n Reduction in Plo Stressed Plants (ain in Remarks)	Except MLRA g Living Roots (C3) C4) wed Soils (C6) D1) (LRR A) Wetland Hyd	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
Type: Depth (inchest Remarks: HYDROLO Wetland Hyde Primary Indic X X S Field Obsert Surface Water Water Table Posaturation Presidincludes capillary	drology Indicator cators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B1) Iron Deposits (B5) Surface Soil Cracks (Inundation Visible on Sparsely Vegetated (C1) vations: Present? Yes resent? Yes sent? Yes y fringe)	rs: of one req 2) B2) 44) (B6) Aerial Ima Concave S	uired; check all the second se	Water stain 1, 2, 4A, an Salt Crust (Aquatic Invu Hydrogen S Oxidized RI Presence o Recent Iron Stunted or S Other (Expl	ad 4B) B11) ertebrates (B13) Sulfide Odor (C1) hizospheres along f Reduced Iron (C n Reduction in Plo Stressed Plants (ain in Remarks)	Except MLRA g Living Roots (C3) C4) wed Soils (C6) D1) (LRR A) Wetland Hyd	Secondary Indicators (2 or more required) Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imagery (X Geomorphic Position (D2) Shallow Aquitard (D3) X Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)

4611

oject/Site:	Flore	nce LWI		City/Cou	nty:	Flo	orence/Lane	Sam	pling Date:	8/1	2/2010
plicant/Owner:	City of Flo	orence					State	OR	_ s	ampling Point	13
estigator(s):		AH/SE		Section	on, To	wnship, Range:					
dform (hillslope, ter	race, etc.:)					Local relief (co	ncave, convex, none):			Slope (%)	:
oregion (LRR):					Lat:		Long				:
Map Unit Name:									:		
- climatic/hydrologic					?	Yes			(if no, explain		
vegetation							Are "Normal Circumstar		_	,	
							d, explain any answers in F	•	(,		_
<u></u>		_	yarology	natarany p	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	natio: il nocace	, explain any anowere in i	tomarko.)			
MMARY OF F	INDINGS	– Atta	ach site	map showin	ıg sa	mpling poin	nt locations, transe	cts, impo	ortant featu	ıres, etc.	
rophytic Vegetation	Present?	Yes	X	No							
ric Soil Present?		Yes	Х			Is Sampled Ai		X	No)	
land Hydrology Pre	esent?	Yes	Х	No					_		
narks:		_		-							
airs.											
GETATION - L	Jse sciei	ntific n	ames of	plants.							
			absolu	te Domina	nt	Indicator	Dominance Test wo	rksheet:			
			% cove	er Species	s?	Status					
Stratum (plot si	ize:)					Number of Dominant Sp	ecies			
							That are OBL, FACW, o	r FAC:			_(A)
							Total Number of Domina				
							Species Across All Strat	a:		3	_(B)
			0	= Total Co	over						
ling/Shrub Stratum	(plot size):)				Percent of Dominant Sp	ecies			
							That are OBL, FACW, o	or FAC:)%	(A/B)
							Prevalence Index W	orksheet	:		
							Total % Cover of	-	Multiply by:	_	
							OBL Species		x 1 =	0	-
			0	= Total Co	over		FACW species FAC Species	-	x 2 =	0	_
Stratum (plot si	izo:	5)					FAC Species FACU Species	i.	- x 3 = x 4 =	0	_
Festuca like			30	х		#N/A	UPL Species	-	- x 4 = x 5 =	0	-
Salicornia virgi	nica		10			OBL	Column Totals	0	(A)	0	(B)
Agrostis like			45	x	_	#N/A	Column Fotale		_('')		_(5)
Juncus tenuis l	like		10			#N/A	Prevalence Index	=B/A =	#D	IV/0!	
fleshy-not pick	leweed		30	x		#N/A					_
yellow flower			5			#N/A	Hydrophytic Vegeta	tion Indic	cators:		
							X	Dominano	e Test is >50%	, 6	
								Prevalenc	e Index is ≤ 3.0) ¹	
			130	= Total Co	over			Morpholog	gical Adaptation	ns ¹ (provide s	upporting
			'				<u> </u>	data in Re	marks or on a	separate she	et)
dy Vine Stratum	(plot size:		_)					-	Ion-Vascular P		
								Problemat	ic Hydrophytic	Vegetation ¹ (Explain)
							[
							¹ Indicators of hydric soil	and wetlan	d hydrology mi	ust be present	t, unless
			0	= Total Co	over		-				
			0	= Total Co	over		disturbed or problematic				
are Ground in Herb	Stratum		0	= Total Co	over		-	Yes	s X	No	•

			PHS #	40	511			Sampling Point: 13
	iption: (Describe to	the depth	needed to docume			nfirm the absend	ce of indicators.)	
Depth	Matrix		0-1 (i-t)		x Features Type ¹	Loc ²	Tautura	Demode
(Inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Турс		Texture	Remarks
0-3	10YR 4/3	80	7.5YR 4/6	20			Sand	ORs in upper 3 inches
3-16	10YR 4/3	88	10YR 4/6	12	<u> </u>	<u> </u>	Sand	
Type: C=Con	centration, D=Deplet	ion, RM=R	educed Matrix, CS=	Covered o	r Coated Sar	nd Grains.		² Location: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Appl	icable to	all LRRs, unless	s otherw	ise noted.))	Indica	ators for Problematic Hydric Soils ³ :
	Histosol (A1)				Sandy Redo	ox (S5)		2 cm Muck (A10)
	Histic Epipedon (A2)	į			Stripped Mar	trix (S6)		Red Parent Material (TF2)
	Black Histic (A3)				Loamy Muck	ky Mineral (F1) (ex	(cept MLRA 1)	Other (explain in Remarks)
	Hydrogen Sulfide (A	4)			Loamy Gley	ed Matrix (F2)		
	Depleted Below Dark	k Surface (/	A11)		Depleted Ma	atrix (F3)		
	Thick Dark Surface (A12)			Redox Dark	Surface (F6)		
	Sandy Mucky Minera	al (S1)			Depleted Da	ark Surface (F7)		³ Indicators of hydrophytic vegetation and wetland
	Sandy Gleyed Matrix	(S4)			Redox Depre	essions (F8)		hydrology must be present, unless disturbed or problematic.
	s):						Hydric Soil Pres	eent? Yes X No
Remarks:					_		Hydric Soil Pres	eent? Yes <u>X</u> No
Remarks: HYDROLO Wetland Hy	OGY drology Indicato		uirod: chock all th	ant apply			Hydric Soil Pres	
HYDROLO Wetland Hy Primary Indi	OGY drology Indicator cators (minimum c		uired; check all th	117/				Secondary Indicators (2 or more required
HYDROLC Wetland Hy Primary Indi	ody rdrology Indicator cators (minimum o Surface Water (A1)	of one req	uired; check all th			ed Leaves (B9) (E		
HYDROLC Wetland Hy Primary Indi	OGY rdrology Indicator cators (minimum of Surface Water (A1) High Water Table (A	of one req	uired; check all th		Water staine	ed Leaves (B9) (E d 4B)		Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)
HYDROLO Wetland Hy Primary Indi X X	ody adrology Indicator cators (minimum of Surface Water (A1) High Water Table (A Saturation (A3)	of one req	uired; check all th		Water staine 1, 2, 4A, and Salt Crust (E	ed Leaves (B9) (E d 4B) 311)		Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10)
HYDROLO Wetland Hy Primary Indi X X	ody cators (minimum of Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1)	of one req	uired; check all th		Water staine 1, 2, 4A, and Salt Crust (E	ed Leaves (B9) (E d 4B) 311) ertebrates (B13)		Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2)
HYDROLO Wetland Hy Primary Indi X X	ody rdrology Indicator cators (minimum of Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (of one req	uired; check all th		Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen St	ed Leaves (B9) (E d 4B) B11) ertebrates (B13) ulfide Odor (C1)	Except MLRA	Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imager
HYDROLO Wetland Hy Primary Indi X X	cators (minimum of Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (I) Drift Deposits (B3)	of one req 2) B2)	uired; check all th		Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen St Oxidized Rh	ed Leaves (B9) (E d 4B) B11) ertebrates (B13) ulfide Odor (C1)	except MLRA Living Roots (C3)	Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imager X Geomorphic Position (D2)
HYDROLO Wetland Hy Primary Indi X X	ody rdrology Indicator cators (minimum of Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (of one req 2) B2)	uired; check all th		Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen St Oxidized Rh Presence of	ed Leaves (B9) (Ed 4B) B11) ertebrates (B13) ulfide Odor (C1) izospheres along	Except MLRA Living Roots (C3) 4)	Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imager X Geomorphic Position (D2) Shallow Aquitard (D3)
HYDROLO Wetland Hy Primary Indi X X	cators (minimum of Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B1) Iron Deposits (B5)	of one req 2) B2)	uired; check all th		Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen St Oxidized Rh Presence of Recent Iron	ed Leaves (B9) (E d 4B) B11) Entebrates (B13) ulfide Odor (C1) uizospheres along	Except MLRA Living Roots (C3) 4) wed Soils (C6)	Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imager X Geomorphic Position (D2)
HYDROLO Wetland Hy Primary Indi X X	cators (minimum of Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (E	of one req 2) B2) 34) (B6)			Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen St Oxidized Rh Presence of Recent Iron Stunted or S	ed Leaves (B9) (Ed 4B) B11) ertebrates (B13) ulfide Odor (C1) izospheres along Reduced Iron (C	Except MLRA Living Roots (C3) 4) wed Soils (C6)	Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imager X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5)
HYDROLO Wetland Hy Primary Indi X X	Cators (minimum of Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (E Iron Deposits (B5) Surface Soil Cracks	of one req 2) B2) 34) (B6) n Aerial Ima	ngery (B7)		Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen St Oxidized Rh Presence of Recent Iron Stunted or S	ed Leaves (B9) (Ed 4B) B11) ertebrates (B13) ulfide Odor (C1) izospheres along Reduced Iron (C Reduction in Ploy	Except MLRA Living Roots (C3) 4) wed Soils (C6)	Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imager X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
HYDROLC Wetland Hy Primary Indi X X	cators (minimum of Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (E Iron Deposits (B5) Surface Soil Cracks Inundation Visible or Sparsely Vegetated	of one req 2) B2) 34) (B6) n Aerial Ima	ngery (B7)		Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen St Oxidized Rh Presence of Recent Iron Stunted or S	ed Leaves (B9) (Ed 4B) B11) ertebrates (B13) ulfide Odor (C1) izospheres along Reduced Iron (C Reduction in Ploy	Except MLRA Living Roots (C3) 4) wed Soils (C6)	Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imager X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
HYDROLO Wetland Hy Primary Indi X X	cators (minimum of Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B Iron Deposits (B5) Surface Soil Cracks Inundation Visible or Sparsely Vegetated (Vations:	of one req 2) B2) 34) (B6) n Aerial Ima	ngery (B7)	X	Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen St Oxidized Rh Presence of Recent Iron Stunted or S	ed Leaves (B9) (Ed 4B) B11) ertebrates (B13) ulfide Odor (C1) izospheres along Reduced Iron (C Reduction in Ploy	Except MLRA Living Roots (C3) 4) wed Soils (C6)	Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imager X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
HYDROLO Wetland Hy Primary Indi X X X	cators (minimum of Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B1) Iron Deposits (B5) Surface Soil Cracks Inundation Visible or Sparsely Vegetated Tvations: The Present? Yes	of one req 2) B2) 34) (B6) n Aerial Ima	ngery (B7) urface (B8)	X	Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen St Oxidized Rh Presence of Recent Iron Stunted or S Other (Expla	ed Leaves (B9) (Ed 4B) B11) ertebrates (B13) ulfide Odor (C1) izospheres along Reduced Iron (C Reduction in Ploy	Living Roots (C3) 4) wed Soils (C6) 01) (LRR A)	Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imager X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A)
Primary Indi X X	cators (minimum of Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B1) Iron Deposits (B5) Surface Soil Cracks Inundation Visible or Sparsely Vegetated of Vations: The Present? Yes Present? Yes Present? Yes Present? Yes	end one request. B2) B4) (B6) n Aerial Ima Concave Si	ngery (B7) urface (B8) No <u>X</u>	X Depth Depth	Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen St Oxidized Rh Presence of Recent Iron Stunted or S Other (Explain	ed Leaves (B9) (Ed 4B) B11) ertebrates (B13) ulfide Odor (C1) nizospheres along Reduced Iron (C Reduction in Plot Stressed Plants (E	Living Roots (C3) 4) wed Soils (C6) 01) (LRR A)	Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imager X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
HYDROLO Wetland Hy Primary Indi X X X Field Obsel Surface Water Water Table F Saturation Pre includes capilla	cators (minimum of Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B1) Iron Deposits (B5) Surface Soil Cracks Inundation Visible or Sparsely Vegetated of Vations: The Present? Yes Present? Yes Present? Yes Present? Yes	bof one required (2) B2) B4) (B6) Aerial Ima Concave Si X X	agery (B7) urface (B8) No X No No No	X Depth Depth	Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen St Oxidized Rh Presence of Recent Iron Stunted or S Other (Explain (inches): (inches): (inches):	ed Leaves (B9) (Ed 4B) B11) ertebrates (B13) ulfide Odor (C1) izospheres along Reduced Iron (C Reduction in Plov Stressed Plants (Edin in Remarks)	Except MLRA Living Roots (C3) 4) wed Soils (C6) 01) (LRR A) Wetland Hydi	Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imager X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)
HYDROLO Wetland Hy Primary Indi X X X Field Obsel Surface Water Water Table F Saturation Pre includes capilla Describe Reco	cators (minimum of Surface Water (A1) High Water Table (A Saturation (A3) Water Marks (B1) Sediment Deposits (B3) Algal Mat or Crust (B Iron Deposits (B5) Surface Soil Cracks Inundation Visible or Sparsely Vegetated of Vations: The Present? The Server of	bof one required (2) B2) B4) (B6) Aerial Ima Concave Si X X	agery (B7) urface (B8) No X No No	X Depth Depth	Water staine 1, 2, 4A, and Salt Crust (E Aquatic Inve Hydrogen St Oxidized Rh Presence of Recent Iron Stunted or S Other (Explain (inches): (inches): (inches):	ed Leaves (B9) (Ed 4B) B11) ertebrates (B13) ulfide Odor (C1) izospheres along Reduced Iron (C Reduction in Plov Stressed Plants (Edin in Remarks)	Except MLRA Living Roots (C3) 4) wed Soils (C6) 01) (LRR A) Wetland Hydi	Secondary Indicators (2 or more required Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B) Drainage Patterns (B10) Dry-Season Water Table (C2) Saturation Visible on Aerial Imager X Geomorphic Position (D2) Shallow Aquitard (D3) Fac-Neutral Test (D5) Raised Ant Mounds (D6) (LRR A) Frost-Heave Hummocks (D7)

Office Data Form (OF)	Wetland Group	1	2	3	4	5 6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22 23	24	25	26	27	28	29	30	31 32	33 34
Q# Indicator	Conditions							1 .	1 .		1 .				Inc	dicator an	swers: 1	= Yes / 0) = NO												
D1 Mitigation Investment	The AA is all or part of a mitigation site used explicitly to offset impacts elsewhere (0= no, 1= yes)	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	1	0	1	0	0 0	0 0
	(no information)	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0 0	0 0
D2 Conservation	The AA is part of or contiguous to a wetland on which public or private organizational	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0 1	0 0
Investment	funds were spent to preserve, create, restore, or enhance habitat mainly as part of a voluntary effort not used explicitly to offset impacts elsewhere (0= no, 1= yes)																														1
	Total har y criote tided explicitly to effect impacts discrimine (e-fie, 1-yes)																														1
	(no information)	0	0		0	0 0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0 0	0 0
D3 Historically Lacking	This AA (a) is not along (or in the biennial floodplain of) a large stream or river where riparian woodlands would be typical and (b) had a Presettlement vegetation class not	1	0	0	0	0 0	0	1	0	0	0	0	1	1	0	0	0	0	1	0	0	1 0	0	0	0	0	0	0	0	1 0	0 1
Trees	dominated by trees as indicated by the Wetlands Explorer web site:																														1
	www.oregonexplorer.info/wetlands/ORWAP . Enter 1 if both are true, 0= if not.																														1 /
D4 Enclosed by Roads	Draw a circle of radius of 2 miles centered on the AA. Within that circle, do paved	1	0	0	1	0 1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	1 0	0	0	1	0	1	1	1	0 0	1 1
D4 Eliciosed by Roads	roads completely encircle the AA? (0= no, 1= yes)		U	0	'			'	'	'		l °	U	U	U	U	U	U	U	U	0		U	U	1	· ·	,	'	'		
D5 Distance to Nearest	The distance from the center of the AA to the nearest road with an average daytime																														
Busy Road	traffic rate of at least 1 vehicle/ minute is:																													0	
	>1 mile 0.5- 1 mile	0	0	1	1	0 0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	1	1	0 1	0 0
	1000-2600 ft	1	0		0	0 0	Ö	0	0	0	0	0	0	Ť	0	0	1	Ŏ	0	0	0	0 0	0	Ö	0	Ĭ	Ĭ	0	0	0 0	1 0
	500-1000 ft 100-500 ft	0		·	0	0 0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0 0 0 n	0	0	0	0	0	0	0	0 0	0 0
	<100 ft		0		0	0 0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	1	1	0	0	0		0 0	0 0
D6 Forest Landscape	Draw a circle of radius of 2 miles centered on the AA. Including the AA itself, the																														
Extent	cumulative amount of forest (regardless of patch sizes) is: <5% of the circle	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0 0	0 0
	5 to 20%	0		0	0	0 0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0 0	1 1
	20 to 50% 50 to 80%	0		1	0	0 0	1	0	0	1 0	0	1	0	1	0 1	1	0	1	1	1	1	0 0	1	0	0	0	0	0	0	0 1	0 0
	>80%	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	Ö	0	Ö	0	0 0	0 0
D7 Forest Tract Proximity	The minimum distance from the AA edge to the closest forested tract or corridor larger than 100 acres is:																														
	<100 ft, or 100-300 ft and not separated from the AA by stretches of open water, bare	0	0	0	1	1 0	1	0	1	1	1	1	1	1	0	1	1	1	0	1	1	0 1	1	1	0	0	0	0	1	0 1	1 0
	ground, lawn, or impervious surface that are wider than 150 ft.			Ů	·						·	·	·			·		·	Ů				·	·	Ů	Ĭ					Ľ
	100-300 ft and separated from the AA by stretches of open water, bare ground, lawn, or impervious surface that are wider than 150 ft.	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0 0	0 0
	300-1000 ft	1	0	1	0	0 0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0 0	0	0	1	0	0	0	0	0 0	0 0
	>1000 ft	0	1	0	0	0 1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1 0	0	0	0	1	1	1	0	1 0	0 1
D8 Size of Nearby Forest	The largest patch or corridor within 0.5 mile of the AA edge that is forested (and not separated from the AA by roads, fields, etc. that create a gap wider than 150 ft),																														
	occupies:																														
	<1 acre of forest	0	•	0	0	0 0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	v	0 0	0 0
	1-10 acres 10-100 acres	1	0	0	1	0 0	1	0	0	0	0	0	0	0	<u> </u>	0	0	0	0	0	0	0 0	0	0	0	0	0	0	1	0 0	0 0
	100-1000 acres				0	0 0	0	0	1	1	0	1	1	1	0	1	1	1	1	1	1	0 1	1	0	1	0	0	1		0 0	1 0
	>1000 acres	0	0	0	0	1 1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1 0	0	0	0	0	0	0	0	0 1	0 0
D9 Natural Land Cover Extent	Within a 2-mile radius measured from the center of the AA, the percent of the land that has natural land cover (see definition on right) is:																														
Extent	<5% of the land	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0 0	0 0
	5 to 20% of the land					0 0			0	0	0	0	0	-	0	0	0	0	0	0	-	0 0	0	0	0	0	0			0 0	
	20 to 60% of the land 60 to 90% of the land	0		0		0 1		0	0	1 0	0	0	0	0	0	0	0	0	0	0		0 0	0	0	0	0	0	0		0 1	0 0
	>90% of the land	0	_		0	0 0			0	0	0	0	0	0	0	0	0	0	0	0		0 0	0	0	0	0	0	0		0 0	, , ,
																															1
D40 T	Milking 2 mile and in managing from the annual of the AA																														
D10 Type of Land Cover Alteration	Within a 2-mile radius measured from the center of the AA, the area that is not "natural land cover" or water is mostly:																														
	impervious surface, e.g., paved road, parking lot, building, exposed rock	1	1	0	1	1 0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 1	1	1	0	0	1	1	1	0 0	0 0
	bare pervious surface, e.g., dirt or gravel road, plowed fields, dunes, recent clearcut or	0	0	1	0	0 0	0	1	0	0	0	1	1	1	1	1	1	1	1	1	1	1 0	0	0	1	1	0	0	0	1 1	1 1
	landslide cultivated row crops, orchards, vineyards, tree plantations	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0 0	0 0
	artificially landscaped areas or lawn	0	0	0	0	0 1	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0 0	0 0
	grassland grazed or mowed to a height usually shorter than 4 inches other		0	0	_	0 0		0	0	0	0	0	0	0	0	0	0	0	0	0	U	0 0	0	0	0	0	0	0	_	0 0	
	(none of above; land cover is >90% natural land cover)		0		0	0 0			0	0	0	0	0	0	0	0	0	0	0	0		0 0	0	0	0	0	0	0		0 0	
D11 Proximity to Natural Land Cover	The minimum distance from the AA edge to the edge of the closest tract or corridor of																														
Land Cover	natural (not necessarily native) land cover larger than 100 acres, is:																														
	<100 ft, or the AA contains >100 acres of vegetation, or >100 acres of natural land	0	0	1	1	1 1	1	0	1	1	1	1	1	1	0	1	1	1	1	1	1	0 1	1	1	0	0	0	0	1	1 1	1 0
	cover is connected to the AA and is not separated from it by stretches of open water,							Ĭ							•										ľ						
	bare ground, lawn, or impervious surface that are wider than 150 ft.																														
	<100 ft, but separated from the wetland by stretches of open water, bare ground, lawn,	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0 0	0 0
	or impervious surface that are wider than 150 ft. 100-300 ft; and not separated from the wetland by stretches of open water, bare	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	1	0	0	0	0	0 0	0 0
	ground, lawn, or impervious surface that are wider than 150 ft.	U	U	U	U	0	U	U U	U	U	U	U	U	U	<u> </u>	U	U	U	U	U	U	0	U	U		U	U	U	v	0	U
	100-300 ft, but separated from the wetland by stretches of open water, bare ground,	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0 0	0 0
	lawn, or impervious surface that are wider than 150 ft. NONE of the above	1	1	0	0	0 0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	1 0	0	0	0	1	11	1	0	0 0	0 1
													•											•							

Office Data Form (OF)	Wetland Group	1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21 22	23	24	25	26	27	28	29 3	30 31	32 33 34
D12 Size of Largest Nearby Tract or Corridor of Natural Land Cover	The largest patch or corridor that is natural land cover and is within 0.5 mile of the AA edge, and not separated from the AA by roads etc. that create gaps wider than 150 ft, occupies:																												
	<1 acre 1-10 acres	0 0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	1	0	0	0 0	0 0 0
	10-100 acres 100-1000 acres	0 0	0	0	0	0 0	0	0	0	0	0	0	0	1	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0 1	0 0 0
	>1000 acres	0 0		0	Ĭ.	1 0	0	0	0	1	0	0	0	Ö	0	0	0	0	0	0 0	0	0	0	0	0	0		0 0	1 0 0
D13 Local Wetland Uniqueness	Within 0.5 mile of the center of the AA, the AA and vegetation of the same form that is contiguous to the AA together provide (select all that apply):																												
	the largest patch of currently ungrazed, unmowed, and unshaded herbaceous	0 0		0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0		0 1	0 0 0
	the largest patch of unshaded shrubland (excluding plantations) the largest patch of deciduous or evergreen trees (excluding plantations)	0 0	0	1	1	0 0	0	0	0	0	0	0	0	0	0	1	1	1	1	0 0	0	1	0	0	0	0	0	1 1	0 0 0
	NONE of above	1 0	_	0	0	0 0	0	1	1	0	0	1	0	1	0	0	0	0	0	0 0	0	0	0	1	0	0	0	0 0	0 0 0
D14 Herbaceous Open Land in Landscape	Draw a circle of radius of 2 miles centered on the AA. The amount of herbaceous openland is: <5% of the land	0 1	1	0	0	0 1	0	0	0	0	0	1	1	4	4	1	4	1	1	1 0	0	1	1	1	1	1	1		
	5 to 20%	1 0	0	1	0	0 0	1	0	0	0	1	0	0	0	0	0	0	0	0	0 1	1	0	0	0	0	0	0	0 1	1 1 1
	20 to 50% 50 to 80%	0 0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0 0	0 0 0
	>80%	0 0		0		0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0		0	0	0	0	0			0 0 0
D15 Proximity to Open Land	The distance from the AA edge to the closest patch of herbaceous openland larger than 1 acre is: <100 ft, or the AA contains >1 acre of such cover, or is contiguous to >1 acre of such	0 0	0	0	1	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0 1	0 0 0
	cover	0 0		4	0	0 0	0		0	4	0	0		0	0	0		0	0	0 0		0	0	0	0	0	0		0 0 0
	100 to 300 ft 300 to 1000 ft	1 0	0	0	0	1 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0 0	0 1 0
D16 Ponded Water in Landscape	>1000 ft Draw a circle of radius of 2 miles centered on the AA. Including water ponded in the AA itself or in a fringing water body, the amount of non-tidal water that is ponded during	0 1	1	0	0	0 1	1	1	1	0	1	1	1	1	1	1	1	1	1	1 1	1	1	1	1	1	1	1	1 0	1 0 1
	most of the year is: <5% of the circle, located in 5 or fewer ponds or lakes	1 0	0	0	0	0 0	1	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0 0	0 0 0
	<5% of the circle, located in >5 ponds or lakes	0 0	0	0	1	1 0	0	1	1	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0 0	0 1 1
	5 to 30%, located in 10 or fewer ponds or lakes 5 to 30%, located in >10 ponds or lakes	0 0	0	1	0	0 0	0	0	0	0	0	0 1	0	0 1	0	1	1	0	1	0 0	0	<u>0</u>	0	0	1	0	0	0 0	0 0 0
	>30%, located in 15 or fewer ponds or lakes	0 0		0		0 0		0	0	0	0	0	0	0	0	0	0	0	0	0 0		0	0	0	0	0			
D17 Ponded Water Proximity	>30%, located in >15 ponds or lakes The minimum distance from the AA edge to the closest non-tidal wetland, pond, or lake that is larger than 1 acre, is ponded most of the year, and is not part of the same associated wetland, pond, or lake, is:		0	0	0	0 0	0	U	0	O	0	U	0	0	U	0	0	U	U	0 0		0	0	0	0	0	0	0 0	
	<300 ft, and connected with a natural land corridor <300 ft, but no uninterrupted natural land corridor	0 0	0	0	0	0 0	0	0	0	0	0	0	0	1	0	0	0	0	0	0 1	1	0	0	0	0	0	0	0 0	1 0 0
	300-1000 ft, and connected with a natural land corridor	1 0		0	1	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	1	0	0	1 0	0 0 0
	300-1000 ft, but no uninterrupted natural land corridor >1000 ft, and connected with a natural land corridor	0 0	0	1	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	<u> </u>	0	0	0	0		0 0	0 0 0
	>1000 ft, but no uninterrupted natural land corridor	0 0		0	0	0 1	1	1	1	0	1	1	0	0	0	0	0	1	0	1 0	0	0	0	0	0	0		0 1	0 1 1
D18 Large Ponded Water Proximity	The distance from the AA edge to the closest (but separate) non-tidal body of water that is ponded during most of the year and is larger than 20 acres (about 1000 ft on a side) is:																												
	<1 mile 1-5 miles	1 0	0	1	0	0 1	0	1	0	0	0	0	0	0	0 1	1	1	0	1	0 1	0	<u>0</u>	0	0	0	0	0	0 0	1 0 0 0 1 1
D40 Tidal Davidadit	>5 miles	0 1	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0 0	0 0 0
D19 Tidal Proximity	The distance from the AA edge to the closest tidal body of water is: <1 mile	1 1	0	1	1	1 1	1	1	1	0	0	0	0	0	0	0	0	0	0	0 0	1	1	1	0	0	0	0	0 1	0 1 1
	1-5 miles >5 miles	0 0		0	0	0 0	0	0	0	0	0	0	1 0	1 0	1 0	0	0	0	0	1 1 0 0	0	0	0	0	1 0	0	1	1 0	1 0 0 0 0 0
D20 Upslope Soil Erodibility Risk	Using the Web Soil Survey procedure described in the ORWAP manual, the rating of the soil map unit which occupies the largest percentage of the zone 200 ft uphill from the AA is:			0		0 0	0	0		0	0	U	0	U	0	0	0	U	U	0 0		0	0	U		U			
	very severe	1 0	1	0	1	0 0		0	0	0	0	1	0	1	0	1	0	0	0	0 0	1	1	0	0	1	0	0	0 0	0 0 1
	severe moderate	0 0	0		0	0 0	1	0	0	0	0	0	0	0	0	0	0	0	0	0 0	·	0	0	1	0	0		0 0	0 0 0
	slight (could not determine)	0 1	0			1 1 0 0	0	0	0	0	0	0	1 0	0	1 0	0	0	0	0	1 1	0	0	0	0	0	0		0 0	1 1 0 0 0 0
D21 Extent of Dominant Vegetation Class in Wetland	Using the Web Soil Survey AOI tool to measure it, what is the area of the largest patch of emergent, shrub, or forest vegetation within the entire wetland of which the AA is a part? Use just the dominant class. See instructions in last column.			J	J			, and the second	Ů			J		Ü	Ů						0		Ů	Ü		J			
	<0.1 acre	0 0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0 0	0 0 0
	0.1 - 1 acre 1 to 10 acres	0 1	0	0	0	0 0	0	0	0	0	0	0	0	0 1	0 1	0	1	0	1	0 1	0	0	0	0	0	0		0 0	0 1 1
	10 to 100 acres	0 0	1	1	1	1 0		0	0	0	1	1	1	0	0	1	0	0	0	1 0	0	1	1	0	1	1	0	1 1	0 0 0
	100 to 1000 acres >1000 acres	0 0		0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0		0	0	0	0	0		0 0 0	
D22 Wetland Size Uniqueness in Watershed	From the Wetlands Explorer web site (see Manual), note the 12-digit code number for this wetland's HUC6 (Hydrologic Unit Code, i.e., watershed). Then turn to the HUC4, HUC5, and HUC6 worksheets in the ORWAP_Supplinfo file. Compare the extent of the wetland's dominant vegetation form (from above) with that of the largest wetlands of the same class in the same HUC4 (first 8 digits), the same HUC5 (first 10 digits), and the same HUC6 (12 digits). Enter *11* for all that apply below:																												
	the vegetated part of this wetland is as large or larger than any of its class mapped in its	s 0 0	0	0	1	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	1	0	0	0 1	0 0 0
	HUC4 watershed the vegetated part of this wetland is as large or larger than any of its class mapped in its	s 0 0	0	1	1	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	1	0	0	0 1	0 0 0
	HUC5 watershed the vegetated part of this wetland is as large or larger than any of its class mapped in its	s 0 0	0	1	1	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	1	0	0	0	1	0	0	0 1	0 0 0
	HUC6 watershed	1 1		0	0	1 1	1	1	1	1	1	1	1	1	1	1	1	1	1	1 1	0	1	1	1	0	1	1	1 0	
	none of above data are inadequate (NWI mapping not >90% completed in HUC)	0 0		0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0 0	0 0 0

Office Data Form (OF)	Wetland Group	1	2	3	4	5	6	7 8	9	10	11	12	13	14	15	16	17	18	19	20	21 2	2 23	24	25	26	27	28	29	30	31 32	2 33	34
Diversity Uniqueness	Turn to the HUCbest worksheet in the ORWAP_Suppinfo file. Using the HUC code noted from the web site, is this AA located in one of the HUCs that are listed as having a large diversity of wetland types relative to area of wetlands (column 3), or a large number (column 4) or area (column 5) of wetlands relative to area of the HUC? Enter "1" for all that apply below:																															
	yes, for the HUC4 watershed	1	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0	0	0	0	0	0	0	0	0 0	0	0
	yes, for the HUC5 watershed yes, for the HUC6 watershed	0	0	1	1	1	1	1 1	1	1	1	0	0	0	1	0	1	0	1	1	0 (0	1	1	0	0	0	0	1	0 0	1	1
	none of above	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0 () 0	0	0	0	0	0	0	0	0 0	0	0
	data are inadequate (NWI mapping not completed in HUC)	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0	0	0	0	0	0	0	0	0 0	0	0
	ring questions, you must obtain specific information from web sites or																															
examine aerial imagery. In to for multiple choices where																																
Connectivity	Compared to extent of wetland that may have been originally present at this location (just prior to settlement in 1851), the current wetland is: same size and boundaries , approximately. For example, wetland boundary may be	W	W	W	W		W		W	W	W	W	W	W	W	W	W	W	W	W		V W	W	W	W	W	W	W		W W	W	W
	nearly identical to hydric soil boundary	U	0	1	٥	•	0	0 1	1	1	0	1	'	1	, i	1	U	0	0	0	0 1	' '	1	U	0	0	0	'	0	0 1		
	smaller (50-99% of the original size) and/or severed (by roads, dikes, drained soils, etc) from a few historically connected wetlands that may no longer exist. Soil map may show hydric soil extending somewhat beyond current wetland boundary.	1	0	0	1	0	1	0 0	0	0	1	0	0	0	0	0	1	1	1	1	0 (0	0	1	1	1	1	0	1	1 0	0	0
	much smaller (<50% of the original size) and/or extensively severed (by roads, dikes, drained soils) from many historically connected wetlands that may no longer exist. Soil map may show hydric soil extending far beyond current wetland boundary.	0	1	0	0	0	0	1 0	0	0	0	0	0	0	0	0	0	0	0	0	1 (0	0	0	0	0	0	0	0	0 0	0	0
	larger (due to damming of stream or runoff, excavation, removal of obstructions, irrigation, etc. that floods soils not mapped as hydric) or has been connected to wetlands from which it existed in isolation just prior to settlement.	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0	0	0	0	0	0	0	0	0 0	0	0
	no wetland is known to have been present at this location originally (no hydric soil is mapped and presettlement vegetation was not wetland; the entire wetland may have resulted from impoundment, excavation, or regrading of upland soils)	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0	0	0	0	0	0	0	0	0 0	0	0
Designations of the	Go to the Oregon Wetlands Explorer web site or other sources noted below and use those to help determine each of the following:																															
	a) the AA is within or is connected to (at least seasonally) a stream or other water body within 0.5 mile that has been designated as Essential Indigenous Anadromous Salmonid Habitat (ESH)	0	0	0	1	1	1	0 0	0	0	0	0	0	0	1	0	0	0	0	0	0 1	0	0	0	0	0	0	0	0	1 1	0	0
	b) the AA is within or contiguous to a Special Protected Area managed by a conservation group or designated as specially protected for conservation by a state or federal resource agency,	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0	0	0	0	0	0	0	0	0 0	0	0
	c) the AA is within or contiguous to a Wetland Priority Area as determined partly by ODFW	0	0		0	0		1 0	0	1	0	0	0	0	0	0	0	0	0	0		1	0	0	0	0	0	0		0 0		0
	d) the AA is within an IBA (Important Bird Area, as officially designated) and listed in the IBA worksheet in the ORWAP_SuppInfo file	0	0	0	1	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0	0	0	0	0	0	0	0	0 0	0	0
	NONE of above	1	1	1	0	0	0	0 1	1	0	1	1	1	1	0	1	1	1	1	1	1 () 0	1	1	1	1	1	1	1	0 0	0	1
D26 Non-anadromous Fish	According to the Wetlands Explorer web site, the score for occurrences of rare non-																															
Species of Conservation Concern	anadromous fish species in the vicinity of this AA is: high (≥ 0.75 for maximum score, or ≥ 0.90 for this group's score sum), or there is a	1	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0	0	0	0	0	0	0	0	0 0	0	0
	recent (within 5 yrs) onsite observation of any of these species by a qualified observer under conditions similar to what now occur																						1	1								
	intermediate (i.e., not as described above or below)	0	0	1	1	1	1	1 1	1	1	1	1	1	1	1	1	1	1	0	1	1 1	0	1	0	1	0	1	1	1	1 0	1	1
	low (≤ 0.33 for both the maximum score this group's score sum, but not 0 for both)	0	1	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	1	0	0 (1	0	1	0	0	0	0	0	0 0	0	0
	zero for both this group's maximum and its sum score, and no recent onsite observation of these species by a qualified observer under conditions similar to what now occur	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0	0	0	0	0	0	0	0	0 0	0	0
Conservation Concern	According to the Wetlands Explorer web site, the score for occurrences of rare invertebrate species in the vicinity of this AA is: high (≥ 0.75 for maximum score, or for this group's score sum), or there is a recent	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0	0	0	0	0	0	0	0	0 0	0	0
	onsite observation of any of these species by a qualified observer under conditions similar to what now occur														, o		Ů							Ů		0						
	low (< 0.75 for maximum score AND for this group's score sum, but not 0 for both) zero for both this group's maximum and its sum score, and no recent onsite observation of these species by a qualified observer under conditions similar to what now occur		1	1	1	1	1	0 0	1	1	0 1	1	1	1	1	1	1	1	0	0 1	0 (0 0	0 1	0 1	0	1	1	0	•	0 0		1
Conservation Concern	According to the Wetlands Explorer web site, the score for occurrences of rare amphibian or reptile species in the vicinity of this AA is: high (≥ 0.60 for maximum score, or >0.90 for score sum), or there is a recent onsite observation of any of these species by a qualified observer under conditions similar to	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0 0	0	0
	what now occur									\perp																						
	intermediate (i.e., not as described above or below) low (≤ 0.21 for maximum score AND <0.15 for score sum, but not 0 for both)	0	0	_			0	1 1	0		0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	1	0 0	1	1
	low (S 0.21 for maximum score AND <0.15 for score sum, but not 0 for both) zero for both this group's maximum and its sum score, and no recent onsite observation of these species by a qualified observer under conditions similar to what now occur	0		0	1			0 0	1	1	1	0	0	0	0	0	0	0	0	0		0 0	v	0	0	0	0	0		0 0		

Office Data Form (OF)	Wetland Group	1	2	3	4	5 6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21 22	23	24	25	26	27	28	29	30 31	1 32	33	34
	According to the Wetlands Explorer web site, the score for occurrences of rare nesting waterbird species in the vicinity of this AA is:																															
Concern	high (≥ 0.60 for maximum score, or ≥1.00 for this group's score sum), or there is a recent onsite observation of any of these species by a qualified observer under conditions similar to what now occur	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0 0	0	0	0
	intermediate (i.e., not as described above or below) low (≤ 0.09 for maximum score and for score sum, but not 0 for both)	1	1	1	0	0 1	1	1 0	0	0	0	1	1	1	1	1	1	1	1	1	1 1	1	1	1	1	1	1	1	1 1	1 1	1	1
	zero for both this group's maximum and its sum score, and no recent onsite observation of these species by a qualified observer under conditions similar to what now occur	0	0	0	1	1 0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0 0	, ,	_ <u> </u>	0
D30 Feeding (Non-breeding) Waterbird Species of	According to the Wetlands Explorer web site, the score for occurrences of rare non- breeding (feeding) waterbird species in the vicinity of this AA is:																															
Conservation Concern	high (≥ 0.33 for maximum score, or there is a recent onsite observation of any of these species by a qualified observer under conditions similar to what now occur	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0 0	0	0	0
	low (< 0.33 for maximum score and for score sum, but not 0 for both)	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0 0	0	0	0
	zero for both this group's maximum and its sum score, and no recent onsite observation of these species by a qualified observer under conditions similar to what now occur	1	1	1	1	1 1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1	1	1	1				1
D31 Songbird, Raptor, Mammal Species of	According to the Wetlands Explorer web site, the score for occurrences of rare songbird, raptor, or mammal species in the vicinity of this AA is:																															
Conservation Concern	high (≥ 0.60 for maximum score, or >1.13 for score sum), or there is a recent onsite observation of any of these species by a qualified observer under conditions similar to what now occur	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0 0	0	0	0
	intermediate (i.e., not as described above or below)	1	1	1	1	1 1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1 1	1	1	1	1	1	1	1	1 1	1	1	1
	low (< 0.09 for maximum score AND <0.13 for score sum, but not 0 for both)	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0 0	0	0	0
	zero for both this group's maximum and its sum score, and no recent onsite observation of these species by a qualified observer under conditions similar to what now occur	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0 0	0	0	0
D32 Plant Species of Conservation Concern	According to the Wetlands Explorer web site, the score for occurrences of rare plant species in the vicinity of this AA is:																															
	high (≥ 0.75 for maximum score, or > 4.00 for score sum), or there is a recent onsite observation of any of these species by a qualified observer under conditions similar to what now occur	0	0	0	0	1 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0 0	0	0	0
	intermediate (i.e., not as described above or below)	0	0	0	0	0 1 0 0	1 0	1 0	1 0	1 0	1 0	1 0	1 0	1 0	1 0	1 0	1 0	0	1 0	1 0	1 1 0 0	0	1 0	1 0	1 0	0	1 0	0	1 1 0 0	1 1	0	0
	zero for both this group's maximum and its sum score, and no recent onsite observation of these species by a qualified observer under conditions similar to what now occur	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0 0	0	0	0
D33 Floodable Property	According to the Wetlands Explorer web site:																													_		
	The AA is tidal, or is either (a) not within a 100-yr floodplain of a river, or (b) there are no inhabited buildings or cropland within 2 miles downslope that are within the 100-yr	1	1	0	0	0 1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1 1	1	1	1	1	1	1	1	1 1	1	1	1
	floodplain. Mark "1" then SKIP TO D35. Inhabited buildings within 1 mile downslope from the AA also are within the 100-yr	0	0	0	1	1 0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0 0	0	0	0
	floodplain Croplands but no inhabited buildings are within 1 mile downslope from the AA, and that	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0 0	0 0	0	0
	cropland is also within the 100-yr floodplain Inhabited buildings within 1-2 miles downslope from the AA are also are within the 100-	0	0	1	1	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0 0	0	0	0
	vr floodplain Croplands but no inhabited buildings are within 1-2 miles downslope from the AA, and		0	0	0	0 0		0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0 0	0	0	0
	that cropland is also within the 100-yr floodplain No floodplain data are available, and damage from river floods has not been known to have occurred within 2 miles downgradient. Mark "1" then SKIP to D35.								0			0	0	0							0 0			0		0			0 0			0
D34 Downslope Storage	Between the AA and any floodable buildings or cropland located within 2 miles downslope:																															
	river flow is regulated and there are many seasonally ponded areas capable of storing water.	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0 0	0	0	0
	miver flow is regulated or there are many seasonally ponded areas capable of storing water.	0	0	0	0	1 0			0	0	0	0	0	0	0	0	0	0	0	0	0 0		0	0	0	0	0	0	0 0			0
D35 Relative Elevation in Watershed	NONE of the above According to Wetlands Explorer map showing this AA's position within its HUC4 watershed, the AA is [see last column and Manual for specific guidance]:	0	0	1	1	0 0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0 0		0	0
, ratoronou	in the upper one-third of its watershed	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0 0	0 0	0	0
	in the middle one-third of its watershed	0	0	0	0	0 0			0	0	0	0	0	0	0	0	0	0	0	0	0 0		0	0	0	0	0	0	0 0			0
	in the lower one-third of its watershed	1	1	1	1	1 1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1 1	1	1	1	1	1	1	1	1 1	1	1	1
D36 Contributing Area (CA) Percent	Based on the definition and protocol in the ORWAP manual , the area of the wetland of which this AA is a part, relative to the wetland's contributing area (CA) is:	W	W	W	W	W W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W W	W	W	W	W	W	W	W	W W	J W	W	W
	<1% of its CA (true if wetland is tidal, or along major river, or has many tributaries, or gets substantial water drawn from other surface water bodies, e.g., flood irrigation)	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0 0	0 1	0	0
	1 to 10% of its CA	0	1	0	0	0 0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	1 0	0	0	0	0	0	0	0	0 0	0	0	0
	10 to 100% of its CA	1	0	1	1	1 1	1	0	1	1	1	1	1	1	0	1	1	0	1	1	0 1	1	1	1	1	1	1	1	1 1	1 0		1
	Larger than the area of its CA (wetland has essentially no CA, e.g., isolated by dikes with no input channels, or is in terrain so flat that a CA can't be delineated). SKIP TO D40.	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0 0	0	0	0
D37 Unvegetated Surface in the Contributing Area	The proportion of the CA comprised of buildings, roads, parking lots, other pavement, exposed bedrock, and other impervious surface is about : >25%	W	W			W W		W	W W		W	W	W	W	W	W	W W	W W														
	22% <10 to 25% <10%, or wetland is tidal	0	1 0		0	0 0 0 1 1 1		1	0	0	0	0	0	0	0 1	0	0	0	0	0	1 0 0 1	0	0	0	1 0	0	0	0		1 0	0	
			-			•	-																									

Office Data Form (OF)	Wetland Group	1	2	3	4	5 6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21 22	23	24	25	26	27	28	29	30	31 32	33	34
D38 Upslope Storage	The cumulative area of seasonally ponded areas in the same CA is:	W	W	W	W	w w	W	W	W	W	W	W	W	W	W	W	W	W	W	W	w w		W	W	W	W	W	W	W	w w	W	W
	Much (>10x) greater than the area of this wetland (plus any contiguous pond or lake),	0	0		0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0 0	0	0
	or inflow is strongly regulated by dams etc. Somewhat greater than the area of this wetland (plus any contiguous pond or lake) and	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	1	0	1	0	1	0 1	1	1
	flows to wetland are not strongly regulated	Ů	Ů	Ů	Ů	0 0	Ů	Ů	Ů	· ·	Ů	· ·	Ů	Ů	Ů	Ů	· ·	v	Ů	Ü	0 0	Ů	Ů	Ů	,	Ů	,	Ů	'	Ů		
	Less than the area of this wetland (plus any contiguous pond or lake), or wetland is tidal, or no upslope wetlands/ ponds and no inflow regulation	1	1	1	1	1 1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1 1	1	1	1	0	1	0	1	0	1 0	0	0
D39 Transport From Upslope	A relatively large proportion of the precipitation that falls farther upslope in the CA	W	W	W	w	w w	W	W	W	W	W	W	W	W	W	W	W	W	W	W	w w	W	W	W	W	W	W	W	W	w w	W	W
	reaches this wetland quickly as runoff (surface water), as indicated by the following: (a) input channel is present, (b) CA slopes are steep, (c) input channels have been																															
	straightened, (d) upslope wetlands have been ditched extensively, (e) land cover is																															
	mostly non-forest, and/or (f) most CA soils are shallow and/or have high runoff coefficients). This statement is:																															
	Mostly true	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0 0		
	Somewhat true	1	0		0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1 1	0	0	0	0	1	1	0		0 0	0	0
D40 Known Water Quality	Mostly untrue, or wetland is tidal Within 1 mile upstream from the wetland, at least one of the major sources of surface	0 W	W	0 W	W	1 1 W W	W	W W	W W	W	1 W	W W	1 W	W	W W	1 W	W V	W	W 1	1 W	0 0 W W		W W	W W	W W	0 W	0 W	1 W	W V	1 1 W W		W
Issues in the Input Water	water to this wetland (at least seasonally) has been designated as Water Quality Limited (303d) for at least one of the parameters below. Obtain from web site only — do not guess. Select all that apply.																															
	total suspended solids (TSS), sedimentation, or turbidity phosphorus	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0		0 0		0
	nitrate or ammonia	0	0		0	0 0		0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0		0	0
	toxics, dioxin, heavy metals (iron, manganese, lead, zinc, etc.) temperature	0	0	0		0 0		0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	_		0	0
D41 Known Water Quality	None of above, or degraded water cannot reach wetland, or no data. Within 1 mile downstream or downslope from this wetland, there is at least one stream	1 W	1 W	1 W	1 W	1 1 W W	1 W	1 W	1 W	1 W	1 W	1	1 W	1 W	1 W	1	1 W	1	1 W	1 W	1 0 W W	1 W	1 W	1 W	1 W	1	1 W	1 W	1 W	1 0 W W		1 W
Issues Below the	or other water body that has been designated as Water Quality Limited (303d) for at	VV	VV	W	vv	vv vv	, vv	l vv	VV	W	l w	, vv	, vv	l w	VV	W	VV	VV	VV	VV	VV VV	W	l w	l w	VV	VV	VV	VV	VV	W W	, w	VV
Wetland	least one of the parameters below. The water body need not be connected to the AA. Obtain from web site only do not guess. Select all that apply.																															
	total suspended solids (TSS), sedimentation, or turbidity phosphorus	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0 0	0	0
	nitrate or ammonia toxics, dioxin, heavy metals (iron, manganese, lead, zinc, etc.)	0	0		0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0 0	0	0
	temperature	1	0	0	1	1 1	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	1	1	1 0	1	1
D42 Type of Outflow	None of above, or no data. Mark "1" then SKIP TO D43. At least part of the AA is connected to the downstream 303d water mentioned in D41	0	1	1	0	0 0	1	0	0	0	0	1	1	1	1	1	1	1	1	1	1 1	1	1	1	1	1	1	0	0	0 1	0	0
Connection to 303d	above:																															
	for 9 or more continuous months annually (persistent water in a stream, ditch, lake, or other water body)	0	0	0	1	1 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	1 0	0	1
	intermittently (at least once annually, but for less than 9 months continually) Not connected, or connected less than annually	0			0	0 0	0	0	0	1 0	1 0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0 0	0	0
	According to the ODEQ LASAR database, the AA is within:					0 0				U					U		U	Ü	U	0			Ü	U	U			'	'	ŮŮ		
(DEQ)	the source area for a surface-water drinking water (DW) source the source area for a groundwater drinking water source	0		0	1	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	1	0 0	0	0
D44 Groundwater Risk	Neither of above The AA is (select all that apply):	1	1	1	0	0 0	1	1	1	1	0	0	1	1	0	1	1	1	1	1	1 1	1	1	1	1	1	0	0	0	1 1	1	1
Designations	within a designated Groundwater Management Area (ODEQ), see maps in Appendix A	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0 0	0	0
	of ORWAP manual. within a designated Sole Source Aquifer area (EPA): the North Florence Dunal Aquifer.	1	1	1	1	1 1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1 1	1	1	1	1	1	1	1	1	1 1	1	1
	See map downloadable from: http://oregonstatelands.us/DSL/WETLAND/or_wet_prot.shtml																															
	NONE of above	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0 0	0	0
D45 Mean Annual Precipitation	According to the PRISM Data Explorer (see ORWAP manual for instructions), annual precipitation in the vicinity of the wetland has normally been:																															
	<10 inches per year 10-12 inches per year	0		0	-	0 0		0	0	0	0	0	0	0	0	0	0	0	0	0	0 0		0	0	0	0	0	0		0 0	·	
	13-19 inches per year	0		0		0 0	_	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	U	0	0	0	0	0	0		0 0		0
	20-47 inches per year 48-77 inches per year	1	1	1	1	1 1	1	ı 1	1	1	1	1	1	1	1	1	1	1	1	1	1 1	1	1	1	1	1	1	1	1	1 1	1	1
D46 County Rank for	>77 inches per year The phosphorus loading rank of the county in which the AA is located is: (select one);	0	0	0	U	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	U	0 0	0	0
Phosphorus Loading	see WQprob worksheet in ORWAP SuppInfo file. top 4 in Oregon (Marion, Malheur, Umatilla, Linn)	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0 0	0	0
	top 18 (see Table 6 in WQprob worksheet in file ORWAP_SuppInfo)	1	1	1	1	1 1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1 1	1	1	1	1	1	1	1	1	1 1	1	1
	bottom 18 (see Table 6 in WQprob worksheet) bottom 4 (Josephine, Hood River, Lincoln, Clatsop)		_			0 0			0	0	0	0	0	0	0	0	0	0	0	0	0 0		0	0	0	0	0	0		0 0		-
D47 County Rank for Nitrogen Loading	The nitrogen loading rank of the county in which the AA is located is: (select one); see WQprob worksheet in ORWAP SuppInfo file.																															
INItiogen Loading	top 4 in Oregon (Marion, Malheur, Umatilla, Linn)	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0 0	0	0
	top 18 (see Table 7 in WQprob worksheet) bottom 18 (see Table 7 in WQprob worksheet)	1 0	1 0	0	0	1 1 0		1 0	1 0	1 0	1 0	1 0	1 0	1 0	0	1	0	1 0	0	1 0	1 1 0 0		1 0	1 0	1 0	0	1 0	1 0	0	1 1 0	1 0	0
Anguar these first to a confi	bottom 4 (Curry, Josephine, Lincoln, Clatsop)							, ·	0		0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0			0 0		
Answer these final two question D48 Estuarine Position	ns only if the AA is tidal. The AA's relative position in the estuary is (SKIP if nontidal):																															
	lower 1/3 (often on a bay and distant from the head-of-tide of a major river; includes most saline tidal wetlands)	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0 0	0	0
	mid 1/3		_			0 0			0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0		0 0		
D40 C " "	upper 1/3 (near the head-of-tide of a major river; includes most brackish and fresh tidal wetlands)	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	U	0	0	0	0	0	0 0	0	0
D49 Salinity	The usual maximum water-surface salinity during high tide in summer in the main channel or bay closest to the AA is (SKIP if nontidal):																															
	>30 parts per thousand (undiluted seawater)	0		0		0 0			0		0	0	0	0	0	0	0	0	0	0	0 0		0	0	0	0	0	0			0	
	5-30 ppt (mesohaline, polyhaline) 0.5 - 5 ppt (oligohaline)	0	0			0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0		0	0	0	0	0	0		0 0	0	0
	<0.5 ppt (fresh)	0	0		0	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0		0 0		0
	no data for nearby locations found at the ODEQ LASAR web site or from other sources	0	0	0	0	0 0	U	0	0	0	0	0	0	0	0	0	0	0	U	0	0 0	0	0	U	0	0	0	0	0	0 0	0	U

Field F Data Form	Wetland Group	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33 34
Q# Indicator	Conditions															lodi	ootor o		 	00 / 0 -	- No													
F1 Presence of Specific	Does the AA contain, or is it part of, any of these wetland types? Mark "1" next to all that	W	W	W	W	W	W	w	W	W	w	w	W	W	W	l w	cator a	nswers W	: 1 = Ye	es / 0 =	W	W	w	w	w	W	W	W	W	w	w	w	w	w w
Wetland Types	apply. Tidal wetland: receives tidal water at least once during a normal year, regardless of salinity,	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0
	and dominated by emergent or woody vegetation.		U	U	U	U		U	U	U	U	U	_	U	U	U	U	U		U	U		U	U		Ť	U			U		Ť	U	
	Lacustrine wetland: an undiked non-tidal wetland bordering a body of standing open water that is >20 acres.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0 0
	Fringe wetland: an undiked "shoreline" wetland bordering persistent open water that is >3 times wider than the wetland (includes most tidal, lacustrine, large riverine, some others).	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0 0
	NONE of above	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	1 1
F2 Wetland Type of Conservation Concern	Does the AA contain, or is it part of, any of these wetland types? Mark "1" next to all that apply. Consult the "Rare Wetland Type" reported for the general vicinity by the Oregon Explorer web site, but be aware that those may not apply to the exact AA you have delimited.	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	w w
	Bog or Fen: contains a sponge-like organic soil layer which covers most of the AA AND often has extensive cover of sedges and/or broad-leaved evergreen shrubs (e.g., Ledum). Often lacks tributaries, being fed mainly by groundwater and/or direct precipitation.	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0
	Playa, Salt Flat, or Alkaline Lake: a non-tidal ponded water body usually having saline (salinity >1 ppt or conductivity >1000 μS) or alkaline (conductivity >2000 μS and pH >9) conditions and large seasonal water level fluctuations (if inputs-outputs unregulated). If a playa or salt flat, vegetation cover is sparse and plants typical of saline or alkaline conditions (e.g., <i>Distichlis</i> , <i>Atriplex</i>) are common.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0
	Hot spring (anywhere in Oregon): a wetland where discharging groundwater in summer is >10 degrees (F) warmer than the expected water temperature.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0
	Native wet prairie (west of the Cascade crest): a seasonally inundated wetland, usually without a naturally-occurring inlet or outlet, and dominated primarily by native graminoids often including species in column E.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0 0
	Vernal pool (Willamette Valley): a seasonally inundated wetland, underlain by hardpan or claypan, with hummocky micro-relief, usually without a naturally-occurring inlet or outlet, and with native plant species distinctly different from those in slightly higher areas, and often including species in column E.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0
	Vernal pool (Medford area): a seasonally inundated acidic wetland, underlain by hardpan, with hummocky micro-relief, usually without a naturally-occurring inlet or outlet, and having concentric rings of similar native vegetation, often including species in column E.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0
	Vernal pool (Modoc basalt & Columbia Plateau): a seasonally inundated wetland, usually without a naturally-occurring inlet or outlet, located on shallow basalt bedrock and often having species in column E.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0
	Interdunal wetland (Coastal ecoregion): a seasonally inundated wetland, usually without a naturally-occurring inlet or outlet, located between sand dunes where wind has scoured the sand down to the water table (deflation plain), and often with significant cover of native species in column E.	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	1	0	1	0	0 0
	Mature forested wetland (anywhere): a wetland in which mean diameter of trees (d.b.h., FACW and FAC species only) exceeds 18 inches, and/or the average age of trees exceeds 80 years, or there are >5 trees/acre with diameter >32 inches.	0	0	0	1	1	1	0	0	0	0	1	1	0	1	1	1	1	0	0	0	1	0	1	1	0	1	1	1	1	1	1	0	0 0
	Ultramafic soil wetland (mainly southwestern Oregon): a low-elevation wetland, usually with a sponge-like organic soil layer, occurring in an area with exposed serpentine or peridotite rock, and/or in soils with very low Ca:Mg ratios.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0
	Wooded tidal wetlands with >30% cover of trees and shrubs. A wetland inundated at least once annually by tides and often dominated by woody plant species.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0
	Undiked tidal freshwater wetland: an emergent or wooded wetland inundated at least once annually by tides and with surface salinity <0.5 ppt during most of spring and summer, and which has never been diked.		0	0	0	1	0	0	0	0	0			0	0	0	0	0	0	0			0	0	0	0	0	0	0	0	0	0	0	0 0
le part of the cite tidal?	NONE of above If yes, answer next 2 questions. If no, SKIP TO # F5.	0	1	1	0	0	0	1	1	1	0	0	0	0	0	0	0	0	1	1	1	0	1	0	0	1	0	0	0	0	0	0	1	1 1
F3 Low Marsh	The percent of the vegetated part of the AA that is "low marsh" (covered by tidal water for																																	
	part of almost every day) is:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0
	≥95% of the AA 50-95% of the AA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0
	25-50% of the AA 1-25% of the AA	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 n	0	0	0	0	0	0 n	0	0	0	0	0	0	0 0
	<1% or none of the AA (high marsh only)	0	0	0	0	0	0	0	0	0	0	0	·	0	0	0		0		0			0	0	0	0	0	0	0	0	Ö	0	0	0 0
F4 Tidal-Nontidal Hydroconnectivity	This tidal wetland is (select one): contiguous to a non-tidal palustrine wetland that contains surface water at least seasonally, and mostly not separated by a dike or other barrier, allowing fish access to both wetlands	W	W 0	W 0	W	W	W	W	W 0	W	0	W	W	W 0	W 0	W 0	W 0	W W 0																
	during spring, contiguous to a non-tidal palustrine wetland that contains surface water at least seasonally, but mostly separated by a dike or other barrier, yet still allowing fish access to both wetlands	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0
	during spring. not contiguous to a non-tidal palustrine wetland that contains surface water, but has an inflowing stream that allows fish during the springtime to access a non-tidal wetland < 1 mile upstream.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0
	unstream. not contiguous to a non-tidal palustrine wetland that contains surface water, but has an inflowing stream that allows fish during the springtime to access a non-tidal wetland > 1 mile unstream.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0
	unstream. not contiguous to a non-tidal palustrine wetland, and lacks an inflowing non-tidal stream that provides fish access to an upstream wetland that contains surface water at least seasonally.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0

	d F Data Form	Wetland Group	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
	Indicator	Conditions															Indic	cator a	nswers:	: 1 = Ye	es / 0 =	No No														
F5	Interrupted Hydroperiod	Select one: during 4 of the last 5 years most of the AA has been constantly covered with surface water,	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
		but it went mostly dry at least once. during 4 of the last 5 years most of the AA has been constantly dry on the surface (i.e., saturated only below the surface), but during at least one event most of it was flooded,	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		even if only briefly.	_	4	•	4		4	4		4	4	4	4		4	4	4		4				4	4		4		4	4	4	4	4			
		neither of above unknown	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
F6	Saturated-only Wetland	No part of the AA is ever inundated (contains at least 1 inch of water above the land surface) for more than 14 consecutive days during a normal year. That is, it is a saturated-only wetland. If true, mark "1" here, then SKIP TO F39 (Herbaceous Extent)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
F7	Seasonal Water Extent	During normal years, the percent of the AA that is inundated only seasonally (more than 14 consecutive days but no more than 9 months, or in tidal wetlands is "high marsh" that is inundated by tides fewer than half the days in any month) is:																																		
		>75% of the AA 50-75% of the AA	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
		25-50% of the AA	0	Ĭ	0	0	0	0	Ö	1	0	1	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	0	1	0	1	1	0	0	1	0
		5-25% of the AA <5% of the AA, or none	0		0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	1
F8	Extent of Persistent Surface Water (Dry Season)	When the AA's surface water is at its lowest annual level, the percent of the AA still containing surface water (whether obscured by vegetation or not) is:	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
		>95% of the AA 50-95% of the AA	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	1	0	- 0	0	0
		25-50% of the AA	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	1	1	0	1	0	0	1	0	0
		1-25% of the AA None of the above, and the AA contains or is part of a fringe wetland, SKIP to F10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		None of the above, and not a fringe wetland, SKIP to F10	0	0	0	0	0	0	Ö	1	Ö	0	Ö	Ö	Ö	0	0	1	Ö	0	0	1	0	0	0	0	0	0	0	0	0	0	0	Ö	1	0
F9	Onsite Surface Water Isolation (Dry Season)	When the AA's surface water is at its lowest annual level (for tidal wetlands = annual lowest tide), the percent of the surface water that is in or connected to flowing channels that exit the AA, compared to surface water that is outside of channels and their floodplains (e.g., in small depressions that do not connect annually to the channel if any). is:																																		
		all (100%) located in channels, swales, or other areas with a surface water connection to a river, lake, or estuary at all times of year	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
		75-99% in or connected to channels, swales, or contiguous lake/ estuary, 1-25% in isolated	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
		50001s 50-75% in or connected to channels, swales, or other areas with a surface water connection to a river, lake, or estuary at all times of year, 25-50% in isolated pools	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
		25-50% in or connected to channels, swales, or other areas with a surface water connection to a river, lake, or estuary at all times of year, 50-75% in isolated pools	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		1-25% in or connected to channels, swales, or other areas with a surface water connection to a river, lake, or estuary at all times of year, 75-99% in isolated pools	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		all located in isolated pools or a single isolated pond from which no surface water exits when levels are lowest	1	1	1	0	0	0	1	0	1	1	1	1	1	1	0	0	1	1	1	0	1	0	1	1	1	1	1	1	1	1	0	0	0	0
F10	Onsite Surface Water Isolation (Wet Season)	During the wettest time of a normal year, the percent of the surface water that is in or																																		
		all (100%) located in channels, swales, or in other areas with a wet-season surface connection to channels or to a contiquous lake or estuary	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0
		75-99% in or connected to channels, swales, or contiguous lake/ estuary, 1-25% in isolated	0	0	0	1	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
		50-75% in or connected to channels, swales, or contiguous lake/ estuary, 25-50% in isolated	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		25-50% in or connected to channels, swales, or contiguous lake/ estuary, 50-75% in isolated	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		1-25% in or connected to channels, swales, or contiguous lake/ estuary, 75-99% in isolated pools	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
		all located in isolated pools or a single isolated pond from which no surface water exits	1	1	1	0	0	0	1	1	1	1	0	0	1	1	0	1	1	0	1	1	0	0	1	1	1	1	1	1	1	1	0	0	1	0
F11	Predominant Water Fluctuation Range	During most years, the difference in surface water level between the driest and wettest time of year in most of the area that is not inundated year-round is:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0
		>6 ft change 3-6 ft change	0		0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0
		1-3 ft change 0.5 - 1 ft change	1	0	1	0	1 0	0	0	0	0	1	0	1 0	1 0	0	0	1	1 0	0	1 0	1	1	0	1	1	1	1	0	0	1	0	0	0	1	0
		< 0.5 ft or no change (stable)	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
F12	Predominant Depth Class	When present, surface water in most of the AA is usually:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	Class	>6 ft deep 2-6 ft deep	1	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	0	1	1	1	0	0	1	1	1	1	1	1	0	0
		1-2 ft deep	0		1	0	1	1	0	0	0	1	0	1	1	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	1	0
L		0.5 - 1 ft deep <0.5 ft deep (but >0)	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
F13	Depth Class Distribution	When present, surface water in most of the AA usually consists of (select one): One depth class (use the classes in F12) that comprises >90% of the AA's inundated area One depth class that comprises >50% of the AA's inundated area	0	0	0	1	0	1	1 0	0	1 0	0		0 0	0 0	0 1 0	0		0	0	0	0	0 1 0	0	1 0	0	1 0	1 0	1 0	1 0	0	1 0	0	0	0	1 0
F14	Deep Spots	Neither of above Ponded nontidal water deeper than 3 ft covers at least 1 acre or >5% of the AA during (check all that apply): most of the period (generally, November-April) when waterfowl are migrating or wintering,	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	1	1	0	0	1	0	1	1	1	1	0	0
		and/ or amphibians are in aquatic phases most of the period (generally, May-August) when waterfowl are breeding	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	1	1	0	0	1	0	1	0	1	1	0	0
		inition of above (no ponded water >3 ft deep is that extensive)	1 0	1 0	1 0	1 0	1 0	1 0	1 0	1 0	1 0	1	0	0	1 0	0	1 0	1 0	1 0	1 0	1 0	1 0	1 0	0	0	0	1 0	1 0	0	1 0	0	0	0	0	1 0	1 0
		Impooning (O foil			U		1 0	, v	· ·		U		U		U	· ·	U	v		v	U	U	v	v	U	v			U	v	v	U	U			

Field F Data	Form	Wetland Group	1	2	3	4	5	6	7	8	9	10	11	12	13	4 15	16	17 1	8 19	20	21	22	23	24	25	26 2	27 2	28	29	30	31	32 3	33 34
lo " l		·																												\bot	\bot		
Q# Indicator		Conditions	- 1	4 1	4		44	1 44	1 4		- 1	40		00	44	<u>In</u>	dicator a	nswers: 1	Yes / 0	= No		45	- 1	- 1	4	o I	^	4	- I		40	7	
F15 Open Water Interspersio Inundated V	on With Partly Vegetation	Visualize the extent and distribution of ponded open water within the AA, relative to the distribution of the most dominant form of partly-submerged vegetation (herbaceous or woody, with stems and leaves >4" above the water surface). Visualize this as it occurs during May of most years. In the table to the right, first estimate the percent open water (left column) in the AA, then its distribution (top row). Select the highest applicable number and enter it in column D. See photographs in Appendix A of manual. If the AA has no ponded water during May, score it "1." If this is a fringe wetland, assume Open Water is >70%.	1	1	4	8	14	14	1	1	5	10	5	20	14	0 5	8	8	14	14	5	15	7	7	1	2	2	1		8	18		1 1
	,	Note: Ponded open water is surface water that is not visibly flowing and contains no vegetation (except perhaps floating-leaved or completely submersed species) and is not beneath a canopy of trees or shrubs. For tidal sites, consider the condition at average midtide																															
F16 Inflow		When surface water enters the AA, it enters as (select all applicable choices): flow moving in streams, ditches, other channels	0	0	0	0	0	1	0	0	0	0	1	0	0) 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 1
		surface water exchanged broadly as overflow with contiguous waters such as an estuary, lake, or river	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0 0
	1	water pumped into or intentionally diverted to the AA, e.g., as part of a stormwater dispersion	0	0	0	0	0	0	0	0	0	0	0	0	0) 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0
		system, irrigation practice, or drainage tile outlet groundwater, runoff, and direct precipitation	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	1 0
F17 Groundwate	L	Select one:	W	W	W	W	W	W	W	W	W	W	W	W	W	v w	W	W \	V W	W	W	W	W	W	W	W	W	W	W	W	W	W	W W
	:	Part of the wetland contains strong evidence of groundwater discharges at the wetland surface during summer: (a) Springs are observed or are shown on Wetland Explorer map, or (b) water is cooler in summer and warmer in winter than in other local wetlands, or (c) measurements from shallow wells indicate groundwater is discharging to the wetland.	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0
	1	Part of the wetland has less definitive evidence of discharging groundwater during summer. Wetland has no perennial tributary and is on organic, sandy, or gravelly soil (as determined in F58) AND has one or more: (a) outflow is present and persists during most of the summer or (b) on a natural slope of >5%, or (c) very close to the base of a natural slope steeper than 15%, and longer than 300 ft, or (d) located at a geologic fault, or (e) has rust deposits, colored precipitates, or dispersible natural oil sheen, or (f) within a mile of the top of a HUC4 watershed (see Wetland Explorer for boundaries).	0	0	0	1	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0 0
	,	Neither of above is true, although some groundwater may discharge to or flow through the wetland, and wetland is in a region of eastern Oregon with mean annual precipitation of less than 20 inches.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0
540 O III D		None of the above	1	1	1	0	0	0	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	_	1 1
F18 Outflow Dur	<u>L</u>	The most durable surface water connection between the wetland and the closest contiquous and/or downslope surface waters is:	W	W	W	W	W	W	W	W	W	W	W	W	0	V W	W	W \	V W	W	W	W	W	W	W	W	W	W	W	W	W		W W
		persistent (>9 months/yr), or daily tidal exchange seasonal (14 days to 9 months/yr, not necessarily consecutive)	0	0	0	0	0	0	0	0	1	0	0	0	•) 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	•	0 0
	ŀ	temporary (<14 days, not necessarily consecutive)	0	0	0	0	0	0	Λ	0	0	Λ	0	0	0) 0	0	0		0	0	0	1	1	0	0	0	0	0	1	0	0	0 0
	l.	none the wetland lacks an outlet. If so, mark "1" here and SKIP TO F25 (Sheltering of	1	0	1	0	0	0	1	1	0	1	0	1	1	0	1			1	1	U			0	1	1	1					
F19 Outflow Cor		none the wetland lacks an outlet. If so, mark "1" here and SKIP TO F25 (Sheltering of Water). During major runoff events, in the places where surface water exits the wetland it is:	1 W	0 W	1 W	0 W		0 W	1 W	1 W	0 W	1 W	0 W	1 W	W	v w	1 W	W	v W	W	W	w	W	W	W	1 W	1 W	1 W	W	W	W	W	w w
F19 Outflow Cor	onfinement	Water).		Ů	1	0 W	0		0 1 W	1 W	·	1 W	·	1 W	W 0	v w	0 W		v w	W	W 0	W 0	W 0	W 0	0 W 0	1 W 0	1 W 0	1 W 0	W 0	W 0	W		W W 0 1
F19 Outflow Cor	onfinement	Water). During major runoff events, in the places where surface water exits the wetland it is: impeded by a pipe, culvert, tidegate, narrowly breached dike, berm, beaver dam, or other	W	Ů	1 W	0 W 1	0 W	W	0 1 W 0	1 W	·	0 0	·	0 0		V W	0 0	W	v w	W 0	W 0	0 0		W 0	0 W 0		0 0	0	0	W 0	1 0	0	
F19 Outflow Cor	onfinement	Water). During major runoff events, in the places where surface water exits the wetland it is: impeded by a pipe, culvert, tidegate, narrowly breached dike, berm, beaver dam, or other obstruction (other than natural topography), or water is pumped out of the wetland (e.g., for irrigation) not impeded by anything other than (possibly) natural topography Either the wetland has BOTH an inlet and outlet with seasonal or persistent surface flow, or	W 0 0 0	1 1 0	0 0	0	0 W 0	W 0	Ů	0 0 0	W 1 0 0	0	W 1 0 1 1	0	0 0	V W 0 0	0	0 0 0	0 0 0 0	0	0 0	0 0	0	0	0	0 0	0	0 0	0 0	0	0 0	0	0 1 0 0 0 0 1
	onfinement	Water). During major runoff events, in the places where surface water exits the wetland it is: impeded by a pipe, culvert, tidegate, narrowly breached dike, berm, beaver dam, or other obstruction (other than natural topography), or water is pumped out of the wetland (e.g., for irridation). not impeded by anything other than (possibly) natural topography	W 0	1 1	0 0	1 0	0 W 0	W 0	0 0 0 W	0 0	W 1		W 1	0	0 0	v w 0 0	0	0 0 0	W 0	0	0	0 0 1 1 1 W	0	0	0	0 0	0 0	0 0	0	0	0 0	0	0 1 0
F20 Inlet+Outlet	onfinement it w Complexity	Water). During major runoff events, in the places where surface water exits the wetland it is: impeded by a pipe, culvert, tidegate, narrowly breached dike, berm, beaver dam, or other obstruction (other than natural topography), or water is pumped out of the wetland (e.g., for irrigation) not impeded by anything other than (possibly) natural topography Either the wetland has BOTH an inlet and outlet with seasonal or persistent surface flow, or the wetland is tidal or lacustrine. If so, enter "1" here and continue. If neither condition met, enter "0" here and then SKIP to F25 (Sheltering of Water). During peak annual flow, most of the surface water that flows through the AA:	0 0 0 W	1 1 0 W	0 0 0 W	1 0 1 W	0 W 0	0 1 1 W	W	0 0 0 W	0 0 W	0 W	0 1 W	0 0 W	0 0 W	v w 0 0 0	0 W	0 0 W 1	0 0 0 W	0 0 W	0 0 W	W	0 0 W	0 0 W	0 W	0 0 W	0 0 W	0 0 0 W	0 0 0 W	0 0 W	0 0 W	0 1 1 1 W	0 1 0 0 0 0 0 1 W W
F20 Inlet+Outlet	onfinement ut w Complexity	Water). During major runoff events, in the places where surface water exits the wetland it is: impeded by a pipe, culvert, tidegate, narrowly breached dike, berm, beaver dam, or other obstruction (other than natural topography), or water is pumped out of the wetland (e.g., for irrigation) not impeded by anything other than (possibly) natural topography Either the wetland has BOTH an inlet and outlet with seasonal or persistent surface flow, or the wetland is tidal or lacustrine. If so, enter "1" here and continue. If neither condition met, enter "0" here and then SKIP to F25 (Sheltering of Water). During peak annual flow, most of the surface water that flows through the AA: encounters little or no vegetation, boulders, or other sources of friction. mostly encounters herbaceous vegetation that offers little resistance, and water follows a fairly straight path from entrance to exit (few internal channels, only slight meandering)	W 0 0 0	1 1 0 W	0 0 0 W	1 0 1 W	0 W 0	0 1 1 1 W	Ů	0 0 0 W	0 0 0 W	0	W 1 0 1 1	0 0 W	0 0 W	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 W	0 0 0 W N	0 0 0 W	0 0 W	0 0 W		0	0 0 W	0 W	0 0 W	0 0 W	0 0 0 W	0 0 0 W	0 0 W	0	0 1 1 1 W 0 0 0 0	0 1 0 0 0 1 W W
F20 Inlet+Outlet	onfinement it w Complexity	Water). During major runoff events, in the places where surface water exits the wetland it is: impeded by a pipe, culvert, tidegate, narrowly breached dike, berm, beaver dam, or other obstruction (other than natural topography), or water is pumped out of the wetland (e.g., for irrigation) not impeded by anything other than (possibly) natural topography Either the wetland has BOTH an inlet and outlet with seasonal or persistent surface flow, or the wetland is tidal or lacustrine. If so, enter "1" here and continue. If neither condition met, enter "0" here and then SKIP to F25 (Sheltering of Water). During peak annual flow, most of the surface water that flows through the AA: encounters little or no vegetation, boulders, or other sources of friction. mostly encounters herbaceous vegetation that offers little resistance, and water follows a fairly straight path from entrance to exit (few internal channels, only slight meandering) mostly encounters herbaceous vegetation that offers little resistance and follows a fairly indirect path from entrance to exit (non-channelized flow or many internal channels, or very	0 0 0 W	1 1 0 W	0 0 0 W	1 0 1 W	0 W 0 1 1 W 0 0	0 1 1 W	W	0 0 0 W	W 1 0 0 W 0	0 W	0 1 W	0 0 W	0 0 W) 0 1 1 1 V W	0 W	0 0 W 1	0 0 0 W	0 0 W	0 0 W	W	0 0 W	0 0 W	0 W	0 0 W	0 0 W	0 0 W W 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 W	0 0 W	0	0 1 1 1 W 0 0 0 0	0 1 0 0 0 0 1 W W
F20 Inlet+Outlet	onfinement ut w Complexity	Water). During major runoff events, in the places where surface water exits the wetland it is: impeded by a pipe, culvert, tidegate, narrowly breached dike, berm, beaver dam, or other obstruction (other than natural topography), or water is pumped out of the wetland (e.g., for irrigation) not impeded by anything other than (possibly) natural topography Either the wetland has BOTH an inlet and outlet with seasonal or persistent surface flow, or the wetland is tidal or lacustrine. If so, enter "1" here and continue. If neither condition met, enter "0" here and then SKIP to F25 (Sheltering of Water). During peak annual flow, most of the surface water that flows through the AA: encounters little or no vegetation, boulders, or other sources of friction. mostly encounters herbaceous vegetation that offers little resistance, and water follows a fairly straight path from entrance to exit (few internal channels, only slight meandering) mostly encounters herbaceous vegetation that offers little resistance and follows a fairly	0 0 W	1 1 0 W	0 0 0 W	1 0 1 W	0 W 0 1 1 W 0 0 0 0 0	0 1 1 1 W	0 0	0 0 0 W	0 0 0 W	0 W	0 1 W	0 0 W	0 0 W	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 W	0 0 W N	0 0 0 V W	0 0 W	0 0 W	W	0 0 W	0 0 W	0 W	0 0 W	0 0 W	0 0 0 W W 0 0 0 0 0 0	0 0 0 W 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 W	0 0 W	0 1 1 1 W 0 0 0 0 0 0	0 1 0 0 0 1 W W
F20 Inlet+Outlet	onfinement wt w Complexity	Water). During major runoff events, in the places where surface water exits the wetland it is: impeded by a pipe, culvert, tidegate, narrowly breached dike, berm, beaver dam, or other obstruction (other than natural topography), or water is pumped out of the wetland (e.g., for irrigation) not impeded by anything other than (possibly) natural topography Either the wetland has BOTH an inlet and outlet with seasonal or persistent surface flow, or the wetland is tidal or lacustrine. If so, enter "1" here and continue. If neither condition met, enter "0" here and then SKIP to F25 (Sheltering of Water). During peak annual flow, most of the surface water that flows through the AA: encounters little or no vegetation, boulders, or other sources of friction. mostly encounters herbaceous vegetation that offers little resistance, and water follows a fairly straight path from entrance to exit (few internal channels, only slight meandering) mostly encounters herbaceous vegetation that offers little resistance and follows a fairly indirect path from entrance to exit (non-channelized flow or many internal channels, or very braided or tightly meandering) encounters measurable resistance from fairly-rigid vegetation (e.g., cattail, bulrush, woody	0 0 0 W	W 1 1 0 W 0 0 0 0 0 0	0 0 0 W	0 1 W	0 W 0 1 1 W 0 0 0 0 0	0 0 1 1 W 0 0 0 0 0 0	0 0	0 0 0 W	0 0 W	0 W	0 1 W	0 0 W	0 0 W	0 0 1 1 W W	0 W	0 0 V V V	0 0 0 0 W W W W O O O O O O O O O O O O	0 0 W	0 0 W	0 0	0 0 W	0 0 W	0 W	0 0 W	0 0 0 W	0 0 0 W	0 0 0 W W 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 W	0 0 W	0 1 1 1 W W 0 0 0 0 1 1 1 1 1 1 1 1 1 1	0 1 0 0 0 1 W W W
F20 Inlet+Outlet F21 Throughflov	w Complexity Zone Relative	Water). During major runoff events, in the places where surface water exits the wetland it is: impeded by a pipe, culvert, tidegate, narrowly breached dike, berm, beaver dam, or other obstruction (other than natural topography), or water is pumped out of the wetland (e.g., for irrigation). not impeded by anything other than (possibly) natural topography Either the wetland has BOTH an inlet and outlet with seasonal or persistent surface flow, or the wetland is tidal or lacustrine. If so, enter "1" here and continue. If neither condition met, enter "0" here and then SKIP to F25 (Sheltering of Water). During peak annual flow, most of the surface water that flows through the AA: encounters little or no vegetation, boulders, or other sources of friction. mostly encounters herbaceous vegetation that offers little resistance, and water follows a fairly straight path from entrance to exit (few internal channels, only slight meandering) encounters herbaceous vegetation that offers little resistance and follows a fairly indirect path from entrance to exit (non-channelized flow or many internal channels, or very braided or tightly meandering) encounters measurable resistance from fairly-rigid vegetation (e.g., cattail, bulrush, woody plants) or channel-clogging debris, and follows a fairly straight path from entrance to exit. During most of the time open water is present in the AA, vegetated areas within the AA, where they are contiquous to open water, are:	0 0 0 W	W 1 1 0 W 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0	1 0 1 W 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 W 0 1 1 W 0 0 0 0 1 1	0 1 1 W 0 0 0 0 1 1	0 0 0	0 0 0 W	W 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 W	0 1 W	0 0 W	0 0 W	0 0 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 W	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 V W	0 0 W	0 0 W	0 0 1 0	0 0 W	0 0 W	0 W	0 0 0 0 0 0	0 0 0 W	0 0 0 W	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 W	0 0 W W 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 1 1 1 W W 0 0 0 0 1 1 0 0 0 0 0 0 0 0	0 1 0 0 0 0 0 W W W 0 0 0 0 0 0 0 0 0 0
F20 Inlet+Outlet F21 Throughflov F22 Vegetated 2	w Complexity Zone Relative	Water). During major runoff events, in the places where surface water exits the wetland it is: impeded by a pipe, culvert, tidegate, narrowly breached dike, berm, beaver dam, or other obstruction (other than natural topography), or water is pumped out of the wetland (e.g., for irrigation). not impeded by anything other than (possibly) natural topography Either the wetland has BOTH an inlet and outlet with seasonal or persistent surface flow, or the wetland is tidal or lacustrine. If so, enter "1" here and continue. If neither condition met, enter "0" here and then SKIP to F25 (Sheltering of Water). During peak annual flow, most of the surface water that flows through the AA: encounters little or no vegetation, boulders, or other sources of friction. mostly encounters herbaceous vegetation that offers little resistance, and water follows a fairly straight path from entrance to exit (fron-channels; only slight meandering) mostly encounters herbaceous vegetation that offers little resistance and follows a fairly indirect path from entrance to exit (non-channelized flow or many internal channels, or very braided or tightly meandering) encounters measurable resistance from fairly-rigid vegetation (e.g., cattail, bulrush, woody plants) or channel-clogging debris, and follows a fairly straight path from entrance to exit. encounters measurable resistance from fairly-rigid vegetation (e.g., cattail, bulrush, woody species) or channel-clogging debris, and follows a fairly indirect path from entrance to exit. During most of the time open water is present in the AA, vegetated areas within the AA, where they are contiquous to open water, are: wider than the contiguous open water	0 0 0 W 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 W 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 0 1 W 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 W 0 1 1 W 0 0 0 1 1 0 0 1 1 0 0 1 1	0 1 1 W 0 0 0 0 1 1	0 0 0	0 0 0 W	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 W	0 1 W 0 1 0 0 0 0 0 1 1	0 0 W	0 0 W	0 0 1 1 1 1 V W	0 W	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 V W	0 0 W	0 0 W	0 0 1	0 0 W	0 0 W	0 W	0 0 0 0 0 0	0 0 0 W	0 0 0 W	0 0 0 W W 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 W	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 1 1 W W 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
F20 Inlet+Outlet F21 Throughflow F22 Vegetated 2 Width F23 Vegetated 2	w Complexity Zone Relative	Water). During major runoff events, in the places where surface water exits the wetland it is: impeded by a pipe, culvert, tidegate, narrowly breached dike, berm, beaver dam, or other obstruction (other than natural topography), or water is pumped out of the wetland (e.g., for irrigation) not impeded by anything other than (possibly) natural topography Either the wetland has BOTH an inlet and outlet with seasonal or persistent surface flow, or the wetland is tidal or lacustrine. If so, enter "1" here and continue. If neither condition met, enter "0" here and then SKIP to F25 (Sheltering of Water). During peak annual flow, most of the surface water that flows through the AA: encounters little or no vegetation, boulders, or other sources of friction. mostly encounters herbaceous vegetation that offers little resistance, and water follows a fairly straight path from entrance to exit (few internal channels, only slight meandering) mostly encounters herbaceous vegetation that offers little resistance and follows a fairly indirect path from entrance to exit (non-channelized flow or many internal channels, or very braided or tightly meandering) encounters measurable resistance from fairly-rigid vegetation (e.g., cattail, bulrush, woody plants) or channel-clogging debris, and follows a fairly straight path from entrance to exit. encounters measurable resistance from fairly-rigid vegetation (e.g., cattail, bulrush, woody species) or channel-clogging debris, and follows a fairly indirect path from entrance to exit. During most of the time open water is present in the AA, vegetated areas within the AA, where they are contiquous to open water, are: wider than the contiguous open water narrower than the contiguous open water The average width of vegetated area in the AA that separates adjoining uplands (if any) from	0 0 0 W	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0	1 0 1 W 0 0 0 0 0 0 1 1 1 1	0 W 0 1 1 W 0 0 0 0 1 1	0 0 0 0 0 0 1 1 0 0 0 1 1	0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	W 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 W	0 1 W	0 0 W	0 0 W	0 0 1 1 0 1 1 W W	0 W	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 V W	0 0 W	0 0 W 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 1 0	0 0 W	0 0 W	0 W	0 0 0 0 0 0	0 0 0 W	0 0 0 W	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 1 1 W W 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 1 0 0 0 0 1 W W W 0 0 0 0 0 0 0 0 0 0
F20 Inlet+Outlet F21 Throughflov F22 Vegetated 2 Width	onfinement It W Complexity Zone Relative	Water). During major runoff events, in the places where surface water exits the wetland it is: impeded by a pipe, culvert, tidegate, narrowly breached dike, berm, beaver dam, or other obstruction (other than natural topography), or water is pumped out of the wetland (e.g., for irrigation). not impeded by anything other than (possibly) natural topography Either the wetland has BOTH an inlet and outlet with seasonal or persistent surface flow, or the wetland is tidal or lacustrine. If so, enter "1" here and continue. If neither condition met, enter "0" here and then SKIP to F25 (Sheltering of Water). During peak annual flow, most of the surface water that flows through the AA: encounters little or no vegetation, boulders, or other sources of friction. mostly encounters herbaceous vegetation that offers little resistance, and water follows a fairly straight path from entrance to exit (few internal channels, only slight meandering) mostly encounters herbaceous vegetation that offers little resistance and follows a fairly indirect path from entrance to exit (non-channelized flow or many internal channels, or very braided or tightly meandering) encounters measurable resistance from fairly-rigid vegetation (e.g., cattail, bulrush, woody plants) or channel-clogging debris, and follows a fairly straight path from entrance to exit. During most of the time open water is present in the AA, vegetated areas within the AA, where they are contiguous open water narrower than the contiguous open water narrower than the contiguous open water narrower than the contiguous open water narrower and follows a fairly indirect path from entrance to exit.	0 0 0 W 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 W 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 0 1 W 0 0 0 0 0 0 1 1 1 1	0 W 0 1 1 W 0 0 0 1 1 0 0 1 1 0 0 1 1	0 0 0 0 0 0 1 1 0 0 0 1 1	0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	W 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 W	0 1 W 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 W	0 0 W	0 0 1 1 0 1 1 W W	0 W	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 V W	0 0 W	0 0 W 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 1 0	0 0 W	0 0 W	0 W	0 0 0 0 0 0	0 0 0 W	0 0 0 W	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0	0 1 0 0 0 1 W W W W 0 0 0 0 0 0 0 0 0 0
F20 Inlet+Outlet F21 Throughflow F22 Vegetated 2 Width F23 Vegetated 2	onfinement w Complexity Zone Relative Zone	Water). During major runoff events, in the places where surface water exits the wetland it is: impeded by a pipe, culvert, tidegate, narrowly breached dike, berm, beaver dam, or other obstruction (other than natural topography), or water is pumped out of the wetland (e.g., for irrigation). not impeded by anything other than (possibly) natural topography Either the wetland has BOTH an inlet and outlet with seasonal or persistent surface flow, or the wetland is tidal or lacustrine. If so, enter "1" here and continue. If neither condition met, enter "0" here and then SKIP to F25 (Sheltering of Water). During peak annual flow, most of the surface water that flows through the AA: encounters little or no vegetation, boulders, or other sources of friction. mostly encounters herbaceous vegetation that offers little resistance, and water follows a fairly straight path from entrance to exit (fron-channels, only slight meandering) mostly encounters herbaceous vegetation that offers little resistance and follows a fairly indirect path from entrance to exit (non-channelized flow or many internal channels, or very braided or tightly meandering) encounters measurable resistance from fairly-rigid vegetation (e.g., cattail, bulrush, woody plants) or channel-clogging debris, and follows a fairly straight path from entrance to exit. encounters measurable resistance from fairly-rigid vegetation (e.g., cattail, bulrush, woody species) or channel-clogging debris, and follows a fairly indirect path from entrance to exit. During most of the time open water is present in the AA, vegetated areas within the AA, where they are contiquous open water narrower than the contiguous open water narrower open waters (if any) is: >300 ft, or no contiguous upland or open waters (not even temporary)	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 0 1 W 0 0 0 0 0 0 1 1 1 1	0 W 0 1 1 1 W 0 0 1 1 0 0 1 1 0 0 1 1	0 0 0 0 0 0 1 1 0 0 0 1 1	0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	W 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 W	0 1 W 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 1 1 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0	0 W	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 W	0 0 W 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 1 0	0 0 0 0 0	0 0 0 0 0 0	0 W 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 1 1 1 W W 0 0 0 1 1 0 0 1 0 0 1 1 0 0 1 0 0 1 1 0 0 1 0 0 1 1 0 0 0 1 1 0 0 0 1 1 0 0 0 1 1 0 0 0 1 1 0 0 0 1 1 0 0 0 1 1 0 0 0 1 1 0 0 0 1 1 0 0 0 1 1 0 0 0 1 1 0 0 0 1 1 0 0 0 1 1 0 0 0 0 1 1 0 0 0 0 1 1 0 0 0 0 1 1 0 0 0 0 1 1 0	0 1 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0
F20 Inlet+Outlet F21 Throughflow F22 Vegetated 2 Width F23 Vegetated 2	w Complexity Zone Relative	Water). During major runoff events, in the places where surface water exits the wetland it is: impeded by a pipe, culvert, tidegate, narrowly breached dike, berm, beaver dam, or other obstruction (other than natural topography), or water is pumped out of the wetland (e.g., for irrigation). not impeded by anything other than (possibly) natural topography Either the wetland has BOTH an inlet and outlet with seasonal or persistent surface flow, or the wetland is tidal or lacustrine. If so, enter "1" here and continue. If neither condition met, enter "0" here and then SKIP to F25 (Sheltering of Water). During peak annual flow, most of the surface water that flows through the AA: encounters little or no vegetation, boulders, or other sources of friction. mostly encounters herbaceous vegetation that offers little resistance, and water follows a fairly straight path from entrance to exit (few internal channels, only slight meandering) mostly encounters herbaceous vegetation that offers little resistance and follows a fairly indirect path from entrance to exit (non-channelized flow or many internal channels, or very braided or tightly meandering) encounters measurable resistance from fairly-rigid vegetation (e.g., cattail, bulrush, woody plants) or channel-clogging debris, and follows a fairly straight path from entrance to exit. During most of the time open water is present in the AA, vegetated areas within the AA, where they are contiguous open water narrower than the contiguous open water narrower than the contiguous open water narrower than the contiguous open water narrower and follows a fairly indirect path from entrance to exit.	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 0 1 W 0 0 0 1 1 0 0 0 1 1 0 0 0 1 1 0 0 0 0	0 W 0 1 1 W 0 0 0 1 1 0 0 1 1 0 0 1 1	0 0 1 1 0 0 1 1 0 0 1 1	0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 W 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 1 W 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 W 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 W	0 0 0 0 0 0	0 0 0 1 0	0 0 0 0 0 0	0 0 W	0 W 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0	0 1 0 0 0 1 W W W W 0 0 0 0 0 0 0 0 0 0

Fiel	F Data Form	Wetland Group	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21 22	2 23	24	25	5 26	27	28	29	30	31	32	33	34
0#	Indicator	Conditions															las al!			4 - V-	- / 0 -	N													
	Undercut Banks	The percent of the AA's water edge, if any, that has undercut banks that are partially visible															inai	cator a	nswers:	: 1 = Ye	S / U =	NO													
	ondorout Barmo	above the water is:																																	
		>75%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0
		50-75% 25-50%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0
		1-25%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 1	0	0	Ö	0	0	0	0	0	0	0	0	1
		<1%, or no definable water edge is present	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	1	0	0
F25	Sheltering of Water	cannot estimate At mid-day in summer, the area of surface water within the AA that is shaded by herbaceous	U	U	0			1	U	U	0	U		U	U	U	U	U	U	U	0	U	0 0	0	0	U	0	0	0	U	0	U		0	0
		or woody vegetation, incised channels, streambanks, or other features also present within the AA is:																																	
		>75% of the water	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0 0	0	0	0	0	0	0	0	0	0	0	0	1
		50-75% of the water 25-50% of the water	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1 1	0	0	0	0	0	0	0	0	1	0	0	0
		5-25% of the water	0	0	0	1	0	1	0	0	0	1	Ö	1	0	1	1	0	Ö	0	1	0	0 0	0	1	1	0	1	0	1	0	0	1	0	0
		<5% of the water (surface water is typically absent in summer or during low tide)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0
F26	Abovewater Wood	The number of downed wood pieces thicker than 4 inches that remain only partly underwater	U	U		U	U	U	U	_	_	U	U	U	Ė	U	U	_	U	_	U	U	0 1	U	U	U		U	U	U	0	0	—	1	
		during most of the spring or early summer, thus potentially serving as basking sites for																																	
		turtles, birds, or froos, is: Several	1	1	0	- 1	1	1	1	0	0	1	1	1	0	1	1	0	0	0	1	0	1 1	1	1	0	1	1	1	1	1	1	1	1	0
		Few or none, or AA never has any surface water at that time	0	0	1	0	0	0	0	1	1	0	0	0	1	0	0	1	1	1	0	Ů	0 0	0	0	Ů	_	0	0	0	0	0	0	0	1
F27	Islands	Select all that apply:	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W		N N	_					W	W	W	W	W	W	W
		During early summer the wetland contains a floating vegetation mat suitable for nesting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0
		birds and isolated from the shore by water depths >3 ft. Or AA is an island with similar isolation and a gently-sloping water edge that is mostly vegetated .																																	
		During early summer the wetland contains (or is) an island with a gently-sloping water edge, that is mostly bare and is isolated from the shore by water depths >3 ft.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0
		Neither of above	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1 1	1	1	1	1	1	1	1	1	1	1	1	1
F28	Shorebird Feeding Habitats	The maximum extent of mudflats or unwooded shortgrass areas within the AA during shorebird migration and wintering (generally August through through April (and for tidal AAs, during mean low tide) is usually:																																	
		none, or <100 sq. ft, and there are none that cover >10,000 sq. ft anywhere within 300 ft of the AA	0	1	1	1	0	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1 1	1	1	1	1	1	1	1	1	1	1	1	1
		none, or <100 sq. ft, but some that cover >10,000 are within 300 ft of the AA	1 0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0
		100-1000 sq. ft. within AA 1000 – 10,000 sq. ft. within AA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0
		>10,000 sq. ft within AA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0
F29	Waves	Which of the following is most true:	0	0	_	_	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0 0	0				0		0		0		0	0
		Wind or boats frequently generate waves of >1 ft near the AA, those waves are intercepted by the wetland, and structures behind the AA are protected from wave erosion	0	0	0	0	U	0	U	U	U	U	0	0	0	0	U	0	U	0	0	U	0 0	U	0	0	U	0	0	U	0	0	0	0	0
		Wind or boats frequently generate waves of >1 ft near the AA, those waves are intercepted by the wetland, but there are no structures behind the wetland	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0
		Neither wind nor boats frequently generate waves of >1 ft near the AA	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1 1	1	1	1	1	1	1	1	1	1	1	1	1
F30	Vectors for Waterborne		0	0	Λ	0	0	0	0	0	0	0	0	0	0	0	0	Λ	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0		0	
	Pests	a regularly-used boat dock is present within or contiguous to the AA a regularly-used boat dock is not within the AA , but there is one within 300 ft of the AA and	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0
		there is a persistent or tidal surface connection between the dock and the AA				_								_		_ `	,		•		,	•				Ĭ			_					,	
		large ships that empty ballast water are regularly present in nearby contiguous waters the AA has a persistent or tidal surface water connection (>9 mos./yr, via ditch, pipe,	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0 0					0	0	0	0	0	0	0	0
		channel, tidegate, or floodplain) to a nearby perennial stream, river, lake, or estuary	V	o l	o	0		•	Ů	Ü	ŭ	o o		Ů		· ·	V	v	Ů	· ·												•	Ů	V	Ů
F04	Non notive Assetts	none of the above The following are known or likely to have reproducing populations in this AA, its wetland, or in	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1 1	1	1	1	1	1	1	1	1	0	1	1	1
FSI	Non-native Aquatic Animals	water bodies within 300 ft that connect to the AA at least seasonally . Select all that apply:																																	
		non-native amphibians (e.g., bullfrog) or reptiles (e.g., red-ear slider)	1	v	0	0	0	0	0	0	0	0	1	0	0	0	1		0	0	0	•	0 1	V	0			0		0	0	1	1	0	1
		carp other non-native fish (e.g., bass, gambusia, walleye, crappie, brook trout)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	U	0 0		0	0		0	0	0	0	0	0	0	0
		non-native invertebrates (e.g., New Zealand mudsnail, mitten crab, rusty crayfish)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	v	0	0		0	0	0	0	0	0	0	0
		nutria	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	v	0 0	·	0	0	·	0	0	0	0	0	0	0	0
For	32 to 34 if the states	none of above, or unknown ment is true, enter a "1" in column D. Otherwise that should be a "0"	0	1	1	1	1	1	1	1	1	1	0	1	1	1	0	1	1	1	1	1	1 0	1	1	1	1	1	1	1	1	0	0	1	1
	lce-free	nont to add, onto a 1 m column b. Otherwise that should be a 0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1 1	1	1	1	1	1	1	1	1	1	1	1	1
F33	Ponded Threshold	During most of the summer, the AA contains more than 0.25 acre of ponded non-tidal	0	0	0	1	1	1	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0 1	1	1	1	0	1	1	1	1	1	1	0	0
		surface water that is deeper than 1 ft, or is within 300 ft of such an area and the intervening habitat is not developed (roads, etc.). Or nesting within the AA by ducks, geese, or swans has been proven.																			1														
F34	No Scum	During most summers, less than 80% of the AA's water surface is covered by floating algae, duckweed, and other non-rooted aquatic plants, AND no major fish kills occur. If no surface water is present in summer , mark "1" in column D.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1 1	1	1	1	1	1	1	1	1	1	1	1	1
F35	Submerged & Floating-	SAV (submerged & floating-leaved aquatic vegetation) occupies an annual maximum of:																																	
	leaved Aquatic	>95% of the surface water area	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0
	Vegetation (SAV)	50-95% of the surface water area 25-50% of the surface water area	0	0	0	0	0	0	0 n	0	0	1	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0
		5-25% of the surface water area	0	0	0	1	1	1	0	0	0	0	1	1	0	1	0	0	0	0	1	0	0 0		1	1	0	1	0	1	0	1	0	0	0
		<5% of the surface water area. Mark "1" here and SKIP TO F39 (Herbaceous Extent).	1	1	1	0	0	0	1	1	1	0	0	0	1	0	1	1	1	1	0	1	0 0	0	0	0	1	0	1	0	1	0	0	1	1

Field F Data Form	Wetland Group	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31 3	32 3	33 34
Q# Indicator	Conditions															Indi	cator a	nswers:	1 = Yes	s / N = I	No													
F36 SAV Invasive vs. Non-	The areal cover of SAV at mid-summer is comprised of:															IIIGI	Cator ai	isweis.	1 - 160	3 / 0 - 1														
invasive Cover	mostly invasive SAV species (see list in column E). Mark "1" here and underline the species	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0 (0 0
	in column E. Then SKIP to F39. mostly non-invasive species	0	0	0	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	1	1	1	0	0	0	0	1	0	0	0	0 0
	impossible to tell	0	0	0	1	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	0	1	1 (0 0
F37 SAV Native Species Dominance	Considering just the SAV species that are native: one or two of those species together comprise >50% of the SAV cover. Mark "1" here and	0	0	0	0	0	0	Λ	0	0	۸	0	0	0	0	0	0	0	0	0	0	0	٥	1	1	0	0	0	0	1	0		0	0 0
Dominance	write names of dominant species in column E.	Ů	U	Ů	Ů	ŭ	•	U	Ů	U	•	Ů	Ů	ŭ	Ū	Ů	Ü	V	U	Ů	Ů	ŭ	Ů		•	Ů	U	Ů	Ů	•	Ů			
	no two of the native SAV species together comprise >50% of the SAV cover impossible to tell	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0 (0 0
F38 SAV Species Ubiquity	Of all the SAV species in this AA:	U	U	U		0		U	U	U			U	U	_	U	U	U	U	0	U		U	U	U		U		U	U	U			
, , , , , , , , , , , , , , , , , , , ,	all are species that are common among Oregon's wetlands and lakes.	0	0	0	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	1	0	0 (•	0 0
	at least one native species is a SAV plant that is not common among Oregon's wetlands and lakes, and it covers >1% of the SAV area or >100 sq. ft. See file ORWAP_SuppInfo, worksheet P_UnCom . Mark "1" in next column and write names of the species in column E.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0 0	0 0
		0	0	0	1	0	1	0	0	0	1	1	0	0	1	0	0	0	0	1	0	1	0	0	0	0	0	1	0	0	0	1	1 (0 0
	ions, "herbaceous" does not include SAV or herbaceous plants growing under a																																	
F39 Herbaceous Extent	The areal cover of herbaceous plants during mid-summer is: >95% of the vegetated part of the AA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0 0
	50-95% of the vegetated part of the AA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Ö	0	0	0	0	Ö	0	0	Ö	0	0	0	0	0 /	0 (0 0
		1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0 (0 0) 0
	5-25% of the vegetated part of the AA. Mark "1" here and SKIP TO F44 (Woody Extent).	0	1	0	0	0	0	1	0	1	0	1	0	0	0	1	0	0	1	0	0	0	0	1	1	0	1	1	1	0	1	0 1	1 /	0 0
F40 Graminoid vs. Forb	When the areal cover of herbaceous plants is at an annual maximum, those plants are:																								_									
Cover		0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0
	mostly non-graminoids (e.g., forbs, ferns) (50-80%)	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	Ö	0	0	0	0	0	0	Õ	Ő	0	0	0	0	0 /	0 (0 1
F41 Herbaceous Native vs.	overwhelmingly (>80%) non-graminoids The maximum annual areal cover of herbaceous plants is:	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0 (0 0
Non-native Cover	overwhelmingly (>80% cover) non-native species, of which >10% are species considered invasive (see column E). Mark "1" in next column and write names of dominant invasive species in column E. Then SKIP to F43.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0 0	0 0
	overwhelmingly (>80% cover) non-native species, but <10% are considered invasive (see column E). Mark "1" in next column and write names of dominant non-native species in column E. Then SKIP to F43.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0 0	0 0
	mostly (50-80%) non-native species, regardless of invasiveness. Mark "1" and SKIP to F43.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0 (0 (0 0
	mostly (50-80%) native species overwhelmingly (>80%) native species	1	0	1	1	1	0	0	0	0	1	0	1	0	1	0	0	0	0	1	1	0	1	0	0	1	0	0	0	0	0	0 (0 (1 1
F42 Herbaceous Species	Of just the herbaceous (forb and graminoid) species that are native:		Ů	·				Ů		Ů		Ů				Ü	Ü		Ů	·		Ů		Ů		Ů	Ů	Ů	Ü	Ü	Ů		Ľ	
Dominance	one or two native species together comprise >50% of the areal cover of native herbaceous plants at any time during the year. Mark "1" in next column and write names of dominant native species in column E.	1	0	1	1		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0			0 0
	no two of the native species together comprise >50% of the areal cover of native herbaceous plants	0	0	0	0	1	1	0	1	0	1	0	1	1	1	0	1	1	0	0	1	1	0	0	0	0	0	0	0	1	0	1 (0 1	1
F43 Herbaceous Plant	Of all the herbaceous species in this AA:																																	
Species Ubiquity	all are species that are common among Oregon's wetlands. at least one native species is not common among Oregon's wetlands and it covers >1% of	1	0	0	1	0	0	0	0	0	1	0	0	1	0	0	1	0	0	1	1	1	1	0	0	1	0	0	0	0	0	1 (0 1	1 1 0 0
	the AA's herbaceous area or >100 sq. ft (either contiguous or scattered). See file ORWAP_Supplnfo, worksheet P_UnCom . Mark "1" in next column and write names of the species in column E.		U	0		1	1	U	0	U	U	U	U	O	U	O	0	0			U	o	U	0	U	0	0		0	'				
	Species referenced in F43				camornica	californica Darlingtonia	Darlingtonia																							Juncus supiniformis				
	Within the AA, woody vegetation (shrubs, trees, woody vines) occupies:	0					0	_	4	4	^	_	_	0	_	4	_	0	1	0	1				^	_	4		^	0	1			
AA	>95% of the vegetated part of the AA 50-95% of the vegetated AA	0	0	0	1	1	1	1	0	0	0	1	1	1	0	0	1	1	0	1	0	1	0	1	1	0	0	1	1	1	0	1	1	0 0
	25-50% of the vegetated AA		0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0 (0 () 0
	5-25% of the vegetated AA <5% of the vegetated AA	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0 0	0 0	0 0
F45 Woody Extent Along Water Edge	Where surface water is present during the wettest time of year, the AA's woody vegetation occupies:	0		0				0	1	1	0	0	0	0	1	1	J	1		0	1	1	0	0	J	0	1					1 1	1 (
	50-95% of the area within 100 ft of open water	0	1	0	0	0	1	1	0	0	1	1	1	1	0	0	0	0	0	1	0	0	1	1	1	1	0	1	1	1	0	0 /	0	1 0
	25-50% of the area within 100 ft of open water	0		1	U	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (0 (0
	5-25% of the area within 100 ft of open water <5% of the area within 100 ft of water; mark "1" here and SKIP TO F50 (Woody Diameter Classes).	0	0	0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0 0
F46 Woody Distribution	The woody vegetation (if any) within the AA is:	0	1	1	1	1	1	0	1	1	0	4		0		1		1	1	0	1	1	0	1	1	4	_	4	4	1			1	
	clumped in fairly distinct bands or patches mostly separate from herbaceous vegetation, and most patches or bands are large (>1 acre including contiguous upland woody veg). Or nearly the entire AA is wooded. Isolated shrubs or trees are few.	0		1				0		2	0	2	0	0	0	1	0			0			U	<u> </u>	1		0	1					1 1	U
	clumped in fairly distinct bands or patches mostly separate from herbaceous vegetation, and most patches are small (<1 acre including contiguous upland woody veg).	1	0	0	0	0	0	1	0	0	0	0	0	1	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0 0	0 1
	dispersed quite evenly amid the herbaceous vegetation, in many small patches, or many isolated shrubs or trees.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0 0	0 0	0 0

Field	I F Data Form	Wetland Group	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
Ω#	Indicator	Conditions															ladi	notor o	nswers:	. 1 – Va	0 / 0 =	No													$-\!\!\perp$	
	Cover of Woody	Within parts of the AA having shrubs or woody vines, the areal cover is:															inaid	cator a	nswers:	: 1 = Ye	S / U =	NO														
	Invasives	overwhelmingly (>80%) non-natives that are categorized as invasive (see column E). Mark	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		"1" in next column and write names of dominant invasives in column E. Then SKIP to F49.															_			-												-				
		overwhelmingly other non-natives . Mark "1" in next column and write names of dominant non-native shrubs/ vines in column E. Then SKIP to F49 .	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		mostly (50-80%) non-natives. Mark "1" in next column and write names of dominant non- native shrubs/ vines in column E. Then SKIP to F49.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		mostly (50-80%) natives overwhelmingly (>80%) natives	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1		1
	Shrub & Vine Species Dominance	Of just the shrub & woody vine species that are native: one or two of the native species together comprise >80% of the native shrub & vine cover.	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0		0	1
	20	Mark "1" in next column and write names of dominant species in column E. Ino two of the native species together comprise >80% of the native shrub & vine cover	0	1	0	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	1	1	1	
	Shrub & Vine Species	Of all the shrub & woody vine species in this AA:	Ů						-					1						·					1		4	4		4	-	·				
	Ubiquity	all are species that are common among Oregon's wetlands. at least one native species is not common among Oregon's wetlands and it covers >1% of	0	0	0	0	0	0	0	0	0	1	0	0	1 0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
		the AA or >100 sq. ft See file ORWAP_Supplnfo, worksheet P_UnCom. Mark "1" in next column and write species in column E.			0	Ü	Ü				o d	o d				O	Ů	O		Ü								Ů			O	Ů				
		Species referenced in F49																																		
	Woody Diameter Classes	Select all the types occupying >5% of the wooded part of the AA or >5% of its wooded upland edge if any.																																		
		deciduous 1-4" diameter and >3 ft tall	0	1	0	1	1	1	0	1	1	1	1	1	0	1	1	0	1	1	0	1	1	1			0	0	0	0	0	0	1	1		1
		evergreen 1-4" diameter and >3 ft tall deciduous 4-9" diameter	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0	0	0	0	0	0	0	0	1	1	1	1
		evergreen 4-9" diameter	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		dead standing 4-9" diameter	0	0	0	1	1	1	0	1	1	0	1	1	1	1	1	0	1	0	0	0	1	1	0	0	0	0	0	1	0	0	1	1	1	1
		deciduous 9-21" diameter evergreen 9-21" diameter	0	1	1	1	1	1	1	1	1	1	1 1	1	1	1	1	1	1	0	1	1	1	1	1	0	0	0	0	1	0	0	1	1	1	1
		dead standing 9-21" diameter	0	0	0	1	0	0	0	1	0	0	1	1	0	1	1	0	1	0	0	0	1	0	0	0	0	0	1	1	0	0	1	1	1	0
		deciduous >21" diameter	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
		evergreen >21" diameter	0	0	0	1	1	0	0	1	0	0	0	1	1	1	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0
		dead standing >21" diameter Lacks woody vegetation, or none of above occupy >5% of the wooded part of the AA or 5% of the length of the upland edge.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	_	0	0	0	0	0	0	0	0	0	0	0	0	0
F51	N Fixers	Within the vegetated part of the AA, the cover of nitrogen-fixing plants (e.g., alder, sweetgale, legumes) is:																																		
		<1% or none	1	0	1	0	0	0	1	1	0	1	0	0	1	0	0	1	1	1	0	1	0	0	1	1	1	1	1	1	1	1	0	0	1	0
		1-25% 25-50%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
		50-75%	Ö		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	U		0	•	0	0	0	0	0	0	0	0	•	0	0
F52	Waterfowl Food Plants	>75% The percent of the vegetated part of the AA, excluding areas that are never inundated, which contains one or more of these plants: Alisma spp., Beckmannia spp., Polygonum spp. (natives only), Potomogeton (Stuckenia) spp., Ruppia spp., Sagittaria spp., Sparganium spp., Zostera spp., is:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		<1% or none, and none are known to occur commonly within the same wetland or within 300	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		ft of this AA <1% or none, but some are known to occur commonly within the same wetland or within 300 ft of this AA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		1-10% 10-50%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E53	History of Fire or	>50% The last time that >5% of the AA's vegetation cover was burned or harvested for hay or	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Vegetation Removal	timber was: 0-12 months ago, and this occurs almost annually within part of the AA	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
		0-12 months ago, but was not an annual (or near-annual) event	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	•	_	0	0	0	0	0	0	0	0	0	0	0	0
		1-5 years ago >5 years ago, or never	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	U	1	0	1	1	1	1	1	1	1	1	1	1	1	1
		unknown	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
	Height Uniformity of Dominant Stratum	Within the stratum (herbaceous, shrub, or tree) that covers the most onsite area, the wetland plants during maximum annual cover condition are mostly:																																		
		of nearly uniform height (+ or - 20% of average) of very diverse heights (e.g., short & tall forbs, short & mid-height grasses)	0	0	0	1	1	1	0	1	1	1	1	1	0	1	0	0	0	0	1	0	V	0		0	0	0	0	0	0	0	0	0	0	0
	Bare Ground & Accumulated Plant Litter	Consider the parts of the AA that usually are not inundated in May, or are inundated by tides at least once annually. Viewed from 6 inches above the soil surface, the condition in most of this area during May is:																																		
		little or no (<5%) bare ground or plant litter (thatch) is visible between erect stems or under canopy. This can occur if ground surface is extensively blanketed by moss, graminoids with great stem densities, or plants with ground-hugging foliage.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					0	0	0	0	0	0	0	0	0		0
		some (5-20%) bare ground or litter is visible. Herbaceous plants have moderate stem densities and do not closely hug the ground. much (20-50%) bare ground or plant litter is visible. Low stem density and/or tall plants with	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	1			0	0	0	0	0	0	0	0	0	0	1	0	0
		little near-ground foliage. May be mostly woody plants, woody vines, cattail, bulrush, sparse annuals.	U	U	U			·	U			U U	0	·	U	U	·	0		·	0	·						U	1	U	1	U	·	0		
		mostly (>50%) bare ground or accumulated plant litter. Or, during May the entire AA is constantly under water.	1	1	1	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	1	0	0	0	0

Field F Data Form	Wetland Group	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19 2	20	21 22	23	24	25	26	27	28	29	30	31	32	33	34
Q# Indicator	Conditions					ı				1	1	1	ı	1	1	Indi	cator ar	nswers: 1	= Yes	/ 0 = N	0				ı		ı		1					
F56 Upland Edge Shape	Most of the edge between the wetland and upland is (select one):	W		W	W	W	W	W	W	W	W	W	W	W	W	W	W		W	W	W	W W	W	W	W	W	W	W	W	W	W	W	W	W
Complexity	Linear: a significant proportion of the wetland's upland edge is straight, as in wetlands bounded by partly or wholly by dikes or roads	U	0	U	U	1	U	1	1	U	U	0	0	0	0	U	U	0	U	0	0	0 0	0	0	0	0	U	U	U	0	0	0	0	0
	Convoluted: Wetland perimeter is many times longer than maximum width of the wetland, with many alcoves and indentations ("fingers")	0	0	0	1	0	0	0	0	0	0	1	1	0	1	0	0	0	0	1	0	1 0	0	0	0	0	0	0	0	0	1	0	0	0
	Intermediate: Wetland's perimeter either (a) is only mildly convoluted, or (b) mixed contains about lengths of linear and convoluted segments.	1	1	1	0	0	1	0	0	1	1	0	0	1	0	1	1	1	1	0	1	0 1	1	1	1	1	1	1	1	1	0	1	1	1
F57 Upland Inclusions	The extent of inclusions of upland within the AA (as indicated by their topography, plants,																																	
	and/or soils) is: Many (e.g., wetland-upland "mosaic")	0	0	0	0	1	1	0	0	0	0	0	1	0	1	0	0	0	1	0	0	1 0	0	0	0	0	1	0	0	0	1	0	0	0
	Few or none	1	1	1	1	0	0	1	1	1	1	1	0	1	0	1	1	1	0	1	1	0 1	1	1	1	1	0	1	1	1	0	1	1	1
F58 Soil Composition in the Soil Pit	The composition of the soil in the soil pit at the ground surface (uppermost soil layer and excluding the <i>duff layer,</i> see protocol in ORWAP Manual, section 2.3.2) is:																																	
	Loamy: includes silt, silt loam, loam, sandy loam Clayey: includes clay, clay loam, silty clay, silty clay loam, sandy clay, sandy clay loam	0	0	0	0	1	0) () 1	1 1	1	0 (1 0 0 0	0 0 0 0	0 0	0	0	0	1	0	0	0	0	0	0	0 (0 C	0	0	0	0	0	0	0
	Organic: includes muck, mucky peat, peat, and mucky mineral Coarse: includes sand, loamy sand, gravel, cobble, stones, boulders, fluvents, fluvaquents,	0	0	0	1	0	0) () (0 (1 (0 0	0 0	0	0	0	0	0	0	0	0	0	0	0	0 (0 0	0	0	1	0	1	0	0
	riverwash	'	'	'	U	Ů	'				'		'	' '	'	1	'		Ů,	1	'	'	1	'	1	'	'l '	· '	'	٩	'	Ů,	/ I	
F59 Downed Wood	The number of downed wood pieces longer than 6 ft and with diameter >6", and not																																	
	persistently submerged, is: Several (>5 if AA is >10 acres, or >2 for smaller AAs)	0	0	0	1	1	1	0	1	0	1	1	1	1	1	1	0	1	0	1	0	1 1	1	1	0	0	1	1	1	0	1	1	1	0
	Few or none	1	1	1	0	0	0	1	0	1	0	0	0	0	0	0	1	0	1	0	1	0 0	0	0	1	0	0	0	0	0	0		0	1
F60 Ground Irregularity	The number of animal burrows, mounds, hummocks, boulders, upturned trees, islands, natural levees, dry channels, pits, wide soil cracks, and microdepressions (in parts of the AA that lack persistent water) is:																																	
	Several (extensive micro-topography) Few or none (minimal microtopography; <1% of the area that isn't persistently inundated);	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1 0 0 1	0	0	0	0	0	0	0	0	0	0	0	0
	e.g., many flat sites having a single hydroperiod	0	0	0		0	4	0	1				0	4		0	0	0	1	0	1	0 0	4	^		^	0	0	0	0	1	0	1	1
F61 Internal Gradient	Intermediate The gradient along most of the AA's water flow paths (both sheet and channel flow) is:	0	0	0	U	0		U	1		U	0	0	1	0	0	U	0		U		0 0	1	0	U	U	0	U	U	U		U		
	>10%	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0
	6-10% 2-5%	1	1	0	0	1	<u>0</u> 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	1	0	1	0	0	0	0	0	0	0	0	0
	Flat (<2%, no slope or flow is ever apparent, or AA is an estuarine fringe wetland). Includes most depressional sites	0	0	0	0	0	0	1	1	0	1	0	1	1	1	1	1	1	1	1	1	0 0	0	0	0	0	1	0	0	1	1	0	1	0
F62 Fish Access From Offsite	e Small fish (e.g., stickleback, minnow) from elsewhere in the watershed can access part of this	0	0	0	1	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0 1	0	0	0	0	0	0	0	0	1	1	0	1
F63 Nesting or Roosting	AA for at least 2 days during most years or are known to already be present onsite. Within the AA or within its wetland or within 300 ft of AA, there are bridges, buildings, caves,	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0		0	0	
Structures	or ledges with openings/ crevices, well-maintained bird or bat boxes, elevated platforms, or other artificial structures suitable for nesting by some native bird or bat species.	V				Ů	Ü	Ů					Ů	Ů		Ü	ŭ	Ü						Ů			Ů		O .		v			
F64 Cliffs, Banks, or Beaver	In the AA or within its wetland or within 100 ft of the AA, there are elevated terrestrial features such as cliffs, stream banks, excavated pits, or pumice walls (but not riprap) that extend at least 6 ft nearly vertically, are unvegetated, and potentially contain crevices or other substrate suitable for nesting or den areas. Or there is evidence that beaver have used this AA (e.g., gnawed limbs).	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0
F65 Visibility	The maximum percent of the wetland that is visible from the best vantage point on public roads, public parking lots, public buildings, or public paved paths that adjoin or are within 300																																	
	ft of the AA (select one) is: >50%	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	n	n	0	0	0	0	0	0	0	0
	25-50%	0	1	1	0	0	0	0	0	1	1	0	0	0	Ö	Ö	0	0	1	1	•	0 1	0		1	1	0	1	0	0	0			0
F66 Ownership	<25% Most of the AA is (select one):	0	0	0	1	1	1	0	1	0	0	1	1	1	1	1	1	1	0	0	0	1 0	1	1	0	0	1	0	1	1	1	1	1	1
1 00 Ownership	in public ownership	1	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0 0	1	0	0	0	0	0	0	1	1	0	1	0
F67 Public Access	in private ownership	0	1	1	1	1	0	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1 1	0	1	1	1	1	1	1	0	0	1	0	1
FOT Public Access	For most of the AA, permission for access is normally given or allowed: to anyone, mostly unrestricted	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0 0	1	0	0	0	0	0	0	1	1	0	1	0
	to anyone, but significant restrictions (e.g., limited dates, permit required)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0
	only on a case-by-case basis, but with few other restrictions only on a case-by-case basis, with restrictions (e.g., limited dates, permit required)	0	U	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0
	seldom or never	0		0	1	1	0	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1 1	0	1	1	1	1	1	1	0	0	0	0	1
F68 Non-consumptive Uses - Actual or Potential	(do not know) - Assuming access permission was granted, select all statements that are true of this AA as it currently exists:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	1	0	0
	Walking is physically possible in >5% of the AA during most of year, e.g., free of deep water	1	0	1	0	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0 0	0	1	1	0	0	0	1	0	1	0	0	0
	and dense shrub thickets All or part of the AA (or an area within sight of the AA and within 100 ft) would be physically accessible to people in wheelchairs, e.g., paved and flat	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0
	Maintained roads, parking areas, or foot-trails are within 30 ft of the AA, or the AA can be accessed most of the year by boat	1	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	1	0	1	0 1	0	0	0	1	1	1	0	0	1	1	0	0
F69 Sustained Scientific Use	Plants, animals, or water in the AA have been monitored for >2 years, unrelated to any regulatory requirements, and data are available to the public. Or the AA is part of an area that has been designated by an agency or institution as a benchmark, reference, or statustrends monitoring area.	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0		0			0 0	0		0	0	0	0	0	0				0
F70 Consumptive Uses	(do not know) Recent evidence was found within the AA of the following potentially-sustainable	U	0	U	0	0	U	U	0	0	0	U	U	0	U	0	0	0	U	U	0	0 0	U	U	U	0	U	U	U	U	0	U	U	0
(Provisioning Services)	consumptive uses. Select all that apply.																																المجا	
	low-impact commercial timber harvest low-impact grazing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 n	0	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0
	commercial harvesting of hay or mushrooms	0	·	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	U	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0
	waterfowl hunting or furbearer trapping	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	U	0	0	0	0 0	0	0	0	0	0	0	0	0	0	0	0	0
	fishing (including shellfish harvest) None of the above	1		1	1	1	11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1 0	1	1	1	1	1	1	1	1	1	0	1	1
	·																																	

Control Cont	Field F Data Form	Wetland Group	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18 1	9 20) 21	22	23	24	25	26	27	28	29	30	31 3	32 3	33 34
The content of the	Q# Indicator	Conditions		ll					1	- 1	ı	_U	L	- N		1	Indi	cator ar	swers: 1	= Yes /	0 = No	ı I	ļ.	Į.	I.	1 1		L	I	L	L			
## A STATE OF THE PROPERTY OF		Wells that currently provide drinking water are:															IIIGI	Cator ar	ISWCIS. I	163 /	0 - 110													
Part March Part	7 7 Bomestic Wells		0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0) 0	0	0	0	0	0	0	0	0	0	0			0 0
This county is a property of the county of			0	0	0	1	0	0	0	0	0	0		0	0	0	0	1		0) 0	0	0		0	0	0	0	0	0	0	0		• •
## Control Con						0		1	1	1	1	1			1			0					1	1	1	1	1	1	1	1	1	1	1	1 1
Property	F72 Sediment Removal	Excessive accumulation of sediment has caused frequent problems for large boats, with		Ť		Ů	,											Ü	j															
Property		contiguous to the AA, or <1 mile downslope from the AA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0) 0	0	0	0	0	0	0	0	0	0	0	1 /	0	0 0
A second and the se		1-5 miles downslope	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0) 0	0	0	0	0	0	0	0	0	0	0	0 /	0 /	0 0
Marie of the first of the fir		>5 miles downslope, or no shoaling, or no boats, or no information	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1 /	1 1
Control Cont	F73 Devegetation	has been persistently reduced to less than that height by mowing (many times per year),																																
Mathematical Association Mathematical Associ			0	0				0	0	0						0		0) 0	0	0			0	0	0	0	0	0	0 (0 (• •
Control Cont									0	0		0	_	0	0			0			,				0	0	0	0	0		0	0 (0 (0 0
Procedure Proc									0	_		0											0			0		0	0			0 (
## A PART OF THE P		<5%, or grazing/ mowing does not cause the described condition	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1 /	1 /	1 1
Part	F74 Core Area 1	The part of the AA almost never visited by humans during an average year probably																																
Mathematical Control of the Contro	1 1																																	
Control Cont	1 1		-			0	0	0	0	0	0	1	0	0	0	0	0	0			,			0	0	0	0	0	0	0	1	0 /	<u>J</u>	0 0
Manufact	1			v		0	1	1	0	1	1	0	1	1	0	1	1	0	0	0) 0	0	0	1	1	1	0	0	0	1	v	0		1 1
The control of the	1		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	1	1	1	0	0	1) (0 0
Fig. 1. Company of the control of th	1												1			<u> </u>	<u> </u>							_	<u> </u>									
## CASE COLUMN 1 A COL			1	0	1	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0) 0	0	0	0	0	0	0	0	0	0	0	0 () (0 0
March Marc	F75 Core Area 2	year probably comprises:	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0		0		0	0	0	0	0	0	0	0	0	0			
Control Cont						_	-		0			0			0			0								0	0	-	0			0 1	-	
The content of the					0	0			0	0	0	0			1		_ <u> </u>	1	1	1) 0	1	1			0	1	1	1	0	0	1	• •	
The property of the sequence					0	1			0	1	1	1	·	_	0	U	V	0	0	0	1 1	0	0	V	1	1	0	0	0	1	1	0	• •	
Mode		Along the AA's boundary with upland, the percent of the upland edge (within 10 ft of AA) that is occupied by species that are marked as invasive in the Plants worksheet is:					'						·					Ü				Ů	Ů					Ů						
Part Count						0			0	_ <u> </u>	0	0			0	<u> </u>		0		0) 0	0	0	0		0	0		0	0	0	0 (•	
The last air of Control Minister and Control Minist						0	0	0	0	0	1	0	0	0	0	0		1		1) 0	1	0	0	v	0	0		0	0	0	0 (•	• .
F77 Not at Land Cover 1 No. 1992 of Land Cover						1	1	1	0	1	v	1	1	1	0	1	0	0	-	Ü	1 1	v	1	0	0	0	0	0	0	0	0	1	Ů	·
Color Colo		none of the upland edge (invasives apparently absent), or AA is not within 10 ft of upland	0	1	1	0	0	0	1	0	0	0	0	0	1	0	1	0	0	0) 0	0	0	1	1	1	1	1	1	1	1	0	1	0 0
Section Sect		contains natural (not necessarily native) land cover is:	0		4	0	0	0	0	4		0	0				4	0	0	0							0	0		2				
Signature Court Signature			U	U	1	- 0	- 0	- 0	0	1	1	0	0	1	0	1	1	0		0) 0	- 0	1	1	1	1	0	0	1	0	1			
Fig. 5/14/25 Company of the Assembly of th			·		0	1	1	1	1	0	0	1	1	0	0	0	0	1	1	1) 0	1	0	0	0	0	0	0	0	0	0	0 1) (0 1
Procedure Cover Process Proces				U	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0) 0	0	0	0	0	0	1	0	0	0	0	0 1) (0 0
Fig. 1 (Law Cover Aberral on 10 Alley Mary Intelligent equation of cover that a rot and provided and cover t						0	•		0		0	0		,	0	·		0		0	, ·		0		0	0	0	•	0		0	0 1		
Emperimental surfaces, e.g., cultivation from core concluded 0 0 0 0 0 0 0 0 0		Within 100 ft upslope of the AA's wetland-upland boundary, the upland land cover that is not natural (as defined above) is mostly:				0	·	·		0	0	0			0	·		0					0		0	0		0	Ů		0			
Contribution congress contribution and contribution of the process			0	0	1	0	-		0	0	0	0			1			0		0	·	_ ·	0	·	0	0	0	0	0	0	1	1		
Feb Edgs Stipe Feb Edgs Stipe			0																							0								
guin fields, or grassland grazed or moved to a height usually shorter than 4 inches 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			U	U	v	1	1	1	0	U	1	1	v	V	0	U	U	1	v	•	, ,	V	U	U	U	0	U	v	U	U	U	0 (0 (0
Chec	1					0	0	0	0		0	0			0		_ <u> </u>	0			, ,					0						<u> </u>	• •	_
Confirm is 290% natural and cover or AA occasional of an island)		grain fields, or grassiand grazed or mowed to a neight usually shorter than 4 inches	U	U	U	U	U	0	"	U	0	0	U	0	0	0	0	U	0		, ,	0	0	0	0	U	U	0	U	0	0		, (
After Stope After			0			0		0	0			0			0			0		•	,					0	0		0	0	•	0 (
Egg Sippe	F79 Buffer Slope	Along the AA's wetland-upland boundary and extending 100 ft uphill, the slope of the land is mostly:				0		0	0		0	0			0	1		0			0		0			1	0		0	0		0		
S-30%	1		v	v		1		n	n	1	0	0	1		1	0		0			, n	V	0	U	v	0	0	•	0	0	, ,	0		
Say	1 1					0	1	1	1	0	1	1	0		0		1	0			·	_	1	1	1	1	1	1	1	1	1	0	U	
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Series (Spate) Medium (2 pla) Mild (1 pl.) Series (3 ps.) Medium (2 pla) Mild (1 pl.) Series (3 ps.) Medium (2 pla) Mild (1 pl.) Series (3 ps.) Medium (2 pla) Mild (1 pl.) Series (3 ps.) Medium (2 pla) Mild (1 pl.) Series (3 ps.) Medium (2 pla) Mild (1 pl.) Series (3 ps.) Medium (2 pl.) Mild (1 pl.) Series (3 ps.) Medium (2 pl.) Mild (1 pl.) Series (3 ps.) Medium (2 pl.) Mild (1 pl.) Series (3 ps.) Medium (2 pl.) Mild (1 pl.) Series (3 ps.) Medium (2 pl.) Mild (1 pl.) Series (3 ps.) Medium (2 pl.) Mild (1 pl.) Series (3 ps.) Medium (2 pl.) Mild (1 pl.) Series (3 ps.) Medium (2 pl.) Mild (1 pl.) Series (3 ps.) Medium (2 pl.) Mild (1 pl.) Series (3 ps.) Medium (2 pl.) Mild (1 pl.) Mild (1 pl.) Series (3 ps.) Medium (2 pl.) Mild (1 pl.) Series (3 ps.) Medium (2 pl.) Mild (1 pl.) Series (3 ps.) Medium (2 pl.) Mild (1 pl.) Series (3 ps.) Medium (2 pl.) Mild (1 pl.) Series (3 ps.) Medium (2 pl.) Mild (1 pl.) Series (3 ps.) Medium (2 pl.) Mild (1 pl.) Series (3 ps.) Medium (2 pl.) Mild (1 pl.) Series (3 ps.) Medium (2 pl.) Mild (1 pl.) Series (3 ps.) Medium (2 pl.) Mild (1 pl.) Series (3 ps.) Mild (1 ps.) Series (3 ps.) Mild (1 pl.) Series (3 ps.) Mild (1 ps.) Series (3 ps.)			
Special center of AA's ensuing dire condition began within past 10 years, and year			
When most of AAs ciriar conditions began			
Score the following 2 awas outly the discordingnee began within past 10 years, and only for the past off and the beginness of the past of the past of the past of the beginness of the past of the pas			
Self-ord confer- Water level decrease 31ft 1-12' 41mh 0 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0	0	0
Water level decrease			
Statistic of the state of the s	0 0 0	0	0
Altered Timing of Water Inputs In the last column, place an X next to any item that is likely to have caused the timing of water inputs (but not necessarily their volume) to shift by hours, days, or weeks, becoming either more muted (smaller or less frequent peaks spread over longer times, more temporal homogeneity of flow or water levels) or more flashly (larger	0 0 0	0	0
Altered Timing of Water Inputs In the last column, place an X mex to any item that is likely to have caused the timing of water inputs (but not necessarily their volume) to shift by hours, days, or weeks, becomine flequent spikes but over shorter times). In the last column, place an X mex to any item that is likely to have caused the timing of water inputs (but not necessarily their volume) to shift by hours, days, or weeks, becomine flequent spikes but over shorter times). In the last column in but and in inbut and	0 0 0	0	0
In the last column, place an X next to any item that is likely to have caused the timing of water inputs (but not necessarily their volume) to shift by hours, days, or weeks, becoming either more muted (smaller or less frequent peaks spread over longer times, more temporal homogeneity of flow or water levels) or more flashy (larger or more flashy (larger or more frequent spikes but over shorter times). **The provision of the spike of the control structure at water entry points that regulates inflow to the AA **The provision of the spike of the control structure at water entry points that regulates inflow to the AA **The provision of the spike of the control structure at water entry points that regulates inflow to the AA **The provision of the spike of the spike of the control structure at water entry points that regulates inflow to the AA **The provision of the spike of the spike of the control structure at water entry points that regulates inflow to the AA **The provision of the spike	0 0 0	0	O
either more muted (smaller or less frequent peaks spread over longer times, more temporal homogeneity of flow or water levels) or more flashy (larger or more frequent spikes but over shorter times). flow regulation in tributaries or water level regulation in adjoining water body, or tidegate or other control structure at water entry points that regulates inflow to the AA x X X x x x x x x x x x x x x x x x x			
flow regulation in tributaries or water level regulation in adjoining water body, or idegaste or other control structure at water entry points that regulates inflow to the AA x X X x x x x x x x x x x x x x x x x			
Straightening, ditching, dredging, and/or lining of tributary channels in the CA discharges of irrigation water to the AA, applied at times when natural runoff typically is not significant when the property of the part of the beam within past 10 years, and only for the part of the earm every flashynous points (3, property only). The property of the part of the beam within past 10 years, and only for the part of the AB has been wern flashynous provincing. The property of the part of the AB has been wern flashynous provincing. The property of the part of the AB has been within past 10 years, and only for the part of the AB has been withing of vaccing or wern controlled. The property of the part of the AB has been wern flashynous provincing of vaccing or wern property of the AB has been withing of vaccing or wern provincing of the AB has been withing of the AB has been withing of the timing of water inputs to the AA. To estimate that, contrast it with the condition if checked thems never occurred or were no longer present. The property of the AB has been within the AA of timing shift began within past 10 years, and only for the part of the AA that experiences those. The property of the AB has been withing of the AB has been withing of water inputs to the AA. To estimate that, contrast it with the condition if checked thems never occurred or were no longer present. The property of the AB has been within the AA of timing of water inputs to the AA. To estimate that, contrast it with the condition if checked thems never occurred or were no longer present. The property of the AB has been within the AA of timing of water inputs to the AA. To estimate that, contrast it with the condition if checked thems never occurred or were no longer present. The property of the AB has been within the AA of timing of water inputs to the AA. To estimate that, contrast it with the condition if checked thems never occurred or were no longer present. The property of the AB has been within the AA of timing of water inputs to th			
discharges of irrigation water to the AA, applied at times when natural runoff typically is not significant other If any items were checked above, then for each row of the table below assign points (3, 2, or 1) in the last column that describe the combined maximum effect of those items on the timing of water inputs to the AA. To estimate that, contrast it with the condition if checked items never occurred or were no longer present. Severe (3 pts) Medium (2 pts) Medium (2 pts) Mid (1 pt) Spatial extent within the AA of timing shift >>55% of AA 5-95% o	x x x	Х	
other ot			匚
If any items were checked above, then for each row of the table below assign points (3, 2, or 1) in the last column that describe the combined maximum effect of those items on the timing of water inputs to the AA. To estimate that, contrast it with the condition if checked items never occurred or were no longer present. Severe (3 pts) Medium (2 pts) Mild (1 pt) Spatial extent within the AA of timing shift >95% of AA 5-95% of		$\Box I$	匚
timing of water inputs to the AA. To estimate that, contrast it with the condition if checked items never occurred or were no longer present. Severe (3 pts) Medium (2 pts) Mid (1 pt) Nid (1 p			\perp
Spatial extent within the AA of timing shift >95% of AA 5-95% of AA			
When most of the timing shift began	1 1 1	4	0
Score the following 2 rows only if the altered inputs began within past 10 years, and only for the part of the AA that experiences those. Input timing now vs. previously Shift of weeks shift of days shift of hours or minutes of the AA that experiences those. Instance of the AA that experiences those intermediate became mildly flashy or controlled Shift of weeks shift of hours or minutes of the AA that experiences those intermediate became mildly flashy or controlled Shift of weeks shift of hours or minutes of the AA that experiences those intermediate became mildly flashy or controlled Shift of weeks shift of hours or minutes of the AA that experiences those intermediate became mildly flashy or controlled or contro			0
only for the part of the AA that experiences those. Input timing now vs. previously Institute of the AA that experiences those. Input timing now vs. previously Institute of the AA that experiences those. Institute of the AA that experiences	1 1 1	1	E
Flashiness or muting became very flashy or controlled became mildly flashy or controll			
controlled controlled controlled	1 1 1	1	0
	1 1 1	1	0
	4 4 4	4	0
0 if Sum= 0, (1 pt) if Sum= 1-4. (2 pt) if 5-6. (3 pt) if 7-8. (4 pt) if 9-10. (5 pt) if >10. final score= 1 1 1 1 2 1 2 1 2 0 0 0 0 0 0 0 0 1 0 0 0 1 1 1 1	1 1 1	1	<u></u>

Field S Data Form		Wetland	Group	1	2 3	4	5	6	7 8	3 9) 10	11 /	12 13	3 14	1 15	16	17	18 1	9 20) 2	1 22	23	24	25 (26 2	7 2	8 29	30	31 3	32 33 3	34
r iola o Bata i olili		· · · · · · · · · · · · · · · · · · ·	Огоцр	<u> </u>	1-1-			1 - 1	-	•		that th	•	•		•				•			_					1001	<u> </u>		$\stackrel{\cdot \cdot \cdot}{+}$
									ΧΙ	naic	ates	ınat ir	ie co	naiti	on w	/as u	eem	eu sa	usne	eu; c	or act	ivity	15 0	was	pres	ent					
Accelerated Inputs of Nutrients, Contaminants, and/or Salts																															
In the last column, place an X next to any item occurring in either the AA or its CA to	hat is likely to have accelera	ated the inputs of nutrients, contam	inants, or salts to the AA																												
stormwater or wastewater effluent (including failing septic systems), landfills				Х	X x	Х	Х	Х	X >	x x	(X	Х			Х			Х	х х	Х	X		Х	Х	'	х х	х х	Х	Х		Χ
irrigation water discharges into the AA, including saline seeps						Х		Х												Х	:	<u> </u>						\perp		\bot	
livestock, dogs					\bot		Х	Х														<u> </u>						\perp		$\perp \downarrow \perp \downarrow$	
fertilizers applied to lawns, ag lands, or other areas in the CA				Х			Х	Х												Х	X	<u> </u>	Х	$\perp \perp \downarrow$						X	Χ
pesticides applied to lawns, ag lands, roadsides, or other areas in the CA, but excluding	•	olling non-natives in the AA		Х		Х	Х	Х							Х						Х	<u> </u>	'	$\perp \perp \downarrow$						Х	Χ
dumping of large amounts of wood, leaves, grass clippings, trash into the AA or its tribu	utaries																		X	Х		\perp	'	$\perp \perp \downarrow$	\perp					$\perp \perp \perp$	
artificial drainage of upslope lands																				Х	:										
reflooding of soils that had been dry for many years																															
fire retardants from aerial firefighting																															
oil or chemical spills (not just chronic inputs) from nearby roads																													х		
erosion of nutrient-rich or contaminated soils																															
chemical wastes from mining, oil/ gas extraction, other industrial sources																															
other human-related disturbances within the CA				Х	Х																										
sources not related directly to humans, e.g., fire, extensive cover of nitrogen-fixing plan	nts (e.g., alder), concentration	ons of waterbirds or other wildlife																													
If any items were checked above, then for each row of the table below assign points (3, 2,	or 1) in the last column that	t describe the combined maximum	effect of those items in																												
generating loads of nutrients, contaminants, or salts reaching the AA. To estimate that, co	ontrast it with the condition i	f checked items never occurred or	were no longer present.																												
	Severe (3 pts)	Medium (2 pts)	Mild (1 pt)																												
Usual toxicity of most toxic contaminants		domestic effluent, cropland, or	, , ,	2	1 1	1	1	1	1 '	1 1	1 1	1	0 0) 0	1	0	0	1	1 1	2	2 1	0	1	1	0	1 7	1 1	1	1	1 0	1
South toxiony of most toxio sometiments	for toxics	303d for nutrients	pets, low density																												
			residential)																												
Frequency & duration of input	frequent and year-round	frequent but mostly seasonal	infrequent & during high	2	1 3	2	2	2	1 '	1 1	1 1	1	0 0	0	1	0	0	1	1 1	2	2	0	1	1	0 '	1 1	1 1	1	1	1 0	1
	0.50.0	50 000 ft '	runoff events mainly	_					_		, _	1 , 1	0 0	, ,				_	4 4	٠,		+_	↓ _'	\perp	_			+		1 1	_
AA proximity to main sources (actual or potential)	0-50 ft	50-300 ft or in groundwater	in other part of contributing	3	2 3	2	2	2	3	1 2	2 2	1	0 0		1	0	0	1	1 1	3	3 1	0	1 1	2	0 7	2 3	3 1	1 1	2	1 0	1
* categorized by ODEQ as Water Quality Limited (303d) and toxic substances are listed by	v ODEQ as one reason. Se	e item D40 in data form OF	area sum=	7	4 7	5	5	5	5 3	3 4	1 4	3	0 0	0 0	3	0	0	3	3 3	7	4	0	3	4	0	4	5 3	3	4	3 0	3
	•	(3 pt) if 6-7. (4 pt) if 8. (5 pt) if 9.	final score=	3	2 3	2	2	2	2	1 2	2	1			1		_	1	1 1	3	2	0		2	0	2 2	2 1	1	2	1 0	1
S7 Excessive Sediment Loading from Contributing Area	j ii Ouiii– 1-0. (z pt) ii 4-0.	(3 pt) 11 0-7. (4 pt) 11 0. (3 pt) 11 3.	iiilai 30010-					2		1 2		1	0 0	, 0	1		0	1	1 1		, 2	+	1	2	0 ,			1			1
In the last column, place an X next to any item present in the CA that is likely to have elev-	rated the load of waterhorne	or windhorne sediment reaching the	ne AA from its CA																												
erosion from plowed fields, fill, timber harvest, dirt roads, vegetation clearing, fires	ated the load of waterborne	or windborne sediment reaching to	IE AA IIOIII IIS CA.	V							V								v			+-	+		+	#	_	#		 	
erosion from plowed fields, fill, fillinger harvest, diff roads, vegetation clearing, files erosion from construction, in-channel machinery in the CA				Х	+	-		-		_	Х	+ +		Х					Х	Х		┿	+'	++	$-\!\!+\!\!$	-	-	$+\!-\!\!-\!\!\!-$		X	
					 	-	_			_				_							_	+	+'	+-+	+	+		 		Х	
erosion from off-road vehicles in the CA				Х	X															_		Х	Х	+-+	\rightarrow	-	Х	Х		\rightarrow	
erosion from livestock or foot traffic in the CA				Х				<u> </u>															+'	+-+	+	+		\perp		+	
stormwater or wastewater effluent				Х	Х	Х	-	Х	- '	x X	(X	Х			_	1						+	+'	Х	x)	<u>^</u>	<u>\</u>	\perp	Х	+	Х
sediment from gravel mining, other mining, oil/ gas extraction				-			-	+ +		-	-	+			_	1						+	+'	++	+	+	+	\perp		+	
accelerated channel downcutting or headcutting of tributaries due to altered land use					++	+	-	+	_	+		+		_		1			_		_	+-	+'	++	+	+	$+\!\!\!\!-$	+	-+	+	
other human-related disturbances within the CA				Х				<u> </u>															+'	+-+	+	+		\perp		Х	
natural processes within the CA, e.g., streambank erosion, landslides, erosion of erosion		•						Х		\perp							Х			\perp		+		\sqcup	\rightarrow	_	_			Х	Х
If any items were checked above, then for each row of the table below assign points (3, 2, increasing the amount or transport of sediment into the AA. To estimate that, contrast it w																															
increasing the amount or transport of sediment into the AA. To estimate that, contrast it w																				_											
	Severe (3 pts)	Medium (2 pts)	Mild (1 pt)																			4	4		4	#	4	ĮĮ.		47	
Erosion in CA	extensive evidence, high	potentially (based on high-	potentially (based on low-	0	1 0	1	0	1	0	1 1		1	0 0) 1	0	0	1	0	0 1	1	. 0	2	1	1	1	1 1	1 1	1	1	1 2	1
	intensity*	intensity* land use) or scattered evidence	intensity* land use) with little or no direct evidence																												
Recentness of significant soil disturbance in the CA	current & ongoing	1-12 months ago	>1 yr ago	0	1 0) 3	0	2	0	1 1	1 1	1	0 0) 1	0	0	1	0	0 1	1	0	3	1	1	0 :	1	1 1	3	1	1 1	1
		· ·	infrequent & during high	0			0			1 1	1 1		0 0		0			0			. 0	2			1 1	+	1 1	1	1		1
Duration of sediment inputs to the AA	frequent and year-round	frequent but mostly seasonal	runoff events mainly	U	1 0	' 2	1	2	0	1 1	1	1		, 1	0	U	1	U			. 0		2	1	1	, ,	1	1	1	1 1	1
AA proximity to actual or potential sources	0-50 ft, or farther but on	50-300 ft	in other part of contributing	0	1 0) 2.	0	2	0	1 7	2 2	2	0 0) 1	0	0	2	0	0 2	2	2 0	2	2	2	$\frac{}{1}$	2 3	3 1	1	$\frac{1}{1}$	1 2	2
To the same of the delical of percential observed	steep erodible slopes		area	ľ		٦		1 1		1	٦	1 1			Ŭ				· -	1	ľ	1	1 - '	-	· '	ا ا		1 1	_ [-	-
* high-intensity= plowing, grading, excavation, erosion with or without veg removal; low-i		with little or no apparent erosion	sum=	0	4 0	8	0	7	0 4	4 5	5 5	5	0 0) 4	0	0	5	0	0 5	5	0	9	6	5	3	5 (6 4	6	4	4 6	5
		if 7-8. (4 pt) if 9-10. (5 pt) if >10.	final score=	0	3 0	4	0	3	0 2	2 2	2 2	2	0 0	2	0	0	2	0	0 2	. 2	2 0	5	3	2	1	3	3 2	4	2	1 3	2
· (17		V 1 / V 1 / V					Į																'		`	ر ا		الصلو		حب	

Field S Data Form		Wetland	Group	1	2 3	3 4	5	6 7	8	9 1	0 11	12	13 14	15	16 1	7 18	19	20 2	21 2	22 23	3 24	25	26 (27 21	8 29	30 3	31 32	33	34
			1			<u> </u>							onditi																
Soil or Sediment Alteration Within the Assessment Area									7		Criare		- I			11100	Jacis		<u> </u>	oc. v.c	, .5 0	1 11 (1)	7 7 10						
In the last column, place an X next to any item present in the AA that is likely to have comp	acted, eroded, or otherwise	altered the AA's soil																											
compaction from machinery, off-road vehicles, or mountain bikes, especially during wetl						Х						Y			х				x	Х	Х		-	\pm	Х	Х			
leveling or other grading not to the natural contour	or poriodo				+							1							Y	^	<u> </u>		-+	+		^ +	+	+	-
tillage, plowing (but excluding disking for enhancement of native plants)					+											+		-	Y				-+	+			+	++	\rightarrow
fill or riprap, excluding small amounts of upland soils containing organic amendments (c	omnost_etc.) or small amou	ints of tonsoil imported from and	ther wetland		+											+		-	^			Y	-+	+			+	++	\rightarrow
livestock and other sediment- or soil-disturbing animals, e.g., carp, nutria, wild boar, pec		into or topoor imported from and	and welland		+-+																	^	+	+			-	+	$\overline{}$
excavation	ppic off foot				+-+														х				+	+			-	+	$\overline{}$
dredging in or adjacent to the AA					+						-	+				+		-	^		-			+		.——	_	+	\longrightarrow
boat traffic in or adjacent to the AA and sufficient to cause shore erosion or stir bottom s	adiments				+						-	+				+		-			-			+		.——	_	+	\longrightarrow
artificial water level or flow manipulations sufficient to cause erosion or stir bottom sedin					+						-	+				+		-	v		-			+		.——	_	+	\longrightarrow
natural processes within the AA, e.g., trampling by concentrated wildlife, shore or strear		formal erosion of erosion-prope	soils aspecially following fire		+		Х	Х			-	+	X		٠,	,		-	^		-			+		.——	_	+	_
floods.	ilbalik elosioli, laliusliues, i	iorniai erosion or erosion-prone	solis especially following life,				^	^					^			,										1			^
If any items were checked above, then for each row of the table below assign points (3, 2,	or 1) in the last column that	describe the combined maximum	m effect of those items in																										
altering the AA's soils. To estimate that, contrast it with the soil condition if checked items																													
	Severe (3 pts)	Medium (2 pts)	Mild (1 pt)																										
Spatial extent of altered soil	>95% of AA or >95% of	5-95% of AA or 5-95% of its	<5% of AA and <5% of its	0	0 () 1	1	1 0	0	0 () 0	2	2 0	0	1 2	2 0	0	0	2	0 2	1	1	0	0 0) 1	1	0 0	0	1
	its upland edge (if any)	upland edge (if any)	upland edge (if any)		\bot																							\bot	
Recentness of significant soil alteration in AA	current & ongoing	1-12 months ago	>1 yr ago	0				2 0					3 0			3 0		0			1			0 0		3	0 0		1
Duration	long-lasting, minimal veg recovery	long-lasting but mostly revegetated	short-term, revegetated, not intense	0	0 0) 1	1	1 0	0	0 (0	3	3 0	0	1 3	0	0	0	2	0 3	1	3	0	0 0) 1	1	0 0	0	1
Timing of soil alteration	frequent and year-round	frequent but mostly seasonal		0	0 0) 1	1	1 0	0	0 () 0	1	2 0	0	1	1 0	0	0	2	0 2	1	1	0	0 0) 1	1	0 0	0	1
			scattered events		$oldsymbol{oldsymbol{\sqcup}}$							ш							\perp					丄			—	$oldsymbol{oldsymbol{\sqcup}}$	
			sum=	0	0 0) 4	6	5 0	0	0 () 0	7	10 0	0	4 9	0	0	0	7	0 10) 4	6	0	0 0) 4	6	0 0	0	4
0 if Sum= 0, (1 pt) if Sun	n= 1-4. (2 pt) if 5-6. (3 pt) i	f 7-8. (4 pt) if 9-10. (5 pt) if >10). final score=	0	0 0	1	2	2 0	0	0 (0	3	4 0	0	1 4	1 0	0	0	3	0 4	1	2	0	0 0	1	2	0 0	0	1
Vegetated Cover Removal Within the Assessment Area																													
In the last column, place an X next to any item present in the AA that is likely to have cause		ver, or less vegetation biomass	, or less wood generally. If																										
only the species composition (not total cover or biomass) changed, do not check any of the	se items.																											4	
clearing, logging, excepting removal of woody vegetation from native prairies						Х					Х	Х			X 2	(Х	Х					Х	(_	
grazing by livestock																												_	
mowing											Х								Χ									\bot	
herbicides, excepting spot applications for controlling non-native plants in the AA											Х																		
plowing, regrading																													
removal of woody debris																													
shading from large artificial structure, e.g., bridge, boardwalk, dock																													
other human-related disturbances within the AA																						Х							
natural processes concentrated within the AA, e.g., wind & wave scouring, windthrow, in deer, elk, geese.	nsect or disease infestations	s, fires, beaver damage, natural	erosion, intensive grazing by										Х		,	(Х									
If any items were checked above, then for each row of the table below assign points (3, 2,	or 1) in the last column that	describe the combined maximum	m effect of those items on the																										
amount of vegetation cover in the AA.																													
	Severe (3 pts)	Medium (2 pts)	Mild (1 pt)																										
Spatial extent of veg removal	>95% of AA or >95% of its water edge	5-95% of AA or 5-95% of its water edge	<5% of AA and <5% of its water edge if any	0	0 0) 1	0	0 0	0	0 (2	1	2 0	0	2	2 0	0	2	2	1 0	0	1	0	0 1	0	0	0 0	0	0
Frequency of significant veg removal	regularly during most of	a few times a year		0	0 0) 1	0	0 0	0	0 () 1	1	2 0	0	1	0	0	1	2	2 0	0	3	0	0 1	0	0	0 0	0	0
Biomass recovery after each removal	the year > 20 yrs	2-20 yrs	<2 yrs	0	0 0) 2	0	0 0	0	0 () 2	2	2 0	0	2 2	2 0	0	2	2	1 0	0	2.	0	0 1	0	0	0 0	10	0
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Department of State Lands

775 Summer Street NE, Suite 100 Salem, OR 97301-1279 (503) 986-5200 FAX (503) 378-4844 www.oregonstatelands.us

June 21, 2012

Sandra Belson Community Development Director City of Florence 250 Highway 101 Florence, OR 97439

Significant Wetlands

State Land Board

John A. Kitzhaber, MD Governor

Kate Brown

Secretary of State

Dear Ms. Belson:

Ted Wheeler State Treasurer

In a letter dated March 29, 2010, the Department of State Lands (DSL) granted permission to the City of Florence to use the Oregon Rapid Wetland Assessment Protocol (ORWAP) to assess wetlands as part of the Siuslaw Estuary Partnership project, as allowed by Oregon administrative rules governing Local Wetlands Inventories (141-086-0185) for your Local Wetlands Inventory and Goal 5/Goal 17 planning.

Approval of Significance Criteria for Identifying Locally

ORWAP has not yet been incorporated into the administrative rules for identifying Locally Significant Wetlands (OAR 141-86-300 through 350). Because Florence piloted the use of ORWAP for this purpose before administrative rule changes were made, you have worked closely with DSL's wetlands planning staff and stakeholders of the Siuslaw Estuary Partnership project to develop significance criteria based upon the ORWAP results.

In lieu of the administrative rules for identifying Locally Significant Wetlands (OAR 141-86-300 through 350), the criteria that will be used for determining significance of non-Goal 17 wetlands in the Florence urban growth boundary (UGB), as outlined in the April 30, 2012 Siuslaw Estuary Partnership document entitled "Proposed Florence Wetlands" Significance Criteria and Protection Measures" (enclosed), are wetlands that score at or above the 75th percentile in either Function or Value for one or more of the following Grouped Functions, as defined in the Oregon Rapid Wetlands Assessment Protocol (ORWAP):

- Hydrologic Control (water storage and delay or "flood control"); or a.
- Water Quality (sediment retention and stabilization, phosphorus retention, b. nitrate removal and retention, and thermoregulation); or
- Habitat for fish, aquatic, or terrestrial species. C.

By way of this letter, DSL grants approval of the aforementioned criteria for determining locally significant wetlands for your Goal 5 planning. We appreciate your interest in using ORWAP for your project. This effort has been very informative for DSL's work on future rule revisions.

Sincerely,

Louise Solliday

Director

cc: Amanda Punton, DLCD

Dave Perry, DLCD, Newport Office

Peter Ryan, DSL

Siuslaw Estuary Partnership

An Integrated Multiple Objective Approach To Watershed Protection and Restoration

Proposed Florence Wetlands Significance Criteria and Protection Measures April 30, 2012

The Wetlands and Riparian Area Team met on March 6, 2012 and concurred with this proposal for determining the significance of, and measures to protect, wetlands in the Florence urban growth boundary (UGB). The Stakeholder Groups forwarded this proposal to the public for comment at their meetings in March and April. Then, the public provided comment on the proposal at the April 30, 2012 Open House.

In this paper, the significance criteria are applied to the wetlands and assessment, using the Oregon Rapid Wetland Assessment Protocol (ORWAP) in the 2010 Draft Florence Area Wetland and Riparian Inventory (Draft Inventory), prepared by Pacific Habitat Services for the Siuslaw Estuary Partnership (Partnership). The application of the significance criteria in this paper is based on the <u>Draft Inventory</u>; thus, the findings are subject to change based on the results of the Department of State Lands' (DSL) review. Any modifications made to the inventory or assessment as a result of DSL's review will be incorporated into the final analysis of wetlands and their significance.

Scope and Study Area

Statewide Planning Goal 5 criteria and protection measures apply to non-Statewide Planning Goal 17 wetlands in the Florence Area Inventory within the Florence Urban Growth Boundary (UGB) which is where Florence's land use measures would apply.¹

The 2010 Florence Area Wetlands Inventory, once approved by DSL, will replace the 1996 Florence Wetlands Inventory in the State Wetland Inventory (SWI), both within and outside the UGB.² In addition, if Lane County elects to determine significance of non-Goal 17 wetlands outside the UGB, the criteria ultimately selected for the Florence UGB may help guide that effort. At their meeting on March 22, the Elected Official Stakeholders will be asked to provide guidance on the question of whether or not to apply Goal 5 protection measures to wetlands outside the UGB.

OAR 660-023-0240. Relationship of Goal 5 to Other Goals

[&]quot;(2) The requirements of Goals 15, 16, 17, and 19 shall supersede requirements of this division for natural resources that are also subject to and regulated under one or more of those goals. However, local governments may rely on a Goal 5 inventory produced under OAR 660-023-0030 and other applicable inventory requirements of this division to satisfy the inventory requirements under Goal 17 for resource sites subject to Goal 17."

² In accordance with OAR 141-086-0185, "once approved by the Department of State Lands (DSL), the Local Wetland Inventory (LWI) must be used in place of the National Wetlands Inventory (NWI) and is incorporated into the "State Wetland Inventory" (SWI). The SWI is an inventory which contains the location, wetlands types, and approximate boundaries of wetlands in the State of Oregon. This inventory is continually revised as additional information is received or obtained by the Division of State Lands. The approved LWI must be used by cities and counties in lieu of the NWI for notifying the Department of land use applications affecting mapped wetlands and other waters (ORS 215.418 and 227.350).

Significance

- 1. The criterion for determining significance of non-Goal 17 wetlands in the Florence urban growth boundary (UGB) is wetlands that score at or above the 75th percentile in either Function or Value for one or more of the following Grouped Functions, as defined in the Oregon Rapid Wetlands Assessment Protocol (ORWAP):
 - a. Hydrologic Control (water storage and delay or "flood control"); or
 - b. Water Quality (sediment retention and stabilization, phosphorus retention, nitrate removal and retention, and thermoregulation); or
 - c. Habitat for fish, aquatic, or terrestrial species.
- 2. The results of the analysis are presented in Table 1, ORWAP Summary for Florence LWI Functions and Values of Grouped Functions, attached. In applying the significance criterion to the Draft Florence Area Inventory, the sixteen non-Goal 17 wetlands in the Florence UGB are significant, as shown in Table 1. This is almost exclusively due to their high Function or Value in providing flood control and water quality protection. All of the wetlands, except Wetland 25, meet the criteria for Hydrologic Control or Water Quality; and Wetland 25 meets the criteria for Aquatic Habitat and is also at the head of a significant riparian corridor. In addition, all of the wetlands except 8, 26, and 34 meet the criteria for providing habitat for fish, aquatic, and/or terrestrial species.

Protection

- 1. The proposed protection measures are to:
 - a. apply the Safe Harbor approach in Statewide Planning Goal 5, attached, to protect significant wetlands in the UGB;
 - b. include a Variance procedure that recognizes the rights of a property owner to develop property that would otherwise be unbuildable (avoids unconstitutional "taking" of private property without just compensation); and
 - c. Use the ESEE (Economic, Social, Environmental, and Energy) Analysis prescribed in Statewide Planning Goal 5 to address conflicts between construction of planned infrastructure projects and resource conservation in the Florence UGB. The ESEE analysis for public utilities and transportation facilities will evaluate these conflicts within the urban growth boundary and propose the appropriate level of resource protection in these areas. Note: The Goal 5 Administrative Rules for ESEE Analysis are attached.

Analysis

1. The proposed approach to determining significance for the Florence Area Inventory bases significance on the ORWAP scores separately for relative effectiveness of the Function and Value of the wetland. The proposed criteria do not require high scores in both the Functions and Values.

Grou	uped Functions in ORWAP
Grouped Functions	Component Functions
Hydrologic Function	Water Storage and Delay (WS)
Water Quality Support Group	Sediment Retention and Stabilization (SR) Phosphorus Retention (PR)

Grou	ped Functions in ORWAP
Grouped Functions	Component Functions
-	Nitrate Removal & Retention (NR) Thermoregulation (T)
Fish Support Group	Anadromous Fish Habitat (FA) Non-anadromous Fish Habitat (FR)
Aquatic Habitat Support Group	Organic Matter Export (OE) Aquatic Invertebrate Habitat (INV) Amphibian and Reptile Habitat (AM) Waterbird Feeding Habitat (WBF) Waterbird Nesting Habitat (WBN)
Terrestrial Habitat Support Group	Songbird, Raptor, and Mammal Habitat (SBM) Pollinator Habitat (POL) Native Plant Diversity (PD)

The Florence Wetlands Project is a pilot and, as such, is one of the first attempts to use the ORWAP method for planning purposes. The Wetlands and Riparian Area Protection Team worked together to come to a mutual understanding of how best to use the ORWAP tool and to agree to criterion for significance that makes sense in a planning context.

- 2. The "service area" for the Florence Comprehensive Plan is the urban growth boundary (UGB). Flood control and water quality are critical issues for the North Florence Dunal Aquifer, both inside and outside the City limits. Wetlands that provide flood control or water quality protection, today or in the future, are of critical importance in providing these two services. For this reason, the proposed criteria take both the Function and the Value of the wetlands into consideration in determining significance.
- 3. The proposed significance criteria recognize the critical role that wetlands play in controlling floods and protecting water quality in the North Florence Sole Source Dunal Aquifer. All wetlands in the UGB play a role, or will play a role in the future, in Hydrologic Control and/or Water Quality Protection. All but one of the "significant" wetlands meet the criteria for these functions or values, and are thus recommended for protection. The proposed criteria also recognize the importance of wetlands for providing Habitat for fish, aquatic, and terrestrial species. All of the wetlands except 8, 26, and 34 meet the criteria for providing habitat for fish, aquatic, and/or terrestrial species.
- 4. For wetland protection measures, the proposal is to apply the Safe Harbor approach in Statewide Planning Goal 5, including the Variance procedure, to protect locally significant wetlands in the UGB, and exempt planned infrastructure and public improvement projects using the ESEE Analysis approach in Goal 5. This would mean that the significant wetlands would be protected, with a Variance procedure available that recognizes the rights of a property owner to develop property (avoids unconstitutional "taking" of private property without just compensation); and that planned public improvements can be constructed as long as the needed state and federal permits are obtained.

The proposed protection measures combine the approaches available under State law, i.e., safe harbor and ESEE analysis, in a manner that ensures all properties

will retain some development potential while at the same time allowing planned infrastructure and public improvement projects to proceed as planned. The ESEE analysis is a tool that can be used to ensure that planned infrastructure and public improvements, such as roads, stormwater systems, wastewater systems, and parks, can be constructed as planned, without being subject to the variance process; although any such development will nevertheless be subject to any required state and federal permit processes.

Table 1. Significant Florence Wetlands and ORWAP Scores for Functions (F) and Values (V)

Wet-	Hydro Cont		Wat Qua		Fi: Hab	sh	Aqu	iatic oitat		strial oitat	N	lotes and Sig	gnificance	
land #	F	٧	F	٧	F	٧	F	V	F	V	Outside UGB	Goal 17	In City Limits	Signifi- cant?
1	5.75	3.67	10	7.19	5.87	10	4.88	6.67	5.94	6.67	Part Out	ONCOME ACTION ASSESSMENT OF THE OWNER	In part	yes
2	3.5	3.08	10	6.07	3.69	4.2	6.37	7.33	6.63	6.67			Outside	yes
3	7	4.72	10	6.19	2.16	6.67	6.89	6.67	6.55	6.67	Outside			-
4	2.31	7.64	6.17	7.5	6.56	10	6.11	10	7.61	7.51	Part Out		In part	yes
5	3.09	7.22	7.39	7.5	7.89	10	6.52	7.33	8.79	10	Part Out	Outside UGB=G17	In part	yes
6	1.77	2.17	4.84	7.5	6.95	10	7.39	7.33	7.51	7.43	,		Mostly in	yes
7	6.0	3.17	10	6.03	2.21	6.67	6.41	7.33	5.23	6.67			Outside	yes
8	3.5	3.08	10	6.03	0.67	6.67	6.72	6.67	5.99	6.67			In	yes
9	3.46	2.17	7.37	5.28	2.3	6.67	7.12	4.0	7.9	6.67	Outside			
10	4.5	2.17	10	5.43	3.69	6.67	7.87	4.0	7.39	6.67	Outside			
11	2.45	6.39	6.2	4.34	3.01	6.67	8.31	5.67	9.01	7.68			Outside	yes
12	3.25	2.17	10	4.94	3.33	6.67	8.39	7.33	7.76	7.77	Part Out		Mostly Outside	yes
13	5.75	2.17	10	5.82	2.32	6.67	7.01	6.67	5.9	6.67	Outside			
14	4.25	2.17	10	5.07	3.52	6.67	8.04	6.67	6.94	6.67	Outside			
15	2.63	2.33	5.09	6.67	6.68	10	7.14	6.67	7.84	6.67	Outside			
16	3.25	2.17	10	5,07	0.74	6.67	7.67	7.33	6.68	6.7	Outside			
17	3.25	2.17	10	5.57	2.05	6.67	7.87	7.33	7.09	6.99	Outside			
18	3.85	2.33	6.46	5.78	1.59	6.67	6.92	7.33	7.71	6.67	Outside			
19	3.25	2.17	10	5.36	2.64	5.11	7.31	6.67	6.53	6.67	Outside			
20	3.25	2.17	10	5.36	0.83	6.67	7.34	7.33	6.06	6.67	Outside			
21	4.5	3.58	10	6.49	2.95	6.67	7.84	7.33	6.99	7.22	Outside			
22	3.13	2.67	4.21	6.67	7.06	10	6.97	6.67	6.34	6.67	Outside	G17		NA LAP
23	4.5	2.17	10	5.45	4.26	5.47	8.28	7.33	6.72	7.21	Outside			
24	5.75	2.17	10	5.61	3.54	6.67	7.82	7.33	7.08	7.09	Part Out	Part G17	Outside	yes
25	3	2.17	5.52	5.28	2.59	5.41	7.23	7.33	5.83	6.7	Part Out		Outside	yes
26	3.25	2.42	10	5.57	2.89	6.67	5.98	6.67	5.95	6.67			Outside	yes
27	3.5	2.67	10	6.28	3.22	4.73	6.78	7.33	5.35	6.67	Part Out		Outside	yes
28	2.25	2.17	10	5.28	3.9	6.67	6.38	7.33	5.85	6.67			Outside	yes
29	4.5	2.17	10	5.36	3.33	6.67	6.41	7.33	5.43	6.67		G17		
30	3.5	1.67	10	5.11	3.97	6.67	7.42	7.33	6.16	6.67		G17		
31	2.71	2.92	6.17	7.5	7.93	10	5.89	7.33	6.3	7.03		G17		
32	2.09	2.0	5.08	6.67	6.3	10	7.08	7.33	7.48	7.35	Outside	G17		
33	4.5	1.67	10	4.77	1.22	7.13	7.36	7.33	7.09	6.97			Inside	yes
34	1.64	1.67	5.03	6.64	2.57	6.67	6.06	6.67	4.66	6.67		Part G17	Inside	yes
Mean	3.58	2.87	8.52	5.92	3.66	7.22	7.05	6.97	6.71	6.97				
Med- ian	3.36	2.17	10.00	5.70	3.28	6.67	7.10	7.33	6.66	6.67				
75%	4.50	3.04	10.00	6.60	4.19	7.02	7.61	7.33	7.46	7.08		Significance	Threshol	d

GOAL 5 ADMINISTRATIVE RULES: WETLANDS

OAR 660-023-0100 Wetlands

- (1) For purposes of this rule, a "wetland" is an area that is inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions.
- (2) Local governments shall amend acknowledged plans and land use regulations prior to or at periodic review to address the requirements of this division, as set out in OAR 660-023-0250(5) through (7). The standard inventory process requirements in OAR 660-023-0030 do not apply to wetlands. Instead, local governments shall follow the requirements of section (3) of this rule in order to inventory and determine significant wetlands.
- (3) For areas inside urban growth boundaries (UGBs) and urban unincorporated communities (UUCs), local governments shall:
 - (a) Conduct a local wetlands inventory (LWI) using the standards and procedures of OAR 141-086-0110 through 141-086-0240 and adopt the LWI as part of the comprehensive plan or as a land use regulation; and
 - (b) Determine which wetlands on the LWI are "significant wetlands" using the criteria adopted by the Division of State Lands (DSL) pursuant to ORS 197.279(3)(b) and adopt the list of significant wetlands as part of the comprehensive plan or as a land use regulation.
- (4) For significant wetlands inside UGBs and UUCs, a local government shall:
 - (a) Complete the Goal 5 process and adopt a program to achieve the goal following the require-ments of OAR 660-023-0040 and 660-023-0050; or
 - (b) Adopt a safe harbor ordinance to protect significant wetlands consistent with this subsection, as follows:
 - (A) The protection ordinance shall place restrictions on grading, excavation, placement of fill, and vegetation removal other than perimeter mowing and other cutting necessary for hazard prevention; and
 - (B) The ordinance shall include a variance procedure to consider hardship variances, claims of map error verified by DSL, and reduction or removal of the restrictions under paragraph (A) of this subsection for any lands demonstrated to have been rendered not buildable by application of the ordinance.
- (5) For areas outside UGBs and UUCs, local governments shall either adopt the statewide wetland inventory (SWI; see ORS 196.674) as part of the local comprehensive plan or as a land use regulation, or shall use a current version for the purpose of section (7) of this rule.
- (6) For areas outside UGBs and UUCs, local governments are not required to amend acknowledged plans and land use regulations in order to determine significant wetlands and complete the Goal 5 process. Local governments that choose to amend acknowledged plans for areas outside UGBs and UUCs in order to inventory and protect significant wetlands shall follow the requirements of sections (3) and (4) of this rule.
- (7) All local governments shall adopt land use regulations that require notification of DSL concerning applications for development permits or other land use decisions affecting

wetlands on the inventory, as per ORS 227 .350 and 215.418, or on the SWI as provided in section (5) of this rule.

(8) All jurisdictions may inventory and protect wetlands under the procedures and requirements for wetland conservation plans adopted pursuant to ORS 196.668 et seq. A wetlands conservation plan approved by the director of DSL shall be deemed to comply with Goal 5 (ORS 197.279(1)).

Stat. Auth.: ORS 183 & ORS 197

Stats. Implemented: ORS 197.040 & ORS 197.225 - ORS 197.245

Hist.: LCDC 2-1996, f. 8-30-96, cert. ef. 9-1-96

GOAL 5 ADMINISTRATIVE RULES: ESEE ANALYSIS

OAR 660-023-0010 Definitions

- (2) "ESEE consequences" are the positive and negative economic, social, nvironmental, and energy (ESEE) consequences that could result from a decision to allow, limit, or prohibit a conflicting use.
- (7) "Protect," when applied to an individual resource site, means to limit or prohibit uses that conflict with a significant resource site (except as provided in OAR 660-023-0140, 660-023-0180, and 660-023-0190). When applied to a resource category, "protect" means to develop a program consistent with this division.

660-023-0040 ESEE Decision Process

- (1) Local governments shall develop a program to achieve Goal 5 for all significant resource sites based on an analysis of the economic, social, environmental, and energy (ESEE) consequences that could result from a decision to allow, limit, or prohibit a conflicting use. This rule describes four steps to be followed in conducting an ESEE analysis, as set out in detail in sections (2) through (5) of this rule. Local governments are not required to follow these steps sequentially, and some steps anticipate a return to a previous step. However, findings shall demonstrate that requirements under each of the steps have been met, regardless of the sequence followed by the local government. The ESEE analysis need not be lengthy or complex, but should enable reviewers to gain a clear understanding of the conflicts and the consequences to be expected. The steps in the standard ESEE process are as follows:
 - (a) Identify conflicting uses;
 - (b) Determine the impact area;
 - (c) Analyze the ESEE consequences; and
 - (d) Develop a program to achieve Goal 5.
- (2) Identify conflicting uses. Local governments shall identify conflicting uses that exist, or could occur, with regard to significant Goal 5 resource sites. To identify these uses, local governments shall examine land uses allowed outright or conditionally within the zones applied to the resource site and in its impact area. Local governments are not required to consider allowed uses that would be unlikely to occur in the impact area because existing permanent uses occupy the site. The following shall also apply in the identification of conflicting uses:

- (a) If no uses conflict with a significant resource site, acknowledged policies and land use regulations may be considered sufficient to protect the resource site. The determination that there are no conflicting uses must be based on the applicable zoning rather than ownership of the site. (Therefore, public ownership of a site does not by itself support a conclusion that there are no conflicting uses.)
- (b) A local government may determine that one or more significant Goal 5 resource sites are conflicting uses with another significant resource site. The local government shall determine the level of protection for each significant site using the ESEE process and/or the requirements in OAR 660-023-0090 through 660-023-0230 (see OAR 660-023-0020(1)).
- (3) Determine the impact area. Local governments shall determine an impact area for each significant resource site. The impact area shall be drawn to include only the area in which allowed uses could adversely affect the identified resource. The impact area defines the geographic limits within which to conduct an ESEE analysis for the identified significant resource site.
- (4) Analyze the ESEE consequences. Local governments shall analyze the ESEE consequences that could result from decisions to allow, limit, or prohibit a conflicting use. The analysis may address each of the identified conflicting uses, or it may address a group of similar conflicting uses. A local government may conduct a single analysis for two or more resource sites that are within the same area or that are similarly situated and subject to the same zoning. The local government may establish a matrix of commonly occurring conflicting uses and apply the matrix to particular resource sites in order to facilitate the analysis. A local government may conduct a single analysis for a site containing more than one significant Goal 5 resource. The ESEE analysis must consider any applicable statewide goal or acknowledged plan requirements, including the requirements of Goal 5. The analyses of the ESEE consequences shall be adopted either as part of the plan or as a land use regulation.
- (5) Develop a program to achieve Goal 5. Local governments shall determine whether to allow, limit, or prohibit identified conflicting uses for significant resource sites. This decision shall be based upon and supported by the ESEE analysis. A decision to prohibit or limit conflicting uses protects a resource site. A decision to allow some or all conflicting uses for a particular site may also be consistent with Goal 5, provided it is supported by the ESEE analysis. One of the following determinations shall be reached with regard to conflicting uses for a significant resource site:
 - (a) A local government may decide that a significant resource site is of such importance compared to the conflicting uses, and the ESEE consequences of allowing the conflicting uses are so detrimental to the resource, that the conflicting uses should be prohibited.
 - (b) A local government may decide that both the resource site and the conflicting uses are important compared to each other, and, based on the ESEE analysis, the conflicting uses should be allowed in a limited way that protects the resource site to a desired extent.
 - (c) A local government may decide that the conflicting use should be allowed fully, notwithstanding the possible impacts on the resource site. The ESEE analysis must demon-strate that the conflicting use is of sufficient importance relative to

the resource site, and must indicate why measures to protect the resource to some extent should not be provided, as per subsection (b) of this section.

Stat. Auth.: ORS 183 & ORS 197

Stats. Implemented: ORS 197.040 & ORS 197.225 - ORS 197.245 Hist.: LCDC 2-1996, f. 8-30-96, cert. ef. 9-1-96

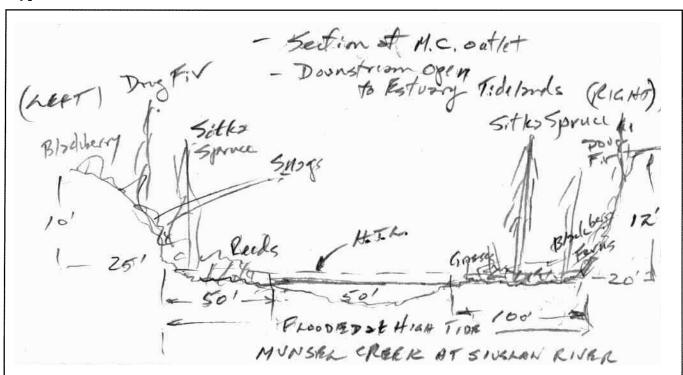


Florence LWI & Riparian Inventory

RIPARIAN CODE RMC - 0

Date:	10/24/2010	Investigators: C. Lysdale	
Dominar	it tree species:	Sitka Spruce	
Pote	ntial tree height	(PTH)/Actual Width of riparian area: 120/25L & 20R	_ feet
		(Width measured horizontally from edge of water resource)	
1	ermined by: n-site vegetation	Reference site Code	
Commen			
Photos RM	C-0Sveg, RMC-0Sstr, R	MC-0Sstr1, RMC-0Sest	

Typical Cross Section:



Rinarian Characterization Form



Riparian Characterization Form	rm	
Florence I WI & Ringrian Inventory	WAY.	<10:1 (10%) Between 10:1 (10%) and 5:1 (20%) >5:1 (20%) [
		Extent of impervious surface within the riparian area. (Question 4)
GENERAL INFORMATION		rricted by man-made features? (Ouest
V CWQ	Location of data point:	Yes No 🔽
Reach Length:		Does the orientation of the riparian area allow for shading of the water resource at midday in summer? (Question 9)
sin:	On-site: 🗸 Off-Site:	Yes No V Dominant vegetation layer within riparian area? (Question 10)
WATER RESOURCE INFORMATION		Woody vegetation
Water Resource: Stream/River:	Width: 50 Low, 200 High Tide feet Width: feet	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) Yes
Wetland:	Width: feet	Large woody debris in riparian area? (Question 15)
Water present year-round: Yes V No		Yes No
e adjacent water re	ree? Yes 🗸 No	Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16) > 40% [v]
Is the water resource listed for temperature on DEQ's 303(d) list:	Q's 303(d) list: Yes \(\bigcup \) No \(\bigcup \)	pment or h
Within FEMA-mapped 100-year floodplain:	Yes 7	<25% 🗾 25% - 75% 🔲 >75% 🗍
Mapped soil series: Waldport fine sand, 0-12% slopes	slopes	How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5)
Adjacent Land Uses? (Check as many as needed)		low, slight moderate
	i.	What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Ques
Commercia/Angus.: Residential: Forestry:		Woody vegetation Herbaceous vegetation Bare ground
Woody vegetation (trees, shrubs, vines >1 meter)	Herbaceous vegetation (include trees, shrubs, vines <1 meter)	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6)
Sitka Spruce	Grasses	Yes 🗸 No
Douglas Fir	Reeds Bracken Fern	Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the
	Blackberry	flood prone riparian area?
		Yes 🗸 No or no flood prone area present
		How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?
1 major - 2 2 faat		

ayer within riparian area? (Question 10)	Woody vegetation / Herbaceous vegetation Bare ground	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) $Yes \ \ \ \ \ Vo \ \ \ \ \ \ \ \ \ \ \ \ \ $	Large woody debris in riparian area? (Question 15) Yes 🖊 No	Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16) >40% 🗾 10% - 40% 📄 <10%	Degree of development or human caused disturbance. (Question 19) <25% 7 >75% 7 >75% 7	CS soil su	low, slight moderate in high, very high, severe	What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Question 3) Woody vegetation Bare ground	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6) Yes	Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area? Yes 🖊 No or no flood prone area present	How many vegetation layers (i.e. canopy, mid-story, groundcover) are present? More than 2 🗾 2 layers 🔲 1 layer or unvegetated	
Dominant v	Woody veg	Does woody Y	Large wood	Percent of v	Degree of d	How does t	low, slig	What is the Woody veg	Are there fi floodplain, Y	Is woody ve flood prone Y	How many vegeta More than 2	



Florence LWI & Riparian Inventory

RIPARIAN CODE RMC - 1 South

Date:	9/25/2010	Investigators: C. Lysdale & M. Tilton	 -
Dominan	t tree species:	Sitka Spruce	
Pote	ntial tree height	(PTH)/Actual Width of riparian area: 120/30L & 50R	feet
PTH deta	ermined by:	(Width measured horizontally from edge of water resource)	
	n-site vegetation	Reference site Code	
Commen	ts:		
Photos RMC	C-1S veg & RMC-1S str		
Typical (Cross Section:		
	-	THE	

MUNISEL CREEK AT HINDY 126 LOOKING SOUTH

ALDER



Riparian Characterization Form	rm	Average slope in the riparian area: (Question 1)
Florence LWI & Riparian Inventory	V.V.	Between 10:1 (10%) and 5:1 (20%) It ious surface within the riparian area
GENERAL INFORMATION		<10% \(10\) \(\sqrt{10\) \\ \sqrt{10\) \(\sqrt{10\) \\ \qquad\) \\ \sqrt{10\) \\
Riparian Code: RMC - 1 South	Location of data point:	Is the reach constructed by man-made leatures; (Question 8) Yes \[\subseteq \text{No \subseteq} \] Does the critical of the circuity of the uniter second
Reach Length:		Summer? (Question 9)
Hydrologic Basin:	On-site: 🗸 Off-Site: 🗌	Yes No C Dominant vegetation layer within riparian area? (Question 10)
WATER RESOURCE INFORMATION		Woody vegetation 🖊 Herbaceous vegetation
7	10	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) $Yes \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$
Wetland:	Width:feet	Large woody debris in riparian area? (Question 15)
Water present year-round: Yes V		Yos No
Are salmonids present in the adjacent water resource?	ce? Yes	Fercent of water resource bordered by vegetated riparian area at least 30 feet $>40\%$ \checkmark 10% -40% \bigcirc
Is the water resource listed for temperature on DEQ's 303(d) list:	$Q^{\circ}s$ 303(d) list: Yes \square No \square	n pment or h
Within FEMA-mapped 100-year floodplain:	Yes No	<25% \(\begin{align*}
Mapped soil series: Waldport fine sand, 0-12% slopes	slopes	How does the NRCS soil survey rank water erosion hazard of the dominant mathe Riparian Area? (Question 5)
Adjacent Land Uses? (Check as many as needed)		low, slight moderate 🔽 high, very high, severe
Agriculture: Roads: Commercial/Indus.		vegetation at the top of bank (if defined) or
	П	Woody vegetation
Woody vegetation (trees, shrubs, vines >1 meter)	Herbaceous vegetation (include trees, shrubs, vines <1 meter)	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA m floodplain, etc.) beyond the top of bank or edge of the water resource? (Question
Sitka Spruce	Grasses	Yes No 🗸
Red Alder		Towards water of the stand or with a stand or then I make (3.2 feat) high of
Willow		as woody vegetation (u'ces, sur tubs, vines) greater than a meter (5.2 teet) ingo of flood prone riparian area?
		Yes No or no flood prone area present
		How many vegetation layers (i.e. canopy, mid-story, groundcover) are present
1 meter = 3.2 feet		

Does the orientation of the riparian area allow for shading of the water resource at midday in summer? (Question 9) Yes \(\subseteq \text{No} \(\subseteq \subseteq \subseteq \text{Ouestion 10} \) Dominant vegetation layer within riparian area? (Question 10)	Woody vegetation	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) Yes \(\subseteq \) No \(\subseteq \)	Large woody debris in riparian area? (Question 15) Yes	Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16) >40% 🔼 10% - 40% 🔲 <10%	Degree of development or human caused disturbance. (Question 19) <25% \[\sqrt{25}\circ - 75\circ \bigcirc \sqrt{\sq}}}}}}}}}}}} \simetinftilender \sinthintit{\sqrt{\sqrt{\sqrt{\sqc}}}}}}}} \end{\sqrt{\sq}}}}}}}}}}}}} \end{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sq}}}}}}}}}} \end{\sqrt{\sq}}}}}}}}} \sqrt{\sqrt{\si	How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5) low, slight moderate	What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Question 3) Woody vegetation	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6) Yes \square No \square	Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area? Yes No or no flood prone area present	How many vegetation layers (i.e. canopy, mid-story, groundcover) are present? More than 2 ✓ 2 layers	
---	------------------	--	---	--	---	---	---	---	---	---	--



Florence LWI & Riparian Inventory

RIPARIAN CODE RMC - 1 North

Date:	9/25/2010	Investigators: C. Lysdale & M. Hiton
Dominar	it tree species:	Douglas Fir
Pote	ntial tree height	(PTH)/Actual Width of riparian area: 120/100L & 75R feet
PTH det	ermined by:	(Width measured horizontally from edge of water resource)
O	n-site vegetation	Reference site Code
Commen	ts:	
	C-1N veg & RMC-1N str	
	۲4.	
	Dorn	*
	g a .	HEMARIL
1	#11	Dosh /
		estimated of the
/	01	(2) PUSOY 121
	1	501 101 least 5
(n	16HT)	MUNSEL CREEK AT HISAYIZE (KEFT)
C		MUNSRY GREEK AT HISAY126 (REFT) LEOKING WOLTH

Riparian Characterization Form



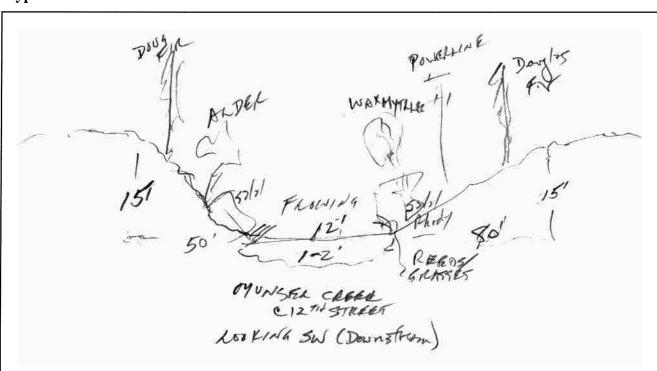
Riparian Characterization Form	Jrm Variable	-,
Florence LWI & Riparian Inventory	Cory	Between ious surfac
GENERAL INFORMATION		<10% 10% - 25% 10% - 25% 1 In the month countricted by man mode fortunate?
Rinarian Code: RMC - 1 North	Location of data point:	Yes No V
		Does the orientation of the riparian area allow f summer? (Question 9)
Hydrologic Basin:	On-site: 🗸 Off-Site:	Yes No Voluminant vegetation layer within riparian area
WATER RESOURCE INFORMATION		Woody vegetation 🗸 Herbaceous veget
Water Resource: Stream/River:	10	Does woody vegetation hang over the edge of the Yes 🗸 No
wetland:	Width:	ris in
Water present year-round: Yes 🗸 No		Yes K
Are salmonids present in the adjacent water resource?	Yes 🗸	Percent of water resource bordered by vegetated >40% ✓ 10% - 40% ✓
Is the water resource listed for temperature on DEQ 's $303(d)$ list:	3Q's 303(d) list: Yes No 🗸	Degree of development or human caused disturl
Within FEMA-mapped 100-year floodplain:	Yes No C	<25% 🗾
Mapped soil series: Yaquina loamy fine sand		How does the NRCS soil survey rank water eros the Riparian Area? (Question 5)
Adjacent Land Uses? (Check as many as needed)		low, slight moderate
Agriculture: Commercial/Indus.:		vegetatio
	<u> </u>	Woody vegetation
Woody vegetation (trees, shrubs, vines >1 meter)	Herbaceous vegetation (include trees, shrubs, vines <1 meter)	Are there flood prone areas (adjacent flat areas, floodplain, etc.) beyond the top of bank or edge
	Grasses	Yes
Western Hemlock	Reeds	
Willow		Is woody vegetation (trees, shrubs, vines) greate flood nrone rinarian area?
Knododenaron		Yes
		How many vegetation layers (i.e. canopy, mid-st
1 meter = 3.2 feet		Money than 7



Florence LWI & Riparian Inventory

RIPARIAN CODE RMC - 2 South

Date:	9/9/2010	Investigators: C. Lysdale	
Dominan	it tree species:	Douglas Fir	
		(PTH)/Actual Width of riparian area: 120/50L & 80R (Width measured horizontally from edge of water resource)	feet
ł	ermined by: n-site vegetation	Reference site Code	
Comments:			
Photos RM0	C-2S veg & RMC-2S str		
Typical C	Cross Section:		



Rinarian Characterization Form



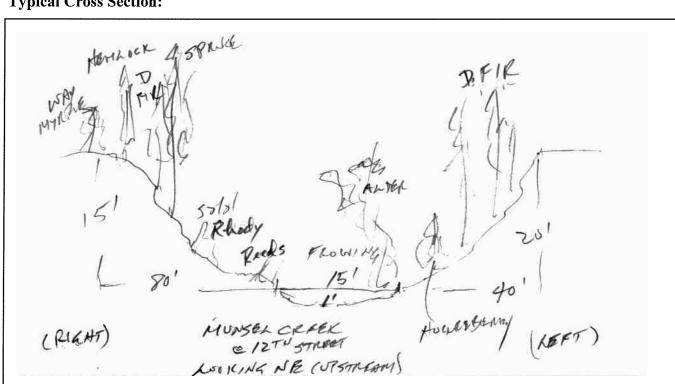
Riparian Characterization Form	SHA	
Florence LWI & Riparian Inventory		<10:1 (10%) Between 10:1 (10%) and 5:1 (Extent of impervious surface within the riparia
GENERAL INFORMATION		<10% V 10% - 25% 1
Location of data point: Dinoxion Codo: DMC - 2 South	oint:	As the reacti constructed by man-inade leadiffes. Yes \[\begin{array}{c} \lambda \lorenth{\cein} \end{array}
10000	Z-010	Does the orientation of the riparian area allow summer? (Question 9)
sin: On-sife: 🗸	Off-Site:	Yes V No Dominant vegetation layer within riparian area
WATER RESOURCE INFORMATION		Woody vegetation
Water Resource: Stream/River: V Width: 12 Lake/Pond: Width: 12	feet feet	Does woody vegetation hang over the edge of the Yes V No
]	1001	Large woody debris in riparian area? (Question Yes V No
		resou
Are salmonids present in the adjacent water resource? Yes 🗸	ON [>40% 🗾
Is the water resource listed for temperature on DEQ's 303(d) list:	Yes No V	Degree of development or human caused distur
Within FEMA-mapped 100-year floodplain: Yes	No N	<25% 🗾
Mapped soil series: Yaquina loamy fine sand		How does the NRCS soil survey rank water ero the Riparian Area? (Question 5)
Adjacent Land Uses? (Check as many as needed)	***************************************	low, slight moderate
		What is the dominant vegetation at the, top of b
Residential: P Forestry:		Woody vegetation
Woody vegetation He	Herbaceous vegetation	Are there flood prone areas (adjacent flat areas floodplain, etc.) beyond the top of bank or edge
Grasse	Cos, om too, vince of inetal	Ves No.
Myrtle		Is woody vegetation (trees, shrubs, vines) great
Khododendron Salal		Vec No or no flood prone area pre
1 modern = 2.3 fb.st		How many vegetation layers (i.e. canopy, mid-s



Florence LWI & Riparian Inventory

RIPARIAN CODE RMC - 2 North

Date:	9/9/2010	Investigators: C. Lysdale	•
Dominan	t tree species:	Douglas Fir	
Poten	itial tree height	(PTH)/Actual Width of riparian area: 120/40L & 80R (Width measured horizontally from edge of water resource)	feet
PTH determined by: On-site vegetation Reference site Code			
Comments:			
Photos RMC	-2N veg & RMC-2N str		
Typical C	ross Section:		



Riparian Characterization Form



Riparian Characterization Form	m.	in the riparian area: (Question 1)
Florence LWI & Riparian Inventory	XI.	<10:1 (10%) Between 10:1 (10%) and 5:1 (20%) \(\bigcup \) >5:1 (20%) \(\bigcup \) \(\bigcup \) Right Extent of impervious surface within the riparian area. (Question 4)
		<10% 🕶 10% - 25% 🗍 >25%
GENERAL INFORMATION		ricted by man-made features? (Ouest
Riparian Code: RMC - 2 North	Location of data point:	Yes No 🔼 Does the orientation of the rinarian area allow for shading of the water resource at midday in
Reach Length:		summer? (Question 9)
Hydrologic Basin:	On-site: 🗸 Off-Site: 🗌	Yes 🖊 No 🔲 Dominant vegetation layer within riparian area? (Question 10)
WATER RESOURCE INFORMATION		Woody vegetation
7	Width: 15 feet Width: feet	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) Yes ✓ No ◯
wenand: wenand: venand: venand: venand Code:		ris in
Water present year-round: Yes 🗾 No		Yes V No
Are salmonids present in the adjacent water resource?	Yes 🗸	Fercent of water resource bordered by vegetated riparian area at least 50 feet white: (Question 16) > 40%
Is the water resource listed for temperature on DEQ's 303(d) list:	2's 303(d) list: Yes \(\begin{array}{c} \text{Yes} \\ \end{array} \]	Degree of development or human caused disturbance. (Question 19)
Within FEMA-mapped 100-year floodplain:	Yes No 🗸	<25% 🗾 25% - 75% 🔲 >75% 🗌
Mapped soil series: Yaquina loamy fine sand		How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5)
Adjacent Land Uses? (Check as many as needed)		low, slight moderate
Agriculture: Roads:		What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Quest
7		Woody vegetation Herbaceous vegetation Bare ground
Woody vegetation (trees, shrubs, vines >1 meter)	Herbaceous vegetation (include trees, shrubs, vines <1 meter)	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6)
Douglas Fir	Grasses	Yes No 🗸
Western Hemlock	Reeds	Y
Sitka Spruce		AS WOODY VEGELAUON (Trees, Shrubs, vines) greater than a meter (3.2 aret) ingn uommant in the flood drone ribarian area?
Red Alder		Yes No or no flood prone area present
Q		
Salal, Huckleberry		ntion layers (i.e. canopy, mid-story, g
I meter $= 3.2$ leet		More than 2 C 2 layers 1 layer or unvegetated

Dominant vegetation layer within riparian area? (Question 10) Woody vegetation Herbaceous vegetation Bare ground Does woody vegetation Herbaceous vegetation Bare ground Yes No	Yes \(\begin{align*}
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Florence LWI & Riparian Inventory

RIPARIAN CODE RMC - 3

Investigators: C. Lysdale	
Red Alder	
(PTH)/Actual Width of riparian area: 65/80L & 5 (Width measured horizontally from edge of water resource)	OR feet
Reference site Code	militari di mandali di
PROPERTY PROPERTY SULLENGE (214H) LOKING DOWNSTREAM	MS PH PH
	Red Alder (PTH)/Actual Width of riparian area: 65/80L & 5 (Width measured horizontally from edge of water resource) Reference site Code Profit Reference site Code HUNSEL CEREK C 15 TH JAHISHACK (216 HM)



Riparian Characterization Form	1000	in the riparian area: (Question 1)
Florence LWI & Riparian Inventory		<10:1 (10%) Between 10:1 (10%) and 5:1 (20%) \(\begin{array}{c} \begin{array}{c} \eqriv \leqrig \rm \eqriv \eqriv \leqrig \eqriv \eqriv \rm \eqriv \rm \eqriv \rm \eqriv \eqriv \rm \rm \eqriv \rm \eqriv \rm \eqriv \rm \eqriv \rm \eqriv \rm \eqriv \rm \rm \eqriv \rm \rm \eqriv \rm \rm \rm \eqriv \rm
GENERAL INFORMATION		<10% 🕶 10% - 25% 🔃 >25% 📋
Riparian Code: RMC - 3	Location of data point:	Is the reach constricted by man-made features? (Question 8) Yes No Done the conjunction of the winening group of the unique macaures at midden in
Reach Length:		Does the orientation of the riparian area anow for shaung of the water resource at minualy in summer? (Question 9)
Hydrologic Basin: On-site:	ie: 🗸 Off-Site: 🗌	Yes 🗾 No 🛅 Dominant vegetation layer within riparian area? (Question 10)
WATER RESOURCE INFORMATION		Woody vegetation
Water Resource: Stream/River: Lake/Pond: Width: Wedand:	r: 10 feet	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) $${\rm Yes} \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$
		Large woody debris in riparian area? (Question 15) Yes 🗸 No 🦳
Water present year-round: Yes V No	Ves V	resource bordered by vegetated ripar
Is the water resource listed for temperature on DEQ's 303(d) list:	Yes	>40% / 10% - 40% <10% <10% Degree of development or human caused disturbance. (Question 19)
Within FEMA-mapped 100-year floodplain: Yes	No N	<25% 🗸
Mapped soil series: Yaquina loamy fine sand		How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5)
Adjacent Land Uses? (Check as many as needed)		low, slight moderate
Agriculture: Roads: Commercial/Indus.: Undeveloped:		vegetatio
Residential: 🗸 Forestry: 🔼		Woody Vegetation Trefbaceous Vegetation
Woody vegetation (trees, shrubs, vines >1 meter)	Herbaceous vegetation (include trees, shrubs, vines <1 meter)	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 1001-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6)
Western Hemlock		Yes No 🗸
Red Alder Hunkleberry		Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the
Rhododendron		flood prone riparian area?
		Yes No or no flood prone area present
		How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?
1 water - 2 2 feat		

Yes No No Dominant vegetation layer within riparian area? (Question 10)	Woody vegetation 🖊 Herbaceous vegetation 🔲 Bare ground	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) Yes ✓ No ☐	Large woody debris in riparian area? (Question 15) Yes 🔼 No	Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16) >40% \(\sqrt{1}\) \(\sqrt{1}\) \(\sqrt{1}\) \(\sqrt{1}\)	Degree of development or human caused disturbance. (Question 19) <25% \subseteq 25% - 75% \square >75% \square	How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5) low, slight moderate		Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6) Yes \square No \square	Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area? Yes \sumset \text{No or no flood prone area present}	How many vegetation layers (i.e. canopy, mid-story, groundcover) are present? More than 2	
--	--	--	---	---	--	---	--	---	--	--	--



Florence LWI & Riparian Inventory

RIPARIAN CODE RMC - 4

Date:	9/9/2010	Investigators: C. Lysdale
Domina	nt tree species:	Douglas Fir
PTH de	ential tree height termined by: on-site vegetation	t (PTH)/Actual Width of riparian area: 120/30L & 30R feet (Width measured horizontally from edge of water resource) Reference site Code
Comme	nts:	
	C-4veg & RMC-4str Cross Section:	
	15/ 1 3 (14)21) PEL (2851)	PLANT CHORD CAPTIONS AND CALLYAND AND CALL



Riparian Characterization Form	n has a second	Average slope in the riparian area: (Question 1)
		<10:1 (10%) Between 10:1 (10%) and 5:1 (20%) >5:1 (20%)
Florence LWI & Riparian Inventory	y	< ده ۲
GENERAL INFORMATION] 10% = 23% [] tricted by man-made features? (Ouest
Lo Riparian Code: RMC - 4	Location of data point:	Yes No V
Reach Length:		DOES the Orientation of the 11partain area allow for shauling of the water resource at minutary in summer? (Question 9)
Hydrologic Basin: On	On-site: 🗸 Off-Site: 🗌	Yes 🗾 No 🔝 Dominant vegetation layer within riparian area? (Question 10)
WATER RESOURCE INFORMATION		Woody vegetation
7	9	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) $Yes \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$
Wetland: Wi	Width:feet	ris in
Water present year-round: Yes 🔽 No		Yes No
Are salmonids present in the adjacent water resource?	Yes ✓	Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16, >40% 7 10% - 40% 1
Is the water resource listed for temperature on DEQ 's 303(d) list:	s 303(d) list: Yes No 🔽	Degree of development or human caused disturbance, (Question 19)
Within FEMA-mapped 100-year floodplain: Yes	No K	<25% 🗾 25% - 75% 🔲 >75%
Mapped soil series: Yaquina loamy fine sand		How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Ouestion 5)
Adjacent Land Uses? (Check as many as needed)		low, slight moderate
Agriculture: Roads: Tradevalemed.		What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Ques
<u></u>		Woody vegetation 🖊 Herbaceous vegetation 🔲 Bare ground
Woody vegetation (trees, shrubs, vines >1 meter)	Herbaceous vegetation (include trees, shrubs, vines <1 meter)	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6)
Douglas Fir		Yes No 🔽
Western Hemlock		
Red Alder		Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 teet) high dominant in the
Shore Pine		#
Huckleberry		res No or no moou prome area present
		How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?
1 meter $= 3.2$ feet		Mann of the state

Dominant vegetation layer within riparian area? (Question 10) Woody vegetation \[\begin{array}{c} \text{Herbaccous vegetation} \] Woody vegetation \[\begin{array}{c} \text{Herbaccous vegetation} \] Yes \[\begin{array}{c} \text{No} \\ \cdot \end{array} \] Large woody debris in riparian area? (Question 15) Yes \[\begin{array}{c} \text{No} \cdot \end{array} \] Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16) \[\text{A05}(\begin{array}{c} \sum \text{No} \cdot \end{array} \] Degree of development or human caused disturbance. (Question 19) \[\text{A25}(\beta \sum \text{No} \sight \text{No} \cdot \end{array} \] How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5) How, slight moderate \[\beta \sum \text{Norsion 5} \] Now, slight moderate \[\beta \sum \text{Norsion 19} \] Woody vegetation \[\beta \sum \text{Norsion 10} \] Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6) \[Yes \begin{array}{c} \text{No ro no flood prone area present} \[\beta \end{array} \] Woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area? \[Yes \begin{array}{c} \text{No ro no flood prone area present} \[\begin{array}{c} \end{array} \] How many vegetation layers (i.e. canopy, mid-story, groundcover) are present? \end{array} How many vegetation layers \[\begin{array}{c} \text{Injayer or unvegetated} \] \[\begin{array}{c} \text{Injayer or unvegetated} \end{array} \] All layers \[\begin{array}{c} \text{Injayer or unvegetated} \end{array} \] \[\text{All layers } \begin{array}{c} \text{Injayer or unvegetated} \end{array} \]
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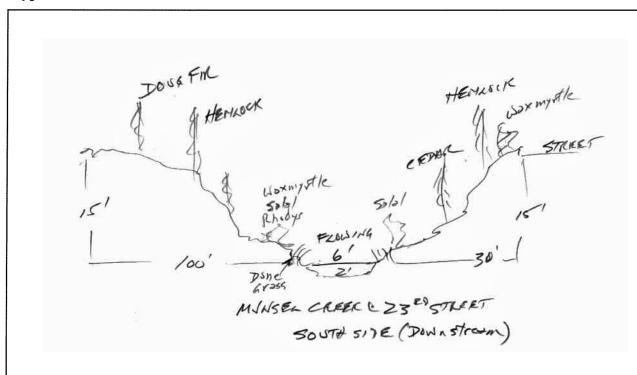


Florence LWI & Riparian Inventory

RIPARIAN CODE RMC - 5 South

Date:	8/25/2010	Investigators: C. Lysdale
Dominan	it tree species:	Douglas Fir
Pote	ntial tree height	(PTH)/Actual Width of riparian area: 120/100L & 30R feet (Width measured horizontally from edge of water resource)
1	ermined by: n-site vegetation	Reference site Code
Commen	ts:	
Photos RM0	C-5S veg & RMC-5S str	

Typical Cross Section:





Tapat tan Charles action For the	office against the state of the
	<10:1 (10%)
Florence LWL & Mparian Inventory	Extent of impo
GENERAL INFORMATION	
	Is the reach co
Riparian Code: RMC - 5 South RMC - 5	Yes
Reach Length:	summer? (Que
Hydrologic Basin: On-site: 🗸 Off-Site:	Yes Dominant veg
WATER RESOURCE INFORMATION	Woody vegeta
Water Resource: Stream/River: V Width: 6	feet Does woody w
1 1	
LWI Wetland Code:	Large woody
Water present year-round: Yes 🗾	Y
Are salmonids present in the adjacent water resource? Yes	
Is the water resource listed for temperature on DEQ's 303(d) list:	No 🔽 Degree of dev
Within FEMA-mapped 100-year floodplain: Yes No]%57>
Mapped soil series: Yaquina loamy fine sand	How does the
Adjacent Land Uses? (Check as many as needed)	low, slight
Agriculture: Roads: V	What is the do
<u> </u> 2	Woody veget
Woody vegetation Herbaceous vegetation (trees, shrubs, vines > 1 meter) (trees, shrubs, vines > 1 meter)	n 1 meter) Are there floo
Grasse	Yes
Western Hemiock Rhododendron	Is woody vege
Salal	flood prone ri
Western Red Cedar	Yes
California vyax Myrtie	How many ve
1 meter = 3.2 feet	More than 7



Florence LWI & Riparian Inventory

RIPARIAN CODE RMC - 5 North

Date:	8/25/2010	Investigators: C. Lysdale
Dominan	t tree species:	Douglas Fir
PTH dete	ntial tree height ermined by: n-site vegetation	(PTH)/Actual Width of riparian area: 120/100L & 50R feet (Width measured horizontally from edge of water resource) Reference site □ Code
Commen	ts:	
	C-5N veg & RMC-5N str	r
	STREE.	JOSH FIRE JOSH JOSH FIRE JOSH JOSH FIRE JOSH JOSH FIRE JOSH FI



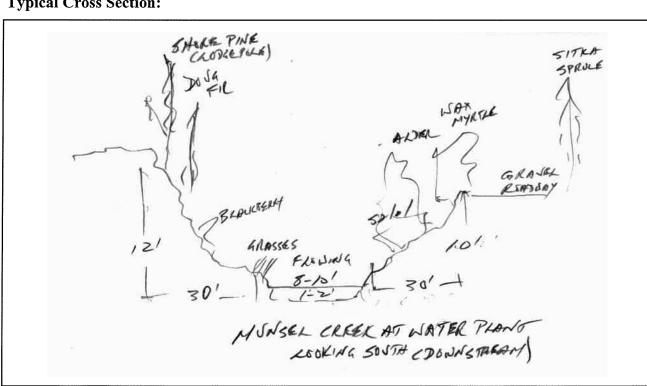
Riparian Characterization Form	. <u>.</u>
Florence LWI & Riparian Inventory	Between ious surfac
GENERAL INFORMATION	<10% - 25% 10% V 10% - 25% 10% - 25% 10% - 25% 10% 10% 10% 10% 10% 10% 10% 10% 10% 10
Location of data point: Diversion Codes BMC - 5 North	Yes No V
	Does the orientation of the riparian area allow summer? (Question 9)
Hydrologic Basin: On-site: On-site:	Yes No V
WATER RESOURCE INFORMATION	Woody vegetation
7	Does woody vegetation hang over the edge of the Yes
LWI Wetland Code:	ris in
Water present year-round: Yes 🗸 No	Yes C No
Are salmonids present in the adjacent water resource? Yes	
Is the water resource listed for temperature on DEQ's 303(d) list: Yes No 🗾	Degree of development or human caused distun
Within FEMA-mapped 100-year floodplain: Yes No	<25% 🔽
Mapped soil series: Yaquina loamy fine sand	How does the NRCS soil survey rank water ero the Riparian Area? (Question 5)
Adjacent Land Uses? (Check as many as needed)	low, slight moderate
Agriculture: Commercial/Indus.: Undeveloped:	What is the dominant vegetation at the top of b Woody vegetation
dv vegetation	Are there flood prone areas (adjacent flat area
meter) (includ	floodplain, etc.) beyond the top of bank or edge
Douglas Fir Grasses	Yes No V
Western Hemlock	Is woody vegetation (trees, shrubs, vines) great
Salal	flood prone riparian area?
Huckleberry	$ m Yes igsqcolom No \ or \ no \ flood \ prone \ area \ pre$
	How many vegetation layers (i.e. canopy, mid-s
1 meter = 3.2 feet	More than 2



Florence LWI & Riparian Inventory

RIPARIAN CODE **RMC - 6**

Date:	8/25/2010	Investigators: C. Lysdale
Domina	ant tree species:	Douglas Fir/Sitka Spruce
Pot	ential tree height	t (PTH)/Actual Width of riparian area: 120/30L & 30R feet (Width measured horizontally from edge of water resource)
	termined by: On-site vegetation	Reference site Code
Comme	ents: <u>Cree</u> l	k emerges from long culvert at this location (no upstream view).
Photos RN	MC-6veg & RMC-6str	
	MC-6veg & RMC-6str Cross Section:	





Riparian Characterization Form	rm	in the riparian area: (Question 1)
Florence LWI & Riparian Inventory	VIO	<10:1 (10%) Between 10:1 (10%) and 5:1 (20%) >5:1 (20%) \[\bu\] >Extent of impervious surface within the rinarian area. (Ouestion 4)
		<10% 🗹 10% - 25% 🗍 >25%
GENEKAL INFORMATION		Is the reach constricted by man-made features? (Question 8)
Riparian Code: RMC - 6	Location of data point: RMC - 6	Yes No 🔽
Reach Length:		Does the orientation of the riparian area allow for shading of the water resource at n summer? (Question 9)
Hydrologic Basin:	On-site: 🗸 Off-Site:	Yes No V Dominant vegetation layer within riparian area? (Question 10)
WATER RESOURCE INFORMATION		Woody vegetation Herbaceous vegetation Bare ground
Water Resource: Stream/River:	Width: 8 feet Width: feet Width: feet	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) $\rm Yes \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$
		Large woody debris in riparian area? (Question 15) Yes 🖊 No 🖳
Water present year-round: Yes 🖊 No 🔼 Are salmonids present in the adjacent water resource?	rce? Yes	Percent of water resource bordered by vegetated riparian area at least 30 feet wide?
Is the water resource listed for temperature on DEQ's 303(d) list:	.Q's 303(d) list: Yes No V] pment or human caused disturbance.
Within FEMA-mapped 100-year floodplain:	Yes No 🗸	<25% 🗾 25% - 75% 🔲 >75%
Mapped soil series: Yaquina loamy fine sand		How does the NRCS soil survey rank water erosion hazard of the dominant mapped the Riparian Area? (Question 5)
Adjacent Land Uses? (Check as many as needed)		low, slight moderate
Agriculture: Roads: Commercial/Indus.: Undeveloped:	`	vegetation at the top of bank (if defined) or
		Woody vegetation Herbaceous vegetation Bare ground
Woody vegetation (trees, shrubs, vines >1 meter)	Herbaceous vegetation (include trees, shrubs, vines <1 meter)	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6)
Douglas Fir	Grasses	Yes No 🔽
Sitka Spruce		֓֞֞֜֜֜֟֝֟֝֟֝֟֝֟֝֟ ֓֞֞֞֞֞֓֞֞֓֞֓֞֞֓֞֓֞֓֞֞֓֓֞֓֞֓֓֞֓
Red Alder Shore Pine		is woody vegetation (trees, surtues, vines) greater man't incert (5:2 teet) inga domina flood prone riparian area?
California Wax Myrtle		Yes No or no flood prone area present
Salal, Huckleberry		How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?
BlackDerry I meter = 3.2 feet		Manual Vegenment any act of the canaly plants are not all parts and the canal of th



Florence LWI & Riparian Inventory

RIPARIAN CODE RMC - 6.3

Date:	9/26/2010	Investigators: C. Lysdale	
Domina	ant tree species:	Western Red Cedar	
Pot	tential tree height	(PTH)/Actual Width of riparian area: 120/50L & 75R	_feet
PTH de	etermined by:	(Width measured horizontally from edge of water resource)	
	On-site vegetation	Reference site Code	

Photos RI	MC-6.3Sveg, RMC-6.3Ss	str ; RMC-6.3Nveg, RMC-6.3Nstr	
Гурісаl	Cross Section:		
	Stork	A CEARL SPINE	
PARK		A CEMIN DESERT A SPINE	HOMES -

MUNSER CREEK AT S.E. CONER FLORE, NORTH & SOUTH SIMPLAK



Riparian Characterization Form	rm	Average slo
T		<10:1 (10%
Florence LWI & Kiparian Inventory	017	Extent of in
CENEDATINEODMATION		<10%
GENERAL INFORMATION		Is the reach
Dinamion Codes DMC 63 South & North	Location of data point:	Ye
	ZINC - 0.0	Does the ori
Reach Length:		summer? (Q
Hydrologic Basin:	On-site: 🗸 Off-Site: 🗌	Ye Dominant v
WATER RESOURCE INFORMATION		Woody veg
Water Resource: Stream/River:	Width: 10 feet	Does woody
Lake/Pond:	Width: feet Width:	Ye
I.W. Wetland Code:	er in 'n indige kinde de keer de kommen de eerste een eerste keer de keer de kommen de keer de keer de keer de	Large wood
Water present violet round:		Ye
Les endiacent water rec	Nos Vose	Percent of v
mocal randa procedure are arrived commonwers are		>40%
As the water resource listed for temperature on DEQ's 303(d) list:	V's 303(d) list: Xes No V	Degree of d
Within FEMA-mapped 100-year floodplain:	Yes No 🗸	<259
Mapped soil series: Yaquina loamy fine sand		How does the
Adjacent Land Uses? (Check as many as needed)		une Kupan ta low, slig
		What is the
Commercial/Indus.: Undeveloped: Residential: Forestry:	7	Woody veg
Woody vegetation	Herbaceous vegetation	Are there fl
(trees, samps, vines >1 meter)	(include trees, sintups, vines < / ineter)	(www.dianous
Lodgepole Pine	Huckleberry	T .
Red Alder		Is woody ve
California Wax Myrtle		flood prone
		Ye
		Ном тапу
1 meter = 3.2 feet		Man than

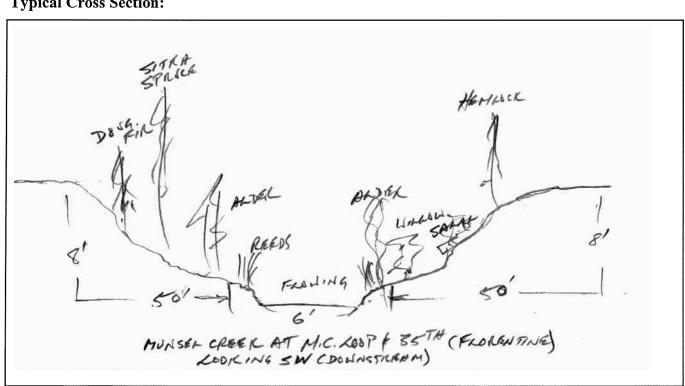
Average slope in the riparian area: (Question 1) <10:1 (10%) Extent of impervious surface within the riparian area. (Question 4) <10% 10% - 25% 1s the reach constricted by man-made features? (Question 8) Yes No	Does the orientation of the riparian area allow for shading of the water resource at midday in summer? (Question 9) Yes □ No ✓ (Shaded by canopy) Dominant vegetation layer within riparian area? (Question 10) Woody vegetation ✓ Herbaceous vegetation □ Bare ground □	Noes woody vegetation hang over the edge of the water? (Questions 11 & 14) Yes	ACS soil survey rank water erosion has at (Question 5) boderate Description of the top of bank (if the top of bank or edge of the beyond the top of bank or edge of the lion (trees, shrubs, vines) greater than rian area? No or no flood prone area present lattion layers (i.e. canopy, mid-story, graterical edge)
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Florence LWI & Riparian Inventory

RIPARIAN CODE RMC - 6.5

Date:	Date: 10/28/2010 Investigators: C. Lysdale)	
Dominai	nt tree species:	Red Alder		
Pote	ential tree height	(PTH)/Actual Width of riparian area:	65/50L & 50R	feet
		(Width measured horizontally from edge of water re	esource)	
PTH det	termined by:	_		
O	n-site vegetation	Reference site Code	e	
Commen	ıts:			
Photos RM	C-6.5Sveg, RMC-6.5Ss	tr		
Typical (Cross Section:			
	1			





Riparian Characterization Form	m.	Average slope in the riparian area: (Question 1)
Florence LWI & Riparian Inventory		Between 10:1 (10%) and 5:1 (20%) Le Lous surface within the riparian area
GENERAL INFORMATION		<10% L 10% - 25% L 10% - 25% L 10 25% L
Riparian Code: RMC-6.5	Location of data point:	Yes No V
Reach Length:		Does the ottentation of the riparian area anow for snatting of the water resolutions. Summer? (Question 9)
Hydrologic Basin:	On-site: 🗸 Off-Site: 🗌	Yes V No No Dominant vegetation layer within riparian area? (Question 19)
WATER RESOURCE INFORMATION		Woody vegetation Herbaceous vegetation Bare ground
Water Resource: Stream/River:	Width: 6 feet Width: 1 feet feet feet feet feet feet feet fe	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) $Yes \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$
		Large woody debris in riparian area? (Question 15)
Water present year-round: Yes [v] No		
Are salmonids present in the adjacent water resource?	Yes 🗸 No	>40%
Is the water resource listed for temperature on DEQ's 303(d) list:	i's 303(d) list: Yes No	Degree of development or human caused disturbance. (Question 19)
Within FEMA-mapped 100-year floodplain:	Yes No V	<25% 🗾 >75% 🔲 >75%
Mapped soil series: Yaquina loamy fine sand		How does the NRCS soil survey rank water erosion hazard of the dominant methe Riparian Area? (Question 5)
Adjacent Land Uses? (Check as many as needed)		low, slight moderate
Agriculture: Roads: Commercial/Indus:		vegetation at the top of bank (if defined) or
7		Woody vegetation
Woody vegetation (trees, shrubs, vines > 1 meter)	Herbaceous vegetation (include trees, shrubs, vines <1 meter)	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA m floodplain, etc.) beyond the top of bank or edge of the water resource? (Question
Douglas Fir	Salal	Yes No 🗸
Sitka Spruce		Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high d
Willow		flood prone riparian area?
		Yes \square No or no flood prone area present $\qquad \checkmark$
		How many vegetation layers (i.e. canopy, mid-story, groundcover) are present
1 meter = 3,2 feet		Toward to make a large of the contract of the

Left Right surface within the riparian area. (Question 4) 10% - 25%	Woody vegetation Merbaceous vegetation Bare ground Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6) Yes No V Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area? Yes No on no flood prone area present V How many vegetation layers (i.e. canopy, mid-story, groundcover) are present? More than 2 V 2 layers 1 layer or unvegetated 1 layer or unve
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Florence LWI & Riparian Inventory

RIPARIAN CODE RMC-6.7

Date:	3/25/2012		Investigators:	C. Lysda	le	· ·
Dominan	t tree species:	Douglas Fir				
Pote	ntial tree height	(PTH)/Actual	Width of riparia	area:	120/20	feet
DTU dot	ermined by:	(Width measured	horizontally from ed	ge of water re	esource)	
ł	n-site vegetation	ı 🔽	Reference site	Code	e	
			1			
Culverts			nd tall trees. Stree low and passa		topographical br	eak.
Cuiverts	at all G.V. Sile	et crossings ar	e iow and passa	ible by list	I.	
Photos RM	C-6.7Nveg, RMC6.7Sv	/eg, RMC-6.7Sstr				
Typical C	Cross Section:					
					2416	
		Days		HEN	1 FIL	
	·-	- N 62		1-000	/ \	
			LOW ST	46 .	1	
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		6 00	AST KILLAGI	4	ANTIA PH	



Florence LWI & Riparian Inventory

GENERAL INFORMATION	
	Location of data point:
Riparian Code: RMC-C side	RMC-6.7
Reach Length:	***************************************
Hydrologic Basin:	On-site: Off-Site:
Trydrologic Basin.	On-site.
WATER RESOURCE INFORMATION	
Water Resource: Stream/River:	Width: 5 feet
Lake/Pond:	Width:feet
Wetland:	Width:feet
LWI Wetland Code:	
Water present year-round: Yes N	No 🗍
Are salmonids present in the adjacent water reso	ource? Yes 🗸 No 📗
Is the water resource listed for temperature on D	EQ's 303(d) list: Yes No
Within FEMA-mapped 100-year floodplain:	Yes No 🗸
Mapped soil series: Yaquina loamy fine sand	<u> </u>
Adjacent Land Uses? (Check as many as needed)	
Agriculture: Road	
Commercial/Indus.: Undevelope	··· —
Residential: V Forestr	
Woody vegetation	Herbaceous vegetation
(trees, shrubs, vines >1 meter)	(include trees, shrubs, vines <1 meter)
Douglas Fir	Salal
Western Hemlock	Huckleberry
California Waxmyrtle	Rhododendron
4	

Average slope in the riparian area: (Question 1)
<10:1 (10%) Between 10:1 (10%) and 5:1 (20%) >5:1 (20%)
Extent of impervious surface within the riparian area. (Question 4)
<10% 🗸 10% - 25% 🗌 >25% 🦳
Is the reach constricted by man-made features? (Question 8)
Yes No 🗸
Does the orientation of the riparian area allow for shading of the water resource at midday in summer? (Question 9)
Yes V No N-S with heavy vegetation
Dominant vegetation layer within riparian area? (Question 10)
Woody vegetation Herbaceous vegetation Bare ground
Does woody vegetation hang over the edge of the water? (Questions 11 & 14)
Yes V No No
Large woody debris in riparian area? (Question 15)
Yes 🗸 No 🗌
Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16)
>40% <10% <10% 🖍
Degree of development or human caused disturbance. (Question 19)
<25% >75% >75%
How does the NRCS soil survey rank water crosion hazard of the dominant mapped unit in the Riparian Area? (Question 5)
low, slight moderate high, very high, severe
What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Question
Woody vegetation Herbaceous vegetation Bare ground
Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6)
Yes No 🗸
Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area?
Yes No or no flood prone area present
How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?
More than 2 2 layers 1 layer or unvegetated



Florence LWI & Riparian Inventory

RIPARIAN CODE RMC-6.8S

Date:	3/25/2012	Investigators: C. Lysdal	9	
Dominar	it tree species:	Sitka Spruce		
Pote	ntial tree height	(PTH)/Actual Width of riparian area: (Width measured horizontally from edge of water r	120/50N,15S esource)	feet
	ermined by: n-site vegetatior		,	
Commen		tion is south side of Florentine-CV borde		
		n a wooden "flume" with nearby structures tion as stream passes through a resident		
	Cross Section:	6.8OtrNveg, RMC-6.8OtrNflum		
		STANGEL SIDE CHANNEL ASNOWLE MINSEL SIDE CHANNEL O BORDER TRANSCE A BORDER TRANS	STENETINE JEV	



Florence LWI & Riparian Inventory

CENERAL INFORMATION				
GENERAL INFORMATION				
Location of data point:				
Riparian Code: RMC-C side RMC-6.8S				
14110 0.00	-			
Reach Length:				
Hydrologic Basin: On-site: Off-Site:				
	·			
WATER RESOURCE INFORMATION				
Water Resource: Stream/River: Width: 4 feet				
Lake/Pond: Width: feet Width:				
LWI Wetland Code:				
Water present year-round: Yes No				
Are salmonids present in the adjacent water resource? Yes V No				
Is the water resource listed for temperature on DEQ's 303(d) list: Yes No.	'			
Within FEMA-mapped 100-year floodplain: Yes No				
Mapped soil series: Yaquina loamy fine sand	_			
Adjacent Land Uses? (Check as many as needed)				
Agriculture: Roads:				
Commercial/Indus.: Koads: Commercial/Indus.: Undeveloped:				
Residential: Forestry:				
Woody vegetation Herbaceous vegetation				
(trees, shrubs, vines >1 meter) (include trees, shrubs, vines <1 meter)				
Douglas Fir Salal				
Sitka Spruce Rhododendron				

Average slope in the riparian area: (Question 1)
<10:1 (10%) Between 10:1 (10%) and 5:1 (20%) >5:1 (20%)
Extent of impervious surface within the riparian area. (Question 4)
<10% 🗾 10% - 25% 🔲 >25% 🔲
Is the reach constricted by man-made features? (Question 8)
Yes 🗸 No 🦳
Does the orientation of the riparian area allow for shading of the water $$ resource at midday in summer? (Question 9)
Yes No 🗸
Dominant vegetation layer within riparian area? (Question 10)
Woody vegetation Herbaceous vegetation Bare ground
Does woody vegetation hang over the edge of the water? (Questions 11 & 14)
Yes No No
Large woody debris in riparian area? (Question 15)
Yes No 🗸
Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16)
>40% 10% - 40% <10% 🗸
Degree of development or human caused disturbance. (Question 19)
<25% >75% >75%
How does the NRCS soil survey rank water crosion hazard of the dominant mapped unit in the Riparian Area? (Question 5)
low, slight moderate high, very high, severe
What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Question
Woody vegetation Herbaceous vegetation Bare ground
Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6)
Yes No 🗸
Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area?
Yes No or no flood prone area present
How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?
More than 2 2 layers 1 layer or unvegetated

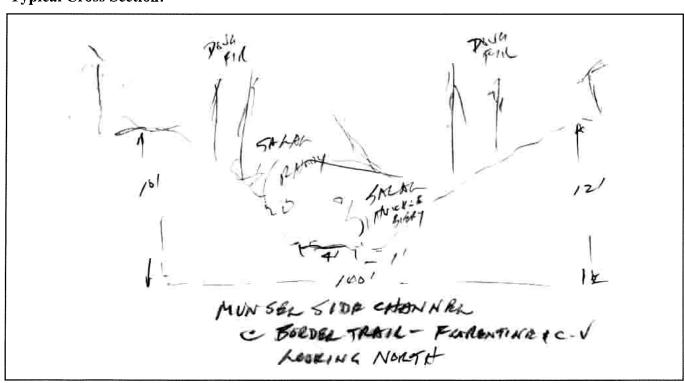


Florence LWI & Riparian Inventory

RIPARIAN CODE RMC-6.8N

Date:	3/25/2012	Investigators: C. Lysdalo	9	
Dominant	tree species:	Douglas Fir		
Poten	tial tree height	(PTH)/Actual Width of riparian area:	120/50N,15S feet	
		(Width measured horizontally from edge of water r	esource)	
PTH determined by: On-site vegetation Reference site Code				
Comments	s: Locat	ion is north side of Florentine-CV border	· trail.	
Heavy vegetation, tall trees, and downed logs/woody debris.				
Stream is	s well shaded b	y woody and herbaceous vegetation at	top of bank.	
Photos RMC-	-6.8Nveg(Flo) & RMC-	6.8Nstr(Flo)		

Typical Cross Section:





Florence LWI & Riparian Inventory

A STOCK CONTROL OF THE PROPERTY OF THE PROPERT		
GENERAL INFORMATION		
	T (* 63.4.4.4.	
Planta Gala PMC Calda	Location of data point:	
Riparian Code: RMC-C side	RMC-6.8N	
Doodh Longth		
Reach Length:	***************************************	
Hydrologic Basin:	On-site: Off-Site:	
III di diogle Busin.	On-site,	
WATER RESOURCE INFORMATION		
Water Resource: Stream/River:	Width: 4 feet	
Lake/Pond:		
Wetland:	Width:feet Width:feet	
уу епици:	AA Yortu:	
LWI Wetland Code:		
Water present year-round: Yes No		
Are salmonids present in the adjacent water resou	rce? Yes 🗸 No	
Is the water resource listed for temperature on DE	Q's 303(d) list: Yes No	
Within FEMA-mapped 100-year floodplain:	Yes No 🗸	
Mapped soil series: Yaquina loamy fine sand		
Adjacent Land Uses? (Check as many as needed)		
Agriculture: Roads:		
Commercial/Indus.: Undeveloped:	─	
Residential: V Forestry:		
Woody vegetation	Herbaceous vegetation	
(trees, shrubs, vines >1 meter)	(include trees, shrubs, vines <1 meter)	
Douglas Fir	Salal	
Sitka Spruce	Rhododendron	
Red Alder	English Ivy	
California Waxmyrtle	Huckleberry	
	1	

	Average slope in the riparian area: (Question 1)
	<10:1 (10%) Between 10:1 (10%) and 5:1 (20%)
E	Extent of impervious surface within the riparian area. (Question 4)
	<10% 🔽 10% - 25% 🗌 >25% 🦳
I	s the reach constricted by man-made features? (Question 8)
	Yes No 🗸
	Does the orientation of the riparian area allow for shading of the water resource at midday in ummer? (Question 9)
	Yes 🗸 No 🦳
I	Dominant vegetation layer within riparian area? (Question 10)
	Woody vegetation Herbaceous vegetation Bare ground
I	Ooes woody vegetation hang over the edge of the water? (Questions 11 & 14)
	Yes V No No
I	Large woody debris in riparian area? (Question 15)
	Yes 🗸 No 🗌
ŀ	Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16)
	>40% 10% - 40% 🔽
I	Degree of development or human caused disturbance. (Question 19)
	<25% >75% >75%
	How does the NRCS soil survey rank water crosion hazard of the dominant mapped unit in he Riparian Area? (Question 5)
	low, slight moderate high, very high, severe
١	What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Question
	Woody vegetation Herbaceous vegetation Bare ground
	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year loodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6)
	Yes No 🗸
	s woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the lood prone riparian area?
	Yes No or no flood prone area present
I	How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?
	More than 2 2 layers 1 layer or unvegetated

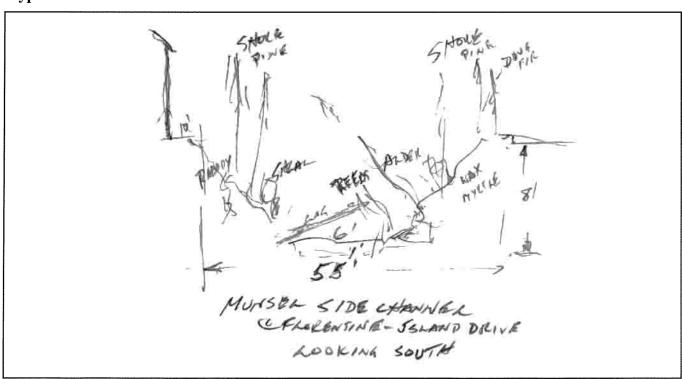


Florence LWI & Riparian Inventory

RIPARIAN CODE RMC-6.9

Date:	3/25/2012	Investigators: C. Lysdale				
Dominan	t tree species:	Shore Pine				
Poten	itial tree height	(PTH)/Actual Width of riparian area:	50/25 feet			
		(Width measured horizontally from edge of water re	source)			
PTH dete	PTH determined by:					
On	ı-site vegetation	Reference site Code				
Comment	ts: Oper	vegetation/brushy reeds at top of bank.				
Tall trees	s and downed	ogs + woody debris in riparian area.				
Reeds a	nd grasses at t	op of bank on north side of bridge.				
Photos RMC	C-6.9veg & RMC-6.9st	ſ				
	.ss - 18 still state manu			***************************************		

Typical Cross Section:





Florence LWI & Riparian Inventory

GENERAL INFORMATION				
I continued data points				
Riparian Code: RMC-C side	Location of data point: RMC-6.9			
Alparian Code: Nivo-C side	RIVIC-0.9			
Reach Length:	***			
Hydrologic Basin:	On-site: Off-Site:			
WATER RESOURCE INFORMATION				
Water Resource: Stream/River: Lake/Pond:	Width: 6 feet Width: feet			
Wetland:	Width:feet			
Water present year-round: Yes No				
Are salmonids present in the adjacent water resource? Yes V				
Is the water resource listed for temperature on DEQ's 303(d) list: Yes No				
Within FEMA-mapped 100-year floodplain: Yes No				
Mapped soil series: Yaquina loamy fine sand				
Adjacent Land Uses? (Check as many as needed)				
Adjacent Land Uses? (Check as many as needed)				
Adjacent Land Uses? (Check as many as needed) Agriculture: Roads: Commercial/Indus.: Undeveloped: Residential:	<u>'</u>			
Agriculture: Roads: Commercial/Indus.: Undeveloped:	Herbaceous vegetation			
Agriculture: Roads: Commercial/Indus.: Undeveloped: Residential: Forestry:	, 			
Agriculture: Roads: Commercial/Indus.: Undeveloped: Residential: Forestry: Woody vegetation	Herbaceous vegetation			
Agriculture: Commercial/Indus.: Residential: Woody vegetation (trees, shrubs, vines > 1 meter)	Herbaceous vegetation (include trees, shrubs, vines <1 meter)			
Agriculture: Commercial/Indus.: Residential: Woody vegetation (trees, shrubs, vines > 1 meter) Shore Pine Roads: Undeveloped: Forestry:	Herbaceous vegetation (include trees, shrubs, vines <1 meter) Salal			
Agriculture: Commercial/Indus.: Residential: Woody vegetation (trees, shrubs, vines > 1 meter) Shore Pine Douglas Fir	Herbaceous vegetation (include trees, shrubs, vines <1 meter) Salal Rhododendron			
Agriculture: Commercial/Indus.: Residential: Woody vegetation (trees, shrubs, vines > 1 meter) Shore Pine Douglas Fir Red Alder	Herbaceous vegetation (include trees, shrubs, vines <1 meter) Salal Rhododendron Huckleberry			
Agriculture: Commercial/Indus.: Residential: Woody vegetation (trees, shrubs, vines > 1 meter) Shore Pine Douglas Fir Red Alder	Herbaceous vegetation (include trees, shrubs, vines <1 meter) Salal Rhododendron Huckleberry Reeds			

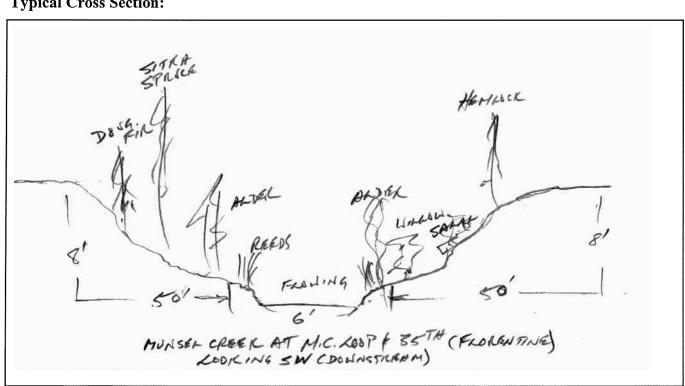
Average slope in the riparian area: (Question 1)
<10:1 (10%) Between 10:1 (10%) and 5:1 (20%) >5:1 (20%)
Extent of impervious surface within the riparian area. (Question 4)
<10% 🗸 10% - 25% 🗌 >25% 🗍
Is the reach constricted by man-made features? (Question 8)
Yes No 🗸
Does the orientation of the riparian area allow for shading of the water resource at midday in summer? (Question 9)
Yes No 🗸
Dominant vegetation layer within riparian area? (Question 10)
Woody vegetation Herbaceous vegetation Bare ground
Does woody vegetation hang over the edge of the water? (Questions 11 & 14)
Yes 🗸 No 🗌
Large woody debris in riparian area? (Question 15)
Yes 🗸 No 🦳
Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16)
>40%
Degree of development or human caused disturbance. (Question 19)
<25%
How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5)
low, slight moderate high, very high, severe
What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Question
Woody vegetation Herbaceous vegetation Bare ground
Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6)
Yes No 🗸
Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area?
Yes No or no flood prone area present
How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?
More than 2 2 layers 1 layer or unvegetated



Florence LWI & Riparian Inventory

RIPARIAN CODE RMC - 6.5

Date:	10/28/2010	Investigators: C. Lysdale)	
Dominai	nt tree species:	Red Alder		
Pote	ential tree height	(PTH)/Actual Width of riparian area:	65/50L & 50R	feet
		(Width measured horizontally from edge of water re	esource)	
PTH det	termined by:	_		
O	n-site vegetation	Reference site Code	e	
Commen	ıts:			
Photos RM	C-6.5Sveg, RMC-6.5Ss	tr		
Typical (Cross Section:			
	1			





Riparian Characterization Form	m.	Average slope in the riparian area: (Question 1)
Florence LWI & Riparian Inventory		Between 10:1 (10%) and 5:1 (20%) Le Lous surface within the riparian area
GENERAL INFORMATION		<10% L 10% - 25% L 10% - 25% L 10 25% L
Riparian Code: RMC-6.5	Location of data point:	Yes No V
Reach Length:		Does the ottentation of the riparian area anow for snatting of the water resolutions. Summer? (Question 9)
Hydrologic Basin:	On-site: 🗸 Off-Site: 🗌	Yes V No No Dominant vegetation layer within riparian area? (Question 19)
WATER RESOURCE INFORMATION		Woody vegetation Herbaceous vegetation Bare ground
Water Resource: Stream/River:	Width: 6 feet Width: 1 feet feet feet feet feet feet feet fe	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) $Yes \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$
		Large woody debris in riparian area? (Question 15)
Water present year-round: Yes [v] No		
Are salmonids present in the adjacent water resource?	Yes 🗸 No	>40%
Is the water resource listed for temperature on DEQ's 303(d) list:	i's 303(d) list: Yes No	Degree of development or human caused disturbance. (Question 19)
Within FEMA-mapped 100-year floodplain:	Yes No V	<25% 🗾 >75% 🔲 >75%
Mapped soil series: Yaquina loamy fine sand		How does the NRCS soil survey rank water erosion hazard of the dominant methe Riparian Area? (Question 5)
Adjacent Land Uses? (Check as many as needed)		low, slight moderate
Agriculture: Roads: Commercial/Indus:		vegetation at the top of bank (if defined) or
7		Woody vegetation
Woody vegetation (trees, shrubs, vines > 1 meter)	Herbaceous vegetation (include trees, shrubs, vines <1 meter)	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA m floodplain, etc.) beyond the top of bank or edge of the water resource? (Question
Douglas Fir	Salal	Yes No 🗸
Sitka Spruce		Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high d
Willow		flood prone riparian area?
		Yes \square No or no flood prone area present $\qquad \checkmark$
		How many vegetation layers (i.e. canopy, mid-story, groundcover) are present
1 meter = 3,2 feet		Toward to make a large of the contract of the

Left Right surface within the riparian area. (Question 4) 10% - 25%	Woody vegetation Merbaceous vegetation Bare ground Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6) Yes No V Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area? Yes No on no flood prone area present V How many vegetation layers (i.e. canopy, mid-story, groundcover) are present? More than 2 V 2 layers 1 layer or unvegetated 1 layer or unve
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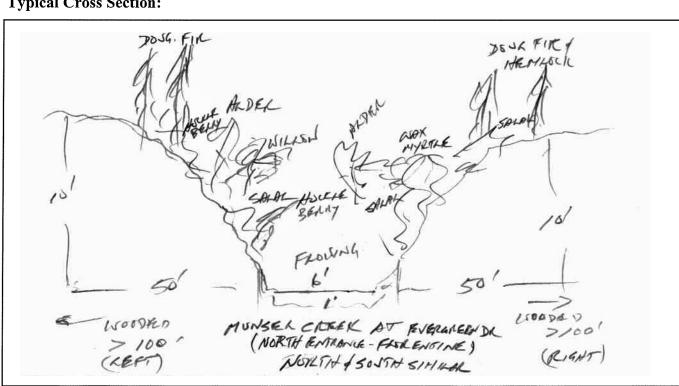


Florence LWI & Riparian Inventory

RIPARIAN CODE RMC - 6.6

Date:	9/26/2010	Investigators: C. Lysdale	-
Dominan	it tree species:	Douglas Fir	
Pote	ntial tree height	(PTH)/Actual Width of riparian area: 120/50L & 50R	feet
		(Width measured horizontally from edge of water resource)	
ł	ermined by: n-site vegetation	Reference site Code	-
Commen	ts:		
Photos RMC	C-6.6Sveg, RMC-6.6Sst	r; RMC-6.6Nveg, RMC-6.6Nstr	

Typical Cross Section:





Riparian Characterization Form		
Florence LWI & Riparian Inventory		<10:1 (10%) 🗸 Between 10:1 (10%) and 5:1 (20%) 🔃 >5:1 (20%)
		Extent of impervious surface within the riparian area. (Question 4)
GENERAL INFORMATION		ricted by man-made features? (Ouest
Location Riparian Code: RMC-6.6 South & North	Location of data point:	Yes No V
Reach Length:		summer? (Question 9)
Hydrologic Basin: On-site:	:: 🗸 Off-Site: 🗌	Yes 🖊 No 🗔 Dominant vegetation layer within riparian area? (Question 10)
WATER RESOURCE INFORMATION		Woody vegetation
7	9	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) Yes 🗹 No
Wedland: Width:	Jeet	ris in
Water present year-round: Yes V No	-	Yes 🗸
ie adjacent water re	Yes 🗸 No	Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16) >40% [~]
Is the water resource listed for temperature on DEQ's 303(d) list:	(d) list: Yes No 🗸	Degree of development or human caused disturbance. (Question 19)
Within FEMA-mapped 100-year floodplain: Yes	No (K	<25% v >75%
Mapped soil series: Yaquina loamy fine sand		How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5)
Adjacent Land Uses? (Check as many as needed)		low, slight moderate
Agriculture: Roads: Tradescolored: V		What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Quest
Forestry:		Woody vegetation
Woody vegetation (trees, shrubs, vines >1 meter)	Herbaceous vegetation (include trees, shrubs, vines <1 meter)	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6)
Douglas Fir Salal		Yes No 7
emlock	Huckleberry	
Red Alder		Is woody vegetation (trees, shrubs, vines) greater than 1 meter (5.2 feet) high dominant in the flood mone ringrian grea?
California Wax Myrtie		Yes No or no flood prome area present
Shore Pine		
1 meter = 3.2 feet		Mount than y regeration rayers (nec. canopy), man-story, groundcores, as e.g. scene.

Yes 🗹 No 🗔 Dominant vegetation layer within riparian area? (Question 10)	Woody vegetation	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) Yes No No No No No No No No No N	Large woody debris in riparian area? (Question 15) Yes 🖊 No	Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16) >40% \square \qquare 10% - 40% \square \qquare 10\qquare \qquare 10\qquare \qquare \qquare \qquare \qquare \qquare \qquare \qquare \qquare \qqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqq	Degree of development or human caused disturbance. (Question 19) <25% 🖊 25% - 75% 🔲 >75%	How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5) low slight moderate	on at the top of Herbaceous ve	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6) Yes \text{No } \text{V}	Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area? Yes No or no flood prone area present	How many vegetation layers (i.e. canopy, mid-story, groundcover) are present? More than 2 2 2 2 2 \qu
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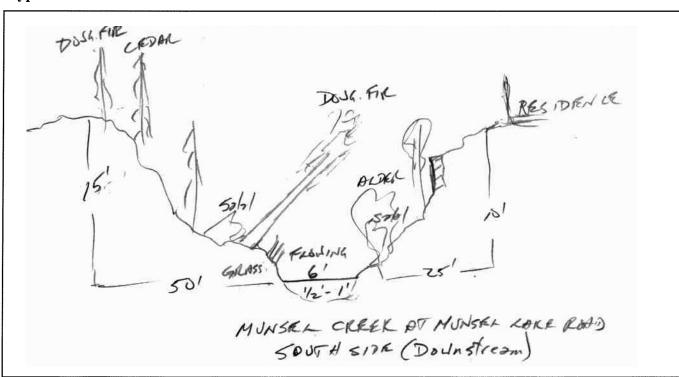


Florence LWI & Riparian Inventory

RIPARIAN CODE RMC - 7 South

Date:	9/14/2010	Investigators: C. Lysdale	
Dominai	nt tree species:	Douglas Fir	
Pote	ential tree height	(PTH)/Actual Width of riparian area: 120/50L & 25R (Width measured horizontally from edge of water resource)	feet
1	ermined by: n-site vegetation		
Commer	ıts: Smal	ll retaining wall on right well above OHW.	
Photos RM	C-7S veg & RMC-7S str		

Typical Cross Section:





Riparian Characterization Form	in the riparian area: (Question 1)
Florence LWI & Riparian Inventory	Between 10:1 (10%) and 5:1 (20%) ious surface within the riparian area
GENERAL INFORMATION	<10% L 10% - 25% L >25% L Is the reach constricted by man-made features? (Question 8)
Riparian Code: RMC - 7 South RMC - 7	Yes No V Does the orientation of the rinarian area allow for shading of the water resource at 1
Reach Length:	summer? (Question 9)
Hydrologic Basin: On-site: V Off-Site:	Yes No 🗾 Dominant vegetation layer within riparian area? (Question 10)
WATER RESOURCE INFORMATION	Woody vegetation Herbaceous vegetation Bare ground
Water Resource: Stream/River: Lake/Pond: Width: 6 feet Feet Wetland: Feet Feet Width: Feet Feet Feet Feet Feet Feet Feet Fee	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) Yes No
	Large woody debris in riparian area? (Question 15) Yes 🗸 No
Water present year-round: Yes 🗸 No 🗌 Are salmonids present in the adjacent water resource? Yes 🗹 No	resource b
Is the water resource listed for temperature on DEQ's 303(d) list:	No 🗾 Degree of development or human caused disturbance. (Question 19)
Within FEMA-mapped 100-year floodplain: Yes No	<25% — 25% - 75% — >75% —
Mapped soil series: Yaquina loamy fine sand	How does the NRCS soil survey rank water crosion hazard of the dominant mapped the Riparian Area? (Question 5)
Adjacent Land Uses? (Check as many as needed)	low, slight moderate
Agriculture: Roads: Commercial/Indus.: Undeveloped:	vegetation at the top of bank (if defined) or
2	Woody vegetation Herbaceous vegetation Bare ground
Woody vegetation Woody vegetation (include trees, shrubs, vines <1 meter) (include trees, shrubs, vines <1 meter)	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6)
Douglas Fir Grasses	Yes No 🗸
Western Red Cedar Red Alder	Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high domina
Salai	flood prone riparian area?
	Yes No or no flood prone area present
	How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?
1 water - 2 2 Cast	

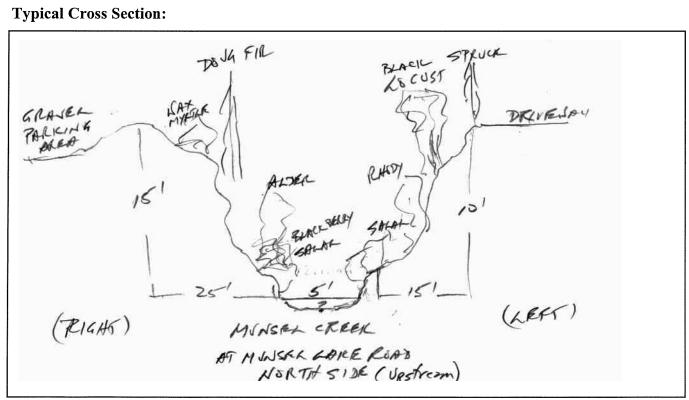
Extent of impervious surface within the riparian area. (Question 4) <10% 10% - 25% >25% >25%	Is the reach constricted by man-made features? (Question 8) Yes \text{No } \text{V}	Does the orientation of the riparian area allow for shading of the water $$ resource at midday in summer? (Question 9)	Yes No 🗸	Dominant vegetation layer within riparian area? (Question 10)	Woody vegetation Woody vegetation Bare ground	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) Yes 🗾 No 🗌	Large woody debris in riparian area? (Question 15) Yes 🗾 No	Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16) >40% \[\bullet \] 10% - 40% \[\bullet \] < 10% \[\bullet \]	Degree of development or human caused disturbance. (Question 19)	<255% 🗾 25% - 75% 🔲 >75%	How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5)	low, slight moderate	What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Question 3)	areas (adjacent flat areas, depressions, swa id the top of bank or edge of the water reson No 🔽	Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area?	Yes No or no flood prone area present	How many vegetation layers (i.e. canopy, mid-story, groundcover) are present? More than 2 🗾 2 layers 1 layer or unvegetated	
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Florence LWI & Riparian Inventory

RIPARIAN CODE RMC - 7 North

Date:	9/14/2010	Investigators: C. Lysdal	e	
Domina	nt tree species:	Douglas Fir/Sitka Spruce		
Pote	ential tree height	(PTH)/Actual Width of riparian area: (Width measured horizontally from edge of water r	120/15L & 25R	_ feet
1	termined by: In-site vegetation		,	_
Comme	nts:			
Photos RM	//////////////////////////////////////	tr	· · · · · · · · · · · · · · · · · · ·	





Riparian Characterization Form	PHS	Average slope in the riparian area: (Question 1)
Florence LWI & Riparian Inventory		<10:1 (10%) Between 10:1 (10%) and 5:1 (20%) >5:1 (20%)
		Extent of impervious surface within the riparian area, (Question 4) <10% 🖊 10% - 25% 🔲 >25% 🗍
GENERAL INFORMATION		nstrictec
Riparian Code: RMC - 7 North RMC	oint: RMC - 7	Yes No 🗸 No 🗸 Does the orientation of the rinarian area allow for shading of the water resource at m
Reach Length:		summer? (Question 9)
Hydrologic Basin: On-site: 🗸 O	Off-Site:	Yes No 🗾 No 🗾 Dominant vegetation layer within riparian area? (Question 10)
WATER RESOURCE INFORMATION		Woody vegetation Herbaceous vegetation Bare ground
Water Resource: Stream/River: Lake/Pond: Width: Wedand:	feet feet feet	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) $${\rm Yes} {\slash\hspace{-0.4em} \slash\hspace{-0.4em} \slash$
		Large woody debris in riparian area? (Question 15) Yes No
Water present year-round: Yes V No	O _N	Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (
Is the water resource listed for temperature on DEQ's 303(d) list:	Yes No V	Lopment or human caused disturbance.
Within FEMA-mapped 100-year floodplain: Yes	No	<25% 🗸 >75% 🔲 >75%
Mapped soil series: Yaquina loamy fine sand		How does the NRCS soil survey rank water erosion hazard of the dominant mapped the Riparian Area? (Ouestion 5)
Adjacent Land Uses? (Check as many as needed)	***************************************	low, slight moderate
Agriculture: Roads: V Commercial/Indus.: Undeveloped:	h.	fined) or
<u> </u>		Woody vegetation Herbaceous vegetation 🗸 Bare ground
Woody vegetation Herr (trees, shubs, vines >1 meter) (include tree	Herbaceous vegetation (include trees, shrubs, vines <1 meter)	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6)
Douglas Fir		Yes No V
Sitka Spruce	the shape and th	
Red Alder		Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high domina
Black Locust California Wax Myrtle		Wood profe riparian area: Yes No or no flood prone area present
Rhododendron		Construction one (automate prime and appears are the second points)
Salal, Blackberry		How many vegetation layers (i.e. canopy, mid-story, groundcover) are present:
		200

As the Feach constricted by man-made leatures? (Question 8) Yes \(\simeq \text{No} \subseteq \) Does the orientation of the riparian area allow for shading of the water resource at midday in summer? (Question 9) Yes \(\simeq \text{No} \subseteq \simeq \) Dominant veretation layer within riparian area? (Question 10)	Woody vegetation	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) Yes 🗾 No 🔃	Large woody debris in riparian area? (Question 15) Yes \[No \[\subseteq \]	Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16) >40%	Degree of development or human caused disturbance. (Question 19) $<25\%$ \checkmark	How does the NRCS soil survey rank water crosion hazard of the dominant mapped unit in the Riparian Area? (Question 5) low, slight moderate	egetation at the top of Herbaceous ve	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6) Yes \to V	Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area? Yes \bigcup No or no flood prone area present	How many vegetation layers (i.e. canopy, mid-story, groundcover) are present? More than 2 🗾 2 layers 1 layer or unvegetated	
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Florence LWI & Riparian Inventory

RIPARIAN CODE RMC-7.5

Date:	3/28/2011	Investigators: C. Lysdale	
Domina	it tree species:	Douglas Fir	
PTH det	ntial tree height ermined by: n-site vegetation	(Width measured horizontally from edge of water resource) Reference site Code	feet
Commen			
Photos			
Typical	Cross Section:		
	251	MUNSEL LAKE BORT LAUNCH HOKING WEST	



Riparian Characterization Form	m.	in the riparian area: (Question 1)
Plorongo I W. & Dinarion Invonto	Alexander	<10:1 (10%) Between 10:1 (10%) and 5:1 (20%) >5:1 (20%)
Fibrence LW1 & Niparian inventory		Extent of impervious surface within the riparian area. (Question 4)
GENERAL INFORMATION		ricted by man-made features? Onest
Riparian Code: RMC-D1	Location of data point:	Yes No V
Reach Length:		Does the Orientation of the Tiparian area anow for shaung of the water resource at mituary in summer? (Question 9)
Hydrologic Basin:	On-site: 🗸 Off-Site: 🗌	Yes No V Dominant vegetation layer within riparian area? (Question 10)
WATER RESOURCE INFORMATION		Woody vegetation [
Water Resource: Stream/River: Lake/Pond:	Width: feet Width: feet State.	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) $Yes \ \ \square \qquad No \ \ \square$
		ris in _
Water present year-round: Yes 🗸 No		Yes V NO
Are salmonids present in the adjacent water resource?	ie? Yes 🗸 No	February Market Lessure Bonuereu by Pegerateu riparian area ar reast 50 feet white: (Aussiron 10, 240%
Is the water resource listed for temperature on DEQ's 303(d) list:	v's 303(d) list: Yes No [v]	Degree of development or human caused disturbance. (Question 19)
Within FEMA-mapped 100-year floodplain:	Yes No C	<25% 35% - 75% 🗸 >75%
Mapped soil series: Yaquina loamy fine sand/Waldport fine sand, 0-12% slopes	aldport fine sand, 0-12% slopes	How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5)
Adjacent Land Uses? (Check as many as needed)		low, slight moderate
Agriculture: Roads:		What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Ques
Residential: Forestry:		Woody vegetation Herbaceous vegetation
Woody vegetation (trees, shrubs, vines >1 meter)	Herbaceous vegetation (include trees, shrubs, vines <1 meter)	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6)
Douglas Fir	Salal	Yes No 🗸
Sitka Spruce	Huckleberry	Ts woody vegetation (trees shruks vines) greater than I meter (3.2 feet) high dominant in the
Ked Alder Shore Pine		flood prone riparian area?
Wasmyrtle		Yes No or no flood prone area present
		How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?
1 mater = 2 2 feat		



Florence LWI & Riparian Inventory

RIPARIAN CODE RMC-7.7

Date:	3/28/2011		Investigators: C. Ly	ysdale	
Dominan	t tree species:	Shore Pine			
PTH dete	ntial tree height ermined by: n-site vegetation	(Width measured	Width of riparian are horizontally from edge of Reference site	***************************************	feet
Commen	ts:				
Photos Typical C	Cross Section:				
*	1-20 M	MUNISEL A	one I	SHORE PINE LIDXMI	AW.



Riparian Characterization Form	T C C C C C C C C C C C C C C C C C C C	Average slope in the riparian area: (Question 1)
FISHER O Director Lances		<10:1 (10%) Between 10:1 (10%) and 5:1 (20%) >5:1 (20%)
Florence LWI& Kiparian inventory	V	Extent of impervious surface within the riparian area. (Question 4)
GENERAL INFORMATION		I 27.0 = 25.70 [
Loo Rinarian Code: RMC-D1	Location of data point:	Yes No V
		Does the orientation of the riparian area allow for shading of the water $$ resource at midday in summer? (Question 9)
Hydrologic Basin: Munsel Creek On.	On-site: 🗸 Off-Site:	Yes No V
WATER RESOURCE INFORMATION		Woody vegetation 🖊 Herbaceous vegetation 🔲 Bare ground
Water Resource: Stream/River: Wi	Width: feet Width:	Does woody vegetation hang over the edge of the water? (Questions 11 & 14)
]
- (-		Lange woody uchirs in riparian area: (Question 13) Yes [
Water present year-round: Yes 🗸 No	[<u>]</u>	Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16)
Are salmonids present in the adjacent water resource?	Yes [>40% 10% - 40% 🗸 <10%
As the water resource listed for temperature on DEQ's 303(d) list:	303(d) list: Yes No V	Degree of development or human caused disturbance. (Question 19)
Within FEMA-mapped 100-year floodplain: Yes	No N	<25% \bigcup 25% - 75% \bigcup \bigcup >75% \bigcup
Mapped soil series:		How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Ouestion 5)
Adjacent Land Uses? (Check as many as needed)		low, slight moderate 🔽 high, very high, severe
		What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Quest
Commercial/Indus.: Undeveloped: Residential: V Forestry:		Woody vegetation Herbaceous vegetation Bare ground
Woody vegetation (trees shurks vines >1 meter)	Herbaceous vegetation (include trees, shrubs, vines <1 meter)	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6)
	Salal	Yes
Waxmyrtle		
		Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 teet) high dominant in the flood prone riparian area?
		Yes No or no flood prone area present
		How many vegetation layers (i.e. canony, mid-story, groundcover) are present?
1 mater - 2 3 feat		TOTAL MINISTER AND

Yes No Z Dominant vegetation layer within riparian area? (Question 10)	Woody vegetation 🖊 Herbaceous vegetation	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) Yes \text{No \(\sqrt{\eqrt{\sq}}}}}}}}} \end{\sqrt{\sq}}}}}}}}}}}} \end{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sq}}}}}}}}}}} \end{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sq}}}}}}}}} \end{\sqrt{\sqrt{\sqrt{\sq}}}}}}}} \end{\sqit{\sqrt{\sq}}}}}} \end{\sqrt{\sq}}}}	Large woody debris in riparian area? (Question 15) Yes 🗾 No	Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16) $> 40\%$ \square 10% - 40% \square $< 10\%$	Degree of development or human caused disturbance. (Question 19) $<25\%$ $\boxed{}$ $>75\%$ $\boxed{}$	How does the NRCS soil survey rank water crosion hazard of the dominant mapped unit in the Riparian Area? (Question 5) low, slight moderate	What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Question 3) Woody vegetation	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6) Yes \times \text{No} \times	Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area? Yes \sumset \sumset \text{No or no flood prone area present} \sumset \sums	How many vegetation layers (i.e. canopy, mid-story, groundcover) are present? More than 2 2 2 2 2 2 2 2 2 2 2 2 \qu
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Florence LWI & Riparian Inventory

RIPARIAN CODE RMC - 8 South

Date:	9/20/2010	Investigators: C. Lysdale	-
Dominar	it tree species:	Douglas Fir	
PTH det	ntial tree height ermined by: n-site vegetation	(PTH)/Actual Width of riparian area: 120/120L & 80R (Width measured horizontally from edge of water resource) Reference site Code	feet
Commen			
	C-8Sveg, RMC-8Sstr		
I RE	HEMINOCH HEMINOCH FILL TO 120	ALDER WATER EILYS LAKE SALAL S	KIK NO 1



Riparian Characterization Form	orm	Average slope in the riparian area: (Question 1)
Florence LWI & Riparian Inventory	TOIL	Between
GENERAL INFORMATION		<10%
Rinarian Code: RMC-8 South	Location of data point: PMC - 8	Yes No V
		Does the orientation of the riparian area allow summer? (Question 9)
Hydrologic Basin:	On-site: 🗸 Off-Site:	Yes No v (Shaded by Dominant vegetation layer within riparian area
WATER RESOURCE INFORMATION		Woody vegetation
Water Resource: Stream/River:	30	Does woody vegetation hang over the edge of the Yes 🗹 No
Wetland:	Width:feet	Large woody debris in riparian area? (Question Yes
Water present year-round: Yes V No	No Xes \(\nabla \)	resource b
Is the water resource listed for temperature on DEQ's 303(d) list:	Yes [>40% \[\sqrt{10} \] Degree of development or human caused distured to the control of the contro
Within FEMA-mapped 100-year floodulain:	Yes No 7	<25% 🗾
Mapped soil series: Netarts fine sand, 3-12% slopes		How does the NRCS soil survey rank water ero
Adjacent Land Uses? (Check as many as needed)		low, slight moderate
Commercial/Indus.: Undeveloped: Residential: A Foresetter	d: S:	What is the dominant vegetation at the top of b Woody vegetation
dy vegetation		Are there flood prone areas (adjacent flat area floodnlain etc.) hevond the ton of hank or edec
(trees, snribs, vines >1 meter) Douglas Fir	(include trees, surubs, vines <1 meter)	No Constitution of the No.
Western Hemlock	Grasses	
Red Alder		Is woody vegetation (trees, shrubs, vines) great flood prone riparian area?
California wax Myrite Rhododendron		Yes V No or no flood prone area pre
		How many vegetation layers (i.e. canopy, mid-s
1 meter = 3.2 feet		More than 2 Javers

<10:1 (10%) Between 10:1 (10%) and 5:1 (20%)	Is the reach constricted by man-made features? (Question 8) Yes \text{No } \text{\sigma}	Does the orientation of the riparian area allow for shading of the water $\mbox{resource}$ at midday in summer? (Question 9)	Yes No V (Shaded by canopy) Dominant veretation laver within riparian area? (Ouestion 10)	Woody vegetation	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) Yes 🖊 No	Large woody debris in riparian area? (Question 15) Yes 🖊 No	Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16) >40% \(\sqrt{\sq}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}	pment or human caused disturbance.	425% 25% 25% 25% 25% 25% 25% 26% 26% 26% 26% 26% 26% 26% 26% 26% 26	the Ktparian Area? (Question 3) low, slight moderate i	What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Question 3) Woody vegetation	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6) Yes $\begin{cal} \end{cal}$	Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area? Yes [\overline{\sigma}] No or no flood prone area present	How many vegetation layers (i.e. canopy, mid-story, groundcover) are present? More than 2	
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Florence LWI & Riparian Inventory

RIPARIAN CODE RMC - 8 North

Date:	9/20/2010	Investigators: C. Lysdale	9	
Domin	ant tree species:	Douglas Fir		
Po	tential tree height	(PTH)/Actual Width of riparian area: (Width measured horizontally from edge of water re	120/120L & 70R esource)	_feet
	etermined by: On-site vegetation	Reference site Cod	e	-
Comme	ents:			
Photos R	MC-8Nveg, RMC-8Nstr			
Typical	l Cross Section:			
	MAXHYROLE	ALDEL	Dessa J	

SALATE



Riparian Characterization Form	m.	in the riparian area: (Question 1)
Florence LWI & Riparian Inventory	Хл	<10:1 (10%) Between 10:1 (10%) and 5:1 (20%) S:1 (20%) L Left&Right Extent of impervious surface within the riparian area. (Question 4)
GENERAL INFORMATION	4 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Iricted by man-made features? (Quest
Riparian Code: RMC-8 North	Accause of data point: RMC - 8	Yes No V Does the orientation of the riparian area allow for shading of the water resource at midday in
Reach Length: Hydrologic Basin:	On-site: V Off-Site:	summer? (Question 9) Yes
WATER RESOURCE INFORMATION		Woody vegetation Herbaceous vegetation Bare ground
7	30	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) Yes No
Wetland: Wetland Code:	Width:icel	ris in
Water present year-round: Yes V No		Yes 🖊 No No Dercent of water resource hordered by vegetated rinarian area at least 30 feet wide? (Onestion 16)
Are salmonids present in the adjacent water resource?	Yes 🗸	>40%
Is the water resource listed for temperature on DEQ's 303(d) list:	γ's 303(d) list: Yes No V	Degree of development or human caused disturbance. (Question 19)
Within FEMA-mapped 100-year floodplain:	Yes No 🗸	<25% 🗾 25% - 75% 🔲 >75% 🗍
Mapped soil series: Netarts fine sand, 3-12% slopes	sado	How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5)
Adjacent Land Uses? (Check as many as needed)		low, slight moderate
Roads:		What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Quest
Commercial/Indus.: Residential: Residential:	∵ ⊓.	Woody vegetation Herbaceous vegetation
Woody vegetation (trees, shrubs, vines >1 meter)	Herbaceous vegetation (include trees, shrubs, vines <1 meter)	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6)
Douglas Fir	Salal	Yes No 🗸
Red Alder California Wax Myrtle	Grasses Ferns	Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the
		flood prone riparian area?
		Tes INO OF ITO MOOU PROBLEM.
000		How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?

Yes No V Dominant vegetation layer within riparian area? (Question 10)	Woody vegetation 🗸 Herbaceous vegetation	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) Yes \text{No \subset }	Large woody debris in riparian area? (Question 15) Yes 🗾 No	Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16) $> 40\%$ \checkmark	Degree of development or human caused disturbance. (Question 19)	How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5) low, slight moderate	What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Question 3) Woody vegetation Herbaceous vegetation	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6) Yes \text{No } \text{V}	Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area? Yes No or no flood prone area present	More than 2
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Florence LWI & Riparian Inventory

RIPARIAN CODE RMC - 9

Date:	9/18/2010	Investigators: C. Lysdale	
Domina	nt tree species:	Douglas Fir	
Pote	ntial tree height	(PTH)/Actual Width of riparian area: 120/120+	_ feet
PTH det	ermined by:	(Width measured horizontally from edge of water resource)	
1	n-site vegetation	Reference site Code	
Commer	nts: <u>No a</u>	ccess - evaluation by aerial photo/comparison with RMC-13	3. Riparian
-		pears to be a flat area between the lake and a wooded bad	ck margin,
_with sai	nd dune further	iniand.	
Typical	Cross Section:		
ANS	DOS4 16 12/20/	SHORE SHORE SHORE ACKERLEY KOKE ACKERLEY KOKE ACKERLEY KOKE ACKERLEY KOKE AT RMC-9 (FEVALUATION FROM AGRIBL PHOTO	5



Florence LWI & Riparian Inventory		Ex
GENERAL INFORMATION		Is
Riparian Code: RMC - 9 RMC - 9		Ě
Reach Length:		a is
Hydrologic Basin: On-site: Off-Site:		ğ
WATER RESOURCE INFORMATION		×
Water Resource: Stream/River: Lake/Pond: Width: 200-500	feet feet	ğ
Wetland: Width:	feet	La
Water present year-round: Yes		i
Are salmonids present in the adjacent water resource?	No	Pe
Is the water resource listed for temperature on DEQ 's 303(d) list:	N ₀	ă
Within FEMA-mapped 100-year floodplain: Yes No		
Mapped soil series: Bullards-Ferrelo loams, 7-12% slopes		Ħ Ħ
Adjacent Land Uses? (Check as many as needed)		
Agriculture: Roads: Commercial/Indus.: Undeveloped:		M
		>
Woody vegetation Herbaceous vegetation (include trees churks vines <1 meter)	tation	Ar flo
(uccs; smuos; vmcs - 1 meets)	(man t con	
Shore Pine		Is
		fle fle
maler = 3.2 feat		Ħ '



Florence LWI & Riparian Inventory

RIPARIAN CODE RMC - 10

Date:	9/18/2010		Investigators: C. L	ysdale		
Domina	nt tree species:	Douglas Fir				-
PTH det	termined by:	(Width measured	Width of riparian are	water reso	20/120+ urce)	_feet
C	n-site vegetation		Reference site	Code_		
Commer area ar			ion by aerial photo/c lake shore with no i			
Typical	Cross Section:					
		CLE	AN HAKE AS	PROBA- DEJSA UNDER 120' OF HOKE	8 8 26-53' 26-53'	



Riparian Characterization Form	m.	Average slope in the riparian area: (Question 1)
Horongo I WI & Binemion Inronto	¥.	<10:1 (10%) Between 10:1 (10%) and 5:1 (20%) 🗸 >5:1 (20%)
THOLERCE LWICK NIPALIAN INVENTORY		Extent of impervious surface within the riparian area. (Question 4)
GENERAL INFORMATION		I IONE 2570 CL
Riparian Code: RMC - 10	Location of data point: RMC - 10	Yes No 🗸
		Does the orientation of the riparian area allow for shading of the water $$ resource at midday in summer? (Question 9)
Hydrologic Basin:	On-site: Off-Site:	Yes No v Dominant vegetation layer within riparian area? (Question 10)
WATER RESOURCE INFORMATION		Woody vegetation
Water Resource: Stream/River:	Width: feet Width: 1000 feet	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) $Yes \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$
-		Large woody debris in riparian area? (Question 15) Yes 7 No No
Water present year-round: Yes 🔼 No 🗔 Are salmonids present in the adjacent water resource?	ce? Yes 🗸 No	resource bordered by vegetated ripar
Is the water resource listed for temperature on DEQ's 303(d) list:	v's 303(d) list: Yes No 🗾	>40% LV% - $40%$ $< 10%$ $< 10%$ $< 10%$ Degree of development or human caused disturbance. (Question 19)
Within FEMA-mapped 100-year floodplain:	Yes No V	<25% 🗾 25% - 75% 🔲 >75% 🗍
Mapped soil series: Slickrock gravelly loam, 3-25% slopes	5% slopes	How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Ouesion 5)
Adjacent Land Uses? (Check as many as needed)		low, slight moderate
Agriculture: Roads:		What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Quest
Undeveloped: Forestry:		Woody vegetation Herbaceous vegetation Bare ground
Woody vegetation (trees, shrubs, vines >1 meter)	Herbaceous vegetation (include trees, shrubs, vines <1 meter)	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6)
Douglas Fir		Yes No 🗾
Shore Pine		
		Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area?
		Yes No or no flood prone area present
		How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?
1 meter = 3.2 feet		New or interest of the second

Yes No	Woody vegetation Herbaceous vegetation Bare ground	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) Yes No No	Large woody debris in riparian area? (Question 15) Yes 🖊 No	Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16) >40% \(\sqrt{1} \) \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Degree of development or human caused disturbance. (Question 19) <25% ✓ 25% ✓ 25% ✓ 75% ◯ >75% ◯	How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5) low, slight moderate	What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Question 3) Woody vegetation	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6) Yes \square No \square	Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area? Yes \sum \text{No or no flood prone area present}	How many vegetation layers (i.e. canopy, mid-story, groundcover) are present? More than 2	A CONTRACTOR OF
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Florence LWI & Riparian Inventory

RIPARIAN CODE RMC - 11

Date:	9/18/2010	Investigators: C. Lysdale	
Domina	nt tree species:	Douglas Fir	
PTH de	ential tree height termined by: On-site vegetation	(Width measured horizontally from edge of water resource)	et
	<u>-10 01</u>	access - evaluation by aerial photo/comparison with RMC-13. F ppears to transition from sand at waterline (south) to low lying to dune (north).	
Typical	Cross Section:		
Sont	SOUTH RANGE	THE NORTH -11 FIR NORTH -11 FIR DEFRECTION WHEN SPAND LOVE SHORE SHORE STORESTED ALEA (MAY FLOOD TECHNOLOURY AT HICH LIDTE CLEDE LAKE AT RMC-11	-S (a)



Riparian Characterization Form	m PHS M	_
Florence LWI & Riparian Inventory	\mathbf{X}	<10:1 (10%) [
GENERAL INFORMATION		<10% 🕶 10% - 25% 🔲 >25% 🛅
	Location of data point:	Is the reach constricted by man-made features? (Question 8) $Yes $
Riparian Code: RMC - 11	RMC - 11	Does the orientation of the riparian area allow for shading of the water resou
Reach Length:		stion 9)
Hydrologic Basin:	On-site: Off-Site:	Yes No Volument vegetation layer within riparian area? (Question 10)
WATER RESOURCE INFORMATION		Woody vegetation V North Herbaceous vegetation Bare ground
		ıtion
Lake/Pond: Wetland: W	Width: >1000 feet Width: feet	Yes 🗸 No 🗸
LWI Wetland Code:		ris in _
Water present year-round: Yes 🗸 No		Yes V
Are salmonids present in the adjacent water resource?	e? Yes 🗸 No	Fercent of water resource bordered by vegetated riparian area at least 30 feet
Is the water resource listed for temperature on DEQ's 303(d) list:	's 303(d) list: Yes No	Lopment or human caused disturbance.
Within FEMA-mapped 100-year floodplain: Ye	Yes No V	<255% — 25% — 75% — >75% —
Mapped soil series: Dune land		How does the NRCS soil survey rank water crosion hazard of the dominant m the Rinarian Area? (Onestion 5)
Adjacent Land Uses? (Check as many as needed)		low, slight moderate
		What is the dominant vegetation at the top of bank (if defined) or edge of wat
Commercial/Indus.: Ondeveloped:		Woody vegetation V North Herbaceous vegetation Bare ground
Woody vegetation (trees, shrubs, vines >1 meter)	Herbaceous vegetation (include trees, shrubs, vines <1 meter)	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA n floodplain, etc.) beyond the top of bank or edge of the water resource? (Question
Douglas Fir		Yes 🗸 No
		Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high
and the same of th		flood prone riparian area?
		Yes 🗸 No or no flood prone area present
		How many vegetation layers (i.e. canopy, mid-story, groundcover) are present
1 meter = 3.2 feet		

Is the reach constricted by man-made features? (Question 8) Yes No	Does the orientation of the riparian area allow for shading of the water $$ resource at midday in summer? (Question 9)	Yes No V Dominant vocatation lavor within rinarian area? (Onestion 10)	Woody vegetation V North Herbaceous vegetation Bare ground V South	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) Yes 🖊 No 🖊	Large woody debris in riparian area? (Question 15) Yes 🖊 No	Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16) >40%	Degree of development or human caused disturbance. (Question 19)	CCS soil survey rank water erosion ha	low, slight moderate high, very high, severe	What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Question 3) Woody vegetation \(\brace \) North Herbaceous vegetation \(\brace \) Bare ground \(\brace \) South	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6) $Yes \ \overline{\textbf{V}} \qquad No \ \overline{\textbf{V}}$	Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area? Yes 🖊 No or no flood prone area present	How many vegetation layers (i.e. canopy, mid-story, groundcover) are present? More than 2 2 layers North 1 layer or unvegetated 2 South
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Florence LWI & Riparian Inventory

RIPARIAN CODE RMC - 12

Date:	9/15/2010	Investigators: C. Lysdale	
Dominar	it tree species:	Douglas Fir/Sitka Spruce	
PTH det	ntial tree height ermined by: n-site vegetation	(PTH)/Actual Width of riparian area: (Width measured horizontally from edge of water res Reference site Code	,
-	<u>pa</u>	ian area is => 120 ft wide on East througl sidence clearings. riparian zone)	n North sides of Collard Lake
Photos RM0	C-12_13, RMC-12		
Typical (Cross Section:		
	COHAR	DUJG FILL SPINIS SHOW SHOW	MORE MORE



Riparian Characterization Form	S C C C C C C C C C C C C C C C C C C C	
Florence W. R. Dinewice Inventors	<u> </u>	<10:1 (10%) Between 10:1 (10%) and 5:1 (20%) 🗸 >5:1 (20%)
FIGURENCE EWI & Suparian inventory		Extent of impervious surface within the riparian area. (Question 4)
GENERAL INFORMATION		fricted by man-made features? (Onest
Loc. Riparian Code: RMC-12	Location of data point: RMC - 12	Yes No V
Reach Length:		Does the orientation of the riparian area allow for shading of the water resource at midday in summer? (Question 9)
Hydrologic Basin: On	On-site: 🗸 Off-Site: 🗌	Yes 🗹 No 🔲 (Near shoreline) Dominant vegetation layer within riparian area? (Question 10)
WATER RESOURCE INFORMATION		Woody vegetation Herbaceous vegetation Bare ground
Water Resource: Stream/River: Lake/Pond: Wid	Width: feet Width: 200 - 800 feet feet feet	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) $Yes \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$
		Large woody debris in riparian area? (Question 15) Vec 7 No 1
Water present year-round: Yes 🗸 No	[resour
Are salmonids present in the adjacent water resource?	Yes No	>40% 🗾
Is the water resource listed for temperature on DEQ's 303(d) list:	303(d) list: Yes No	Degree of development or human caused disturbance. (Question 19)
Within FEMA-mapped 100-year floodplain: Yes	ů Ž	<25% 🗾 25% - 75% 🔲 >75%
Mapped soil series: Bullards-Ferrelo loams, 7-12% slopes	slopes	How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5)
Adjacent Land Uses? (Check as many as needed)		low, slight moderate
		What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Ques
Commercial/Indus.: Undeveloped: Residential:		Woody vegetation Herbaceous vegetation Bare ground
Woody vegetation (trees, shrubs, vines >1 meter)	Herbaceous vegetation (include trees, shrubs, vines <1 meter)	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6)
	Salal	Yes No 🗸
pruce		y and the state of
Willow California Wax Mortle		AS Woody Vegetation (trees, sartubs, vines) greater than a meter (3.2 teel) mga uommaar in the flood prone riparian area?
Rhododendron		Yes No or no flood prone area present
		How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?
water - 2) fact		

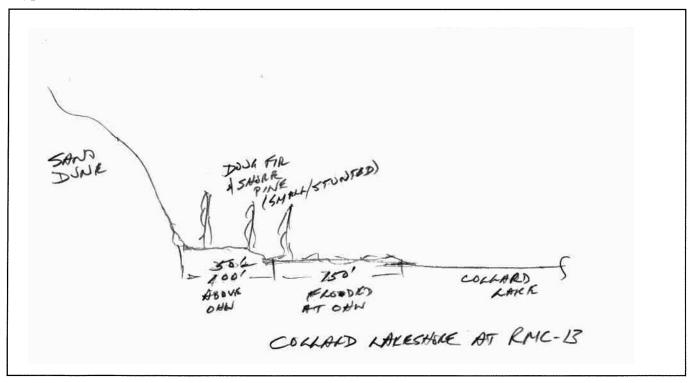


Florence LWI & Riparian Inventory

RIPARIAN CODE RMC - 13

Date:	9/15/2010	Investigators: C. Lysdal	e	
Domina	ant tree species:	Douglas Fir/Sitka Spruce		
Pot	ential tree heigh	t (PTH)/Actual Width of riparian area :	120/120+	feet
		(Width measured horizontally from edge of water	resource)	
Į.	etermined by: On-site vegetation	Reference site Coo	le	
	· · · · · · · · · · · · · · · · · · ·			
Comme	ents: RMC	-13 is a flat area between Collard Lake a	nd an encroachir	ng sand dune.
It is of	small extent (40	0 ft long). To the south, the sand dune b	orders the lake.	To the north,
the ripa	arian area slope	s up from the lake shore and is heavily w	ooded with width	> 120 ft.
		-		
Photos RN	MC-13N, RMC-13			

Typical Cross Section:





Florence LWL& Riparian Inventory	
GENERAL INFORMATION	
Riparian Code: RMC-13 RMC - 13	
Reach Length:	1
Hydrologic Basin: On-site: V Off-Site:	
WATER RESOURCE INFORMATION	
Water Resource: Stream/River: Lake/Pond: Width: Width: Wetland: Width:	feet feet feet feet
LWI Wetland Code:	
Water present year-round: Yes 🗾 No	
Are salmonids present in the adjacent water resource?	No
Is the water resource listed for temperature on DEQ's 303(d) list:	°°Z
Within FEMA-mapped 100-year floodplain: Yes No	
Mapped soil series: Dune land	And the second s
Adjacent Land Uses? (Check as many as needed)	
Agriculture: Roads: Commercial/Indus.: Undeveloped:	
	etation
(unclude trees, shrubs, vines >1 meter) (include trees, shrubs, vines <1 meter) (include trees, shrubs, vines <1 meter)	ines <1 meter)
Shore Pine	
meter = 3.2 feet	

Average slope in the riparian area: (Question 1) <10:1 (10%) ✓ Between 10:1 (10%) and 5:1 (20%) ◯ >5:1 (20%) ◯	Extent of impervious surface within the riparian area. (Question 4) <10%	Is the reach constricted by man-made features? (Question 8) Yes \(\subseteq \text{No} \(\subseteq \)	Does the orientation of the riparian area allow for shading of the water $$ resource at midday in summer? (Question 9)	Yes No V	Woody vegetation	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) Yes No	Large woody debris in riparian area? (Question 15) Yes 🖊 No	Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16) >40%	Degree of development or human caused disturbance. (Question 19)	<255% 🗾 25% - 75% 🔲 >75%	How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5)	low, slight moderate	What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Question 3) Woody vegetation	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6)	l Ion (tr ian an	Yes No or no flood prone area present	How many vegetation layers (i.e. canopy, mid-story, groundcover) are present? More than 2 2 2 layers 7 1 layer or unvegetated]
--	--	---	--	----------	------------------	--	--	---	--	--------------------------	--	----------------------	---	--	------------------------	---------------------------------------	--	---



Florence LWI & Riparian Inventory

RIPARIAN CODE RAIR - 0.3

10/24/2010	Investigators: C. Lysdale		
it tree species:	Shore Pine		
<u> </u>	· · · · · · · · · · · · · · · · · · ·	50/10L & 10R ource)	_feet
•	Reference site Code		
		Olidimoi appos	
R-0.3veg, RAIR-0.3str			
Cross Section:			
	nt tree species: ntial tree height ermined by: n-site vegetation ats: Strea	nt tree species: Shore Pine ntial tree height (PTH)/Actual Width of riparian area: (Width measured horizontally from edge of water rescent ermined by: n-site vegetation Reference site Code ats: Stream emerges from a culvert at this location. ed and cleared.	nt tree species: Shore Pine ntial tree height (PTH)/Actual Width of riparian area: 50/10L & 10R (Width measured horizontally from edge of water resource) ermined by: n-site vegetation Reference site Code tts: Stream emerges from a culvert at this location. Channel appea ed and cleared.

RAIR 0.3 AT OAK STARKT

LUKERLE PINK



Riparian Characterization Form	m,	
Florence I WI & Binerien Invento	DEA.	<10:1 (10%) Between 10:1 (10%) and 5:1 (20%) >5:1 (20%) [V]
Tiorence LWL& inparian inventory		Extent of impervious surface within the riparian area. (Question 4)
GENERAL INFORMATION		I 1970 - 2570 IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII
I. Rinarian Code: RAIR-A	Location of data point:	Yes No V
	0.0 - 4164	Does the orientation of the riparian area allow for shading of the water resource at midday in summer? (Question 9)
Hydrologic Basin:0	On-site: 🔽 Off-Site:	Yes 🗾 No 🔲 Dominant vegetation layer within riparian area? (Question 10)
WATER RESOURCE INFORMATION		Woody vegetation Herbaceous vegetation
Water Resource: Stream/River:	Width: 5 feet Width:	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) Vec
:		Vest Vest No
Water present year-round: Yes No V	ce? Yes No V	er resource bordered by vegetated ripar
Is the water resource listed for temperature on DEQ 's 303(d) list:	2's 303(d) list: Yes	Degree of development or human caused disturbance, (Question 19)
Within FEMA-mapped 100-year floodplain:	Yes No V	<25% \(\begin{align*}
Mapped soil series: Yaquina loamy fine sand		How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Rinarian Area? (Onestion 5)
Adjacent Land Uses? (Check as many as needed)		low, slight moderate
Roads:		What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Ques
Commercial/Indus.: Undeveloped: Residential: V Forestry:		Woody vegetation
Woody vegetation (trees, shruks, vines > 1 meter)	Herbaceous vegetation (include trees, shrubs, vines < meter)	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6)
Shore Pine	Salal	Yes No 🗸
	Rhododendron	ation (†
		flood prone riparian area?
		Yes No or no flood prone area present
		How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?
meter = 3.2 feet		

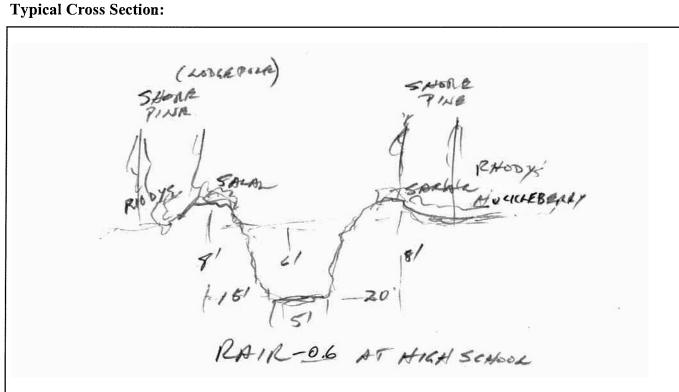
Does woody vegetation hang over the edge of the water? (Questions 11 & 14) Yes No	Large woody debris in riparian area? (Question 15) Yes	Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16) $>40\%$ $= 10\% - 40\%$ $= <10\%$	Degree of development or human caused disturbance. (Question 19) <25% 75% 75% 7	How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5)	low, slight moderate 🔽 high, very high, severe	What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Question 3 Woody vegetation Bare ground	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6) Yes \times \times \times \	Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area?	Yes No or no flood prone area present	How many vegetation layers (i.e. canopy, mid-story, groundcover) are present? More than 2	
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Florence LWI & Riparian Inventory

RIPARIAN CODE RAIR - 0.6

Date:	10/24/2010	Investigators: C. Lysdale	
Dominant	tree species:	Shore Pine	
Poten	tial tree height	(PTH)/Actual Width of riparian area: 50/15L & 20R (Width measured horizontally from edge of water resource)	feet
PTH deter On-	rmined by: -site vegetation		
Comments		nnel appears to be excavated and cleared, including berms o	n
Photos RAIR-	0.6veg, RAIR-0.6str		
T	G. J.		





Riparian Characterization Form	m	
Howance I W. R. Binesies Issueda	***	<10:1 (10%) Between 10:1 (10%) and 5:1 (20%) >5:1 (20%) \[\bu\]
riorence Lwi & Kiparian inventory		Extent of impervious surface within the riparian area. (Question 4)
GENERAL INFORMATION		fricted by man-made features? (Quest
Li Riparian Code: RAIR-A	Location of data point: RAIR - 0.6	Yes 🖊 No 🔲 Berms left and right
Reach Length:		Does the orientation of the ripartan area allow for shading of the water resource at initionay in summer? (Question 9)
Hydrologic Basin:	On-site: 🗸 Off-Site: 🗌	Yes V No No Dominant vegetation layer within riparian area? (Question 10)
WATER RESOURCE INFORMATION		Woody vegetation Herbaceous vegetation
Water Resource: Stream/River: Lake/Pond: Workand:	Width: 5 feet Width: feet Width: feet	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) $Yes \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$
]		Large woody debris in riparian area? (Question 15)
Water present year-round: Yes No	[;	ı resoui
Are salmonids present in the adjacent water resource; Is the water resource listed for teamorature on DFO's 202(A) lists.	ic? Yes No V	>40%
as the water resource instead for temperature on DEA		Degree of development or human caused disturbance. (Question 19)
Within FEMA-mapped 100-year floodplain:	Yes No 🗾	<25%
Mapped soil series: Yaquina loamy fine sand		How does the NRCS soil survey rank water crosion hazard of the dominant mapped unit in the Riparian Area? (Question 5)
Adjacent Land Uses? (Check as many as needed)		low, slight moderate
Agriculture: Roads: Tindevolumed:		What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Ques
Forestry:	□	Woody vegetation Herbaceous vegetation
Woody vegetation (trees, shrubs, vines >1 meter)	Herbaceous vegetation (include trees, shrubs, vines <1 meter)	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6)
Shore Pine	Salal	Yes No V
	Rhododendron	Is woody vegetation (trees shrubs vines) greater than I meter (3.2 feet) high dominant in the
	Huckleberry	is woody vegetation (tress, suituos, vines) greater than a ineter (5.2 acc) ingu toninnant in the flood prone riparian area?
		Yes No or no flood prone area present
		How many vecetation layers (i.e. canony. mid-story, groundcover) are present?
1 mater - 2 2 feat		TION Thany regulation tayers (no canopy) time every) is concessed, in a greeness



Florence LWI & Riparian Inventory

RIPARIAN CODE RAIR - 1

Date: 9/26/2010	Investigators: C. Lysdale	_
Dominant tree species:	Shore Pine	
Potential tree height PTH determined by: On-site vegetation	(Width measured horizontally from edge of water resource) Reference site Code	_feet -
Comments: Stream slope, surrounding area	ambed appears to be cleared. Banks are almost vertical to a is level.	break in
Photos RAIR-1Sveg, RAIR-1Sstr;	RAIR-1Nveg, RAIR-1Nstr	
Typical Cross Section:		
LEFT	SHOPE PINE DENKWAY(E) HOLLESCHY DENKWAY(E) DENKWA	

Ē



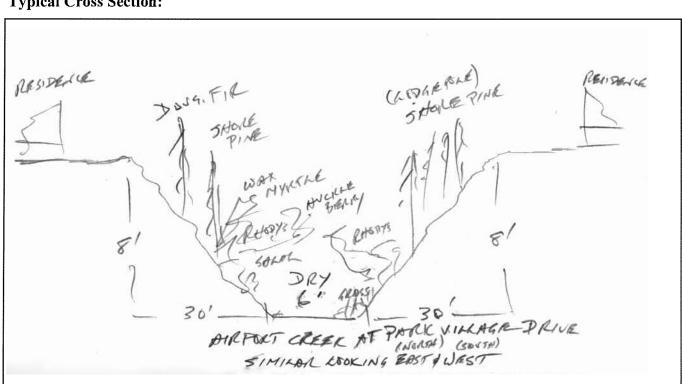
Riparian Characterization Form	rm PHS	in the riparian area: (Question 1)
Florence LWI & Riparian Inventory	ory	Between 10:1 (10%) and 5:1 (20%) ous surface within the riparian are:
GENERAL INFORMATION Riparian Code: RAIR-1 South & North	Location of data point: RAIR - 1	<10% \(\sqrt{\sq}}}}}}}}} \end{\sqrt{\sq}}}}}}}} \end{\sqrt{\sq}}}}}}}}} \end{\sqnt{\sqrt{\sq}}}}}}} \end{\sqnt{\sqnt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sq}}}}}}}} \end{\sqin{\sqrt{\sq}}}}}}} \end{\sqit{\sqrt{\sq}}}}}}} \sqnt{\sqnt{\s
Reach Leugth: Hydrologic Basin:	On-site: 🗸 Off-Site:	summer? (Question 9) Yes No Dominant vegetation layer within riparian area? (Question 10)
WATER RESOURCE INFORMATION Water Resource: Stream/River: Lake/Pond: Wedand:	Width: 5 feet Width: feet Width: feet	Woody vegetation Herbaceous vegetation Pare ground Does woody vegetation hang over the edge of the water? (Questions 11 & 14) Yes No V
water re	Yes No	Large woody debris in riparian area? (Question 15) Yes \(\text{No} \(\text{L} \) Percent of water resource bordered by vegetated riparian area at least 30 feet wide? >40\% \(\text{L} \) Degree of development or luman caused disturbance, (Question 19)
Within FEMA-mapped 100-year floodplain: Mapped soil series: Yaquina loamy fine sand	Yes No 🗸	4.25% 25% 25% - 75% V >75% 1.2 And obes the NRCS soil survey rank water erosion hazard of the dominant mapped
Adjacent Land Uses? (Check as many as needed) Agriculture: Commercial/Indus.: Residential: Forestry:		the Kaparian Area? (Question 2) low, slight moderate
Woody vegetation (trees, shrubs, vines >1 meter)	Herbaceous vegetation (include trees, shrubs, vines <1 meter)	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mappee floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6)
Willow	Huckleberry	Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high domination flood prone riparian area?
		Yes No or no flood prone area present
meter = 3.2 feet		How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?



Florence LWI & Riparian Inventory

RIPARIAN CODE RAIR - 1.5

Date:	9/22/2010	Investigators: C. Lysdale	-
Dominai	nt tree species:	Shore Pine	
Pote	ential tree height	(PTH)/Actual Width of riparian area: 50/30L & 30R (Width measured horizontally from edge of water resource)	_feet
	ermined by: n-site vegetation	Reference site Code	
Commer	nts: Strea	mbed appears to be cleared/straightened to the east.	
Photos RAI	R-1.5Sveg, RAIR-1.5Ss	str ; RAIR-1.5Nveg, RAIR-1.5Nstr	
Typical (Cross Section:		





Riparian Characterization Form	m.	in the riparian area: (Question 1)
Florence I WI & Rinarian Inventory	A.I.	<10:1 (10%) Between 10:1 (10%) and 5:1 (20%) >5:1 (20%) \[\bu\] >5:1 (20%) \[\bu\]
		Extent of impervious surface within the riparian area. (Question 4)
GENERAL INFORMATION		I I I I I I I I I I I I I I I I I I I
Riparian Code: RAIR-1.5	Location of data point: RAIR - 1.5	Yes No 🗸
Reach Length:		Does the orientation of the riparian area allow for shading of the water resource at midday in summer? (Question 9)
Hydrologic Basin:	On-site: 🗸 Off-Site: 🗌	Yes V No No Dominaut vegetation layer within riparian area? (Question 10)
WATER RESOURCE INFORMATION		Woody vegetation Herbaceous vegetation Bare ground
7	9	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) $Yes \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$
Wetland:	Width:	debris in
Water present year-round: Yes No	[2]	Yes NO V
Are salmonids present in the adjacent water resource?	Yes No V	Ferential water resource boldered by vegetated riparial area at least 50 feet wide: (Question to)
Is the water resource listed for temperature on DEQ's 303(d) list:	γ's 303(d) list: Yes No 🗸	Degree of development or human caused disturbance. (Question 19)
Within FEMA-mapped 100-year floodplain:	Yes No 🗸	<25%
Mapped soil series: Waldport fine sand, 0-12% slopes	slopes	How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5)
Adjacent Land Uses? (Check as many as needed)		low, slight moderate
		What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Ques
Commercia/Indus.: Residential:		Woody vegetation Herbaceous vegetation
Woody vegetation (trees, shrubs, vines >1 meter)	Herbaceous vegetation (include trees, shrubs, vines <1 meter)	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6)
Douglas Fir	Salal	Yes No No
Shore Pine	Huckleberry	
California Wax Myrtle	Grasses	Is woody vegetation (trees, shrubs, vines) greater than I meter (3.2 feet) high dominant in the
Rhododendron		Sarian area?
		Yes No or no flood prone area present
		How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?
1 meter = 3.2 feet		



Florence LWI & Riparian Inventory

RIPARIAN CODE RAIR - 2 North

Date:	9/22/2010	Investigators: C. Lysdale
Domina	nt tree species:	Shore Pine
PTH de	ential tree height termined by: On-site vegetation	(Width measured horizontally from edge of water resource) Reference site Code
Comme	nts:	
	NR-2Nveg, RAIR-2Nstr	
Typical	Cross Section:	
	(RIGHT)	PHOSY'S WHITE RESIDENCE SPLANT APART APAR
		LOUILING HORTH (UPSTREAM)



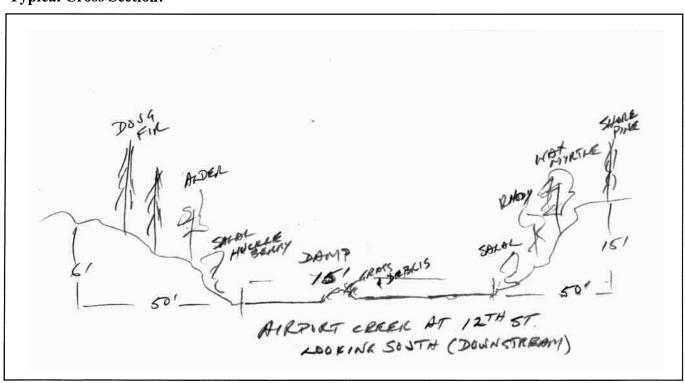
taput tan Characti Eatani Polini		odois aguinas
Wordnoof W. & Dinamion Invontor		<10:1 (10%)
rioi ence EW L & Inparran inventory		Extent of impo
GENERAL INFORMATION		<10% Is the reach of
L. Riparian Code: RAIR-2 North	Location of data point: RAIR - 2	Yes
Reach Length:		Does the orien summer? (Que
Hydrologic Basin: O	On-site: 🗸 Off-Site: 🗌	Yes [Dominant veg
WATER RESOURCE INFORMATION		Woody vegeta
Water Resource: Stream/River:	Width: 5 feet Width: feet	Does woody vo
Wetland: Wetland: Wetland: Wetland: Metland Code:	Width: feet	Large woody
Water present year-round: Yes No		Yes
Are salmonids present in the adjacent water resource?	.c? Yes No 🔽	Percent of wal
Is the water resource listed for temperature on DEQ's 303(d) list:	² s 303(d) list: Yes	Degree of dev
Within FEMA-mapped 100-year floodplain: X	Yes No C	<25%
Mapped soil series: Waldport fine sand, 0-12% slopes	slopes	How does the the Riparian
Adjacent Land Uses? (Check as many as needed)		low, slight
Agriculture: Commercial/Indus: Residential:		What is the do Woody vegeta
Woody vegetation (frees shuths vines) meter)	Herbaceous vegetation (include trees shrubs, vines < 1 meter)	Are there floo floodplain, etc
	Salal	Yes
Shore Pine California Wax Myrtle	Grasses	Is woody vege
Rhododendron		flood prone ri Yes
		How many ve
1 meter = 3,2 feet		Morre than 2



Florence LWI & Riparian Inventory

RIPARIAN CODE RAIR - 2 South

Date:	9/22/2010	Investigators: C. Lysdale	
Domin	ant tree species:	Douglas Fir	
	<u> </u>	(PTH)/Actual Width of riparian area: 120/50L & 50R (Width measured horizontally from edge of water resource)	feet
1	etermined by: On-site vegetation	Reference site Code	
Comm		ambed not well defined at this location (crossing 12th street F wide flat area interspersed with debris and vegetation. No c	
	RAIR-2Sveg, RAIR-2Sstr		
Typica	l Cross Section:		





Riparian Characterization Form	Form	. ,
Florence LWI & Riparian Inventory	ntory	<10:1 (10%) Between 10:1 (10%) and 5:1 (5 Extent of impervious surface within the riparian
GENERAL INFORMATION		<10% [V] 10% - 25% [J] In the reach constricted by man_made features?
Rinarian Code: RAIR-2 South	Location of data point:	Yes No V
	7 1 1001	Does the orientation of the riparian area allow f summer? (Question 9)
Hydrologic Basin:	On-site: Off-Site:	Yes No (Shaded by Dominant vegetation layer within riparian area'
WATER RESOURCE INFORMATION		Woody vegetation 🖊 Herbaceous veget
Water Resource: Stream/River:	Width: 15 feet Width: feet	Does woody vegetation hang over the edge of the Yes 🗹 No
Wenand: LWI Wetland Code:	Width:	ris in
ound: Yes	No K	Yes (
Are salmonids present in the adjacent water resource?	source? Yes No	Fercent of water resource bordered by vegetated >40% \[\blace{\sigma} \]
Is the water resource listed for temperature on DEQ's 303(d) list:	DEQ's 303(d) list: Yes \(\text{No} \(\text{V} \)	Degree of development or human caused disturb
Within FEMA-mapped 100-year floodplain:	Yes No V	<25% 🗾
Mapped soil series: Waldport fine sand, 0-12% slopes	2% slopes	How does the NRCS soil survey rank water eros the Riparian Area? (Question 5)
Adjacent Land Uses? (Check as many as needed)		low, slight moderate
Agriculture: Roads: Commercial/Indus.: Undeveloped:	ads:	vegetatio
7		Woody vegetation
	Herbaceous vegetation	Are there flood prone areas (adjacent flat areas, floodulain etc.) heroud the ton of hank or edge
(trees, shrubs, vines >1 meter)	(include trees, sintuos, vines <1 meter)	
Shore Pine	Huckleberry	DAT .
California Wax Myrtle	Grasses	Is woody vegetation (trees, shrubs, vines) greate
Red Alder		flood prone riparian area?
Rhododendron		Yes No or no flood prone area pres
		How many vegetation layers (i.e. canopy, mid-st
1 meter = 3,2 feet		Mana than 7



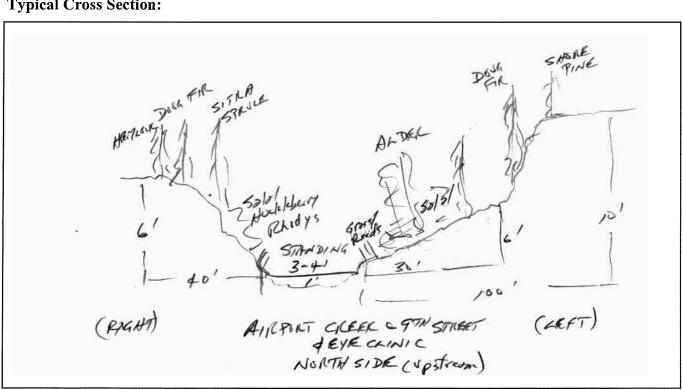
Florence LWI & Riparian Inventory

RIPARIAN CODE RAIR - 3 North

Date:	8/25/2010	Investigators: C. Lysdale	
Domina	nt tree species:	Shore Pine	
Pote	ential tree height	(PTH)/Actual Width of riparian area: 50/100L & 40R (Width measured horizontally from edge of water resource)	feet
ł	ermined by: n-site vegetation	Reference site Code	
Commer	nts:		

Photos RA	IR-3Nveg, RAIR-3Nstr		

Typical Cross Section:





Riparian Characterization Form	orm	. ,
Florence I WI & Pinarian Invantory	7. A. J.	<10:1 (10%) Between 10:1 (10%) and 5:1 (
	X.	Extent of impervious surface within the riparia
GENERAL INFORMATION		ricted by
Dinamian Code. DAID 3 North	Location of data point:	Yes No 🗸
Reach Length:	KAIK - 3	Does the orientation of the riparian area allow summer? (Question 9)
Hydrologic Basin:	On-site: 🗸 Off-Site:	Yes No V Shaded by Dominant vegetation layer within riparian area
WATER RESOURCE INFORMATION		Woody vegetation
Water Resource: Stream/River:	Width: 4 feet Width: feet	Does woody vegetation hang over the edge of th Yes
Wetland:	Width: feet	
		Yes No
water present year-round: xes	ource? Yes No	resource b
Is the water resource listed for temperature on DEQ's 303(d) list:	0EQ's 303(d) list: Yes No ✓	Degree of development or human caused distur
Within FEMA-mapped 100-year floodplain:	Yes No 7	<25% 🗾
Mapped soil series: Waldport fine sand, 0-12% slopes		How does the NRCS soil survey rank water ero
Adjacent Land Uses? (Check as many as needed)		low, slight moderate
	is 5	What is the dominant vegetation at the top of b
Residential:	, n.	Woody vegetation 🗸 Herbaceous vege
Woody vegetation	Herbaceous vegetation	Are there flood prone areas (adjacent flat areas floodplain, etc.) beyond the top of bank or edge
	Reeds	N Section 1
Sitka Spruce	Grasses	
Western Hemlock		Is woody vegetation (trees, shrubs, vines) great
Shore Pine Ped Alder		Rood prome riparian area:
Rhododendron		res ho of no nood prone area pres
Salal, Huckleberry		How many vegetation layers (i.e. canopy, mid-s
1 meter = 3,2 feet		Money C C and the Man

 <10:1 (10%) Between 10:1 (10%) and 5:1 (20%)	Summer? (Question 9) Yes No V Shaded by canopy Dominant vegetation layer within riparian area? (Question 10) Woody vegetation V Herbaceous vegetation Bare ground	etation hang over the edge of the wate No bris in riparian area? (Question 15) No resource bordered by vegetated ripan	>40%	What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Question 3) Woody vegetation Herbaceous vegetation Bare ground Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6) Yes No	Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area? Yes \(\bigcircless{\cutes} \) No or no flood prone area present \(\bigcircless{\cutes} \) How many vegetation layers (i.e. canopy, mid-story, groundcover) are present? More than 2 \(\bigcircless{\cutes} \)
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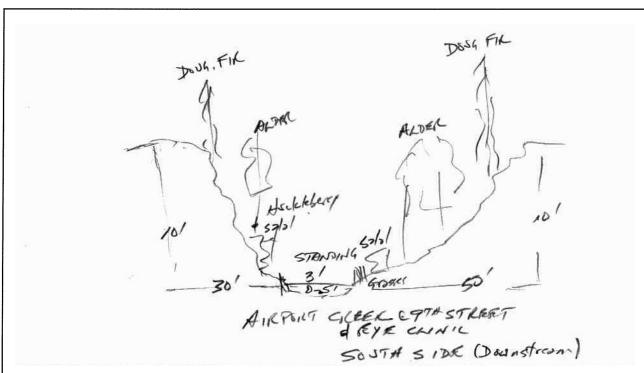


Florence LWI & Riparian Inventory

RIPARIAN CODE RAIR - 3 South

Date:	8/25/2010	Investigators: C. Lysdal	<u>e</u>	
Domina	nt tree species:	Red Alder		
Pote	ential tree height	(PTH)/Actual Width of riparian area:	65/30L & 50R	feet
		(Width measured horizontally from edge of water i	resource)	
1	termined by: On-site vegetation	Reference site Cod	le	
Comme	nts:			
	TO A STATE OF THE PROPERTY OF			
Photos RA	AIR-3Sveg, RAIR-3Sstr			

Typical Cross Section:





Riparian Characterization Form	ırm	Average slope in the riparian area: (Question I)
Florence LWI & Riparian Inventory	Å10]	<10:1 (10%) Between 10:1 (10%) and 5:1 (2 Extent of impervious surface within the riparian
GENERAL INFORMATION		<10% 🗾
DAID 9 Courth	Location of data point:	Is the reach constricted by man-made features? Yes No \(\bu\)
	KAIK - 3	Does the orientation of the riparian area allow for summer? (Question 9)
Hydrologic Basin:	On-site: 🗸 Off-Site:	Yes No Shaded by Ominant vegetation layer within riparian area?
WATER RESOURCE INFORMATION		Woody vegetation
Water Resource: Stream/River:	Width: 3 feet Width: feet	Does woody vegetation hang over the edge of the Yes V
Wetland:	Width:feet	ris in
ound: Yes	Ž Ž	Yes 🗸 No
Are salmonids present in the adjacent water resource?	rrce? Yes No	Percent of water resource bordered by vegetatec
Is the water resource listed for temperature on DEQ's 303(d) list:	£Q's 303(d) list: Yes \(\begin{array}{c} \text{No} \(\begin{array}{c} \text{Ves} \end{array} \end{array} \]	pment or h
Within FEMA-mapped 100-year floodplain:	Yes No 🗸	<25% 🗾
Mapped soil series: Waldport fine sand, 0-12% slopes		How does the NRCS soil survey rank water crost the Riparian Area? (Question 5)
Adjacent Land Uses? (Check as many as needed)		low, slight moderate
Agriculture: Roads: Commercial/Indus.:		vegetatio 1
Residential: 🗸 Forestry:		Woody Vegetation V
Woody vegetation (trees, shrubs, vines >1 meter)	Herbaceous vegetation (include trees, shrubs, vines <1 meter)	Are there flood prone areas (adjacent flat areas, floodplain, etc.) beyond the top of bank or edge
Douglas Fir	Grasses	Yes No V
Red Alder		
Salal		is woody vegetation (trees, shrubs, vines) greate flood prone riparian area?
		$\operatorname{Yes} \ igcup \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$
		How many vegetation layers (i.e. canopy, mid-st
1 meter = 3.2 feet		Money than 7

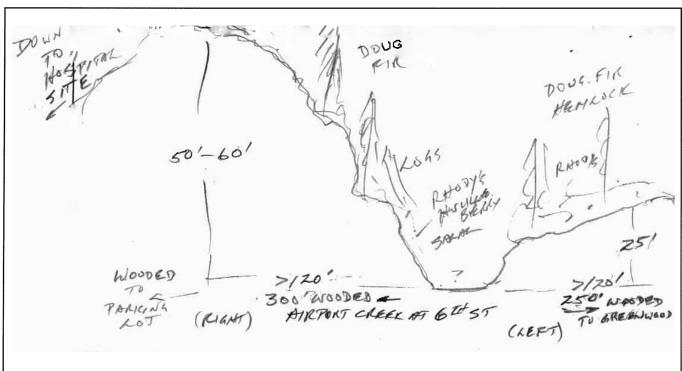
Close Cloee Close Close Close Close Close Close Close Cloe	n n et et en en en en en en per beforet kommen en en beforet kommen en e
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Florence LWI & Riparian Inventory

RIPARIAN CODE RAIR - 4

Date: 9/25/2010 Investigators: C. Lysdale								
Dominant tree species: Douglas Fir/Western Hemlock								
Potential tree height (PTH)/Actual Width of riparian area: 120/120E&W for (Width measured horizontally from edge of water resource)								
PTH determined by: On-site vegetation Reference site Code								
Comments: E-W location of stream is uncertain - no access due to heavy vegetation and steep terrain.								
Photos RAIR-4veg0, RAIR-4veg1; RAIR-4veg4								
Typical Cross Se	ction:							





			Location of data point: RAIR - 4		Off-Site:		N/A feet	leet		Yes No V	ist: Yes No 🗾	No N					Herbaceous vegetation	Toront Track to the control of the c	arry		
Mparian Characterization form	Florence LWI & Riparian Inventory	GENERAL INFORMATION	Location o Riparian Code: RAIR-4	Reach Length:	Hydrologic Basin: On-site:	WATER RESOURCE INFORMATION	7	Wetland: Width:	Water present year-round: Yes	Are salmonids present in the adjacent water resource?	Is the water resource listed for temperature on DEQ's 303(d) list:	Within FEMA-mapped 100-year floodplain: Yes	Mapped soil series: Waldport fine sand, 0-12% slopes	Adjacent Land Uses? (Check as many as needed)	Roads:	Commercial/Indus.: Undeveloped: V Residential: Forestry:	Woody vegetation	Salal	Western Hemlock Huckleberry	Rhododendron	

Is the reach constricted by man-made features? (Question 8) Yes \(\bigcirc \text{No } \bigcirc \cdot \text{No } \bigcirc \cdot \text{No } \bigcirc \cdot \text{No } \bigcirc \cdot \text{No } \bigcirc \text{No } \bigcirc \text{Shaded by canopy} \\ \text{Dominant vegetation layer within riparian area? (Question 10)} \\ \text{Woody vegetation } \bigcirc \text{Herbaceous vegetation} \Bare \text{ground} \Bare \text{ground} \Bare \text{ground} \Bare \text{ground} \Bare \text{Suminant } \text{Ves } \bigcirc \text{No} \Bare \text{No} \Bare \text{Suminant } \Bare \text{Suminant } \text{No} \Bare \text{Suminant } \Bare \text{Suminant } \Bare \text{ground} \Bare \text{Suminant } \Bare \text	How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5) low, slight moderate
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Florence LWI & Riparian Inventory

RIPARIAN CODE RAIR - 5 North

Date: 9/25/2010		Investigators: C. Ly	/sdale
Dominant tree species:	Red Alder		
Potential tree height PTH determined by: On-site vegetation	(Width measured	Width of riparian area horizontally from edge of with Reference site	***************************************
Comments:			
Photos RAIR-5Nveg, RAIR-5Nstr Typical Cross Section:			
(RIGHT) ZO	FROMING PIR	PORT CREEK AT PH LOOKING NORT	

Ē



Riparian Characterization Form	rm	Average slope in the riparian area: (Question 1)
Florence LWI & Riparian Inventory	VIC	<10:1 (10%)
GENERAL INFORMATION		<10% V 10% - 25%
Riparian Code: RAIR-5 North	Location of data point: RAIR - 5	As the Feach constructed by man-made feathres? (Question 8) Yes \[\begin{align*} align*
Reach Length:		DOES INCOLUNIATION OF the Liparian area anow for snaumg of the water 1 tesoms
Hydrologic Basin:	On-site: 🗸 Off-Site: 🗌	Yes No Volument vegetation layer within riparian area? (Question 10)
WATER RESOURCE INFORMATION		Woody vegetation 🖊 Herbaceous vegetation 🗾 Bare ground
7	9	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) $Yes \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$
Wetland: LWI Wetland Code:	Width:	ris in
Water present year-round: Yes		Yes
Are salmonids present in the adjacent water resource?	ce? Yes No 🗸	Percent of water resource bordered by vegetated riparian area at least 30 feet $>40\%$ $\boxed{}$
Is the water resource listed for temperature on DEQ's 303(d) list:	2's 303(d) list: Yes No V	pment or l
Within FEMA-mapped 100-year floodplain:	Yes No 🗹	<25% v 25% - 75%
Mapped soil series: Waldport fine sand, 0-12% slopes	slopes	How does the NRCS soil survey rank water erosion hazard of the dominant mathe Ringrian Area? (Onesting 5)
Adjacent Land Uses? (Check as many as needed)		low, slight moderate in high, very high, severe
Agriculture: Roads: Commercial/Indus.: Undevelopmed:		ont vegetation at the top of bank (if defined) or
<u> </u>		Woody vegetation Herbaceous vegetation
Woody vegetation	Herbaceous vegetation	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA m floodulain, etc.) heyond the ton of bank or edge of the water resource? (Question
Douglas Fir	(HIGHUR HOES, SHEEDS, VIIICS AT HIGHE)	V _{pc} N _o
Willow	And the state of t	
Red Alder		Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high d
California Wax Myrtle		flood prone riparian area?
Blackberry		Yes 🗸 No or no flood prone area present
		How many vegetation layers (i.e. canopy, mid-story, groundcover) are present'
1 meter = 3,2 feet		

Is the reach constricted by man-made features? (Question 8) Yes \bigsquare No \bigsquare \bigsquare \bigsquare No \bigsquare \bigsquare \bigsquare No \bigsquare \bigsquare \bigsquare No \bigsquare \bigsquare No \bigsquare \bigsqua	
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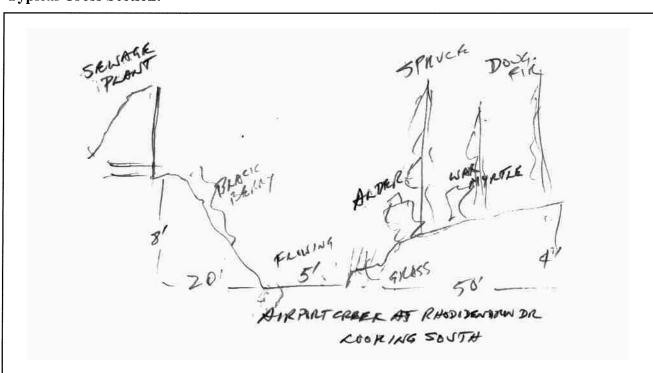


Florence LWI & Riparian Inventory

RIPARIAN CODE RAIR - 5 South

Date:	9/25/2010	Investigators: C. Lysdale
Domina	nt tree species:	Red Alder
Pote	ential tree height	(PTH)/Actual Width of riparian area: 65/20L & 50R feet (Width measured horizontally from edge of water resource)
1	termined by: On-site vegetation	Reference site Code
Comme	nts: Rip-r	ap bank at sewage plant
Photos RA	IR-5Sveg, RAIR-5Sstr	
Typical	Cross Soctions	

Typical Cross Section:





Riparian Characterization Form	
Florence LWI & Riparian Inventory	<10:1 (10%) Between 10:1 (10%) and 5:1 (5 Extent of impervious surface within the riparian
GENERAL INFORMATION	<10% (7) 10% - 25% (1) 10% - 25% (1) 10% - 25% (1) 10%
Location of data point: RAIR-5 South RAIR - 5	As the reach constructed by man-made reatures: Yes
	Does the orientation of the riparian area allow f summer? (Question 9)
Hydrologic Basin: On-site:	Yes No Vo
WATER RESOURCE INFORMATION	Woody vegetation 🗸 Herbaceous veget
Width: 5 Width:	Does woody vegetation hang over the edge of the Yes 🗾 No
Wetland: Wetland: LWI Wetland Code:	ris in
Water present year-round: Yes 🗸 No	Yes 🗸
Are salmonids present in the adjacent water resource? Yes No	Fercent of water resource bordered by vegetated >40% [▼]
Is the water resource listed for temperature on DEQ's 303(d) list: Yes No 🗾	n pment or l
Within FEMA-mapped 100-year floodplain: Yes No	<25%
Mapped soil series: Waldport fine sand, 0-12% slopes/Dune land	How does the NRCS soil survey rank water eros the Riparian Area? (Question 5)
Adjacent Land Uses? (Check as many as needed)	low, slight moderate
	What is the dominant vegetation at the top of bo
Commercial/industrial: Variable Forestry: Forestry:	Woody vegetation Herbaceous veget
Woody vegetation Herbaceous vegetation (include trees churks vines <1 meter)	Are there flood prone areas (adjacent flat areas, floodplain, etc.) beyond the top of bank or edge
Grasse	Yes
JĮ.	
Red Alder California Wax Mortle	AS Woody Vegetation (trees, sartius, vines) greate flood prone riparian area?
Blackberry	Yes No or no flood prone area pres
	How many vegetation layers (i.e. canopy, mid-st
1 modes = 2 7 foot	



Florence LWI & Riparian Inventory

RIPARIAN CODE RAIR - 6 North

Date:	9/22/2010	Investigators: C. Lysdale	i.
Dominan	t tree species:	Shore Pine	
PTH dete	ermined by:	(Width measured horizontally from edge of water resource)	feet
Or	1-site vegetation	Reference site Code	
Commen	ts: Strea	am drains very limited area, and streambed appears usually	dry.
Photos RAIF	R-6Nveg, RAIR-6Nstr		
Typical C	Cross Section:		
	(1215H	BLACK BEACK BLACK BEACK SHELLY STENOTHS AI REPORT SOUTH FENCE-AIRPORT CREEK	
		AI RPORT SOUTH FENCE-AIRPORT CREEK	*2



Riparian Characterization Form	SHA	Average slope in the riparian area: (Question 1)
Florence LWI & Riparian Inventory		<10:1 (10%) Between 10:1 (10%) and 5:1. Extent of impervious surface within the riparia
GENERAL INFORMATION		<10% [v] 10% - 25% [] Is the reach constricted by man-made features'
Location of data point: RAIR-6 North DAIE	ta point: DAID 6	Yes No V
		Does the orientation of the riparian area allow summer? (Question 9)
Hydrologic Basin: On-site:	Off-Site:	Yes No 🗾 Dominant vegetation layer within riparian are
WATER RESOURCE INFORMATION		Woody vegetation Herbaceous veg
Water Resource: Stream/River: Lake/Pond: Width:	3 feet feet	Does woody vegetation hang over the edge of the Yes \square No \square
1	1001	Large woody debris in riparian area? (Question Yes No 7
	Γ	er resoun
Jacent water resource?	Xes [>40% 10% - 40% 1
As the water resource listed for temperature on DEQ 's 303(d) list:	Yes No V	Degree of development or human caused distu
Within FEMA-mapped 100-year floodplain: Yes	No V	<25% 🗾
Mapped soil series: Yaquina loamy fine sand		How does the NRCS soil survey rank water ere the Riparian Area? (Question 5)
Adjacent Land Uses? (Check as many as needed)		low, slight moderate
Agriculture: Roads: Trademical Commencial Co	L.	What is the dominant vegetation at the top of t
Caleveropeu: Forestry:		Woody vegetation Herbaceous veg
Woody vegetation (trees, shubs, vines > 1 meter) (trees, shubs, vines > 1 meter)	Herbaceous vegetation (finelude trees, shrubs, vines <1 meter)	Are there flood prone areas (adjacent flat area floodplain, etc.) beyond the top of bank or edgr
Blackb		Yes No 🔽
		Is woody vegetation (trees, shrubs, vines) great flood prone riparian area?
		Yes No or no flood prone area pre
		How many vegetation layers (i.e. canopy, mid-
1 mater - 2 7 fact		, [



Florence LWI & Riparian Inventory

RIPARIAN CODE RAIR - 6 South

Date:	9/22/2010		Investigators: C. Lysdale	
Dominar	it tree species:	Douglas Fir		
PTH det	ntial tree height ermined by: n-site vegetation	(Width measured	Width of riparian area: I horizontally from edge of water res Reference site Code	
Commen	nts: Stream	ambed appears	s usually dry.	
	R-6Sveg, RAIR-6Sstr			
Detr.	101	AXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	DRY BLACK 30	101

Rinarian Characterization Form



Riparian Characterization Form	rm	
Florence LWI & Riparian Inventory	OIY	Between 10:1 (10%) and 5:1 (20%) ious surface within the riparian area
GENERAL INFORMATION	Location of data point:	Suppose the reach constricted by man-made features? (Question 8)
Riparian Code: RAIR-6 South Reach Length:	RAIR - 6	L tation of
Hydrologic Basin:	On-site: 🗸 Off-Site:	Yes No Volument vegetation layer within riparian area? (Question 10)
WATER RESOURCE INFORMATION		Woody vegetation 🖊 Herbaceous vegetation 🔲 Bare ground
Water Resource: Stream/River: Lake/Pond: Wetland:	Width: 3 feet Width: feet Width: feet	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) Yes 🗸 No
		Large woody debris in riparian area? (Question 15) Yes \to No \buildrel{\sigma}
Water present year-round: Yes No V	No 🗸 source? Yes No 🗸	resource b
Is the water resource listed for temperature on DEQ's 303(d) list:	Q's 303(d) list: Yes No	Degree of development or human caused disturbance. (Question 19)
Within FEMA-mapped 100-year floodplain:	Yes No V	<25% 🗸 >75% 🔲 >75%
Mapped soil series: Waldport fine sand, 12-30% slopes	% slopes	How does the NRCS soil survey rank water crosion hazard of the dominant mapped the Riparian Area? (Question 5)
Adjacent Land Uses? (Check as many as needed)		low, slight moderate
Agriculture: Roads: Commercial/Indus: Undeveloped:		fined) or
	_	Woody vegetation Herbaceous vegetation
Woody vegetation (trees, shrubs, vines >1 meter)	Herbaceous vegetation (include trees, shrubs, vines <1 meter)	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6)
Douglas Fir		Yes No No
California Wax Myrtle	Scotch Broom	Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high domin flood prone riparian area?
		Yes No or no flood prone area present
		How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?
1 mater = 2 7 feat		

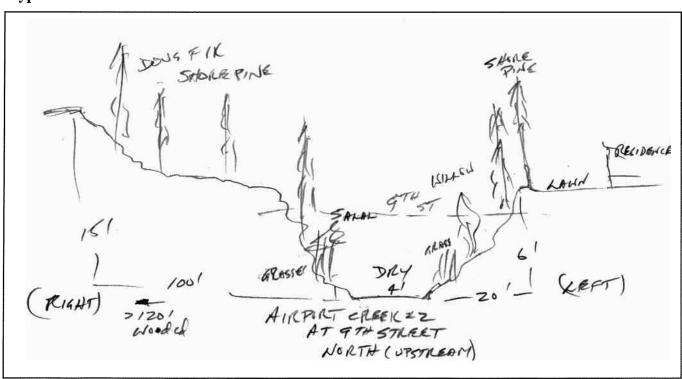


Florence LWI & Riparian Inventory

RIPARIAN CODE RAIR - 7 North

Date:	9/22/2010	Investigators: C. Lysdale	
Dominant	tree species:	Shore Pine	
	· ·	(PTH)/Actual Width of riparian area: 50/20L (Width measured horizontally from edge of water resource)	& 100R feet
ł	rmined by: -site vegetation	Reference site Code	
Comment	s: <u>Strea</u>	m disappears under street at this location - proba	ably into storm sewer.
			WANTED TO THE TOTAL THE TOTAL TO THE TOTAL TOTAL TO THE T
Photos RAIR	-7Nveg, RAIR-7Nstr		

Typical Cross Section:



Riparian Characterization Form



Riparian Characterization Form	in the riparian area: (Question 1)
Florence LWI & Riparian Inventory	Between 10:1 (10%) and 5:1 (20%) Between within the riparian area
GENERAL INFORMATION	<10% L 10% - 25% 10% - 25% 10 the reach constricted by man-made features? (Onestion 8)
Riparian Code: RAIR-7 North RAIR - 7	Yes No V
Reach Length:	summer? (Question 9)
Hydrologic Basin: On-site: 🗸 Off-Site:	Yes No V Dominant vegetation layer within riparian area? (Question 10)
WATER RESOURCE INFORMATION	Woody vegetation Herbaceous vegetation Bare ground
Water Resource: Stream/River: **Lake/Pond: Width: feet Wetland: Width: feet Feet Wetland: Width: Feet Feet Feet Feet Feet Feet Feet Fee	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) Yes No No
	Large woody debris in riparian area? (Question 15) Yes \[\sqrt{No} \[\sqrt{\sq}}}}}}}}}} \end{\sqrt{\sq}}}}}}}}}}}}} \end{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sq}}}}}}}}} \end{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sq}}}}}}}}}} \end{\sqrt{\sqrt{\sqrt{\sq\si}}}}}}}} \end{\sqit{\sqrt{\sq}}}}}} \sqrt{\sqrt{\sqrt{\
Water present year-round: Yes No V	Percent of water resource bordered by vegetated riparian area at least 30 feet
303(d) list: Yes	No V Degree of development or human caused disturbance. (Ouestion 19)
Within FEMA-mapped 100-year floodplain: Yes No	<25%
Mapped soil series: Waldport fine sand, 0-12% slopes	How does the NRCS soil survey rank water erosion hazard of the dominant mather Riparian Area? (Ouestion 5)
Adjacent Land Uses? (Check as many as needed)	low, slight moderate
	What is the dominant vegetation at the top of bank (if defined) or edge of wate
Commercial/Indus.: Undeveloped: Desidential: Profestry: Desidential: Profestry: Design Statement	Woody vegetation Herbaceous vegetation
Woody vegetation Herbaceous vegetation (trees, shrubs, vines >1 meter) (include trees, shrubs, vines <1 meter)	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA m floodplain, etc.) beyond the top of bank or edge of the water resource? (Question
Salal	Yes No 🔽
Shore Pine Grasses Grasses Willow	Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high d
	flood prone riparian area?
	Yes No or no flood prone area present
	How many vegetation layers (i.e. canopy, mid-story, groundcover) are present
1	

Is the reach constricted by man-made features? (Question 8) Yes \bigcup No \bigcup No \bigcup No crientation of the riparian area allow for shading of the water resource at midday in summer? (Question 9) Yes \bigcup No \bigcup No \bigcup Heabaceous vegetation \bigcup Heabaceous vegetation have within riparian area? (Question 10) Woody vegetation hang over the edge of the water? (Questions 11 & 14) Yes \bigcup No \bigcup N	
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Florence LWI & Riparian Inventory

RIPARIAN CODE RHB - 0.3

Date:	9/17/2010	Investigators: C. Lysdale	
Domina	nt tree species:	Shore Pine	
PTH det	ential tree height termined by: On-site vegetation	(PTH)/Actual Width of riparian area: 50/8L & 15 R feet (Width measured horizontally from edge of water resource) Reference site Code	
Commen	ıts: <u>Wate</u>	erway enters culvert to beach at 1st Avenue across from Meares	Street.
	· · · · · · · · · · · · · · · · · · ·	, RHB3Estr0; at 100' east, RHB3Estr&veg	
Typical	Cross Section:		
\$	8 (RIGHT	RESOND TO SHOW SHOW SHOW PINE BEYOND TS FROM SIJOS WATERWAY BAST SIDE IST AVE AT MEARES LOOKING BAST CUPSTREAM	

Riparian Characterization Form



Riparian Characterization Form	Cm Cm	in the riparian area: (Question 1)
Florence LWI & Riparian Inventory	XI	Between 10:1 (10%) and 5:1 (20%) ious surface within the riparian area
GENERAL INFORMATION		<10% \(\sum_{10\%} \) = 25% \(\sum_{10\%} \) S the reach constricted by man-made features? (Question 8)
Riparian Code: RHB-1	Location of data point: RHB-0.3	Yes No 🔽 Does the orientation of the rinarian area allow for shading of the water resource at
Reach Length:		summer? (Question 9)
Hydrologic Basin:	On-site: 🗸 Off-Site: 🗌	Yes 🖊 No 🗔 Dominant vegetation layer within riparian area? (Question 10)
WATER RESOURCE INFORMATION		Woody vegetation 🖊 Herbaceous vegetation 🔼 Bare ground
Water Resource: Stream/River:	Width: 5 feet Width: feet Width:	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) Yes 🗾 No
	erei ereinvereinde ekkelende ekkelende ereinde ereinde ereinde ereinde ekkelende ekkelende ekkelende ekkelende	ris in
Water present year-round: Yes No	[2]	I CS V NO
Are salmonids present in the adjacent water resource?	ce? Yes No	Ferenti Di Water Tesource Doldered by Vegetated Tiparani area ar feast 50 feet with \$\times \times 40\% \big \qquad \leq 10\% \big \qquad \leq 10\% \big
Is the water resource listed for temperature on DEQ's 303(d) list:	2's 303(d) list: Yes No [V]	pment or h
Within FEMA-mapped 100-year floodplain:	Yes No C	<25% v 25% - 75%
Mapped soil series: Waldport fine sand, 0-12% slopes	sodols	How does the NRCS soil survey rank water erosion hazard of the dominant mappee the Riparian Area? (Question 5)
Adjacent Land Uses? (Check as many as needed)		low, slight moderate
Agriculture: Roads: Commercial Indus.		What is the dominant vegetation at the top of bank (if defined) or edge of water res
<u></u>		Woody vegetation Herbaceous vegetation Bare ground
Woody vegetation (trees, shrubs, vines >1 meter)	Herbaceous vegetation (include trees, shrubs, vines <1 meter)	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mappe floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6)
Shore Pine	Reeds	Yes No 🖊
Salal	Grasses	Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high domin
Application		oarian area?
		Yes No or no flood prone area present
		How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?
1 mater = 2 9 feat		

Does the orientation of the riparian area allow for shading of the water resource at midday in summer? (Question 9) Yes 7 No No	Dominant vegetation layer within riparian area? (Question 10)	Woody vegetation	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) Yes 🖊 No	Large woody debris in riparian area? (Question 15) Yes 🗾 No	Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16) >40% \rightarrow 10% - 40% \rightarrow <10\limits_10\limi	Degree of development or human caused disturbance. (Question 19)	CS soil survey rank water erosion ha	low, slight moderate 🗸 high, very high, severe	What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Question 3) Woody vegetation	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6) Yes \to Vo \toV	Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area? Yes No or no flood prone area present	How many vegetation layers (i.e. canopy, mid-story, groundcover) are present? More than 2	
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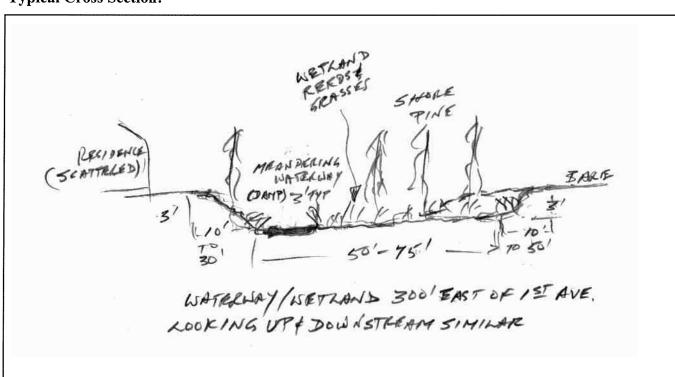


Florence LWI & Riparian Inventory

RIPARIAN CODE RHB - 0.6

Date:	9/17/2010	Investigators: C. Lysdale					
Dominant	tree species:	Shore Pine					
Potential tree height (PTH)/Actual Width of riparian area: 50/30L & 30R (Width measured horizontally from edge of water resource) PTH determined by: On-site vegetation Reference site Code							
Comments: Seasonal waterway meanders through a riparian wetland of 50' to 100' total width.							
Photos RHB-	6Eveg, RHB6Eveg0), RHB6Estr					

Typical Cross Section:



Pingrian Characterization Form



Riparian Characterization Form	The state of the s	in the riparian area: (Question 1)
Florence LWI & Riparian Inventory	VIV	Between 10:1 (10%) and 5:1 (20%) Right Lous surface within the riparian area
GENERAL INFORMATION		<10% [V] 10% - 25% >25% 1.4.6.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0
Riparian Code: RHB-A	Location of data point: RHB - 0.6	As the feach constructed by man-made feath est (Question o) Yes \[\begin{array}{ccc} \text{No} \bigcered{\cdots} \end{array} \]
Reach Length:		Does the orientation of the riparian area allow for shading of the Water reson. summer? (Question 9)
Hydrologic Basin:	On-site: 🗸 Off-Site: 🗌	Yes 🗾 No 🔝 Dominant vegetation layer within riparian area? (Question 10)
WATER RESOURCE INFORMATION		Woody vegetation
Water Resource: Stream/River:	Width: 3 feet Width: feet	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) Yes [✓] No [☐]
Wetland:	Width:feet	Large woody debris in riparian area? (Question 15)
Water present year-round: Yes No		Yes No
ie adjacent water re	ce? Yes No Z	Percent of water resource bordered by vegetated riparian area at least 30 feet >40%
Is the water resource listed for temperature on \mathbf{DEQ} 's $303(d)$	2's 303(d) list: Yes	Degree of development or human caused disturbance. (Question 19)
Within FEMA-mapped 100-year floodplain:	Yes No 🗹	<25% \[25% - 75% \[\vec{\vec{\vec{\vec{\vec{\vec{\vec{
Mapped soil series:Waldport fine sand, 0-12% slopes	slopes	How does the NRCS soil survey rank water erosion hazard of the dominant m the Riparian Area? (Question 5)
Adjacent Land Uses? (Check as many as needed)		low, slight moderate
Agriculture: Roads: Commercialfindus.		What is the dominant vegetation at the top of bank (if defined) or edge of wate
7		Woody vegetation
Woody vegetation (trees, shrubs, vines >1 meter)	Herbaceous vegetation (include trees, shrubs, vines <1 meter)	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA n floodplain, etc.) beyond the top of bank or edge of the water resource? (Question
Shore Pine	Grasses	Yes No 🗾
The second secon	Reeds	
		As woody vegetation (trees, surtius, vines) greater than a meet (5.2 reed) inga- flood prone riparian area?
		Yes No or no flood prone area present
		How many vegetation layers (i.e. canopy, mid-story, groundcover) are present
1 meter = 3.2 feet		

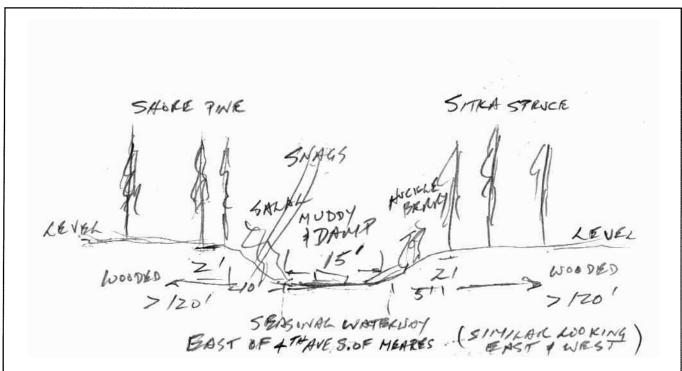
Does the orientation of the riparian area allow for shading of the water resource at midday in summer? (Question 9) Yes \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Woody vegetation	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) Yes 🗾 No	Large woody debris in riparian area? (Question 15) Yes 🗾 No 🔝	Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16) >40%	Degree of development or human caused disturbance. (Question 19) $<25\%$ 25% 25% \checkmark	l survey rank water e stion 5)	Setation at the top of	Woody vegetation	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6) $Yes $	tation (trees, shrubs, vines) greater than parian area?	getation layers (i.e. canopy, mid-story, g
Woody vegetation Z Herbaccous vegetation Bare ground Ves Vo Vestion Voody vegetation hang over the edge of the water? (Questions 11 & 14) Yes V No Vestion Voody vegetated riparian area at least 30 feet wide? (Question 16) Yes V No Vestion Voody Vegetated riparian area at least 30 feet wide? (Question 16) Yes V No Voody Vegetated Voody Voody Vegetated Voody Vegetated Voody Vegetated Voody Vegetated Voody Vegetation Voody Voody Voody Vegetation Voody Voody Voody Voody Vegetation Voody	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) Yes \[\begin{align*} \text{No} \end{align*} \] Large woody debris in riparian area? (Question 15) Yes \[\begin{align*} \text{No} \end{align*} \] Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16) >40% \[\begin{align*} \text{Lorentz} \] Nogere of development or human caused disturbance. (Question 19) <25% \[\begin{align*} \text{25% -75% } \begin{align*} \begin{align*} \text{NCS} \text{soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 3) Noody vegetation \[\begin{align*} \text{Herbaccous vegetation} \] What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Question 3) Woody vegetation \[\begin{align*} \text{Herbaccous vegetation} \] Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6) Yes \[\begin{align*} \text{No Con no flood prone area present } \[\begin{align*} \begin{align*} \text{No ron flood prone area present } \[\begin{align*} \begin{align*} \text{No ron flood prone area present } \[\begin{align*} \begin{align*} \text{No ron flood prone area present } \[\begin{align*} \begin{align*} \text{Ves} \] How many vegetation layers (i.e. canopy, mid-story, groundcover) are present? More than 2 \[\begin{align*} \text{2 layers} \begin{align*} \begin{align*} \text{1 layer or unvegetated} \end{align*} \] I layer or unvegetated \[\begin{align*} \begin{align*} \text{1 layer or unvegetated} \end{align*} \]	Large woody debris in riparian area? (Question 15) Yes	Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16) >40%	Degree of development or human caused disturbance. (Question 19) <25% — 75%	How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5) low, slight moderate	What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Question 3) Woody vegetation Herbaceous vegetation Bare ground Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6) Yes No Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area? Yes No or no flood prone area present How many vegetation layers (i.e. canopy, mid-story, groundcover) are present? More than 2 2 layers 1 layer or unvegetated	Woody vegetation Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6) Yes No Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area? Yes No or no flood prone area present How many vegetation layers (i.e. canopy, mid-story, groundcover) are present? More than 2 1 layer or unvegetated 1 layer or unvegetated	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6) Yes No V Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area? Yes No or no flood prone area present V How many vegetation layers (i.e. canopy, mid-story, groundcover) are present? More than 2 2 layers V 1 layer or unvegetated	Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area? Yes \(\bigcup \) No or no flood prone area present \(\bigcup \) How many vegetation layers (i.e. canopy, mid-story, groundcover) are present? More than 2 \(\bigcup \) 2 layers \(\bigcup \) 1 layer or unvegetated \(\bigcup \)	How many vegetation layers (i.e. canopy, mid-story, groundcover) are present? More than 2	



Florence LWI & Riparian Inventory

RIPARIAN CODE RHB - 1

Date:	9/17/2010	Investigators: C. Lysdale	_		
Dominant	tree species:	Shore Pine			
Poten	tial tree height	(PTH)/Actual Width of riparian area: 50/50L&50R (Width measured horizontally from edge of water resource)	feet		
PTH determined by: On-site vegetation Reference site Code					
Comments	s: <u>Strea</u>	m bed is a wide depression in an otherwise mostly level wo	ooded area.		
Photos RHB-1Eveg0, RHB-1Estr0; and at 100' east RHB-1Eveg, RHB-1Estr					
Typical Cross Section:					





Riparian Characterization Form	rm PHS	Average slope in the riparian area: (Question 1)
Florence LWI & Riparian Inventory	COLY	<10:1 (10%)
GENERAL INFORMATION		<10% 🕶 10% - 25% 🔲 >25% 🛅
Riparian Code: RHB-B	Location of data point: RHB - 1	Is the reach constricted by man-made features? (Question 8) Yes \[\begin{align*} \text{No } \begin{align*} \begin{align*} Volume of the discrete of the midden in the content of the midden in the midden in the content of the midden in the midden
Reach Length:		Does the orientation of the ripartan area allow for shading of the water resource at initional in summer? (Question 9)
Hydrologic Basin:	On-site: 🗸 Off-Site: 🗌	Yes 🖊 No 🔲 Dominant vegetation layer within riparian area? (Question 10)
WATER RESOURCE INFORMATION		Woody vegetation [
Water Resource: Stream/River:	Width: 15 feet Width: feet Width:	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) Yes 🖊 No
		Large woody debris in riparian area? (Question 15) Yes 🗾 No
Water present year-round: Yes No V	No 🗸 source? Yes 🔲 No 🗸	Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16)
Is the water resource listed for temperature on DEQ's 303(d) list:	€Q's 303(d) list: Yes \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	pment or human caused disturbance.
Within FEMA-mapped 100-year floodplain:	Yes No K	<25% 🗾 25% - 75% 🔲 >75% 🗌
Mapped soil series: Yaquina loamy fine sand		How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Ouestion 5)
Adjacent Land Uses? (Check as many as needed)		low, slight moderate
Agriculture: Roads: Commercialfindus.		What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Quest
		Woody vegetation
Woody vegetation (trees, shrubs, vines >1 meter)	Herbaceous vegetation (include trees, shrubs, vines <1 meter)	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6)
Sitka Spruce	Salal	Yes No 🔽
Shore Pine	Huckleberry	ation (tı
		flood prone riparian area?
		t col 100 tations procedure at our pressure.
1 meter = 3.2 feet		Month many vegetation tayers (i.e. canopy), mur-story, groundcover) are present:

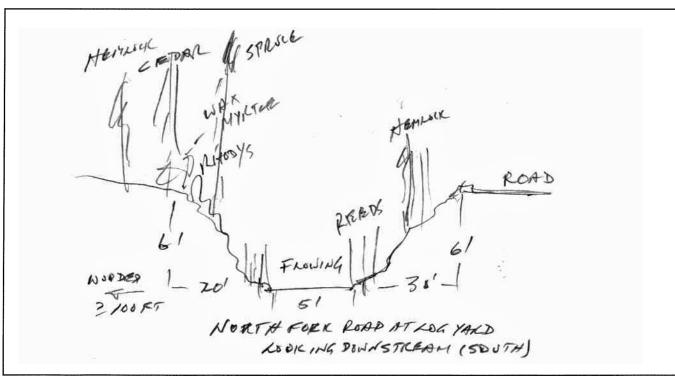


Florence LWI & Riparian Inventory

RIPARIAN CODE RNS - 2

Date:	10/25/2010	Investigators: C. Lysdale			
Dominant	tree species:	Western Hemlock/Sitka Spruce			
Poten	tial tree height	(PTH)/Actual Width of riparian area: 120/100L & 30R feet (Width measured horizontally from edge of water resource)			
1	PTH determined by: On-site vegetation Reference site Code				
Comment	s: Strea	am emerges from culvert (west) at this location.			
Photos RNS-	2veg, RNS-2str				

Typical Cross Section:



Riparian Characterization Form



TAPATANI CITAL ACCI IZALION FOI III		or age and
T : O' EXXX I		<10:1 (10%
Florence LWI & Riparian Inventory	Ory	Extent of in
CENEDAT INFORMATION		<10%
GENERAL INFORMATION		Is the reach
Riparian Code: RNS-A	Location of data point: RNS-2	Ye
		Does the ori summer? (Q
Hydrologic Basin: North Fork	On-eite-	Ye
		Dominant v
WATER RESOURCE INFORMATION		Woody veg
Water Resource: Stream/River:	Width: 5 feet	Does woody
Lake/Pond:	Width: feet Width: foot	Ye
LWI Wefland Code:		Large wood
Water present year-round: Yes V		Ye
e adjacent water re	irce? Yes No	Percent of v
Is the water resource listed for temperature on DEQ's 303(d) list:	Yes 🗌	>40% Degree of d
Within DDWA manned 100 mon floodulein.	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	<259
Mapped soil series: Waldport fine sand, 0-12% slopes		How does tl
Adjacent Land Uses? (Check as many as needed)		the Riparia low, slig
Agriculture: Roads: V	Ž	What is the
Commercial/Indus.: Undeveloped: Residential: V Forestry:		Woody veg
Woody vegetation	Herbaceous vegetation	Are there fl
Western Hemlock	Rhododendron	À
Western Red Cedar	Bracken Fern	
Sitka Spruce	Reeds	Is woody ve
California Wax Myrtle		flood prone
Douglas Fir		Ye
		Ном тапу
1 meter = 3.2 feet		More than

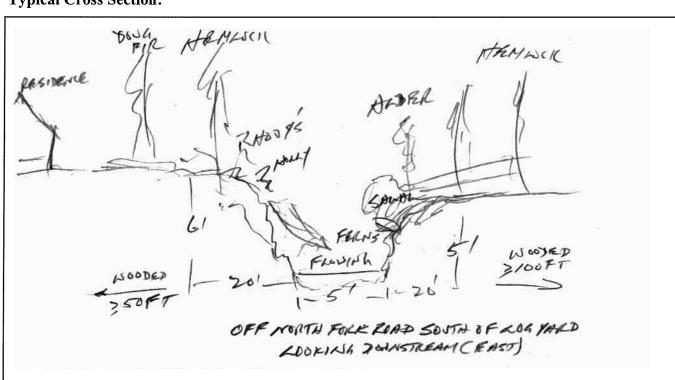


Florence LWI & Riparian Inventory

RIPARIAN CODE RNS - 3

Date:	10/25/2010	Investigators: C. Lysdale	<u> </u>	
Domina	nt tree species:	Western Hemlock		
Pote	ential tree height	(PTH)/Actual Width of riparian area: (Width measured horizontally from edge of water re	120/50L & 100R feet	
	PTH determined by: On-site vegetation Reference site Code			
Comme	nts:			
Photos RN	S-3veg, RNS-3str			

Typical Cross Section:





Riparian Characterization Form	orm .	Average slope in the riparian area: (Question 1)
Florence I WI & Ringrian Inventory	M.O.	<10:1 (10%) Between 10:1 (10%) and 5:1 (20%) >5:1 (20%) 2
		Extent of impervious surface within the riparian area. (Question 4)
GENERAL INFORMATION		ricted by man-made features? (Ouest
Riparian Code: RNS-A	Location of data point: RNS-3	Yes No 🗾
		Does the orientation of the riparian area allow for shading of the water resource at summer? (Question 9)
Hydrologic Basin: North Fork	On-site: 🗸 Off-Site: 🗌	Yes No V
WATER RESOURCE INFORMATION		Woody vegetation 🖊 Herbaceous vegetation 🔲 Bare ground
Water Resource: Stream/River:	Width: 5 feet Width:	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) Yes V
Wetland:	Width:feet	ris in
LWI Wetland Code: Water present year-round: Yes V		Yes 🗸 No
e adjacent water res	urce? Yes No	Percent of water resource bordered by vegetated riparian area at least 30 feet wide?
Is the water resource listed for temperature on DEQ's 303(d) list:	3Q's 303(d) list: Yes No V	J AND AND TO THE DESCRIPTION OF
Within FEMA-mapped 100-year floodplain:	Yes No C	<25% 🕶 25% - 75% 🔲 >75%
Mapped soil series: Waldport fine sand, 0-12% slopes	sedols 9	How does the NRCS soil survey rank water erosion hazard of the dominant mapped the Riparian Area? (Question 5)
Adjacent Land Uses? (Check as many as needed)		low, slight moderate
Agriculture: Roads: Commondiffication (1)		What is the dominant vegetation at the top of bank (if defined) or edge of water resc
7 2	<u> </u>	Woody vegetation Herbaceous vegetation Bare ground
Woody vegetation	Herbaceous vegetation	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped floodulain, etc.) beyond the trn of bank or edge of the water resource? (Question 6)
Western Hemlock	(include uces, sinuos, vines >1 meter) Rhododendron	Vec No Z
Douglas Fir	Salal	
Red Alder	Holly	Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high domin
	Bracken Fern	flood prone riparian area?
		ו בא ביי וויס מו ווס זוסמת ליוסמת ליוסמת מו נס ביי ביי ביי ביי ביי ביי ביי ביי ביי בי
		How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?
1 meter = 3.2 feet		



Florence LWI & Riparian Inventory

RIPARIAN CODE RRH - 1

Date:	9/21/2010	Investigators: C. Lysdale	-	
Domina	nt tree species:	Red Alder/Shore Pine		
	· ·	(PTH)/Actual Width of riparian area: 65/70L &50 R (Width measured horizontally from edge of water resource)	feet	
ł .	ermined by: on-site vegetation	Reference site Code	-	
Commer	ıts: <u>Strea</u>	am enters large concrete box culvert at this location.	4134	
Photos RRI	H-1Eveg0, RRH-1Eveg;	RRH-1Estr		
Typical Cross Section:				
OPEN JUSTEN RESIGN	PLACESE 172' (RIGH	FLOUING TO' 121	OPEN DEVENTRE)	

Rinarian Characterization Form



Riparian Characterization Form	m PHS	Average slope in the riparian area: (Question 1) <10:1 (10%) Between 10:1 (10%) and 5:1 (20%) 2 >5:1 (20%) 2
Florence LWI & Riparian Inventory	LY	Extent of impervious surface within the riparian area. (Question 4) <10% 7 10% 25% 7 >>5% 7
RMATION RRH-1NE	Location of data point:	ricted by man-made features? (Quest No 🗾 ion of the riparian area allow for sh.
Reacu Lengui: Hydrologic Basin:	On-site: Off-Site:	Yes V No Dominant vegetation layer within riparian area? (Question 10)
WATER RESOURCE INFORMATION Water Resource: Stream/River: Lake/Pond: Wetland: P	Width: 4 feet Width: feet Width: feet	Woody vegetation Herbaceous vegetation Bare ground Does woody vegetation hang over the edge of the water? (Questions 11 & 14) Yes No
Water present year-round: Yes No C Are salmonids present in the adjacent water resource? Is the water resource listed for temperature on DEQ's 303(d) list:	.e? Yes No V No V	Yes Volument or human caused disturbance. (Question 19)
Within FEMA-mapped 100-year floodplain: Yes Mapped soil series: Waldport fine sand, 0-12% slopes	Yes No V	<25% 🗾 25% - 75% 🔲 >75% 🗌 How does the NRCS soil survey rank water crosion hazard of the dominant m
Adjacent Land Uses? (Check as many as needed) Agriculture: Commercial/Indus.: Residential:		the Kaparran Area? (Question 5) low, slight moderate
Woody vegetation (trees, shrubs, vines >1 meter) Shore Pine	Herbaceous vegetation (include trees, shrubs, vines <1 meter)	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA n floodplain, etc.) beyond the top of bank or edge of the water resource? (Question Yes \to No \to \to \to
Ked Alder Willow California Wax Myrtle		
Blackberry		Yes No or no flood prone area present How many vegetation layers (i.e. canopy, mid-story, groundcover) are present

Extent of impervious surface within the riparina area. (Question 4) <pre></pre>	How many vegetation layers (i.e. canopy, mid-story, groundcover) are present? More than 2 ☐ 2 layers ✓ 1 layer or unvegetated ☐
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Florence LWI & Riparian Inventory

RIPARIAN CODE RRH - 2SW

Date:	9/21/2010	Investigators: C. Lysdale
Domina	nt tree species:	Shore Pine/Alder
Pot	ential tree height	t (PTH)/Actual Width of riparian area: 50/75L & 75 R feet (Width measured horizontally from edge of water resource)
•	termined by:	<u> </u>
(On-site vegetation	Reference site Code
Comme	nts:	
Photos RF	RH-2Sveg, RRH-2Sstr	
Typical	Cross Section:	
		The second secon
		SHORE
Le	& SPIRE	IN SE
20'	OPEN (NOW	PLEWING STORY TELL 201
		CREEK AT SKOOK JAY DR
		EDOKUMG SOUTH WEST (DOWNSTKEAM)

Rinarian Characterization Form



Riparian Characterization Form	m.	
Florence LWI & Riparian Inventory	AI	Between 10:1 (10%) and 5:1 (20%) ious surface within the riparian area
GENERAL INFORMATION		<10% [\sqrt{\sq}}}}}}}}}} \end{\sqnt{\sqnt{\sqrt{\sqrt{\sqrt{\sqrt{\sq}}}}}}}}}} \end{\sqnt{\sqnt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sq}}}}}}}}} \end{\sqnt{\sqnt{\sqrt{\sqrt{\sqrt{\sqrt{\sq}}}}}}}} \end{\sqnt{\sqrt{\sq}}}}}}} \end{\sqnt{\sqnt{\sqnt{\sq}}}}}} \end{\sqnt{\sq}}}}}} \end{\sqnt{\sqnt{\sq}}}}}} \end{\sqnt{\sqnt{\sq}}}}}} \end{\sqnt{\sq}
Riparian Code: RRH-2SW	Location of data point:	Yes No 🗸 Does the arientation of the rinarian area allow for shading of the water recom
Reach Length:		Summer? (Question 9)
Hydrologic Basin:	On-site: 🗸 Off-Site: 🗌	Yes
WATER RESOURCE INFORMATION		Woody vegetation 🗸 Herbaceous vegetation 🗾 Bare ground
Water Resource: Stream/River: V Lake/Pond: V Worland: V	Width: 3 feet Width: feet Width: feet	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) $Yes \ \ \checkmark \qquad No \ \ \square$
		lebris in
Water present year-round: Yes No	[2]	Yes No V
Are salmonids present in the adjacent water resource?	ce? Yes No 🗸	
Is the water resource listed for temperature on DEQ's 303(d) list:	γ's 303(d) list: Yes	Degree of development or human caused disturbance. (Question 19)
Within FEMA-mapped 100-year floodplain:	Yes No 🗹	<25% v >75%
Mapped soil series: Dune land		How does the NRCS soil survey rank water erosion hazard of the dominant m the Riparian Area? (Question 5)
Adjacent Land Uses? (Check as many as needed)		low, slight moderate
Agriculture: Roads: Commercial/Indus:		vegetation at the top of bank (if defined) or
]2	1	Woody vegetation
Woody vegetation (trees, shrubs, vines >1 meter)	Herbaceous vegetation (include trees, shrubs, vines <1 meter)	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA m floodplain, etc.) beyond the top of bank or edge of the water resource? (Question
Shore Pine	Grasses	Yes 🗸 No
Red Alder California Wax Myrtle		Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high o
		flood prone riparian area? Yes \to
1 motor - 2 2 feat		TION MANY TEACHER AND LES (INC. CHANGE) INC. COLLEGE C

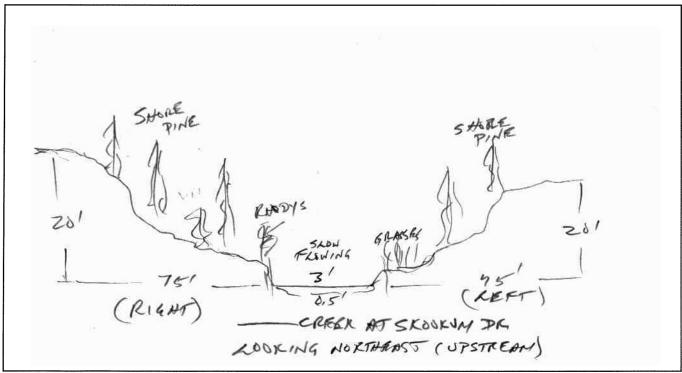
Extent of impervious surface within the riparian area. (Question 4) <10% 🗹 10% - 25% 🔲 >25% 🛄	Is the reach constricted by man-made features? (Question 8) Yes No 🗾	Does the orientation of the riparian area allow for shading of the water $\mbox{resource}$ at midday in summer? (Question 9)	Yes 🗸 No 🔲 Dominant vegetation layer within riparian area? (Question 10)	Woody vegetation 🖊 Herbaceous vegetation 🔲 Bare ground	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) Yes 🖊 No	Large woody debris in riparian area? (Question 15) Yes \[\sum \text{No} \[\subset \]	Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16) >40% \[\sqrt{\sq}}}}}}}}}}}}}} \end{\sqrt{\sq}}}}}}}}}}}} \end{\sqit{\sqrt{\sq}}}}}}}}} } \end{\sqrt{\sqrt{\sqrt{\sq}}}}}}}}} } \sqrt{\sqrt{\sqrt{\sqrt{\	Degree of development or human caused disturbance. (Question 19)	<25% 🗸 25% - 75% 🔲 >75% 🗌	How does the NRCS soil survey rank water crosion hazard of the dominant mapped unit in the Riparian Area? (Question 5) low, slight moderate	What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Question 3) Woody vegetation	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6) $Yes \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area? Yes \bigcup No or no flood prone area present \bigcup \bigcup	How many vegetation layers (i.e. canopy, mid-story, groundcover) are present? More than 2	
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Florence LWI & Riparian Inventory

RIPARIAN CODE RRH - 2NE

Date:	9/21/2010	Investigators: C. Lysdale	
Dominant	t tree species:	Shore Pine	
Poten	itial tree height	(PTH)/Actual Width of riparian area: 50/75L & 75 R (Width measured horizontally from edge of water resource)	feet
i .	rmined by: -site vegetation	_	
Comment			
Photos RRH-	2Nveg, RRH-2Nstr	MATERIAL PROPERTY AND ADMINISTRATION OF THE PROPERT	
Typical C	ross Section:		



Rinarian Characterization Form



Riparian Characterization Form	rm PHS	
Florence LWI & Binarian Inventory	A.I.O	<10:1 (10%) Between 10:1 (10%) and 5:1 (20%) >5:1 (20%) <
		Extent of impervious surface within the riparian area. (Question 4)
GENERAL INFORMATION		ricted by man-made features? (Ouest
Pissonian Codes	Location of data point:	Yes No C
Reach Lenoth:	אאח - 2	Does the orientation of the riparian area allow for shading of the water $$ resource at midday in summer? (Question 9)
Hydrologic Basin:	On-site: 🗸 Off-Site:	Yes Volume No
WATER RESOURCE INFORMATION		Woody vegetation Herbaceous vegetation Bare ground
Water Resource: Stream/River:	3	Does woody vegetation hang over the edge of the water? (Questions 11 & 14)
Lake/Pond: Wetland:	Width: feet Width: feet	Yes (
LWI Wetland Code:		Large woody debris in riparian area? (Question 15) Yes \[\sum \ \subseteq \subseteq \]
Water present year-round: Yes No	[Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16)
Are salmonids present in the adjacent water resource?	Yes No 🗸	>40% 🗸 10% - 40% 🔲 <10%
Is the water resource listed for temperature on DEQ's 303(d) list:	Q's 303(d) list: Yes No 🗸	Degree of development or human caused disturbance. (Question 19)
Within FEMA-mapped 100-year floodplain:	Yes No 🗸	<25% v 25% - 75%
Mapped soil series: Dune land		How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5)
Adjacent Land Uses? (Check as many as needed)		low, slight moderate ligh, very high, severe
		What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Quest
Commercial/maus.: Residential:		Woody vegetation Herbaceous vegetation
Woody vegetation	Herbaceous vegetation (include trees shunks vines<1 meter)	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6)
Shore Pine	Grasses	Ves
Rhododendron		Y 1.
		is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) nign dominant in the flood prone riparian area?
		Yes No or no flood prone area present
		How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?
1 meter = 3.2 feet		

Yes 🗸 No 🔲 Dominant vegetation layer within riparian area? (Question 10)	Woody vegetation	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) $Yes \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	Large woody debris in riparian area? (Question 15) Yes \text{No \(\mathcal{L}\)}	Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16) $>40\%$ \checkmark 10% \sim 10% \sim $<10\%$	Degree of development or human caused disturbance. (Question 19) <255% 🗾 25% - 75% 📄 >75%	How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5) low, slight moderate	What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Question 3) Woody vegetation Herbaceous vegetation	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6) Yes \times \times \times \	Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area? Yes \bigcup No or no flood prone area present \bigcup	How many vegetation layers (i.e. canopy, mid-story, groundcover) are present? More than 2
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Florence LWI & Riparian Inventory

RIPARIAN CODE RRH-3

Date:	3/1/2011	Investigators: C. Lysdale	
Dominan	t tree species:	Shore Pine	
PTH dete	ntial tree height ermined by: n-site vegetation	(Width measured horizontally from edge of water resource) Reference site Code	
Commen	ts:		
Photos Typical C	Cross Section:		
	T. CRIA	SHOULE SHOULE SHOULE SHOULE PINE SHOULE PINE SHOULE PINE SHOULE A' SO' - 1 - 0.5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	

Riparian Characterization Form



Riparian Characterization Form	m.	
Flowence I W. P. Dinewicz Ingonto		<10:1 (10%) Between 10:1 (10%) and 5:1 (20%) 🗸 >5:1 (20%)
FIGURENCE LWI & Niparian inventory		Extent of impervious surface within the riparian area. (Question 4)
GENERAL INFORMATION		ricted by man-made features? (Ouset)
Riparian Code: RRH-A	Location of data point:	As III No V
Reach Length:		Does the offentation of the riparian area allow for shading of the water resource at inidday in summer? (Question 9)
Hydrologic Basin:	On-site: 🗸 Off-Site: 🗌	Yes No V Dominant vegetation layer within riparian area? (Question 10)
WATER RESOURCE INFORMATION		Woody vegetation Herbaceous vegetation Bare ground
Water Resource: Stream/River:	Width: 4 feet Width: feet Width: feet	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) $Yes ~ \square ~ No ~ \checkmark$
]	1	Large woody debris in riparian area? (Question 15)
Water present year-round: Yes No	[7]] - -
Are salmonids present in the adjacent water resource?	ce? Yes No 🗸	February Market Lesquirce Bolinered by regelated hydrian area ar reast 50 feet white: (Squestion by) >40% 10% - 40%
Is the water resource listed for temperature on DEQ's 303(d) list:	y's 303(d) list: Yes No 🗸	Degree of development or human caused disturbance. (Question 19)
Within FEMA-mapped 100-year floodplain:	Yes No V	<25%
Mapped soil series: Dune land		How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5)
Adjacent Land Uses? (Check as many as needed)		low, slight moderate high, very high, severe
		What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Ques
Commercial/indus.: Residential: Rosetty:		Woody vegetation ☐ Herbaceous vegetation ✓ Bare ground
Woody vegetation (trees, shrubs, vines >1 meter)	Herbaceous vegetation (include trees, shrubs, vines <1 meter)	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6)
Shore Pine	Grasses	Yes No 🗸
		Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area?
		Yes No or no flood prone area present
		How many vegetation layers (i.e. canopy, mid-story, groundcover) are present?
1 mater - 2 1 fact		

Yes No V Dominant vegetation layer within riparian area? (Question 10)	Woody vegetation Herbaceous vegetation Bare ground	Does woody vegetation hang over the edge of the water? (Questions 11 & 14) Yes \text{No \(\vec{\vectcolor}\)}	Large woody debris in riparian area? (Question 15) Yes \[\sum_{\text{No}} \subseteq \cdot \sigma_{\text{\colorable}} \]	Percent of water resource bordered by vegetated riparian area at least 30 feet wide? (Question 16) > 40%	Degree of development or human caused disturbance. (Question 19) <25% 75% >75%	How does the NRCS soil survey rank water erosion hazard of the dominant mapped unit in the Riparian Area? (Question 5)	low, slight moderate high, very high, severe	What is the dominant vegetation at the top of bank (if defined) or edge of water resource? (Question 3) Woody vegetation Herbaceous vegetation	Are there flood prone areas (adjacent flat areas, depressions, swales, FEMA mapped 100-year floodplain, etc.) beyond the top of bank or edge of the water resource? (Question 6) Yes \square No \square	Is woody vegetation (trees, shrubs, vines) greater than 1 meter (3.2 feet) high dominant in the flood prone riparian area?	Yes No or no flood prone area present	How many vegetation layers (i.e. canopy, mid-story, groundcover) are present? More than 2	The second secon
---	--	---	---	--	--	--	--	---	---	--	---------------------------------------	--	--

Date(s) of field work: 9/25/10, 10/	24/10	Stream Name: Munsel Creek
Investigator(s): CAL		Stream Reach: RMC-A
Location: Siuslaw Estuary to Hw	yy. 126	Reach Length: <u>545</u> feet
Assessment Sites: RMC-0, RMC	-1S	Hydrologic basin: Munsel Creek
Water Resource(s): Perennial N t Adjacent Land-Use: Undeveloped Soil – Mapped series: Waldport fi	, Commercial	
Channel & Riparian Characteris	stics:	
Shaded Summer Midday: Flood Prone Areas: X Y Woody Debris in Riparian Area: Extent of Impervious Surface:	Y X N V _N, Woody Veg Present: X Disturbance:	0-10% X 11-24% > 25%
Riparian Vegetation		
Number of Layers: 0-12 Dominant Layer: Woody > 1m TREES Sitka Spruce Douglas Fir Red Alder		Hang over water: X Yes No ominant TOB: Woody > 1m HERBACEOUS Reeds Grasses Bracken Fern
Willow		
Riparian Dimensions: (Estimat	ed – Looking I	Oownstream, TOB = Top of Bank)
Average Slope in Riparian Area: Riparian Width at least 30 feet:		0-10%11-19% _ X > 20% 0-10%11-39%> 40% _ X
Width of Riparian Area Looking Total Riparian Area:	g Downstream:	Left:30 feetRight:40 feetLeft:0.4 acresRight:0.5 acres

Rationale/Comments: Riparian widths are measured above the area flooded at high tide up slope to the topographical beak at level upland.

Date(s) of field work: 8/25/10 – 9 /	/26/10	Stream Name: Munsel Creek
Investigator(s): CAL		Stream Reach: RMC-B
Location: Hwy. 126 to M.C. Gre	eenway Park	Reach Length: 8550 feet
Assessment Sites: RMC-1N, RM RMC-4, RMC-5, RM		Hydrologic basin: Munsel Creek
Water Resource(s): Perennial N Adjacent Land-Use: Residential Soil – Mapped series: Yaquina lo	,	etland,Lake
Channel & Riparian Characteri	stics:	
Shaded Summer Midday: Y Flood Prone Areas: Y X Woody Debris in Riparian Area Extent of Impervious Surface:	Y N W N, Woody Vege Present: X Disturbance: 0	0-10% X 11-24% > 25%
Riparian Vegetation		
Number of Layers: 0-12 Dominant Layer: Woody > 1m		Hang over water: X Yes No ominant TOB: $Woody > 1m$.
TREES Douglas Fir Western Hemlock Western Red Cedar Red Alder	SHRUBS Salal Huckleberry Rhododendro	HERBACEOUS Grasses Reeds
Riparian Dimensions: (Estimat	ted – Looking D	ownstream, TOB = Top of Bank)
Average Slope in Riparian Area: Riparian Width at least 30 feet:		0-10%11-19% <u>X</u> > 20% 0-10%11-39%> 40% <u>X</u>
Width of Riparian Area Looking Total Riparian Area:	_	Left: 50 feet Right: 50 feet Left: 9.8 acres Right: 9.8 acres

Rationale/Comments: Reach lies entirely within a residential area. Riparian widths are set from TOB to the topographical break to level upland, which is also typically the boundary of established residential development.

Date(s) of field work: 9/26/10, 10/2	8/10	Stream Name:	Munsel Creek
Investigator(s): CAL		Stream Reach:	RMC-C
Location: M.C. Greenway Park to at 35 th Street	M.C. Loop	Reach Length:	2400 feet
Assessment Sites: RMC-6.3, RMC		Hydrologic bas	in: Munsel Creek
Water Resource(s): Perennial N to Adjacent Land-Use: Residential, Un Soil – Mapped series: Yaquina loan	ndeveloped	tland <u>#6</u>	_, Lake
Channel & Riparian Characterist	ics:		
Channel Width: <u>Var.</u> ft Depth of Shaded Summer Midday: <u>X</u> Y Flood Prone Areas: <u>X</u> Y! Woody Debris in Riparian Area: Extent of Impervious Surface: Degree of Development/Human D Comments: Stream flow primaril passing through a side channel	N Wa N, Woody Vege Present: X 0 visturbance: 0 y passes throug	ter Erosion Haza station in Flood A Not Present: -10% _X 11-24 -25% _X 26-7 sh wetland LWI -	Area: Hi X Lo Area: X Y N
Riparian Vegetation			
Number of Layers: 0-12 Dominant Layer: Woody > 1m		ang over water: minant TOB: <u>W</u>	
TREES Douglas Fir Red Alder Shore Pine Willow	SHRUBS Salal Huckleberry		ERBACEOUS Grasses Reeds
Riparian Dimensions: (Estimated	d – Looking Do	ownstream, TO	B = Top of Bank)
Average Slope in Riparian Area: Riparian Width at least 30 feet:		0-10% <u>X</u> 11 0-10% <u>1</u> 11-	-19%> 20% 39%_X > 40%
Width of Riparian Zone Looking Total Area of Riparian Zone:	Downstream:		t Right: <u>50</u> feet
Rationale/Comments: The riparian on definite stream bank or to	pographical bre	eak on the eastern	n (left) side. The

Rationale/Comments: The riparian corridor for this reach includes a large wetland with no definite stream bank or topographical break on the eastern (left) side. The stream splits over several seasonal routes within the wetland and re-converges near RMC-6.3. The right (west) riparian width is from TOB to the topographical break at level upland; the left (east) width is based on PTH for Shore Pine.

Date(s) of field work: 3/13/12, 3/25	5/12	Stream Name:	Munsel Creek
Investigator(s): C. Lysdale with S and NMFS	STEP, ODFW,	Stream Reach:	RMC-Cu*side'ej cppgn
Location: Coast Village, Florenti	ne Estates	Reach Length:	<u>1900</u> feet
Assessment Sites: RMC-6.7, RMC	C-6.8, RMC-6.9	Hydrologic bas	sin: Munsel Creek
Water Resource(s): Intermittent Madjacent Land-Use: Residential, Soil – Mapped series: Waldport fin			
Channel & Riparian Characteris	stics:		
Flood Prone Areas: Y X N Woody Debris in Riparian Area: Extent of Impervious Surface: Degree of Development/Human I Comments: The channel is in a r vegetated. The stream passes passable, plus a wooden flum	Present: X 0 Disturbance: 0 residential area be through culvert	Not Present:	
Riparian Vegetation			•
Number of Layers: 0-12 _X Dominant Layer: Woody > 1m			X Yes No Voody > 1m .
TREES	SHRUBS	F	HERBACEOUS
Douglas Fir	Salal		Grasses
Red Alder	Huckleberry		Reeds
Shore Pine	Rhododendro	n	
Calif. Waxmyrtle			
Riparian Dimensions: (Estimate	ed – Looking Do	ownstream, TO	OB = Top of Bank)
Average Slope in Riparian Area:		0-10% 11	1-19%> 20%_ X
Riparian Width at least 30 feet:			1-39% <u>> 40%</u>
Width of Riparian Zone Looking Total Riparian Area:	•		t Right: <u>25</u> feet es Right: <u>1.1</u> acres

Rationale/Comments: Lysdale visited site with above agency staff on 3/13/12 and Lysdale returned on 3/25/12 to complete Reach Summary. This reach is a side channel off Munsel Creek which passes through heavy residential development and has low or no flow in summer. The 25-ft riparian width L and R is typical from TOB to a topographical break adjacent to streets and/or structures. All 3 agencies concurred in writing that Munsel Creek and the side channel are both considered as critical habitat for Oregon Coast coho salmon (a federally listed threatened species) and are important to the conservation and recovery of this species and recommended that the riparian area be declared as significant and protected with a 50-foot safe harbor riparian width.

Date(s) of field work: 9/14/10 - 10/28	8/10	Stream Name: Munsel Creek
Investigator(s): CAL		Stream Reach: RMC-D
Location: M.C. Loop at 35 th St to Moutfall into Munsel C		Reach Length: 8350 feet
Assessment Sites: RMC-6.5, RMC-		Hydrologic basin: Munsel Creek
Water Resource(s): Perennial N to S Adjacent Land-Use: Residential Soil – Mapped series: Yaquina loam		aldport fine sand, 0-12% slopes
Channel & Riparian Characteristic	cs:	
Flood Prone Areas: YXN, Woody Debris in Riparian Area: H Extent of Impervious Surface: Degree of Development/Human Di	Woody Veget Present: X 0- sturbance: 0	er Erosion Hazard: HiX _ Lo tation in Flood Area: YXN Not Present:10%X11-24% > 25%25% 26-74%X > 75% shaded by large conifers and shrubs.
Riparian Vegetation		
Number of Layers: 0-12> Dominant Layer: Woody > 1m		ang over water: X Yes No minant TOB: $Woody > 1m$.
TREES	SHRUBS	HERBACEOUS
	Salal	Grasses
Western Hemlock Red Alder Shore Pine	Huckleberry	Reeds
Riparian Dimensions: (Estimated	– Looking Do	ownstream, TOB = Top of Bank)
Average Slope in Riparian Area: Riparian Width at least 30 feet:		0-10%11-19% <u>X</u> > 20% 0-10%11-39% > 40% <u>X</u> _
Tupullar (Table at least 50 100).		11 00/0
Width of Riparian Area Looking D Total Riparian Area:		Left: 40 feet Right: 40 feet Left: 7.7 acres Right: 7.7 acres

Rationale/Comments: Reach lies mostly within developed residential areas. Riparian widths are set as distance from TOB to topographical break at level upland and/or boundary with established residential development.

Date(s) of field work: 9/14/10 - 3/2	28/11	Stream Name: Munsel Lake (West)
Investigator(s): CAL		Stream Reach: RMC-D1
Location: Developed west shoreli of Munsel Lake	ne	Reach Length: 4750 feet
Assessment Sites: RMC-7.5, RM	C-7.7	Hydrologic basin: Munsel Creek
Water Resource(s): Munsel Lake Adjacent Land-Use: Residential Soil – Mapped series: Yaquina loa		aldport fine sand, 0-12% slopes
Channel & Riparian Characteris	stics:	
Woody Debris in Riparian Area: Extent of Impervious Surface: Degree of Development/Human Comments: Lakeshore is develo	Present:0 Disturbance: (tation in Flood Area:Y _X _N Not Present: _X10% _X _11-24% > 25%25% 26-74% _X > 75% and includes a public boat launch
Riparian Vegetation		
Number of Layers: 0-12 _X Dominant Layer: Woody > 1m		ang over water: Yes X _ No sminant TOB: $Woody > 1m$
TREES	SHRUBS	HERBACEOUS
Douglas Fir	Salal	Grasses
Shore Pine Red Alder	Huckleberry	Reeds
Riparian Dimensions: (Estimat	ed – Looking Do	ownstream, TOB = Top of Bank)
Average Slope in Riparian Area: Riparian Width at least 30 feet:		0-10%11-19% <u>X</u> > 20% 0-10%11-39% > 40% <u>X</u>
Width of Riparian Area: Total Riparian Area:		<u>50</u> feet <u>5.5</u> acres

Rationale/Comments: Reach lies mostly within developed residential areas. Riparian width is set as typical distance from lakeshore to topographical break with residential development (south), and PTH of dominant Shore Pine species (north)

Date(s) of field work: 9/14/10 - 9/	/20/10 Stream	m Name: Muns	el Creek & Lake,
	erley Creek & l		ke, Collard Lake
Investigator(s): CAL			RMC-E Left
Location: Munsel Lake through Collard Lake	half of	Reach Length:	<u>28,700</u> feet
Assessment Sites: RMC-8, RMC RMC-11, RMC-		Hydrologic bas	sin: Munsel Creek
Water Resource(s): Munsel Lake Lake, and Ackerley Creek Adjacent Land-Use: Left (east sid Soil – Mapped series: Left (east) P	le) forestry		
Channel & Riparian Characteria	stics:		
Shaded Summer Midday:Y X Flood Prone Areas:Y X Woody Debris in Riparian Area: Extent of Impervious Surface: Degree of Development/Human Comments: This reach include The east side of the lakes a the west shorelines are print	N, Woody Vege Present: X Oisturbance: Odes several lakes and waterways ar	Not Present:	Area: YXN 24% > 25% 74% > 75% connecting waterways. orime riparian zones;
Riparian Vegetation			
Number of Layers: 0-12 _X	(> 2 H	ang over water	X Yes No
Dominant Layer: $\frac{\text{Woody}}{\text{Dominant Layer}} > 1\text{m}$			$\frac{1}{\text{Voody}} > 1 \text{m}$
TREES	SHRUBS	_	HERBACEOUS
Douglas Fir	Huckleberry		Reeds
Western Hemlock	Salal		Grasses
Red Alder	Rhododenron	1	Bracken Fern
California Wax Myrtle			
Riparian Dimensions: (Estimat	ed – Looking D	ownstream, TO	DB = Top of Bank)
Average Slope in Riparian Area:		0-10% 11-	-19% <u>X</u> >20%
Riparian Width at least 30 feet:			-39%> 40%_X_
Width of Riparian Area: Total Riparian Area:		120 79.1 :	feet acres

Rationale/Comments: The riparian widths for forested sections of this reach are set at the Potential Tree Height (PTH).

Date(s) of field work: 9/14/10 - 9/			sel Creek & Lake,
	erley Creek & l		ke, Collard Lake
Investigator(s): CAL Location: Munsel Lake through	half of	Reach Length	: RMC-E Right
Collard Lake	nan oi	Reach Length	. <u>10,030</u> leet
Assessment Sites: RMC-8, RMC RMC-11, RMC-		Hydrologic ba	asin: Munsel Creek
Water Resource(s): Munsel Lake Lake, and Ackerley Creek Adjacent Land-Use: Right (west) Soil – Mapped series: Right (west)	side) undevelope		south half of Collard
Channel & Riparian Characteris	stics:		
Channel Width: N/A ft Depth Shaded Summer Midday: Y X Flood Prone Areas: Y X Woody Debris in Riparian Area: Extent of Impervious Surface: Degree of Development/Human Comments: This reach include The west shorelines are pri	Y X N Wand N Wang N, Woody Veget Present: Object Disturbance: des several lakes	ater Erosion Haretation in Flood Not Present:	zard: X Hi Lo Area: Y X N X
Riparian Vegetation			
Number of Layers: 0-1 X 2 Dominant Layer: Bare sand			Yes X No Bare sand .
TREES	SHRUBS		HERBACEOUS
Douglas Fir	Huckleberry		Reeds
Western Hemlock Red Alder	Salal		Grasses
Riparian Dimensions: (Estimat	ed – Looking D	ownstream, T	OB = Top of Bank)
Average Slope in Riparian Area:		0-10% 11	-19% <u>X</u> > 20%
Riparian Width at least 30 feet:			1-39% X > 40%
Width of Riparian Area: Total Riparian Area:		<u>15</u> ft at du <u>14.5</u> acres	nes, 120 ft lowlands

Rationale/Comments: For the west (right) side of the northern lakes, barren sand dunes reach to the shoreline. The riparian widths for forested lowland sections are set at the Potential Tree Height (PTH).

Date(s) of field work: 9/15/10		Stream Name: Collard Lake
Investigator(s): CAL		Stream Reach: RMC-F Left
Location: North half of Collard L	ake	Reach Length: 3950 feet
Assessment Sites: RMC-13		Hydrologic basin: Munsel Creek
Water Resource(s): North half of C Adjacent Land-Use: Left (east side Soil – Mapped series: Bullards-Fer) residential	
Channel & Riparian Characterist	tics:	
Flood Prone Areas:Y _X_N Woody Debris in Riparian Area: Extent of Impervious Surface:	N, Woody Ve Present:	0-10%11-24% _X > 25% 0-25%26-74% _X > 75% If of Collard Lake.
Riparian Vegetation		
Number of Layers: 0-12 <u>X</u> Dominant Layer: <u>Woody > 1m</u>		Hang over water: Yes <u>X</u> No Dominant TOB: <u>Woody > 1m</u> .
TREES Douglas Fir Western Hemlock Shore Pine	SHRUBS Salal Huckleberr	Grasses
Riparian Dimensions: (Estimate	d – Looking	g Downstream, TOB = Top of Bank)
Average Slope in Riparian Area: Riparian Width at least 30 feet:		0-10%11-19% <u>X</u> > 20% 0-10%11-39%> 40% <u>X</u>
Width of Riparian Area: Total Riparian Area:	-	50 feet 4.5 acres

Rationale/Comments: The riparian width is set as typical distance from the lakeshore to established residential development and structures.

Date(s) of field work: 9/15/10		Stream Name: Collard Lake
Investigator(s): CAL		Stream Reach: RMC-F Right
Location: North half of Collard 1	Lake	Reach Length: 1630 feet
Assessment Sites: RMC-13		Hydrologic basin: Munsel Creek
Water Resource(s): North half of Adjacent Land-Use: Right (west s. Soil – Mapped series: Bullards-Fe	ide) undevelop	
Channel & Riparian Characteris	stics:	
Shaded Summer Midday: Y	X N W N, Woody Veg Present: X Disturbance: s the north half	0-10% X 11-24% > 25% 0-25% X 26-74% > 75% of Collard Lake.
Riparian Vegetation		
Number of Layers: 0-1 2 _X Dominant Layer: Woody > 1m		Hang over water:Yes X_No ominant TOB: Woody > 1m .
TREES Douglas Fir Western Hemlock Shore Pine	SHRUBS Salal Huckleberry	HERBACEOUS Grasses
Riparian Dimensions: (Estimate	ed – Looking I	Downstream, TOB = Top of Bank)
Average Slope in Riparian Area: Riparian Width at least 30 feet:		0-10%11-19% <u>X</u> > 20% 0-10%11-39% > 40% <u>X</u>
Width of Riparian Area: Total Riparian Area:		120 feet 4.5 acres

Rationale/Comments: The riparian widths for this forested reach are set at the Potential Tree Height (PTH).

Date(s) of field work: 8/25/10 – 10 .	/24/10	Stream Name:	Airport 1
Investigator(s): CAL		Stream Reach:	RAIR-A
Location: Oak at 31st to RoW at 12th & Green	wood	Reach Length:	<u>8650</u> feet
Assessment Sites: RAIR-0.3, RAIR-1.5, RAIR-2N	R-0.6, RAIR-1	, Hydrologic bas	in: Airport
Water Resource(s): Intermittent N Adjacent Land-Use: Undeveloped, Soil – Mapped series: Yaquina loa	airport, residen	tial	
Channel & Riparian Characteris	tics:		
Channel Width: 5 ft Depth of Shaded Summer Midday: Y Flood Prone Areas: Y X Woody Debris in Riparian Area: Extent of Impervious Surface: Degree of Development/Human I Comments: The channel for straightened over much of its	X N W N, Woody Veg Present: Oisturbance: of this reach appears	ater Erosion Haza etation in Flood A Not Present:	ard:Hi _X_Lo Area:Y _X_N X
Riparian Vegetation			
Number of Layers: 0-12 X Dominant Layer: <u>Herb./Woody</u> <			
TREES Shore Pine Douglas Fir Red Alder	SHRUBS Salal Huckleberry Rhododendro	•	ERBACEOUS Grasses
Riparian Dimensions: (Estimate	ed – Looking D	ownstream, TO	B = Top of Bank)
Average Slope in Riparian Area: Riparian Width at least 30 feet:			19%> 20% X -39%> 40%
Width of Riparian Area Looking Total Riparian Area:			Right: 20 feet Right: 4.0 acres

Rationale/Comments: Riparian widths are typically set from TOB to a topographical break at level upland.

Date(s) of field work: 8/25/10 – 10)/24/10	Stream Name: Airport 1
Investigator(s): CAL		Stream Reach: RAIR-B
Location: RoW at 12 th & Green Siuslaw Estuary at Sev Assessment Sites: RAIR-2S, RAI	vage Plant	Reach Length: 3000 feet Hydrologic basin: Airport
RAIR-5	,	, ,
Water Resource(s): Intermittent Adjacent Land-Use: Undeveloped Soil – Mapped series: Waldport fi	, residential	Wetland,Lake
Channel & Riparian Characteris	stics:	
Shaded Summer Midday: X Flood Prone Areas: Y X Woody Debris in Riparian Area: Extent of Impervious Surface: Degree of Development/Human	Y N Wa N, Woody Vego Present: X O Disturbance: 0	Atter Erosion Hazard:Y _X_N Atter Erosion Hazard:Hi _X_Lo Atter Erosion Hazard:Y _X_N Atter Erosion Hazard:
Riparian Vegetation		
Number of Layers: 0-12 Dominant Layer: Woody > 1m		ang over water: X Yes No inant TOB: Woody > 1m .
<u>TREES</u>	<u>SHRUBS</u>	HERBACEOUS
Red Alder	Salal	Grasses
Sitka Spruce	Huckleberry	
Western Hemlock	Rhododendro	n
Douglas Fir		
California Wax Myrtle		
Riparian Dimensions: (Estimate	ed – Looking D	ownstream, TOB = Top of Bank)
Average Slope in Riparian Area:		0-10%11-19% X _> 20%
Riparian Width at least 30 feet:		0-10% 11-39% > 40% X
Width of Riparian Area Looking Total Riparian Area:	Downstream:	Left: <u>65</u> feet Right: <u>65</u> feet Left: <u>4.5</u> acres Right: <u>4.5</u> acres

Rationale/Comments: Riparian widths are set by the Potential Tree Height (PTH) for the dominant Red Alder species.

Date(s) of field work: 8/25/10 – 10/	24/10	Stream Name	: Airport 2	
Investigator(s): CAL		Stream Reach: RAIR-C		
Location: Airport south fence to 9th Street at Ivy Rov	W	Reach Length	n: <u>1125</u> feet	ţ
Assessment Sites: RAIR-6, RAIR-		Hydrologic b	asin: Airpor	t
Water Resource(s): Intermittent N Adjacent Land-Use: Undeveloped, Soil – Mapped series: Waldport fin	residential			Lake
Channel & Riparian Characterist	ics:			
Channel Width: 3 ft Depth of Shaded Summer Midday: Y Flood Prone Areas: Y X Woody Debris in Riparian Area: Extent of Impervious Surface: Degree of Development/Human Comments: North end of chanoxious non-native shrubs.	X N V N, Woody Veg Present: Oisturbance:	Vater Erosion H getation in Flood Not Present: 0-10%X_11- 0-25%X_26	fazard: d Area: X	_Hi <u>X</u> Lo _Y <u>X</u> N 25%
Riparian Vegetation				
Number of Layers: 0-12 _X				
TREES Shore Pine Douglas Fir California Wax Myrtle	SHRUBS Blackberry Scotch Broom		HERBACEO Grasses	<u>DUS</u>
Riparian Dimensions: (Estimated	d – Looking D	ownstream, T	OB = Top of	f Bank)
Average Slope in Riparian Area: Riparian Width at least 30 feet:		0-10%1 0-10%1		
Width of Riparian Area Looking Total Riparian Area:	Downstream:	Left: <u>30</u> fee Left: <u>0.8</u> acre		

Rationale/Comments: Riparian widths are typically set from TOB to a topographical break. Streambed is dry much of the year.

Date(s) of field work: 9/17/10		Stream Name: Heceta Beach
Investigator(s): CAL		Stream Reach: RHB-A
Location: 1 st Avenue at Meares St 4 th Avenue south of 1		Reach Length: <u>730</u> feet
Assessment Sites: RHB-0.3, RHB-0		Hydrologic basin: Heceta Beach
Water Resource(s): Intermittent E Adjacent Land-Use: Undeveloped, 1 Soil – Mapped series: Waldport fine	residential	
Channel & Riparian Characteristi	ics:	
Shaded Summer Midday: X Y Flood Prone Areas: Y X N Woody Debris in Riparian Area: Extent of Impervious Surface: Degree of Development/Human Decomments: Waterway mean Riparian Vegetation	N W N, Woody Ve Present: X isturbance: ders through	0-10% X 11-24% > 25%
Dominant Layer: Woody > 1m		Dominant TOB: $\frac{\overline{Woody} > 1m}{}$.
TREES Shore Pine	SHRUBS Salal	HERBACEOUS Grasses Reeds
Riparian Dimensions: (Estimated	l – Looking I	Downstream, TOB = Top of Bank)
Average Slope in Riparian Area: Riparian Width at least 30 feet:		0-10%11-19% <u>X</u> > 20% 0-10% <u>X</u> 11-39% > 40%
Width of Riparian Area Looking I Total Riparian Area:	Oownstream	: Left: 20 feet Right: 20 feet Left: 0.3 acres Right: 0.3 acres

Rationale/Comments: Riparian widths are typically from stream TOB or the edge of wetland to a topographic break.

Date(s) of field work: 9/17/10	Stream Name: Heceta Beach
Investigator(s): CAL	Stream Reach: RHB-B
Location: 4 th Avenue south of Mea to wetland 0.2 miles	
Assessment Sites: RHB-1	Hydrologic basin: Heceta Beach
Water Resource(s): Intermittent E Adjacent Land-Use: Undeveloped Soil – Mapped series: Yaquina loam	to W Stream, Wetland, Lake ay fine sand
Channel & Riparian Characteristi	cs:
Shaded Summer Midday: X Y Flood Prone Areas: X Y N Woody Debris in Riparian Area: I Extent of Impervious Surface: Degree of Development/Human Di	FOHW: 1 ft Man-made Channel: Y X N N Water Erosion Hazard: Hi X Lo Noody Vegetation in Flood Area: X Y N Present: Not Present: 0-10% X 11-24% > 25% isturbance: 0-25% X 26-74% > 75% ow banks, surrounding terrain is mostly level.
Riparian Vegetation	
Number of Layers: 0-12 _X	> 2 Hang over water: X Yes No Dominant TOB: Woody > 1m .
TREES_	SHRUBS HERBACEOUS
Shore Pine	Salal Grasses
Sitka Spruce	Huckleberry
Riparian Dimensions: (Estimated	- Looking Downstream, TOB = Top of Bank)
Average Slope in Riparian Area: Riparian Width at least 30 feet:	0-10% <u>X</u> 11-19% > 20% 0-10%11-39% > 40% <u>X</u>
Width of Riparian Area Looking I Total Riparian Area:	Downstream: Left: 50 feet Right: 50 feet Left: 1.0 acres Right: 1.0 acres

Rationale/Comments: No topographic break outside of channel. Riparian width set by Potential Tree Height (PTH) of dominant Shore Pine species.

Date(s) of field work: 9/21/10		Stream Name	: Rhododend	ron
Investigator(s): CAL		Stream Reach	: RRH-A	
Location: Rhododendron Dr. at N to Royal St Georges at '		Reach Length	: <u>2550</u> feet	
Assessment Sites: RRH-1, RRH-2		Hydrologic ba	asin: Rhodode	endron
Water Resource(s): Intermittent N Adjacent Land-Use: Undeveloped, Soil – Mapped series: Dune land		m , Wetland	,	Lake
Channel & Riparian Characterist	tics:			
Shaded Summer Midday: X Y Flood Prone Areas: Y X Woody Debris in Riparian Area: Extent of Impervious Surface: Degree of Development/Human I Comments: Understory is n	N, Woody Vego Present:0 Disturbance: (etation in Flood Not Present: -10%X_11- -25%26-	Area:Y X> 25	Y <u>X</u> N %
Riparian Vegetation				
Number of Layers: 0-12 _X Dominant Layer: Woody > 1m		ing over water: minant TOB: 1		
TREES Shore Pine Red Alder California Wax Myrtle Willow	SHRUBS Rhododendro Blackberry	· · · · · · · · · · · · · · · · · · ·	HERBACEOU Grasses	<u>JS</u>
Riparian Dimensions: (Estimate	d – Looking D	ownstream, T	OB = Top of I	Bank)
Average Slope in Riparian Area: Riparian Width at least 30 feet:			1-19%> 20 1-39%> 40	
Width of Riparian Area Looking Total Riparian Area:		Left: <u>50</u> fee Left: <u>2.9</u> acre		

Rationale/Comments: Riparian widths are set at the Potential Tree Height (PTH) of the dominant Shore Pine tree species.

Date(s) of field work: 10/25/10		Stream Name: North Fork 1			
Investigator(s): CAL		Stream Reach: RNS-A			
Location: North Fork Road at logs to North Fork Siusla	~ ~ •	Reach Length: <u>950</u> feet			
Assessment Sites: RNS-2, RNS-3		Hydrologic basin: North Fork Siuslaw			
Water Resource(s): Intermittent N to S Stream, Wetland,Lake Adjacent Land-Use: Commercial Soil – Mapped series: Waldport fine sand, 0-12% slopes					
Channel & Riparian Characteristics:					
Shaded Summer Midday: X Y Flood Prone Areas: Y X N Woody Debris in Riparian Area: I Extent of Impervious Surface:	N Water N Water N Woody Vege Present: X 0-sturbance: 0	Man-made Channel: Y X N er Erosion Hazard: Hi X Lo etation in Flood Area: Y X N Not Present:10% 11-24% X > 25%25% 26-74% X > 75%			
Riparian Vegetation					
Number of Layers: 0-12> Dominant Layer: Woody > 1m		ang over water: <u>X</u> Yes No minant TOB: <u>Woody > 1m</u> .			
Western Hemlock	SHRUBS Rhododendron Salal Holly	HERBACEOUS Grasses Reeds Bracken Fern			
Riparian Dimensions: (Estimated – Looking Downstream, TOB = Top of Bank)					
Average Slope in Riparian Area: Riparian Width at least 30 feet:		0-10%11-19% > 20% X 0-10%11-39% > 40% X			
Width of Riparian Area Looking Downstream: Left: 40 feet Right: 40 feet Total Riparian Area: Left: 0.9 acres Right: 0.9 acres					

Rationale/Comments: Topographical breaks are not definitive except at road. Large trees provide favorable riparian effects out to the boundary with extensive commercial/residential development.