

APPENDIX A - Field Data Forms

Data Form
Routine Wetland Determination

Job Number: 10013b
 City: none
 Wetland Data Point: SP1

Project/Site: Wilcox Stream BE
 Applicant/Owner: Wilcox Dairy
 Investigator: M Heckert

Date: December 02, 2010
 County: Pierce
 State: WA

- Do normal circumstances exist on the site?
 Have vegetation, soils, or hydrology been disturbed?
 Is the area a potential problem area?

Community iD: Meadow
 Station ID:
 Plot ID:

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X <i>Cirsium vulgare</i>	Thistle,Bull	20	FACU
X <i>Dactylis glomerata</i>	Grass,Orchard	70	FACU

% Species that are OBL, FACW, or FAC (except FAC-): 0 Cowardin Classification:

Remarks
 active pasture

Hydrology

- | | | |
|---|--|--|
| <input type="checkbox"/> Recorded Data (describe in remarks)
<input type="checkbox"/> Stream, Lake, or Tide Gage
<input type="checkbox"/> Aerial Photograph
<input type="checkbox"/> Other (describe in remarks)

Field Observations:
Depth of Surface Water(in.): 0
Depth to Free Water in Pit(in.): 24
Depth to Saturated Soils(in.): >24 | Primary Wetland Hydrology Indicators
<input type="checkbox"/> Inundated
<input type="checkbox"/> Saturated in upper 12 inches
<input type="checkbox"/> Water marks
<input type="checkbox"/> Drift lines
<input type="checkbox"/> Sediment deposits
<input type="checkbox"/> Drainage patterns in wetlands | Secondary Hydrology Indicators
<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> FAC-Neutral test
<input type="checkbox"/> Other (explain in remarks) |
|---|--|--|

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle		Texture, Structure, etc.
			Color	Abundance	
0-3	A	10YR 3/2			Fine Sandy Loam
3-12	A/B	10YR 4/3			Sandy Loam
12-18	B	10YR 4/2	10YR 5/6	few faint	Sandy Clay Loam

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name: Taxonomy:
 Drainage Class: Field Observations match map

Remarks

Wetland Determination

- | | |
|---|---|
| <input type="checkbox"/> Hydrophytic Vegetation Present | <input type="checkbox"/> This Data Point is a Wetland |
| <input type="checkbox"/> Hydric Soils Present | |
| <input type="checkbox"/> Wetland Hydrology Present | |

Remarks

Data Form
Routine Wetland Determination

Job Number: 10013b
 City: none
 Wetland Data Point: SP16

Project/Site: Wilcox Stream BE
 Applicant/Owner: Wilcox Dairy
 Investigator: M Heckert

Date: December 03, 2010
 County: Pierce
 State: WA

- Do normal circumstances exist on the site?
 Have vegetation, soils, or hydrology been disturbed?
 Is the area a potential problem area?

Community ID: Meadow
 Station ID:
 Plot ID:

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<i>Herbaceous</i>			
X <i>Cirsium vulgare</i>	Thistle,Bull	25	FACU
X <i>Dactylis glomerata</i>	Grass,Orchard	60	FACU

% Species that are OBL, FACW, or FAC (except FAC-): 0 Cowardin Classification:
 Remarks

Hydrology

- Recorded Data (describe in remarks)
 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other (describe in remarks)

Primary Wetland Hydrology Indicators

- Inundated
 Saturated in upper 12 inches
 Water marks
 Drift lines
 Sediment deposits
 Drainage patterns in wetlands

Secondary Hydrology Indicators

- Oxidized root channels
 Water-stained leaves
 Local soil survey data
 FAC-Neutral test
 Other (explain in remarks)

Field Observations:
 Depth of Surface Water(in.): 0
 Depth to Free Water in Pit(in.): >24
 Depth to Saturated Soils(in.): >24

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle		Texture, Structure, etc.
			Color	Abundance	
0-12	A	10YR 3/2			Sandy Loam
12-18	B	10YR 4/2	10YR 5/6	few faint	Loamy Sand

Hydric Soils Indicators

- Histosol
 Histic Epipedon
 Sulfidic Odor
 Probable Aquatic Moist Regime
 Reducing Conditions
 Gleyed or Low-Chroma Colors
 Concretions
 High Organic % in Surface Layer
 Organic Streaking
 Listed on Local Hydric Soils List
 Listed on National Hydric Soils List
 Other (explain in remarks)

Unit Name: Taxonomy:
 Drainage Class: Field Observations match map

Remarks

Wetland Determination

- Hydrophytic Vegetation Present
 Hydric Soils Present
 Wetland Hydrology Present
 This Data Point is a Wetland

Remarks

Data Form
Routine Wetland Determination

Job Number: 10013b
 City: none
 Wetland Data Point: SP10

Project/Site: Wilcox Stream BE
 Applicant/Owner: Wilcox Dairy
 Investigator: M Heckert

Date: December 03, 2010
 County: Pierce
 State: WA
 Community ID: Meadow
 Station ID:
 Plot ID:

- Do normal circumstances exist on the site?
 Have vegetation, soils, or hydrology been disturbed?
 Is the area a potential problem area?

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X <i>Taraxacum officinale</i>	Dandelion, Common	25	FACU
X <i>Cirsium vulgare</i>	Thistle, Bull	20	FACU
X <i>Dactylis glomerata</i>	Grass, Orchard	50	FACU

% Species that are OBL, FACW, or FAC (except FAC-): 0
 Cowardin Classification:
 Remarks

Hydrology

- Recorded Data (describe in remarks)
 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other (describe in remarks)

Primary Wetland Hydrology Indicators

- Inundated
 Saturated in upper 12 inches
 Water marks
 Drift lines
 Sediment deposits
 Drainage patterns in wetlands

Secondary Hydrology Indicators

- Oxidized root channels
 Water-stained leaves
 Local soil survey data
 FAC-Neutral test
 Other (explain in remarks)

Field Observations:
 Depth of Surface Water(in.): 0
 Depth to Free Water in Pit(in.): >24
 Depth to Saturated Soils(in.): >24

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Texture, Structure, etc.
0-5	A	10YR 3/3			Sandy Loam
5-16	B	10YR 4/3	10YR 5/6	few faint	Coarse Sandy Loam

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name: Taxonomy:
 Drainage Class: Field Observations match map

Remarks

Wetland Determination

- Hydrophytic Vegetation Present
 Hydric Soils Present
 Wetland Hydrology Present
 This Data Point is a Wetland

Remarks

Data Form
Routine Wetland Determination

Job Number: 10013b
 City: none
 Wetland Data Point: SP9

Project/Site: Wilcox Stream BE
 Applicant/Owner: Wilcox Dairy
 Investigator: M Heckert

Date: December 03, 2010
 County: Pierce
 State: WA
 Community ID: Floodplain
 Station ID:
 Plot ID:

- Do normal circumstances exist on the site?
 Have vegetation, soils, or hydrology been disturbed?
 Is the area a potential problem area?

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u> X Phalaris arundinacea	Grass.Reed Canary	100	OBL

% Species that are OBL, FACW, or FAC (except FAC-): 100 Cowardin Classification:

Remarks
 prsture

Hydrology

- Recorded Data (describe in remarks)
 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other (describe in remarks)

Primary Wetland Hydrology Indicators

- Inundated
 Saturated in upper 12 inches
 Water marks
 Drift lines
 Sediment deposits
 Drainage patterns in wetlands

Secondary Hydrology Indicators

- Oxidized root channels
 Water-stained leaves
 Local soil survey data
 FAC-Neutral test
 Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): 0
 Depth to Free Water in Pit(in.): 10
 Depth to Saturated Soils(in.): 6

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Texture, Structure, etc.
0-18	A	10YR 2/1			Silt Loam

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:
 Drainage Class:

Taxonomy:
 Field Observations match map

Remarks

Wetland Determination

- Hydrophytic Vegetation Present
 Hydric Soils Present
 Wetland Hydrology Present
- This Data Point is a Wetland

Remarks
 WL A west
 A50 to

Data Form
Routine Wetland Determination

Job Number: 10013b
 City: none
 Wetland Data Point: SP8

Project/Site: Wilcox Stream BE
 Applicant/Owner: Wilcox Dairy
 Investigator: M Heckert

Date: December 02, 2010
 County: Pierce
 State: WA

- Do normal circumstances exist on the site?
 Have vegetation, soils, or hydrology been disturbed?
 Is the area a potential problem area?

Community ID: Floodplain
 Station ID:
 Plot ID:

Vegetation

Dominant Species	Common Name	% Cover	Indicator
Herbaceous			
X <i>Dactylis glomerata</i>	Grass, Orchard	50	FACU
X <i>Cirsium vulgare</i>	Thistle, Bull	20	FACU
X <i>Ranunculus repens</i>	Butter-Cup, Creeping	20	FACW

% Species that are OBL, FACW, or FAC (except FAC-): 33 Cowardin Classification:

Remarks
 grazed pasture

Hydrology

- Recorded Data (describe in remarks)
 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other (describe in remarks)

Primary Wetland Hydrology Indicators

- Inundated
 Saturated in upper 12 inches
 Water marks
 Drift lines
 Sediment deposits
 Drainage patterns in wetlands

Secondary Hydrology Indicators

- Oxidized root channels
 Water-stained leaves
 Local soil survey data
 FAC-Neutral test
 Other (explain in remarks)

Field Observations:
 Depth of Surface Water(in.): 0
 Depth to Free Water in Pit(in.): >24
 Depth to Saturated Soils(in.): >24

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Texture, Structure, etc.
0-12	A	10YR 2/2			Silt Loam
12-20	B	10YR 4/2	10YR 2/1	few distinct	Clay Loam

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name: Taxonomy:
 Drainage Class: Field Observations match map

Remarks

Wetland Determination

- Hydrophytic Vegetation Present
 Hydric Soils Present
 Wetland Hydrology Present
- This Data Point is a Wetland

Remarks

Data Form
Routine Wetland Determination

Job Number: 10013b
 City: none
 Wetland Data Point: SP14

Project/Site: Wilcox Stream BE
 Applicant/Owner: Wilcox Dairy
 Investigator: M Heckert

Date: December 03, 2010
 County: Pierce
 State: WA
 Community ID: Meadow
 Station ID:
 Plot ID:

- Do normal circumstances exist on the site?
 Have vegetation, soils, or hydrology been disturbed?
 Is the area a potential problem area?

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X <i>Taraxacum officinale</i>	Dandelion, Common	25	FACU
X <i>Urtica dioica</i>	Nettle, Stinging	25	FACW
X <i>Dactylis glomerata</i>	Grass, Orchard	40	FACU

% Species that are OBL, FACW, or FAC (except FAC-): 33 Cowardin Classification:

Remarks
 Grazed

Hydrology

- Recorded Data (describe in remarks)
 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other (describe in remarks)

- Primary Wetland Hydrology Indicators*
 Inundated
 Saturated in upper 12 inches
 Water marks
 Drift lines
 Sediment deposits
 Drainage patterns in wetlands

- Secondary Hydrology Indicators*
 Oxidized root channels
 Water-stained leaves
 Local soil survey data
 FAC-Neutral test
 Other (explain in remarks)

Field Observations:
 Depth of Surface Water(in.): 0
 Depth to Free Water in Pit(in.): >24
 Depth to Saturated Soils(in.): >24

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color		Abundance	Texture, Structure, etc.
0-10	A	10YR 3/2				
10-20	B	10YR 4/1	10YR 2/2	few	distinct	Clay Loam

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:
 Drainage Class:

Taxonomy:
 Field Observations match map

Remarks

Wetland Determination

- Hydrophytic Vegetation Present
 Hydric Soils Present
 Wetland Hydrology Present
- This Data Point is a Wetland

Remarks

Data Form
Routine Wetland Determination

Job Number: 10013b
 City: none
 Wetland Data Point: SP13

Project/Site: Wilcox Stream BE
 Applicant/Owner: Wilcox Dairy
 Investigator: M Heckert

Date: December 03, 2010
 County: Pierce
 State: WA
 Community ID: Meadow
 Station ID:
 Plot ID:

- Do normal circumstances exist on the site?
 Have vegetation, soils, or hydrology been disturbed?
 Is the area a potential problem area?

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X <i>Ranunculus repens</i>	Butter-Cup, Creeping	70	FACW
X <i>Phalaris arundinacea</i>	Grass, Reed Canary	30	OBL

% Species that are OBL, FACW, or FAC (except FAC-): 100 Cowardin Classification:

Remarks
 Grazed pasture

Hydrology

- Recorded Data (describe in remarks)
 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other (describe in remarks)

Primary Wetland Hydrology Indicators

- Inundated
 Saturated in upper 12 inches
 Water marks
 Drift lines
 Sediment deposits
 Drainage patterns in wetlands

Secondary Hydrology Indicators

- Oxidized root channels
 Water-stained leaves
 Local soil survey data
 FAC-Neutral test
 Other (explain in remarks)

Field Observations:
 Depth of Surface Water(in.): 0
 Depth to Free Water in Pit(in.): 8
 Depth to Saturated Soils(in.): 4

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Texture, Structure, etc.
0-18	A	10YR 3/1			Silt Loam

Hydric Soils Indicators

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input checked="" type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input checked="" type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name: Taxonomy:
 Drainage Class: Poorly Drained Field Observations match map

Remarks

Wetland Determination

- Hydrophytic Vegetation Present This Data Point is a Wetland
 Hydric Soils Present
 Wetland Hydrology Present

Remarks

Data Form
Routine Wetland Determination

Job Number: 10013b
 City: none
 Wetland Data Point: SP8q

Project/Site: Wilcox Stream BE
 Applicant/Owner: Wilcox Dairy
 Investigator: M Heckert

Date: December 07, 2010
 County: Pierce
 State: WA

- Do normal circumstances exist on the site?
 Have vegetation, soils, or hydrology been disturbed?
 Is the area a potential problem area?

Community ID: Meadow
 Station ID:
 Plot ID:

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u> X Phalaris arundinacea	Grass, Reed Canary	100	OBL

% Species that are OBL, FACW, or FAC (except FAC-): 100 Cowardin Classification:

Remarks
 Grazed pasture

Hydrology

- Recorded Data (describe in remarks)
 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other (describe in remarks)

Primary Wetland Hydrology Indicators

- Inundated
 Saturated in upper 12 inches
 Water marks
 Drift lines
 Sediment deposits
 Drainage patterns in wetlands

Secondary Hydrology Indicators

- Oxidized root channels
 Water-stained leaves
 Local soil survey data
 FAC-Neutral test
 Other (explain in remarks)

Field Observations:
 Depth of Surface Water(in.): 0
 Depth to Free Water in Pit(in.): 4
 Depth to Saturated Soils(in.): 0

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Texture, Structure, etc.
0-16	A	10YR 3/1			Silt Loam plastic

Hydric Soils Indicators

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input checked="" type="checkbox"/> Histic Epipedon | <input checked="" type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input checked="" type="checkbox"/> Listed on Local Hydric Soils List |
| <input checked="" type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:
 Drainage Class:

Taxonomy:
 Field Observations match map

Remarks

Wetland Determination

- Hydrophytic Vegetation Present
 Hydric Soils Present
 Wetland Hydrology Present
- This Data Point is a Wetland

Remarks

Data Form
Routine Wetland Determination

Job Number: 10013b
 City: none
 Wetland Data Point: SP11

Project/Site: Wilcox Stream BE
 Applicant/Owner: Wilcox Dairy
 Investigator: M Heckert

Date: December 03, 2010
 County: Pierce
 State: WA

- Do normal circumstances exist on the site?
 Have vegetation, soils, or hydrology been disturbed?
 Is the area a potential problem area?

Community ID: Floodplain
 Station ID:
 Plot ID:

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u> X Phalaris arundinacea	Grass, Reed Canary	100	OBL

% Species that are OBL, FACW, or FAC (except FAC-): 100 Cowardin Classification:
 Remarks

Hydrology

- Recorded Data (describe in remarks)
 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other (describe in remarks)

Primary Wetland Hydrology Indicators

- Inundated
 Saturated in upper 12 inches
 Water marks
 Drift lines
 Sediment deposits
 Drainage patterns in wetlands

Secondary Hydrology Indicators

- Oxidized root channels
 Water-stained leaves
 Local soil survey data
 FAC-Neutral test
 Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): 0
 Depth to Free Water in Pit(in.): 4
 Depth to Saturated Soils(in.): 0

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Texture, Structure, etc.
0-18	A	10YR 3/1			Silt Loam

Hydric Soils Indicators

- Histosol
 Histic Epipedon
 Sulfidic Odor
 Probable Aquatic Moist Regime
 Reducing Conditions
 Gleyed or Low-Chroma Colors
 Concretions
 High Organic % in Surface Layer
 Organic Streaking
 Listed on Local Hydric Soils List
 Listed on National Hydric Soils List
 Other (explain in remarks)

Unit Name:

Taxonomy:

Drainage Class:

- Field Observations match map

Remarks

Wetland Determination

- Hydrophytic Vegetation Present
 Hydric Soils Present
 Wetland Hydrology Present
 This Data Point is a Wetland

Remarks

Data Form
Routine Wetland Determination

Job Number: 10013b
 City: none
 Wetland Data Point: SP3

Project/Site: Wilcox Stream BE
 Applicant/Owner: Wilcox Dairy
 Investigator: M Heckert

Date: December 02, 2010
 County: Pierce
 State: WA

- Do normal circumstances exist on the site?
- Have vegetation, soils, or hydrology been disturbed?
- Is the area a potential problem area?

Community ID: Meadow
 Station ID:
 Plot ID:

Vegetation

Dominant Species	Common Name	% Cover	Indicator
------------------	-------------	---------	-----------

% Species that are OBL, FACW, or FAC (except FAC-): 0

Cowardin Classification:

Remarks
 grazed bare

Hydrology

- Recorded Data (describe in remarks)
 - Stream, Lake, or Tide Gage
 - Aerial Photograph
 - Other (describe in remarks)

Primary Wetland Hydrology Indicators

- Inundated
- Saturated in upper 12 inches
- Water marks
- Drift lines
- Sediment deposits
- Drainage patterns in wetlands

Secondary Hydrology Indicators

- Oxidized root channels
- Water-stained leaves
- Local soil survey data
- FAC-Neutral test
- Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): 0
 Depth to Free Water in Pit(in.): 10
 Depth to Saturated Soils(in.): 8

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Texture, Structure, etc.
0-3	A	10YR 2/2			Silt Loam
3-16	A/B	10YR 3/2	10YR 5/6	common distinct	Silt Loam spongy fluffy

Hydric Soils Indicators

- Histosol
- Histic Epipedon
- Sulfidic Odor
- Probable Aquatic Moist Regime
- Reducing Conditions
- Gleyed or Low-Chroma Colors
- Concretions
- High Organic % in Surface Layer
- Organic Streaking
- Listed on Local Hydric Soils List
- Listed on National Hydric Soils List
- Other (explain in remarks)

Unit Name:

Taxonomy:

Drainage Class:

- Field Observations match map

Remarks
 peat-like

Wetland Determination

- Hydrophytic Vegetation Present
- Hydric Soils Present
- Wetland Hydrology Present
- This Data Point is a Wetland

Remarks

wl A along stream

Data Form
Routine Wetland Determination

Job Number: 10013b
 City: none
 Wetland Data Point: SP17

Project/Site: Wilcox Stream BE
 Applicant/Owner: Wilcox Dairy
 Investigator: M Heckert

Date: December 03, 2010
 County: Pierce
 State: WA
 Community ID: Meadow
 Station ID:
 Plot ID:

- Do normal circumstances exist on the site?
 Have vegetation, soils, or hydrology been disturbed?
 Is the area a potential problem area?

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<i>Herbaceous</i>			
X <i>Poa pratensis</i>	Bluegrass, Kentucky	60	FACU
X <i>Dactylis glomerata</i>	Grass, Orchard	40	FACU
% Species that are OBL, FACW, or FAC (except FAC-): 0		Cowardin Classification:	
Remarks			

Hydrology

- | | | |
|---|--|--|
| <input checked="" type="checkbox"/> Recorded Data (describe in remarks)
<input type="checkbox"/> Stream, Lake, or Tide Gage
<input type="checkbox"/> Aerial Photograph
<input type="checkbox"/> Other (describe in remarks)

Field Observations:
Depth of Surface Water(in.): 0
Depth to Free Water in Pit(in.): >24
Depth to Saturated Soils(in.): >24 | <i>Primary Wetland Hydrology Indicators</i>
<input type="checkbox"/> Inundated
<input type="checkbox"/> Saturated in upper 12 inches
<input type="checkbox"/> Water marks
<input type="checkbox"/> Drift lines
<input type="checkbox"/> Sediment deposits
<input type="checkbox"/> Drainage patterns in wetlands | <i>Secondary Hydrology Indicators</i>
<input type="checkbox"/> Oxidized root channels
<input type="checkbox"/> Water-stained leaves
<input type="checkbox"/> Local soil survey data
<input type="checkbox"/> FAC-Neutral test
<input type="checkbox"/> Other (explain in remarks) |
|---|--|--|

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Texture, Structure, etc.
0-18	A/B	10YR 3/2			Clay Loam

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

Field Observations match map

Remarks

Wetland Determination

- Hydrophytic Vegetation Present
 Hydric Soils Present
 Wetland Hydrology Present
 This Data Point is a Wetland

Remarks

Higher and drained

Data Form
Routine Wetland Determination

Job Number: 10013b
 City: none
 Wetland Data Point: SP15

Project/Site: Wilcox Stream BE
 Applicant/Owner: Wilcox Dairy
 Investigator: M Heckert

Date: December 03, 2010
 County: Pierce
 State: WA
 Community ID: Meadow
 Station ID:
 Plot ID:

- Do normal circumstances exist on the site?
 Have vegetation, soils, or hydrology been disturbed?
 Is the area a potential problem area?

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u> X Phalaris arundinacea	Grass, Reed Canary	100	OBL

% Species that are OBL, FACW, or FAC (except FAC-): 100 Cowardin Classification:
 Remarks

Hydrology

- Recorded Data (describe in remarks)
 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other (describe in remarks)

- Primary Wetland Hydrology Indicators*
 Inundated
 Saturated in upper 12 inches
 Water marks
 Drift lines
 Sediment deposits
 Drainage patterns in wetlands

- Secondary Hydrology Indicators*
 Oxidized root channels
 Water-stained leaves
 Local soil survey data
 FAC-Neutral test
 Other (explain in remarks)

Field Observations:
 Depth of Surface Water(in.): 3
 Depth to Free Water in Pit(in.): 0
 Depth to Saturated Soils(in.): 0

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Texture, Structure, etc.
0-18	A	10YR 2/1			Silt Loam

Hydric Soils Indicators

- | | |
|---|---|
| <input type="checkbox"/> Histosol | <input checked="" type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input checked="" type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input checked="" type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input checked="" type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:
 Drainage Class: Very Poorly Drained

Taxonomy:
 Field Observations match map

Remarks

Wetland Determination

- Hydrophytic Vegetation Present
 Hydric Soils Present
 Wetland Hydrology Present
- This Data Point is a Wetland

Remarks

Data Form
Routine Wetland Determination

Job Number: 10013b
 City: none
 Wetland Data Point: SP19

Project/Site: Wilcox Stream BE
 Applicant/Owner: Wilcox Dairy
 Investigator: M Heckert

Date: December 07, 2010
 County: Pierce
 State: WA
 Community ID: Floodplain
 Station ID:
 Plot ID:

- Do normal circumstances exist on the site?
 Have vegetation, soils, or hydrology been disturbed?
 Is the area a potential problem area?

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u> X Phalaris arundinacea	Grass, Reed Canary	100	OBL

% Species that are OBL, FACW, or FAC (except FAC-): 100 Cowardin Classification:
 Remarks

Hydrology

- Recorded Data (describe in remarks)
 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other (describe in remarks)

- Primary Wetland Hydrology Indicators*
 Inundated
 Saturated in upper 12 inches
 Water marks
 Drift lines
 Sediment deposits
 Drainage patterns in wetlands

- Secondary Hydrology Indicators*
 Oxidized root channels
 Water-stained leaves
 Local soil survey data
 FAC-Neutral test
 Other (explain in remarks)

Field Observations:
 Depth of Surface Water(in.): 6
 Depth to Free Water in Pit(in.): 0
 Depth to Saturated Soils(in.): 0

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Texture, Structure, etc.
0-16	A	10YR 2/2			Silt Loam plastic
16-20	B	10YR 4/1	10YR 2/1	common prominent	Clay Loam plastic

Hydric Soils Indicators

- Histosol
 Histic Epipedon
 Sulfidic Odor
 Probable Aquatic Moist Regime
 Reducing Conditions
 Gleyed or Low-Chroma Colors
 Concretions
 High Organic % in Surface Layer
 Organic Streaking
 Listed on Local Hydric Soils List
 Listed on National Hydric Soils List
 Other (explain in remarks)

Unit Name: Taxonomy:
 Drainage Class: Field Observations match map

Remarks

Wetland Determination

- Hydrophytic Vegetation Present
 Hydric Soils Present
 Wetland Hydrology Present
 This Data Point is a Wetland

Remarks

Data Form
Routine Wetland Determination

Job Number: 10013b
 City: none
 Wetland Data Point: SP18

Project/Site: Wilcox Stream BE
 Applicant/Owner: Wilcox Dairy
 Investigator: M Heckert

Date: December 07, 2010
 County: Pierce
 State: WA
 Community ID: Meadow
 Station ID:
 Plot ID:

- Do normal circumstances exist on the site?
 Have vegetation, soils, or hydrology been disturbed?
 Is the area a potential problem area?

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<i>Herbaceous</i>			
X <i>Taraxacum officinale</i>	Dandelion, Common	25	FACU
X <i>Ranunculus repens</i>	Butter-Cup, Creeping	20	FACW
X <i>Dactylis glomerata</i>	Grass, Orchard	50	FACU

% Species that are OBL, FACW, or FAC (except FAC-): 33 Cowardin Classification:
 Remarks
 Grazed pasture

Hydrology

- | | | |
|---|--|---|
| <input checked="" type="checkbox"/> Recorded Data (describe in remarks) | <input type="checkbox"/> Inundated | <input type="checkbox"/> Oxidized root channels |
| <input type="checkbox"/> Stream, Lake, or Tide Gage | <input type="checkbox"/> Saturated in upper 12 inches | <input type="checkbox"/> Water-stained leaves |
| <input type="checkbox"/> Aerial Photograph | <input type="checkbox"/> Water marks | <input type="checkbox"/> Local soil survey data |
| <input type="checkbox"/> Other (describe in remarks) | <input type="checkbox"/> Drift lines | <input type="checkbox"/> FAC-Neutral test |
| Field Observations: | <input type="checkbox"/> Sediment deposits | <input type="checkbox"/> Other (explain in remarks) |
| Depth of Surface Water(in.): 0 | <input type="checkbox"/> Drainage patterns in wetlands | |
| Depth to Free Water in Pit(in.): >24 | | |
| Depth to Saturated Soils(in.): >24 | | |

Remarks
 Near tile drain

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Texture, Structure, etc.
0-16	A/B	10YR 3/2			Silt Loam plastic

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name: Taxonomy:
 Drainage Class: Field Observations match map

Remarks

Wetland Determination

- Hydrophytic Vegetation Present This Data Point is a Wetland
 Hydric Soils Present
 Wetland Hydrology Present

Remarks

Data Form
Routine Wetland Determination

Job Number: 10013b
 City: none
 Wetland Data Point: SP7

Project/Site: Wilcox Stream BE
 Applicant/Owner: Wilcox Dairy
 Investigator: M Heckert

Date: December 02, 2010
 County: Pierce
 State: WA

- Do normal circumstances exist on the site?
 Have vegetation, soils, or hydrology been disturbed?
 Is the area a potential problem area?

Community ID: Floodplain
 Station ID:
 Plot ID:

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u> X Phalaris arundinacea	Grass, Reed Canary	100	OBL

% Species that are OBL, FACW, or FAC (except FAC-): 100 Cowardin Classification:
 Remarks

Hydrology

- Recorded Data (describe in remarks)
 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other (describe in remarks)

Primary Wetland Hydrology Indicators

- Inundated
 Saturated in upper 12 inches
 Water marks
 Drift lines
 Sediment deposits
 Drainage patterns in wetlands

Secondary Hydrology Indicators

- Oxidized root channels
 Water-stained leaves
 Local soil survey data
 FAC-Neutral test
 Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): 0
 Depth to Free Water in Pit(in.): 12
 Depth to Saturated Soils(in.): 12

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Texture, Structure, etc.
0-15	A	10YR 2/1			Silt Loam
15-20	B	10YR 4/1			Sand

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

- Field Observations match map

Remarks

Wetland Determination

- Hydrophytic Vegetation Present
 Hydric Soils Present
 Wetland Hydrology Present

- This Data Point is a Wetland

Remarks

Data Form
Routine Wetland Determination

Job Number: 10013b
 City: none
 Wetland Data Point: SP6

Project/Site: Wilcox Stream BE
 Applicant/Owner: Wilcox Dairy
 Investigator: M Heckert

Date: December 02, 2010
 County: Pierce
 State: WA

- Do normal circumstances exist on the site?
- Have vegetation, soils, or hydrology been disturbed?
- Is the area a potential problem area?

Community ID: Floodplain
 Station ID:
 Plot ID:

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u> X Phalaris arundinacea	Grass, Reed Canary	100	OBL

% Species that are OBL, FACW, or FAC (except FAC-): 100 Cowardin Classification:
 Remarks

Hydrology

- Recorded Data (describe in remarks)
 - Stream, Lake, or Tide Gage
 - Aerial Photograph
 - Other (describe in remarks)

Primary Wetland Hydrology Indicators

- Inundated
- Saturated in upper 12 inches
- Water marks
- Drift lines
- Sediment deposits
- Drainage patterns in wetlands

Secondary Hydrology Indicators

- Oxidized root channels
- Water-stained leaves
- Local soil survey data
- FAC-Neutral test
- Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): 0
 Depth to Free Water in Pit(in.): 12
 Depth to Saturated Soils(in.): 12

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Texture, Structure, etc.
0-15	A	10YR 2/1			Silt Loam
15-20	B	10YR 4/1			Loamy Sand

Hydric Soils Indicators

- Histosol
- Histic Epipedon
- Sulfidic Odor
- Probable Aquatic Moist Regime
- Reducing Conditions
- Gleyed or Low-Chroma Colors
- Concretions
- High Organic % in Surface Layer
- Organic Streaking
- Listed on Local Hydric Soils List
- Listed on National Hydric Soils List
- Other (explain in remarks)

Unit Name:

Taxonomy:

Drainage Class:

- Field Observations match map

Remarks

Wetland Determination

- Hydrophytic Vegetation Present
- Hydric Soils Present
- Wetland Hydrology Present
- This Data Point is a Wetland

Remarks

bound along fence

Data Form
Routine Wetland Determination

Job Number: 10013b
 City: none
 Wetland Data Point: SP5

Project/Site: Wilcox Stream BE
 Applicant/Owner: Wilcox Dairy
 Investigator: M Heckert

Date: December 02, 2010
 County: Pierce
 State: WA

- Do normal circumstances exist on the site?
 Have vegetation, soils, or hydrology been disturbed?
 Is the area a potential problem area?

Community ID: Floodplain
 Station ID:
 Plot ID:

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u> X Phalaris arundinacea	Grass.Reed Canary	100	OBL

% Species that are OBL, FACW, or FAC (except FAC-): 100 Cowardin Classification:

Remarks
 grazed pasture

Hydrology

- Recorded Data (describe in remarks)
 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other (describe in remarks)

Primary Wetland Hydrology Indicators

- Inundated
 Saturated in upper 12 inches
 Water marks
 Drift lines
 Sediment deposits
 Drainage patterns in wetlands

Secondary Hydrology Indicators

- Oxidized root channels
 Water-stained leaves
 Local soil survey data
 FAC-Neutral test
 Other (explain in remarks)

Field Observations:
 Depth of Surface Water(in.): 0
 Depth to Free Water in Pit(in.): 6
 Depth to Saturated Soils(in.): 4

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Texture, Structure, etc.
0-15	A	10YR 2/1			Silt Loam
15-20	B	10YR 4/1			Loamy Sand

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name: Taxonomy:
 Drainage Class: Field Observations match map

Remarks

Wetland Determination

- Hydrophytic Vegetation Present This Data Point is a Wetland
 Hydric Soils Present
 Wetland Hydrology Present

Remarks

Data Form
Routine Wetland Determination

Job Number: 10013b
 City: none
 Wetland Data Point: SP4

Project/Site: Wilcox Stream BE
 Applicant/Owner: Wilcox Dairy
 Investigator: M Heckert

Date: December 02, 2010
 County: Pierce
 State: WA

- Do normal circumstances exist on the site?
 Have vegetation, soils, or hydrology been disturbed?
 Is the area a potential problem area?

Community ID: Meadow
 Station ID:
 Plot ID:

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u>			
X <i>Dactylis glomerata</i>	Grass, Orchard	60	FACU
X <i>Cirsium vulgare</i>	Thistle, Bull	20	FACU

% Species that are OBL, FACW, or FAC (except FAC-): 0

Cowardin Classification:

Remarks
 grazed

Hydrology

- Recorded Data (describe in remarks)
 Stream, Lake, or Tide Gage
 Aerial Photograph
 Other (describe in remarks)

Primary Wetland Hydrology Indicators

- Inundated
 Saturated in upper 12 inches
 Water marks
 Drift lines
 Sediment deposits
 Drainage patterns in wetlands

Secondary Hydrology Indicators

- Oxidized root channels
 Water-stained leaves
 Local soil survey data
 FAC-Neutral test
 Other (explain in remarks)

Field Observations:

Depth of Surface Water(in.): 0
 Depth to Free Water in Pit(in.): >24
 Depth to Saturated Soils(in.): >24

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Texture, Structure, etc.
0-16	A/B	10YR 3/3	10YR 4/2	few distinct	Sandy Loam

Hydric Soils Indicators

- | | |
|--|---|
| <input type="checkbox"/> Histosol | <input type="checkbox"/> Concretions |
| <input type="checkbox"/> Histic Epipedon | <input type="checkbox"/> High Organic % in Surface Layer |
| <input type="checkbox"/> Sulfidic Odor | <input type="checkbox"/> Organic Streaking |
| <input type="checkbox"/> Probable Aquatic Moist Regime | <input type="checkbox"/> Listed on Local Hydric Soils List |
| <input type="checkbox"/> Reducing Conditions | <input type="checkbox"/> Listed on National Hydric Soils List |
| <input type="checkbox"/> Gleyed or Low-Chroma Colors | <input type="checkbox"/> Other (explain in remarks) |

Unit Name:

Taxonomy:

Drainage Class:

Field Observations match map

Remarks

Wetland Determination

- | | |
|---|---|
| <input type="checkbox"/> Hydrophytic Vegetation Present | <input type="checkbox"/> This Data Point is a Wetland |
| <input type="checkbox"/> Hydric Soils Present | |
| <input type="checkbox"/> Wetland Hydrology Present | |

Remarks

Data Form
Routine Wetland Determination

Job Number: 100131
 City: none
 Wetland Data Point: SP12

Project/Site: Wilcox Stream BE
 Applicant/Owner: Wilcox Dairy
 Investigator: M Heckert

Date: December 03, 2010
 County: Pierce
 State: WA

- Do normal circumstances exist on the site?
- Have vegetation, soils, or hydrology been disturbed?
- Is the area a potential problem area?

Community ID: Meadow
 Station ID:
 Plot ID:

Vegetation

Dominant Species	Common Name	% Cover	Indicator
<u>Herbaceous</u> X <i>Dactylis glomerata</i>	Grass, Orchard	100	FACU

% Species that are OBL, FACW, or FAC (except FAC-): 0
 Cowardin Classification:
 Remarks

Hydrology

- Recorded Data (describe in remarks)
 - Stream, Lake, or Tide Gage
 - Aerial Photograph
 - Other (describe in remarks)

- Primary Wetland Hydrology Indicators*
- Inundated
 - Saturated in upper 12 inches
 - Water marks
 - Drift lines
 - Sediment deposits
 - Drainage patterns in wetlands

- Secondary Hydrology Indicators*
- Oxidized root channels
 - Water-stained leaves
 - Local soil survey data
 - FAC-Neutral test
 - Other (explain in remarks)

Field Observations:
 Depth of Surface Water(in.): 0
 Depth to Free Water in Pit(in.): >24
 Depth to Saturated Soils(in.): >24

Remarks

Soils

Depth (in.)	Hor.	Matrix Color	Mottle / 2nd Mottle Color	Abundance	Texture, Structure, etc.
0-12	A	10YR 3/2			Fine Sandy Loam
12-18	B	10YR 4/2	10YR 5/6	common faint	Sandy Loam

Hydric Soils Indicators

- Histosol
- Histic Epipedon
- Sulfidic Odor
- Probable Aquatic Moist Regime
- Reducing Conditions
- Gleyed or Low-Chroma Colors
- Concretions
- High Organic % in Surface Layer
- Organic Streaking
- Listed on Local Hydric Soils List
- Listed on National Hydric Soils List
- Other (explain in remarks)

Unit Name: Taxonomy:
 Drainage Class: Field Observations match map

Remarks

Wetland Determination

- Hydrophytic Vegetation Present
- Hydric Soils Present
- Wetland Hydrology Present
- This Data Point is a Wetland

Remarks

APPENDIX B – WSWRS Form
Revised Washington State Wetland Rating System
Rating Form

WETLAND RATING FORM – WESTERN WASHINGTON
Version 2 – Updated Oct. 2008 with the new WDFW definitions for priority habitats

Name of wetland (if known): WL A Date of site visit: 12/2/10
 Rated by: M. Heckert Trained by Ecology? Yes Date of training: 5/05
 SEC: _____ TWNSHP: _____ RNGE: _____ Is S/T/R in Appendix D? Yes _____ No: X

Map of wetland unit: Figure _____ Estimated size: 28 ac

SUMMARY OF RATING

Category based on FUNCTIONS provided by wetland: I _____ II _____ III _____ IV _____

Category I =	Score > 70
Category II =	Score 51 - 69
Category III =	Score 30 – 50
Category IV =	Score < 30

Score for Water Quality Functions	14
Score for Hydrologic Functions	16
Score for Habitat Functions	12
TOTAL Score for Functions	42

Category based on SPECIAL CHARACTERISTICS of Wetland I _____ II _____ **Does not apply** N/A _____

Final Category (choose the “highest” category from above”) 3

Summary of basic information about the wetland unit.

Wetland Unit has Special Characteristics		Wetland HGM Class used for Rating	
Estuarine		Depressional	
Natural Heritage Wetland		Riverine	
Bog		Lake-fringe	
Mature Forest		Slope	
Old Growth Forest		Flats	
Coastal Lagoon		Freshwater Tidal	
Interdunal			
None of the above		Check if unit has multiple HGM classes present	<input type="checkbox"/>

Does the wetland being rated meet any of the criteria below? If you answer YES to any of the questions below you will need to protect the wetland according to the regulations regarding the special characteristics found in the wetland.

Check List for Wetlands that Need Additional Protection (in addition to the protection recommended for its category)	YES	NO
SP1. <i>Has the wetland unit been documented as a habitat for any Federally listed Threatened or Endangered animal or plant species (T/E species)?</i> For the purposes of this rating system, “documented” means the wetland is on the appropriate state or federal database.		X
SP2. <i>Has the wetland unit been documented as habitat for any State listed Threatened or Endangered animal species?</i> For the purposes of this rating system, “documented” means the wetland is on the appropriate state database. Note: Wetlands with State listed plant species are categorized as Category 1 Natural Heritage Wetlands (see p. 19 of data form).		X
SP3. <i>Does the wetland unit contain individuals of Priority species listed by the WDFW for the state?</i>		X
SP4. <i>Does the wetland unit have a local significance in addition to its functions?</i> For example, the wetland has been identified in the Shoreline Master Program, the Critical Areas Ordinance, or in a local management plan as having special significance.		X

To complete the next part of the data sheet you will need to determine the Hydrogeomorphic Class of the wetland being rated.

The hydrogeomorphic classification groups wetlands in to those that function in similar ways. This simplifies the questions needed to answer how well the wetland functions. The Hydrogeomorphic Class of a wetland can be determined using the key below. See p. 24 for more detailed instructions on classifying wetlands.

Classification of Vegetated Wetlands for Western Washington

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

1. Are the water levels in the entire unit usually controlled by tides (i.e. except during floods)?

NO – go to 2 YES – the wetland class is **Tidal Fringe**

If yes, is the salinity of the water during periods of annual low flow below 0.5 ppt (parts per thousand)?

YES – **Freshwater Tidal Fringe** NO – **Saltwater Tidal Fringe (Estuarine)**

If your wetland can be classified as a Freshwater Tidal Fringe use the forms for **Riverine** wetlands. If it is a Saltwater Tidal Fringe it is rated as an **Estuarine** wetland. Wetlands that were call estuarine in the first and second editions of the rating system are called Salt Water Tidal Fringe in the Hydrogeomorphic Classification. Estuarine wetlands were categorized separately in the earlier editions, and this separation is being kept in this revision. To maintain consistency between editions, the term “Estuarine” wetland is kept. Please note, however, that the characteristics that define Category I and II estuarine wetlands have changed (see p. _____).

2. The entire wetland unit is flat and precipitation is only source (>90%) of water to it. Groundwater and surface water runoff are NOT sources of water to the unit.

NO – go to 3 YES – The wetland class is **Flats**

If your wetland can be classified as a “Flats” wetland, use the form for **Depressional** wetlands.

3. Does the entire wetland meet both of the following criteria?

_____ The vegetated part of the wetland is on the shores of a body of permanent open water (without any vegetation on the surface) where at least 20 acres (8ha) in size;

_____ At least 30% of the open water area is deeper than 6.6 (2 m)?

NO – go to 4 YES – The wetland class is **Lake-fringe (Lacustrine Fringe)**

4. Does the entire wetland meet all of the following criteria?

_____ The wetland is on a slope (*slope can be very gradual*).

_____ The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks.

_____ The water leaves the wetland **without being impounded?**

NOTE: *Surface water does not pond in these types of wetlands except occasionally in very small and shallow depressions or behind hummocks (depressions are usually <3 ft diameter and less than 1 foot deep).*

NO – go to 5 YES – The wetland class is **Slope**

5. Does the entire wetland meet all of the following criteria?

_____ The unit is in a valley or stream channel where it gets inundated by overbank flooding from that stream or river.

_____ The overbank flooding occurs at least once every two years.

NOTE: *The riverine unit can contain depressions that are filled with water when the river is not flooding.*

NO – go to 6 YES – The wetland class is **Riverine**

6. Is the entire wetland unit in a topographic depression in which water ponds, or is saturated to the surface, at some time of the year. This means that any outlet, if present is higher than the interior of the wetland.

NO – go to 7 YES – The wetland class is **Depressional**

7. Is the entire wetland located in a very flat area with no obvious depression and no overbank flooding. The unit does not pond surface water more than a few inches. The unit seems to be maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

No – go to 8 YES – The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM classes. For example, seeps at the base of a slope may grade into a riverine floodplain, or a small stream within a depressional wetland has a zone of flooding along its sides. GO BACK AND IDENTIFY WHICH OF THE HYDROLOGIC REGIMES DESCRIBED IN QUESTIONS 1-7 APPLY TO DIFFERENT AREAS IN THE UNIT (make a rough sketch to help you decide). Use the following table to identify the appropriate class to use for the rating system if you have several HGM classes present within your wetland. NOTE: Use this table only if the class that is recommended in the second column represents 10% or more of the total area of the wetland unit being rated. If the area of the class listed in column 2 is less than 10% of the unit, classify the wetland using the class that represents more than 90% of the total area.

HGM Classes within the wetland unit being rated	HGM Class to Use in Rating
Slope + Riverine	Riverine
Slope + Depressional	Depressional
Slope + Lake-fringe	Lake-fringe
Depressional + Riverine along stream within boundary	Depressional
Depressional + Lake-fringe	Depressional
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as ESTUARINE under wetlands with special characteristics

<p>D 4</p>	<p>Does the wetland have the opportunity to reduce flooding and erosion? Answer YES if the unit is in a location in the watershed where the flood storage, or reduction in water velocity, it provides helps protect downstream property and aquatic resources from flooding or excessive and/or erosive flows. Answer NO if the water coming into the wetland is controlled by a structure such as flood gate, tide gate, flap valve, reservoir etc. OR you estimate that more than 90% of the water in the wetland is from groundwater in areas where damaging groundwater flooding does not occur. <i>Note which of the following indicators of opportunity apply.</i></p> <p> <input type="checkbox"/> Wetland is in a headwater of a river or stream that has flooding problems. <input type="checkbox"/> Wetland drains to a river or stream that has flooding problems <input type="checkbox"/> Wetland has no outlet and impounds surface runoff water that might otherwise flow into a river or stream that has flooding problems <input type="checkbox"/> Other _____ </p> <p style="text-align: center;"> YES multiplier is 2 NO multiplier is 1 </p>	<p>(see p. 49)</p> <p>Multiplier</p> <p style="text-align: center;">2</p>
<p>◆</p>	<p>TOTAL – Hydrologic Functions Multiply the score from D3 by D4; then <i>add score to table on p. 1</i></p>	<p style="text-align: center;">16</p>

Comments:

These questions apply to wetlands of all HGM classes.		Points (only 1 score per box)								
HABITAT FUNCTIONS – Indicators that wetland functions to provide important habitat.										
H 1	Does the wetland have the potential to provide habitat for many species?									
H 1.1	<p><u>Vegetation structure</u> (see P. 72): Check the types of vegetation classes present (as defined by Cowardin) – Size threshold for each class is 1/4 acre or more than 10% of the area if unit is smaller than 2.5 acres.</p> <p><input type="checkbox"/> Aquatic Bed <input checked="" type="checkbox"/> Emergent plants <input type="checkbox"/> Scrub/shrub (areas where shrubs have > 30% cover) <input type="checkbox"/> Forested (areas where trees have > 30% cover)</p> <p>If the unit has a forested class check if: <input type="checkbox"/> The forested class has 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the forested polygon. Add the number of vegetation types that qualify. If you have:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">4 structures or more..... points = 4</td> <td style="width: 50%; text-align: right;">Map of Cowardin vegetation classes</td> </tr> <tr> <td>2 structures..... points = 1</td> <td style="text-align: right;">3 structures..... points = 2</td> </tr> <tr> <td></td> <td style="text-align: right;">1 structure..... points = 0</td> </tr> </table>	4 structures or more..... points = 4	Map of Cowardin vegetation classes	2 structures..... points = 1	3 structures..... points = 2		1 structure..... points = 0	Figure — 0		
4 structures or more..... points = 4	Map of Cowardin vegetation classes									
2 structures..... points = 1	3 structures..... points = 2									
	1 structure..... points = 0									
H 1.2	<p><u>Hydroperiods</u> (see p. 73): Check the types of water regimes (hydroperiods) present within the wetland. The water regime has to cover more than 10% of the wetland or 1/4 acre to count (see text for descriptions of hydroperiods).</p> <p><input type="checkbox"/> Permanently flooded or inundated <input checked="" type="checkbox"/> Seasonally flooded or inundated <input checked="" type="checkbox"/> Occasionally flooded or inundated <input type="checkbox"/> Saturated only <input checked="" type="checkbox"/> Permanently flowing stream or river in, or adjacent to, the wetland <input type="checkbox"/> Seasonally flowing stream in, or adjacent to, the wetland <input checked="" type="checkbox"/> Lake-fringe wetland = 2 points <input type="checkbox"/> Freshwater tidal wetland = 2 points</p> <p style="text-align: right;">Map of hydroperiods</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">4 or more types present</td> <td style="width: 50%; text-align: right;">points = 3</td> </tr> <tr> <td>3 or more types present.....</td> <td style="text-align: right;">points = 2</td> </tr> <tr> <td>2 types present.....</td> <td style="text-align: right;">points = 1</td> </tr> <tr> <td>1 type present.....</td> <td style="text-align: right;">points = 0</td> </tr> </table>	4 or more types present	points = 3	3 or more types present.....	points = 2	2 types present.....	points = 1	1 type present.....	points = 0	Figure — 2
4 or more types present	points = 3									
3 or more types present.....	points = 2									
2 types present.....	points = 1									
1 type present.....	points = 0									
H 1.3	<p><u>Richness of Plant Species</u> (see p. 75): Count the number of plant species in the wetland that cover at least 10 ft² (different patches of the same species can be combined to meet the size threshold) You do not have to name the species. Do not include Eurasian Milfoil, reed canarygrass, purple loosestrife, Canadian Thistle.</p> <p>If you counted:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">> 19 species.....</td> <td style="width: 50%; text-align: right;">points = 2</td> </tr> <tr> <td>5 – 19 species.....</td> <td style="text-align: right;">points = 1</td> </tr> <tr> <td>< 5 species.....</td> <td style="text-align: right;">points = 0</td> </tr> </table> <p>List species below if you want to: _____ _____ _____</p>	> 19 species.....	points = 2	5 – 19 species.....	points = 1	< 5 species.....	points = 0	1		
> 19 species.....	points = 2									
5 – 19 species.....	points = 1									
< 5 species.....	points = 0									
H 1.4	<p><u>Interspersion of Habitats</u> (see p. 76): Decided from the diagrams below whether interspersion between Cowardin vegetation (described in H1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, medium, low, or none.</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  None = 0 points </div> <div style="text-align: center;">  Low = 1 point </div> <div style="text-align: center;">  Moderate = 2 points </div> <div style="text-align: center;">  High = 3 points </div> </div> <p style="text-align: center;">[riparian braided channels]</p> <p style="text-align: right;">Note: If you have 4 or more classes or 3 vegetation classes and open water, the rating is always “high”. Use map of Cowardin classes.</p>	Figure — 1								
H 1.5	<p><u>Special Habitat Features</u> (see p. 77): Check the habitat features that are present in the wetland. The number of checks is the number of points you put into the next column.</p> <p><input type="checkbox"/> Large, downed, woody debris within the wetland (> 4 in. diameter and 6 ft. long) <input type="checkbox"/> Standing snags (diameter at the bottom > 4 inches) in the wetland <input type="checkbox"/> Undercut banks are present for at least 6.6 ft. (2m) and/or overhanging vegetation extends at least 3.3 ft. (1m) over a stream (or ditch) in, or contiguous with the unit, for at least 33 ft. (10m) <input checked="" type="checkbox"/> Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (cut shrubs or trees that have not yet turned grey/brown) <input checked="" type="checkbox"/> At least 1/4 acre of thin-stemmed persistent vegetation or woody branches are present in areas that are permanently or seasonally inundated (structures for egg-laying by amphibians) <input type="checkbox"/> Invasive plants cover less than 25% of the wetland area in each stratum of plants</p> <p>NOTE: The 20% stated in early printings of the manual on page 78 is an error.</p>	2								
H 1 TOTAL Score – potential for providing habitat		Add the points in the column above 6								

<p>H 2.3</p>	<p><u>Near or adjacent to other priority habitats listed by WDFW</u> (see p. 82): (see new and complete descriptions of WDFW priority habitats, and the counties in which they can be found, in the PHS report http://wdfw.wa.gov/hab/phslist.htm)</p> <p>Which of the following priority habitats are within 330 ft. (100m) of the wetland unit? <i>NOTE: the connections do not have to be relatively undisturbed.</i></p> <p><input type="checkbox"/> Aspen Stands: Pure or mixed stands of aspen greater than 0.4 ha (1 acre).</p> <p><input type="checkbox"/> Biodiversity Areas and Corridors: Areas of habitat that are relatively important to various species of native fish and wildlife (full descriptions in WDFW PHS report p. 152).</p> <p><input type="checkbox"/> Herbaceous Balds: Variable size patches of grass and forbs on shallow soils over bedrock.</p> <p><input type="checkbox"/> Old-growth/Mature forests: (Old-growth west of Cascade crest) Stands of at least 2 tree species, forming a multi-layered canopy with occasional small openings; with at least 20 trees/ha (8 trees/acre) > 81 cm (32 in) dbh or > 200 years of age. (Mature forests) Stands with average diameters exceeding 53 cm (21 in) dbh; crown cover may be less than 100%; decay, decadence, numbers of snags, and quantity of large downed material is generally less than that found in old-growth; 80 - 200 years old west of the Cascade crest.</p> <p><input type="checkbox"/> Oregon white Oak: Woodlands Stands of pure oak or oak/conifer associations where canopy coverage of the oak component is important (full descriptions in WDFW PHS report p. 158).</p> <p><input type="checkbox"/> Riparian: The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other.</p> <p><input type="checkbox"/> Westside Prairies: Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet prairie (full descriptions in WDFW PHS report p. 161).</p> <p><input checked="" type="checkbox"/> Instream: The combination of physical, biological, and chemical processes and conditions that interact to provide functional life history requirements for instream fish and wildlife resources.</p> <p><input type="checkbox"/> Nearshore: Relatively undisturbed nearshore habitats. These include Coastal Nearshore, Open Coast Nearshore, and Puget Sound Nearshore. (full descriptions of habitats and the definition of relatively undisturbed are in WDFW report: pp. 167-169 and glossary in Appendix A).</p> <p><input type="checkbox"/> Caves: A naturally occurring cavity, recess, void, or system of interconnected passages under the earth in soils, rock, ice, or other geological formations and is large enough to contain a human.</p> <p><input type="checkbox"/> Cliffs: Greater than 7.6 m (25 ft) high and occurring below 5000 ft.</p> <p><input type="checkbox"/> Talus: Homogenous areas of rock rubble ranging in average size 0.15 - 2.0 m (0.5 - 6.5 ft), composed of basalt, andesite, and/or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs.</p> <p><input type="checkbox"/> Snags and Logs: Trees are considered snags if they are dead or dying and exhibit sufficient decay characteristics to enable cavity excavation/use by wildlife. Priority snags have a diameter at breast height of > 51 cm (20 in) in western Washington and are > 2 m (6.5 ft) in height. Priority logs are > 30 cm (12 in) in diameter at the largest end, and > 6 m (20 ft) long.</p> <p>If wetland has 3 or more priority habitats = 4 points If wetland has 2 priority habitats = 3 points If wetland has 1 priority habitat = 1 point No habitats = 0 points</p> <p>Note: All vegetated wetlands are by definition a priority habitat but are not included in this list. Nearby wetlands are addressed in question H 2.4)</p>	<p>1</p>
<p>H 2.4</p>	<p><u>Wetland Landscape:</u> Choose the one description of the landscape around the wetland that best fits (see p. 84)</p> <ul style="list-style-type: none"> • There are at least 3 other wetlands within 1/2 mile, and the connections between them are relatively undisturbed (light grazing between wetlands OK, as is lake shore with some boating, but connections should NOT be bisected by paved roads, fill, fields, or other development).....points = 5 • The wetland is Lake-fringe on a lake with little disturbance and there are 3 other lake-fringe wetlands within 1/2 milepoints = 5 • There are at least 3 other wetlands within 1/2 mile, BUT the connections between them are disturbed.....points = 3 • The wetland fringe on a lake with disturbance and there are 3 other lake-fringe wetlands within 1/2 milepoints = 3 • There is at least 1 wetland within 1/2 milepoints = 2 • There are no wetlands within 1/2 mile.....points = 0 	<p>3</p>
<p>H 2 TOTAL Score – opportunity for providing habitat</p>	<p>Add the scores from H2.1, H2.2, H2.3, H2.4</p>	<p>6</p>
<p></p>	<p>TOTAL for H 1 from page 8</p>	<p>6</p>
<p>◆ Total Score for Habitat Functions</p>	<p>Add the points for H 1 and H 2; then record the result on p. 1</p>	<p>12</p>

Comments:

CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

Please determine if the wetland meets the attributes described below and circle the appropriate answers and Category.

Wetland Type – Check off any criteria that apply to the wetland. Circle the Category when the appropriate criteria are met.		
SC1	<p>Estuarine wetlands? (see p.86)</p> <p>Does the wetland unit meet the following criteria for Estuarine wetlands?</p> <p><input type="checkbox"/> The dominant water regime is tidal,</p> <p><input type="checkbox"/> Vegetated, and</p> <p><input type="checkbox"/> With a salinity greater than 0.5 ppt.</p> <p>YES = Go to SC 1.1 NO _____</p>	
	<p>SC 1.1 Is the wetland unit within a National Wildlife Refuge, National Park, National Estuary Reserve, Natural Area Preserve, State Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30-151? YES = Category I NO = go to SC 1.2</p>	Cat. I N/A
	<p>SC 1.2 Is the wetland at least 1 acre in size and meets at least two of the following conditions?</p> <p>YES = Category I NO = Category II</p> <p><input type="checkbox"/> The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has less than 10% cover of non-native plant species. If the non-native <i>Spartina</i> spp., are only species that cover more than 10% of the wetland, then the wetland should be given a dual rating (I/II). The area of <i>Spartina</i> would be rated a Category II while the relatively undisturbed upper marsh with native species would be a Category I. Do not, however, exclude the area of <i>Spartina</i> in determining the size threshold of 1 acre.</p> <p><input type="checkbox"/> At least 3/4 of the landward edge of the wetland has a 100 ft. buffer of shrub, forest, or un-grazed or un-mowed grassland</p> <p><input type="checkbox"/> The wetland has at least 2 of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands.</p>	Cat. I Cat. II Dual Rating I/II N/A
SC2	<p>Natural Heritage Wetlands (see p. 87)</p> <p>Natural Heritage wetlands have been identified by the Washington Natural Heritage Program/DNR as either high quality undisturbed wetlands or wetlands that support state Threatened, Endangered, or Sensitive plant species.</p> <p>SC 2.1 Is the wetland being rated in a Section/Township/Range that contains a natural heritage wetland? (This question is used to screen out most sites before you need to contact WNHP/DNR.) S/T/R information from Appendix D _____ or accessed from WNHP/DNR web site _____ YES _____ Contact WNHP/DNR (see p. 79) and go to SC 2.2 NO _____</p> <p>SC 2.2 Has DNR identified the wetland as a high quality undisturbed wetland or as a site with state threatened or endangered plant species? YES = Category 1 NO _____ not a Heritage Wetland</p>	N/A Cat I N/A
SC3	<p>Bogs (see p. 87)</p> <p>Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? Use the key below to identify if the wetland is a bog. If you answer yes you will still need to rate the wetland based on its function.</p> <ol style="list-style-type: none"> Does the unit have organic soil horizons (i.e. layers of organic soil), either peats or mucks, that compose 16 inches or more of the first 32 inches of soil profile? (See Appendix B for a field key to identify organic soils)? YES = go to question 3 NO = go to question 2 Does the wetland have organic soils, either peats or mucks that are less than 16 inches deep over bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on a lake or pond? YES = go to question 3 NO = is not a bog for purpose of rating Does the unit have more than 70% cover of mosses at ground level, AND other plants, if present, consist of the “bog” species listed in Table 3 as a significant component of the vegetation (more than 30% of the total shrub and herbaceous cover consists of species in Table 3)? YES = Is a bog for purpose of rating NO = go to question 4 <p>NOTE: If you are uncertain about the extent of mosses in the understory you may substitute that criterion by measuring the pH of the water that seeps into a hole dug at least 16” deep. If the pH is less than 5.0 and the “bog” plant species in Table 3 are present, the wetland is a bog.</p> <ol style="list-style-type: none"> Is the unit forested (> 30% cover) with sitka spruce, subalpine fir, western red cedar, western hemlock, lodgepole pine, quaking aspen, Englemann’s spruce, or western white pine. WITH any of the species (or combination of species) on the bog species plant list in Table 3 as a significant component of the ground cover (> 30% coverage of the total shrub/herbaceous cover)? YES = Category I NO = Is not a bog for purpose of rating 	Cat. I N/A

SC4	<p>Forested Wetlands (see p. 90)</p> <p>Does the wetland have at least 1 acre of forest that meet one of these criteria for the Department of Fish and Wildlife's forests as priority habitats? <i>If you answer yes you will still need to rate the wetland based on its function.</i></p> <p>___ Old-growth forests: (west of Cascade Crest) Stands of at least two three species forming a multi-layered canopy with occasional small openings; with at least 8 trees/acre (20 trees/hectare) that are at least 200 years of age OR have a diameter at breast height (dbh) of 32 inches (81 cm or more).</p> <p>NOTE: The criterion for dbh is based on measurements for upland forests. Two-hundred year old trees in wetlands will often have a smaller dbh because their growth rates are often slower. The DFW criterion is and "OR" so old-growth forests do not necessarily have to have trees of this diameter.</p> <p>___ Mature forests: (west of the Cascade Crest) Stands where the largest trees are 80 – 200 years old OR have an average diameters (dbh) exceeding 21 inches (53 cm); crown cover may be less than 100%; decay, decadence, numbers of snags, and quantity of large downed material is generally less than that found in old-growth.</p> <p>YES = Category I NO = ___ not a forested wetland with special characteristics</p>	<p>Cat. I N/A</p>
SC5	<p>Wetlands in Coastal Lagoons (see p. 91)</p> <p>Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?</p> <p>___ The wetland lies in a depression adjacent to marine waters that is wholly or partially separated from marine waters by sandbanks, gravel banks, shingle, or, less frequently, rocks.</p> <p>___ The lagoon in which the wetland is located contains surface water that is saline or brackish (> 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to be measured near the bottom.</i>)</p> <p>YES = Go to SC 5.1 NO ___ not a wetland in a coastal lagoon</p> <p>SC 5.1 Does the wetland meet all of the following three conditions?</p> <p>___ The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing) and has less than 20% cover of invasive plant species (see list of invasive species on p. 74).</p> <p>___ At least 3/4 of the landward edge of the wetland has a 100 ft. buffer of shrub, forest, or un-grazed or un-mowed grassland.</p> <p>___ The wetland is larger than 1/10 acre (4350 square ft.)</p> <p>YES = Category I NO = Category II</p>	<p>Cat. I Cat. II N/A</p>
SC6	<p>Interdunal Wetlands (see p. 93)</p> <p>Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)?</p> <p>YES = Go to SC 6.1 NO ___ not an interdunal wetland for rating</p> <p><i>If you answer yes you will still need to rate the wetland based on its functions.</i></p> <p>In practical terms that means the following geographic areas:</p> <ul style="list-style-type: none"> • Long Beach Peninsula -- lands west of SR 103 • Grayland-Westport -- lands west of SR 105 • Ocean Shores-Copalis – lands west of SR 115 and SR 109 <p>SC 6.1 Is the wetland one acre or larger, or is it in a mosaic of wetlands that is one acre or larger?</p> <p>YES = Category II NO = go to SC 6.2</p> <p>SC 6.2 Is the wetland between 0.1 and 1 acre, or is it in a mosaic of wetlands that is between 0.1 and 1 acre?</p> <p>YES = Category III</p>	<p>Cat. II Cat. III N/A</p>
◆	<p>Category of wetland based on Special Characteristics</p> <p>Choose the "highest" rating if wetland falls into several categories, and record on p. 1.</p> <p>If you answered NO for all types enter "Not Applicable" on p. 1</p>	<p>N/A</p>

Comments: