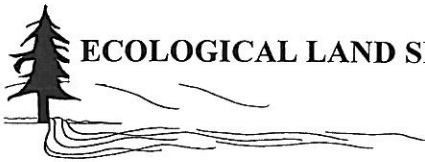


**APPENDIX B**

**Routine On-site Wetland Determination Data Sheets**

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Project Site: Potholes Reservoir
Date: 11/28/07
Project #: 1691.01
Applicant/Owner: WDFW
County/State: Grant County, Washington
Test Plot Location: Unit B 20 ft north of Berm 1's wetland flag 13S
Sec/Town/Range: S1 T18N R27E, S36 T19N R27E, and S31 T19N R28E

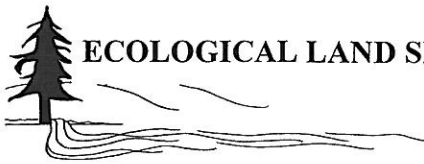
Do normal circumstances exist at the site? [X] Yes [ ] No
Is the site significantly disturbed (atypical situation)? [ ] Yes [X] No
Is the site a potential problem area? [ ] Yes [X] No

VEGETATION (Strata: tree, sapling, shrub, woody vine, herb)
Dominant Plant Species
Table with columns: Common Name, Scientific Name, Strata, % Cover, Indicator Status.
Other species present: Bareground at 30%.
Remarks: \* = dominant species per the 50/20 rule. 0/3 = 0%

HYDROLOGY
Recorded data available? [X] Yes [ ] No
Is it the growing season? [ ] Yes [X] No
Is site inundated? [ ] Yes [X] No
Depth of surface water: N/A
Depth to free water in pit: N/A
Depth to saturated soils: N/A
Wetland Hydrology Indicators
Primary Indicators: [ ] Inundated, [ ] Saturated < 12 in., [ ] Water Marks, [ ] Drift Lines, [ ] Sediment Deposits, [ ] Drainage Patterns in wetlands
Secondary Indicators (2 required): [ ] Oxidized Root Channels < 12in. bgs, [X] Local Soil Survey Data, [ ] Water Stained Leaves, [ ] FAC-Neutral Test, [ ] Other (explain in remarks)
Hydrology Criteria Met? [ ] Yes [X] No

SOILS:
Map Unit Name: Wasner-Quincy fine sands, 0-5% slopes (176)
Taxonomy (Subgroup): mesic Typic Psammaquents
Drainage Class: [ ] Excessively Drained, [ ] Somewhat Excessively Drained, [ ] Well Drained, [ ] Moderately Well Drained, [ ] Somewhat Poorly Drained, [X] Poorly Drained, [ ] Very Poorly Drained
Field observations confirm mapped soil type? [ ] Yes [X] No
Profile Description
Table with columns: Depth (inches), Horizon, Matrix color, Mottle Color, Mottle Abundance, Mottle Size, Texture.
Hydric Soil Indicators: [ ] Histic Epipedon (8-16"), [ ] Sulfidic Odor, [ ] Aquic Moisture Regime, [ ] Reducing Conditions, [ ] Gleyed or Low Chroma Colors, [ ] Mn or Fe Concretions, [ ] High Organic Content in Layer of Sandy Soils, [ ] Organic Streaking in Sandy Soils, [ ] Organic Pans, [ ] Listed on Local Hydric Soils List, [ ] Other (explain in remarks)
Remarks: The criteria were not met.
Soils Criteria Met? [ ] Yes [X] No

WETLAND DETERMINATION
Hydrophytic Vegetation Dominant? [ ] Yes [X] No
Wetland Hydrology Present? [ ] Yes [X] No
Hydric Soil Present? [ ] Yes [X] No
Remarks: The wetland criteria is not met.
Is test plot within a wetland? [ ] Yes [X] No



Project Site: Potholes Reservoir Date: 11/28/07 Project #: 1691.01
Applicant/Owner: WDFW County/State: Grant County, WA
Test Plot Location: Unit B 40 ft north of Berm 1's wetland flag 12S Sec/Town/Range: S1 T18N R27E, S36 T19N R27E, and S31 T19N R28E

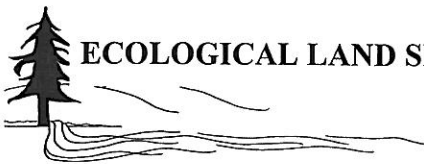
Do normal circumstances exist at the site? [X] Yes [ ] No Plot ID: TP-2wet
Is the site significantly disturbed (atypical situation)? [ ] Yes [X] No Community ID: --
Is the site a potential problem area? [ ] Yes [X] No Transect ID: --

VEGETATION (Strata: tree, sapling, shrub, woody vine, herb)
Dominant Plant Species
Table with columns: Common Name, Scientific Name, Strata, % Cover, Indicator Status.
Other species present: Bareground at 20%.
% of dominant species OBL, FACW, FACW-, FAC+, FAC 100% (more than 50% required)
Remarks: \* = dominant species per the 50/20 rule. 4/4 = 100%
Vegetation Criteria Met? [X] Yes [ ] No

HYDROLOGY
Recorded data available? [X] Yes [ ] No Type(s): --
Is it the growing season? [ ] Yes [X] No
Is site inundated? [ ] Yes [X] No
Depth of surface water: N/A
Depth to free water in pit: N/A
Depth to saturated soils: N/A
Wetland Hydrology Indicators
Primary Indicators: [ ] Inundated, [ ] Saturated < 12 in., [ ] Water Marks, [ ] Drift Lines, [ ] Sediment Deposits, [X] Drainage Patterns in wetlands
Secondary Indicators (2 required): [ ] Oxidized Root Channels < 12in. bgs, [X] Local Soil Survey Data, [ ] Water Stained Leaves, [X] FAC-Neutral Test, [ ] Other (explain in remarks)
Hydrology Criteria Met? [X] Yes [ ] No
Remarks: The criteria were met.

SOILS:
Map Unit Name: Wasner-Quincy fine sands, 0-5% slopes (176)
Taxonomy (Subgroup): mesic Typic Psammaquents
Drainage Class: [ ] Excessively Drained, [ ] Somewhat Excessively Drained, [ ] Well Drained, [ ] Moderately Well Drained, [ ] Somewhat Poorly Drained, [X] Poorly Drained, [ ] Very Poorly Drained
Field observations confirm mapped soil type? [X] Yes [ ] No
Profile Description
Table with columns: Depth (inches), Horizon, Matrix color, Mottle Color, Mottle Abundance (few, common, many), Mottle Size (fine, med, coarse), Texture.
Hydric Soil Indicators: [ ] Histosol (-ists), [ ] Histic Epipedon (8-16"), [ ] Sulfidic Odor, [ ] Aquic Moisture Regime, [ ] Reducing Conditions, [ ] Gleyed or Low Chroma Colors, [ ] Mn or Fe Concretions, [ ] High Organic Content in Layer of Sandy Soils, [ ] Organic Streaking in Sandy Soils, [ ] Organic Pans, [X] Listed on Local Hydric Soils List, [ ] Other (explain in remarks)
Remarks: The criteria were met.
Soils Criteria Met? [X] Yes [ ] No

WETLAND DETERMINATION
Hydrophytic Vegetation Dominant? [X] Yes [ ] No
Wetland Hydrology Present? [X] Yes [ ] No
Hydric Soil Present? [X] Yes [ ] No
Remarks: The wetland criteria were met.
Is test plot within a wetland? [X] Yes [ ] No



Project Site: Potholes Reservoir Date: 11/28/07 Project #: 1691.01
Applicant/Owner: WDFW County/State: Grant County, WA
Test Plot Location: Unit B 10 ft north of Berm 2's wetland flag 2-2W Sec/Town/Range: S1 T18N R27E, S36 T19N R27E, and S31 T19N R28E

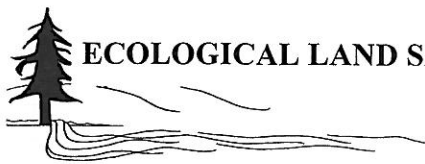
Do normal circumstances exist at the site? [X] Yes [ ] No Plot ID: TP-3wet
Is the site significantly disturbed (atypical situation)? [ ] Yes [X] No Community ID: --
Is the site a potential problem area? [ ] Yes [X] No Transect ID: --

VEGETATION (Strata: tree, sapling, shrub, woody vine, herb)
Dominant Plant Species
Common Name Scientific Name Strata % Cover Indicator Status
1. hardstem bulrush\* Schoenoplectus acutus Herb 80 OBL
2. - - - - -
3. - - - - -
4. - - - - -
5. - - - - -
6. - - - - -
7. - - - - -
8. - - - - -
Other species present: Bareground at 20%.
% of dominant species OBL, FACW, FACW-, FAC+, FAC 100% (more than 50% required)
Remarks: \* = dominant species per the 50/20 rule. 1/1 = 100%
Vegetation Criteria Met? [X] Yes [ ] No

HYDROLOGY
Recorded data available? [X] Yes [ ] No Type(s): --
Is it the growing season? [ ] Yes [X] No Wetland Hydrology Indicators
Is site inundated? [ ] Yes [X] No Primary Indicators Secondary Indicators (2 required)
Depth of surface water: N/A [ ] Inundated [ ] Oxidized Root Channels < 12in. bgs
Depth to free water in pit: N/A [ ] Saturated < 12 in. [ ] Local Soil Survey Data
Depth to saturated soils: N/A [ ] Water Marks [ ] Water Stained Leaves
[X] Drainage Patterns in wetlands [X] FAC-Neutral Test [ ] Other (Explain in remarks)
Hydrology Criteria Met? [X] Yes [ ] No
Remarks: The criteria were met.

SOILS: Drainage Class: [ ] Excessively Drained [X] Somewhat Excessively Drained
Map Unit Name: Quincy fine sand, 2-15% slopes (97) [ ] Well Drained [ ] Moderately Well Drained
(Series and Phase) [ ] Somewhat Poorly Drained
Taxonomy (Subgroup): mesic Xeric Torripsamments [ ] Poorly Drained [ ] Very Poorly Drained
Field observations confirm mapped soil type? [ ] Yes [X] No
Profile Description
Depth (inches) Horizon Matrix color Mottle Color Mottle Abundance Mottle Size Texture
0-12" - 10 YR 4/1 - - - sand
Hydric Soil Indicators [ ] Histosol (-ists) [ ] Reducing Conditions [ ] Organic Streaking in Sandy Soils
[ ] Histic Epipedon (8-16") [X] Gleyed or Low Chroma Colors [ ] Organic Pans
[ ] Sulfidic Odor [ ] Mn or Fe Concretions [ ] Listed on Local Hydric Soils List
[ ] Aquic Moisture Regime [ ] High Organic Content in Layer of Sandy Soils [ ] Other (explain in remarks)
Remarks: The criteria were met.
Soils Criteria Met? [X] Yes [ ] No

WETLAND DETERMINATION
Hydrophytic Vegetation Dominant? [X] Yes [ ] No
Wetland Hydrology Present? [X] Yes [ ] No
Hydric Soil Present? [X] Yes [ ] No
Remarks: The wetland criteria were met.
Is test plot within a wetland? [X] Yes [ ] No



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1997 Washington State Delineation Manual

Table with 3 columns: Project Site, Date, Project #, Applicant/Owner, County/State, Test Plot Location, Sec/Town/Range.

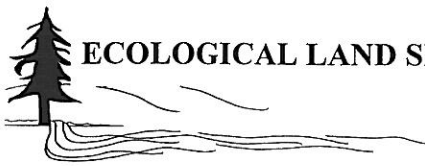
Table with 3 columns: Question (Do normal circumstances exist...), Yes/No checkboxes, and ID (Plot ID, Community ID, Transect ID).

VEGETATION (Strata: tree, sapling, shrub, woody vine, herb)
Dominant Plant Species table with columns: Common Name, Scientific Name, Strata, % Cover, Indicator Status.
Other species present: Bareground at 20%.
% of dominant species OBL, FACW, FAC-, FAC+, FAC 0% (more than 50% required)
Remarks: \* = dominant species per the 50/20 rule. 0/2 = 0%
Vegetation Criteria Met? [ ] Yes [X] No

HYDROLOGY
Recorded data available? [X] Yes [ ] No
Is it the growing season? [ ] Yes [X] No
Is site inundated? [ ] Yes [X] No
Depth of surface water: N/A
Depth to free water in pit: N/A
Depth to saturated soils: N/A
Type(s): --
Primary Indicators: [ ] Inundated, [ ] Saturated < 12 in., [ ] Water Marks, [ ] Drift Lines, [ ] Sediment Deposits, [ ] Drainage Patterns in wetlands.
Secondary Indicators (2 required): [ ] Oxidized Root Channels < 12in. bgs, [X] Local Soil Survey Data, [ ] Water Stained Leaves, [ ] FAC-Neutral Test, [ ] Other (Explain in remarks).
Hydrology Criteria Met? [ ] Yes [X] No
Remarks: The criteria were not met.

SOILS:
Map Unit Name: Wasner-Quincy fine sands, 0-5% slopes (176)
Taxonomy (Subgroup): mesic Typic Psammaquents
Drainage Class: [ ] Excessively Drained, [ ] Somewhat Excessively Drained, [ ] Well Drained, [ ] Moderately Well Drained, [ ] Somewhat Poorly Drained, [X] Poorly Drained, [ ] Very Poorly Drained.
Field observations confirm mapped soil type? [ ] Yes [X] No
Profile Description table with columns: Depth (inches), Horizon, Matrix color, Mottle Color, Mottle Abundance, Mottle Size, Texture.
Hydric Soil Indicators: [ ] Histosol (-ists), [ ] Histic Epipedon (8-16"), [ ] Sulfidic Odor, [ ] Aquic Moisture Regime, [ ] Reducing Conditions, [ ] Gleyed or Low Chroma Colors, [ ] Mn or Fe Concretions, [ ] High Organic Content in Layer of Sandy Soils, [ ] Organic Streaking in Sandy Soils, [ ] Organic Pans, [ ] Listed on Local Hydric Soils List, [ ] Other (explain in remarks).
Remarks: The criteria were not met.
Soils Criteria Met? [ ] Yes [X] No

WETLAND DETERMINATION
Hydrophytic Vegetation Dominant? [ ] Yes [X] No
Wetland Hydrology Present? [ ] Yes [X] No
Hydric Soil Present? [ ] Yes [X] No
Remarks: The wetland criteria is not met.
Is test plot within a wetland? [ ] Yes [X] No



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 DATA FORM – Routine Onsite Wetland Determination  
 1987 COE Wetlands Delineation Manual  
 1997 Washington State Delineation Manual

<b>Project Site:</b> Potholes Reservoir	<b>Date:</b> 11/28/07	<b>Project #:</b> 1691.01
<b>Applicant/Owner:</b> WDFW	<b>County/State:</b> Grant County, WA	
<b>Test Plot Location:</b> Unit B 20 ft east of Berm 3a's wetland flag 1E	<b>Sec/Town/Range:</b> S1 T18N R27E, S36 T19N R27E, and S31 T19N R28E	

<b>Do normal circumstances exist at the site?</b>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<b>Plot ID:</b> TP-5up
<b>Is the site significantly disturbed (atypical situation)?</b>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<b>Community ID:</b> --
<b>Is the site a potential problem area?</b>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<b>Transect ID:</b> --

**VEGETATION** (Strata: tree, sapling, shrub, woody vine, herb)

**Dominant Plant Species**

Common Name	Scientific Name	Strata	% Cover	Indicator Status
1. Douglas rabbitbrush*	<i>Chrysothamnus viscidiflorus</i>	Herb	20	NI
2. gray rabbitbrush*	<i>Chrysothamnus nauseosus</i>	Herb	20	NI
3. tumble mustard*	<i>Sisymbrium altissimum</i>	Herb	30	FACU-
4. Bailey's buckwheat	<i>Eriogonum baileyi</i>	Herb	15	NI
5. antelope bitterbrush	<i>Purshia tridentata</i>	Herb	15	NI
6.		-		-
7.		-		-
8.		-		-

Other species present:  
 % of dominant species OBL, FACW, FACW-, FAC+, FAC 0% (more than 50% required)  
**Remarks:** \* = dominant species per the 50/20 rule. 0/3 = 100%

Vegetation Criteria Met?  Yes  No

**HYDROLOGY**

Recorded data available?  Yes  No  
 Is it the growing season?  Yes  No  
 Is site inundated?  Yes  No

Depth of surface water: N/A  
 Depth to free water in pit: N/A  
 Depth to saturated soils: N/A

Type(s): --

**Wetland Hydrology Indicators**

<b>Primary Indicators</b>	<b>Secondary Indicators (2 required)</b>
<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized Root Channels < 12in. bgs
<input type="checkbox"/> Saturated < 12 in.	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Water Marks	<input type="checkbox"/> Water Stained Leaves
<input type="checkbox"/> Drift Lines	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Sediment Deposits	<input type="checkbox"/> Other (Explain in remarks)
<input type="checkbox"/> Drainage Patterns in wetlands	

Hydrology Criteria Met?  Yes  No

**Remarks:** The criteria were not met.

**SOILS:**

Map Unit Name: Quincy fine sands, 0-5% slopes (97)  
 (Series and Phase)  
 Taxonomy (Subgroup): mesic Xeric Torripsamments

Field observations confirm mapped soil type?  Yes  No

**Drainage Class:**

<input type="checkbox"/> Excessively Drained
<input checked="" type="checkbox"/> Somewhat Excessively Drained
<input type="checkbox"/> Well Drained
<input type="checkbox"/> Moderately Well Drained
<input type="checkbox"/> Somewhat Poorly Drained
<input type="checkbox"/> Poorly Drained
<input type="checkbox"/> Very Poorly Drained

**Profile Description**

Depth (inches)	Horizon	Matrix color	Mottle Color	Mottle Abundance (few, common, many)	Mottle Size (fine, med, coarse)	Texture
0-12"	-	10 YR 3/3	-	-	-	sand

**Hydric Soil Indicators**

<input type="checkbox"/> Histosol (-ists)	<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Histic Epipedon (8-16")	<input type="checkbox"/> Gleyed or Low Chroma Colors	<input type="checkbox"/> Organic Pans
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Mn or Fe Concretions	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Aquic Moisture Regime	<input type="checkbox"/> High Organic Content in Layer of Sandy Soils	<input type="checkbox"/> Other (explain in remarks)

**Remarks:** The criteria were not met.

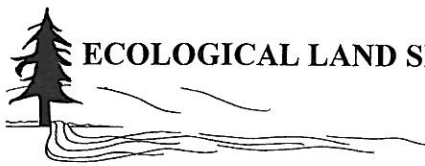
Soils Criteria Met?  Yes  No

**WETLAND DETERMINATION**

Hydrophytic Vegetation Dominant?  Yes  No  
 Wetland Hydrology Present?  Yes  No  
 Hydric Soil Present?  Yes  No

**Remarks:** The wetland criteria were not met.

Is test plot within a wetland?  Yes  No



<b>Project Site:</b> Potholes Reservoir	<b>Date:</b> 11/28/07	<b>Project #:</b> 1691.01
<b>Applicant/Owner:</b> WDFW	<b>County/State:</b> Grant County, WA	
<b>Test Plot Location:</b> Unit B 20 ft west of Berm 3a wetland flag 1E	<b>Sec/Town/Range:</b> S1 T18N R27E, S36 T19N R27E, and S31 T19N R28E	

<b>Do normal circumstances exist at the site?</b>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<b>Plot ID:</b> TP-6wet
<b>Is the site significantly disturbed (atypical situation)?</b>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<b>Community ID:</b> --
<b>Is the site a potential problem area?</b>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<b>Transect ID:</b> --

**VEGETATION** (Strata: tree, sapling, shrub, woody vine, herb)

**Dominant Plant Species**

Common Name	Scientific Name	Strata	% Cover	Indicator Status
1. hardstem bulrush*	<i>Schoenoplectus acutus</i>	Herb	100	OBL
2.		-		-
3.		-		-
4.		-		-
5.		-		-
6.		-		-
7.		-		-
8.		-		-

Other species present:  
 % of dominant species OBL, FACW, FACW-, FAC+, FAC 100% (more than 50% required)  
**Remarks:** \* = dominant species per the 50/20 rule. 1/1 = 100%

Vegetation Criteria Met?  Yes  No

**HYDROLOGY**

Recorded data available?  Yes  No  
 Is it the growing season?  Yes  No  
 Is site inundated?  Yes  No

Depth of surface water: N/A  
 Depth to free water in pit: N/A  
 Depth to saturated soils: N/A

Type(s): --

**Wetland Hydrology Indicators**

<b>Primary Indicators</b>	<b>Secondary Indicators (2 required)</b>
<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized Root Channels < 12in. bgs
<input type="checkbox"/> Saturated < 12 in.	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Water Marks	<input type="checkbox"/> Water Stained Leaves
<input type="checkbox"/> Drift Lines	<input checked="" type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Sediment Deposits	<input type="checkbox"/> Other (Explain in remarks)
<input checked="" type="checkbox"/> Drainage Patterns in wetlands	

Hydrology Criteria Met?  Yes  No

**Remarks:** The criteria were met.

**SOILS:**

**Map Unit Name:** Quincy fine sands, 0-5% slopes (97)  
 (Series and Phase)  
**Taxonomy (Subgroup):** mesic Xeric Torripsamments

**Drainage Class:**

<input type="checkbox"/> Excessively Drained
<input checked="" type="checkbox"/> Somewhat Excessively Drained
<input type="checkbox"/> Well Drained
<input type="checkbox"/> Moderately Well Drained
<input type="checkbox"/> Somewhat Poorly Drained
<input type="checkbox"/> Poorly Drained
<input type="checkbox"/> Very Poorly Drained

Field observations confirm mapped soil type?  Yes  No

**Profile Description**

Depth (inches)	Horizon	Matrix color	Mottle Color	Mottle Abundance (few, common, many)	Mottle Size (fine, med, coarse)	Texture
0-12"	-	10 YR 4/1	-	-	-	sand

**Hydric Soil Indicators**

<input type="checkbox"/> Histosol (-ists)	<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Histic Epipedon (8-16")	<input checked="" type="checkbox"/> Gleyed or Low Chroma Colors	<input type="checkbox"/> Organic Pans
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Mn or Fe Concretions	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Aquic Moisture Regime	<input type="checkbox"/> High Organic Content in Layer of Sandy Soils	<input type="checkbox"/> Other (explain in remarks)

**Remarks:** The criteria were met.

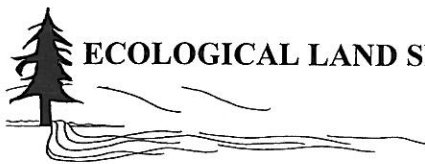
Soils Criteria Met?  Yes  No

**WETLAND DETERMINATION**

Hydrophytic Vegetation Dominant?  Yes  No  
 Wetland Hydrology Present?  Yes  No  
 Hydric Soil Present?  Yes  No

**Remarks:** The wetland criteria were met.

Is test plot within a wetland?  Yes  No



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DATA FORM – Routine Onsite Wetland Determination  
1987 COE Wetlands Delineation Manual  
1997 Washington State Delineation Manual

<b>Project Site:</b> Potholes Reservoir	<b>Date:</b> 11/28/07	<b>Project #:</b> 1691.01
<b>Applicant/Owner:</b> WDFW	<b>County/State:</b> Grant County, WA	
<b>Test Plot Location:</b> Unit B in vicinity of Berm 4	<b>Sec/Town/Range:</b> S1 T18N R27E, S36 T19N R27E, and S31 T19N R28E	

<b>Do normal circumstances exist at the site?</b>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<b>Plot ID:</b> TP-7Aup
<b>Is the site significantly disturbed (atypical situation)?</b>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<b>Community ID:</b> --
<b>Is the site a potential problem area?</b>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<b>Transect ID:</b> --

**VEGETATION** (Strata: tree, sapling, shrub, woody vine, herb)

**Dominant Plant Species**

Common Name	Scientific Name	Strata	% Cover	Indicator Status
1. -	-	-	-	-
2.		-		-
3.		-		-
4.		-		-
5.		-		-
6.		-		-
7.		-		-
8.		-		-

Other species present: Bareground at 100%  
% of dominant species OBL, FACW, FACW-, FAC+, FAC - % (more than 50% required)  
**Remarks:** No vegetation to assess vegetation criteria.

Vegetation Criteria Met?  Yes  No

**HYDROLOGY**

Recorded data available?  Yes  No  
 Is it the growing season?  Yes  No  
 Is site inundated?  Yes  No

Depth of surface water: N/A  
 Depth to free water in pit: N/A  
 Depth to saturated soils: N/A

Type(s): --

**Wetland Hydrology Indicators**

<b>Primary Indicators</b>	<b>Secondary Indicators (2 required)</b>
<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized Root Channels < 12in. bgs
<input type="checkbox"/> Saturated < 12 in.	<input checked="" type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Water Marks	<input type="checkbox"/> Water Stained Leaves
<input type="checkbox"/> Drift Lines	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Sediment Deposits	<input type="checkbox"/> Other (Explain in remarks)
<input type="checkbox"/> Drainage Patterns in wetlands	

Hydrology Criteria Met?  Yes  No

**Remarks:** The criteria were not met.

**SOILS:** **Drainage Class:**

**Map Unit Name:** Wasner-Quincy fine sands, 0-5% slopes (176)  
(Series and Phase)  
**Taxonomy (Subgroup):** mesic Typic Psammaquents

Field observations confirm mapped soil type?  Yes  No

**Profile Description**

Depth (inches)	Horizon	Matrix color	Mottle Color	Mottle Abundance (few, common, many)	Mottle Size (fine, med, coarse)	Texture
0-4"	-	10 YR 3/3	-	-	-	sand
4-6"	-	10 YR 4/2	-	-	-	sandy clay
7-12"	-	10 YR 3/3	-	-	-	sand

**Hydric Soil Indicators**

<input type="checkbox"/> Histosol (-ists)	<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Histic Epipedon (8-16")	<input type="checkbox"/> Gleyed or Low Chroma Colors	<input type="checkbox"/> Organic Pans
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Mn or Fe Concretions	<input type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Aquic Moisture Regime	<input type="checkbox"/> High Organic Content in Layer of Sandy Soils	<input type="checkbox"/> Other (explain in remarks)

**Remarks:** The criteria were not met.

Soils Criteria Met?  Yes  No

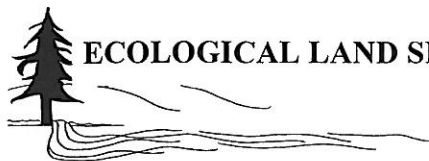
**WETLAND DETERMINATION**

Hydrophytic Vegetation Dominant?  Yes  No  
 Wetland Hydrology Present?  Yes  No  
 Hydric Soil Present?  Yes  No

**Remarks:** The wetland criteria were not met.

Is test plot within a wetland?  Yes  No





<b>Project Site:</b> Potholes Reservoir	<b>Date:</b> 11/28/07	<b>Project #:</b> 1691.01
<b>Applicant/Owner:</b> WDFW	<b>County/State:</b> Grant County, WA	
<b>Test Plot Location:</b> Unit B 40 ft southwest Berm 5 wetland flag 5-10	<b>Sec/Town/Range:</b> S1 T18N R27E, S36 T19N R27E, and S31 T19N R28E	

<b>Do normal circumstances exist at the site?</b>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<b>Plot ID:</b> TP-7Bup
<b>Is the site significantly disturbed (atypical situation)?</b>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<b>Community ID:</b> --
<b>Is the site a potential problem area?</b>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<b>Transect ID:</b> --

**VEGETATION (Strata: tree, sapling, shrub, woody vine, herb)**  
**Dominant Plant Species**

Common Name	Scientific Name	Strata	% Cover	Indicator Status
1. small tumbleweed*	<i>Sisymbrium loeselii</i>	Herb	30	NI
2. Bailey's buckwheat	<i>Eriogonum baileyi</i>	Herb	15	NI
3. gray rabbitbrush	<i>Chrysothamnus nauseosus</i>	Herb	10	NI
4. Douglas rabbitbrush	<i>Chrysothamnus viscidiflorus</i>	Herb	10	NI
5. tumble mustard	<i>Sisymbrium altissimum</i>	Herb	10	FACU-
6.	-	-	-	-
7.	-	-	-	-
8.	-	-	-	-

Other species present: Bareground at 25%  
 % of dominant species OBL, FACW, FACW-, FAC+, FAC 0% (more than 50% required)  
**Remarks:** \* = dominant species per the 50/20 rule. 0/1 = 0%

Vegetation Criteria Met?  Yes  No

**HYDROLOGY**

Recorded data available?  Yes  No  
 Is it the growing season?  Yes  No  
 Is site inundated?  Yes  No

Depth of surface water: N/A  
 Depth to free water in pit: N/A  
 Depth to saturated soils: N/A

Type(s): --

**Wetland Hydrology Indicators**

**Primary Indicators**

- Inundated
- Saturated < 12 in.
- Water Marks
- Drift Lines
- Sediment Deposits
- Drainage Patterns in wetlands

**Secondary Indicators (2 required)**

- Oxidized Root Channels < 12in. bgs
- Local Soil Survey Data
- Water Stained Leaves
- FAC-Neutral Test
- Other (Explain in remarks)

Hydrology Criteria Met?  Yes  No

**Remarks:** The criteria were not met.

**SOILS:**

Map Unit Name: Wasner-Quincy fine sands, 0-5% slopes (176)  
 (Series and Phase)  
 Taxonomy (Subgroup): mesic Typic Psammaquents

Drainage Class:  Excessively Drained  
 Somewhat Excessively Drained  
 Well Drained  
 Moderately Well Drained  
 Somewhat Poorly Drained  
 Poorly Drained  
 Very Poorly Drained

Field observations confirm mapped soil type?  Yes  No

**Profile Description**

Depth (inches)	Horizon	Matrix color	Mottle Color	Mottle Abundance (few, common, many)	Mottle Size (fine, med, coarse)	Texture
0-12"	-	10 YR 3/3	-	-	-	sand

**Hydric Soil Indicators**

- Histosol (-ists)
- Histic Epipedon (8-16")
- Sulfidic Odor
- Aquic Moisture Regime
- Reducing Conditions
- Gleyed or Low Chroma Colors
- Mn or Fe Concretions
- High Organic Content in Layer of Sandy Soils
- Organic Streaking in Sandy Soils
- Organic Pans
- Listed on Local Hydric Soils List
- Other (explain in remarks)

**Remarks:** The criteria were not met.

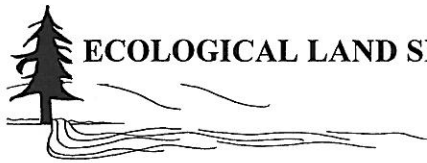
Soils Criteria Met?  Yes  No

**WETLAND DETERMINATION**

Hydrophytic Vegetation Dominant?  Yes  No  
 Wetland Hydrology Present?  Yes  No  
 Hydric Soil Present?  Yes  No

**Remarks:** The wetland criteria were not met.

Is test plot within a wetland?  Yes  No



<b>Project Site:</b> Potholes Reservoir	<b>Date:</b> 11/28/07	<b>Project #:</b> 1691.01
<b>Applicant/Owner:</b> WDFW	<b>County/State:</b> Grant County, WA	
<b>Test Plot Location:</b> Unit B 20 ft northeast of Berm 5 wetland flag 5-11	<b>Sec/Town/Range:</b> S1 T18N R27E, S36 T19N R27E, and S31 T19N R28E	

<b>Do normal circumstances exist at the site?</b>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<b>Plot ID:</b> TP-8wet
<b>Is the site significantly disturbed (atypical situation)?</b>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<b>Community ID:</b> --
<b>Is the site a potential problem area?</b>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<b>Transect ID:</b> --

**VEGETATION** (Strata: tree, sapling, shrub, woody vine, herb)

**Dominant Plant Species**

Common Name	Scientific Name	Strata	% Cover	Indicator Status
1. cattail*	<i>Typha latifolia</i>	Herb	50	OBL
2. hardstem bulrush*	<i>Schoenoplectus acutus</i>	Herb	30	OBL
3. sedge sp.	<i>Carex sp.</i>	Herb	20	-
4.		-		-
5.		-		-
6.		-		-
7.		-		-
8.		-		-

Other species present:  
 % of dominant species OBL, FACW, FACW-, FAC+, FAC 100% (more than 50% required)  
**Remarks:** \* = dominant species per the 50/20 rule. 2/2 = 100%

Vegetation Criteria Met?  Yes  No

**HYDROLOGY**

Recorded data available?  Yes  No  
 Is it the growing season?  Yes  No  
 Is site inundated?  Yes  No

Depth of surface water: N/A  
 Depth to free water in pit: N/A  
 Depth to saturated soils: N/A

Type(s): --

**Wetland Hydrology Indicators**

**Primary Indicators**

- Inundated
- Saturated < 12 in.
- Water Marks
- Drift Lines
- Sediment Deposits
- Drainage Patterns in wetlands

**Secondary Indicators (2 required)**

- Oxidized Root Channels < 12in. bgs
- Local Soil Survey Data
- Water Stained Leaves
- FAC-Neutral Test
- Other (Explain in remarks)

Hydrology Criteria Met?  Yes  No

**Remarks:** The criteria were met.

**SOILS:**

Map Unit Name: Wasner-Quincy fine sands, 0-5% slopes (176)  
 (Series and Phase)  
 Taxonomy (Subgroup): mesic Typic Psammaquents

Field observations confirm mapped soil type?  Yes  No

**Drainage Class:**

- Excessively Drained
- Somewhat Excessively Drained
- Well Drained
- Moderately Well Drained
- Somewhat Poorly Drained
- Poorly Drained
- Very Poorly Drained

**Profile Description**

Depth (inches)	Horizon	Matrix color	Mottle Color	Mottle Abundance (few, common, many)	Mottle Size (fine, med, coarse)	Texture
0-12"	-	10 YR 3/1	-	-	-	sand

**Hydric Soil Indicators**

- Histosol (-ists)
- Histic Epipedon (8-16")
- Sulfidic Odor
- Aquic Moisture Regime
- Reducing Conditions
- Gleyed or Low Chroma Colors
- Mn or Fe Concretions
- High Organic Content in Layer of Sandy Soils
- Organic Streaking in Sandy Soils
- Organic Pans
- Listed on Local Hydric Soils List
- Other (explain in remarks)

**Remarks:** The criteria were met.

Soils Criteria Met?  Yes  No

**WETLAND DETERMINATION**

Hydrophytic Vegetation Dominant?  Yes  No  
 Wetland Hydrology Present?  Yes  No  
 Hydric Soil Present?  Yes  No

**Remarks:** The wetland criteria were met.

Is test plot within a wetland?  Yes  No



Project Site: Potholes Reservoir Date: 11/28/07 Project #: 1691.01
Applicant/Owner: WDFW County/State: Grant County, WA
Test Plot Location: Unit B east of Pond B1d and Berm 9 Sec/Town/Range: S1 T18N R27E, S36 T19N R27E, and S31 T19N R28E

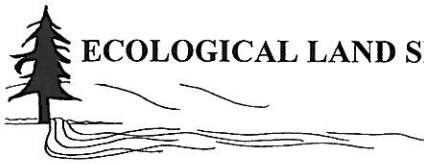
Do normal circumstances exist at the site? [X] Yes [ ] No Plot ID: TP-9up
Is the site significantly disturbed (atypical situation)? [ ] Yes [X] No Community ID: --
Is the site a potential problem area? [ ] Yes [X] No Transect ID: --

VEGETATION (Strata: tree, sapling, shrub, woody vine, herb)
Dominant Plant Species
Table with columns: Common Name, Scientific Name, Strata, % Cover, Indicator Status.
Other species present: Bareground at 40%.
Remarks: \* = dominant species per the 50/20 rule. 0/3 = 1005

HYDROLOGY
Recorded data available? [X] Yes [ ] No
Is it the growing season? [ ] Yes [X] No
Is site inundated? [ ] Yes [X] No
Depth of surface water: N/A
Depth to free water in pit: N/A
Depth to saturated soils: N/A
Wetland Hydrology Indicators
Primary Indicators: [ ] Inundated, [ ] Saturated < 12 in., [ ] Water Marks, [ ] Drift Lines, [ ] Sediment Deposits, [ ] Drainage Patterns in wetlands
Secondary Indicators (2 required): [ ] Oxidized Root Channels < 12in. bgs, [X] Local Soil Survey Data, [ ] Water Stained Leaves, [ ] FAC-Neutral Test, [ ] Other (Explain in remarks)
Hydrology Criteria Met? [ ] Yes [X] No

SOILS:
Map Unit Name: Wasner-Quincy fine sands, 0-5% slopes (176)
Taxonomy (Subgroup): mesic Typic Psammaquents
Drainage Class: [ ] Excessively Drained, [ ] Somewhat Excessively Drained, [ ] Well Drained, [ ] Moderately Well Drained, [ ] Somewhat Poorly Drained, [X] Poorly Drained, [ ] Very Poorly Drained
Field observations confirm mapped soil type? [ ] Yes [X] No
Profile Description
Table with columns: Depth (inches), Horizon, Matrix color, Mottle Color, Mottle Abundance, Mottle Size, Texture.
Hydric Soil Indicators: [ ] Histosol (-ists), [ ] Histic Epipedon (8-16"), [ ] Sulfidic Odor, [ ] Aquic Moisture Regime, [ ] Reducing Conditions, [ ] Gleyed or Low Chroma Colors, [ ] Mn or Fe Concretions, [ ] High Organic Content in Layer of Sandy Soils, [ ] Organic Streaking in Sandy Soils, [ ] Organic Pans, [ ] Listed on Local Hydric Soils List, [ ] Other (explain in remarks)
Remarks: The criteria were not met.
Soils Criteria Met? [ ] Yes [X] No

WETLAND DETERMINATION
Hydrophytic Vegetation Dominant? [ ] Yes [X] No
Wetland Hydrology Present? [ ] Yes [X] No
Hydric Soil Present? [ ] Yes [X] No
Remarks: The wetland criteria were not met.
Is test plot within a wetland? [ ] Yes [X] No



Project Site: Potholes Reservoir Date: 11/28/07 Project #: 1691.01
Applicant/Owner: WDFW County/State: Grant County, WA
Test Plot Location: Unit B south of Pond B1d and Berm 9 Sec/Town/Range: S1 T18N R27E, S36 T19N R27E, and S31 T19N R28E

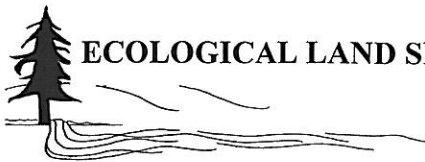
Do normal circumstances exist at the site? [X] Yes [ ] No Plot ID: TP-10wet
Is the site significantly disturbed (atypical situation)? [ ] Yes [X] No Community ID: --
Is the site a potential problem area? [ ] Yes [X] No Transect ID: --

VEGETATION (Strata: tree, sapling, shrub, woody vine, herb)
Dominant Plant Species
Common Name Scientific Name Strata % Cover Indicator Status
1. hardstem bulrush\* Schoenoplectus acutus Herb 100 OBL
Other species present:
% of dominant species OBL, FACW, FACW-, FAC+, FAC 100% (more than 50% required)
Remarks: \* = dominant species per the 50/20 rule. 1/1 = 100%
Vegetation Criteria Met? [X] Yes [ ] No

HYDROLOGY
Recorded data available? [X] Yes [ ] No Type(s): --
Is it the growing season? [ ] Yes [X] No
Is site inundated? [ ] Yes [X] No
Depth of surface water: N/A
Depth to free water in pit: N/A
Depth to saturated soils: N/A
Wetland Hydrology Indicators
Primary Indicators: [ ] Inundated, [ ] Saturated < 12 in., [ ] Water Marks, [ ] Drift Lines, [ ] Sediment Deposits, [X] Drainage Patterns in wetlands
Secondary Indicators (2 required): [ ] Oxidized Root Channels < 12in. bgs, [X] Local Soil Survey Data, [ ] Water Stained Leaves, [X] FAC-Neutral Test, [ ] Other (explain in remarks)
Hydrology Criteria Met? [X] Yes [ ] No
Remarks: The criteria were met.

SOILS:
Map Unit Name: Wasner-Quincy fine sands, 0-5% slopes (176)
Taxonomy (Subgroup): mesic Typic Psammaquents
Field observations confirm mapped soil type? [X] Yes [ ] No
Drainage Class: [ ] Excessively Drained, [ ] Somewhat Excessively Drained, [ ] Well Drained, [ ] Moderately Well Drained, [ ] Somewhat Poorly Drained, [X] Poorly Drained, [ ] Very Poorly Drained
Profile Description
Depth (inches) Horizon Matrix color Mottle Color Mottle Abundance Mottle Size Texture
0-12" - 10 YR 3/1 - (few, common, many) (fine, med, coarse) sand
Hydric Soil Indicators: [ ] Histosol (-ists), [ ] Histic Epipedon (8-16"), [ ] Sulfidic Odor, [ ] Aquic Moisture Regime
[ ] Reducing Conditions, [X] Gleyed or Low Chroma Colors, [ ] Mn or Fe Concretions, [ ] High Organic Content in Layer of Sandy Soils
[ ] Organic Streaking in Sandy Soils, [ ] Organic Pans, [X] Listed on Local Hydric Soils List, [ ] Other (explain in remarks)
Remarks: The criteria were met.
Soils Criteria Met? [X] Yes [ ] No

WETLAND DETERMINATION
Hydrophytic Vegetation Dominant? [X] Yes [ ] No
Wetland Hydrology Present? [X] Yes [ ] No
Hydric Soil Present? [X] Yes [ ] No
Remarks: The wetland criteria were met.
Is test plot within a wetland? [X] Yes [ ] No



ECOLOGICAL LAND SERVICES, INC.

1157 3rd Avenue, Suite 220, Longview, Washington 98632
(360)578-1371 FAX (360)414-9305
DATA FORM - Routine Onsite Wetland Determination
1987 COE Wetlands Delineation Manual
1997 Washington State Delineation Manual

Project Site: Potholes Reservoir Date: 11/28/07 Project #: 1691.01
Applicant/Owner: WDFW County/State: Grant County, WA
Test Plot Location: Unit B 20 feet north of Berm 10 wetland flag 9-6W Sec/Town/Range: S1 T18N R27E, S36 T19N R27E, and S31 T19N R28E

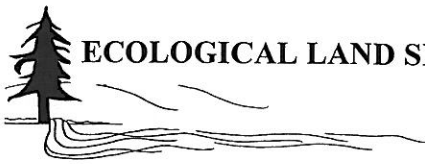
Do normal circumstances exist at the site? [X] Yes [ ] No Plot ID: TP-11up
Is the site significantly disturbed (atypical situation)? [ ] Yes [X] No Community ID: --
Is the site a potential problem area? [ ] Yes [X] No Transect ID: --

VEGETATION (Strata: tree, sapling, shrub, woody vine, herb)
Dominant Plant Species
Table with columns: Common Name, Scientific Name, Strata, % Cover, Indicator Status.
Other species present: Bareground at 10%.
Remarks: \* = dominant species per the 50/20 rule. 0/1 = 0%
Vegetation Criteria Met? [ ] Yes [X] No

HYDROLOGY
Recorded data available? [X] Yes [ ] No Type(s): --
Is it the growing season? [ ] Yes [X] No
Is site inundated? [ ] Yes [X] No
Depth of surface water: N/A
Depth to free water in pit: N/A
Depth to saturated soils: N/A
Wetland Hydrology Indicators
Primary Indicators: [ ] Inundated, [ ] Saturated < 12 in., [ ] Water Marks, [ ] Drift Lines, [ ] Sediment Deposits, [ ] Drainage Patterns in wetlands
Secondary Indicators (2 required): [ ] Oxidized Root Channels < 12in. bgs, [X] Local Soil Survey Data, [ ] Water Stained Leaves, [ ] FAC-Neutral Test, [ ] Other (explain in remarks)
Hydrology Criteria Met? [ ] Yes [X] No
Remarks: The criteria were not met.

SOILS:
Map Unit Name: Wasner-Quincy fine sands, 0-5% slopes (176)
Taxonomy (Subgroup): mesic Typic Psammaquents
Drainage Class: [ ] Excessively Drained, [ ] Somewhat Excessively Drained, [ ] Well Drained, [ ] Moderately Well Drained, [ ] Somewhat Poorly Drained, [X] Poorly Drained, [ ] Very Poorly Drained
Field observations confirm mapped soil type? [ ] Yes [X] No
Profile Description
Table with columns: Depth (inches), Horizon, Matrix color, Mottle Color, Mottle Abundance, Mottle Size, Texture.
Hydric Soil Indicators: [ ] Histosol (-ists), [ ] Histic Epipedon (8-16"), [ ] Sulfidic Odor, [ ] Aquic Moisture Regime, [ ] Reducing Conditions, [ ] Gleyed or Low Chroma Colors, [ ] Mn or Fe Concretions, [ ] High Organic Content in Layer of Sandy Soils, [ ] Organic Streaking in Sandy Soils, [ ] Organic Pans, [ ] Listed on Local Hydric Soils List, [ ] Other (explain in remarks)
Remarks: The criteria were not met.
Soils Criteria Met? [ ] Yes [X] No

WETLAND DETERMINATION
Hydrophytic Vegetation Dominant? [ ] Yes [X] No
Wetland Hydrology Present? [ ] Yes [X] No
Hydric Soil Present? [ ] Yes [X] No
Remarks: The wetland criteria were not met.
Is test plot within a wetland? [ ] Yes [X] No



**ECOLOGICAL LAND SERVICES, INC.**

1157 3<sup>rd</sup> Avenue, Suite 220, Longview, Washington 98632  
 (360)578-1371 FAX (360)414-9305  
 DATA FORM – Routine Onsite Wetland Determination  
 1987 COE Wetlands Delineation Manual  
 1997 Washington State Delineation Manual

<b>Project Site:</b> Potholes Reservoir	<b>Date:</b> 11/28/07	<b>Project #:</b> 1696.01
<b>Applicant/Owner:</b> WDFW	<b>County/State:</b> Grant County, WA	
<b>Test Plot Location:</b> Unit B 40 ft east of Berm 10 wetland flag 9-6W	<b>Sec/Town/Range:</b> S1 T18N R27E, S36 T19N R27E, and S31 T19N R28E	

<b>Do normal circumstances exist at the site?</b>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<b>Plot ID:</b> TP-12wet
<b>Is the site significantly disturbed (atypical situation)?</b>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<b>Community ID:</b> --
<b>Is the site a potential problem area?</b>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<b>Transect ID:</b> --

**VEGETATION** (Strata: tree, sapling, shrub, woody vine, herb)

**Dominant Plant Species**

Common Name	Scientific Name	Strata	% Cover	Indicator Status
1. hardstem bulrush*	<i>Schoenoplectus acutus</i>	Herb	100	OBL
2.		-		-
3.		-		-
4.		-		-
5.		-		-
6.		-		-
7.		-		-
8.		-		-

Other species present:  
 % of dominant species OBL, FACW, FACW-, FAC+, FAC 100% (more than 50% required)  
**Remarks:** \* = dominant species per the 50/20 rule. 1/1 = 100%

Vegetation Criteria Met?  Yes  No

**HYDROLOGY**

Recorded data available?  Yes  No  
 Is it the growing season?  Yes  No  
 Is site inundated?  Yes  No

Depth of surface water: N/A  
 Depth to free water in pit: N/A  
 Depth to saturated soils: N/A

Type(s): --

**Wetland Hydrology Indicators**

<b>Primary Indicators</b>	<b>Secondary Indicators (2 required)</b>
<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized Root Channels < 12in. bgs
<input type="checkbox"/> Saturated < 12 in.	<input checked="" type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Water Marks	<input type="checkbox"/> Water Stained Leaves
<input type="checkbox"/> Drift Lines	<input checked="" type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Sediment Deposits	<input type="checkbox"/> Other (Explain in remarks)
<input checked="" type="checkbox"/> Drainage Patterns in wetlands	

Hydrology Criteria Met?  Yes  No

**Remarks:** The criteria were met.

**SOILS:**

Map Unit Name: Wasner-Quincy fine sands, 0-5% slopes (176)  
 (Series and Phase)  
 Taxonomy (Subgroup): mesic Typic Psammaquents

Field observations confirm mapped soil type?  Yes  No

**Drainage Class:**

<input type="checkbox"/> Excessively Drained
<input type="checkbox"/> Somewhat Excessively Drained
<input type="checkbox"/> Well Drained
<input type="checkbox"/> Moderately Well Drained
<input type="checkbox"/> Somewhat Poorly Drained
<input checked="" type="checkbox"/> Poorly Drained
<input type="checkbox"/> Very Poorly Drained

**Profile Description**

Depth (inches)	Horizon	Matrix color	Mottle Color	Mottle Abundance (few, common, many)	Mottle Size (fine, med, coarse)	Texture
0-12"	-	10 YR 4/1	-	-	-	sand

**Hydric Soil Indicators**

<input type="checkbox"/> Histosol (-ists)	<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Histic Epipedon (8-16")	<input checked="" type="checkbox"/> Gleyed or Low Chroma Colors	<input type="checkbox"/> Organic Pans
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Mn or Fe Concretions	<input checked="" type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Aquic Moisture Regime	<input type="checkbox"/> High Organic Content in Layer of Sandy Soils	<input type="checkbox"/> Other (explain in remarks)

Soils Criteria Met?  Yes  No

**Remarks:** The criteria were met.

**WETLAND DETERMINATION**

Hydrophytic Vegetation Dominant?  Yes  No  
 Wetland Hydrology Present?  Yes  No  
 Hydric Soil Present?  Yes  No

**Remarks:** The wetland criteria were met.

Is test plot within a wetland?  Yes  No

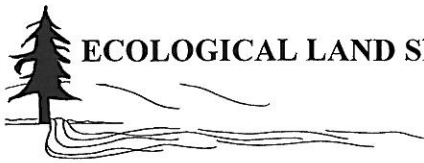


Table with 3 columns: Project Site, Date, Project #; Applicant/Owner, County/State; Test Plot Location, Sec/Town/Range.

Table with 3 columns: Do normal circumstances exist at the site?, Is the site significantly disturbed (atypical situation)?, Is the site a potential problem area?; Includes checkboxes for Yes/No and Plot ID, Community ID, Transect ID.

VEGETATION (Strata: tree, sapling, shrub, woody vine, herb)
Dominant Plant Species table with columns: Common Name, Scientific Name, Strata, % Cover, Indicator Status.
Other species present: Bareground at 30%.
% of dominant species OBL, FACW, FACW-, FAC+, FAC 0% (more than 50% required)
Remarks: \* = dominant species per the 50/20 rule. 0/3= 0%
Vegetation Criteria Met? [ ] Yes [X] No

HYDROLOGY
Recorded data available? [X] Yes [ ] No
Is it the growing season? [ ] Yes [X] No
Is site inundated? [ ] Yes [X] No
Type(s): --
Wetland Hydrology Indicators
Primary Indicators: [ ] Inundated, [ ] Saturated < 12 in., [ ] Water Marks, [ ] Drift Lines, [ ] Sediment Deposits, [ ] Drainage Patterns in wetlands
Secondary Indicators (2 required): [ ] Oxidized Root Channels < 12in. bgs, [X] Local Soil Survey Data, [ ] Water Stained Leaves, [ ] FAC-Neutral Test, [ ] Other (Explain in remarks)
Hydrology Criteria Met? [ ] Yes [X] No
Remarks: The criteria were not met.

SOILS
Map Unit Name: Wasner-Quincy fine sands, 0-5% slopes (176)
Taxonomy (Subgroup): mesic Typic Psammaquents
Drainage Class: [ ] Excessively Drained, [ ] Somewhat Excessively Drained, [ ] Well Drained, [ ] Moderately Well Drained, [ ] Somewhat Poorly Drained, [X] Poorly Drained, [ ] Very Poorly Drained
Field observations confirm mapped soil type? [ ] Yes [X] No
Profile Description table with columns: Depth (inches), Horizon, Matrix color, Mottle Color, Mottle Abundance (few, common, many), Mottle Size (fine, med, coarse), Texture.
Hydric Soil Indicators: [ ] Histosol (-ists), [ ] Histic Epipedon (8-16"), [ ] Sulfidic Odor, [ ] Aquic Moisture Regime; [ ] Reducing Conditions, [ ] Gleyed or Low Chroma Colors, [ ] Mn or Fe Concretions, [ ] High Organic Content in Layer of Sandy Soils; [ ] Organic Streaking in Sandy Soils, [ ] Organic Pans, [ ] Listed on Local Hydric Soils List, [ ] Other (explain in remarks)
Remarks: The criteria were not met.
Soils Criteria Met? [ ] Yes [X] No

WETLAND DETERMINATION
Hydrophytic Vegetation Dominant? [ ] Yes [X] No
Wetland Hydrology Present? [ ] Yes [X] No
Hydric Soil Present? [ ] Yes [X] No
Remarks: The wetland criteria were not met.
Is test plot within a wetland? [ ] Yes [X] No



Project Site: Potholes Reservoir	Date: 11/28/07	Project #: 1691.01
Applicant/Owner: WDFW	County/State: Grant County, WA	
Test Plot Location: Unit A 15 ft south of Berm 4a	Sec/Town/Range: S1 T18N R27E, S36 T19N R27E, and S31 T19N R28E	

Do normal circumstances exist at the site?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Plot ID: TP-14wet
Is the site significantly disturbed (atypical situation)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Community ID: --
Is the site a potential problem area?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Transect ID: --

**VEGETATION** (Strata: tree, sapling, shrub, woody vine, herb)

**Dominant Plant Species**

Common Name	Scientific Name	Strata	% Cover	Indicator Status
1. hardstem bulrush*	<i>Schoenoplectus acutus</i>	Herb	100	OBL
2.		-		-
3.		-		-
4.		-		-
5.		-		-
6.		-		-
7.		-		-
8.		-		-

Other species present:  
 % of dominant species OBL, FACW, FACW-, FAC+, FAC 100% (more than 50% required)  
**Remarks:** \* = dominant species per the 50/20 rule. 1/1 = 100%

Vegetation Criteria Met?  Yes  No

**HYDROLOGY**

Recorded data available?  Yes  No  
 Is it the growing season?  Yes  No  
 Is site inundated?  Yes  No

Depth of surface water: N/A  
 Depth to free water in pit: N/A  
 Depth to saturated soils: N/A

Type(s): --

**Wetland Hydrology Indicators**

<b>Primary Indicators</b>	<b>Secondary Indicators (2 required)</b>
<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized Root Channels < 12in. bgs
<input type="checkbox"/> Saturated < 12 in.	<input checked="" type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Water Marks	<input type="checkbox"/> Water Stained Leaves
<input type="checkbox"/> Drift Lines	<input checked="" type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Sediment Deposits	<input type="checkbox"/> Other (Explain in remarks)
<input checked="" type="checkbox"/> Drainage Patterns in wetlands	

Hydrology Criteria Met?  Yes  No

**Remarks:** The criteria were met.

**SOILS:** Wasner-Quincy fine sands, 0-5% slopes (176) (Series and Phase)  
 Taxonomy (Subgroup): mesic Typic Psammaquents

Field observations confirm mapped soil type?  Yes  No

**Drainage Class:**

<input type="checkbox"/> Excessively Drained
<input type="checkbox"/> Somewhat Excessively Drained
<input type="checkbox"/> Well Drained
<input type="checkbox"/> Moderately Well Drained
<input type="checkbox"/> Somewhat Poorly Drained
<input checked="" type="checkbox"/> Poorly Drained
<input type="checkbox"/> Very Poorly Drained

**Profile Description**

Depth (inches)	Horizon	Matrix color	Mottle Color	Mottle Abundance (few, common, many)	Mottle Size (fine, med, coarse)	Texture
0-12"	-	10 YR 3/1	-	-	-	sand

**Hydric Soil Indicators**

<input type="checkbox"/> Histosol (-ists)	<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Histic Epipedon (8-16")	<input checked="" type="checkbox"/> Gleyed or Low Chroma Colors	<input type="checkbox"/> Organic Pans
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Mn or Fe Concretions	<input checked="" type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Aquic Moisture Regime	<input type="checkbox"/> High Organic Content in Layer of Sandy Soils	<input type="checkbox"/> Other (explain in remarks)

**Remarks:** The criteria were met.

Soils Criteria Met?  Yes  No

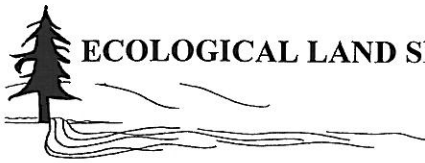
**WETLAND DETERMINATION**

Hydrophytic Vegetation Dominant?  Yes  No  
 Wetland Hydrology Present?  Yes  No  
 Hydric Soil Present?  Yes  No

**Remarks:** The wetland criteria were met.

Is test plot within a wetland?  Yes  No





Project Site: Potholes Reservoir Date: 11/28/07 Project #: 1691.01
Applicant/Owner: WDFW County/State: Grant County, WA
Test Plot Location: Unit A near Berm 6b flag Sec/Town/Range: S1 T18N R27E, S36 T19N R27E, and S31 T19N R28E

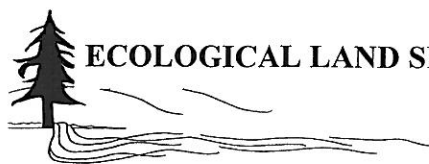
Do normal circumstances exist at the site? [X] Yes [ ] No Plot ID: TP-15up
Is the site significantly disturbed (atypical situation)? [ ] Yes [X] No Community ID: -
Is the site a potential problem area? [ ] Yes [X] No Transect ID: --

VEGETATION (Strata: tree, sapling, shrub, woody vine, herb)
Dominant Plant Species
Table with columns: Common Name, Scientific Name, Strata, % Cover, Indicator Status.
Other species present: Bareground at 40%.
% of dominant species OBL, FACW, FACW-, FAC+, FAC 0% (more than 50% required)
Remarks: \* = dominant species per the 50/20 rule. 0/2 = 0%
Vegetation Criteria Met? [ ] Yes [X] No

HYDROLOGY
Recorded data available? [X] Yes [ ] No Type(s): --
Is it the growing season? [ ] Yes [X] No
Is site inundated? [ ] Yes [X] No
Depth of surface water: N/A
Depth to free water in pit: N/A
Depth to saturated soils: N/A
Primary Indicators: [ ] Inundated, [ ] Saturated < 12 in., [ ] Water Marks, [ ] Drift Lines, [ ] Sediment Deposits, [ ] Drainage Patterns in wetlands
Secondary Indicators (2 required): [ ] Oxidized Root Channels < 12in. bgs, [X] Local Soil Survey Data, [ ] Water Stained Leaves, [ ] FAC-Neutral Test, [ ] Other (explain in remarks)
Hydrology Criteria Met? [ ] Yes [X] No
Remarks: The criteria were not met.

SOILS:
Map Unit Name: Wasner-Quincy fine sands, 0-5% slopes (176)
Taxonomy (Subgroup): mesic Typic Psammaquents
Drainage Class: [ ] Excessively Drained, [ ] Somewhat Excessively Drained, [ ] Well Drained, [ ] Moderately Well Drained, [ ] Somewhat Poorly Drained, [X] Poorly Drained, [ ] Very Poorly Drained
Field observations confirm mapped soil type? [ ] Yes [X] No
Profile Description
Table with columns: Depth (inches), Horizon, Matrix color, Mottle Color, Mottle Abundance (few, common, many), Mottle Size (fine, med, coarse), Texture.
Hydric Soil Indicators: [ ] Histosol (-ists), [ ] Histic Epipedon (8-16"), [ ] Sulfidic Odor, [ ] Aquic Moisture Regime, [ ] Reducing Conditions, [ ] Gleyed or Low Chroma Colors, [ ] Mn or Fe Concretions, [ ] High Organic Content in Layer of Sandy Soils, [ ] Organic Streaking in Sandy Soils, [ ] Organic Pans, [ ] Listed on Local Hydric Soils List, [ ] Other (explain in remarks)
Remarks: The criteria were not met.
Soils Criteria Met? [ ] Yes [X] No

WETLAND DETERMINATION
Hydrophytic Vegetation Dominant? [ ] Yes [X] No
Wetland Hydrology Present? [ ] Yes [X] No
Hydric Soil Present? [ ] Yes [X] No
Remarks: The wetland criteria were not met.
Is test plot within a wetland? [ ] Yes [X] No



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DATA FORM - Routine Onsite Wetland Determination
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1997 Washington State Delineation Manual

Project Site: Potholes Reservoir
Date: 11/28/07
Project #: 1691.01
Applicant/Owner: WDFW
County/State: Grant County, WA
Test Plot Location: Unit A north of Berm 6b at wetland flag 6b-2SW
Sec/Town/Range: S1 T18N R27E, S36 T19N R27E, and S31 T19N R28E

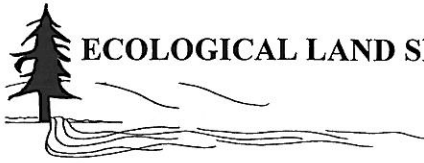
Do normal circumstances exist at the site? [X] Yes [ ] No
Is the site significantly disturbed (atypical situation)? [ ] Yes [X] No
Is the site a potential problem area? [ ] Yes [X] No
Plot ID: TP-16wet
Community ID: --
Transect ID: --

VEGETATION (Strata: tree, sapling, shrub, woody vine, herb)
Dominant Plant Species
Table with columns: Common Name, Scientific Name, Strata, % Cover, Indicator Status.
Other species present:
% of dominant species OBL, FACW, FAC-, FAC+, FAC 100% (more than 50% required)
Remarks: \* = dominant species per the 50/20 rule. 1/1 = 100%
Vegetation Criteria Met? [X] Yes [ ] No

HYDROLOGY
Recorded data available? [X] Yes [ ] No
Is it the growing season? [ ] Yes [X] No
Is site inundated? [ ] Yes [X] No
Type(s): --
Wetland Hydrology Indicators
Primary Indicators: [ ] Inundated, [ ] Saturated < 12 in., [ ] Water Marks, [ ] Drift Lines, [ ] Sediment Deposits, [X] Drainage Patterns in wetlands
Secondary Indicators (2 required): [ ] Oxidized Root Channels < 12in. bgs, [X] Local Soil Survey Data, [ ] Water Stained Leaves, [X] FAC-Neutral Test, [ ] Other (explain in remarks)
Hydrology Criteria Met? [X] Yes [ ] No
Remarks: The criteria were met.

SOILS:
Map Unit Name: Wasner-Quincy fine sands, 0-5% slopes (176)
Taxonomy (Subgroup): mesic Typic Psammaquents
Drainage Class: [ ] Excessively Drained, [ ] Somewhat Excessively Drained, [ ] Well Drained, [ ] Moderately Well Drained, [ ] Somewhat Poorly Drained, [X] Poorly Drained, [ ] Very Poorly Drained
Field observations confirm mapped soil type? [X] Yes [ ] No
Profile Description
Table with columns: Depth (inches), Horizon, Matrix color, Mottle Color, Mottle Abundance, Mottle Size, Texture.
Hydric Soil Indicators: [ ] Histosol (-ists), [ ] Histic Epipedon (8-16"), [ ] Sulfidic Odor, [ ] Aquic Moisture Regime, [ ] Reducing Conditions, [X] Gleyed or Low Chroma Colors, [ ] Mn or Fe Concretions, [ ] High Organic Content in Layer of Sandy Soils, [ ] Organic Streaking in Sandy Soils, [ ] Organic Pans, [X] Listed on Local Hydric Soils List, [ ] Other (explain in remarks)
Remarks: The criteria were met.
Soils Criteria Met? [X] Yes [ ] No

WETLAND DETERMINATION
Hydrophytic Vegetation Dominant? [X] Yes [ ] No
Wetland Hydrology Present? [X] Yes [ ] No
Hydric Soil Present? [X] Yes [ ] No
Remarks: The wetland criteria were met.
Is test plot within a wetland? [X] Yes [ ] No



Project Site: Potholes Reservoir Date: 11/28/07 Project #: 1691.01
Applicant/Owner: WDFW County/State: Grant County, WA
Test Plot Location: Unit A 15 ft north of Berm 7 wetland flag 7-1N Sec/Town/Range: S1 T18N R27E, S36 T19N R27E, and S31 T19N R28E

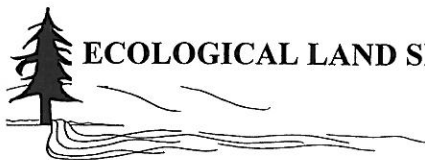
Do normal circumstances exist at the site? [X] Yes [ ] No Plot ID: TP-17 up
Is the site significantly disturbed (atypical situation)? [ ] Yes [X] No Community ID: --
Is the site a potential problem area? [ ] Yes [X] No Transect ID: --

VEGETATION (Strata: tree, sapling, shrub, woody vine, herb)
Dominant Plant Species
Table with columns: Common Name, Scientific Name, Strata, % Cover, Indicator Status.
Other species present: Bareground at 40%
% of dominant species OBL, FACW, FAC-, FAC+, FAC 0% (more than 50% required)
Remarks: \* = dominant species per the 50/20 rule. 0/2 = 0%
Vegetation Criteria Met? [ ] Yes [X] No

HYDROLOGY
Recorded data available? [X] Yes [ ] No Type(s): --
Is it the growing season? [ ] Yes [X] No
Is site inundated? [ ] Yes [X] No
Depth of surface water: N/A
Depth to free water in pit: N/A
Depth to saturated soils: N/A
Wetland Hydrology Indicators
Primary Indicators: [ ] Inundated, [ ] Saturated < 12 in., [ ] Water Marks, [ ] Drift Lines, [ ] Sediment Deposits, [ ] Drainage Patterns in wetlands
Secondary Indicators (2 required): [ ] Oxidized Root Channels < 12in. bgs, [X] Local Soil Survey Data, [ ] Water Stained Leaves, [ ] FAC-Neutral Test, [ ] Other (explain in remarks)
Hydrology Criteria Met? [ ] Yes [X] No
Remarks: The criteria were not met.

SOILS: Drainage Class: [ ] Excessively Drained, [ ] Somewhat Excessively Drained, [ ] Well Drained, [ ] Moderately Well Drained, [ ] Somewhat Poorly Drained, [X] Poorly Drained, [ ] Very Poorly Drained
Map Unit Name: Wasner-Quincy fine sands, 0-5% slopes (176)
Taxonomy (Subgroup): mesic Typic Psammaquents
Field observations confirm mapped soil type? [ ] Yes [X] No
Profile Description
Table with columns: Depth (inches), Horizon, Matrix color, Mottle Color, Mottle Abundance (few, common, many), Mottle Size (fine, med, coarse), Texture
Hydric Soil Indicators: [ ] Histosol (-ists), [ ] Histic Epipedon (8-16"), [ ] Sulfidic Odor, [ ] Aquic Moisture Regime, [ ] Reducing Conditions, [ ] Gleyed or Low Chroma Colors, [ ] Mn or Fe Concretions, [ ] High Organic Content in Layer of Sandy Soils, [ ] Organic Streaking in Sandy Soils, [ ] Organic Pans, [ ] Listed on Local Hydric Soils List, [ ] Other (explain in remarks)
Remarks: The criteria were not met.
Soils Criteria Met? [ ] Yes [X] No

WETLAND DETERMINATION
Hydrophytic Vegetation Dominant? [ ] Yes [X] No
Wetland Hydrology Present? [ ] Yes [X] No
Hydric Soil Present? [ ] Yes [X] No
Remarks: The wetland criteria were not met.
Is test plot within a wetland? [ ] Yes [X] No



<b>Project Site:</b> Potholes Reservoir	<b>Date:</b> 11/28/07	<b>Project #:</b> 1691.01
<b>Applicant/Owner:</b> WDFW	<b>County/State:</b> Grant County, WA	
<b>Test Plot Location:</b> Unit A west of Berm 7	<b>Sec/Town/Range:</b> S1 T18N R27E, S36 T19N R27E, and S31 T19N R28E	

<b>Do normal circumstances exist at the site?</b>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<b>Plot ID:</b> TP-18wet
<b>Is the site significantly disturbed (atypical situation)?</b>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<b>Community ID:</b> --
<b>Is the site a potential problem area?</b>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<b>Transect ID:</b> --

**VEGETATION** (Strata: tree, sapling, shrub, woody vine, herb)

**Dominant Plant Species**

Common Name	Scientific Name	Strata	% Cover	Indicator Status
1. hardstem bulrush*	<i>Schoenoplectus acutus</i>	Herb	100	OBL
2.		-		-
3.		-		-
4.		-		-
5.		-		-
6.		-		-
7.		-		-
8.		-		-

Other species present:  
 % of dominant species OBL, FACW, FACW-, FAC+, FAC 100% (more than 50% required)  
**Remarks:** \* = dominant species per the 50/20 rule. 1/1 = 100%

Vegetation Criteria Met?  Yes  No

**HYDROLOGY**

Recorded data available?  Yes  No  
 Is it the growing season?  Yes  No  
 Is site inundated?  Yes  No

Depth of surface water: N/A  
 Depth to free water in pit: N/A  
 Depth to saturated soils: N/A

Type(s): --

**Wetland Hydrology Indicators**

<b>Primary Indicators</b>	<b>Secondary Indicators (2 required)</b>
<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized Root Channels < 12in. bgs
<input type="checkbox"/> Saturated < 12 in.	<input checked="" type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Water Marks	<input type="checkbox"/> Water Stained Leaves
<input type="checkbox"/> Drift Lines	<input checked="" type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Sediment Deposits	<input type="checkbox"/> Other (Explain in remarks)
<input checked="" type="checkbox"/> Drainage Patterns in wetlands	

Hydrology Criteria Met?  Yes  No

**Remarks:** The criteria were met.

**SOILS:**

Map Unit Name: Wasner-Quincy fine sands, 0-5% slopes (176)  
 (Series and Phase)  
 Taxonomy (Subgroup): mesic Typic Psammaquents

Field observations confirm mapped soil type?  Yes  No

**Drainage Class:**

<input type="checkbox"/> Excessively Drained
<input type="checkbox"/> Somewhat Excessively Drained
<input type="checkbox"/> Well Drained
<input type="checkbox"/> Moderately Well Drained
<input type="checkbox"/> Somewhat Poorly Drained
<input checked="" type="checkbox"/> Poorly Drained
<input type="checkbox"/> Very Poorly Drained

**Profile Description**

Depth (inches)	Horizon	Matrix color	Mottle Color	Mottle Abundance (few, common, many)	Mottle Size (fine, med, coarse)	Texture
0-12"	-	10 YR 4/1	-	-	-	sand

**Hydric Soil Indicators**

<input type="checkbox"/> Histosol (-ists)	<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Histic Epipedon (8-16")	<input checked="" type="checkbox"/> Gleyed or Low Chroma Colors	<input type="checkbox"/> Organic Pans
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Mn or Fe Concretions	<input checked="" type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Aquic Moisture Regime	<input type="checkbox"/> High Organic Content in Layer of Sandy Soils	<input type="checkbox"/> Other (explain in remarks)

**Remarks:**

Soils Criteria Met?  Yes  No

**WETLAND DETERMINATION**

Hydrophytic Vegetation Dominant?  Yes  No  
 Wetland Hydrology Present?  Yes  No  
 Hydric Soil Present?  Yes  No

**Remarks:** The wetland criteria were met.

Is test plot within a wetland?  Yes  No

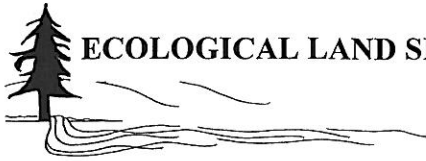


Table with 3 columns: Project Site, Date, Project #; Applicant/Owner, County/State; Test Plot Location, Sec/Town/Range.

Table with 4 columns: Question (Do normal circumstances exist...), Yes/No checkboxes, Plot ID, Community ID, Transect ID.

VEGETATION (Strata: tree, sapling, shrub, woody vine, herb)
Dominant Plant Species table with columns: Common Name, Scientific Name, Strata, % Cover, Indicator Status.
Other species present: Bareground at 50%.
% of dominant species OBL, FACW, FAC-, FAC+, FAC 0% (more than 50% required)
Remarks: \* = dominant species per the 50/20 rule. 0/1 = 0%
Vegetation Criteria Met? Yes No

HYDROLOGY
Recorded data available? Yes No
Is it the growing season? Yes No
Is site inundated? Yes No
Depth of surface water: N/A
Depth to free water in pit: N/A
Depth to saturated soils: N/A
Type(s): --
Wetland Hydrology Indicators
Primary Indicators: Inundated, Saturated < 12 in., Water Marks, Drift Lines, Sediment Deposits, Drainage Patterns in wetlands.
Secondary Indicators (2 required): Oxidized Root Channels < 12in. bgs, Local Soil Survey Data, Water Stained Leaves, FAC-Neutral Test, Other (Explain in remarks).
Hydrology Criteria Met? Yes No

SOILS:
Map Unit Name: Wasner-Quincy fine sands, 0-5% slopes (176)
Taxonomy (Subgroup): mesic Typic Psammaquents
Drainage Class: Excessively Drained, Somewhat Excessively Drained, Well Drained, Moderately Well Drained, Somewhat Poorly Drained, Poorly Drained, Very Poorly Drained.
Field observations confirm mapped soil type? Yes No
Profile Description table with columns: Depth (inches), Horizon, Matrix color, Mottle Color, Mottle Abundance, Mottle Size, Texture.
Hydric Soil Indicators: Histosol (-ists), Histic Epipedon (8-16"), Sulfidic Odor, Aquic Moisture Regime, Reducing Conditions, Gleyed or Low Chroma Colors, Mn or Fe Concretions, High Organic Content in Layer of Sandy Soils, Organic Streaking in Sandy Soils, Organic Pans, Listed on Local Hydric Soils List, Other (explain in remarks).
Remarks: The criteria were not met.
Soils Criteria Met? Yes No

WETLAND DETERMINATION
Hydrophytic Vegetation Dominant? Yes No
Wetland Hydrology Present? Yes No
Hydric Soil Present? Yes No
Remarks: The wetland criteria were not met.
Is test plot within a wetland? Yes No



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1997 Washington State Delineation Manual

Table with 3 columns: Project Site, Date, Project #; Applicant/Owner, County/State; Test Plot Location, Sec/Town/Range.

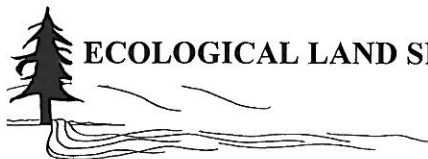
Table with 3 columns: Question (Do normal circumstances exist...), Yes/No checkboxes, and ID (Plot ID, Community ID, Transect ID).

VEGETATION (Strata: tree, sapling, shrub, woody vine, herb)
Dominant Plant Species table with columns: Common Name, Scientific Name, Strata, % Cover, Indicator Status.
Other species present: % of dominant species OBL, FACW, FACW-, FAC+, FAC 100% (more than 50% required)
Remarks: \* = dominant species per the 50/20 rule. 1/1 = 100%
Vegetation Criteria Met? [X]Yes [ ]No

HYDROLOGY
Recorded data available? [X] Yes [ ] No
Is it the growing season? [ ] Yes [X] No
Is site inundated? [ ] Yes [X] No
Type(s): --
Wetland Hydrology Indicators
Primary Indicators: [ ] Inundated, [ ] Saturated < 12 in., [ ] Water Marks, [ ] Drift Lines, [ ] Sediment Deposits, [X] Drainage Patterns in wetlands
Secondary Indicators (2 required): [ ] Oxidized Root Channels < 12in. bgs, [X] Local Soil Survey Data, [ ] Water Stained Leaves, [X] FAC-Neutral Test, [ ] Other (explain in remarks)
Hydrology Criteria Met? [X]Yes [ ]No
Remarks: The criteria were met.

SOILS:
Map Unit Name: Wasner-Quincy fine sands, 0-5% slopes (176)
Taxonomy (Subgroup): mesic Typic Psammaquents
Drainage Class: [ ] Excessively Drained, [ ] Somewhat Excessively Drained, [ ] Well Drained, [ ] Moderately Well Drained, [ ] Somewhat Poorly Drained, [X] Poorly Drained, [ ] Very Poorly Drained
Field observations confirm mapped soil type? [X]Yes [ ]No
Profile Description table with columns: Depth (inches), Horizon, Matrix color, Mottle Color, Mottle Abundance, Mottle Size, Texture.
Hydric Soil Indicators: [ ] Histosol (-ists), [ ] Histic Epipedon (8-16"), [ ] Sulfidic Odor, [ ] Aquic Moisture Regime, [ ] Reducing Conditions, [X] Gleyed or Low Chroma Colors, [ ] Mn or Fe Concretions, [ ] High Organic Content in Layer of Sandy Soils, [ ] Organic Streaking in Sandy Soils, [ ] Organic Pans, [X] Listed on Local Hydric Soils List, [ ] Other (explain in remarks)
Remarks: The criteria were met.
Soils Criteria Met? [X]Yes [ ]No

WETLAND DETERMINATION
Hydrophytic Vegetation Dominant? [X]Yes [ ]No
Wetland Hydrology Present? [X]Yes [ ]No
Hydric Soil Present? [X]Yes [ ]No
Remarks: The wetland criteria were met.
Is test plot within a wetland? [X]Yes [ ]No



<b>Project Site:</b> Potholes Reservoir	<b>Date:</b> 11/28/07	<b>Project #:</b> 1691.01
<b>Applicant/Owner:</b> WDFW	<b>County/State:</b> Grant County, WA	
<b>Test Plot Location:</b> Unit A 5 ft north of Berm 11 wetland flag	<b>Sec/Town/Range:</b> S1 T18N R27E, S36 T19N R27E, and S31 T19N R28E	

<b>Do normal circumstances exist at the site?</b>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<b>Plot ID:</b> TP-21wet
<b>Is the site significantly disturbed (atypical situation)?</b>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<b>Community ID:</b> --
<b>Is the site a potential problem area?</b>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<b>Transect ID:</b> --

**VEGETATION** (Strata: tree, sapling, shrub, woody vine, herb)

**Dominant Plant Species**

Common Name	Scientific Name	Strata	% Cover	Indicator Status
1. hardstem bulrush*	<i>Schoenoplectus acutus</i>	Herb	100	OBL
2.		-		-
3.		-		-
4.		-		-
5.		-		-
6.		-		-
7.		-		-
8.		-		-

Other species present:  
% of dominant species OBL, FACW, FACW-, FAC+, FAC 100% (more than 50% required)  
**Remarks:** \* = dominant species per the 50/20 rule. 1/1 = 100%

Vegetation Criteria Met?  Yes  No

**HYDROLOGY**

Recorded data available?  Yes  No  
 Is it the growing season?  Yes  No  
 Is site inundated?  Yes  No

Depth of surface water: N/A  
 Depth to free water in pit: N/A  
 Depth to saturated soils: N/A

Type(s): --

**Wetland Hydrology Indicators**

<b>Primary Indicators</b>	<b>Secondary Indicators (2 required)</b>
<input type="checkbox"/> Inundated	<input type="checkbox"/> Oxidized Root Channels < 12in. bgs
<input type="checkbox"/> Saturated < 12 in.	<input checked="" type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Water Marks	<input checked="" type="checkbox"/> Water Stained Leaves
<input type="checkbox"/> Drift Lines	<input checked="" type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Sediment Deposits	<input type="checkbox"/> Other (Explain in remarks)
<input checked="" type="checkbox"/> Drainage Patterns in wetlands	

Hydrology Criteria Met?  Yes  No

**Remarks:** The criteria were met.

**SOILS:** Wasner-Quincy fine sands, 0-5% slopes (176)  
 (Series and Phase)  
 Taxonomy (Subgroup): mesic Typic Psammaquents

Field observations confirm mapped soil type?  Yes  No

**Drainage Class:**

<input type="checkbox"/> Excessively Drained
<input type="checkbox"/> Somewhat Excessively Drained
<input type="checkbox"/> Well Drained
<input type="checkbox"/> Moderately Well Drained
<input type="checkbox"/> Somewhat Poorly Drained
<input checked="" type="checkbox"/> Poorly Drained
<input type="checkbox"/> Very Poorly Drained

**Profile Description**

Depth (inches)	Horizon	Matrix color	Mottle Color	Mottle Abundance (few, common, many)	Mottle Size (fine, med, coarse)	Texture
0-12"	-	10 YR 4/1	-	-	-	sand

**Hydric Soil Indicators**

<input type="checkbox"/> Histosol (-ists)	<input type="checkbox"/> Reducing Conditions	<input type="checkbox"/> Organic Streaking in Sandy Soils
<input type="checkbox"/> Histic Epipedon (8-16")	<input checked="" type="checkbox"/> Gleyed or Low Chroma Colors	<input type="checkbox"/> Organic Pans
<input type="checkbox"/> Sulfidic Odor	<input type="checkbox"/> Mn or Fe Concretions	<input checked="" type="checkbox"/> Listed on Local Hydric Soils List
<input type="checkbox"/> Aquic Moisture Regime	<input type="checkbox"/> High Organic Content in Layer of Sandy Soils	<input type="checkbox"/> Other (explain in remarks)

**Remarks:** The criteria were met.

Soils Criteria Met?  Yes  No

**WETLAND DETERMINATION**

Hydrophytic Vegetation Dominant?  Yes  No  
 Wetland Hydrology Present?  Yes  No  
 Hydric Soil Present?  Yes  No

**Remarks:** The wetland criteria were met.

Is test plot within a wetland?  Yes  No