APPENDIX B

Routine On-site Wetland Determination Data Sheets

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, 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?	☒Yes	☐No	**Plot ID:** TP-1up
Is the site significantly disturbed (atypical situation)?	☐Yes	☒No	**Community ID:** --
Is the site a potential problem area?	☐Yes	☒No	**Transect ID:** --

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

Common Name	Scientific Name	Strata	% Cover	Indicator Status
1. Douglas rabbitbrush*	*Chrysothamnus viscidiflorus*	Herb	20	NI
2. gray rabbitbrush*	*Chrysothamnus nauseosus*	Herb	20	NI
3. tumble mustard*	*Sisymbrium altissimum*	Herb	20	FACU-
4.		-		-
5.		-		-
6.		-		-
7.		-		-
8.		-		-

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 ☒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

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 4/3	-	-	-	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 is not met.

Is test plot within a wetland? ☐Yes ☒No

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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?	☒Yes	☐No	**Plot ID:** TP-2wet
Is the site significantly disturbed (atypical situation)?	☐Yes	☒No	**Community ID:** --
Is the site a potential problem area?	☐Yes	☒No	**Transect ID:** --

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

Common Name	Scientific Name	Strata	% Cover	Indicator Status
1. narrowleaf willow*	*Salix exigua*	Shrub	30	OBL
2. reed canarygrass*	*Phalaris arundinacea*	Herb	20	FACW
3. hardstem bulrush*	*Schoenoplectus acutus*	Herb	20	OBL
4. curly dock*	*Rumex crispus*	Herb	10	FAC+
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. 4/4 = 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
1-3"	-	10 YR 5/2	-	-	-	sandy clay
3-12"	-	10 YR 4/2	2.5 YR 4/8	common	med	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

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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?	☒Yes	☐No	**Plot ID:** TP-3wet
Is the site significantly disturbed (atypical situation)?	☐Yes	☒No	**Community ID:** --
Is the site a potential problem area?	☐Yes	☒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? ☒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: Quincy fine sand, 2-15% slopes (97)
(Series and Phase)
Taxonomy (Subgroup): mesic Xeric Torripsamments

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 4/1	-	-	-	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

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Applicant/Owner: WDFW	**County/State:** Grant County, WA	
Test Plot Location: Unit B 40 ft east of Berm 2's wetland flag 13S	**Sec/Town/Range:** S1 T18N R27E, S36 T19N R27E, and S31 T19N R28E	

Do normal circumstances exist at the site?	☒Yes	☐No	**Plot ID:** TP-4up
Is the site significantly disturbed (atypical situation)?	☐Yes	☒No	**Community ID:** --
Is the site a potential problem area?	☐Yes	☒No	**Transect ID:** --

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

Common Name	Scientific Name	Strata	% Cover	Indicator Status
1. Douglas rabbitbrush*	*Chrysothamnus viscidiflorus*	Herb	35	NI
2. gray rabbitbrush*	*Chrysothamnus nauseosus*	Herb	35	NI
3.		-		-
4.		-		-
5.		-		-
6.		-		-
7.		-		-
8.		-		-

Other species present: Bareground at 20%.
% 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 ☒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

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 4/3	-	-	-	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 is not met.

Is test plot within a wetland? ☐Yes ☒No

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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 ft east of Berm 3a's wetland flag 1E	**Sec/Town/Range:** S1 T18N R27E, S36 T19N R27E, and S31 T19N R28E	

Do normal circumstances exist at the site?	☒Yes	☐No	**Plot ID:** TP-5up
Is the site significantly disturbed (atypical situation)?	☐Yes	☒No	**Community ID:** --
Is the site a potential problem area?	☐Yes	☒No	**Transect ID:** --

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

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

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: 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:
- ☐ 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 3/3	-	-	-	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

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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 ft west of Berm 3a wetland flag 1E	**Sec/Town/Range:** S1 T18N R27E, S36 T19N R27E, and S31 T19N R28E	

Do normal circumstances exist at the site?	☒Yes	☐No	**Plot ID:** TP-6wet
Is the site significantly disturbed (atypical situation)?	☐Yes	☒No	**Community ID:** --
Is the site a potential problem area?	☐Yes	☒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
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

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: 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:
- ☐ 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 4/1	-	-	-	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

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

Do normal circumstances exist at the site?	☒Yes	☐No	**Plot ID:** TP-7Aup
Is the site significantly disturbed (atypical situation)?	☐Yes	☒No	**Community ID:** --
Is the site a potential problem area?	☐Yes	☒No	**Transect ID:** --

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

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

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
0-4"	-	10 YR 3/3	-	-	-	sand
4-6"	-	10 YR 4/2	-	-	-	sandy clay
7-12"	-	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

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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 B 40 ft southwest Berm 5 wetland flag 5-10	**Sec/Town/Range:** S1 T18N R27E, S36 T19N R27E, and S31 T19N R28E	

Do normal circumstances exist at the site?	☒Yes	☐No	**Plot ID:** TP-7Bup
Is the site significantly disturbed (atypical situation)?	☐Yes	☒No	**Community ID:** --
Is the site a potential problem area?	☐Yes	☒No	**Transect ID:** --

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

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

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 3/3	-	-	-	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

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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 ft northeast of Berm 5 wetland flag 5-11	**Sec/Town/Range:** S1 T18N R27E, S36 T19N R27E, and S31 T19N R28E	

Do normal circumstances exist at the site?	☒Yes	☐No	**Plot ID:** TP-8wet
Is the site significantly disturbed (atypical situation)?	☐Yes	☒No	**Community ID:** --
Is the site a potential problem area?	☐Yes	☒No	**Transect ID:** --

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

Common Name	Scientific Name	Strata	% Cover	Indicator Status
1. cattail*	*Typha latifolia*	Herb	50	OBL
2. hardstem bulrush*	*Schoenoplectus acutus*	Herb	30	OBL
3. sedge sp.	*Carex sp.*	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

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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?	☒Yes	☐No	**Plot ID:** TP-9up
Is the site significantly disturbed (atypical situation)?	☐Yes	☒No	**Community ID:** --
Is the site a potential problem area?	☐Yes	☒No	**Transect ID:** --

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

Common Name	Scientific Name	Strata	% Cover	Indicator Status
1. Douglas rabbitbrush*	*Chrysothamnus viscidiflorus*	Herb	20	NI
2. gray rabbitbrush*	*Chrysothamnus nauseosus*	Herb	20	NI
3. tumble mustard*	*Sisymbrium altissimum*	Herb	20	FACU-
4.		-		-
5.		-		-
6.		-		-
7.		-		-
8.		-		-

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. 0/3 = 1005

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

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 3/2	-	-	-	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

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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?	☒Yes	☐No	**Plot ID:** TP-10wet
Is the site significantly disturbed (atypical situation)?	☐Yes	☒No	**Community ID:** --
Is the site a potential problem area?	☐Yes	☒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
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

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

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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?	☒Yes	☐No	**Plot ID:** TP-11up
Is the site significantly disturbed (atypical situation)?	☐Yes	☒No	**Community ID:** --
Is the site a potential problem area?	☐Yes	☒No	**Transect ID:** --

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

Common Name	Scientific Name	Strata	% Cover	Indicator Status
1. Bailey's buckwheat*	*Eriogonum baileyi*	Herb	60	NI
2. tumble mustard	*Sisymbrium altissimum*	Herb	10	FACU-
3. small tumbleweed	*Sisymbrium loeselii*	Herb	10	NI
4. Douglas rabbitbrush	*Chrysothamnus viscidiflorus*	Herb	10	NI
5. gray rabbitbrush	*Chrysothamnus nauseosus*	Herb	10	NI
6.		-		-
7.		-		-
8.		-		-

Other species present: Bareground at 10%.
% 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

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 3/2	-	-	-	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

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Project Site: Potholes Reservoir	**Date:** 11/28/07	**Project # :** 1696.01
Applicant/Owner: WDFW	**County/State:** Grant County, WA	
Test Plot Location: Unit B 40 ft east 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?	☒Yes	☐No	**Plot ID:** TP-12wet
Is the site significantly disturbed (atypical situation)?	☐Yes	☒No	**Community ID:** --
Is the site a potential problem area?	☐Yes	☒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
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

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 4/1	-	-	-	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

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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 10 ft north of Berm 4a	**Sec/Town/Range:** S1 T18N R27E, S36 T19N R27E, and S31 T19N R28E	

Do normal circumstances exist at the site?	☒Yes	☐No	**Plot ID:** TP-13up
Is the site significantly disturbed (atypical situation)?	☐Yes	☒No	**Community ID:** --
Is the site a potential problem area?	☐Yes	☒No	**Transect ID:** --

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

Common Name	Scientific Name	Strata	% Cover	Indicator Status
1. small tumbleweed*	*Sisymbrium loeselii*	Herb	30	NI
2. Douglas rabbitbrush*	*Chrysothamnus viscidiflorus*	Herb	20	NI
3. gray rabbitbrush*	*Chrysothamnus nauseosus*	Herb	20	NI
4.		-		-
5.		-		-
6.		-		-
7.		-		-
8.		-		-

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 ☒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

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 3/3	-	-	-	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

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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?	☒Yes	☐No	**Plot ID:** TP-14wet
Is the site significantly disturbed (atypical situation)?	☐Yes	☒No	**Community ID:** --
Is the site a potential problem area?	☐Yes	☒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
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

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

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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?	☒Yes	☐No	**Plot ID:** TP-15up
Is the site significantly disturbed (atypical situation)?	☐Yes	☒No	**Community ID:** -
Is the site a potential problem area?	☐Yes	☒No	**Transect ID:** --

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

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

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 ☒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

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 4/2	-	-	-	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

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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?	☒Yes	☐No	**Plot ID:** TP-16wet
Is the site significantly disturbed (atypical situation)?	☐Yes	☒No	**Community ID:** --
Is the site a potential problem area?	☐Yes	☒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
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

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 2/1	-	-	-	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

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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?	☒Yes	☐No	**Plot ID:** TP-17 up
Is the site significantly disturbed (atypical situation)?	☐Yes	☒No	**Community ID:** --
Is the site a potential problem area?	☐Yes	☒No	**Transect ID:** --

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

Common Name	Scientific Name	Strata	% Cover	Indicator Status
1. Douglas rabbitbrush*	*Chrysothamnus viscidiflorus*	Herb	30	NI
2. gray rabbitbrush*	*Chrysothamnus nauseosus*	Herb	30	NI
3.		-		-
4.		-		-
5.		-		-
6.		-		-
7.		-		-
8.		-		-

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 ☒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

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 3/3	-	-	-	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

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

Do normal circumstances exist at the site?	☒Yes	☐No	**Plot ID:** TP-18wet
Is the site significantly disturbed (atypical situation)?	☐Yes	☒No	**Community ID:** --
Is the site a potential problem area?	☐Yes	☒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
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

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 4/1	-	-	-	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:

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

ECOLOGICAL LAND SERVICES, INC.

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(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 A 20 ft north of Berm 10 wetland flag 10-3N	**Sec/Town/Range:** S1 T18N R27E, S36 T19N R27E, and S31 T19N R28E	

Do normal circumstances exist at the site?	☒Yes	☐No	**Plot ID:** TP-19up
Is the site significantly disturbed (atypical situation)?	☐Yes	☒No	**Community ID:** --
Is the site a potential problem area?	☐Yes	☒No	**Transect ID:** --

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

Common Name	Scientific Name	Strata	% Cover	Indicator Status
1. small tumbleweed*	*Sisymbrium loeselii*	Herb	20	NI
2. Douglas rabbitbrush	*Chrysothamnus viscidiflorus*	Herb	15	NI
3. gray rabbitbrush	*Chrysothamnus nauseosus*	Herb	15	NI
4.		-		-
5.		-		-
6.		-		-
7.		-		-
8.		-		-

Other species present:Bareground at 50%.
% 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

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 3/3	-	-	-	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

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Project Site: Potholes Reservoir	**Date:** 11/28/07	**Project # :** 1691.01
Applicant/Owner: WDFW	**County/State:** Grant County, WA	
Test Plot Location: Unit A 5 ft southeast of Berm 10 wetland flag 10-3N	**Sec/Town/Range:** S1 T18N R27E, S36 T19N R27E, and S31 T19N R28E	

Do normal circumstances exist at the site?	☒Yes	☐No	**Plot ID:** TP-20wet
Is the site significantly disturbed (atypical situation)?	☐Yes	☒No	**Community ID:** --
Is the site a potential problem area?	☐Yes	☒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	90	OBL
2. cattail	*Typha latifolia*	Herb	10	OBL
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

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 4/1	-	-	-	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

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

Do normal circumstances exist at the site?	☒Yes	☐No	**Plot ID:** TP-21wet
Is the site significantly disturbed (atypical situation)?	☐Yes	☒No	**Community ID:** --
Is the site a potential problem area?	☐Yes	☒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
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

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 4/1	-	-	-	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