Badger Mountain Solar Energy Project

ATTACHMENT I: WETLAND DELINEATION REPORT

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Badger Mountain Solar Energy Project Wetland Delineation Report

Prepared by:



Prepared for: Aurora Solar, LLC

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Appendix A. Figures

Appendix B. Arid West Region Wetland Determination Data Sheets Appendix C. Wetlands and Waters Photolog

AW Supplement	Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West (Version 2.0)
DNR	Washington Department of Natural Resources
FAC	Facultative
FACU	Facultative Upland
FACW	Facultative Wetland
GPS	global positioning system
LRR	Land Resource Region
NWI	National Wetlands Inventory
NWPL	National Wetland Plant List
OBL	Obligate
Project	Badger Mountain Solar Energy Project
SDAM	Streamflow Duration Assessment Methodology
Tetra Tech	Tetra Tech, Inc.
UPL	Upland
U.S.	United States
USDA	U.S. Department of Agriculture
WETS	Climate Analysis for Wetlands Tables

Acronyms and Abbreviations

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1.0 Introduction

Aurora Solar, LLC, a wholly owned subsidiary of Avangrid Renewables, LLC, is proposing to construct and operate the Badger Mountain Solar Energy Project (Project). The Project is a 200-megawatt solar photovoltaic generation facility with an optional 200-megawatt battery energy storage system and associated 3.7-mile-long, 230-kilovolt overhead generation-tie transmission line corridor in unincorporated Douglas County, Washington. Wetland and other water surveys were conducted April 19 to 22, 2021, and June 23 and 24, 2021, in preparation for Project permitting.

Four staff experienced in conducting wetland delineations in the Arid West region of the United States (U.S.) were involved in the field surveys and review of the data and reporting:

- Ed Strohmaier, Senior Wetland Scientist, with 23 years of experience conducting wetland and other waters of the U.S. assessments in the Pacific Northwest and throughout the United States. Mr. Strohmaier is the senior reviewer for the field surveys and reporting.
- Jessica Taylor, Wetland and Riparian Scientist, with 15 years of experience conducting wetland and other waters of the U.S. assessments in the Pacific Northwest. Ms. Taylor is the field and report lead.
- Katie Pyne, Junior Wetland Scientist, with 5 years of experience conducting wetland delineations on various projects in Idaho, Oregon, and Washington. Ms. Pyne assisted in field efforts and reporting.
- Sara Frank, Junior Wetland Scientist, with 2 years of experience conducting wetlands delineations on various projects in Oregon. Ms. Frank assisted in field efforts and reporting.

2.0 Landscape Setting

The Project study area is located within the Level III Columbia Plateau Ecoregion, and within the further subdivided Level IV, Channeled Scablands and Loess Islands Ecoregions (Thorson et al. 2003). In addition, the Project is within U.S. Department of Agriculture (USDA) Land Resource Region (LRR) B, Northwestern Wheat and Range Region, Columbia Basin Subregion (NRCS 2006). The LRR B, Northwestern Wheat and Range Region overlaps within the Project study area with the LRR B Columbia/Snake River Plateau Region in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (Version 2.0) (USACE 2008; AW Supplement).

2.1 Project Study Area Location and Land Ownership

The 2,390-acre Project study area is in Sections 21, 22, 27, 28, 34, and 35 of Township 23 North, Range 21 East, and Section 2 of Township 22 North, Range 21 East in Douglas County (Appendix A, Figure 1). The Project study area is contained within parcels owned by private individuals as well as the Washington State Department of Natural Resources (DNR). The Project study area is approximately 3.5 miles due north of Rock Island, Washington, and approximately 5.5 miles northeast of Wenatchee.

There were approximately 34 acres within the Project study area consisting of two areas (Appendix A, Figure 2) that were inaccessible due to a lack of landowner permission. The streams within those parcels were delineated based on aerial photography and what was visible in the field during surveys of the adjacent parcels.

2.2 Land Use

The majority of the Project study area lies on top of a plateau with a smaller portion of the Project study area within the proposed 230-kilovolt generation-tie transmission line corridor extending off the plateau down to a proposed switchyard (Appendix A, Figure 1). The land within the Project study area is primarily cropland with inclusions of shallow soils (scabland patches) and is bordered by shrub-steppe on the western side near the edge of the plateau

The land is primarily used for growing wheat in a winter wheat/chemical fallow rotation but there were signs that cattle had been grazing the wheat stubble and in the privately owned shrub-steppe habitat near the plateau's edge. Abandoned homesteads, some in good condition, were present in three places within the Project study area. These old homes had some remnant vegetation: rose bushes (*Rosa* sp.), blue elderberry (*Sambucus nigra*, FACU), and at one old homesite a patch of reed canarygrass (*Phalaris arundinacea*, FACW).

2.2.1 Vegetation

Plant species names and associated wetland indicator status ratings for the Arid West are from the National Wetland Plant List (NWPL; USACE 2018). The following wetland indicator ratings are ordered according to the percent likelihood of the plant occurring in wetlands, from most likely to least likely: Obligate (OBL), Facultative Wetland (FACW), Facultative (FAC), Facultative Upland (FACU), and Upland (UPL). Species that do not appear on the NWPL are considered to be Upland plants.

Woody vegetation commonly observed in the Project study area included big sagebrush (*Artemisia tridentata*, UPL), rubber rabbitbrush(*Ericameria nauseosa*, UPL), green rabbitbrush (*Chrysothamnus viscidiflorus*, UPL), purple sage (*Salvia dorrii*, UPL), scabland sagebrush (*Artemisia rigida*, UPL), three-tip sagebrush (*Artemisia tripartita*, UPL), and antelope bitterbrush (*Purshia tridentata*, UPL).

Herbaceous species documented in the Project study area most frequently included wheat (*Triticum aestivum*, UPL), common yarrow (*Achillea millefolium*, FACU), sulfur buckwheat (*Eriogonum umbellatum*, UPL), crested wheatgrass (*Agropyron cristatum*, UPL), cheatgrass (*Bromus tectorum*, UPL), bluebunch wheatgrass (*Pseudoroegneria spicata*, UPL), arrowleaf balsamroot (*Balsamorhiza sagittate*, UPL), Douglas' brodiaea (*Triteleia grandiflora* var. *grandiflora*, UPL), Douglas's dustymaiden (*Chaenactis douglasii*, UPL), common mullein (*Verbascum thapsus*, FACU), and smooth brome (*Bromus inermis*, FACU).

2.2.2 Priority Habitats and Species

The Washington Department of Ecology requests information on priority habitats and species from the Washington Department of Fish and Wildlife. Surveys for specialized habitats and species are being assessed as part of separate reports in support of this Project and can be made available as requested.

2.3 NWI and Natural Resources Conservation Service Soils

Prior to field work, Tetra Tech, Inc. (Tetra Tech) reviewed the National Wetlands Inventory (NWI), hydric soils data, and aerial photographs to identify potential wetlands and other waters, as described below.

2.3.1 National Wetlands Inventory Data

Desktop review of NWI data identified one freshwater emergent wetland feature (PEM1A) within the Project study area (Appendix A, Figure 3).

2.3.2 Hydric Soils Data

Thirty-eight soil map units are mapped in the Project study area (Table 1 and Appendix A, Figure 4). The dominant soil in the Project study area is Broadax-Titchenal complex, 3 to 5 percent slopes covering approximately 26 percent of the Project study area followed by Bakeoven very cobbly loam, zero to 15 percent slopes at 24 percent. No soils in the Project study area were considered hydric soils although the Haploxerolls unit had a 5 percent hydric component. Soils must have at least 33 percent hydric components to be considered "partially hydric" so this map unit is considered non-hydric.

Map Symbol	Soil Unit Name and Slope	Percent Hydric Soil	Acres
100	Cheviot-Ralls-Grinrod complex, 15 to 30 percent slopes	0	2.66
101	Cheviot-Ralls-Rubble land complex, 30 to 65 percent slopes	0	52.60
16	Alstown-Cheviot complex, 30 to 65 percent slopes	0	8.41
187	Grinrod-Rock outcrop-Rubble land complex, 30 to 70 percent slopes	0	3.68
193	Haploxerolls, moderately well drained, nearly level to gently sloping	5	4.06
222	Logy cobbly sandy loam, 3 to 15 percent slopes	0	1.05
224	Logy very stony sandy loam, 3 to 15 percent slopes	0	4.22
239	Morrow silt loam, 3 to 8 percent slopes	0	200.46
240	Morrow silt loam, 8 to 15 percent slopes	0	45.40
241	Morrow-Argabak complex, 3 to 8 percent slopes	0	80.73
242	Morrow-Argabak complex, 8 to 15 percent slopes	0	20.08

Table 1. Soils Mapped in the Study Area

Map Symbol	Soil Unit Name and Slope	Percent Hydric Soil	Acres
243	Morrow-Argabak-Badge complex, 15 to 30 percent slopes	0	40.08
28	Argabak-Morrow complex, 0 to 30 percent slopes	0	149.61
286	Renslow silt loam, 15 to 30 percent south slopes	0	3.45
287	Renslow silt loam, cemented substratum, 0 to 8 percent slopes	0	2.79
288	Renslow silt loam, cemented substratum, 8 to 15 percent slopes	0	15.70
289	Renslow silt loam, cemented substratum, 15 to 30 percent slopes	0	12.67
297	Ritzville silt loam, cemented substratum, 0 to 8 percent slopes	0	20.81
298	Ritzville silt loam, cemented substratum, 8 to 15 percent slopes	0	23.39
300	Ritzville silt loam, cemented substratum, 30 to 65 percent slopes	0	2.79
306	Rubble land-Rock outcrop complex, very steep	0	0.02
391	Terlan silt loam, 0 to 8 percent slopes	0	10.93
406	Titchenal silt loam, 3 to 8 percent slopes	0	27.92
407	Titchenal silt loam, 8 to 15 percent slopes	0	49.73
41	Bagdad silt loam, 0 to 8 percent slopes	0	1.07
42	Bagdad silt loam, cemented substratum, 0 to 8 percent slopes	0	311.74
43	Bagdad silt loam, cemented substratum, 8 to 15 percent slopes	0	13.00
447	Van Nostern silt loam, 3 to 8 percent slopes	0	32.28
448	Van Nostern silt loam, 8 to 15 percent slopes	0	52.46
449	Van Nostern silt loam, 15 to 30 percent slopes	0	0.53
452	Van Nostern-Camaspatch complex, 8 to 15 percent slopes	0	38.47
453	Van Nostern-Camaspatch complex, 15 to 30 percent slopes	0	4.67
59	Benwy-Selah-Alstown complex, 15 to 30 percent slopes	0	3.32
66	Broadax silt loam, cemented substratum, 3 to 8 percent slopes	0	151.28
67	Broadax silt loam, cemented substratum, 8 to 15 percent slopes	0	50.99
68	Broadax-Morrow-Spofford complex, 3 to 8 percent slopes	0	231.09
69	Broadax-Morrow-Spofford complex, 8 to 15 percent slopes	0	106.06
70	Broadax-Titchenal complex, 3 to 15 percent slopes	0	610.04
Total Acres	•		2,390
Source: NRCS n.d	a.		

3.0 Site Alterations

Site alterations are those activities that directly or indirectly impact wetlands and other waters such that the function or area of the feature changes significantly. A significant alteration would be one that renders the feature non-functioning, or one that changes the boundaries. Land use in the Project study area is generally dominated by agriculture where the native vegetation has been removed and the soils are disturbed by both annual cropping and grazing cattle. The shrub-steppe adjacent to the crop fields also contain two-track roads in the western part of the Project study area providing access to the radio and cell towers present just outside of the Project study area.

4.0 Precipitation Data and Analysis

Precipitation data for the period preceding and during field work were collected from the National Weather Service, East Wenatchee, Washington Station (NOAA 2021). Data from the Natural Resource Conservation Service Climate Analysis for Wetlands Tables (WETS) Station, Wenatchee Pangborn Memorial Airport, were used to compare historical precipitation data with recent water records. Average historical monthly precipitation data were obtained from the WETS Table for Wenatchee Pangborn Memorial Airport (Table 2) for the period of 1971 to 2021 (NRCS n.d.b.).

4.1 April 2021 Field Surveys

Field surveys occurred in the 2021 Water Year (October 1, 2020 through September 30, 2021) (USGS 2016). During the 6-day span preceding field work on April 19–21, 2021, there was no measurable precipitation. Monthly precipitation for April 2021 was 4 percent of the average 0.52 inches that normally falls this month. For the Water Year beginning October 2020 through April 2021, precipitation was 96 percent of average due to the above-average precipitation for the months of October, November, January, and February that helped mitigate for below-average precipitation in other months. Based on the precipitation data for the Water Year for the 3 months prior to the site visits it was estimated that groundwater was average to slightly below average, for what is usually encountered at this time of year (Table 2).

4.2 June 2021 Field Surveys

During the 6-day span preceding field work on June 23-24, 2021, there was no measurable precipitation (NOAA 2021). Monthly precipitation for March, April, May, and June of 2021 was well below average, and precipitation totals from the Water Year starting on October 2020 through June 2021 were at 82 percent of average. Based on the precipitation data for the 3 months prior to the site visits, it was estimated that groundwater was below average for what is usually encountered at this time of year (Table 2). Lower than average precipitation levels for March, April, and May 2021 did not affect the delineation of other waters, as determinations of intermittent versus ephemeral streams were made using indicators described in the Streamflow Duration Assessment Method (Nadeau 2015), which relies on multiple indicators independent of the presence or absence of observed surface hydrology.

Precipitation	Oct 2020	Nov 2020	Dec 2020	Jan 2021	Feb 2021	Mar 2021	Apr 2021	May 2021	Jun 1-24 2021	Water Year to Date 2021 ³ Total
Recorded Monthly Precipitation Totals (inches); (East Wenatchee, WA) ¹	0.93	1.19	0.86	1.63	0.91	0.10	0.02	0.08	0.08	5.80
WETS Average Monthly Precipitation (inches); (Wenatchee Pangborn Memorial AP, WA) ²	0.53	0.97	1.33	1.04	0.80	0.69	0.52	0.67	0.53	7.08
Recorded Precipitation Relative to WETS Average Monthly Precipitation	175%	123%	65%	157%	114%	14%	4%	12%	15%	82%
1. NOAA 2021.										
2. WETS Table for Wenatchee Pangborn Memorial Airp	2. WETS Table for Wenatchee Pangborn Memorial Airport, Washington, 1971-2021.									

Table 2. Precipitation Data - Current and Historical (Inches)

3. USGS 2016.

5.0 Methods

5.1 Pre-field Work

In preparation for the field work, Tetra Tech reviewed NWI, hydric soils data, and aerial photographs to identify potential wetlands and other waters, as described in the preceding sections. Tetra Tech prepared digital field maps with these data and uploaded these maps onto a Samsung Android data collection tablet to assist field staff in identifying the locations of probable wetlands and non-wetland waters within or adjacent to the Project study area.

The Washington Natural Heritage Program (WNHP 2018) data were used to determine if natural heritage features associated with wetlands exist in or near the Project study area. No wetlands associated with natural heritage features were noted as occurring in the Project study area.

The following guidance documents and procedures were reviewed:

- Arid West Supplement (USACE 2008);
- Wetlands Delineation Manual, Technical Report Y-87-1 (the Manual) (USACE 1987);
- Streamflow Duration Assessment Method for the Pacific Northwest (SDAM; Nadeau 2015);
- Classification of Wetlands and Deepwater Habitats of the United States (Cowardin et al. 1979); and
- Washington State Wetland Rating System for Eastern Washington 2014 Update (Hruby 2014).

5.2 Field Work

Field investigations for the delineation of wetlands and other waters included pedestrian surveys within the Project study area. Tetra Tech conducted the field surveys on April 19 to April 22, 2021 with follow-up visits on June 23 and 24, 2021. The desktop wetland data were used to focus the wetland delineations, whereas the desktop surface water data were used to focus the non-wetlands water evaluation as necessary.

5.2.1 Mapping Methods

Water centerlines, photograph locations, and sample plot locations were recorded using Juniper Geode series global positioning system (GPS) units, configured to differentially correct positions in real-time using the Satellite Based Augmentation System, which typically results in positional error of less than 1 meter (Juniper Systems 2018).

Water centerlines were recorded as line features using GPS units set to collect vertices every 2 seconds. The location of sample plots was recorded as a point feature consisting of the average of 30 GPS-recorded positions.

5.2.2 Wetland Delineations

Wetland presence was determined as per methods in the Manual and the AW Supplement. A field indicator of each of the three wetland parameters (i.e., hydrophytic vegetation, hydric soils, and wetland hydrology) must be present to make a positive wetland determination. Field evaluations for potential wetlands were conducted using the following guidelines:

• Several sample plots were established in the palustrine emergent wetland identified by NWI data (USFWS 2020). The sample plots were dug across the lowest elevations of the feature where it was judged most likely to have wetland characteristics (i.e., the lowest or most green place). Photographs were taken to document conditions within the NWI boundary.

No wetlands were found at any of the sample plots recorded during field work. Data sheets describing the lack of hydric conditions can be found in Appendix B.

5.2.3 Non-wetland Waters Evaluations

Non-wetland waters were evaluated using the following criteria:

- Stream channels less than 6 feet in width were mapped along their centerline, and streams greater than 6 feet in width were mapped at their Ordinary High Water Lines for each bank.
- Streams were delineated based on the presence of a defined channel with bed scour, sediment deposition, or other evidence of regular flow.
- In locations where the National Hydrography Dataset indicated that there is a stream or orthoimagery showed a drainage feature but no bed or banks were found, stream centerlines were delineated at the lowest landscape position
- Flow duration for the stream channels was determined using criteria in SDAM (Nadeau 2015).
- Stream channels were classified following the DNR interim water typing system (WAC 222-16-031). Water type classifications are based primarily on fish use and flow regime, as well as other values including water supply use.
- Culverts were mapped in all drainages where they were found.

6.0 Description of Wetlands and Other Non-wetland Waters

All wetlands and non-wetland waters evaluated in the Project study area are depicted in the mapbook in Appendix A, Figure 5.

6.1 Wetlands

There were no wetlands within the Project study area. Several soil pits were dug in the one feature identified by the NWI. The area identified by the NWI is within the yard of an abandoned

homestead. Reed canarygrass grows across the area between the house and the outbuildings. The soils did not meet hydric criteria. Additionally, although nearby drainages showed the effects of recent snow melt run-off with freshly incised banks, there was no sign of recent water flow within the NWI designated area. The Arid West Region Wetland Determination Data Sheets showing conditions in that feature are found in Appendix B.

6.2 Non-wetland Waters

There were 44 ephemeral stream segments delineated in the field and two stream segments that were desktop delineated (ST-DT-01 and ST-DT-02) due to access issues (Table 3). ST-DT-01 is a continuation of a field delineated stream (ST-381) where it passes through a non-accessible parcel. ST-DT-02 is not connected to any field delineated streams and is listed by DNR as having untyped/unknown periodicity.

The DNR map shows that all but one of the streams within the Project study area have "non-fish" (N) habitat bearing status or "unknown" (U) periodicity and fish-bearing statuses (DNR 2021). Stream ST-329 is considered to have fish use, although only the headwaters exist within the Project study area and the drainage loses all bed and banks where it is farmed through just to the east and downslope from the delineated reach (Figure 5.10 in Appendix A and Photo Points 329a and 329b in the photolog in Appendix C). The closest named stream is Beaver Creek, approximately 1.5 linear miles from the Project at the nearest point. Beaver Creek is considered perennial by DNR and is listed on StreamNet (2021) as having migratory rainbow trout (*Oncorhynchus mykiss*) habitat.

Feature Name	Feature Type	Stream Segment Length (ft)	Acreage	DNR Stream Type ¹
ST-117	Ephemeral Stream	85.52	<0.01	N
ST-134	Ephemeral Stream	461.36	0.02	N
ST-148	Ephemeral Stream	103.96	<0.01	U
ST-153	Ephemeral Stream	186.91	0.01	U
ST-156	Ephemeral Stream	108.90	0.01	U
ST-160	Ephemeral Stream	1,386.50	0.06	N
ST-200	Ephemeral Stream	1,998.58	0.09	N
ST-238	Ephemeral Stream	550.97	0.03	N
ST-241	Ephemeral Stream	2879.90	0.13	N
ST-249A	Ephemeral Stream	955.27	0.04	N
ST-249B	Ephemeral Stream	1,253.54	0.06	N
ST-249C	Ephemeral Stream	1,781.90	0.08	N
ST-251	Ephemeral Stream	1,445.25	0.07	U
ST-300A	Ephemeral Stream	1,134.68	0.05	N

Table 3. Summary of Water Feature

Feature Name	Feature Type	Stream Segment Length (ft)	Acreage	DNR Stream Type ¹
ST-300B	Ephemeral Stream	605.89	0.03	N
ST-321	Ephemeral Stream	238.02	0.01	N
ST-329	Ephemeral Stream	55.46	<0.01	F
ST-335	Ephemeral Stream	58.79	<0.01	U
ST-341	Ephemeral Stream	55.55	<0.01	U
ST-342	Ephemeral Stream	238.90	0.01	U
ST-344	Ephemeral Stream	27.42	<0.01	U
ST-345	Ephemeral Stream	184.37	0.01	U
ST-360	Ephemeral Stream	79.66	<0.01	N
ST-381	Ephemeral Stream	1,526.97	0.05	U
ST-382	Ephemeral Stream	216.51	0.01	U
ST-383	Ephemeral Stream	258.95	0.01	U
ST-390	Ephemeral Stream	20.56	<0.01	U
ST-392	Ephemeral Stream	305.18	0.01	U
ST-501	Ephemeral Stream	93.85	<0.01	N
ST-503	Ephemeral Stream	346.80	0.02	N
ST-505	Ephemeral Stream	1,595.65	0.07	U
ST-507	Ephemeral Stream	272.90	0.01	U
ST-510	Ephemeral Stream	3,489.75	0.16	N
ST-511	Ephemeral Stream	485.82	0.02	N
ST-512	Ephemeral Stream	307.68	0.01	N
ST-513	Ephemeral Stream	1,199.99	0.06	N
ST-516	Ephemeral Stream	137.13	0.01	U
ST-517	Ephemeral Stream	1,429.24	0.07	U
ST-518	Ephemeral Stream	775.91	0.04	U
ST-519	Ephemeral Stream	509.01	0.02	U
ST-520	Ephemeral Stream	928.32	0.04	U
ST-520a	Ephemeral Stream	97.67	<0.01	U
ST-521	Ephemeral Stream	307.25	0.01	U
ST-522	Ephemeral Stream	325.25	0.01	U
ST-DT-01 (continuation of ST- 381)	Ephemeral Stream	219.6	0.01	U
ST-DT-02	Ephemeral Stream	266.6	0.01	U
Total Other Waters Acreage			1.40	
1. N = Non-fish stream; F = fish strea	am; U = Unknown/Unmap	oped	·	·

7.0 Summary

Using methods in the Manual and AW Supplement, no wetlands were determined to be within the Project study area. Using the SDAM protocol, 44 ephemeral streams were delineated and documented in the Project study area. The total area of preliminary jurisdictional waters within the study area boundary is 1.40 acres.

8.0 Disclaimer

This report documents the investigation, best professional judgment, and conclusions of the investigators. It should be considered a Preliminary Jurisdictional Determination of wetlands and other waters and used at your own risk unless it has been reviewed and approved in writing by the USACE and Washington Department of Ecology.

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Appendix A. Figures

Figure A-1.	Project Location
Figure A-2.	Tax Lots
Figure A-3.	NWI/NHD
Figure A-4.	Soils
Figure A-5.	Delineated Wetlands and Waters

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Badger Mountain Solar Energy Project

Figure 2 Survey Area

DOUGLAS COUNTY, WASHINGTON



Survey Area Area not Accessible*

* Site access was not available to approximately 34.3 acres of the Survey Area along the Gen-tie Micrositing Corridor during the 2021 survey season. While these areas were not visited on foot in 2021, they were viewed from adjacent accessible parcels and public roads.




















































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Appendix B. Arid West Region Wetland Determination Data Sheets

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OMB Control #: 0710-xxxx, Exp: Pending Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

Project/Site: Badger Mountain Solar	Cit	y/Cou	nty: Douglas	s Cour	nty		Sampling	Date:	4/20/2	021
Applicant/Owner: Avangrid					State:	WA	Sampling	Point:	WT-:	223
Investigator(s): Jessica Taylor/Katie Pyne/Sara Frank	Sec	ction, T	Township, Ra	ange:	Section 3	34, 23N, 2	1E			
Landform (hillside, terrace, etc.): swale	Local	relief	(concave, co	nvex,	none): gei	ntle slope		Slope	(%):	3
Subregion (LRR): LRR B Lat:47.466557	_	Lo	ng:-120.18 <u>6</u>	733	, <u>s</u>		Da	atum:	NAD8	3
Soil Map Unit Name: 70 Broadax-Titchenel complex, 3 to 15 perce	nt				NV	VI classific	ation: PEN	11A		
Are climatic / hydrologic conditions on the site typical for this time c	of year?		Yes X	No	(lf no, expl	ain in Rema	arks.)		
Are Vegetation , Soil , or Hydrology significantly	disturbe	d? A	re "Normal C	Circum	stances"	present?	Yes X	No		
Are Vegetation, Soil, or Hydrologynaturally pro	blematio	;? (lf needed, ex	plain a	any answe	ers in Rem	arks.)	_		
SUMMARY OF FINDINGS – Attach site map showin	ng san	nplin	g point lo	catio	ons, trar	nsects, i	importan	t featu	res,	etc.
Hydrophytic Vegetation Present? Yes No X Hydric Soil Present? Yes No X Wetland Hydrology Present? Yes No X Remarks: No X X		Is the withi	e Sampled A n a Wetland	rea ?	Ye	es	No <u>X</u>	_		
Site is located in slight swale between abandoned house and out subsequent snow melt.	buildings	. No h	ydrology was	s obsei	rved onsite	e despite	recent sprin	g snow s	storm	and
VEGETATION – Use scientific names of plants.										
Tree Stratum (Plot size:) Absolute % Cover % % %	Domi Spec	nant ies?	Indicator Status	Dor	ninance	Fest work	sheet:			
1	·			Nur Are	nber of Do OBL, FA	ominant S CW, or FA	pecies That	0		(A)
3				Tota Acre	al Number oss All Str	r of Domin rata:	ant Species	3		(B)
Sapling/Shrub Stratum (Plot size:)	=Total (Cover		Per Are	cent of Do OBL, FA	ominant Sp CW, or FA	pecies That C:	0.0	%	(A/B)
2				Pre	valence l	ndex wor	ksheet:			
3.	• •				Total %	Cover of:		Multipl	y by:	
4.				OBI	L species	0	x 1 =	= 0		
5.				FAC	CW specie	es 0	x 2 =	= 0		
	=Total 0	Cover		FAC	C species	0	x 3 =	= 0		
Herb Stratum (Plot size: 5)	-			FAC	CU specie	s 0	x 4 =	= 0		
1. Agropyron cristatum 50	Ye	S	UPL	UPL	_ species	50	x 5 =	= 25	0	
2.				Col	umn Total	s: <u>50</u>	(A)	25	0	(B)
3				F	Prevalenc	e Index =	B/A =	5.00		
4										
5				Hyd	Irophytic	Vegetatio	on Indicato	rs:		
6.					Dominan	ce Test is	>50%			
7.					Prevalen	ce Index is	s ≤3.0 ¹			
8	Tatal				Morpholo data in	gical Ada	ptations ¹ (P	rovide su	ipporti	ng
Woody Vine Stratum (Plot size:		Jover			Problema	atic Hydro	hvtic Vege	tation ¹ /	-xnlair	-))
1 (1 101 5126)				1.						''
2.				Ind be p	ncators of present, u	nyarıc soi nless distu	i and wetlar urbed or pro	nd hydrol blematic	logy m :.	nust
	=Total (Cover		Hyd Veg	drophytic getation					

Remarks:

Depth	Matrix	Redo	x Features				,	
(inches)	Color (moist) %	Color (moist)	% Type ¹	Loc ²	Textur	e	Remarks	6
0-16	10YR 3/3 10	0			silt loar	n		
0.10		<u> </u>						
	· ·		<u> </u>					
	· ·							
	· ·							
	<u> </u>		·					
¹ Type: C=C	oncentration D-Depletion	RM-Reduced Matrix	S=Covered or C	oated S	and Grains	² Location: P	l – Pore Lining M	1-Matrix
Hydric Soil	Indicators: (Applicable to	all I RRs. unless othe	erwise noted.)			ndicators for P	roblematic Hydr	ic Soils ³
Histosol	(A1)	Sandy Red	dox (S5)			1 cm Muck (A9) (LRR C)	
Histic E	pipedon (A2)	Stripped N	latrix (S6)		-	2 cm Muck (A10) (LRR B)	
Black H	istic (A3)	Loamy Mu	cky Mineral (F1)		-	Iron-Mangan	ese Masses (F12	2) (LRR D)
Hydroge	en Sulfide (A4)	Loamy Gle	eyed Matrix (F2)		_	Reduced Ve	rtic (F18)	,,,,,
Stratifie	d Lavers (A5) (LRR C)	Depleted N	Matrix (F3)		-	Red Parent I	Material (F21)	
1 cm Mu	uck (A9) (LRR D)	Redox Da	k Surface (F6)		—	Very Shallov	v Dark Surface (F	22)
Deplete	d Below Dark Surface (A11) Depleted [Dark Surface (F7)		-	Other (Expla	in in Remarks)	
Thick Da	ark Surface (A12)	Redox Dep	pressions (F8)		_			
Sandy N	Mucky Mineral (S1)							
Sandy G	Gleyed Matrix (S4) ³ Ind	licators of hydrophytic v	egetation and we	tland hy	drology must	be present, unle	ess disturbed or p	oroblematic.
Restrictive	Layer (if observed):							
Type:								
Depth (i	nches):				Hydric Soil	Present?	Yes	No X
Remarks:								
Soil is soft a	nd loamy with no signs of r	ecent saturation.						
HYDROLC	DGY							
Wetland Hy	drology Indicators:							
Primary Indi	cators (minimum of one is a	required: check all that :	annly)		c	Secondary Indica	ators (minimum c	f two required
Surface	Water (A1)	Salt Crust	(B11)			Water Marks	(B1) (Riverine)	i two required;
High Wa	ater Table (A2)	Biotic Crus	(B12)		-	Sediment De	eposits (B2) (Rive	erine)
Saturati	on (A3)	Aquatic In	vertebrates (B13)		-	Drift Deposit	s (B3) (Riverine)	
Water M	Aarks (B1) (Nonriverine)	Hvdrogen	Sulfide Odor (C1)	-	Drainage Pa	tterns (B10)	
Sedime	nt Deposits (B2) (Nonriver i	ine) Oxidized F	hizospheres on	, Livina R	oots (C3)	Drv-Season	Water Table (C2)
Drift De	posits (B3) (Nonriverine)	Presence	of Reduced Iron	(C4)		Cravfish Bur	rows (C8)	
Surface	Soil Cracks (B6)	Recent Iro	n Reduction in Ti	lled Soi	s (C6)	Saturation V	isible on Aerial Ir	nagerv (C9)
Inundati	ion Visible on Aerial Imager	y (B7) Thin Muck	Surface (C7)		(= = /	Shallow Aqu	itard (D3)	J- , (,
		· · · · · · · · · · · · · · · · · · ·			_			

Inundation Visible on A	erial Imagery (B7)		Thin Mu	ick Surface (C7)	Shallow Aquitard (D3)				
Water-Stained Leaves	(B9)		Other (E	Explain in Remarks)	FAC-Neutral Test (D5)				
Field Observations:									
Surface Water Present?	Yes	No	Х	Depth (inches):					
Water Table Present?	Yes	No	Х	Depth (inches):					
Saturation Present?	Yes	No	Х	Depth (inches):	Wetland Hydrology Present? Yes	No X			
(includes capillary fringe)					·				
Describe Recorded Data (st	tream gauge, moni	oring	well, ae	rial photos, previous inspe	ctions), if available:				
Remarks:									

OMB Control #: 0710-xxxx, Exp: Pending Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

Project/Site: Badger Mountain Solar	C	city/County: Doug	las County	Sampling Date	e: <u>4/20/2021</u>
Applicant/Owner: Avangrid			State: WA	Sampling Poir	nt: WT-224
Investigator(s): Jessica Taylor/Katie Pyne/Sara Frank	S	ection, Township,	Range: Section 34, 23	3N, 21E	
Landform (hillside, terrace, etc.): swale	Loca	al relief (concave,	convex, none): gentle s	slope S	lope (%): 3
Subregion (LRR): LRR B Lat: 47.466557		Long:	-120.186733	Datur	n: NAD83
Soil Map Unit Name: 70 Broadax-Titchenel complex, 3 to	15 percent		NWI cla	assification: PEM1A	
Are climatic / hydrologic conditions on the site typical for t	his time of year	Yes X	No (If no	explain in Remarks	.)
Are Vegetation . Soil . or Hydrology sig	nificantly disturb	ed? Are "Norma	al Circumstances" prese	ent? Yes X	No
Are Vegetation Soil or Hydrology pat	turally problema	ic? (If needed	explain any answers in	Remarks)	
SUMMARY OF FINDINGS – Attach site map	showing sa	mpling point	locations, transed	cts, important fe	atures, etc
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks: Ketter Ketter	X X X	Is the Sampled within a Wetla	l Area nd? Yes	NoX	
Site is located in slight swale between abandoned house subsequent snow melt.	and outbuilding	s. No hydrology v	vas observed onsite des	spite recent spring si	ow storm and
VEGETATION – Use scientific names of pla	nts.		-		
Tree Stratum (Plot size:	Absolute Dom % Cover Spe	ninant Indicator	Dominance Test	worksheet.	
1.			- Number of Domin	ant Species That	
2.			Are OBL, FACW,	or FAC:	1 (A)
3.			Total Number of D	ominant Species	
4			Across All Strata:	· _	2 (B)
Sapling/Shrub Stratum (Plot size:) 1.	=Total	Cover	Percent of Domina Are OBL, FACW,	ant Species That or FAC:	<u>50.0%</u> (A/B
2.			Prevalence Index	worksheet:	
3.			Total % Cove	er of: N	ultiply by:
4			OBL species	0 x 1 =	0
5			FACW species	50 x 2 =	100
_	=Total	Cover	FAC species	0 x 3 =	0
Herb Stratum (Plot size: 5)			FACU species	0 x 4 =	0
1. Agropyron cristatum	<u>50 Y</u>	es UPL	UPL species	$50 \times 5 =$	250
2. Phalaris arundinacea	<u>50 Y</u>	es FACW	Column Totals:	<u>100</u> (A)	<u>350</u> (B)
3			- Prevalence Inc	IEX = B/A = 3	.50
4				otation Indicators	
٥					
7				dev is <2 0 ¹	
8			Morphologica	Adaptations ¹ (Provi	de supporting
u	100 –Total	Cover	data in Rer	narks or on a separa	te sheet)
Woody Vine Stratum (Plot size:			Problematic F	lydrophytic Vegetatio	on ¹ (Explain)
1.			¹ Indicators of hude	ic coil and watland h	
2.			be present. unless	s disturbed or problem	natic.
	=Tota	Cover			
- % Bare Ground in Herb Stratum 0 % Co	ver of Biotic Crus	st	Present?	(es No	×

Remarks:

Color (moist) % Cc 0-16 10YR 3/3 100 100 10YR 3/3 10 11 Histosol (A1) 1 11 Histosol (A2) 1 12 Black Histic (A3) 1 13 Hydrogen Sulfide (A4) 1 14 Depleted Below Dark Surface (A12) 1 15 Sandy Gleyed Matrix (S4) 3 Indicators of Restrictive Layer (if observed): Type: 1 <	lor (moist) %	Type ¹	Loc ² s	Texture silt loam silt loam ains. ² Location: Indicators for 1 cm Muck 2 cm Muck Iron-Manga Reduced V Red Parent Very Shallo Other (Expl y must be present, un	Remarks PL=Pore Lining, M=Matrix. Problematic Hydric Soils ³ : (A9) (LRR C) (A10) (LRR B) anese Masses (F12) (LRR D) fertic (F18) t Material (F21) bw Dark Surface (F22) lain in Remarks) less disturbed or problematic.
0-16 10YR 3/3 100	Jced Matrix, CS=Co , unless otherwise Sandy Redox (St Stripped Matrix (St Loamy Mucky Mi Loamy Gleyed M Depleted Matrix (Redox Dark Surfa Depleted Dark Surfa Depleted Dark Surfa Nedox Depression hydrophytic vegetati	vered or Coa noted.) 5) S6) ineral (F1) latrix (F2) (F3) ace (F6) urface (F7) ons (F8) ion and wetla	ted Sand Gra	ains. ² Location: ains. ² Location: Indicators for 1 cm Muck 2 cm Muck 2 cm Muck Iron-Manga Reduced V Red Parent Very Shallo Other (Expl y must be present, un	PL=Pore Lining, M=Matrix. Problematic Hydric Soils ³ : (A9) (LRR C) (A10) (LRR B) anese Masses (F12) (LRR D) lertic (F18) t Material (F21) bw Dark Surface (F22) lain in Remarks) less disturbed or problematic.
¹ Type: C=Concentration, D=Depletion, RM=Red Hydric Soil Indicators: (Applicable to all LRRs Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) (LRR C) 1 cm Muck (A9) (LRR D) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) ³ Indicators of Restrictive Layer (if observed): Type: Depth (inches): Remarks: High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)	uced Matrix, CS=Co , unless otherwise Sandy Redox (St Stripped Matrix (St Loamy Mucky Mi Loamy Gleyed M Depleted Matrix (Redox Dark Surfa Depleted Dark St Redox Depressio	vered or Coa noted.) 5) S6) ineral (F1) latrix (F2) (F3) ace (F6) urface (F7) ons (F8) ion and wetla	ted Sand Gra	ains. ² Location: Indicators for 1 cm Muck 2 cm Muck 2 cm Muck Reduced V Red Parent Very Shallo Other (Expl	PL=Pore Lining, M=Matrix. Problematic Hydric Soils ³ : (A9) (LRR C) (A10) (LRR B) anese Masses (F12) (LRR D) 'ertic (F18) t Material (F21) bw Dark Surface (F22) lain in Remarks) less disturbed or problematic.
¹ Type: C=Concentration, D=Depletion, RM=Red Hydric Soil Indicators: (Applicable to all LRRs Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) (LRR C) 1 cm Muck (A9) (LRR D) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) ³ Indicators of Restrictive Layer (if observed): Type: Depth (inches): Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)	uced Matrix, CS=Co , unless otherwise Sandy Redox (St Stripped Matrix (Loamy Mucky Mi Loamy Gleyed M Depleted Matrix (Redox Dark Surfa Depleted Dark Su Redox Depressio	vered or Coa noted.) 5) S6) ineral (F1) latrix (F2) (F3) ace (F6) urface (F7) ons (F8) ion and wetla	ted Sand Gra	ains. ² Location: Indicators for 1 cm Muck 2 cm Muck Iron-Manga Reduced V Red Parent Very Shallo Other (Expl	PL=Pore Lining, M=Matrix. Problematic Hydric Soils ³ : (A9) (LRR C) (A10) (LRR B) anese Masses (F12) (LRR D) 'ertic (F18) t Material (F21) bw Dark Surface (F22) lain in Remarks) less disturbed or problematic.
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Type: C=Concentration, D=Depletion, RM=Red Hydric Soil Indicators: (Applicable to all LRRs Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) (LRR C) 1 1 cm Muck (A9) (LRR D) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) ³ Indicators of Restrictive Layer (if observed): Type: Depth (inches):	Liced Matrix, CS=Co , unless otherwise Sandy Redox (St Stripped Matrix (St Loamy Mucky Mi Loamy Gleyed M Depleted Matrix (Redox Dark Surfa Depleted Dark Surfa Redox Depressio hydrophytic vegetati	vered or Coa noted.) 5) S6) ineral (F1) latrix (F2) (F3) ace (F6) urface (F7) ons (F8) ion and wetla	ted Sand Gra	ains. ² Location: Indicators for 1 cm Muck 2 cm Muck Iron-Manga Reduced V Red Parent Very Shallo Other (Expl y must be present, un	PL=Pore Lining, M=Matrix. Problematic Hydric Soils ³ : (A9) (LRR C) (A10) (LRR B) anese Masses (F12) (LRR D) Pertic (F18) t Material (F21) bw Dark Surface (F22) lain in Remarks) less disturbed or problematic.
Type: C=Concentration, D=Depletion, RM=Red Hydric Soil Indicators: (Applicable to all LRRs Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) (LRR C) 1 cm Muck (A9) (LRR D) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) ³ Indicators of Restrictive Layer (if observed): Type: Depth (inches): Remarks: IYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)	uced Matrix, CS=Co , unless otherwise Sandy Redox (St Stripped Matrix (Loamy Mucky Mi Loamy Gleyed M Depleted Matrix (Redox Dark Surfa Depleted Dark Su Redox Depressio	vered or Coa noted.) 5) S6) ineral (F1) 1atrix (F2) (F3) ace (F6) urface (F7) ons (F8) ion and wetla	ted Sand Gra	ains. ² Location: Indicators for 1 cm Muck 2 cm Muck Iron-Manga Reduced V Red Parent Very Shallo Other (Expl	PL=Pore Lining, M=Matrix. Problematic Hydric Soils ³ : (A9) (LRR C) (A10) (LRR B) anese Masses (F12) (LRR D) 'ertic (F18) t Material (F21) bw Dark Surface (F22) lain in Remarks) less disturbed or problematic.
¹ Type: C=Concentration, D=Depletion, RM=Red Hydric Soil Indicators: (Applicable to all LRRs Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) (LRR C) 1 cm Muck (A9) (LRR D) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) ³ Indicators of Restrictive Layer (if observed): Type: Depth (inches): Remarks: Hydrology Indicators: Primary Indicators (minimum of one is required; of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)	uced Matrix, CS=Co , unless otherwise Sandy Redox (St Stripped Matrix (Loamy Mucky Mi Loamy Gleyed M Depleted Matrix (Redox Dark Surfa Depleted Dark Su Redox Depressio	vered or Coa noted.) 5) S6) ineral (F1) latrix (F2) (F3) ace (F6) urface (F7) ons (F8) ion and wetla	ted Sand Gra	ains. ² Location: Indicators for 1 cm Muck 2 cm Muck Iron-Manga Reduced V Red Parent Very Shallo Other (Expl	PL=Pore Lining, M=Matrix. Problematic Hydric Soils ³ : (A9) (LRR C) (A10) (LRR B) anese Masses (F12) (LRR D) rertic (F18) t Material (F21) bw Dark Surface (F22) lain in Remarks) less disturbed or problematic.
¹ Type: C=Concentration, D=Depletion, RM=Red Hydric Soil Indicators: (Applicable to all LRRs Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) (LRR C) 1 cm Muck (A9) (LRR D) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) ³ Indicators of Restrictive Layer (if observed): Type: Depth (inches): Remarks: Hydrology Indicators: Primary Indicators (minimum of one is required; of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Invindation Visible on Aerial Imagery (B7)	uced Matrix, CS=Co , unless otherwise Sandy Redox (S& Stripped Matrix (Loamy Mucky Mi Loamy Gleyed M Depleted Matrix (Redox Dark Surfa Depleted Dark Surfa Redox Depression hydrophytic vegetati	wered or Coa noted.) 5) S6) ineral (F1) latrix (F2) (F3) ace (F6) urface (F7) ons (F8) ion and wetla	ted Sand Gra	ains. ² Location: Indicators for 1 cm Muck 2 cm Muck Iron-Manga Reduced V Red Parent Very Shallo Other (Expl	PL=Pore Lining, M=Matrix. Problematic Hydric Soils ³ : (A9) (LRR C) (A10) (LRR B) anese Masses (F12) (LRR D) fertic (F18) t Material (F21) bw Dark Surface (F22) lain in Remarks) less disturbed or problematic.
Type: C=Concentration, D=Depletion, RM=Red Hydric Soil Indicators: (Applicable to all LRRs Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) (LRR C) 1 cm Muck (A9) (LRR D) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4) ³ Indicators of Restrictive Layer (if observed): Type: Depth (inches): Remarks: High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)	uced Matrix, CS=Co , unless otherwise Sandy Redox (St Stripped Matrix (Loamy Mucky Mi Loamy Gleyed M Depleted Matrix (Redox Dark Surf: Depleted Dark Surf: Redox Depression hydrophytic vegetati	vered or Coa noted.) 5) S6) ineral (F1) fatrix (F2) (F3) ace (F6) urface (F7) ons (F8) ion and wetla	ted Sand Gra	ains. ² Location: Indicators for 1 cm Muck 2 cm Muck Iron-Manga Reduced V Red Parent Very Shallo Other (Expl	PL=Pore Lining, M=Matrix. Problematic Hydric Soils ³ : (A9) (LRR C) (A10) (LRR B) anese Masses (F12) (LRR D) fertic (F18) t Material (F21) bw Dark Surface (F22) lain in Remarks) less disturbed or problematic.
Hydric Soil Indicators: (Applicable to all LRRs Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) (LRR C) 1 cm Muck (A9) (LRR D) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) ³ Indicators of Restrictive Layer (if observed): Type: Depth (inches): Remarks: IYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)	s, unless otherwise Sandy Redox (S Stripped Matrix (Loamy Mucky Mi Loamy Gleyed M Depleted Matrix (Redox Dark Surfa Depleted Dark Surfa Redox Depression hydrophytic vegetati	noted.) 5) S6) ineral (F1) latrix (F2) (F3) face (F6) urface (F7) ons (F8) ion and wetla	and hydrology	Indicators for 1 cm Muck 2 cm Muck Iron-Manga Reduced V Red Parent Very Shallo Other (Expl	Problematic Hydric Soils ³ : (A9) (LRR C) (A10) (LRR B) anese Masses (F12) (LRR D) fertic (F18) t Material (F21) bw Dark Surface (F22) lain in Remarks) less disturbed or problematic.
Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) (LRR C) 1 cm Muck (A9) (LRR D) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) ³ Indicators of Restrictive Layer (if observed): Type: Depth (inches): Remarks: YDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one is required; of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)	Sandy Redox (St Stripped Matrix (Loamy Mucky Mi Loamy Gleyed M Depleted Matrix (Redox Dark Surfa Depleted Dark Si Redox Depression hydrophytic vegetati	5) S6) ineral (F1) latrix (F2) (F3) ace (F6) urface (F7) ons (F8) ion and wetla	and hydrology	1 cm Muck 2 cm Muck Iron-Manga Reduced V Red Parent Very Shallo Other (Expl	(A9) (LRR C) (A10) (LRR B) anese Masses (F12) (LRR D) fertic (F18) t Material (F21) ow Dark Surface (F22) lain in Remarks)
Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) (LRR C) 1 cm Muck (A9) (LRR D) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) ³ Indicators of Restrictive Layer (if observed): Type: Depth (inches): Remarks: Primary Indicators (minimum of one is required; of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)	Stripped Matrix (Loamy Mucky Mi Loamy Gleyed M Depleted Matrix (Redox Dark Surf: Depleted Dark Surf: Redox Depression hydrophytic vegetati	S6) ineral (F1) latrix (F2) (F3) face (F6) urface (F7) ons (F8) ion and wetla	and hydrology	2 cm Muck Iron-Manga Reduced V Red Parent Very Shallo Other (Expl	(A10) (LRR B) anese Masses (F12) (LRR D) fertic (F18) t Material (F21) ow Dark Surface (F22) lain in Remarks)
Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) (LRR C) 1 cm Muck (A9) (LRR D) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) ³ Indicators of Restrictive Layer (if observed): Type: Depth (inches): Remarks: Primary Indicators (minimum of one is required; of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)	Loamy Mucky Mi Loamy Gleyed M Depleted Matrix (Redox Dark Surfa Depleted Dark Surfa Redox Depressic hydrophytic vegetat	ineral (F1) fatrix (F2) (F3) ace (F6) urface (F7) ons (F8) ion and wetla	and hydrology	Iron-Manga Reduced V Red Parent Very Shallo Other (Expl	anese Masses (F12) (LRR D) lertic (F18) t Material (F21) ow Dark Surface (F22) lain in Remarks)
Hydrogen Sulfide (A4) Stratified Layers (A5) (LRR C) 1 cm Muck (A9) (LRR D) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) ³ Indicators of Restrictive Layer (if observed): Type: Depth (inches): Remarks:	Loamy Gleyed M Depleted Matrix (Redox Dark Surfa Depleted Dark Si Redox Depressic hydrophytic vegetati	latrix (F2) (F3) ace (F6) urface (F7) ons (F8) ion and wetla	and hydrology	Reduced V Red Parent Very Shallo Other (Exp y must be present, un	ertic (F18) t Material (F21) ow Dark Surface (F22) lain in Remarks) less disturbed or problematic.
Stratified Layers (A5) (LRR C) 1 cm Muck (A9) (LRR D) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) alindicators of Restrictive Layer (if observed): Type: Depth (inches): Remarks: IYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)	Depleted Matrix (Redox Dark Surfa Depleted Dark Surfa Redox Depressic	(F3) face (F6) urface (F7) ons (F8) ion and wetla	and hydrology	Red Parent Very Shallo Other (Exp y must be present, un	t Material (F21) ow Dark Surface (F22) lain in Remarks) less disturbed or problematic.
1 cm Muck (A9) (LRR D) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) ³ Indicators of Restrictive Layer (if observed): Type: Depth (inches): Remarks: IYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)	Redox Dark Surf	ace (F6) urface (F7) ons (F8) ion and wetla	and hydrology	Very Shallo Other (Exp y must be present, un	ow Dark Surface (F22) lain in Remarks) less disturbed or problematic.
Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Type: Depth (inches): Remarks: TYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)	Depleted Dark Si Redox Depressic hydrophytic vegetat	urface (F7) ons (F8) ion and wetla	and hydrology	Other (Expl	lain in Remarks)
Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) ³ Indicators of Restrictive Layer (if observed): Type: Depth (inches): Remarks: Primary Indicators (minimum of one is required; of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)	Redox Depressic	ion and wetla	and hydrology	y must be present, un	less disturbed or problematic.
Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) ³ Indicators of Restrictive Layer (if observed): Type: Depth (inches): Remarks: IYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)	hydrophytic vegetat	ion and wetla	and hydrology	y must be present, un	less disturbed or problematic.
Sandy Gleyed Matrix (S4) ³ Indicators of Restrictive Layer (if observed): Type: Depth (inches): Remarks: TYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)	hydrophytic vegetat	tion and wetla	and hydrology	y must be present, un	less disturbed or problematic.
Restrictive Layer (if observed): Type: Depth (inches): Remarks: IYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)					
Type: Depth (inches): Remarks: Primary Indicators (minimum of one is required; of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)					
Depth (inches): Remarks: IYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)					
Remarks: IYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)			Hydri	ic Soil Present?	Yes No X
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; of surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)					
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)					
Primary Indicators (minimum of one is required; Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)					
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)	heck all that apply)			Secondary Indi	cators (minimum of two required
High Water Table (A2) Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)	Salt Crust (B11)			Water Marl	ks (B1) (Riverine)
Saturation (A3) Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)	Biotic Crust (B12	<u>'</u>)		Sediment E	Deposits (B2) (Riverine)
Water Marks (B1) (Nonriverine) Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)	Aquatic Invertebr	rates (B13)		Drift Depos	sits (B3) (Riverine)
Sediment Deposits (B2) (Nonriverine) Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)	Hydrogen Sulfide	e Odor (C1)		Drainage P	atterns (B10)
Drift Deposits (B3) (Nonriverine) Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)	Oxidized Rhizosp	pheres on Liv	ring Roots (C	3) Dry-Seasor	n Water Table (C2)
Surface Soil Cracks (B6) Inundation Visible on Aerial Imagery (B7)	Presence of Red	luced Iron (C4	4)	Crayfish Bu	urrows (C8)
Inundation Visible on Aerial Imadery (B7)	Recent Iron Redu	uction in Tille	d Soils (C6)	Saturation	Visible on Aerial Imagery (C9)
Water Steined Leaves (D0)	Thin Muck Surfac	ce (C7)		Shallow Aq	Juitard (D3)
Water-Stained Leaves (B9)	Other (Explain In	Remarks)		FAC-Neutra	al Test (D5)
Field Observations:		<i>"</i> , , , ,			
Surface Water Present? Yes I	vo X Depth	(inches):	<u> </u>		
VValer Lable Present? Yes I		(incries):	\	tland Uudralams D	sont? Voo No V
Galuidii Greenii (Galuidii Cherry Che	No X Depth	(Inchoo)	we	and nyurology Pre	
nicioues capillary IIIIge) Describe Recorded Data (stream dauge, monitor	No X Depth No X Depth	(inches):			
December Recorded Data (Stream gauge, monitor	No X Depth No X Depth		nspections)	if available:	
Remarks:	No X Depth No X Depth ing well, aerial photo	(inches):	nspections), i	if available:	

OMB Control #: 0710-xxxx, Exp: Pending Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

Project/Site: Badger Mountain Solar		City/Cou	inty: Dougla	s County	Sampling Date	e: <u>4/20/2(</u>	021
Applicant/Owner: Avangrid				State: WA	Sampling Poir	nt: WT-2	225
Investigator(s): Jessica Taylor/Katie Pyne/Sara Frank		Section,	Township, Ra	ange: Section 34, 23N,	21E		
Landform (hillside, terrace, etc.): Swale on gentle slop)e	Local relief	(concave. co	nvex. none): Concave	s	slope (%):	5
Subregion (LRR): LRR B Lat: 47 458279			Long: 1	20 197609	Datun	n: NAD8:	<u> </u>
Sail Man Linit Name: 70 Broadey Titabanal complex	to 15 parage		Long	20.107000	fination: DEM1A	I. NADOC	
Soli Map Unit Name. 70 Broadax- nichener complex, 3		11 (0				<u></u>	
Are climatic / hydrologic conditions on the site typical f	for this time o	f year?	Yes <u>x</u>	No (If no, ex	blain in Remarks.	.)	
Are Vegetation, Soil, or Hydrology	significantly	disturbed? A	Are "Normal (Circumstances" present?	Yes x	No	
Are Vegetation, Soil, or Hydrology	naturally pro	blematic? (If needed, ex	plain any answers in Re	marks.)		
SUMMARY OF FINDINGS – Attach site m	ap showir	ng samplin	g point lo	cations, transects	, important fe	atures, e	etc.
	-						
Hydrophytic Vegetation Present? Yes N	lo <u>x</u>	Is the	e Sampled A	rea			
Hydric Soil Present? Yes N	10 <u>x</u>	withi	n a Wetland	? Yes	<u>No x</u>		
Wetland Hydrology Present? Yes N	lo <u>X</u>						
Remarks:							
Site is located in slight swale between abandoned ho	use and outb	uildings. No h	ydrology was	observed onsite despite	erecent spring sn	low storm a	and
subsequent snow meit.							
VEGETATION – Use scientific names of p	olants.						
	Absolute	Dominant	Indicator				
Iree Stratum (Plot size:)	% Cover	Species?	Status	Dominance Test wo	rksheet:		
1	·			Number of Dominant	Species That	1 ((^)
2.					AC	((A)
3				Total Number of Dom	inant Species	2 ((B)
T	· · · · · · · · · · · · · · · · · · ·	-Total Cover		Across All Strata.		((U)
Sapling/Shrub Stratum (Plot size:)			Are OBL FACW or F	Species I nat	50.0% ((A/R
1.	/			,,,,,,,,		(
2.	·			Prevalence Index we	orksheet:		
3.	<u> </u>			Total % Cover o	f: M	ultiply by:	
4.				OBL species	0 x 1 =	0	
5.				FACW species 4	x 2 =	80	
		=Total Cover		FAC species	0 x 3 =	0	
Herb Stratum (Plot size: 5)				FACU species 1	0 x 4 =	40	
1. Agropyron cristatum	40	Yes	UPL	UPL species 4	x 5 =	200	
2. Phalaris arundinacea	40	Yes	FACW	Column Totals: 9	00 (A)	320 ((B)
3. Rosa woodsii	10	No	FACU	Prevalence Index	= B/A =3	.56	
4							
5				Hydrophytic Vegetat	ion Indicators:		
6				Dominance Test	is >50%		
7				Prevalence Index	is ≤3.0 ¹		
8				Morphological Ad	aptations ¹ (Provid	de supportir	ng
	90	=Total Cover		data in Remar	s or on a separa	te sheet)	
Woody Vine Stratum (Plot size:)			Problematic Hydr	ophytic Vegetatic	on' (Explain	1)
1				¹ Indicators of hydric s	oil and wetland h	ydrology m	ust
2				be present, unless dis	sturbed or probler	natic.	
		=Total Cover		Hydrophytic			

% Cover of Biotic Crust

0

Remarks:

% Bare Ground in Herb Stratum

10

No X

Vegetation

Yes

Present?

Depth	Matrix		Redo	x Featur	es				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
0-16	10YR 3/3	100					Silt Loam		
¹ Type: C=Co	oncentration, D=Dep	letion, RM=R	educed Matrix, C	S=Cove	ered or C	oated S	and Grains. ² Loc	ation: PL=Pore Lining, M=Matrix	K.
Hydric Soil	ndicators: (Applica	ble to all LR	Rs, unless othe	erwise n	oted.)		Indicato	rs for Problematic Hydric Soils	s ³ :
Histosol	(A1)		Sandy Red	dox (S5)			1 cm	I Muck (A9) (LRR C)	
Histic Ep	pipedon (A2)		Stripped N	latrix (Se	6)		2 cm	I Muck (A10) (LRR B)	
Black Hi	stic (A3)		Loamy Mu	cky Min	eral (F1)		Iron-	Manganese Masses (F12) (LRR	D)
Hydroge	n Sulfide (A4)		Loamy Gle	eyed Ma	trix (F2)		Redu	uced Vertic (F18)	
Stratified	Layers (A5) (LRR C	;)	Depleted M	Aatrix (F	3)		Red	Parent Material (F21)	
1 cm Mu	ck (A9) (LRR D)		Redox Dai	k Surfac	ce (F6)		Very	Shallow Dark Surface (F22)	
Depleted	Below Dark Surface	e (A11)	Depleted [Dark Sur	face (F7))	Othe	er (Explain in Remarks)	
Thick Da	ark Surface (A12)		Redox Dep	pression	s (F8)				
Sandy N	lucky Mineral (S1)	3							
Sandy G	ileyed Matrix (S4)	°Indicators	s of hydrophytic v	egetatio	n and we	etland hy	drology must be prese	ent, unless disturbed or problema	atic.
Restrictive I	_ayer (if observed):								
Type:			_						
Depth (ir	nches):		_				Hydric Soil Presen	t? Yes No	x
HYDROLO	GY								
Wetland Hy	drology Indicators:								
Primary India	cators (minimum of o	ne is require	d; check all that a	apply)			<u>Seconda</u>	ry Indicators (minimum of two re	quired)
Surface	Water (A1)		Salt Crust	(B11)			Wate	er Marks (B1) (Riverine)	
High Wa	iter Table (A2)		Biotic Crus	st (B12)	(Sedi	ment Deposits (B2) (Riverine)	
Saturatio	on (A3) orko (B1) (Nonriveri	no)		Vertebra	tes (B13))	Drift	Deposits (B3) (Riverine)	
	arks (DT) (Noriniven	ne) vriverine)		Sumue () Livina P	oots (C3) Druc	Season Water Table (C2)	
Orift Der	n Deposits (B2) (Nonriver	invernie)	Oxidized P				Crav	fish Burrows (C8)	
Dint Dep	Soil Cracks (B6)	iiie)	Recent Iro	n Reduc	tion in Ti	illed Soi	Clay	iration Visible on Aerial Imagery	(CQ)
Inundatio	on Visible on Aerial II	magery (B7)	Thin Muck	Surface	(C7)		Shal	low Aquitard (D3)	(00)
Water-S	tained Leaves (B9)	inagery (Br)	Other (Exc	plain in R	(en) Remarks)		FAC	-Neutral Test (D5)	
Field Obser	vations:				,				
Surface Wat	er Present? Ye	s	No X	Depth (i	nches):				
Water Table	Present? Ye	s		Depth (i	nches):				
Saturation P	resent? Ye	s	No X	Depth (i	nches):	<u> </u>	Wetland Hydrolo	gy Present? Yes No	ъ X
(includes cap	oillary fringe)				· -				
Describe Re	corded Data (stream	gauge, moni	itoring well, aeria	l photos	, previou	s inspec	tions), if available:		
Dent									
Remarks:									

OMB Control #: 0710-xxxx, Exp: Pending Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

See ERDO	C/EL TR-07	7-24; the prop	ponent	agency	/ is CE	ECW-0	CO-R	(Authority:	AR 335-15, p	baragrap	h 5-2a)	
Project/Site: Badger	Mountain So	lar			C	City/Cou	nty: Douglas	s County	Sampli	ng Date:	4/20/	/2021
Applicant/Owner:	Avangrid							State: WA	Sampli	ng Point:	WT	-226
Investigator(s): Jess	ica Taylor/Ka	tie Pyne/Sara Fr	rank		S	ection, T	Township, Ra	ange: Section 34, 2	3N, 21E			
Landform (hillside, te	errace, etc.):	Swale			Loca	al relief	(concave, co	nvex, none): concav	e	Slo	pe (%):	3
Subregion (LRR):	LRR B	Lat: 47.4582	279				Long: 12	20.197609		Datum:	NAD	83
Soil Map Unit Name	68 Broad	ax-Morrow-Spof	ford com	nplex, 3 to	o 8 perc	cent slop	pes	NWI cla	assification: P	PEM1A		
Are climatic / hydrolo	ogic condition	is on the site typ	ical for t	his time (of year	?	Yes X	No (If no	, explain in Re	emarks.)		
Are Vegetation	, Soil	, or Hydrology	sig	nificantly	disturb	ed? A	re "Normal C	Circumstances" pres	ent? Yes	X N	lo	
Are Vegetation	, Soil	, or Hydrology	nat	urally pro	blemat	tic? (lf needed, ex	plain any answers ir	Remarks.)			-
		- Attach site	o man	showi	na sa	mnlin	a noint lo	cations transe	rts imnort	ant foa	ituras	otc
			c map	5110 111	ing su	mpini	g point io		sto, import		tures,	, c.c.
Hydrophytic Vegeta	ation Present	? Yes	No	Х		Is the	e Sampled A	rea				
Hydric Soil Present	?	Yes	No	Х		withi	n a Wetland	? Yes_	No	Х		
Wetland Hydrology	Present?	Yes	No	X								
Remarks:	abt south bar					- NI- L.		- harmond a sector da				
subsequent snow n	ight swale bei nelt.	tween abandone	d house	and out	building	js. No h	ydrology was	observed onsite de	spite recent sp	pring sno	w storm	n and
			of alo									
VEGETATION -	Use sciel	ntific names	or pla	nts.	Dom	inant	Indiactor					
Tree Stratum	(Plot size:)		% Cover	Spe	cies?	Status	Dominance Test	worksheet:			
1.		^						Number of Domin	ant Species T	hat		
2.								Are OBL, FACW,	or FAC:		1	(A)
3								Total Number of D	Dominant Spe	cies		
4.					Tatal	Causar		Across All Strata:			2	_ ^(B)
Sanling/Shrub Strat	tum (P	llot size.) —		=10tai	Cover		Percent of Domina	ant Species T	hat 5	0.0%	(Δ/B)
<u>Saping/Shitb Strai</u> 1.	<u>tum</u> (i	101 3126.)					Ale OBE, I AOW,	orrad.		0.078	_(\\\\D)
2.								Prevalence Index	worksheet:			
3.								Total % Cov	er of:	Mul	tiply by:	:
4.								OBL species	0 x	:1=	0	-
5								FACW species	50 x	2 =	100	_
		- 、	_		=Total	Cover		FAC species	<u>0</u> x	3 =	0	-
Herb Stratum	(Plot size:)		50	Ň	(aa		FACU species	<u> </u>	4 = <u> </u>	0	-
2 Phalaris arundi	nacea			50	- <u> </u>	(es	FACW	Column Totals:	100 (A)	. 5 =	350	(B)
3.				00	·'		17.000	Prevalence Inc	Iex = B/A =	3.5	0	_(2)
4.										210		-
5.								Hydrophytic Veg	etation Indica	ators:		
6.								Dominance T	est is >50%			
7								Prevalence Ir	ldex is ≤3.0 ¹			
8.					·			Morphologica	I Adaptations ¹	(Provide	suppor	rting
			、 –	100	=Total	Cover		data in Rer	harks or on a	separate	sneet)	
vvoody vine Stratui	<u>m</u> (P)					Problematic F	iyaropnytic Ve	egetation	(Expla	ain)

=Total Cover

% Cover of Biotic Crust

Hydrophytic Vegetation Present? Yes No

Remarks:

2.

% Bare Ground in Herb Stratum

0

Х

•			Redo	x realur						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-16	10YR 3/3	100			. <u> </u>		Loamy/Claye	/	Silt Loam	
		<u> </u>								
Type: C=Cor	centration, D=Deplet	tion, RM=R	educed Matrix, C	S=Cove	red or Co	oated Sa	and Grains.	Location: PL=P	ore Lining, M=	Matrix.
lydric Soil In	dicators: (Applicab	le to all LR	Rs, unless othe	rwise n	oted.)		Indic	ators for Probl	ematic Hydric	Soils':
Histosol (/	A1)		Sandy Rec	lox (S5)			1	cm Muck (A9)	(LRR C)	
Histic Epi	pedon (A2)		Stripped M	latrix (Se	5)		2	2 cm Muck (A10)) (LRR B)	
Black Hist	ic (A3)		Loamy Mu	cky Mine	eral (F1)		'	ron-Manganese	Masses (F12)	(LRR D)
Hydrogen	Sulfide (A4)		Loamy Gle	yed Mat	rix (F2)		!	Reduced Vertic ((F18)	
Stratified				Matrix (F:	3)		!	Red Parent Mate	erial (F21)	-
1 cm Muc	k (A9) (LRR D)	()	Redox Dar	k Surfac	;e(⊢6))	/ery Shallow Da	rk Surface (F2	2)
Depleted	Below Dark Surface ((A11)	Depleted L	Jark Sur	face (F7)			Other (Explain in	Remarks)	
	K Surface (A12)			pression	S (F8)					
Sandy Iviu	CKy Mineral (ST)	³ Indicators	of hydrophytic y	vogotatio	n and wa	tland by	drology must be r	vrosont unloss c	licturbod or pro	blomatic
		maioatore		Getation		alana ny				biematie.
loctrictive L e	war (if abcarvad)									
Type:	ayer (if observed):									
Type: Depth (inc	ayer (if observed): hes):		_ 				Hydric Soil Pre	sent?	Yes	No
Type: Depth (inc	ayer (if observed):						Hydric Soil Pre	sent?	Yes	No
Type: Depth (inc	ayer (if observed): hes):						Hydric Soil Pre	sent?	Yes	No
YDROLOC	ayer (if observed): hes): 3Y ology Indicators:						Hydric Soil Pre	sent?	Yes	No
YDROLOC Vetland Hydr	ayer (if observed): :hes): SY :ology Indicators: ttors (minimum of one	<u>e is require</u>	d; check all that a	apply)			Hydric Soil Pre	sent?	Yes	No
Type: Depth (inc Remarks: YDROLOC Vetland Hydr Primary Indica Surface W	ayer (if observed): thes): SY rology Indicators: ttors (minimum of one /ater (A1)	<u>e is require</u>		<u>apply)</u> (B11)			Hydric Soil Pre	sent? ondary Indicators Water Marks (B1	Yes s (minimum of :	No
Type: Depth (inc emarks: YDROLOC Vetland Hydr rimary Indica Surface W High Wate	ayer (if observed): thes): SY SY rology Indicators: itors (minimum of one /ater (A1) F Table (A2)	<u>e is require</u>	d; check all that a Salt Crust Biotic Crust	арріу) (В11) зі (В12)			Hydric Soil Pre	sent? Indary Indicators Water Marks (B1 Sediment Depos	Yes s (minimum of - 1) (Riverine) iits (B2) (River	No
	Ayer (if observed): thes): SY 'ology Indicators: ttors (minimum of one /ater (A1) Table (A2) (A3)	<u>e is require</u>	d; check all that a Salt Crust Biotic Crus	apply) (B11) st (B12) vertebrat	es (B13)		Hydric Soil Pre	sent? Indary Indicators Water Marks (B1 Sediment Depos Drift Deposits (B	Yes s (minimum of : 1) (Riverine) sits (B2) (River 3) (Riverine)	No wo requir
	ayer (if observed): ches):	<u>e is require</u>	d; check all that a Salt Crust Biotic Crus Aquatic Inv Hydrogen	apply) (B11) st (B12) vertebrat Sulfide C	es (B13) Ddor (C1)		Hydric Soil Pre	sent? ondary Indicators Water Marks (B1 Sediment Depos Drift Deposits (B Drainage Pattern	Yes <u>s (minimum of -</u>) (Riverine) its (B2) (River 3) (Riverine) ns (B10)	No wo requir
Type: Depth (inc Remarks: Primary Indica Surface W High Wate Saturatior Water Ma Sediment	ayer (if observed): ches):	e is require e) iverine)	d: check all that a Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R	apply) (B11) st (B12) vertebrat Sulfide C thizosph	es (B13) Ddor (C1) eres on L) iving R0	Hydric Soil Pre Secc	sent? ondary Indicators Water Marks (B1 Sediment Depos Drift Deposits (B Drainage Patterr Dry-Season Wat	Yes (minimum of r (Riverine) (Riverine) (Riverine) (B10) (B10) (er Table (C2)	No
Appendix Control Contro Control Control Control Control Control Control Control Control C	ayer (if observed): ches):	e) iverine) ie)	d; check all that a Salt Crust Biotic Crust Aquatic Im Hydrogen Oxidized R Presence o	apply) (B11) st (B12) vertebrat Sulfide C thizosph of Reduc	eres (B13) Ddor (C1) eres on I ced Iron () _iving R(Hydric Soil Pre Secc	sent? ondary Indicators Water Marks (B1 Sediment Depos Drift Deposits (B Drainage Patterr Dry-Season Wat Crayfish Burrows	Yes (minimum of r (Riverine)	No
Appendix Control Contro Control Control Control Control Control Control Control Control C	ayer (if observed): ches):	e is require e) iverine) ie)	d; check all that a Salt Crust Biotic Crust Aquatic Inv Hydrogen a Oxidized R Presence o Recent Iro	apply) (B11) st (B12) vertebrat Sulfide C thizosph of Reduc n Reduc	es (B13) Ddor (C1) eres on L ced Iron (tion in Ti) _iving Rd (C4) Iled Soil	Hydric Soil Pre Secc Secc Secc Secc Secc Secc Secc Secc Secc Secc	sent? andary Indicators Water Marks (B1 Sediment Depos Drift Deposits (B Drainage Patterr Dry-Season Wat Crayfish Burrows Saturation Visible	Yes (minimum of : (Riverine)	No wo requir
Appendix Control Contro Control Control Control Control Control Control Control Control C	ayer (if observed): ches):	e is require e) iverine) ie) agery (B7)	d; check all that a Salt Crust Biotic Crus Aquatic Inv Hydrogen Oxidized R Presence o Recent Iro Thin Muck	apply) (B11) st (B12) vertebrat Sulfide C thizosph of Reduc n Reduc Surface	ees (B13) Ddor (C1) eres on I ced Iron (tion in Ti (C7)) _iving Rư (C4) Iled Soil	Hydric Soil Pre Secc	sent? Indary Indicators Water Marks (B1 Sediment Depos Drift Deposits (B Drainage Patterr Dry-Season Wat Crayfish Burrows Saturation Visible Shallow Aquitard	Yes <u>s (minimum of -</u>) (Riverine) sits (B2) (River 3) (Riverine) ns (B10) ter Table (C2) s (C8) e on Aerial Ima 4 (D3)	No wo requir ine)
	ayer (if observed): ches): SY rology Indicators: ttors (minimum of one /ater (A1) >r Table (A2) 1 (A3) rks (B1) (Nonriverine oilsits (B3) (Nonriverine oil Cracks (B6) 1 Visible on Aerial Ima- ined Leaves (B9)	e is require e) iverine) ie) agery (B7)	d: check all that a Salt Crust Biotic Crus Aquatic Im Hydrogen Oxidized R Presence o Recent Iro Thin Muck Other (Exp	apply) (B11) st (B12) vertebrat Sulfide C thizosph of Reduc n Reduc Surface slain in R	res (B13) Ddor (C1) eres on L ced Iron (tion in Ti (C7) eremarks)) Living Ro (C4) Iled Soil	Hydric Soil Pre Secc	sent? Indary Indicators Water Marks (B1 Sediment Depos Drift Deposits (B Drainage Patterr Dry-Season Wat Crayfish Burrows Saturation Visible Shallow Aquitard FAC-Neutral Tes	Yes (minimum of 1) (Riverine	No wo requir ine)
Appendix a section of the secti	ayer (if observed): ches): Trology Indicators: ttors (minimum of one /ater (A1) er Table (A2) (A3) rks (B1) (Nonriverine Deposits (B2) (Nonriverine oil Cracks (B6) N Visible on Aerial Ima- ined Leaves (B9) ations:	e is require iverine) ie) agery (B7)	d; check all that a Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence o Recent Iro Thin Muck Other (Exp	apply) (B11) st (B12) vertebrat Sulfide C thizosph of Reduc n Reduc Surface slain in R	ees (B13) Ddor (C1) eres on L ced Iron (tion in Ti (C7) eemarks)) _iving Ri (C4) Iled Soil	Hydric Soil Pre Secc	sent? Indary Indicators Vater Marks (B1 Sediment Depos Drift Deposits (B Drainage Patterr Dry-Season Wat Crayfish Burrows Saturation Visible Shallow Aquitard FAC-Neutral Tes	Yes (minimum of : (Riverine)	No wo requir ine)
Appendix a second	ayer (if observed): ches): ches): GY rology Indicators: ators (minimum of one) /ater (A1) ar Table (A2) i (A3) rks (B1) (Nonriverine) oil Cracks (B2) (Nonriverine) oil Cracks (B6) i Visible on Aerial Imagined Leaves (B9) ations: r Present? Yes	e) iverine) ne) agery (B7)	d; check all that a Salt Crust Biotic Crus Aquatic Inv Hydrogen Oxidized R Presence o Recent Iro Thin Muck Other (Exp No X	apply) (B11) st (B12) vertebrat Sulfide (thizosph of Reduc n Reduc Surface plain in R Depth (ii	ees (B13) Door (C1) eres on L ced Iron (tion in Ti (C7) eemarks) cemarks):) _iving Rd (C4) Iled Soil	Hydric Soil Pre	sent? Indary Indicators Water Marks (B1 Sediment Depos Drift Deposits (B Drainage Patterr Dry-Season Wat Crayfish Burrows Saturation Visible Shallow Aquitard FAC-Neutral Tes	Yes <u>s (minimum of 1</u>) (Riverine) its (B2) (River 3) (Riverine) ns (B10) ter Table (C2) s (C8) e on Aerial Ima 4 (D3) st (D5)	No wo requir ine)
Appendix and a second sec	Ayer (if observed): ches): Ches): Tology Indicators: ators (minimum of one /ater (A1) Pr Table (A2) (A3) rks (B1) (Nonrivering oil Cracks (B6) N Visible on Aerial Ima- ined Leaves (B9) ations: r Present? Yes Yes	e) iverine) ie) agery (B7)	d; check all that a Salt Crust Biotic Crus Aquatic Inv Hydrogen Oxidized R Presence o Recent Iro Thin Muck Other (Exp No X No X	apply) (B11) st (B12) vertebrat Sulfide C hizosph of Reduc Surface blain in R Depth (ii Depth (ii	ees (B13) Ddor (C1) eres on I ced Iron (tion in Ti (C7) emarks) nches):) _iving Rư (C4) Iled Soil	Hydric Soil Pre	sent? Indary Indicators Water Marks (B1 Sediment Depos Drift Deposits (B Drainage Patterr Dry-Season Wat Crayfish Burrows Saturation Visible Shallow Aquitard FAC-Neutral Tes	Yes <u>s (minimum of 1</u>) (Riverine) itis (B2) (River 3) (Riverine) ns (B10) ter Table (C2) s (C8) e on Aerial Ima 4 (D3) st (D5)	No
	ayer (if observed): ches): SY rology Indicators: ators (minimum of one /ater (A1) er Table (A2) i (A3) rks (B1) (Nonriverine oil Cracks (B2) (Nonriverine oil Cracks (B3) i Visible on Aerial Ima- ined Leaves (B9) ations: r Present? Yes isent? Yes	e) iverine) ie) agery (B7)	d: check all that a Salt Crust Biotic Crus Aquatic Im Hydrogen Oxidized R Presence o Recent Iro Thin Muck Other (Exp No X No X No X	apply) (B11) st (B12) vertebrat Sulfide C hizosph of Reduc n Reduc Surface blain in R Depth (ii Depth (ii	res (B13) Ddor (C1) eres on l ced Iron (tion in Ti (C7) remarks) nches): _ nches): _ nches): _) _iving Re (C4) Iled Soil	Hydric Soil Pre	sent? Indary Indicators Water Marks (B1 Sediment Depos Drift Deposits (B Drainage Patterr Dry-Season Wat Crayfish Burrows Saturation Visible Shallow Aquitard FAC-Neutral Tes Trology Present?	Yes (minimum of ' (Riverine) (Riverine) (Riverine) (B10) (Riverine) (B10) (Riverine) (B10) (C2) (C3) (C3) e on Aerial Ima (D3) (D3) et (D5) Yes	No
Restrictive La Type: Depth (inc Remarks: YDROLOC Vetland Hydn Primary Indica Surface W High Water Saturation Water Ma Sediment Drift Depo Surface S Inundation Water-Sta Surface Water Surface Water Surface Water Surface S Inundation Water Table F Saturation Pre-	ayer (if observed): ches): Trology Indicators: ators (minimum of one vater (A1) er Table (A2) (A3) rks (B1) (Nonriverine oil Cracks (B2) (Nonriverine oil Cracks (B6) n Visible on Aerial Ima- ined Leaves (B9) ations: r Present? Yes isent? Yes isent? Yes isent? Yes isent? Yes	e is require iverine) iverine) agery (B7)	d; check all that a Salt Crust Biotic Crust Aquatic Inv Hydrogen Oxidized R Presence o Recent Iro Thin Muck Other (Exp No X No X No X	apply) (B11) st (B12) vertebrat Sulfide C hizosph of Reduc n Reduc Surface blain in R Depth (in Depth (in	ees (B13) Ddor (C1) eres on I ced Iron (tion in Ti (C7) eemarks) nches):) _iving R((C4) Iled Soil	Hydric Soil Pre	sent? Indary Indicators Vater Marks (B1 Sediment Depos Drift Deposits (B Drainage Patterr Dry-Season Wat Crayfish Burrows Saturation Visible Shallow Aquitard FAC-Neutral Tes rology Present?	Yes (minimum of r (Riverine)	No
Restrictive La Type: Depth (inc Remarks: YDROLOC Vetland Hydr Primary Indica Surface W High Water Saturation Water Ma Sediment Drift Depo Surface S Inundation Water Table F Saturation Pre- Gaturation Pre- Diff Deport Surface Water Doescribe Record	ayer (if observed): ches): ches): ators (minimum of one vators (minimum o	e is require iverine) ne) agery (B7)	d; check all that a Salt Crust Biotic Crus Aquatic Inv Hydrogen Oxidized R Presence o Recent Iro Thin Muck Other (Exp No X No X No X No X No X	apply) (B11) st (B12) vertebrat Sulfide (thizosph of Reduc n Reduc Surface blain in R Depth (in Depth (in Depth (in Depth (in I photos,	ees (B13) Door (C1) eres on I ced Iron (tion in Ti (C7) emarks): nches): nches): nches):) _iving Rd (C4) Iled Soil	Hydric Soil Pre	sent? Indary Indicators Nater Marks (B1 Sediment Depos Drift Deposits (B Drainage Patterr Dry-Season Wat Crayfish Burrows Saturation Visible Shallow Aquitard FAC-Neutral Tes rology Present?	Yes s (minimum of :) (Riverine) its (B2) (River 3) (Riverine) ns (B10) er Table (C2) s (C8) e on Aerial Ima d (D3) st (D5) ? Yes	No

OMB Control #: 0710-xxxx, Exp: Pending Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)

Project/Site: Badger	Mountain Solar			С	ity/Cou	nty: Douglas	s County			Sampling E	Date: 4/20	0/2021
Applicant/Owner:	Avangrid						Sta	te: W	/A S	ampling P	oint: W	T-227
Investigator(s): Jess	ica Taylor/Katie	Pyne/Sara Franl	k	Se	ection, T	ownship, Ra	ange: 231	N, 21E, 3	34			
Landform (hillside, to	errace, etc.): Sw	/ale		Loca	l relief (concave, co	nvex, non	e): conca	ave		Slope (%): 3
Subregion (LRR):	LRR B	Lat: 47.458279)			Long: 1	20.197609)		Da	tum: NAI	D83
Soil Map Unit Name	: 68 Broadax-Mo	orrow-Spofford c	omplex, 3 to 8	percen	t slopes	6		NWI	classificat	ion: PEM	1A	
Are climatic / hydrol	ogic conditions o	on the site typica	I for this time c	f year?		Yes X	No	(lf r	no, explair	n in Remai	·ks.)	
Are Vegetation	, Soil, o	r Hydrology	significantly	disturb	ed? A	re "Normal C	Circumstar	nces" pre	esent?	Yes X	No	
Are Vegetation	, Soil , o	r Hydrology	naturally pro	blemat	ic? (I	f needed, ex	cplain any	answers	in Remar	ks.)		
SUMMARY OF	FINDINGS -	Attach site r	nap showir	ng sai	mpling	g point lo	cations	, trans	ects, in	portant	features	s, etc.
Hydrophytic Vegeta Hydric Soil Present Wetland Hydrology Remarks:	ation Present? t? r Present?	Yes X Yes Yes	No No X No X		ls the withi	Sampled A n a Wetland	Area ?	Yes		No <u>X</u>	-	
Site is located in sl subsequent snow r	ight swale betwe nelt.	en abandoned h	ouse and outb	uilding	s. No hy	/drology was	s observed	l onsite c	lespite red	cent spring	snow stor	m and
VEGETATION -	- Use scienti	fic names of	plants.									
Tree Stratum	(Plot size:)	Absolute % Cover	Dom Spec	inant cies?	Indicator Status	Domina	ance Te	st worksł	neet:		
1 2							Numbe Are OB	r of Dom L, FACV	inant Spe √, or FAC	cies That	1	(A)
3. 4.							Total N Across	umber of All Strata	f Dominar a:	nt Species	1	(B)
Sapling/Shrub Stra	<u>tum</u> (Plot	size:	_)	=Total	Cover		Percent Are OB	t of Dom L, FACV	inant Spe V, or FAC	cies That :	100.0%	_(A/B)
2.							Prevale	ence Ind	ex works	heet:		
3.							Тс	tal % Co	over of:		Multiply b	y:
4.							OBL sp	ecies	0	x 1 =	0	
5.							FACW	species	95	x 2 =	190	
				=Total	Cover		FAC sp	ecies	0	x 3 =	0	
Herb Stratum	(Plot size:	5_)					FACU s	species	0	x 4 =	0	
1. Phalaris arundi	nacea		95	Y	es	FACW	UPL sp	ecies	0	x 5 =	0	_
2.							Column	Totals:	95	(A)	190	(B)
3							Prev	alence I	ndex = B	/A =	2.00	_
4												
5.							Hydrop	hytic Ve	egetation	Indicator	s:	
6.							X Doi	minance	Test is >	50%		
7							Pre	valence	Index is ≤	\$3.0 [']		
8			95	=Total	Cover		Mo	rphologic data in R	cal Adapta emarks o	ations' (Pro r on a sepa	ovide suppo arate sheet)
Woody Vine Stratu	<u>m</u> (Plot	size:)				Pro	blematic	: Hydroph	ytic Veget	ation ¹ (Expl	lain)
1. 2.							¹ Indicat be pres	ors of hy ent, unle	vdric soil a	nd wetlan	d hydrology plematic.	/ must
				=Total	Cover		Lister	.,				
% Bare Ground in I	Herb Stratum	5 %	6 Cover of Biot	ic Crus	t		Vegeta Presen	tion t?	Yes X	No		

Remarks:

· ·	Matrix	Redox	k Feature	es			
(inches)	Color (moist) %	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-16	10YR 3/3 100					Silt Loam	
<u> </u>							
1						10 : 2	
Type: C=Con	centration, D=Depletion, RM=	Reduced Matrix, C	S=Cove	red or Co	oated S	and Grains.	Location: PL=Pore Lining, M=Matrix.
Hydric Soil Ind	dicators: (Applicable to all L	RRs, unless othe	rwise n	oted.)		Indica	ators for Problematic Hydric Soils":
Histosol (A	(1)	Sandy Rec	10x (S5)			1	
Histic Epip	edon (A2)	Stripped M	atrix (S6	5)		2	cm Muck (A10) (LRR B)
Black Histi	c (A3)	Loamy Mu	cky Mine	eral (F1)		Ir	on-Manganese Masses (F12) (LRR D)
Hydrogen	Sulfide (A4)	Loamy Gle	yed Mat	rix (F2)		R	educed Vertic (F18)
Stratified L	ayers (A5) (LRR C)	Depleted N	/latrix (F:	3)		R	ed Parent Material (F21)
1 cm Muck	(A9) (LRR D)	Redox Dar	k Surfac	e (F6)		V	ery Shallow Dark Surface (F22)
Depleted E	Below Dark Surface (A11)	Depleted D	Dark Sur	ace (F7)		0	other (Explain in Remarks)
Thick Dark	Surface (A12)	Redox Dep	pressions	s (F8)			
Sandy Muc	cky Mineral (S1)						
Sandy Gle	yed Matrix (S4) Indicato	rs of hydrophytic v	egetation	n and we	tland hy	/drology must be pi	resent, unless disturbed or problematic.
Restrictive La	yer (if observed):						
Туре:							
Depth (incl	hes):					Hydric Soil Pres	sent? Yes <u>No X</u>
HYDROLOG	Υ						
HYDROLOG Wetland Hydro	Y ology Indicators:						
HYDROLOG Wetland Hydro Primary Indicat	TY ology Indicators: tors (minimum of one is requir	ed; check all that a	apply)			Secor	ndary Indicators (minimum of two required
HYDROLOG Wetland Hydro Primary Indicat Surface W	Y ology Indicators: tors (minimum of one is requir ater (A1)	ed; check all that a	apply) (B11)				ndary Indicators (minimum of two required /ater Marks (B1) (Riverine)
HYDROLOG Wetland Hydro Primary Indicat Surface W High Wate	Y ology Indicators: tors (minimum of one is requir ater (A1) r Table (A2)	ed; check all that a Salt Crust Biotic Crus	apply) (B11) it (B12)			S	<u>ndary Indicators (minimum of two required</u> /ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine)
HYDROLOG Wetland Hydro Primary Indicat Surface W High Wate Saturation	blogy Indicators: tors (minimum of one is requir ater (A1) r Table (A2) (A3)	<u>ed; check all that a</u> Salt Crust Biotic Crus Aquatic Inv	apply) (B11) it (B12) vertebrat	es (B13)		S % S D	<u>ndary Indicators (minimum of two required</u> /ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rift Deposits (B3) (Riverine)
HYDROLOG Wetland Hydro Primary Indicat Surface W High Wate Saturation Water Mar	blogy Indicators: tors (minimum of one is requir ater (A1) r Table (A2) (A3) ks (B1) (Nonriverine)	ed; check all that a Salt Crust Biotic Crus Aquatic Inv Hydrogen S	apply) (B11) tt (B12) vertebrat Sulfide C	es (B13) Ddor (C1))	<u>Secor</u> W S D D	ndary Indicators (minimum of two required /ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rrift Deposits (B3) (Riverine) rrainage Patterns (B10)
HYDROLOG Wetland Hydro Primary Indicat Surface W High Wate Saturation Water Mar Sediment I	SY ology Indicators: tors (minimum of one is requir ater (A1) r Table (A2) (A3) ks (B1) (Nonriverine) Deposits (B2) (Nonriverine)	ed; check all that a Salt Crust Biotic Crus Aquatic Inv Hydrogen S	apply) (B11) t (B12) vertebrat Sulfide C hizosph	es (B13) Ddor (C1) eres on L) _iving R	Secor W S D D D D D D	ndary Indicators (minimum of two required /ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rrift Deposits (B3) (Riverine) rrainage Patterns (B10) rry-Season Water Table (C2)
HYDROLOG Wetland Hydro Primary Indicat Surface W High Wate Saturation Water Mar Sediment I Drift Depos	blogy Indicators: tors (minimum of one is requir ater (A1) r Table (A2) (A3) ks (B1) (Nonriverine) Deposits (B2) (Nonriverine) sits (B3) (Nonriverine)	ed; check all that a Salt Crust Biotic Crus Aquatic Inv Hydrogen 3 Oxidized R Presence o	apply) (B11) It (B12) vertebrat Sulfide C Ihizosph of Reduc	es (B13) Odor (C1) eres on I æd Iron () _iving R [C4)	<u>Secor</u> W S D D D D D C	ndary Indicators (minimum of two required /ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) Irift Deposits (B3) (Riverine) Irainage Patterns (B10) Iry-Season Water Table (C2) Irayfish Burrows (C8)
HYDROLOG Wetland Hydro Primary Indicat Surface W High Wate Saturation Water Mar Sediment I Drift Depos Surface So	blogy Indicators: tors (minimum of one is requir ater (A1) r Table (A2) (A3) ks (B1) (Nonriverine) Deposits (B2) (Nonriverine) sits (B3) (Nonriverine) bil Cracks (B6)	ed; check all that a Salt Crust Biotic Crus Aquatic Inv Hydrogen 3 Oxidized R Presence o Recent Iro	apply) (B11) tr (B12) vertebrat Sulfide C hizosph of Reduc n Reduc	es (B13) Ddor (C1) eres on L ered Iron (tion in Ti) _iving R (C4) Iled Soi	Second	ndary Indicators (minimum of two required Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) wrift Deposits (B3) (Riverine) Prainage Patterns (B10) wry-Season Water Table (C2) erayfish Burrows (C8) aturation Visible on Aerial Imagery (C9)
HYDROLOG Wetland Hydro Primary Indicat Surface W High Wate Saturation Water Mar Sediment I Drift Depos Surface So Inundation	blogy Indicators: tors (minimum of one is requir ater (A1) r Table (A2) (A3) ks (B1) (Nonriverine) Deposits (B2) (Nonriverine) sits (B3) (Nonriverine) bil Cracks (B6) Visible on Aerial Imagery (B7	ed; check all that a Salt Crust Biotic Crus Aquatic Inv Hydrogen S Oxidized R Presence o Recent Iron)Thin Muck	apply) (B11) it (B12) vertebrat Sulfide C hizosph of Reduc n Reduc Surface	es (B13) Ddor (C1) eres on I æd Iron (tion in Ti (C7)) _iving R (C4) Iled Soi	<u>Secor</u> W S D D D D D	ndary Indicators (minimum of two required Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) Irift Deposits (B3) (Riverine) Irainage Patterns (B10) Iry-Season Water Table (C2) Irayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3)
HYDROLOG Wetland Hydro Primary Indicat Surface W High Wate Saturation Water Mar Sediment I Drift Depos Surface So Inundation Water-Stai	blogy Indicators: tors (minimum of one is requir ater (A1) r Table (A2) (A3) ks (B1) (Nonriverine) Deposits (B2) (Nonriverine) sits (B3) (Nonriverine) bil Cracks (B6) Visible on Aerial Imagery (B7 ned Leaves (B9)	ed; check all that a Salt Crust Biotic Crus Aquatic Inv Hydrogen 3 Oxidized R Presence 0 Recent Iron) Thin Muck Other (Exp	apply) (B11) (B12) vertebrat Sulfide C hizospho of Reduc on Reduc Surface lain in R	es (B13) Ddor (C1) eres on I ced Iron (tion in Ti (C7) emarks)) ∟iving R (C4) Iled Soi	Secor S D D D D D D D D D D D D D D D D D S D S S D D S S S D S 	ndary Indicators (minimum of two required /ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) Irift Deposits (B3) (Riverine) Irainage Patterns (B10) Iry-Season Water Table (C2) Irayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5)
HYDROLOG Wetland Hydro Primary Indicat Surface W High Wate Saturation Water Mar Sediment I Drift Depos Surface So Inundation Water-Stai	blogy Indicators: tors (minimum of one is requir ater (A1) r Table (A2) (A3) ks (B1) (Nonriverine) Deposits (B2) (Nonriverine) sits (B3) (Nonriverine) bil Cracks (B6) Visible on Aerial Imagery (B7 ned Leaves (B9) tions:	ed; check all that a Salt Crust Biotic Crus Aquatic Inv Hydrogen Oxidized R Presence o Recent Iron) Thin Muck Other (Exp	apply) (B11) ertebrat Sulfide C hizospho of Reduc n Reduc Surface lain in R	es (B13) Ddor (C1) eres on L æd Iron (tion in Ti (C7) emarks)) _iving R (C4) Iled Soi	Secor W S D S D D S S S S D S S S S S S S S S S S S S S D S S D S D D D S D D D S 	ndary Indicators (minimum of two required /ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rrift Deposits (B3) (Riverine) rrainage Patterns (B10) rry-Season Water Table (C2) rrayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5)
HYDROLOG Wetland Hydro Primary Indicat Surface W High Wate Saturation Water Mar Sediment I Drift Depos Surface So Inundation Water-Stai Field Observa Surface Water	Y ology Indicators: tors (minimum of one is requir ater (A1) r Table (A2) (A3) ks (B1) (Nonriverine) Deposits (B2) (Nonriverine) sits (B3) (Nonriverine) bil Cracks (B6) Visible on Aerial Imagery (B7 ned Leaves (B9) tions: Present? Yes	ed; check all that a Salt Crust Biotic Crust Aquatic Inv Hydrogen 3 Oxidized R Presence o Recent Iron) Thin Muck Other (Exp	apply) (B11) (B12) vertebrat Sulfide C chizospho of Reduc n Reduc Surface lain in R	es (B13) Odor (C1) eres on L æd Iron (tion in Ti (C7) emarks)) _iving R [C4) Iled Soi	<u>Secor</u> W S D S	ndary Indicators (minimum of two required Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rrift Deposits (B3) (Riverine) rrainage Patterns (B10) rry-Season Water Table (C2) rrayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5)
HYDROLOG Wetland Hydro Primary Indicat Surface W High Wate Saturation Water Mar Sediment I Drift Depos Surface So Inundation Water-Stai Field Observa Surface Water Water Table Po	ater (A1) r Table (A2) (A3) ks (B1) (Nonriverine) Deposits (B2) (Nonriverine) bil Cracks (B6) Visible on Aerial Imagery (B7) visible on Aerial Imagery (B7) ned Leaves (B9) tions: Present? Yes Yes	ed; check all that a Salt Crust Biotic Crus Aquatic Inv Hydrogen 3 Oxidized R Presence o Recent Iro Thin Muck Other (Exp No X	apply) (B11) (B12) vertebrat Sulfide C hizospho of Reduc n Reduc Surface lain in R Depth (in Depth (in	es (B13) Ddor (C1) eres on L eed Iron (tion in Ti (C7) emarks) nches): _ nches):) _iving R (C4) Iled Soi	Second W S D D D S	ndary Indicators (minimum of two required Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) wrift Deposits (B3) (Riverine) wrainage Patterns (B10) wry-Season Water Table (C2) wrayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5)
HYDROLOG Wetland Hydro Primary Indicat Surface W High Wate Saturation Water Mar Sediment I Drift Depos Surface So Inundation Water-Stai Field Observa Surface Water Water Table Prosection Saturation Press	iY ology Indicators: tors (minimum of one is requir ater (A1) r Table (A2) (A3) ks (B1) (Nonriverine) Deposits (B2) (Nonriverine) sits (B3) (Nonriverine) bil Cracks (B6) Visible on Aerial Imagery (B7 ned Leaves (B9) tions: Present? Yes resent? Yes sent? Yes	ed; check all that a Salt Crust Biotic Crus Aquatic Inv Hydrogen 3 Oxidized R Presence o Recent Iron Thin Muck Other (Exp No X No X No X	apply) (B11) (B12) vertebrat Sulfide C hizosph of Reduc n Reduc Surface lain in R Depth (ir Depth (ir Depth (ir	es (B13) Ddor (C1) eres on l æd Iron (tion in Ti (C7) emarks) nches): _ nches): _ nches):) _iving R (C4) Iled Soi	Second	ndary Indicators (minimum of two required Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) rrift Deposits (B3) (Riverine) rrainage Patterns (B10) rry-Season Water Table (C2) rrayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5)
HYDROLOG Wetland Hydro Primary Indicat Surface W High Wate Saturation Water Mar Sediment I Drift Depos Surface So Inundation Water-Stai Field Observa Surface Water Water Table Pro Saturation Press (includes capill	iY ology Indicators: tors (minimum of one is requir ater (A1) r Table (A2) (A3) ks (B1) (Nonriverine) Deposits (B2) (Nonriverine) sits (B3) (Nonriverine) oil Cracks (B6) Visible on Aerial Imagery (B7 ned Leaves (B9) tions: Present? Yes resent? Yes sent? Yes ary fringe)	ed; check all that a Salt Crust Aquatic Inv Hydrogen 3 Oxidized R Presence o Recent Iron Thin Muck Other (Exp No X No X No X	apply) (B11) (B12) vertebrat Sulfide C hizospho of Reduc n Reduc Surface lain in R Depth (in Depth (in Depth (in	es (B13) Ddor (C1) eres on I ced Iron (tion in Ti (C7) emarks) nches): nches):) _iving R (C4) Iled Soi	Second	hdary Indicators (minimum of two required /ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) Irift Deposits (B3) (Riverine) Irianage Patterns (B10) Iry-Season Water Table (C2) Irayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5) blogy Present? Yes NoX
HYDROLOG Wetland Hydro Primary Indicat Surface W High Wate Saturation Water Mar Sediment I Drift Depos Surface So Inundation Water-Stai Field Observa Surface Water Water Table Prisaturation Press (includes capill Describe Reco	air Y cology Indicators: tors (minimum of one is requir ater (A1) r Table (A2) (A3) ks (B1) (Nonriverine) Deposits (B2) (Nonriverine) sits (B3) (Nonriverine) bil Cracks (B6) Visible on Aerial Imagery (B7 ned Leaves (B9) tions: Present? Yes sent? Yes ary fringe) rded Data (stream gauge, mo	ed; check all that a Salt Crust Biotic Crus Aquatic Inv Hydrogen 3 Oxidized R Presence o Recent Iron Thin Muck Other (Exp No X No X No X No X	apply) (B11) (B12) vertebrat Sulfide C chizosph of Reduc n Reduc Surface lain in R Depth (in Depth (in Depth (in	es (B13) Ddor (C1) eres on I ered Iron (tion in Ti (C7) emarks)) _iving R (C4) Iled Soi	Second	ndary Indicators (minimum of two required /ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) Irift Deposits (B3) (Riverine) Irianage Patterns (B10) Iry-Season Water Table (C2) Irayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5) ology Present? Yes NoX
HYDROLOG Wetland Hydr Primary Indicat Surface W High Wate Saturation Water Mar Sediment I Drift Depos Surface So Inundation Water-Stai Field Observa Surface Water Water Table Pr Saturation Pres (includes capill Describe Reco	SY ology Indicators: tors (minimum of one is requir ater (A1) r Table (A2) (A3) ks (B1) (Nonriverine) Deposits (B2) (Nonriverine) sits (B3) (Nonriverine) bil Cracks (B6) Visible on Aerial Imagery (B7 ned Leaves (B9) tions: Present? Yes sent? Yes ary fringe) rded Data (stream gauge, mo	ed; check all that a Salt Crust Biotic Crus Aquatic Inv Hydrogen 3 Oxidized R Presence o Recent Iro) Thin Muck Other (Exp No X No X No X No X	apply) (B11) (B12) vertebrat Sulfide C hizosphof Reduc n Reduc Surface lain in R Depth (in Depth (in Depth (in	es (B13) Ddor (C1) eres on L eed Iron (tion in Ti (C7) emarks) nches):) _iving R (C4) Iled Soi	Second	ndary Indicators (minimum of two required /ater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) Irift Deposits (B3) (Riverine) Irrainage Patterns (B10) Irry-Season Water Table (C2) Irrayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5) ology Present? Yes NoX
HYDROLOG Wetland Hydr Primary Indicat Surface W High Wate Saturation Water Mar Sediment I Drift Depos Surface So Inundation Water-Stai Field Observa Surface Water Water Table Pro Saturation Pres (includes capill Describe Reco Remarks:	SY ology Indicators: tors (minimum of one is requir ater (A1) r Table (A2) (A3) ks (B1) (Nonriverine) Deposits (B2) (Nonriverine) sits (B3) (Nonriverine) bil Cracks (B6) Visible on Aerial Imagery (B7 ned Leaves (B9) tions: Present? Yes sent? Yes ary fringe) rded Data (stream gauge, mo	ed; check all that a Salt Crust Biotic Crus Aquatic Inv Hydrogen 3 Oxidized R Presence o Recent Irou) Thin Muck Other (Exp No X No X No X	apply) (B11) (B12) vertebrat Sulfide C hizospho of Reduc n Reduc Surface lain in R Depth (in Depth (in Depth (in	es (B13) Ddor (C1) eres on I eres on I tion in Ti (C7) emarks) mches): previous) _iving R (C4) Iled Soi	Ooots (C3) C S S S S S S S S S S S S S S S S S S S	ndary Indicators (minimum of two required Vater Marks (B1) (Riverine) ediment Deposits (B2) (Riverine) mit Deposits (B3) (Riverine) trainage Patterns (B10) my-Season Water Table (C2) trayfish Burrows (C8) aturation Visible on Aerial Imagery (C9) hallow Aquitard (D3) AC-Neutral Test (D5)

Proje	ect # / Na	ame Badger Mountain		Assessor Jessica Taylor, Sara Frank, and Katie Pyne						
Addr	If ess East Wenatchee, WA Date 4/19/2021									
Wate	erway Na	me st-200			Coordinates at	Lat.		Ν		
Read	h Bound	aries Study area width.			downstream er (ddd.mm.ss)	nd Long.		W		
Prec	ipitation	w/in 48 hours (cm) 0	Channe	l Width (m) 2-	foot	Distr Distr	urbed Site / Dif 01 (Describe in "No	ficult otes")		
Obse Hydi	erved rology	% of reach w/observed % of reach w/any flow (surface flow <u>0</u> surface or hypor	heic) <u>0</u>	_					
Observations	Observe (and inc	ed Wetland Plants _{NONE} dicator status):		Observed M Ta	lacroinvertebra xon Indi Sta	ates: icator l atus	Ephemer- # optera? Indiv	of iduals		
	1. Are a	quatic macroinvertebrate	es present?			🗌 Yes	No			
ors	2. Are 6	or more individuals of th	e Order Epheme	eroptera pres	ent?	🗌 Yes	No			
cat	3. Are p	erennial indicator taxa pr	resent? (refer to T	able 1)		🗌 Yes	No			
ndi	4. Are F	ACW, OBL, or SAV plants	present? (Within	½ channel widt	h)	🗌 Yes	No			
	5. What	is the slope? (In percent, r	neasured for the val	ley, not the strea	am)	39	%			
Conclusions		Are aquatic macroinvertebrates present? (Indicator 1)	: Are 6 or more uals of the Order hemeroptera present? indicator 2) Are SAV, FACW, plants present? ndicator 4)	If Yes: Are perennial indicator taxa present? (Indicator 3) If No: INTERMITTENT If Yes: What is the slope? (Indicator 5) If No: EPHEMERAL	If Yes: PERENNIAL If No: What is ti slope? (Indicator 5) Slope < 10.5' INTERMITTEN Slope ≥ 10.5' EPHEMERAL Slope ≥ 10.5' EPHEMERAL		Slope < 16%: INTERMITTENT Slope ≥ 16%: PERENNIAL			
	EPHEMERAL Finding: Ephemeral Single Indicators: Intermittent Intermittent Fish Perennial Perennial									

onclusions, description of disturbar	nces or mo	difications th	nat may
Describe situation. For dist	urbed strea	ams, note ex	tent, type,
n of photos, comments on hydrolog	ical observ	ations, etc.)	Attach
n two fields.			
Observed Amphibians, Snake, an	d Fish:		
Observed Amphibians, Snake, an	d Fish: Life History	Location	Number of Individuals
Observed Amphibians, Snake, an Taxa	d Fish: Life History Stage	Location Observed	Number of Individuals Observed
Observed Amphibians, Snake, an Taxa	d Fish: Life History Stage	Location Observed	Number of Individuals Observed
Observed Amphibians, Snake, an Taxa	d Fish: Life History Stage	Location Observed	Number of Individuals Observed
	n two fields.	n two fields.	n two fields.

Project # / Name Badger Mountain				Assessor Jessic	a Taylor, S	Sara Frank, a	nd Katie Pyne		
Address East Wenatchee, WA Date 4/20/2021									
Waterway Name ST-238 Coordinates at Lat.						Ν			
Read	h Bound	aries Study area width.			downstream er (ddd.mm.ss)	nd Long.			W
Prec	Precipitation w/in 48 hours (cm) 0 Channel			l Width (m) 2	-foot	Dist Dist	urbed Site n (Describe	e / Difficult in "Notes")	
Obse Hydi	erved	% of reach w/observed % of reach w/any flow (surface flow <u>0</u> surface or hypor	heic)	_				
		# of pools observed <u>0</u>							
Observations	Observe (and inc	ed Wetland Plants _{NONE} dicator status):		Observed M Ta	facroinvertebra xon Ind St NC	ates: icator atus DNE	Ephemer- optera?	# of Individuals	
	1. Are a	quatic macroinvertebrate	es present?			🗌 Yes] No	
:ors	2. Are 6	or more individuals of th	e Order Epheme	eroptera pres	ent?	🗌 Yes] No	
icat	3. Are p	erennial indicator taxa p	resent? (refer to T	able 1)		🗌 Yes] No	
pu	4. Are F	ACW, OBL, or SAV plants	present? (Within	1/2 channel widt	h)	🗌 Yes] No	
	5. What	is the slope? (In percent, r	measured for the val	ley, not the strea	am)	39	%		
Conclusions		Are aquatic macroinvertebrates present? (Indicator 1)	: Are 6 or more uals of the Order hemeroptera present? Indicator 2) Are SAV, FACW, plants present? ndicator 4)	If Yes: Are perennial indicator taxa present? (Indicator 3) If No: INTERMITTENT If Yes: What is the slope? (Indicator 5) If No: EPHEMERAL	If Yes: PERENNIAL If No: What is ti slope? (Indicator 5) Slope < 10.57 EPHEMERAL Slope ≥ 10.57 EPHEMERAL		Slope < 16%: INTERMITTENI Slope ≥ 16%: PERENNIAL		
	Single I	I ndicators: hibians			Finding:	l■] Ep In Pe	onemera termitter erennial	I nt	

Notes: (explanation of any single indicator co interfere with indicators, etc.)	onclusions, description of disturbar	nces or mo	difications th	nat may
Difficult Situation:	Describe situation. For distributed	urbed strea	ams, note ex	tent, type,
Prolonged Abnormal Rainfall / Snowpack				
Below Average				
Above Average				
🗌 Natural or Anthropogenic Disturbance				
Other:				
Additional Notes: (sketch of site, description additional sheets as necessary.	n of photos, comments on hydrologi	ical observ	ations, etc.)	Attach
See Photo #				
Predominant vegetation is sagebrush, mullein, and gray re	abbitbrush.			
An eillem Informations				
Riparian Corridor				
Erosion and Deposition				
Floodplain Connectivity				
l l	Observed Amphibians. Snake, an	d Fish:		
		Life History	Location	Number of Individuals
	Таха	Stage	Observed	Observed

Project # / Name Badger Mountain Solar				Assessor Jessic	a Taylor, S	Sara Frank, a	nd Katie Pyne		
Addr	Address East Wenatchee, WA Date 4/20/2021								
Wate	erway Na	me st-241			Coordinates at	Lat.			Ν
Read	h Bound	aries Study area width.			downstream er (ddd.mm.ss)	10 Long.			W
Precipitation w/in 48 hours (cm) 0 Channel Width			l Width (m) 3-	feet	Dist Dist	urbed Site	e / Difficult in "Notes")		
Observed Hydrology		% of reach w/observed % of reach w/any flow (surface flow <u>0</u> surface or hypor	 heic) <u>0</u>	_				
nyu	ology	# of pools observed 0							
Observations	Observe (and inc	ed Wetland Plants _{NONE} dicator status):		Observed M Ta	lacroinvertebra xon Indi Sta	ates: icator atus	Ephemer- optera?	# of Individuals	
	1. Are a	quatic macroinvertebrate	es present?			🗌 Yes] No	
Ors	2. Are 6	or more individuals of th	e Order Ephemo	eroptera pres	ent?	🗌 Yes] No	
icat	3. Are p	erennial indicator taxa pr	resent? (refer to	able 1)		🗌 Yes] No	
pu	4. Are F	ACW, OBL, or SAV plants	present? (Within	1/2 channel widtl	h)	🗌 Yes] No	
	5. What	t is the slope? (In percent, r	measured for the va	lley, not the strea	am)	3 9	%		
Conclusions		Are aquatic macroinvertebrates present? (Indicator 1)	: Are 6 or more uals of the Order hemeroptera present? Indicator 2) Are SAV, FACW, plants present? ndicator 4)	If Yes: Are perennial indicator taxa present? (Indicator 3) If No: INTERMITTENT If Yes: What is the slope? (Indicator 5) If No: EPHEMERAL	If Yes: PERENNIAL If No: What is the slope? (Indicator 5) Slope < 10.5% EPHEMERAL Slope ≥ 10.5% EPHEMERAL		Slope < 16%: INTERMITTENT Slope ≥ 16%: PERENNIAL		
	Single Fish Amp	Indicators: hibians			Finding:	.■. E¢ In P€	itermitter erennial	nt	

Notes: (explanation of any single indicator c interfere with indicators, etc.)	onclusions, description of disturbar	ices or mo	difications tl	nat may
Difficult Situation:	Describe situation. For dist	urbed strea	ams, note ex	tent, type,
Prolonged Abnormal Rainfall / Snowpack				
Below Average				
Above Average				
Natural or Anthropogenic Disturbance				
Other:				
Additional Notes: (sketch of site, description additional sheets as necessary.	n of photos, comments on hydrolog	ical observ	ations, etc.)	Attach
See Photo #				
Predominant vegetation is sagebrush, mullein, and gray i	rabbitbrush.			
Ephemeral drainage, with rocks in channel bottom and or restriction prevents water from seeping into the soil.	utside of stream bed. There are areas with da	mp soil, and s	ome standing w	vater, as rock
Ancillary Information:				
Riparian Corridor				
Frosion and Deposition				
Floodaloin Connectivity				
	Observed Amphibians, Snake, an	d Fish: Life		Number of
	Таха	History Stage	Location Observed	Individuals
		0*		

Project # / Name Badger Mountain Solar				Assessor Jessic	a Taylor, S	Sara Frank, and F	Katie Pyne		
Address East Wenatchee, WA Date 4/21/2021						21			
Waterway Name sT-249Coordinates atLat.							Ν		
Read	h Bound	aries Study area width.			downstream er (ddd.mm.ss)	nd Long.			w
Precipitation w/in 48 hours (cm) 0 Channel Width (l Width (m) 3	-feet	Dist Dist	urbed Site / I 01 (Describe in "	Difficult 'Notes")		
Observed Hydrology		% of reach w/observed % of reach w/any flow (surface flow <u>0</u> surface or hypor	heic) <u>0</u>	_				
		# of pools observed							
Observations	Observe (and inc	ed Wetland Plants _{NONE} dicator status):		Observed M Ta	facroinvertebra xon Ind St NC	ates: icator atus DNE	Ephemer- optera? In	# of dividuals	
	1. Are a	quatic macroinvertebrate	es present?			🗌 Yes		0	
tors	2. Are 6	or more individuals of th	e Order Epheme	eroptera pres	ent?	🗌 Yes		0	
icat	3. Are p	erennial indicator taxa pr	resent? (refer to 1	able 1)		🗌 Yes		0	
Ind	4. Are F	ACW, OBL, or SAV plants	present? (Within	1/2 channel widt	h)	🗌 Yes		0	
	5. What	is the slope? (In percent, r	neasured for the val	ley, not the strea	am)	39	%		
Conclusions		Are aquatic macroinvertebrates present? (Indicator 1)	: Are 6 or more uals of the Order hemeroptera present? indicator 2) Are SAV, FACW, plants present? ndicator 4)	If Yes: Are perennial indicator taxa present? (Indicator 3) If No: INTERMITTENT If Yes: What is the slope? (Indicator 5) If No: EPHEMERAL	If Yes: PERENNIAL If No: What is ti slope? (Indicator 5) Slope < 10.5 INTERMITTEN Slope ≥ 10.53 EPHEMERAL Slope ≥ 10.53 EPHEMERAL		Slope < 16%: INTERMITTENT Slope ≥ 16%: PERENNIAL		
	Single I	I ndicators: hibians			Finding:		onemeral termittent erennial		

Notes: (explanation of any single indicator c interfere with indicators, etc.)	onclusions, description of disturbar	nces or mo	difications th	nat may
Difficult Situation:	Describe situation. For dist	urbed strea	ams, note ex	tent, type,
Prolonged Abnormal Rainfall / Snowpack	(
Below Average				
Above Average				
Natural or Anthropogenic Disturbance				
Other:				
Additional Notes: (sketch of site, description additional sheets as necessary.	n of photos, comments on hydrolog	ical observ	ations, etc.)	Attach
See Photo #				
Predominant vegetation is russian thistle and basin wild r	ye.			
Ephemeral drainage, with some rocks in channel bottom,	but substrate mostly consists of dirt or dried	up vegetation.		
Anoillary Information				
Riparian Corridor				
Erosion and Deposition				
Floodplain Connectivity				
	Observed Amphibians, Snake, an	d Fish:		
		Life History	Location	Number of Individuals
	Таха	Stage	Observed	Observed

Project # / Name Badger Mountain Solar				Assessor Jessic	ca Taylor, S	Sara Frank, ar	nd Katie Pyne		
Address East Wenatchee, WA Date 4/21/2021						2021			
Waterway Name ST-251 Coordinates at Lat.							Ν		
Read	h Bound	aries Study area width.			downstream er	nd Long.			W
Precipitation w/in 48 hours (cm) 0 Channel Wig				l Width (m) 2-	feet	Dist Dist	urbed Site	/ Difficult in "Notes")	
We of reach w/observed surface flow 0 We of reach w/any flow (surface or hypo We of pools observed We of pools observed			heic) <u>0</u>	- lacroinvertebra	ates:				
Observations	(and inc	dicator status):		Та	xon Ind St	icator atus	Ephemer- optera?	# of Individuals	
	1. Are a	quatic macroinvertebrate	es present?			🗌 Yes		No	
Ors	2. Are 6	or more individuals of th	e Order Epheme	eroptera pres	ent?	🗌 Yes		No	
cat	3. Are p	erennial indicator taxa pr	esent? (refer to T	able 1)		🗌 Yes		No	
ndi	4. Are F	ACW, OBL, or SAV plants	present? (Within	1/2 channel widtl	h)	☐ Yes		No	
	5. What	is the slope? (In percent, r	neasured for the val	ley, not the strea	am)	3 9	 %		
Conclusions		Are aquatic macroinvertebrates present? (Indicator 1)	: Are 6 or more uals of the Order present? ndicator 2) Are SAV, FACW, plants present? ndicator 4)	If Yes: Are perennial indicator taxa present? (Indicator 3) If No: INTERMITTENT If Yes: What is the slope? (Indicator 5) If No: EPHEMERAL	If Yes: PERENNIAL If No: What is t slope? (Indicator 5) Slope < 10.5 INTERMITTEN Slope ≥ 10.5 EPHEMERAL Finding:		Slope < 16%: INTERMITTENT Slope ≥ 16%: PERENNIAL		
	Single I	I ndicators: hibians			i munig.		termitter erennial	nt	

onclusions, description of disturbar	nces or mo	difications th	nat may
Describe situation. For disturbance	urbed strea	ams, note ex	tent, type,
n of photos, comments on hydrolog	ical observ	ations atc.)	Attach
n or photos, comments on hydrologi			Allach
S.			
S.			
Observed Amphibians, Snake, an	d Fish:		Number of
Observed Amphibians, Snake, an	d Fish: Life History	Location	Number of Individuals
Observed Amphibians, Snake, an	d Fish: Life History Stage	Location Observed	Number of Individuals Observed
Observed Amphibians, Snake, an	d Fish: Life History Stage	Location Observed	Number of Individuals Observed
Observed Amphibians, Snake, an Taxa	d Fish: Life History Stage	Location Observed	Number of Individuals Observed
	Describe situation. For dist and history of disturbance.	Describe situation. For disturbed streat and history of disturbance.	Describe situation. For disturbed streams, note ex and history of disturbance.

Proje	ect # / Na	ame_			Assessor				
Address				Date 4/19/2021					
Addi Wat	ress orway Nr	2mo ST_300			Date 4/19/2021			N	
Poor	ch Pour	dariaa			downstream e	end		1N 1M	
nea		lanes			(ddd.mm.ss)		ad Site / Difficult	. vv	
Prec	pitation	w/in 48 hours (cm)	0 ^{Cha}	annel Width (m)	1-2 ft	Situation (D	escribe in "Notes")	•	
Weight of the second									
	Observ	ved Wetland Plants N//	4	Observed	Macroinverte	brates:	N/A		
Observations	Observed Wetland Plants _{N/A} (and indicator status):				axon Inc S	licator Epher tatus opter	mer- # of ra? Individuals		
	1. Are a	aquatic macroinvertebra	tes present	?		🗌 Yes	🗹 No		
ors	2. Are 6	6 or more individuals of	the Order E	phemeroptera p	oresent?	🗌 Yes	🗹 No		
icat	3. Are p	. Are perennial indicator taxa present? (refer to Table 1)							
Ind	4. Are I	FACW, OBL, or SAV pla	ants present	? (Within ½ chann	(Within ½ channel width)				
	5. Wha	t is the slope? (In percent	t, measured for	the valley, not the	ne valley, not the stream) <u>3</u> %				
Conclusions	Ar macro g (In	e aquatic invertebrates resent? dicator 1) If No : Ar FACW, plants pr (Indica	Are 6 or ividuals Order roptera ant? tor 2) re SAV, or OBL resent? tor 4)	If Yes: Are perennial indicator taxa present? (Indicator 3) If No: INTERMITTENT If Yes: What is the slope? (Indicator 5) If No: EPHEMERAL	If Yes: PE If No: WI slo (Indica Slope < INTERM Slope ≥ EPHEN	RENNIAL hat is the pe? ator 5) :: 10.5%: ITTENT	Slope < 16%: INTERMITTENT Slope ≥ 16% : PERENNIAL)	
	Single	Indicators: bhibians			rinaing:		rmittent ennial		

Notes: single indicator interfere with indicators, etc.)	or conclusions, description of distur	bances or modifications that may								
Difficult Situation:	Describe situation. For dis type, and history of disturb	turbed streams, note extent, ance.								
Prolonged Abnormal Rainfall / Snowpa	ack									
Below Average										
Above Average										
Natural or Anthropogenic Disturbance										
Other:										
Additional Notes: (sketch of site, descrip additional sheets as necessary. Low point between two wheat fields. M recent snowmelt.	otion of photos, comments on hydro	ological observations, etc.) Attach								
Anaillary Information										
Riparian Corridor										
Erosion and Deposition										
Eloodplain Connectivity										
	Observed Amphibians, Snake,	and Fish:								
	Taya	Life Number of History Location Individuals								
	I axa	Slage Observed Observed								
Project # / Name						Assessor	_			
------------------	-------------------------	---	---	-----------------------------	---	---------------------	--	----------------------------	---	---
1 10,		Badger Mountai	n				Sara Fra	ink		
Add	ress	07.004				Coordinate	a at	Date 4/	19/2021	
wate	erway Na	ame S1-321				downstrea	mend			Ν
Rea	ch Boun	daries				(ddd.mm.ss)	Lor	ng.		W
Prec	cipitation	w/in 48 hours (cm)	0	Channe	el Width (m)	1 ft	Situat	sturbed Si ion (Descrit	te / Difficult	
Obs Hyd	erved rology	% of reach w/observed % of reach w/any flow # of pools observed <u>0</u>	d surface (surface	e flow <u>0</u> e or hyp	orheic) <u>0</u>					
	Observ	ved Wetland Plants N/A	Ą		Observed	Macroinve	rtebrates		N/A	
Observations	(and in	dicator status):		Τε	axon	Indicator Status	Ephemer- optera?	# of Individuals		
	1. Are a	aquatic macroinvertebra	tes pres	ent?			🗌 Yes	s 🔽	⊿ No	
ors	2. Are 6	6 or more individuals of	the Orde	er Ephe	meroptera p	resent?		s [⊿ No	
icat	3. Are p	perennial indicator taxa	present?	(refer t	o Table 1)		🗌 Yes	s 🕻	⊿ No	
pul	4. Are I	FACW, OBL, or SAV pla	ints pres	ent? (v	Vithin ½ chann	el width)	🗌 Yes	s 🕻	Z No	
	5. Wha	t is the slope? (In percent	, measure	d for the	valley, not the	stream)	_5_%			
Conclusions	Ar macro g (In	e aquatic invertebrates resent? dicator 1) If No : Ar FACW, plants pr (Indica	Are 6 or Drder roptera ant? tor 2) e SAV, or OBL resent? tor 4)		Yes: Are perennial indicator taxa present? (Indicator 3) If No: INTERMITTENT f Yes: What is the slope? (Indicator 5) If No: EPHEMERAL		s: PERENNIAL o: What is the slope? Indicator 5) Depe < 10.5%: TERMITTENT Depe ≥ 10.5%: PHEMERAL		Slope < 16%: NTERMITTENT Slope ≥ 16% : PERENNIAL)
	Single	Indicators: bhibians				FIIIdill	y. ⊻ □	Intermi Perenn	ttent	

Notes: single indicator interfere with indicators, etc.)	conclusions, description of distu	rbances oi	r modificatio	ons that may
Difficult Situation:	Describe situation. For dis type, and history of disturb	sturbed str ance.	eams, note	extent,
Prolonged Abnormal Rainfall / Snowpac	ck			
Below Average				
Above Average				
Natural or Anthropogenic Disturbance				
Other:	_			
Additional Notes: (sketch of site, description etc.) Attach additional sheets as necessar	on of photos, comments on hydro y.	ological ob	servations,	
Drainage full of sagebrush and russian this	stle.			
Ancillary Information:				
Riparian Corridor				
Erosion and Deposition				
Floodplain Connectivity				
	Observed Amphibians, Snake,	and Fish	:	Newskaw of
	Tava	Life History	Location	Number of Individuals
	Taxa	Siage	Observed	Observed
		•		

Proie	Project # / Name					Assessor				
ر ا		Badger Mountai	n			5	sara ⊢ra		0/2024	
Add Wat	ress orway Nr	2mo ST-321				Coordinates	sat Lat	Date 4/2	20/2021	N
Poo	ch Dound	dariaa				downstream				
пеа		uanes				(ddd.mm.ss)	ddd.mm.ss) Long.			
Prec	pitation	w/in 48 hours (cm)	0 ^{Ch}	nannel	Width (m)	dth (m) 1 ft Situation (Describe in "Note				
Obs Hyd	erved rology	% of reach w/observed % of reach w/any flow # of pools observed <u>0</u>	d surface flo (surface or	low <u>0</u> r hypc	orheic) <u>0</u>					
	Observ	ved Wetland Plants _{N//}	4		Observed	Macroinver	tebrates	:	N/A	
Observations	(and in	dicator status):		Ta	axon	ndicator Status	Ephemer- optera?	# of Individuals		
	1. Are a	aquatic macroinvertebra	tes presen	nt?			🗌 Yes	s 🔽	🛛 No	
ors	2. Are 6	6 or more individuals of	the Order E	Ephen	neroptera p	oresent?		s 🔽	🛛 No	
icat	3. Are p	perennial indicator taxa	present? ((refer to	Table 1)			s 🔽	🛛 No	
pul	4. Are I	FACW, OBL, or SAV pla	ants presen	nt? (W	(Within ½ channel width) Yes No					
	5. Wha	t is the slope? (In percent	t, measured fo	or the v	alley, not the	stream)	3	_ %		
5. What is the slope? (In percent, measured for the valley, not the stream) <u>3</u> %									Slope < 16%: ITERMITTENT Slope ≥ 16% : PERENNIAL)
	Single	Indicators: D Dhibians				rmanię	J. ⊻ □	Intermi Perenn	ttent ial	

Notes: single indicato interfere with indicators, etc.)	r conclusions, description of distu	rbances o	r modificatio	ons that may
Difficult Situation:	Describe situation. For dis type, and history of disturb	sturbed str	eams, note	extent,
Prolonged Abnormal Rainfall / Snowpa	ack			
Below Average				
Above Average				
Natural or Anthropogenic Disturbance				
☐ Other:				
Additional Notes: (sketch of site, descript etc.) Attach additional sheets as necessa	tion of photos, comments on hydro ary.	ological ob	servations,	
Drainage between old farm equipment. F	Rocky bare ground.			
Ancillary Information:				
Riparian Corridor				
Erosion and Deposition				
Floodplain Connectivity				
	Observed Amphibians, Snake,	and Fish	:	Number of
	Таха	History Stage	Location Observed	Individuals Observed

Proie	Project # / Name					Assessor				
ر ا		Badger Mountai	n			5	sara ⊦ra		0/2024	
Add Wat	ress orway Nr	2mo ST-321				Coordinates	sat Lat	Date 4/2	20/2021	N
Poo	ch Dound	dariaa				downstream				
пеа		uanes				(ddd.mm.ss)	ddd.mm.ss) Long.			
Prec	pitation	w/in 48 hours (cm)	0 ^{Ch}	nannel	Width (m)	dth (m) 1 ft Situation (Describe in "Note				
Obs Hyd	erved rology	% of reach w/observed % of reach w/any flow # of pools observed <u>0</u>	d surface flo (surface or	low <u>0</u> r hypc	orheic) <u>0</u>					
	Observ	ved Wetland Plants _{N//}	4		Observed	Macroinver	tebrates	:	N/A	
Observations	(and in	dicator status):		Ta	axon	ndicator Status	Ephemer- optera?	# of Individuals		
	1. Are a	aquatic macroinvertebra	tes presen	nt?			🗌 Yes	s 🔽	🛛 No	
ors	2. Are 6	6 or more individuals of	the Order E	Ephen	neroptera p	oresent?		s 🔽	🛛 No	
icat	3. Are p	perennial indicator taxa	present? ((refer to	Table 1)			s 🔽	🛛 No	
pul	4. Are I	FACW, OBL, or SAV pla	ants presen	nt? (W	(Within ½ channel width) Yes No					
	5. Wha	t is the slope? (In percent	t, measured fo	or the v	alley, not the	stream)	3	_ %		
5. What is the slope? (In percent, measured for the valley, not the stream) <u>3</u> %									Slope < 16%: ITERMITTENT Slope ≥ 16% : PERENNIAL)
	Single	Indicators: D Dhibians				rmanię	J. ⊻ □	Intermi Perenn	ttent ial	

Notes: single indicato interfere with indicators, etc.)	r conclusions, description of distu	rbances o	r modificatio	ons that may
Difficult Situation:	Describe situation. For dis type, and history of disturb	sturbed str	eams, note	extent,
Prolonged Abnormal Rainfall / Snowpa	ack			
Below Average				
Above Average				
Natural or Anthropogenic Disturbance				
☐ Other:				
Additional Notes: (sketch of site, descript etc.) Attach additional sheets as necessa	tion of photos, comments on hydro ary.	ological ob	servations,	
Drainage between old farm equipment. F	Rocky bare ground.			
Ancillary Information:				
Riparian Corridor				
Erosion and Deposition				
Floodplain Connectivity				
	Observed Amphibians, Snake,	and Fish	:	Number of
	Таха	History Stage	Location Observed	Individuals Observed

Proie	Project # / Name					Assessor				
ر ا		Badger Mountai	n			5	sara ⊦ra		0/2024	
Add Wat	ress orway Nr	2mo ST-321				Coordinates	sat Lat	Date 4/2	20/2021	N
Poo	ch Dound	dariaa				downstream				
пеа		uanes				(ddd.mm.ss)	ddd.mm.ss) Long.			
Prec	pitation	w/in 48 hours (cm)	0 ^{Ch}	nannel	Width (m)	dth (m) 1 ft Situation (Describe in "Note				
Obs Hyd	erved rology	% of reach w/observed % of reach w/any flow # of pools observed <u>0</u>	d surface flo (surface or	low <u>0</u> r hypc	orheic) <u>0</u>					
	Observ	ved Wetland Plants _{N//}	4		Observed	Macroinver	tebrates	:	N/A	
Observations	(and in	dicator status):		Ta	axon	ndicator Status	Ephemer- optera?	# of Individuals		
	1. Are a	aquatic macroinvertebra	tes presen	nt?			🗌 Yes	s 🔽	🛛 No	
ors	2. Are 6	6 or more individuals of	the Order E	Ephen	neroptera p	oresent?		s 🔽	🛛 No	
icat	3. Are p	perennial indicator taxa	present? ((refer to	Table 1)			s 🔽	🛛 No	
pul	4. Are I	FACW, OBL, or SAV pla	ants presen	nt? (W	(Within ½ channel width) Yes No					
	5. Wha	t is the slope? (In percent	t, measured fo	or the v	alley, not the	stream)	3	_ %		
5. What is the slope? (In percent, measured for the valley, not the stream) <u>3</u> %									Slope < 16%: ITERMITTENT Slope ≥ 16% : PERENNIAL)
	Single	Indicators: D Dhibians				rmanię	J. ⊻ □	Intermi Perenn	ttent ial	

Notes: single indicato interfere with indicators, etc.)	r conclusions, description of distu	rbances oi	r modificatio	ons that may
Difficult Situation:	Describe situation. For dis type, and history of disturb	sturbed str	eams, note	extent,
Prolonged Abnormal Rainfall / Snowpa	ack			
Below Average				
Above Average				
Natural or Anthropogenic Disturbance				
☐ Other:				
Additional Notes: (sketch of site, descript etc.) Attach additional sheets as necessa	ion of photos, comments on hydro ary.	ological ob	servations,	
Drainage around rock piles. Full of comm	non mullein.			
Ancillary Information:				
Riparian Corridor				
Erosion and Deposition				
Eloodplain Connectivity				
	Observed Amphibians, Snake,	, and Fish Life	:	Number of
	Таха	History Stage	Location Observed	Individuals Observed

Project # / Name						Assessor	_			
1 10,		Badger Mountai	n				Sara Fra	ink		
Add	ress	07.040				Coordinato		Date 4/2	20/2021	
wate	erway Na	ame S1-342				downstrear	n end			Ν
Rea	ch Boun	daries	<u> </u>			(ddd.mm.ss)		ng.		W
Prec	cipitation	w/in 48 hours (cm)	0	Channe	el Width (m)	1 ft	Situa	sturbed Si tion (Descrit	te / Difficult	
Obs Hyd	erved rology	% of reach w/observed % of reach w/any flow # of pools observed <u>0</u>	d surfac (surface	e flow <u>0</u> e or hyp	orheic) <u>0</u>					
	Observ	ved Wetland Plants _{N//}	Ą		Observed	Macroinve	tebrates	:	N/A	
Observations	(and in	dicator status):		Τa	axon	Indicator Status	Ephemer- optera?	# of Individuals		
	1. Are a	aquatic macroinvertebra	ites pres	sent?			🗌 Ye	s 🔽	⊿ No	
ors	2. Are 6	or more individuals of	the Ord	er Ephe	meroptera p	resent?		s 🔽	⊿ No	
icat	3. Are p	perennial indicator taxa	present	? (refer t	o Table 1)		🗌 Ye	s 🔽	⊿ No	
pul	4. Are I	FACW, OBL, or SAV pla	ants pres	sent? (v	(Within ½ channel width)					
	5. Wha	t is the slope? (In percent	t, measure	ed for the	valley, not the	stream)	_	5 %		
Conclusions	Ar macro g (In	e aquatic invertebrates resent? dicator 1) If No : Ar FACW, plants p (Indica	Are 6 or lividuals Order roptera ent? tor 2) re SAV, or OBL resent? tor 4)		Yes: Are perennial indicator taxa present? (Indicator 3) If No: INTERMITTENT If Yes: What is the slope? (Indicator 5) If No: EPHEMERAL		PERENNIAL : What is the slope? ndicator 5) De < 10.5%: :RMITTENT De ≥ 10.5%: HEMERAL		Slope < 16%: NTERMITTENT Slope ≥ 16% : PERENNIAL)
	Single	Indicators: bhibians				rmunų	J. ⊠	Intermi Perenn	ttent	

interfere with indicators, etc.)	ay
Difficult Situation: Describe situation. For disturbed streams, note extent, type, and history of disturbance	
Prolonged Abnormal Rainfall / Snowpack	
Below Average	
Above Average	
Natural or Anthropogenic Disturbance	
Other:	
Additional Notes: (sketch of site, description of photos, comments on hydrological observations, etc.) Attach additional sheets as necessary. Drainage around scattered rocks. Full of common mullein and russian thistle.	
Ancillary Information:	
Riparian Corridor	
Erosion and Deposition	
Floodplain Connectivity	
Observed Amphibians, Snake, and Fish:	- 4
Lile Number History Location Individua Taxa Stage Observed Observe	ls d
	<u>u</u>

Proie	Project # / Name					Assessor					
ر ا		Badger Mountai	N				Sara Fra		0/2024		
Wat	erway Na	ame ST-344				Coordinate	esat Lat	Date 4/2	20/2021	N	
Rea	ch Boun	daries				downstrea	m end Lor	na.		w	
Due						(ddd.mm.ss)	Di	Disturbed Site / Difficu			
Prec	pitation	w/in 48 hours (cm)	0 ^{Cr}	nanne	Width (m)	3 ft	Situat	tion (Describ	e in "Notes")		
Obs Hyd	erved rology	% of reach w/observed % of reach w/any flow # of pools observed <u>0</u>	d surface fl (surface o	low <u>0</u> or hypc	orheic) <u>0</u>						
	Observ	ved Wetland Plants N//	4		Observed	Macroinve	rtebrates	:	N/A		
Observations	(and in	dicator status):		Ta	axon	Indicator Status	Ephemer- optera?	# of Individuals			
	1. Are a	aquatic macroinvertebra	tes presen	nt?				s 🔽] No		
tors	2. Are 6	6 or more individuals of	the Order I	Epher	neroptera p	present?	🗌 Yes	s 🔽] No		
licat	3. Are p	perennial indicator taxa	present? ((refer to	Table 1)			s 🔽] No		
lnd	4. Are I	FACW, OBL, or SAV pla	ints preser	nt? (w	'ithin ½ chann	el width)	Yes	s 🔽] No		
	5. Wha	t is the slope? (In percent	t, measured f	for the v	alley, not the	stream)		2_%			
Conclusions	Ar macro (In	re aquatic invertebrates resent? Idicator 1) If No : Ar FACW, plants pr (Indica	Are 6 or ividuals Order roptera ent? tor 2) e SAV, pr OBL resent? tor 4)	Yes: Are perennial indicator taxa present? (Indicator 3) If No: NTERMITTENT Yes: What is the slope? (Indicator 5) If No: EPHEMERAL		s: PERENNIAL o: What is the slope? Indicator 5) Dope < 10.5%: ERMITTENT Dope ≥ 10.5%: PHEMERAL		Slope < 16%: ITERMITTENT Slope ≥ 16% : PERENNIAL)		
	Single ☐ Fish ☐ Amp	Indicators: Dhibians				Finain	y. ⊻ □	Intermit Perenn	ial		

Notes: single indicato interfere with indicators, etc.)	r conclusions, description of distu	rbances oi	r modificatio	ons that may
Difficult Situation:	Describe situation. For dis type, and history of disturb	sturbed str ance.	eams, note	extent,
Prolonged Abnormal Rainfall / Snowpa	ack			
Below Average				
Above Average				
Natural or Anthropogenic Disturbance				
☐ Other:				
Additional Notes: (sketch of site, descript etc.) Attach additional sheets as necessa	ion of photos, comments on hydro ary.	ological ob	servations,	
Very short drainage filled with rocks and	scattered russian thistle.			
Ancillary Information:				
Riparian Corridor				
Erosion and Deposition				
Floodplain Connectivity				
	Observed Amphibians, Snake,	and Fish	:	Number of
	Таха	History Stage	Location Observed	Individuals Observed

Project # / Name					Assessor					
1 10,0		Badger Mountai	n			S	ara Fra	Ink		
Add	ress	07.045				Coordinates	ot i i	Date 4/2	20/2021	
Wate	erway Na	ame S1-345				downstream	at Lat	•		Ν
Rea	ch Boun	daries				(ddd.mm.ss) Long.				W
Prec	cipitation	w/in 48 hours (cm)	0 Ch	nannel	Width (m)	1 ft	Situat	sturbed Sit	te / Difficult be in "Notes")	
Obs Hyd	erved rology	% of reach w/observed % of reach w/any flow # of pools observed <u>0</u>	d surface fl (surface o	low <u>0</u> r hypo	urheic) <u>0</u>					
	Observ	ved Wetland Plants N//	4		Observed	Macroinvert	ebrates	:	N/A	
Observations	(and in	dicator status):		Та	ıxon Ir	ndicator Status	Ephemer- optera?	# of Individuals		
	1. Are a	aquatic macroinvertebra	tes presen	nt?			🗌 Ye	s 🔽] No	
ors	2. Are 6	6 or more individuals of	the Order I	Ephen	neroptera p	resent?	Yes	s 🔽	No	
icat	3. Are p	perennial indicator taxa	present? ((refer to	Table 1)			s 🔽	No	
Indi	4. Are I	FACW, OBL, or SAV pla	ants preser	nt? (W	ithin ½ channe	el width)	🗌 Ye	s 🔽	No	
	5. Wha	t is the slope? (In percent	t, measured fo	or the v	alley, not the s	stream)	-	5 %		
Conclusions	5. What is the slope? (In percent, measured for the valley, not the stream)								Slope < 16%: ITERMITTENT Slope ≥ 16% : PERENNIAL)
	Single	Indicators: bhibians				i munig		Intermit Perenn	ial	

Notes: single indicator interfere with indicators, etc.)	r conclusions, description of distu	rbances oi	r modificatio	ons that may
Difficult Situation:	Describe situation. For dis type, and history of disturb	sturbed str ance.	eams, note	extent,
Prolonged Abnormal Rainfall / Snowpa	ick			
Below Average				
Above Average				
Natural or Anthropogenic Disturbance				
Other:				
Additional Notes: (sketch of site, descript etc.) Attach additional sheets as necessa Low point between two wheat fields, full o	ion of photos, comments on hydro ry. of rocks and common mullein	ological ob	oservations,	
Ancillary Information:				
🗌 Riparian Corridor				
Erosion and Deposition				
Floodplain Connectivity				
	Observed Amphibians. Snake.	and Fish	:	
	·····, ····,	Life History	Location	Number of Individuals
	Таха	Stage	Observed	Observed

Project # / Name Redger Mountain						Assessor Sara Frank				
۲	ross	Badger Mountai	n				Sara Fran	1K Date 4/2	0/2021	
Wate	erwav Na	ame ST-360				Coordinate	esat _{Lat.}	Dale 4/2	0/2021	N
Rea	ch Boun	daries				downstrea	m end	g.		w
Proc	pinitation	w/in 48 hours (cm)		hanne	Width (m)	Disturbed Site / Difficult				
1160	spitation		0 0		Situation (Describe in "Notes")					
Obs Hyd	erved rology	% of reach w/observed % of reach w/any flow # of pools observed <u>0</u>	d surface t (surface d	flow <u>0</u> or hyp	orheic) <u>0</u>					
	Observ	red Wetland Plants N//	4		Observed	Macroinve	rtebrates:		N/A	
Observations	(and in	dicator status):		T	axon	Indicator Status	Ephemer- optera?	# of Individuals		
	1. Are a	aquatic macroinvertebra	ites prese	nt?			🗌 Yes	\checkmark] No	
tors	2. Are 6	6 or more individuals of	the Order	Ephe	meroptera p	present?	🗌 Yes	\checkmark] No	
licat	3. Are p	perennial indicator taxa	present?	(refer t	o Table 1)		🗌 Yes	\checkmark] No	
lnc	4. Are F	FACW, OBL, or SAV pla	ants prese	nt? (V	Vithin ½ chanr	el width)	🗌 Yes	\checkmark] No	
	5. Wha	t is the slope? (In percent	t, measured	for the	he valley, not the stream)7_%					
Conclusions	Ar macro F (In	e aquatic invertebrates resent? dicator 1) If No : An FACW, plants pi (Indica	Yes: Are perennial indicator taxa present? (Indicator 3) If No: INTERMITTENT If Yes: What is the slope? (Indicator 5)		s: PERENNIAL o: What is the slope? Indicator 5) ope < 10.5%: TERMITTENT ope ≥ 10.5%: PHEMERAL	S	ilope < 16%: FERMITTENT)		
	Single	Indicators: phibians				rinain	g: ⊻ t □ l □ l	ntermit	tent al	

Notes: single indicato interfere with indicators, etc.)	r conclusions, description of distu	rbances oi	r modificatic	ons that may
Difficult Situation:	Describe situation. For dis type, and history of disturb	sturbed str ance.	eams, note	extent,
Prolonged Abnormal Rainfall / Snowpa	ack			
Below Average				
Above Average				
Natural or Anthropogenic Disturbance				
☐ Other:				
Additional Notes: (sketch of site, descript etc.) Attach additional sheets as necessa	ion of photos, comments on hydro ary.	ological ob	servations,	
Likely the result of recent snowmelt. Roc	ks, disturbed sagebrush and russ	ian thistle i	in drainage	
Ancillary Information:				
Riparian Corridor				
Erosion and Deposition				
Floodplain Connectivity				
	Observed Amphibians, Snake,	and Fish	: 	Number of
	Таха	History Stage	Location Observed	Individuals Observed

Project # / Name						Assessor Sara Frank				
ر ا		Badger Mountai				Sara Fra	ank	01/0001		
Wat	erway Na	ame ST-381				Coordinate	es at Ta	Dale 4/2	21/2021	N
Rea	ch Boun	daries				downstrea	im end Lo	na.		w
Due				NI	(ddd.mm.ss) Disturbed Site			te / Difficult		
Prec	pitation	w/in 48 hours (cm)	0	nanne	el Width (m) 1.5 ft Situation (Describe in "Notes					
Obs Hyd	erved rology	% of reach w/observed % of reach w/any flow # of pools observed <u>0</u>	d surface (surface	flow <u>0</u> or hyp	orheic) <u>0</u>					
	Observ	ved Wetland Plants N//	4		Observed	Macroinve	ertebrates	s:	N/A	
Observations	(and indicator status):				Т	axon	Indicator Status	Ephemer- optera?	# of Individuals	
	1. Are a	aquatic macroinvertebra	tes prese	ent?			🗌 Ye	s 🔽	🛛 No	
tors	2. Are 6	6 or more individuals of	the Order	^r Ephe	meroptera p	present?	🗌 Ye	s 🔽	🛛 No	
licat	3. Are p	perennial indicator taxa	present?	(refer t	o Table 1)		🗌 Ye	s 🗸	🛛 No	
lnc	4. Are I	FACW, OBL, or SAV pla	ants prese	ent? (v	Vithin ½ chanr	el width)	🗌 Ye	s 🔽	🛛 No	
	5. Wha	t is the slope? (In percent	t, measured	for the	valley, not the	stream)		5_ %		
Conclusions	Ar macro (In	re aquatic invertebrates resent? idicator 1) If No : Ar FACW, plants pr (Indica	Are 6 or Viduals Order roptera ant? tor 2) re SAV, or OBL resent? tor 4)		Yes: Are perennial indicator taxa present? (Indicator 3) If No: INTERMITTENT If Yes: What is the slope? (Indicator 5) If No: EPHEMERAL		es: PERENNIAL No: What is the slope? (Indicator 5) lope < 10.5%: TERMITTENT lope ≥ 10.5%: PHEMERAL		Slope < 16%: ITERMITTENT Slope ≥ 16% : PERENNIAL)
	Single	Indicators: D Dhibians					iy. ⊻ □	Intermi Perenn	ttent ial	

Notes: single indicator interfere with indicators, etc.)	conclusions, description of distu	rbances o	r modificatio	ons that may
Difficult Situation:	Describe situation. For dis	sturbed str	eams, note	extent,
Prolonged Abnormal Rainfall / Snowpac	sk			
Below Average				
Above Average				
Natural or Anthropogenic Disturbance				
☐ Other:	_			
Additional Notes: (sketch of site, description etc.) Attach additional sheets as necessary Sagebrush grown in drainage	on of photos, comments on hydro y.	ological ob	servations,	
Ancillary Information:				
Riparian Corridor				
Erosion and Deposition				
Floodplain Connectivity				
Γ	Observed Amphibians, Snake,	and Fish	:	Number of
	Таха	History	Location	Individuals
	Ιαλα	Glage	CDSCIVEU	CD3EIVEU

Project # / Name Rodger Mountain						Assessor Sara Frank					
λdd,	rase	Badger Mountai	n				sara Frai	TK Date 4/2	1/2021		
Wate	Waterway Name ST-382 Coordinates at Lat. N										
Rea	ch Boun	daries				downstream	n end Long	J.		w	
Droc		w/in 49 hours (om)		Channe	Midth (m)	Cada.mm.ss)					
Prec	spitation	W/IN 48 nours (cm)	0	Jnanne	ei Width (m) 4.5 ft Situation (Describe in "Notes")						
Obs Hyd	erved rology	% of reach w/observed % of reach w/any flow # of pools observed <u>0</u>	d surface (surface	flow <u>0</u> or hyp	orheic) <u>0</u>						
	Observ	ved Wetland Plants N//	Ą		Observed	Macroinver	rtebrates:		N/A		
Observations	(and in	dicator status):		Τa	axon	Indicator Status	Ephemer- optera?	# of Individuals			
	1. Are a	aquatic macroinvertebra	ites prese	ent?			🗌 Yes	\checkmark] No		
ors	2. Are 6	or more individuals of	the Orde	r Ephe	meroptera p	present?	Yes] No		
licat	3. Are p	perennial indicator taxa	present?	(refer t	o Table 1)		🗌 Yes	\checkmark] No		
lnd	4. Are F	FACW, OBL, or SAV pla	ants prese	ent? (v	Vithin ½ chann	el width)	🗌 Yes	\checkmark] No		
	5. Wha	t is the slope? (In percent	t, measured	d for the	he valley, not the stream)5_%						
Conclusions	Ar macro (In	e aquatic invertebrates resent? dicator 1)	Are 6 or ividuals Order roptera ent? tor 2) re SAV, or OBL resent? tor 4)		Yes: Are perennial indicator taxa present? (Indicator 3) If No: INTERMITTENT If Yes: What is the slope? (Indicator 5) If No: EPHEMERAL	If Yes: If No (Ir Slop INTE Slop	PERENNIAL What is the slope? adicator 5) pe < 10.5%: EMMITTENT $pe \ge 10.5\%$: HEMERAL	S F	Blope < 16%: IERMITTENT)	
	Single ☐ Fish ☐ Amp	Indicators:				rmainę		ntermit Perenni	tent al		

Notes: single indicator interfere with indicators, etc.)	or conclusions, description of distu	rbances o	r modificatio	ons that may					
Difficult Situation:	Describe situation. For dis	sturbed str	eams, note	extent,					
Prolonged Abnormal Rainfall / Snowpa	ack								
Below Average									
Above Average									
Natural or Anthropogenic Disturbance									
☐ Other:									
Additional Notes: (sketch of site, description of photos, comments on hydrological observations, etc.) Attach additional sheets as necessary.									
Rocky streambed with high exposed wal ft at widest, 2 ft at narrowest part within p	ls. Filled with large rocks and prim project area.	arily chea	tgrass. 4.5						
Ancillary Information:									
Riparian Corridor									
Frosion and Deposition									
Floodplain Connectivity									
	Observed Amphibians, Snake,	, and Fish	:						
		Life History	Location	Number of Individuals					
	Таха	Stage	Observed	Observed					
		I	I						

Project # / Name Dedger Mountain						Assessor Sara Frank				
ر ا		Badger Mountai				Sara Fra	ank	01/0001		
Wat	erway Na	ame ST-383				Coordinate	es at Ta	Date 4/2	21/2021	N
Rea	ch Boun	daries				downstrea	im end Lo	na.		w
Due					(ddd.mm.ss)			te / Difficult		
Prec	pitation	w/in 48 hours (cm)	0	nanne	el Width (m)	1.5 ft	Situa	tion (Descrit	be in "Notes")	
Obs Hyd	erved rology	% of reach w/observed % of reach w/any flow # of pools observed <u>0</u>	d surface f (surface c	flow <u>0</u> or hyp	orheic) <u>0</u>					
	Observ	ved Wetland Plants N//	4		Observed	Macroinve	ertebrates	s:	N/A	
Observations	(and indicator status):				Т	axon	Indicator Status	Ephemer- optera?	# of Individuals	
	1. Are a	aquatic macroinvertebra	tes presei	nt?			🗌 Ye	s 🔽	🛛 No	
tors	2. Are 6	6 or more individuals of	the Order	Ephe	meroptera p	present?	🗌 Ye	s 🗸	🛛 No	
icat	3. Are p	perennial indicator taxa	present?	(refer t	o Table 1)		🗌 Ye	s 🔽	🛛 No	
lnd	4. Are I	FACW, OBL, or SAV pla	ants prese	nt? (v	Vithin ½ chanr	el width)	🗌 Ye	s 🗸	🛛 No	
	5. Wha	t is the slope? (In percent	t, measured	for the	valley, not the	stream)		10_ %		
Conclusions	Ar macro (In	re aquatic invertebrates resent? Idicator 1) If No : Ar FACW, plants pr (Indica	Are 6 or ividuals Order roptera ent? tor 2) re SAV, or OBL resent? tor 4)		Yes: Are perennial indicator taxa present? (Indicator 3) If No: INTERMITTENT If Yes: What is the slope? (Indicator 5) If No: EPHEMERAL		es: PERENNIAL No: What is the slope? (Indicator 5) lope < 10.5%: TERMITTENT lope ≥ 10.5%: PHEMERAL		Slope < 16%: ITERMITTENT Slope ≥ 16% : PERENNIAL)
	Single	Indicators: D Dhibians					iy. ⊻ □	Intermi Perenn	ttent ial	

Notes: single indicato interfere with indicators, etc.)	r conclusions, description of distu	rbances oi	r modificatio	ons that may
Difficult Situation:	Describe situation. For dis type, and history of disturb	sturbed str ance.	eams, note	extent,
Prolonged Abnormal Rainfall / Snowpa	ack			
Below Average				
Above Average				
Natural or Anthropogenic Disturbance				
Other:				
Additional Notes: (sketch of site, descript etc.) Attach additional sheets as necessa	tion of photos, comments on hydro ary.	ological ob	servations,	
Drainage barely discernible as it enters p west.	project area from the east and wide	ens as it c	ontinues	
Ancillary Information:				
Riparian Corridor				
Erosion and Deposition				
Floodplain Connectivity				
	Observed Amphibians, Snake,	, and Fish Life	: 	Number of
	Таха	History Stage	Location Observed	Individuals Observed

Project # / Name Declarer Mountain						Assessor				
ام م		Badger Mountai	n				Sara Frai	NK L Data 4/2	1/0004	
Wat	erway Na	ame ST-384				Coordinate	esat _{Lat}	Dale 4/2	1/2021	N
Rea	ch Boun	daries				downstrea	m end	a.		w
Dree				<u>Nh a m m a</u>		(ddd.mm.ss)		sturbed Sit	e / Difficult	
Prec	cipitation	w/in 48 hours (cm)	0	Inanne	el Width (m) 3 ft Situation (Describe in "No					
Obs Hyd	erved rology	% of reach w/observed % of reach w/any flow # of pools observed <u>0</u>	d surface (surface	flow <u>0</u> or hyp	orheic) <u>0</u>					
	Observ	ved Wetland Plants N//	Ą		Observed	Macroinve	rtebrates:		N/A	
Observations	(and in	dicator status):		Ta	axon	Indicator Status	Ephemer- optera?	# of Individuals		
	1. Are a	aquatic macroinvertebra	ites prese	ent?			🗌 Yes	\checkmark] No	
ors	2. Are 6	or more individuals of	the Orde	r Ephe	meroptera p	present?	Yes	\checkmark] No	
licat	3. Are p	perennial indicator taxa	present?	(refer t	o Table 1)		Yes	\checkmark] No	
lnd	4. Are F	FACW, OBL, or SAV pla	ants prese	ənt? (V	Vithin ½ chann	el width)	🗌 Yes	\checkmark] No	
	5. Wha	t is the slope? (In percent	t, measured	for the	valley, not the	stream)		12_%		
Conclusions	Ar macro (In	e aquatic invertebrates resent? dicator 1) If No : Ar FACW, plants pr (Indica	Are 6 or ividuals Order roptera ent? tor 2) re SAV, or OBL resent? tor 4)		Yes: Are perennial indicator taxa present? (Indicator 3) If No: INTERMITTENT f Yes: What is the slope? (Indicator 5) If No: EPHEMERAL		s: PERENNIAL o: What is the slope? Indicator 5) Dope < 10.5%: TERMITTENT Dope ≥ 10.5%: PHEMERAL	S F	Slope < 16%: TERMITTENT lope ≥ 16% : PERENNIAL)
	Single	Indicators:					9. VI []	ntermit Perenni	tent	

Notes: single indicator interfere with indicators, etc.)	or conclusions, description of distu	rbances o	r modificatio	ons that may					
Difficult Situation:	Describe situation. For dis type, and history of disturb	sturbed str ance.	eams, note	extent,					
Prolonged Abnormal Rainfall / Snowpa	ack								
Below Average									
Above Average									
Natural or Anthropogenic Disturbance									
☐ Other:									
Additional Notes: (sketch of site, description of photos, comments on hydrological observations, etc.) Attach additional sheets as necessary.									
Steep swale. Stream mapped because w with lots of snowmelt. No sign of streams	vater could potentially flow here du bed.	uring heav	y rainfall or						
Ancillary Information:									
Riparian Corridor									
Erosion and Deposition									
Floodplain Connectivity									
	Observed Amphibians, Snake,	, and Fish	:	Number of					
	Тауа	History	Location	Individuals					
	i ала	Jiage	Observed	Observed					

Project # / Name			Assessor							
Badger Mountain					Sara Frank					
Add						Coordinates	at La	Date 4/2	21/2021	N
vval	erway Na	anie 51-386				downstream	end	•		IN N
Rea	ch Boun	daries				(ddd.mm.ss)		ig.		VV
Prec	pitation	w/in 48 hours (cm)	0 Ch	nannel	Width (m)	4 in	Situat	tion (Describ	e in "Notes")	
Observed Hydrology% of reach w/observed surface % of reach w/any flow (surface # of pools observed 0				low <u>0</u> or hypo	rheic) <u>0</u>					
	Observ	ved Wetland Plants _{N//}	4	(Observed	Macroinver	ebrates		N/A	
Observations	(and indicator status):				Та	ixon li	ndicator Status	Ephemer- optera?	# of Individuals	
	1. Are a	aquatic macroinvertebra	tes presen	nt?			🗌 Yes	s 🔽] No	
ors	2. Are 6 or more individuals of the Order Ephemeroptera present?									
icat	3. Are perennial indicator taxa present? (refer to Table 1)									
pul	4. Are I	FACW, OBL, or SAV pla	ants preser	nt? (Wi	thin ½ channe	el width)		s 🔽	No	
	5. Wha	t is the slope? (In percent	t, measured f	or the va	alley, not the s	stream)		4 %		
Conclusions	5. What is the slope? (In percent, measured for the valley, not the stream))		
	Single	Indicators: bhibians				rinaing		Intermit Perenn	tent ial	

Notes: single indicato interfere with indicators, etc.)	Notes: single indicator conclusions, description of disturbances or modifications that may interfere with indicators, etc.)						
Difficult Situation:	Describe situation. For dis type, and history of disturb	sturbed str ance.	eams, note	extent,			
Prolonged Abnormal Rainfall / Snowpa	ack						
Below Average							
Above Average							
Natural or Anthropogenic Disturbance							
Other:							
Additional Notes: (sketch of site, description of photos, comments on hydrological observations, etc.) Attach additional sheets as necessary.							
Slight cracking between rows of planted winter wheat, likely due to recent snowmelt. 4 inches wide at most.							
Ancillary Information:							
Riparian Corridor							
Erosion and Deposition							
Eloodplain Connectivity							
	Observed Amphibians, Snake,	and Fish	:				
	_	Life History	Location	Number of Individuals			
	Таха	Stage	Observed	Observed			
		I					

Project # / Name Dedger Mountain			Assessor							
, Add	Address				Sara Frank					
Wat	erway Na	ame ST-387				Coordinates at Lat				
Rea	ch Boun	daries				downstrea	m end	na.		w
Due						(ddd.mm.ss)		isturbed Si	te / Difficult	
Prec	pitation	w/in 48 hours (cm)	0	nanne	el Width (m)	4 in	Situa	tion (Descrit	be in "Notes")	
Observed % of reach w/observed surface Hydrology % of reach w/any flow (surface # of pools observed 0			d surface f (surface c	flow <u>0</u> or hyp	orheic) <u>0</u>					
	Observ	ved Wetland Plants N//	4		Observed	Macroinve	ertebrates):	N/A	
Observations	(and in	dicator status):			Ti	axon	Indicator Status	Ephemer- optera?	# of Individuals	
	1. Are aquatic macroinvertebrates present?									
tors	2. Are 6 or more individuals of the Order Ephemeroptera					present?	🗌 Ye	s 🗸	🛛 No	
icat	3. Are perennial indicator taxa present? (refer to Table 1)									
lnd	4. Are I	FACW, OBL, or SAV pla	ants prese	nt? (v	Vithin ½ chanr	annel width) Yes Vo				
	5. Wha	t is the slope? (In percent	t, measured	for the	valley, not the	stream)		4_%		
Conclusions	5. What is the slope? (In percent, measured for the valley, not the stream))			
	Single ☐ Fish ☐ Amp	Indicators: Dhibians				Filiain	y. ⊻ □	Intermi Perenn	ttent ial	

Notes: single indicato interfere with indicators, etc.)	Notes: single indicator conclusions, description of disturbances or modifications that may interfere with indicators, etc.)						
Difficult Situation:	Describe situation. For dis type, and history of disturb	sturbed str ance.	eams, note	extent,			
Prolonged Abnormal Rainfall / Snowpa	ack						
Below Average							
Above Average							
Natural or Anthropogenic Disturbance							
Other:							
Additional Notes: (sketch of site, description of photos, comments on hydrological observations, etc.) Attach additional sheets as necessary.							
Slight cracking between rows of planted winter wheat, likely due to recent snowmelt. 4 inches wide at most.							
Ancillary Information:							
Riparian Corridor							
Erosion and Deposition							
Eloodplain Connectivity							
	Observed Amphibians, Snake,	and Fish	:				
	_	Life History	Location	Number of Individuals			
	Таха	Stage	Observed	Observed			
		I					

Project # / Name Dedger Mountain				Assessor						
ر ا	Address					Sara Frank				
Wat	erway Na	ame ST-390			Coordinates at Lat					N
Rea	ch Boun	daries				downstream end				w
Due						(ddd.mm.ss)	Dis	sturbed Si	te / Difficult	
Prec	pitation	w/in 48 hours (cm)	0 ^{Ch}	annel Width (n	n) ₁	1 ft	Situati	ion (Describ	e in "Notes")	
Observed Hydrology % of reach w/observed surface fl % of reach w/any flow (surface o # of pools observed 0				ow_0 r hyporheic) _0_						
	Observ	ved Wetland Plants N//	4	Observe	ed l	Macroinverte	brates:		N/A	
Observations	(and in	dicator status):			Та	xon Inc S	licator tatus	Ephemer- optera?	# of Individuals	
	1. Are aquatic macroinvertebrates present?									
tors	2. Are 6 or more individuals of the Order Ephemeroptera					resent?	🗌 Yes] No	
licat	3. Are perennial indicator taxa present? (refer to Table 1)									
lnc	4. Are I	FACW, OBL, or SAV pla	ints presen	t? (Within ½ cha	inne	el width)	Yes		🛾 No	
	5. Wha	t is the slope? (In percent	, measured fo	or the valley, not th	ne s	tream)		5_%		
Conclusions	5. What is the slope? (In percent, measured for the valley, not the stream))			
	Single	Indicators: Dhibians				rinaing:		Intermit Perenn	ial	

Notes: single indicator interfere with indicators, etc.)	Notes: single indicator conclusions, description of disturbances or modifications that may interfere with indicators, etc.)						
Difficult Situation:	Describe situation. For dis type, and history of disturb	sturbed str ance.	eams, note	extent,			
Prolonged Abnormal Rainfall / Snowpa	ick						
Below Average							
Above Average							
Natural or Anthropogenic Disturbance							
Other:							
Additional Notes: (sketch of site, description of photos, comments on hydrological observations, etc.) Attach additional sheets as necessary.							
Drainage full of russian thistle begins and	runs outside of project area						
Ancillary Information:							
🗌 Riparian Corridor							
Erosion and Deposition							
Floodplain Connectivity							
	Observed Amphibians Snake	and Fish					
		Life History	Location	Number of			
	Таха	Stage	Observed	Observed			

Project # / Name				Assessor					
Badger Mountain				Sara Frank					
Add	ress	07.000			Coordinatoo		Date 4/2	1/2021	
Wate	erway Na	ame S1-392			downstream end				
Rea	ch Boun	daries			(ddd.mm.ss)		J.	/ D://: 11	W
Prec	cipitation	w/in 48 hours (cm)	0 Cha	annel Width (m)	1 ft	Situatio	turbed Sit 01 (Describ	e / Difficult e in "Notes")	
Observed Hydrology% of reach w/observed surface % of reach w/any flow (surface # of pools observed 0				w <u>0</u> hyporheic) <u>0</u>					
	Observ	ved Wetland Plants N//	4	Observed	Macroinverte	brates:		N/A	
Observations	(and in	dicator status):	Ta	axon Inc S	licator tatus	Ephemer- optera?	# of Individuals		
	1. Are aquatic macroinvertebrates present?								
ors	2. Are 6 or more individuals of the Order Ephemeroptera present?								
icat	3. Are perennial indicator taxa present? (refer to Table 1)								
pul	4. Are I	FACW, OBL, or SAV pla	ants present	? (Within ½ chann	el width)	🗌 Yes 🛛 No			
	5. Wha	t is the slope? (In percent	t, measured for	r the valley, not the	stream)		8 %		
Conclusions	5. What is the slope? (In percent, measured for the valley, not the stream))	
	Single	Indicators: bhibians			rinaing:		ntermit Perenni	tent al	

Notes: single indicator conclusions, description of disturbances or modifications that may interfere with indicators, etc.)							
Difficult Situation:	Describe situation. For disturb	sturbed str ance.	eams, note	extent,			
Prolonged Abnormal Rainfall / Snowpa	ick						
Below Average							
Above Average							
Natural or Anthropogenic Disturbance							
Other:							
Additional Notes: (sketch of site, description of photos, comments on hydrological observations, etc.) Attach additional sheets as necessary.							
Ded and banks barely discernible, full of		alea					
Ancillary Information:							
Fracian and Danasitian							
E Floodplain Connectivity							
		and Einh					
	Observed Amphibians, Shake,	Life	Location	Number of			
	Таха	Stage	Observed	Observed			

Appendix C. Wetlands and Waters Photolog

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Photopoint 100. Sample site WT-100. Facing south.



Photopoint 101. Sample site WT-101. Facing southeast.



Photopoint 103. Overview of confluence of ST-200 and ST-300A. Facing southeast.



Photopoint 105. No bed or banks. XBB-104. Facing west.


Photopoint 106. No bed or banks. XBB-107. Facing southwest.



Photopoint 108. No bed or banks. XBB-109. Facing west.



Photopoint 110. No bed or banks. XBB-111. Facing west.



Photopoint 112. No bed or banks. XBB-113. Facing west.



Photopoint 115. No bed or banks. XBB-116. Facing southwest.



Photopoint 118. Ephemeral drainage ST-117. Facing south.



Photopoint 119. No bed or banks downhill from ST-117. XBB-120. Facing north.



Photopoint 123. Rock pile, no hydric features in low spot. Facing east.



Photopoint 124. No bed or banks. XBB-125. Facing northeast.



Photopoint 127. Runoff in low spot between two fields. Facing southwest.



Photopoint 129. No hydric features in swale. Facing southwest.



Photopoint 130. No bed or banks. XBB-131. Facing west.



Photopoint 132a. Grassed area between two fields. Facing west.



Photopoint 132b. Overview of grassy area indicated as wetland by NWI, no hydric conditions. Facing southeast.



Photopoint 133. No bed or banks. XBB-133. Facing southwest.



Photopoint 134. Ephemeral drainage ST-134. Facing east.



Photopoint 135. No bed or banks. XBB-135. Facing west.



Photopoint 136. No bed or banks. XBB-136. Facing east.



Photopoint 137. No bed or banks. XBB-137. Facing east.



Photopoint 138. No bed or banks. Sagebrush in rocky area. Facing northwest.



Photopoint 139. No bed or banks. Sagebrush in rocky area. Facing southeast.



Photopoint 140. No bed or banks. Scabland, typical conditions. Facing north.



Photopoint 141. No bed or banks. XBB-141. Facing north.



Photopoint 142. No bed or banks. Sagebrush in rocky area. Facing northwest.



Photopoint 143. No bed or banks. XBB-143. Facing north.



Photopoint 144. No bed or banks. Sagebrush in rocky area. Facing southwest.



Photopoint 145. No bed or banks. Sagebrush in rocky area. Facing north.



Photopoint 146. No bed or banks. XBB-146. Facing east.



Photopoint 147. No bed or banks. XBB-147. Facing northwest.



Photopoint 148. ST- 148. Ephemeral feature drains towards ST-249A. Facing south.



Photopoint 149. No bed or banks. ST-249 does not continue beyond here. Facing west.



Photopoint 150. No bed or banks. XBB-150. No visible drainage uphill from here. Facing northwest.



Photopoint 151. No bed or banks. XBB-151. Facing southeast.



Photopoint 152. No bed or banks. XBB-152. Facing northwest.



Photopoint 153. Ephemeral drainage. ST-153. Facing northwest.



Photopoint 154. No bed or banks. XBB-154. Facing southeast.



Photopoint 155. No bed or banks. XBB-155. Facing west.



Photopoint 156. Erosional feature ST-156. Facing west.



Photopoint 157. No bed or banks. XBB-157. Facing east.



Photopoint 158. No bed or banks. XBB-158. Facing west.



Photopoint 159. No bed or banks. XBB-159. Facing east.



Photopoint 160. ST-160. Highly eroded section. Facing northeast.



Photopoint 161. Scabland patch. Facing southeast.



Photopoint 162. Scabland patch. Facing north.



Photopoint 163. Scabland patch. Facing south.



Photopoint 164. Scabland patch. Facing west.



Photopoint 165. No bed or banks. XBB-165. Facing northwest.



Photopoint 200. Ephemeral drainage. ST-200. Facing southwest.



Photopoint 201. No bed or banks. XBB-201. Facing south.



Photopoint 202. No bed or banks. XBB-202. Facing southwest.



Photopoint 203. No bed or banks. XBB-203. Facing southwest.



Photopoint 204. No bed or banks. XBB-204. Facing west.



Photopoint 205. No bed or banks. XBB-205. Facing northeast.



Photopoint 206. No bed or banks. XBB-206. Facing northwest.



Photopoint 207. No bed or banks. XBB-207. Facing north.



Photopoint 208. No bed or banks. XBB-208. Facing north.



Photopoint 209. No bed or banks. XBB-209. Facing northwest.



Photopoint 210. No bed or banks. XBB-210. Facing northwest.



Photopoint 211. No bed or banks. XBB-211. Facing north.



Photopoint 212. No bed or banks. XBB-212. Facing northwest.



Photopoint 213. No bed or banks. XBB-213. Facing southwest.



Photopoint 214. No bed or banks. XBB-214. Facing west.



Photopoint 215. No bed or banks. XBB-215. Facing northwest.



Photopoint 216. No bed or banks. XBB-216. Facing northwest.



Photopoint 217. No bed or banks. XBB-217. Facing southeast.



Photopoint 218. No bed or banks. XBB-218. Facing north.



Photopoint 219. No bed or banks. XBB-219. Facing south.



Photopoint 220. No bed or banks. XBB-220. Facing west.



Photopoint 221. No bed or banks. XBB-221. Facing east.



Photopoint 222. No bed or banks. XBB-222. Facing south.



Photopoint 223. Overview from WT-223. Sample site. Facing south.



Photopoint 224. Overview from WT-224. Sample site. Facing west.


Photopoint 225. Overview from WT-225. Sample site. Facing southwest.



Photopoint 226. Overview from WT-226. Sample site. Facing west.



Photopoint 227. Overview from WT-227. Sample site. Facing southwest.



Photopoint 228. Grassy area between two fields, shallow soils. Facing west.



Photopoint 229. Overview of ST-134. Facing northwest.



Photopoint 230. Overview of ST-134. Facing east.



Photopoint 231. Overview of site conditions, ST-134 originates downhill from this point. Facing west.



Photopoint 232. No bed or banks. XBB-232. Facing west.



Photopoint 233. No bed or banks. XBB-233. Facing west.



Photopoint 234. No bed or banks. XBB-234. Facing west.



Photopoint 235. No bed or banks. XBB-235. Facing northeast.



Photopoint 236. No bed or banks. XBB-236. Facing north.



Photopoint 237. No bed or banks. XBB-237. Facing northeast.



Photopoint 238. Ephemeral drainage. ST-238. Facing southwest.



Photopoint 239. No bed or banks. XBB-239. Facing southwest.



Photopoint 241. Ephemeral drainage. ST-241. Facing northwest.



Photopoint 243. No bed or banks. XBB-243. Facing west.



Photopoint 244. No bed or banks. XBB-244. Facing southwest.



Photopoint 245. No bed or banks. XBB-245. Facing north.



Photopoint 246. No bed or banks. XBB-246. Facing southwest.



Photopoint 248. No bed or banks. XBB-248. Facing west.



Photopoint 249a. Ephemeral drainage. ST-249. Facing east.



Photopoint 249b. Ephemeral drainage. ST-249. Facing east.



Photopoint 249c. Ephemeral drainage. ST-249. Facing east.



Photopoint 250. No bed or banks. XBB-250. Facing west.



Photopoint 251. Ephemeral drainage. ST-251. Facing west.



Photopoint 252. End of ST-251. XBB-252. Facing west.



Photopoint 253. No bed or banks. XBB-253. Facing southwest.



Photopoint 254. No bed or banks. XBB-254. Facing west.



Photopoint 255. No bed or banks. XBB-255. Facing west.



Photopoint 256. No bed or banks. XBB-256. Facing west.



Photopoint 257. No bed or banks. XBB-257. Facing southwest.



Photopoint 258. No bed or banks. XBB-258. Facing southwest.



Photopoint 259. No bed or banks. XBB-259. Facing east.



Photopoint 260. No bed or banks. XBB-260. Facing west.



Photopoint 261. No bed or banks. XBB-261. Facing west.



Photopoint 262. No bed or banks. XBB-262. Facing northwest.



Photopoint 263. No bed or banks. XBB-263. Facing east.



Photopoint 264. No bed or banks. XBB-264. Facing northwest.



Photopoint 265. Ephemeral drainage. ST-241. Facing northwest.



Photopoint 300a. Ephemeral drainage. ST-300. Facing south.



Photopoint 300b. Ephemeral drainage. ST-300. Facing south.



Photopoint 300c. Facing south.



Photopoint 300d. Facing south.



Photopoint 301. No bed or banks. XBB-301. Facing south.



Photopoint 302. No bed or banks. Facing west.



Photopoint 303a. No bed or banks. XBB-303. Facing southeast.



Photopoint 303b. No bed or banks. XBB-303. Facing west.



Photopoint 304. Rock pile with some snow melt runoff. XBB-304. Facing southeast.



Photopoint 305. No bed or banks. XBB-305. Facing southwest.



Photopoint 306. No bed or banks. XBB-306. Facing west.



Photopoint 307. No bed or banks. XBB-307. Facing south.



Photopoint 308. No bed or banks. XBB-308. Facing east.



Photopoint 309. No bed or banks. XBB-309. Facing southwest.



Photopoint 310. No bed or banks. XBB- 310. Facing southwest.



Photopoint 311. No bed or banks. XBB-311. Facing east.



Photopoint 312. Two track road. Facing west.



Photopoint 313. Old barbed wire. Facing west.



Photopoint 314. Rock piles. Facing northeast.



Photopoint 315. No bed or banks. XBB-315. Facing west.



Photopoint 316. No bed or banks. XBB-316. Facing northeast.



Photopoint 317. Rock pile. XBB-317. Facing southwest.



Photopoint 318. No bed or banks. XBB-318. Facing east.



Photopoint 319. No bed or banks. XBB-319. Facing east.



Photopoint 320. No bed or banks. XBB-320. Facing southwest.



Photopoint 321. Ephemeral drainage. ST-321. Facing southwest.



Photopoint 322. No bed or banks. XBB-322. Facing northeast.



Photopoint 323. No bed or banks. Facing east.



Photopoint 324. No bed or banks. XBB-324. Facing northeast.



Photopoint 325. No bed or banks. XBB-325. Facing northeast.



Photopoint 326. No bed or banks. XBB-326. Facing east.



Photopoint 327. Old structures. Facing southwest.


Photopoint 329a. Overview of ST-329 within project area, looking from outside the project to the headwaters. Facing west.



Photopoint 329b. Headwaters of ST-329. Facing east.



Photopoint 330. No bed or banks. XBB-330. Facing northeast.



Photopoint 331. No bed or banks. XBB-331. Facing north.



Photopoint 332. Sample site. WT-332. Facing northwest.



Photopoint 333. No bed or banks. XBB-333. Facing north.



Photopoint 334. No bed or banks. XBB-334. Facing southeast.



Photopoint 335a. Ephemeral drainage. ST-335. Facing northwest.



Photopoint 335b. Beginning of ST-335. Facing west.



Photopoint 336. No bed or banks. XBB-336. Facing southeast.



Photopoint 337. No bed or banks. XBB-337. Facing southeast.



Photopoint 338. No bed or banks. Facing northwest.



Photopoint 339. No bed or banks. Facing west.



Photopoint 340. Mullein and rock piles, no bed or banks. Facing southeast.



Photopoint 341a. Ephemeral drainage. ST-341. Facing southeast.



Photopoint 341b. Ephemeral drainage. End of ST-341. Facing northwest.



Photopoint 342a. Ephemeral drainage. Beginning of ST-342. Facing east.



Photopoint 342b. Ephemeral drainage. End of ST-342. Facing east.



Photopoint 344. Rock pile. Facing west.



Photopoint 345a. Ephemeral drainage. ST-345. Facing west.



Photopoint 345b. Ephemeral drainage. ST-345. Facing east.



Photopoint 346. No bed or banks. XBB-346. Facing west.



Photopoint 347. Eroded spot where culvert should be, culvert is present on opposite side of road. Facing west.



Photopoint 348. No bed or banks. XBB-348. Facing west.



Photopoint 349. Rock pile. Facing east.



Photopoint 350. No bed or banks. XBB-350. Facing west.



Photopoint 351. No bed or banks. XBB-351. Facing west.



Photopoint 352. No bed or banks. XBB-352. Facing east.



Photopoint 353. No bed or banks. XBB-353. Facing west.



Photopoint 354. Sagebrush, Russian thistle area. Facing west.



Photopoint 355. Rock pile. Facing north.



Photopoint 356. Cliffside. Facing northwest.



Photopoint 357. No bed or banks. XBB-357. Facing northeast.



Photopoint 358. No bed or banks. XBB-358. Facing northeast.



Photopoint 359. No bed or banks. XBB-359. Facing east.



Photopoint 360a. Ephemeral drainage. ST-360. Facing northwest.



Photopoint 360b. Ephemeral drainage. ST-360. Facing southeast.



Photopoint 361. No bed or banks. XBB-361. Facing west.



Photopoint 362. No bed or banks. XBB-362. Facing southwest.



Photopoint 363. No bed or banks. XBB-363. Facing west.



Photopoint 364. No bed or banks. XBB-364. Facing south.



Photopoint 365. No bed or banks. XBB-365. Facing south.



Photopoint 366. No bed or banks. XBB-366. Facing south.



Photopoint 367. No bed or banks. XBB-367. Facing south.



Photopoint 368. No bed or banks. XBB-368. Facing south.



Photopoint 369. No bed or banks. XBB-369. Facing southwest.



Photopoint 370. No bed or banks. XBB-370. Facing north.



Photopoint 371. No bed or banks. XBB-371. Facing northeast.



Photopoint 372. No bed or banks. XBB-372. Facing west.



Photopoint 373. No bed or banks. XBB-373. Facing north.



Photopoint 374. No bed or banks. XBB-374. Facing southwest.



Photopoint 375. Rocky area. Facing west.



Photopoint 376. Edge of field. Facing west.



Photopoint 377. Sagebrush. Facing northwest.



Photopoint 378. No bed or banks. XBB-378. Facing northeast.



Photopoint 379. Sagebrush and rocky patch. Facing northeast.



Photopoint 380. Sagebrush and rocky patch. Facing south.



Photopoint 381. Ephemeral drainage. ST-381. Facing southwest.



Photopoint 382a. Ephemeral drainage. ST-382. Facing west.



Photopoint 382b. Ephemeral drainage. ST-382. Facing east.



Photopoint 383a. Headwaters of ephemeral drainage ST-383. Facing west.



Photopoint 383b. Ephemeral drainage. ST-383. Facing east.



Photopoint 384. No bed or banks. XBB-384. Facing northwest.



Photopoint 385. No bed or banks. XBB-385. Facing northwest.



Photopoint 386. No bed or banks. XBB-386. Facing north.



Photopoint 387. No bed or banks. XBB-387. Facing southeast.



Photopoint 388. No bed or banks. XBB-388. Facing west.



Photopoint 389. No bed or banks. XBB-389. Facing northeast.



Photopoint 390. Ephemeral drainage. ST-390. Facing west.



Photopoint 391. No bed or banks. XBB-391. Facing west.



Photopoint 392. Ephemeral drainage. ST-392. Facing north.



Photopoint 393. No bed or banks. XBB-393. Facing southeast.


Photopoint 394. No bed or banks. XBB-394. Facing south.



Photopoint 395. No bed or banks. XBB-395. Facing west.



Photopoint 396. No bed or banks. XBB-396. Facing southeast.



Photopoint 397. No bed or banks. XBB-397. Facing southeast.



Photopoint 398. No bed or banks. XBB-398. Facing northwest.



Photopoint 399. No bed or banks. XBB-399. Facing northwest.



Photopoint 400. Steep hillside. Facing west.



Photopoint 500. No bed or banks. XBB-500. Facing northwest.



Photopoint 501. Overview of ST-501. Facing northeast.



Photopoint 503. Overview of ST-503. Facing northeast.



Photopoint 505. Overview of ST-505 at top of reach. Facing southeast.



Photopoint 505a. Downstream end of ST-505, no bed or banks. Crested wheatgrass, yarrow. Facing southwest.



Photopoint 507. ST-507. Barely discernible channel, one foot wide. Facing northwest.



Photopoint 508. No bed or banks on NHD line. Facing west.



Photopoint 509. No bed or banks in swale. Facing west.



Photopoint 510. ST-510, three feet wide, incised, upland plants, no macroinvertebrates. Facing northeast.



Photopoint 510a. ST-510, three feet wide, incised, upland plants. Facing southeast.



Photopoint 510b. ST-510, three feet wide, incised, upland plants, no macroinvertebrates. Facing west.



Photopoint 511. ST-511, two feet wide, incised, upland plants. Facing west.



Photopoint 512. Overview of ST-512. Facing southeast.



Photopoint 513. ST-513, no bed or banks, culvert underneath road. Facing north.



Photopoint 513a. ST-513, south side of culvert, one foot wide. Facing southwest.



Photopoint 514. No bed or banks. XBB-514. Facing southwest.



Photopoint 515. No bed or banks. XBB-515. Facing southwest.



Photopoint 517. No bed or banks. XBB-517. Facing northeast.



Photopoint 517a. ST-517, heavily vegetated, no bed or banks. Facing northwest.



Photopoint 517b. Overview of ST-517, no bed or banks. Facing west.



Photopoint 518. No bed or banks. XBB-518. Facing south.



Photopoint 518a. Head of drainage, ST-518. Facing northwest.



Photopoint 518b. No bed or banks, centerline taken at lowest elevation. Facing northwest.



Photopoint 519. Overview of ST-519, no bed or banks, centerline taken at lowest elevation. Facing west.



Photopoint 520. Overview of ST-520. Facing southwest.



Photopoint 520a. Overview of ST-520. Facing east.



Photopoint 520b. Culvert. Facing southwest.



Photopoint 521. Overview of ST-521. Facing southwest.



Photopoint 522. No bed or banks, but built up topography from rock slide creates drainage. Looking SW.