

**Bill Sanderson Gas Processing Plant Project
Waters of the U.S.
Updated Field Assessment and Offsite Assessment Report**

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1.0 INTRODUCTION

1.1 Project Description

OE2 North LLC (OE2) is planning to develop the Bill Sanderson Gas Processing Plant Project (Bill Sanderson) facilities pad on private surface in Williams County, North Dakota. The Bill Sanderson project will be located in section 27 T154N-R104W and will include gas processing and compression equipment. OE2 contracted Grouse Mountain Environmental Consultants (Grouse Mountain) to conduct desktop analyses for wildlife, cultural, and Waters of the United States (WOTUS) natural resources potentially impacted by the construction of the Bill Sanderson facility. Grouse Mountain previously submitted a resource desktop analysis summary report to Trent Taylor on January 31, 2020 (GMEC 2020a) and an offsite wetland assessment report on February 17, 2020 (GMEC 2020b). Preliminary findings were outlined where two (2) unknown tributaries within section 27 were identified as a potential jurisdictional concern. As construction is anticipated to occur prior to the growing season, not allowing for an official wetland delineation to be conducted, OE2 contracted Grouse Mountain to conduct an offsite wetland assessment using long-term aerial imagery, hydric soils information, and other hydrologic data to draw inference on jurisdictional water boundaries. Grouse Mountain conducted the initial on-site field assessment on January 29, 2020 to supplement findings from the offsite wetland assessment. On March 5 and 26, 2020, Grouse Mountain conducted follow-up field assessments to further supplement the findings of the offsite wetland assessment.

1.2 Jurisdictional Waters and Wetlands

Under section 404 of the Clean Water Act (CWA) of 1972, the U.S. Army Corps of Engineers (USACE) may issue permits for the discharge of dredge or fill material into WOTUS (Clean Water Act 2002). Following the repeal of the 2015 rule in October 2019, the Department of the Army and the Environmental Protection Agency finalized the Navigable Waters Protection Rule (Final Rule). The Final Rule was intended to clarify the pre-2015 regulatory language and definition of WOTUS. The Final Rule is expected to take effect 60 days following the publication in the federal registry; publication in the federal registry has not yet occurred. Until then, the pre-2015 definition of WOTUS will still be in effect (40 CFR 230.3). In 2017, under section 404 of the CWA, the USACE issued general permits authorizing activities resulting in minimal impacts to WOTUS, known as Nationwide Permits (NWP). NWP 12 or NWP 39 may apply to this project given determination by USACE. General conditions still apply and a preconstruction notification (PCN) may be required (USACE 2017). Additionally, a 401 certification is required by the North Dakota Department of Health (NDDoH) for all NWP permits. Please see USACE (2017) and the NDDoH website for detailed guidelines regarding NWPs and section 401 certification.

2.0 ENVIRONMENTAL SETTING

The Bill Sanderson facility is approximately 15 miles west of Williston, North Dakota and located along the North Dakota-Montana border. The local climate can be characterized by long cold winters and short hot summers. Average temperatures range from 1.7 °F to 21.3 °F in January and from 57.0 °F to 85.4 °F in July. Mean annual precipitation is 14.17 inches (WRCC 2016). Elevation of the project area ranges from 2,180 to 2,270 feet. The project area is dominated by loamy ecosites with minor components of limy and limy steep ecosites. Many other ecosites occur within the project area, but at very low occurrences. Horse Tied Creek lies 0.8 mile south of the project area. The majority of the project area falls within the Lower

Little Muddy Creek (HUC-12 [100600050704]) subwatershed of the Missouri-Poplar basin (HUC-6[100600]; Table 1). Livestock grazing and mineral development are the predominant land uses in the area.

Table 1. Hydrologic Unit Codes (HUC) for Bill Sanderson Location

Project Name	Basin (HUC-6)	Subbasin (HUC-8)	Watershed (HUC-10)	Subwatershed (HUC-12)
Bill Sanderson Gas Processing Plant	Missouri-Poplar (100600)	Charlie-Little Muddy (10060005)	Little Muddy Creek (1006000507)	Lower Little Muddy Creek (100600050704)

3.0 METHODS AND RESULTS

3.1 Jurisdictional Waters and Wetlands

3.1.1 Methods

Prior to conducting field surveys, Grouse Mountain conducted an offsite wetland and hydrology assessment using spatial layers from applicable state and federal agencies. Hydrologic watershed data was acquired from the U.S. Geological Survey (USGS) Watershed Boundary Dataset (WBD). Wetland data was obtained from the USFWS National Wetlands Inventory (NWI; USFWS 2012b). Spatial data for rivers, streams, and tributaries were acquired from the USGS National Hydrologic Dataset (NHD). Soils data was acquired from the Natural Resources Conservation Service (NRCS) Web Soils Survey (WSS; SSS-NRCS-USDA 2020). NHD in combination with the WBD and NWI were overlaid with the provided parcel boundary and additional survey area in ArcGIS to assess potential areas of jurisdictional concern. However, as these datasets are based on aerial or satellite imagery and infrequently updated, they may not accurately represent resources on the ground. Grouse Mountain used the North Dakota NRCS’s *State Guidance for Wetland Determinations Including State Offsite Methods* (NRCS 2017) and Minnesota’s *USACE Guidance for Offsite Hydrology/Wetland Determinations* (USACE 2016) to delineate wetlands within these areas of concern. Imagery used for offsite assessments was acquired from the National Agriculture Imagery Program (NAIP) and representative of 2009-2010, 2012, and 2014-2019. WSS data was overlaid on these images to assess hydric soils. In areas where hydric soils were present, sample areas were delineated based on changes to vegetation greenness or inundation during years of normal climatic conditions. Grouse Mountain calculated the climatic conditions for the three (3) months prior to the month the imagery was taken for each year according to the procedure outlined in the NRCS *Hydrology Tools for Wetland Determination* (NRCS 1997) and using the NRCS WETS monthly precipitation data. Grouse Mountain determined wetland status of sample units by comparing hydric soils, whether the area had previously been classified as a wetland, and the percentage of images across years that had indicators of wetland hydrology (i.e. greener color tones in vegetation).

To supplement the offsite determination, Grouse Mountain conducted a field assessment on January 29, 2020. Due to the time of year and snow cover present, wetland delineation in accordance with the Great Plains Regional Supplement to the Corp of Engineers Wetland Delineation Manual protocols to assess jurisdictional boundaries (USACE 2010) and assessment of OHWM/bed and bank features were not possible in the field. However, Grouse Mountain biologists were able to identify major vegetation along the drainages and overall topography to assist in offsite assessments. Later, Grouse Mountain conducted

follow-up field assessments on March 5 and 26, 2020 to assess OHWM and re-assess the potential wetland within the project footprint to the best extent possible prior to the growing season. Extensive photographs were taken to document the drainages within the footprint (Appendices A and B).

3.1.2 Results

During the initial desktop analysis (GMEC 2020a), NWI-designated wetlands were identified within the northern half of the parcel boundary (Lot 3 and NESE, Section 27, T154N-R104W). These wetlands are classified as intermittent riverine wetlands and are associated with an intermittent tributary of Little Muddy Creek. Additionally, one (1) NWI wetland extends into the additional survey area to the south (NWNW Section 35, T154N-R104W). No NWI or NHD data was present within the southern portion of the parcel boundary in Section 27; however, two (2) distinct channels running south to north are visible on aerial imagery (Section 27, T154N-R104W). These channels will be referred to throughout as the western drainage (Lots 3 and 4, Section 27, T154N-R104W) and the eastern drainage (NESE and SESE, Section 27, T154N-R104W). Although these drainages are not identified within the NHD or NWI datasets, spatial data shows evidence of a high water table and potential water pooling.

Table 2. Bill Sanderson Gas Processing Plant - Antecedent Precipitation

Imagery	Imagery Date¹	Climatic Condition
2019 NAIP	7/25/2019	Normal
2018 NAIP	July 15 – Oct. 23, 2018	Normal
2017 NAIP	10/4/2017	Wet
2016 NAIP	7/25/2016	Normal
2015 NAIP	9/14/2015	Normal
2014 NAIP	8/19/2014	Dry
2012 NAIP	6/27/2012	Wet
2010 NAIP	6/29/2010	Normal
2009 NAIP	June – Sept. 2009	Normal

¹For years where no imagery date was found, climatic conditions were calculated for all possible three-month prior time periods. All calculations gave the same result, so the data was included.

Analysis of antecedent precipitation for each year of NAIP imagery showed six (6) years of normal climatic conditions, two (2) years that were wetter than normal, and one (1) year that was drier than normal (Table 2). According to WSS data, hydric soils were not present within the corresponding Map Unit for the western drainage within the southern portion of the parcel boundary (Lots 3 and 4, Section 27, T154N-R104W). The ground assessment of the drainage in question indicated steep slopes were present along the extent of the reach and would likely not allow for significant water accumulation and associated wetland formation before draining directly into the intermittent drainage downstream. Additionally, the majority of vegetation present within the drainage was woody upland vegetation visible above the snow cover, a strong indication that no wetlands were associated with this drainage. As such, an offsite wetland assessment was not conducted for the western most drainage of concern.

WSS data identified the Map Unit encompassing the eastern drainage as having potential for hydric soils. Grouse Mountain identified sixteen (16) sampling units using wetland indicators on aerial imagery during

years of normal circumstances (Table 3; Figure 1). During initial analysis, four (4) units were determined not to be wetlands, as they showed indications of wet signatures in less than half of the images from “normal” years (Sampling Units 12 and 14-16; Table 3). Ground surveys conducted in January indicated that the wet signatures in eleven (11) units were an artefact of patches of western snowberry (*Symphoricarpos occidentalis*; an upland shrub) producing deep color tone differences in the imagery (Sampling Units 1-11; Table 3). Based on the vegetation that was identified during this onsite field assessment, it is likely that western snowberry and other upland plants comprise the majority of the vegetative cover within this eastern drainage (Appendix A), eliminating the potential for classification as wetland sites. However, at one (1) of these sites (Sampling Unit 9), the snowberry was located on the edge of a potential depression with facultative vegetation (*Rosa* spp., *Deschampsia caespitosa*) present. One (1) other site lacked western snowberry but still showed indicators of wet signatures in >80% of the imagery from “normal” years (Sampling Unit 13). The same facultative plants were identified in this sampling unit, suggesting some level of water tolerance. Based on this analysis, fourteen (14) sampling units have been classified as not a wetland and two (2) units (Sampling Units 9 and 13) have been classified as “unknown” features due to the presence of facultative vegetation.

Table 3. Bill Sanderson Gas Processing Plant - Offsite Assessment Results

Sampling Unit	Hydric Soils Present	Identified NWI	% Wet Signatures	Key Vegetative Characteristics	Wetland?
1	Possible	No	100	Snowberry	No
2	Possible	No	83.3	Snowberry	No
3	Possible	No	66.6	Snowberry	No
4	Possible	No	100	Snowberry	No
5	Possible	No	100	Snowberry	No
6	Possible	No	50	Snowberry, <i>Deschampsia</i>	No
7	Possible	No	100	Snowberry	No
8	Possible	No	100	Snowberry	No
9	Possible	No	100	Snowberry, <i>Deschampsia</i>	Unknown
10	Possible	No	66.6	Snowberry	No
11	Possible	No	83.3	Snowberry	No
12	Possible	No	0		No
13	Possible	No	83.3	<i>Deschampsia</i>	Unknown
14	Possible	No	33.3		No
15	Possible	No	33.3		No
16	Possible	No	33.3		No

Follow-up field assessments conducted in March provided more favorable field conditions for further assessing the hydrology of these drainages. During the field survey on March 5, 2020, snow cover was minimal and frozen water was observed running downstream in both the eastern and western drainages. The majority of this frozen water had receded by the time field surveys were conducted on March 26, 2020. Grouse Mountain biologists did not observe any characteristics of OHWM along either the eastern or western drainage within the facilities footprint. There were small pools of frozen water still present within depressions along the eastern drainage outside of the footprint; however, OHWM, characteristic of hydrologic connectivity, was not identified between these depressions. Additionally, relics of upland vegetation appeared to be dominant throughout the drainage.

During surveys on March 26, 2020, Grouse Mountain biologists further assessed the Unit 9 potential wetland. While frozen water was still present at this site, the water line had receded and relics of upland vegetation was more visible. Grouse Mountain biologists re-delineated an unofficial boundary, using standing water as the guide for the potential wetland boundary. The overall size of the Unit 9 potential wetland was reduced significantly from what was first identified within the offsite assessment. The potential wetland is now less than 0.006 acres (262 sq. ft.).

4.0 SUMMARY AND RECOMMENDATIONS

4.1 Jurisdictional Waters and Wetlands

Offsite assessments were conducted by Grouse Mountain using available spatial data and supplemental data retrieved during an onsite field assessment conducted outside of the growing season. Data not otherwise specified within the outlined methods above may not have been made available to GMEC and, thus, not considered in the overall evaluation of WOTUS presented in this report. Results and recommendations outlined within this report are provided based on Grouse Mountain's best assessment of hydrologic resources from aerial imagery and onsite field visits; however, field conditions did not allow for all wetland indicators to be assessed. Further, determination of jurisdictional waters are subject to the USACE.

The western drainage (Lots 3 and 4, Section 27, T154N-R104W) is characterized by steep slopes and woody upland vegetation, likely not allowing for significant water accumulation and wetland formation before reaching the intermittent drainage downstream. WSS data shows no hydric soils present in this drainage, so an offsite assessment was not conducted. Based on offsite analysis of the eastern drainage (NESE and SESE, Section 27, T154N-R104W), several sampling units showed consistent soil saturation, indicated by an increase in the greenness of vegetation across all years of NAIP imagery. However, field surveys indicated that much of this increased greenness is likely due to the presence of western snowberry, an upland shrub. Some remnants of wetland vegetation were identified beneath the snow in certain areas, though it did not appear to make up a dominant proportion of vegetation. Specifically, fourteen (14) of the sampling units within the eastern drainage were characterized by a predominance of snowberry and classified as not a wetland. Two (2) of the total sampling units were classified as wetland status "unknown" due to consistent wetland signatures present in over half of the imagery years assessed as well as a high prevalence of facultative vegetation and lack of upland shrubs; one (1) of these units falls within the project boundary (Unit 9). Follow-up field assessments indicated that no characteristics of OHWM were present within the project footprint nor immediately downstream from Unit 9. Further assessment of Unit 9 showed continuously receding water levels and an increase in visible relic upland vegetation. However, field conditions did not allow for an official wetland delineation to be conducted.

For all potential jurisdictional waters, Grouse Mountain suggests avoidance where possible. If avoidance is not possible, minimization of the area being impacted and coordination with USACE is recommended. Where possible, additional field visits to conduct official wetland delineations at potential wetland sites during the growing season are highly recommended.

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6.0 Qualifications

Katie Taylor holds a B.S. degree in Biology (2009) from Seattle Pacific University and a M.S. degree in Rangeland Ecology (2014) from the University of Wyoming. She is currently Lead Wildlife Biologist with Grouse Mountain Environmental Consultants based in Buffalo, Wyoming. Ms. Taylor has 9 years of experience working in the wildlife field. Her direct work experience includes applied field work and research for universities, private industry, and federal and state agencies. Ms. Taylor has worked on research projects involving raptors, grouse species, songbirds, wolves, and various species of ungulates throughout the continental U.S. More specifically, she has 5 years of experience conducting surveys in accordance with BLM wildlife survey protocols for nesting raptors, sage-grouse and sharp-tailed grouse leks, mountain plover, and other sensitive species in Wyoming. In addition, Ms. Taylor has experience in wildlife data management and GIS support for the Bureau of Land Management – Buffalo Field Office. Ms. Taylor has also completed wetland delineation training and has experience with wetland determinations and working with the USACE for hydrology determinations.

Kirstie Lawson holds a B.S. degree in Wildlife Biology (2012) from the University of Montana and a M. S. degree in Biology (2018) from the University of British Columbia Okanagan. She is currently a Wildlife Biologist with Grouse Mountain Environmental Consultants based in Buffalo, Wyoming. Ms. Lawson has over 6 years of experience working in the wildlife field. With a focus on grouse research, Ms. Lawson's background also includes conducting research and surveys for mesocarnivores, songbirds, and raptors in the U.S. and Canada. Her previous work has required interacting with various stakeholders, including private landowners, government agencies, and industry.

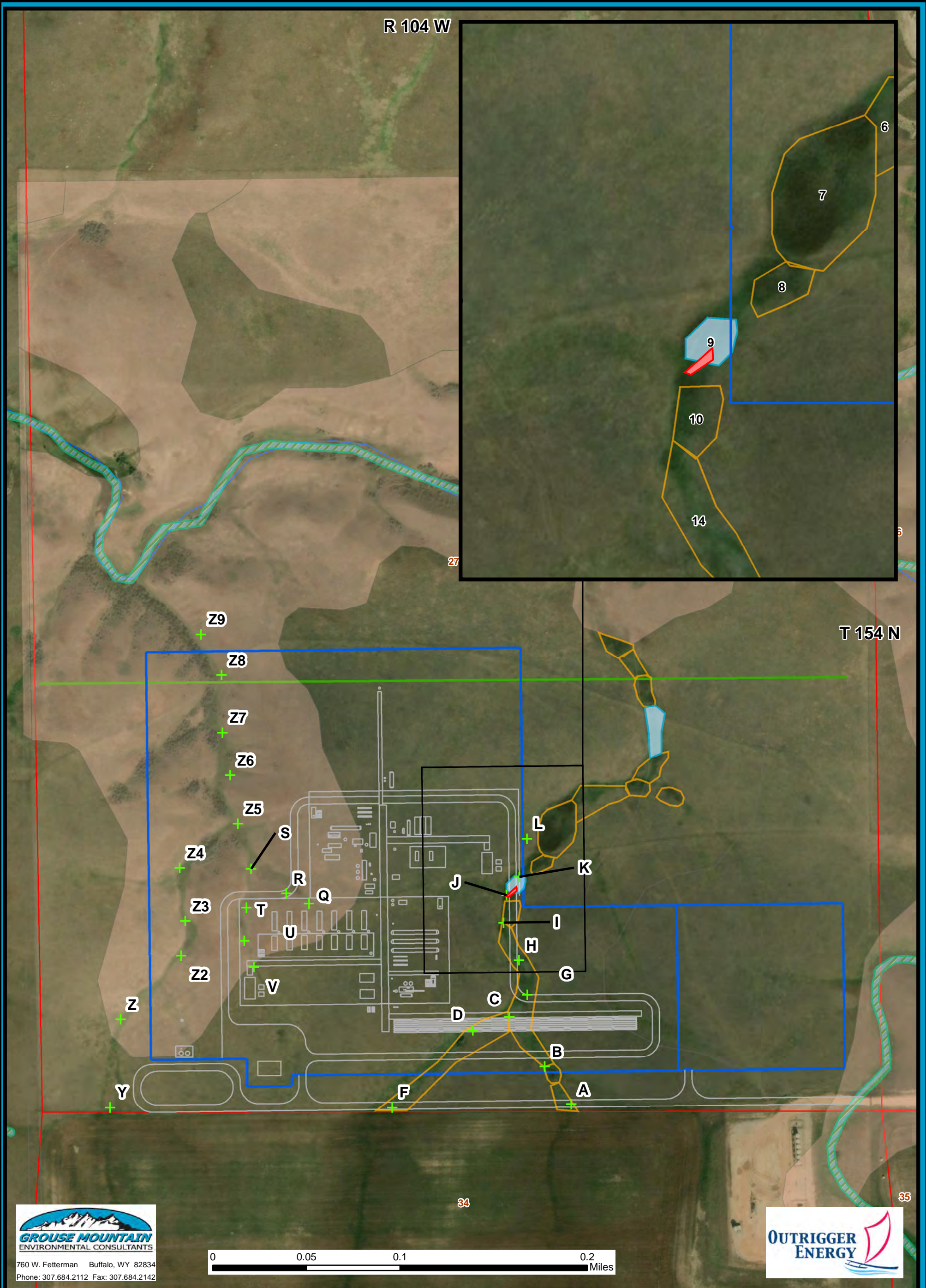
Gregory Shedd holds a B.S. in Wildlife Biology (2002) from Unity College. He is currently a Wildlife Biologist with Grouse Mountain Environmental Consultants based in Buffalo, Wyoming. Mr. Shedd has over 15 years of combined experience in the wildlife field. His primary experience is private consulting in Wyoming and surrounding states performing surveys, monitoring and applied research for various stakeholders including private landowners, government agencies, and industry. Mr. Shedd has completed wetland delineation training and has conducted wetland determinations for over 10 years.

FIGURES

Figure 1. OE2: Bill Sanderson Gas Processing Plant Wetland Assessment Report Map

R 104 W

T 154 N



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Figure 1. OE2 North LLC: Bill Sanderson Gas Processing Plant Wetland Assessment Report Map

- Plant Boundary (fence line)
- Plant Site Features
- Northern Extent
- + Report Photo Points

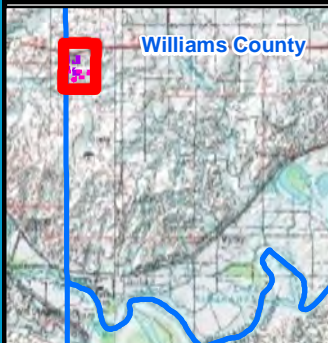
Offsite Assessment

- Unknown
- Not Wetland
- Updated Unit 9 Boundary
- National Wetlands Inventory Wetland

Soils

- Not Hydric
- 0-5% Hydric
- Intermittent Stream

Coordinate System: NAD 1983 UTM Zone 13N
 Projection: Transverse Mercator
 Datum: North American 1983
 Units: Meter
 Scale: 1:3,000
 Date: 4/7/2020
 Created by: klawson
 File Name: OUT-004_WetlandDelineation_Map_040720



APPENDICES

Appendix A. Bill Sanderson Gas Processing Plant Field Survey Plant List

Common Name	Scientific Name	Indicator Status	Comment(s)
Western snowberry	<i>Symphoricarpos occidentalis</i>	UPL	
Crested wheatgrass	<i>Agropyron cristatum</i>	UPL	
Silver buffaloberry	<i>Shepherdia argentea</i>	UPL	
Tufted hair grass	<i>Deschampsia caespitosa</i>	FACW	
Big bluestem	<i>Andropogon gerardii</i>	FACU	
Prairie sandreed	<i>Calmovilfa longifolia</i>	UPL	
Common Yarrow	<i>Achillea milleflium</i>	UPL	
Tall hedgemustard	<i>Sisymbrium altissimum</i>	FACU	
Stiff goldenrod	<i>Oligoneuron rigidum</i>	FACU	
Spotted Knapweed	<i>Cenaurea stoebe</i>	UPL	
Rose	<i>Rosa</i> spp.	FACU	
Needlegrass	<i>Nassella</i> spp.	UPL	
Coneflower	<i>Echinecea</i> or <i>Rudbeckia</i> spp.	Unknown	Unable to identify to species at this time.
Unknown Sedge	<i>Carex</i> spp.	Unknown	Possibly threadleaf sedge, but unable to identify at this time.

Appendix B.

Bill Sanderson Field Survey Drainage Photographs



Photo 1. Overview of eastern drainage within the facilities footprint taken from Photo Point A, facing northwest. Picture taken on March 26, 2020.



Photo 2. Overview of eastern drainage within the facilities footprint taken from Photo Point A, facing south. Picture taken on March 26, 2020.



Photo 3. Overview of eastern drainage within the facilities footprint taken from Photo Point B, facing northwest. Picture taken on March 26, 2020.



Photo 4. Overview of eastern drainage within the facilities footprint taken from Photo Point B, facing southeast. Picture taken on March 26, 2020.



Photo 5. Overview of eastern drainage within the facilities footprint taken from Photo Point C, facing north. Picture taken on March 26, 2020.



Photo 6. Overview of eastern drainage within the facilities footprint taken from Photo Point C, facing southeast. Picture taken on March 26, 2020.



Photo 7. Overview of eastern drainage within the facilities footprint taken from Photo Point D, facing north. Picture taken on March 26, 2020.



Photo 8. Overview of eastern drainage within the facilities footprint taken from Photo Point D, facing southwest. Picture taken on March 26, 2020.



Photo 9. Overview of eastern drainage within the facilities footprint taken from Photo Point F, facing north. Picture taken on March 26, 2020.



Photo 10. Overview of eastern drainage within the facilities footprint taken from Photo Point F, facing south. Picture taken on March 26, 2020.



Photo 11. Overview of eastern drainage within the facilities footprint taken from Photo Point G, facing north. Picture taken on March 26, 2020.



Photo 12. Overview of eastern drainage within the facilities footprint taken from Photo Point G, facing southwest. Picture taken on March 26, 2020.



Photo 13. Overview of eastern drainage within the facilities footprint taken from Photo Point H, facing northwest. Picture taken on March 26, 2020.



Photo 14. Overview of eastern drainage within the facilities footprint taken from Photo Point H, facing south. Picture taken on March 26, 2020.



Photo 15. Overview of eastern drainage within the facilities footprint taken from Photo Point I, facing north. Picture taken on March 26, 2020.



Photo 16. Overview of eastern drainage within the facilities footprint taken from Photo Point I, facing south. Picture taken on March 26, 2020.



Photo 17. Overview of eastern drainage and Unit 9 “potential wetland” within the facilities footprint taken from Photo Point J, facing north. Picture taken on March 26, 2020.



Photo 18. Overview of eastern drainage within the facilities footprint taken from Photo Point J, facing south. Picture taken on March 26, 2020.



Photo 19. Overview of eastern drainage within the facilities footprint taken from Photo Point K, facing north. Picture taken on March 26, 2020.



Photo 20. Overview of eastern drainage within the facilities footprint taken from Photo Point K, facing south. Picture taken on March 26, 2020.



Photo 21. Overview of eastern drainage just outside of the facilities footprint taken from Photo Point L, facing northeast. Picture taken on March 26, 2020.



Photo 22. Overview of eastern drainage within the facilities footprint taken from Photo Point L, facing southeast. Picture taken on March 26, 2020.



Photo 23. Overview of western drainage within the facilities footprint taken from Photo Point Q, facing northwest. Picture taken on March 26, 2020.



Photo 24. Overview of western drainage within the facilities footprint taken from Photo Point R, facing northwest. Picture taken on March 26, 2020.



Photo 25. Overview of western drainage within the facilities footprint taken from Photo Point S, facing north. Picture taken on March 26, 2020.



Photo 26. Overview of western drainage within the facilities footprint taken from Photo Point S, facing southeast. Picture taken on March 26, 2020.



Photo 27. Overview of western drainage within the facilities footprint taken from Photo Point T, facing north. Picture taken on March 26, 2020.



Photo 28. Overview of western drainage within the facilities footprint taken from Photo Point T, facing southwest. Picture taken on March 26, 2020.



Photo 29. Overview of western drainage within the facilities footprint taken from Photo Point U, facing north. Picture taken on March 26, 2020.



Photo 30. Overview of western drainage within the facilities footprint taken from Photo Point U, facing south. Picture taken on March 26, 2020.



Photo 31. Overview of western drainage within the facilities footprint taken from Photo Point V, facing north. Picture taken on March 26, 2020.



Photo 32. Overview of western drainage within the facilities footprint taken from Photo Point V, facing south. Picture taken on March 26, 2020.



Photo 33. Overview of western drainage that leads into the project boundary (fence line) taken from Photo Point Y, facing north. Picture taken on March 26, 2020.



Photo 34. Overview of western drainage that leads into the project boundary (fence line) taken from Photo Point Y, facing south. Picture taken on March 26, 2020.



Photo 35. Overview of western drainage that leads into the project boundary (fence line) taken from Photo Point Z, facing north. Picture taken on March 26, 2020.



Photo 36. Overview of western drainage that leads into the project boundary (fence line) taken from Photo Point Z, facing south. Picture taken on March 26, 2020.



Photo 37. Overview of western drainage within the project boundary (fence line) taken from Photo Point Z2, facing north. Picture taken on March 26, 2020.



Photo 38. Overview of western drainage within the project boundary (fence line) taken from Photo Point Z2, facing southwest. Picture taken on March 26, 2020.



Photo 39. Overview of western drainage within the project boundary (fence line) taken from Photo Point Z3, facing north. Picture taken on March 26, 2020.



Photo 40. Overview of western drainage within the project boundary (fence line) taken from Photo Point Z3, facing south. Picture taken on March 26, 2020.



Photo 41. Overview of western drainage within the project boundary (fence line) taken from Photo Point Z4, facing northeast. Picture taken on March 26, 2020.



Photo 42. Overview of western drainage within the project boundary (fence line) taken from Photo Point Z4, facing south. Picture taken on March 26, 2020.



Photo 43. Overview of western drainage within the project boundary (fence line) taken from Photo Point Z5, facing northwest. Picture taken on March 26, 2020.



Photo 44. Overview of western drainage within the project boundary (fence line) taken from Photo Point Z5, facing south. Picture taken on March 26, 2020.



Photo 45. Overview of western drainage within the project boundary (fence line) taken from Photo Point Z6, facing north. Picture taken on March 26, 2020.



Photo 46. Overview of western drainage within the project boundary (fence line) taken from Photo Point Z6, facing southwest. Picture taken on March 26, 2020.



Photo 47. Overview of western drainage within the project boundary (fence line) taken from Photo Point Z7, facing north. Picture taken on March 26, 2020.



Photo 48. Overview of western drainage within the project boundary (fence line) taken from Photo Point Z7, facing south. Picture taken on March 26, 2020.



Photo 49. Overview of western drainage within the project boundary (fence line) taken from Photo Point Z8, facing northwest. Picture taken on March 26, 2020.



Photo 50. Overview of western drainage within the project boundary (fence line) taken from Photo Point Z8, facing southwest. Picture taken on March 26, 2020.



Photo 51. Overview of western drainage just outside of the project boundary (fence line) taken from Photo Point Z9, facing northwest. Picture taken on March 26, 2020.



Photo 52. Overview of western drainage just outside of the project boundary (fence line) taken from Photo Point Z9, facing south. Picture taken on March 26, 2020.