Exhibit J

Wetlands and Other Jurisdictional Waters

Yellow Rosebush Energy Center
September 2025

Prepared for
Yellow Rosebush Energy Center, LLC

Prepared by

TETRA TECH

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Acronyms and Abbreviations

Applicant	Yellow Rosebush Energy Center, LLC
CFR	Code of Federal Regulations
Facility	Yellow Rosebush Energy Center
NHD	U.S. Geological Survey National Hydrography Dataset
NWI	National Wetland Inventory
OAR	Oregon Administrative Rules
ODSL	Oregon Department of State Lands
ORS	Oregon Revised Statutes
WOS	Waters of the State
WOUS	Waters of the United States

1.0 Introduction

Yellow Rosebush Energy Center, LLC (Applicant) seeks to develop the Yellow Rosebush Energy Center (Facility), a solar energy generation facility, battery energy storage system, and related or supporting facilities in Wasco and Sherman counties, Oregon. This Exhibit J was prepared to meet the submittal requirements in Oregon Administrative Rules (OAR) 345-021-0010(1)(j).

2.0 Wetlands and Other Jurisdictional Waters – OAR 345-021-0010(1)(j)(A)

OAR 345-021-0010(1)(j) Information based on literature and field study, as appropriate, about waters of this state, as defined under ORS 196.800, including:

OAR 345-021-0010(1)(j)(A) A description of all areas within the site boundary that might be waters of this state and a map showing the location of these features;

2.1 Definitions

2.1.1 Federal

Waters of the United States (WOUS) are defined in 33 Code of Federal Regulations (CFR) 328.3(a)(1-5) as:

(1) Waters which are:

(i) Currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;

(ii) The territorial seas; or

(iii) Interstate waters;

(2) Impoundments of waters otherwise defined as waters of the United States under this definition, other than impoundments of waters identified under paragraph (a)(5) of this section;

(3) Tributaries of waters identified in paragraph (a)(1) or (2) of this section that are relatively permanent, standing or continuously flowing bodies of water;

(4) Wetlands adjacent to the following waters:

(i) Waters identified in paragraph (a)(1) of this section; or

(ii) Relatively permanent, standing or continuously flowing bodies of water identified in paragraph (a)(2) or (a)(3) of this section and with a continuous surface connection to those waters;

(5) Intrastate lakes and ponds not identified in paragraphs (a)(1) through (4) of this section that are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in paragraph (a)(1) or (a)(3) of this section.

Wetlands are defined federally at 33 CFR § 328.3(c)(1) as "areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas."

2.1.2 State

Oregon Revised Statutes (ORS) 196.800(15) defines Waters of the State (WOS) more broadly than federal WOUS. Specifically, WOS include:

…all natural waterways, tidal and nontidal bays, intermittent streams, constantly flowing streams, lakes, wetlands, that portion of the Pacific Ocean that is in the boundaries of this state, all other navigable and nonnavigable bodies of water in this state and those portions of the ocean shore, as defined in ORS 390.605, where removal or fill activities are regulated under a state-assumed permit program as provided in 33 United States Code 1344(g) of the Federal Water Pollution Control Act, as amended.

The Oregon Department of State Lands' (ODSL) definition of wetlands mirrors the federal definition; see OAR 141-085-0510 (101).

2.2 Jurisdictional Versus Non-Jurisdictional Waters

Not all wetlands and streams are within the jurisdiction of state or federal regulation, and not all waters falling within the state's jurisdiction fall under federal jurisdiction. For the Facility, several jurisdictional distinctions are important, to estimate impacts only to jurisdictional wetlands and other waters. These include determinations related to the following:

- Ephemeral streams, which generally are not under state jurisdiction and are evaluated on a case-by-case basis for federal jurisdiction, as distinct from perennial and intermittent (Nadeau 2015 and USACE 2023).
- Artificially created roadside and farm ditches, which are considered WOS if they contain food or game fish and are connected to WOS (OAR 141-085-0515[8]) and WOUS if they connect to other WOUS and are not ephemeral (EPA and USACE 2011).

Ephemeral streams are defined in the Streamflow Duration Assessment Method for the Pacific Northwest (Nadeau 2015) as streams that flow:

…only in direct response to precipitation. Water typically flows only during and shortly after large precipitation events. An ephemeral stream may or may not have a well-defined channel, the stream bed is always above the water table, and stormwater runoff is the primary source of water. An ephemeral stream typically lacks biological, hydrological, and physical characteristics commonly associated with the continuous or intermittent conveyance of water).

In contrast, intermittent streams are defined by Oregon as "any stream which flows during a portion of every year and which provides spawning, rearing or food-producing areas for food and game fish" (OAR 141-085-0510[46]). Food-producing streams are typically one stream order above a fish-bearing stream.

Based on the definitions of jurisdictional waters given above, intermittent streams are likely to be jurisdictional under federal regulations if they have physical characteristics such as discernible banks, evidence of sustained surface flow for at least three consecutive months of the year, and a surface water connection to other WOUS.

2.3 Desktop Study

In preparation for the field work, Tetra Tech reviewed National Wetland Inventory (NWI), U.S. Geological Survey National Hydrography Dataset (NHD), hydric soils data, and aerial photographs in Google Earth to identify potential wetlands and other waters. Wetlands and surface water data were obtained from the U.S. Fish and Wildlife Service NWI (NWI 2023), which includes NWI and miscellaneous wetland mapping by state and federal agencies, non-governmental organizations, academia and consultants, and from the U.S. Geological Survey's National Hydrography Dataset (Figure J-1; NHD 2023). Soils data were also obtained from the Oregon Wetlands Database, which includes statewide polygons demarcating hydric, partially hydric, and related wetland soils, as well as from the Natural Resources Conservation Service Web Soil Survey (NRCS 2023). Tetra Tech used aerial imagery from Google Earth because a wide variety of imagery was available (Google Earth 2023). Digital maps used in the field contained the NWI, NHD, and recent aerial photograph overlays.

2.4 Delineation of Wetlands and Other Water Features

Pedestrian surveys to delineate wetlands and other waters were performed on June 26, 30, July 17 to 21, 2023, and November 6, 2024. The desktop wetland data (see Figure J-1) were used to focus the wetland delineation's field effort while the desktop surface water data were used to focus the non-wetlands water evaluation as necessary.

2.4.1 Methods

Wetland presence was determined per methods in the Manual and the Arid West Supplement. Wetland indicator status for the plants was determined using the USACE National Wetland Plant List v3.5 (USACE 1987, 2008, 2023). Flow duration for non-wetland waters was determined using criteria in the Streamflow Duration Assessment Methodology (Nadeau 2015). More details on methods are available in the attached Wetlands and Other Waters Delineation Report (Attachment J-1).

2.4.2 Results

Within the Study Area a total of 17 wetlands and 59 other waters were mapped (see Figure J-2). Vernal pools are considered an Aquatic Resource of Special Concern and two were mapped within the Study Area. Table J-1 summarizes these features, and Attachment J-1 describes the wetlands in more detail. Attachment J-2 provides supplemental data from the November 2024 survey.

Table J-1. Summary of Wetlands and Other Water Features

Feature	Number of Features	Acres
Vernal Pool Wetlands	2	0.45
Wetlands	15	1.60
Wetland Total	**17**	**2.05**
Ephemeral Waterways	52	4.41
Intermittent Waterways	2	0.29
Ponds	5	1.45
Other Waters Total	**59**	**6.15**

3.0 Effects on Wetlands and Other Jurisdictional Waters of the State – OAR 345-021-0010(1)(j)(B)

OAR 345-021-0010(1)(j)(B) An analysis of whether construction or operation of the proposed facility would adversely affect any waters of this state;

OAR 345-021-0010(1)(j)(C) A description of the significance of potential adverse impacts to each feature identified in (A), including the nature and amount of material the applicant would remove from or place in the waters analyzed in (B).

OAR 345-021-0010(1)(j)(B) requests an analysis of any adverse effects on WOS from the Facility. The Facility will not adversely affect WOS, as defined under OAR 141-085-0510. The Facility will avoid impacting any wetlands or waters, and the delineation report has been submitted to ODSL for concurrence.

3.1 Avoidance and Minimization

OAR 345-021-0010(1)(j)(F) A description of proposed actions to mitigate adverse impacts to the features identified in (A) and the applicant's proposed monitoring program, if any, for such impacts.

The Facility will have no adverse impacts to wetlands or other jurisdictional WOS. Therefore, no monitoring or mitigation is proposed.

3.2 Significance of Impacts – OAR 345-021-0010(1)(j)(C)

OAR 345-021-0010(1)(j)(C) A description of the significance of potential adverse impacts to each feature identified in (A), including the nature and amount of material the applicant would remove from or place in the waters analyzed in (B);

The Facility will have no adverse impacts to wetlands or other jurisdictional WOS. Therefore, no material would be removed or placed in WOS.

4.0 Information Supporting Lack of Requirement for Removal-Fill Permit – OAR 345-021-0010(1)(j)(D)

OAR 345-021-0010(1)(j)(D) If the proposed facility would not need a removal-fill authorization, an explanation of why no such authorization is required for the construction and operation of the proposed facility;

There will be no impacts to wetlands or waters; therefore, no removal-fill authorization is needed.

5.0 Information Supporting Issuance of Removal-Fill Permit – OAR 345-021-0010(1)(j)(E)

OAR 345-021-0010(1)(j)(E) If the proposed facility would need a removal-fill authorization, information to support a determination by the Council that the Oregon Department of State Lands should issue a removal-fill permit, including information in the form required by the Department of State Lands under OAR Chapter 141 Division 85; and

There will be no impacts to wetlands or waters; therefore, no removal-fill authorization is needed.

6.0 Submittal Requirements

6.1 Submittal Requirements

Table J-2. Submittal Requirements Matrix

Requirement	Location
OAR 345-021-0010(1)(j) Information based on literature and field study, as appropriate, about waters of this state, as defined under ORS 196.800 including:	–
(A) A description of all areas within the site boundary that might be waters of this state and a map showing the location of these features.	Section 3.0, Figure J-1, and Attachment J-1
(B) An analysis of whether construction or operation of the proposed facility would adversely affect any waters of this state.	Section 3.0

Requirement	Location
(C) A description of the significance of potential adverse impacts to each feature identified in (A), including the nature and amount of material the applicant would remove from or place in the waters analyzed in (B).	Section 3.2
(D) If the proposed facility would not need a removal-fill authorization, an explanation of why no such authorization is required for the construction and operation of the proposed facility.	Section 4.0
(E) If the proposed facility would need a removal-fill authorization, information to support a determination by the Council that the Oregon Department of State Lands should issue a removal-fill permit, including information in the form required by the Department of State Lands under OAR chapter 141 Division 85.	Section 5.0
(F) A description of proposed actions to mitigate adverse impacts to the features identified in (A) and the applicant's proposed monitoring program, if any, for such impacts.	N/A

6.2 Approval Standards

OAR 345 Division 22 does not provide an approval standard specific to Exhibit J.

7.0 References

EPA and USACE (U.S. Environmental Protection Agency and U.S. Army Corps of Engineers). 2011. Clean Water Act Jurisdiction Following the US Supreme Court's Decision in Rapanos v. United States & Carabell v United States. Accessed at: http://www.epa.gov/owow/wetlands/pdf/RapanosGuidance6507.pdf.

Google Earth Pro. 2023. Historical Aerial Imagery of the Project Study Area from 2022, 2021, 2020, 2019, 2016, 2015, 2014, 2013, 2012, 2011, 2006, 2005, 2003, 2000, and 1994.

Nadeau, Tracie-Lynn. 2015. Streamflow Duration Assessment Method for the Pacific Northwest. EPA 910-K-14-001, U.S. Environmental Protection Agency, Region 10, Seattle, WA.

NHD (National Hydrography Dataset). 2023. http://datagateway.nrcs.usda.gov/ Accessed 2023.

NRCS (Natural Resources Conservation Service). 2023. Web Soil Survey. http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Accessed 2023.

NWI (U.S. Fish and Wildlife Service, National Wetlands Inventory). 2023. Wetlands Data by State, Oregon. Available at: https://www.fws.gov/wetlands/Data/State-Downloads.html.

USACE (U.S. Army Corps of Engineers). 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1. January 1987. Wetlands Research Program. U.S. Army Corps of Engineers, Waterways Experiment Station, 3909 Halls Ferry Road, Vicksburg, MS 39180- 6199.

USACE. 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0), ed. J.S. Wakeley, R. W. Lichvar, and C.V. Noble. ERDC/EL TR-08-28. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

USACE. 2023. Current Implementation of Waters of the United States. Available: https://www.epa.gov/wotus/current-implementation-waters-united-states

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Figures

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Yellow Rosebush Energy Center

Figure J-1
National Wetlands Inventory and National Hydrography Dataset

SHERMAN AND WASCO COUNTIES, OR

Sherman County

Wasco County

97

- Facility Site Boundary
- Micrositing Corridor
- County Boundary
- US Highway
- Local Roads

Wetlands and Waters

- Freshwater Emergent Wetland (NWI)
- Freshwater Forested/ Shrub Wetland (NWI)
- Freshwater Pond (NWI)
- Riverine (NWI)
- Playa (NHD)
- Lake/Pond (NHD)
- Intermittent Stream (NHD)
- Perennial Stream (NHD)
- Artificial Path

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Reference Map

1:60,000

WGS 1984 UTM Zone 10N

0 0.5 1 2 Miles

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Center

Figure J-2 Delineated Wetlands and Waters

SHERMAN AND WASCO COUNTIES, OR

- Facility Site Boundary
- Micrositing Corridor
- County Boundary
- US Highway
- Local Roads
- Field Delineated Stream
- Field Delineated Wetland
- Desktop Delineated Other Water Feature

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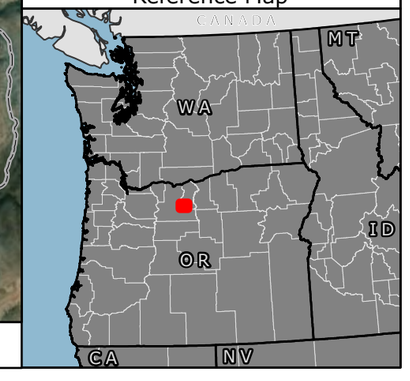
Reference Map



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WGS 1984 UTM Zone 10N

0 0.5 1 2 Miles

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Attachment J-1. Wetlands and Other Waters Delineation Report

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Wetlands and Other Waters Delineation Report

Yellow Rosebush Energy Center

Prepared for:
Yellow Rosebush Energy Center, LLC

Prepared by:

Tetra Tech, Inc

October 2023

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1.0 Introduction

Yellow Rosebush Energy Center, LLC contracted Tetra Tech, Inc. (Tetra Tech) to perform wetland and other waters surveys for the Yellow Rosebush Energy Center (Project), located in Wasco County, Oregon. Tetra Tech surveyed a 7,026-acre micrositing boundary within the larger 8,075-acre leased boundary.

2.0 Landscape Setting

2.1 Study Area

The approximately 7,026-acre Study Area encompasses all Project components, including potential solar array sites, access roads, temporary workspaces, and laydown areas, with the exception of the alternate transmission line route and substation connection (Figure 1). The transmission line will be surveyed in spring of 2024.

Figure 2 shows the tax lots crossed by the Study Area. Table 1 includes the townships, ranges, and sections in the Project Study Area.

Table 1. Tax Lot Numbers within the Project Study Area

Tax Lot Number	
4S 15E 0 1500	5S 16E 0 2300
5S 16E 0 1000	5S 16E 0 2400
5S 16E 0 1100	4S 16E 0 300
5S 16E 0 1300	5S 16E 0 900
5S 16E 0 2000	5S 15E 0 100

2.2 Landscape Setting

The Project is located within the Level III Columbia Plateau Ecoregion and within the Level IV Umatilla Plateau and Deschutes/John Day Canyons Ecoregions (Thorson et al. 2003). In addition, the Project is within US Department of Agriculture Land Resource Region (LRR) B, Northwest Wheat and Range Region (NRCS 2006). LRR B, Northwest Wheat and Range Region is equivalent to 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 (Arid West Supplement; USACE 2008).

Plant species names and associated wetland indicator status ratings are from the National Wetland Plant List version 3.5 (USACE 2020). 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 with an indicator of NI (No Indicator) refer to plants that are not listed in the wetland plant list, and are thereby considered to be upland plants.

Dominant shrub and tree species found within the Study Area included: basin big sagebrush (*Artemisia tridentata* ssp. *tridentata*, NI), stiff sage (*Artemisia rigida*, NI), white sagebrush (*Artemisia ludoviciana*, FACU), rubber rabbitbrush (*Ericameria nauseos*a, NI), green rabbitbrush (*Chrysothamnus viscidiflorus*, NI), antelope bitterbrush (*Purshia tridentata*, NI), and western juniper (*Juniperus occidentalis*, NI).

Dominant grass species found within the Study Area included: Idaho fescue (*Festuca idahoensis*, FACU) cheat grass (*Bromus tectorum*, NI), bulbous bluegrass (*Poa bulbosa*, FACU), Kentucky bluegrass (*Poa pratensis*, FAC), ventenata (*Ventenata dubia*, NI), small fescue (*Vulpia microstachy*, NI), bluebunch wheatgrass (*Pseudoroegneria spicata*, NI), and medusahead (*Taeniatherum caput-medusae*, NI).

Dominant herbaceous species documented in the Study Area included: common yarrow (*Achillea millefolium*, FACU), barestem lomatium (*Lomatium nudicaule*, UPL), nineleaf biscuitroot (*Lomatium triternatum*, NI), Gray's biscuitroot (*Lomatium grayi*, NI), Suksdorf's desert parsley (*Lomatium suksdorfii*, NI), sulphur-flower buckwheat (*Eriogonum umbellatum*, NI), tall buckwheat (*Eriogonum elatum*, NI), common mullein (*Verbascum thapsus*, FACU), woollypod milkvetch (*Astragalus purshii*, NI), large flowered collomia (*Collomia grandiflora*, NI), upland larkspur (*Delphinium nuttallianum*, FAC), linear-leaved phacelia (*Phacelia linearis*, NI), and arrowleaf balsamroot (*Balsamorhiza sagittata*, NI).

2.3 National Wetlands Inventory, National Hydrography Dataset, and Hydric Soils

Prior to field work, Tetra Tech reviewed the National Wetlands Inventory (NWI), the National Hydrography Dataset (NHD), Natural Resource Conservation Service (NRCS) hydric soils data, and aerial photographs to identify potential wetlands and other waters, as described below.

2.3.1 NWI and NHD

Digital maps used in the field contained the NWI, NHD, and recent aerial photograph overlays. Figure 3 shows the NWI and NHD mapped features in the Study Area (NWI 2023, NHD 2023). The following NWI features are mapped within the Study Area, with quantity included in parentheses:

- PEM1B wetlands (1): Palustrine, emergent, persistent, saturated;
- PUSAh wetlands (7): Palustrine, unconsolidated shore, temporary flooded, diked, impounded;
- PEM1C wetlands (2): Palustrine, emergent, persistent, seasonally flooded;
- PEM1J wetlands (1): Palustrine, emergent, persistent, intermittently flooded; and
- PSSA wetlands (1): Palustrine, scrub-shrub, temporarily flooded.

2.3.2 Hydric Soils

There are six soil types mapped by the Natural Resource Conservation Service in the Study Area (Table 2). Of these, the Playas map unit are listed as hydric soil (NRCS 2023b, NRCS 2023c). Figure 4 shows the mapped soil units within the Study Area. Figure 5 shows recent aerial imagery of the Study Area.

Table 2. Soils Mapped in the Project Study Area

Map Unit Code	Map Unit Name	Hydric Rating	Acres
BcC	Bakeoven-Condon complex, 2 to 20 percent slopes	No	1653.5
CnC	Condon silt loam, 2 to 12 percent slopes	No	4163.3
CoC	Condon-Bakeoven complex, 2 to 20 percent slopes	No	851.7
LeF	Lickskillet extremely stony loam, 40 to 70 percent slopes	No	192.7
Pa	Playas	Yes	77.8
WrF	Wrentham-Rock outcrop complex, 35 to 70 percent slopes	No	86.3

3.0 Site Alterations and Land Use

Site alterations are those activities that directly or indirectly impact wetlands and other waters in such a way 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 livestock grazing and the infrastructure needed to manage associated herds (e.g., fences, farm roads, and artificially created watering ponds). Road building and other drainage alterations associated with these practices may have affected the geographic size or the hydroperiod of wetlands and other waters. Most of the wetlands that were delineated in the Study Area resulted from past ground disturbance actions that created depressions where wetlands have since formed, resulting in artificially created wetlands The Study Area traverses largely unpopulated land used for cattle grazing.

Where livestock is present on agricultural lands, wetlands and streams have been altered by compacting soils, trampling and grazing of existing vegetation (especially riparian areas), introducing and spreading non-native invasive plant species in disturbed wetland soils, and reducing water quality by depositing manure and increasing sedimentation through the trampling of stream-side soil and vegetation. Alterations associated with livestock affect the vegetation, soils, and hydrologic conditions within the respective wetlands.

4.0 Precipitation Data and Analysis

Precipitation data for the period preceding and during field work were collected from the Community Collaborative Rain, Hail, and Snow Network, Madras 6.6 NNW Station (COCORAHS 2023). Data from the NRCS Climate Analysis for Wetlands Tables (WETS) Station, Madras, Oregon,

were used to compare historical precipitation data with recent water records (COCORAHS 2023, NRCS 2023).

For the Water Year October 1, 2022 through July 21, 2023, precipitation was 92 percent of average. (Table 3). Based on the precipitation data for the Water Year for the 3 months prior to the site visits, it was estimated that groundwater was about what is usually encountered at this time of year. Precipitation was below average in October and November of 2022, and January, February, April, June, and July of 2023. The lower precipitation in these months was made up for by the above average precipitation in December 2022, and March and May 2023. Precipitation levels 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 hydrology.

Table 3. Precipitation Data

Precipitation	Oct 2022	Nov 2022	Dec 2022	Jan 2023	Feb 2023	Mar 2023	Apr 2023	May 2023	June 2023	July 1-21 2023	Water Year Total
Recorded Monthly Precipitation Totals[1] (inches); (Madras, OR)	0.12	0.94	2.17	0.35	0.21	1.43	0.78	2.30	0.00	0.00	**8.30**
WETS Average Monthly Precipitation[2] (inches); (Madras, OR)	0.80	1.24	1.27	1.12	0.96	0.82	0.83	0.96	0.61	0.42	**9.03**
Recorded Precipitation Relative to WETS Average Monthly Precipitation	15%	76%	171%	31%	22%	174%	94%	240%	0%	0%	**92%**
Normal Monthly Range of Precipitation[2] (inches)	0.45-0.97	0.63-1.52	0.60-1.55	0.62-1.37	0.45-1.17	0.47-1.00	0.42-1.02	0.47-1.17	0.25-0.72	0.15-0.45	**N/A**

1. Madras 6.6 NNW, OR Station (CoCoRaHS 2023)
2. Madras, OR Station (NOAA 2023)

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5.0 Methods

5.1 Pre-field Work

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

Wetlands and surface water data were obtained from the U.S. Fish and Wildlife Service NWI (NWI 2023), which includes NWI and miscellaneous wetland mapping by state and federal agencies, non-governmental organizations, academia and consultants, and from the U.S. Geological Survey National Hydrography Dataset (NHD 2023). Soils data were also obtained from the Oregon Wetlands Database, which includes statewide polygons demarcating hydric, partially hydric, and related wetland soils (Oregon Spatial Data Library 2023), as well as from the NRCS Web Soil Survey (NRCS 2023c). Tetra Tech used aerial imagery from Google Earth because a wide variety of imagery was available. The wetland figures aerial imagery is dated February 23, 2023.

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 (Nadeau 2015);
- Classification of Wetlands and Deepwater Habitats of the United States (Cowardin et al. 1979); and
- Oregon Administrative Rule (OAR) 141-090, Administrative Rules for Wetland Delineation Report Requirements and for Jurisdictional Determinations for the Purpose of Regulating Fill and Removal within Waters of the State.

5.2 Field Work

Pedestrian surveys to delineate wetlands and other waters were performed on June 26, 30, and July 17 to 21st. The desktop wetland data were used to focus the wetland delineation's field effort while the desktop surface water data were used to focus the non-wetlands water evaluation as necessary.

5.2.1 Wetland Delineations

Wetland presence was determined per methods in the Manual and the Arid West Supplement. Wetland indicator status for the plants was determined using the USACE National Wetland Plant List v3.5 (USACE 2020).

- Sample plots were established in all features identified by NWI data (Oregon Spatial Data Library 2018). The sample plot was located within the feature where it was judged most likely to have wetland characteristics (i.e., the lowest or most green place).
- Paired sample plots were established in logical locations to document wetland boundaries.
- The number of sample plots established in wetlands was commensurate with the size and complexity of the wetland, and whether the wetland was bordered by upland or another wetland with a different Cowardin et al. (1979) classification; the number of sample plots per wetland ranged from one to several. Wetland datasheets are provided in Appendix A.
- Photographs were taken to document wetland and upland conditions at the wetland boundary. Photographs were also taken at sample plots documenting upland conditions at locations that NHD mapped as streams (Appendix B).
- Each wetland boundary was recorded as a polygon using Juniper Geode GPS units.
- Non-Wetland Waters Delineations.

Flow duration for non-wetland waters was determined using criteria in the Streamflow Duration Assessment Methodology (Nadeau 2015). The centerline of all non-wetland waters less than or equal to 6 feet wide was recorded using the Juniper Geodes as a line feature and buffered to the stream width determined in the field. All delineated streams that were greater than 6 feet wide were recorded as polygon features.

6.0 Description of Wetlands and Other Non-Wetland Waters,

The following sections describe the characteristics of the wetlands and waters within the Study Area.

6.1 Wetlands

Wetlands within the Study Area were found in ephemeral drainages that had seeps within their bed and banks, in excavated livestock ponds, and in scablands with shallow soils. One suspected wetland (WT-501) was inaccessible due to very steep terrain and it is desktop delineated and shown on Figure 5.1.15. Wetland WT-501 likely extends out of the project area to the northeast. There will be no project elements installed in this area.

Table 4 contains a description of each field delineated wetland including their HGM and Cowardin classifications. There are no Aquatic Resources of Special Concern (ARSC) identified within the Study Area.

There is a mapped playa in the southeast section of the Study Area. However only portions of the mapped playa are within the study area. The NWI has this feature mapped as PEM1J. The special modifier J is usually limited to the Arid West and is stated to “not fall within our definition of wetland because they do not have hydric soil or support hydrophytes”. The center of the mapped playa may hold water seasonally however that is not within the Study Area. Hydrology has been

altered with agricultural practices such as plowing, ditching, and pond and berm construction. The aerial signature is not typical of most playas in the Arid West. The aerial signature shows areas within the mapped playa soils that share the same patterned ground of the Bakeoven-Condon soils. There is a berm and pond to the east of this mapped playa (WT-443), which is an example of the manipulated hydrology in the area.

Table 4. Soils Mapped in the Project Study Area

Wetland Name	HGM (Subclass) Wetland Type	Cowardin	Acres	General Conditions
WT-122	Riverine (Flow-through)	PEM	0.003	Small depressional wetland in ephemeral drainage, likely fed by groundwater.
WT-123	Riverine (Flow-through)	PEM	0.01	Small depressional wetland in ephemeral drainage where a seep occurs.
WT-124	Riverine (Flow-through)	PSS	0.16	Wetland begins within site boundary where drainage has seeps. Water was observed in channel and continues offsite to the north. Vegetation is dense and there is a closed canopy over water.
WT-201	Riverine (Flow-through)	PEM	0.10	Hydrology for wetland in drainage comes from overflow from livestock watering troughs. Water comes from pump in drainage.
WT-203	Depressional (Closed Nonpermanent)	PEM	0.01	Artificially created livestock watering area meets wetland criteria. It appears that swale was dug out and a berm created on downhill side to create ponding of surface flow.
WT-212	Riverine (Flow-through)	PEM	0.15	Wetland in ephemeral drainage originates from multiple seeps along drainage bottom.
WT-313	Depressional (Closed Nonpermanent)	PEM	0.16	Artificially created wetland/habitat/livestock pond has Pacific tree frogs in soil cracks and wetland plants growing where water has receded. Piped water provides hydrology for wetland.
WT-434	Depressional (Closed Nonpermanent)	PEM	0.02	Vernal pool in rangeland. Or an artificially created feature? Really an ARSC?
WT-440	Depressional (Closed Nonpermanent)	PEM	0.04	Artificially created excavated livestock pond meets vernal pool wetland criteria. Not an ARSC.
WT-443	Depressional (Closed	PEM	0.28	Artificially created excavated livestock pond meets wetland criteria.

	Nonpermanent)			
WT-445	Depressional (Closed Nonpermanent)	PEM	0.01	Artificially created small wetland in excavated livestock pond.

6.2 Non-wetland Waters

There are no Essential Salmonid Habitat (ESH) waters within the Study Area. Buck Hollow Creek is outside of the Study Area and is considered ESH. All waters except for ST-447 and a segment of ST-407 are considered ephemeral per the Stream Duration Assessment Method (Hruby 2014). All ephemeral drainages are populated with species such as medusahead, cheat grass, bluebunch wheatgrass, basin big sagebrush, rabbitbrush, and juniper. All ephemeral streambeds were all fully vegetated with upland species within bed and banks. Intermittent drainage ST-447 and the upper reaches of the intermittent segment of ST-407 had basin big sagebrush, silver sage, and tumble mustard (*Sisybrium altissimum*) in their bed and banks.

The lower reach of intermittent stream segment of ST-407 was inaccessible as the drainage drops over a (dry) waterfall 260 feet from the northern boundary of the Study Area. The intermittent determination was made based on vegetation observed from top of waterfall. Vegetation visible in the intermittent segment of ST-407 included cottonwood (*Populus balsamifera*) and mock orange (*Philadelphus lewisii*).

Livestock ponds were delineated using Google Earth historical orthoimagery to get a more accurate ordinary high water as there was no water in the livestock ponds while surveyors were in the field and the livestock ponds were generally filled with annual weeds.

7.0 Results and Conclusions

A total of eleven palustrine emergent wetlands, one desktop delineated riverine wetland, 49 ephemeral waterways, two intermittent waterways, and four livestock ponds were found within the Study Area. These are depicted in Figure 5 and summarized in Table 4.

Table 5. Summary of Wetlands and Other Water Features

Feature	Number of Features	Acres
Palustrine Emergent Wetlands, including Vernal Pools	11	0.95
Riverine wetland	1	0.45
Wetland Total	**11**	**1.40**
Ephemeral Waterway	49	4.45
Intermittent Waterway	2	0.31

Livstock Ponds	4	1.39
Other Waters Total	**53**	**6.15**

8.0 Disclaimer

This disclaimer is included according to OAR 141-090-0035(12)(j): "This report documents the investigation, best professional judgment, and conclusions of the investigator. It is correct and complete to the best of my knowledge. 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 Oregon Department of State Lands in accordance with OAR 141-090-0005 through 141-090-0055."

9.0 References

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Figures

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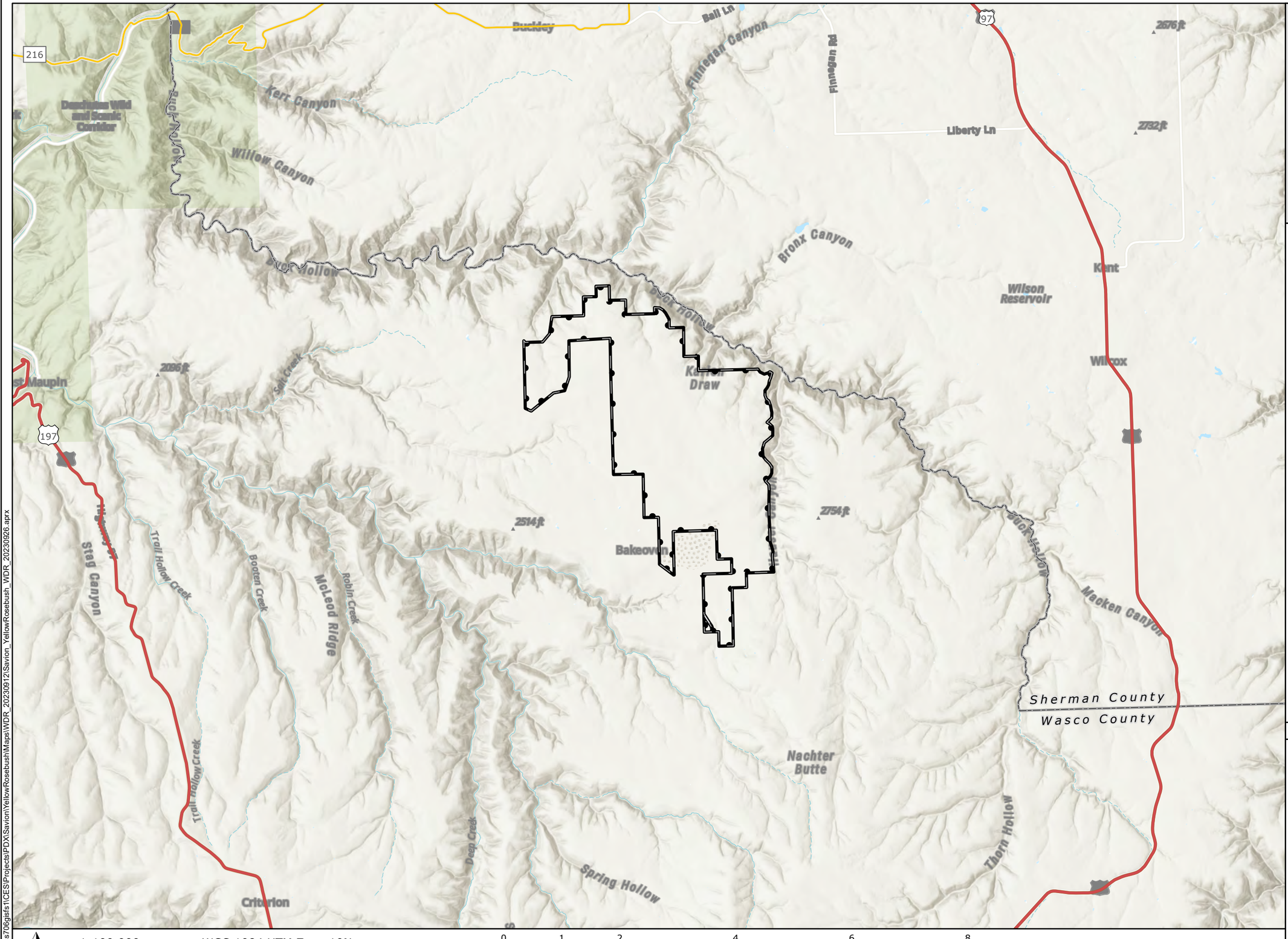
Yellow Rosebush Energy Center

Figure 1
Project Location

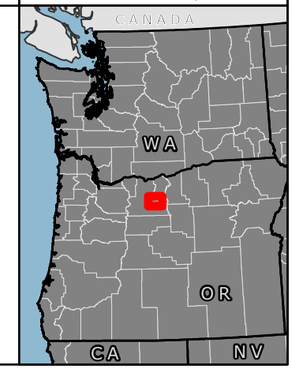
WASCO COUNTY, OR



- Study Area
- County Boundary
- US Highway
- State Highway

TETRA TECH

SAVION
A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

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Yellow Rosebush Energy Center

Figure 2
Tax Lot Index Map

WASCO COUNTY, OR

Sherman County
Wasco County
Figure 2.1
Figure 2.2
Finnegan Rd
Von Borstel Rd
Wilson Ln
Baksoyen Rd
Wilson Rd
Hinton Rd

Map Grid
Study Area
County Boundary
Local Roads

TETRA TECH
SAVION
A RENEWABLE ENERGY COMPANY

Data Sources

Savion-Project Infrastructure; Tiger-Roads; ESRI-Aerial; Wasco County-Taxlots

Reference Map

1:50,000

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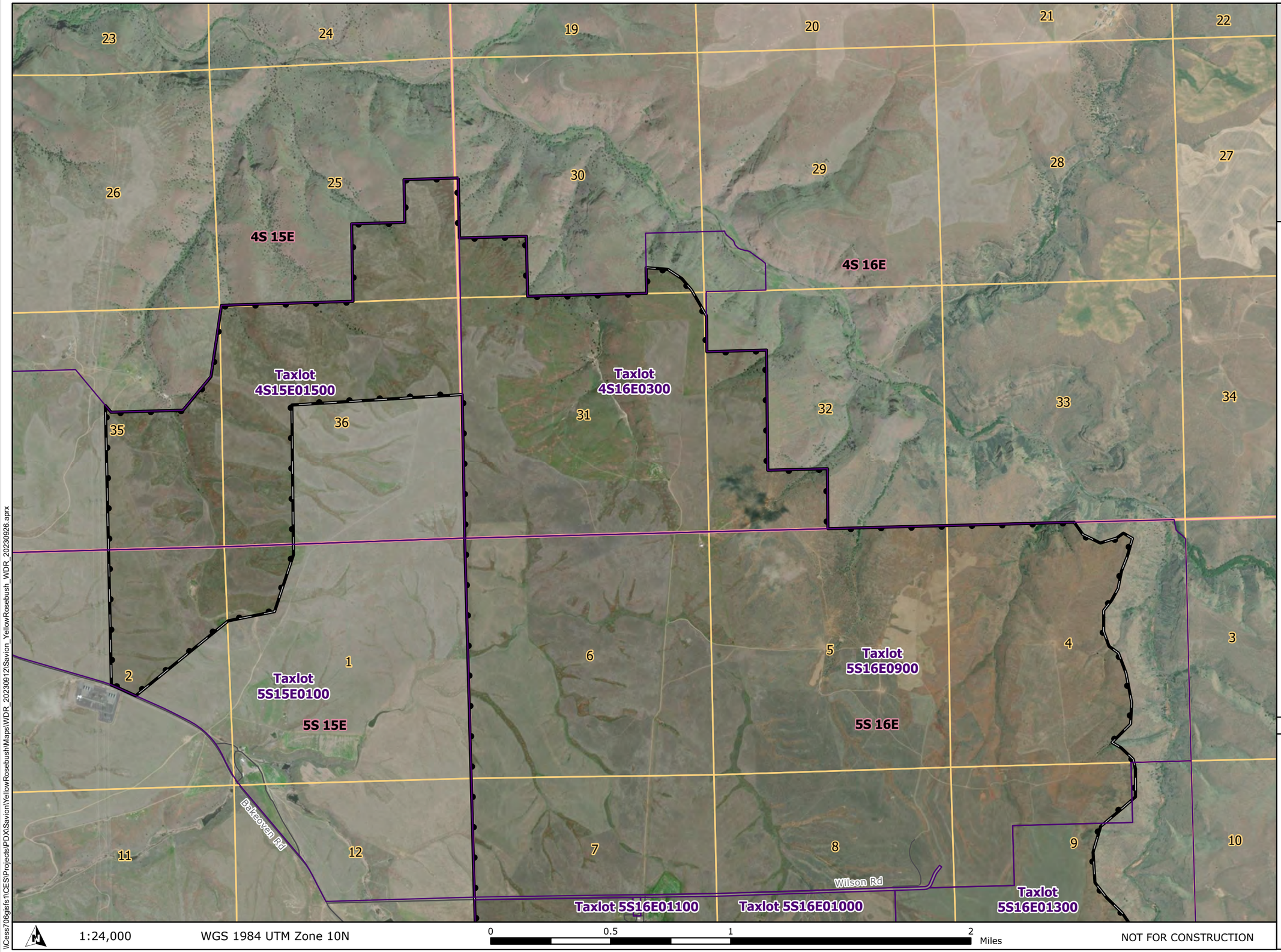
Yellow Rosebush Energy Center

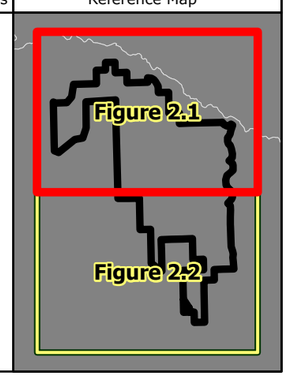
Figure 2.1
Tax Lot Detail Map

WASCO COUNTY, OR



- Study Area
- Taxlot Boundary
- Township/Range
- Section
- Local Roads

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Aerial; Wasco County-Taxlots	

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Yellow Rosebush Energy Center

Figure 2.2
Tax Lot Detail Map

WASCO COUNTY, OR

Taxlot 5S16E01000
Taxlot 5S16E01300
Taxlot 5S16E02000
Taxlot 5S16E02400
Taxlot 5S16E02300
5S 15E
5S 16E
Bakeoven Rd

- Study Area
- Taxlot Boundary
- Township/Range
- Section
- Local Roads

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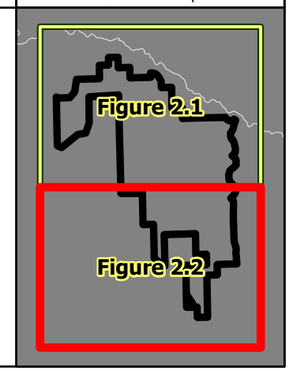
TETRA TECH

SAVION
A RENEWABLE ENERGY COMPANY

Data Sources

Savion-Project Infrastructure; Tiger-Roads; ESRI-Aerial; Wasco County-Taxlots

Reference Map



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Yellow Rosebush Energy Park

Figure 3
National Wetlands Inventory Index Map

WASCO COUNTY, OR

Figure 3.1

Figure 3.2

- Map Grid
- Study Area
- County Boundary
- Local Roads

TETRA TECH | SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topo; USGS-NHD; USFWS-NWI	

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Yellow Rosebush Energy Park

Figure 3.1
National Wetlands Inventory Detail Map

WASCO COUNTY, OR

- Study Area

Wetlands and Waters

- Freshwater Emergent Wetland (NWI)
- Freshwater Forested/ Shrub Wetland (NWI)
- Freshwater Pond (NWI)
- Riverine (NWI)
- Lake/Pond (NHD)
- Spring/Seep (NHD)
- Intermittent Stream (NHD)
- Perennial Stream (NHD)

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SAVION
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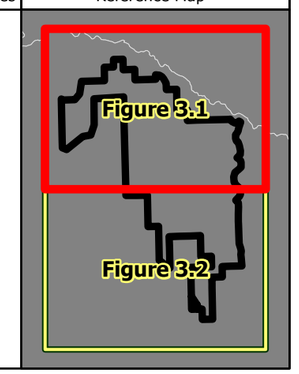
Data Sources

Savion-Project Infrastructure; Tiger-Roads; ESRI-Topo; USGS-NHD; USFWS-NWI

Reference Map



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Yellow Rosebush Energy Park

Figure 3.2
National Wetlands Inventory Detail Map

WASCO COUNTY, OR

- Study Area

Wetlands and Waters

- Freshwater Emergent Wetland (NWI)
- Freshwater Forested/ Shrub Wetland (NWI)
- Freshwater Pond (NWI)
- Riverine (NWI)
- Playa (NHD)
- Lake/Pond (NHD)
- Spring/Seep (NHD)
- Intermittent Stream (NHD)
- Perennial Stream (NHD)

TETRA TECH

SAVION
A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topo; USGS-NHD; USFWS-NWI	Figure 3.1 Figure 3.2

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Yellow Rosebush Energy Park

Figure 4
Soils Index Map

WASCO COUNTY, OR

Sherman County
Wasco County
Figure 4.1
Figure 4.2
Finnegan Rd
Von Borstel Rd
Wilson Ln
Bakeoven Rd
Wilson Rd
Hinton Rd

- Map Grid
- Study Area
- County Boundary
- Local Roads

TETRA TECH
SAVION
A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Aerial; Soils-NRCS	CANADA, WA, OR, CA, NV

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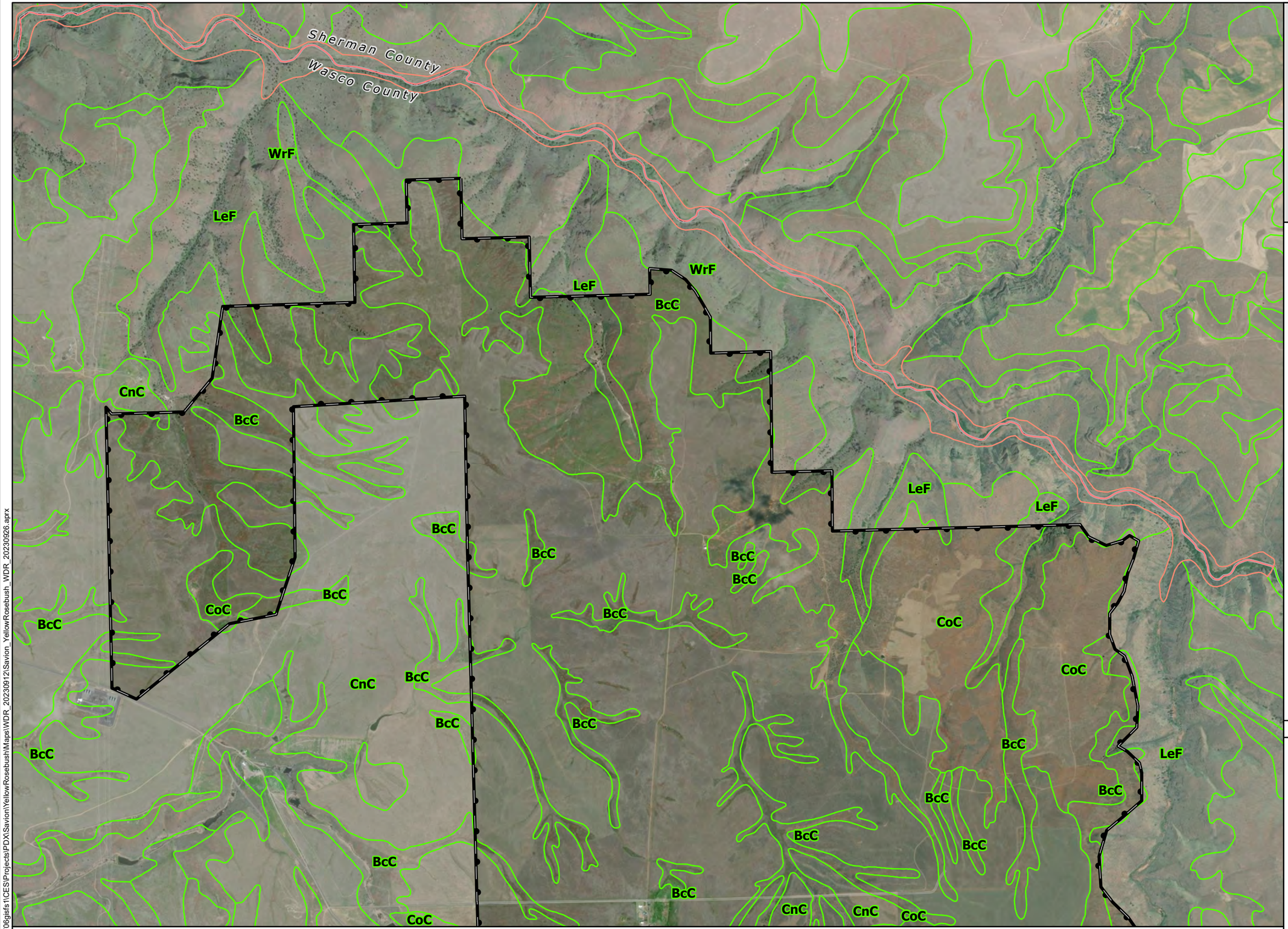
Yellow Rosebush Energy Park

Figure 4.1
Soils Detail Map

WASCO COUNTY, OR



Study Area

County Boundary

Hydric Rating

Yes

No

Mapunit Symbol - Mapunit Name

BcC - Bakeoven-Condon complex, 2-20% slopes

CnC - Condon silt loam, 2-12% slopes

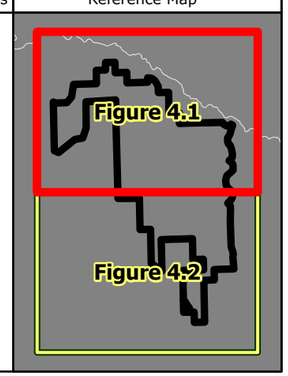
CoC - Condon-Bakeoven complex, 2-20% slopes

LeF - Lickskillet extremely stony loam, 40-70% slopes

WrF - Wrentham-Rock outcrop complex, 35-70% slopes

TETRA TECH

SAVION
A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Aerial; Soils-NRCS	

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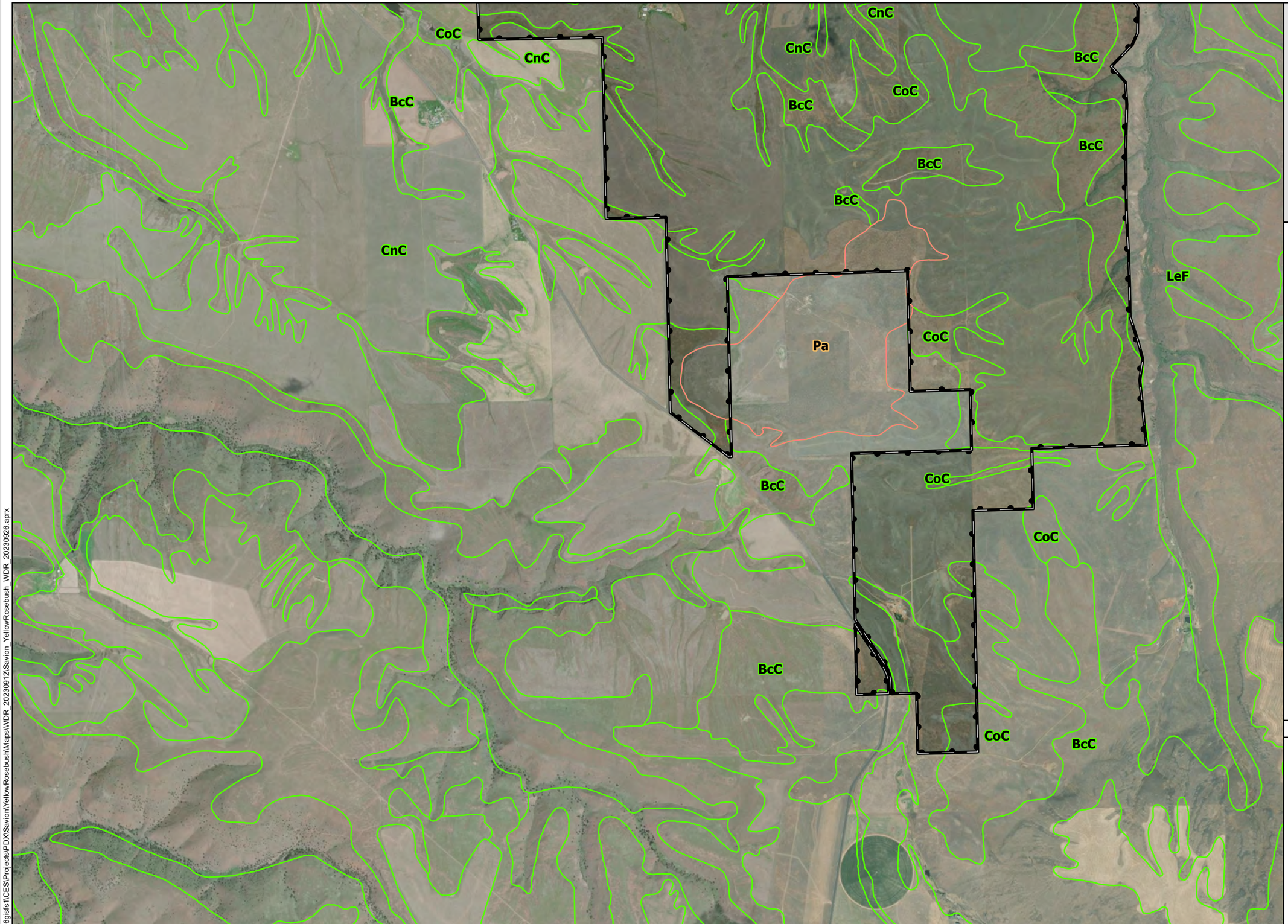
Yellow Rosebush Energy Park

Figure 4.2
Soils Detail Map

WASCO COUNTY, OR

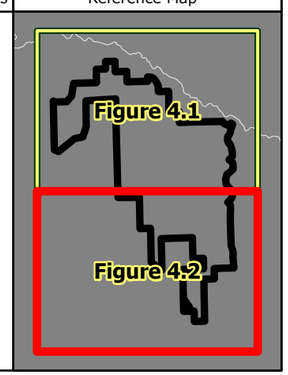


- Study Area
- County Boundary

Hydric Rating
- Yes
- No

Mapunit Symbol - Mapunit Name
- BcC - Bakeoven-Condon complex, 2-20% slopes
- CnC - Condon silt loam, 2-12% slopes
- CoC - Condon-Bakeoven complex, 2-20% slopes
- LeF - Lickskillet extremely stony loam, 40-70% slopes
- Pa - Playas

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Aerial; Soils-NRCS	

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Yellow Rosebush Energy Park

Figure 5
Wetland Delineation Index Map

WASCO COUNTY, OR

Sherman County
Wasco County

Figure 5.1

Figure 5.2

Map Grid
Study Area
County Boundary

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH

SAVION
A RENEWABLE ENERGY COMPANY

Data Sources

Savion-Project Infrastructure; Tiger-Roads; ESRI-Aerial

Reference Map

1:50,000

WGS 1984 UTM Zone 10N

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Yellow Rosebush Energy Park

Figure 5.1
Wetland Delineation Detail Map

WASCO COUNTY, OR

Figure 5.1.01
Figure 5.1.02
Figure 5.1.03
Figure 5.1.04
Figure 5.1.05
Figure 5.1.06
Figure 5.1.07
Figure 5.1.08
Figure 5.1.09
Figure 5.1.10
Figure 5.1.11
Figure 5.1.12
Figure 5.1.13
Figure 5.1.14
Figure 5.1.15
Figure 5.1.16
Figure 5.1.17
Figure 5.1.18
Figure 5.1.19
Figure 5.1.20
Figure 5.1.21
Figure 5.1.22
Figure 5.1.23
Figure 5.1.24
Figure 5.1.25
Figure 5.1.26
Figure 5.2.27
Figure 5.2.28

Taxlot 4S16E0300
Taxlot 4S15E01500
Taxlot 5S15E0100
Taxlot 5S16E0900
Taxlot 5S16E01100
Taxlot 5S16E01000
Taxlot 5S16E01300

- Detailed Map Grid
- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Sample Plot
- Field Delineated Stream
- Field Delineated Wetland
- Desktop Delineated Other Water Feature

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

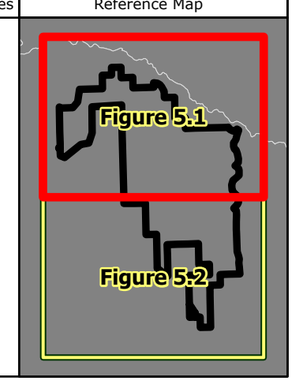
Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources

Savion-Project Infrastructure; Tiger-Roads; ESRI-Aerial

Reference Map



1:24,000 WGS 1984 UTM Zone 10N

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Yellow Rosebush Energy Park

Figure 5.2 Wetland Delineation Detail Map

WASCO COUNTY, OR

Figure 5.1.25
Figure 5.2.27
Figure 5.2.28
Figure 5.2.29
Figure 5.2.30
Taxlot 5S16E01000
Figure 5.2.31
Figure 5.2.32
Figure 5.2.33
Figure 5.2.34
Taxlot 5S16E02000
Figure 5.2.35
Figure 5.2.36
Taxlot 5S16E01300
Taxlot 5S16E02400
Taxlot 5S16E02300
Figure 5.2.37
Figure 5.2.38
Figure 5.2.39

- Detailed Map Grid
- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Sample Plot
- Field Delineated Stream
- Field Delineated Wetland
- Desktop Delineated Other Water Feature

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

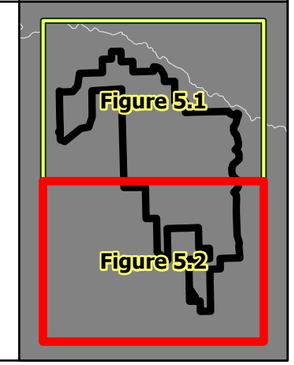
Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources

Savion-Project Infrastructure; Tiger-Roads; ESRI-Aerial

Reference Map



1:24,000 WGS 1984 UTM Zone 10N 0 0.5 1 2 Miles

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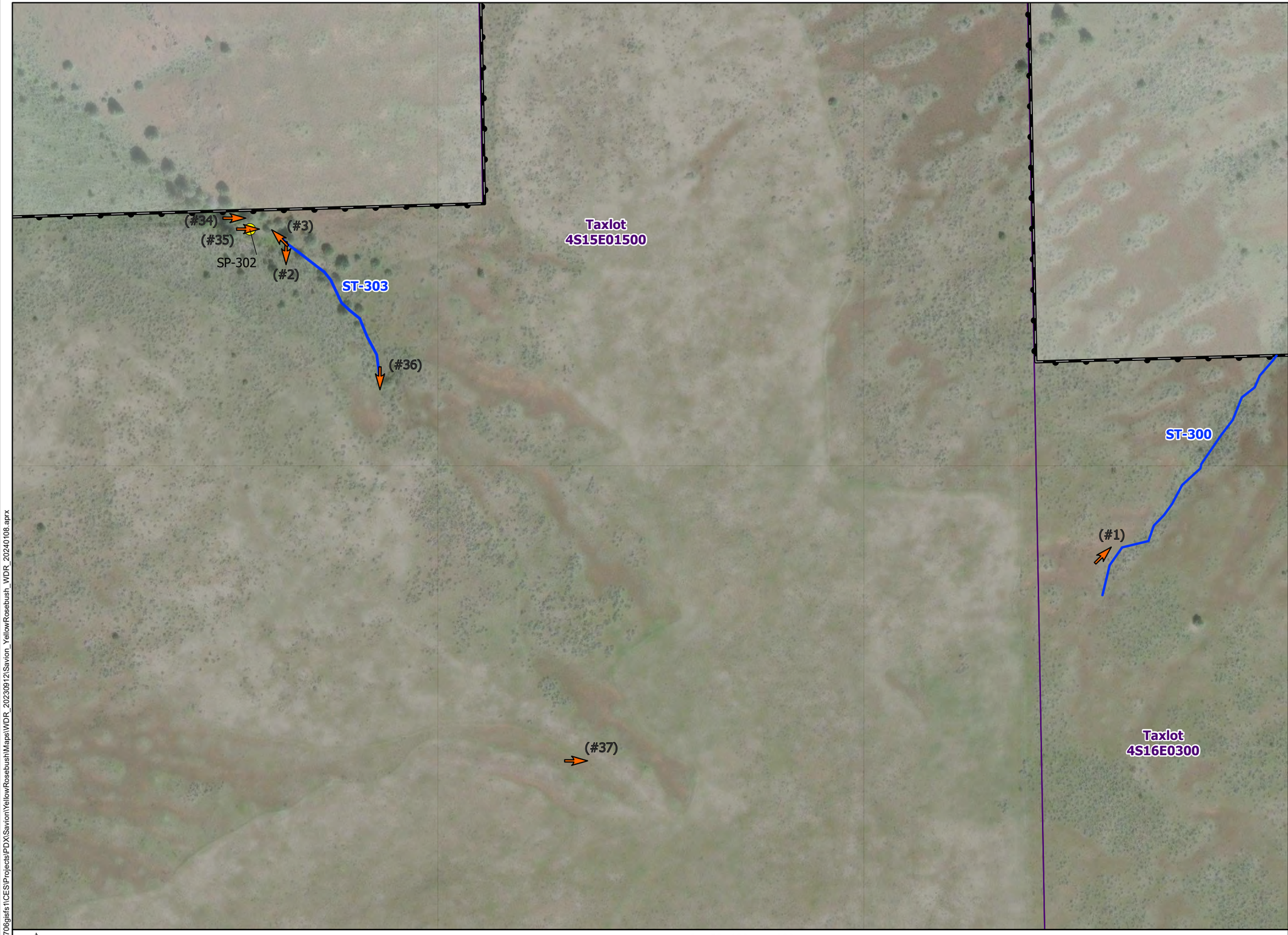
Yellow Rosebush Energy Park

Figure 5.1.01
Wetland Delineation Map

WASCO COUNTY, OR

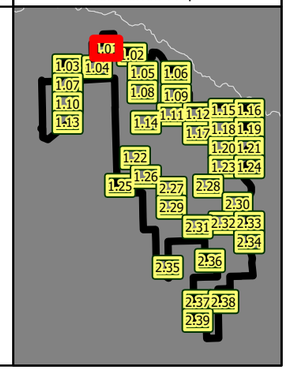


- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Sample Plot
- Field Delineated Stream

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N 0 50 100 200 Feet

NOT FOR CONSTRUCTION

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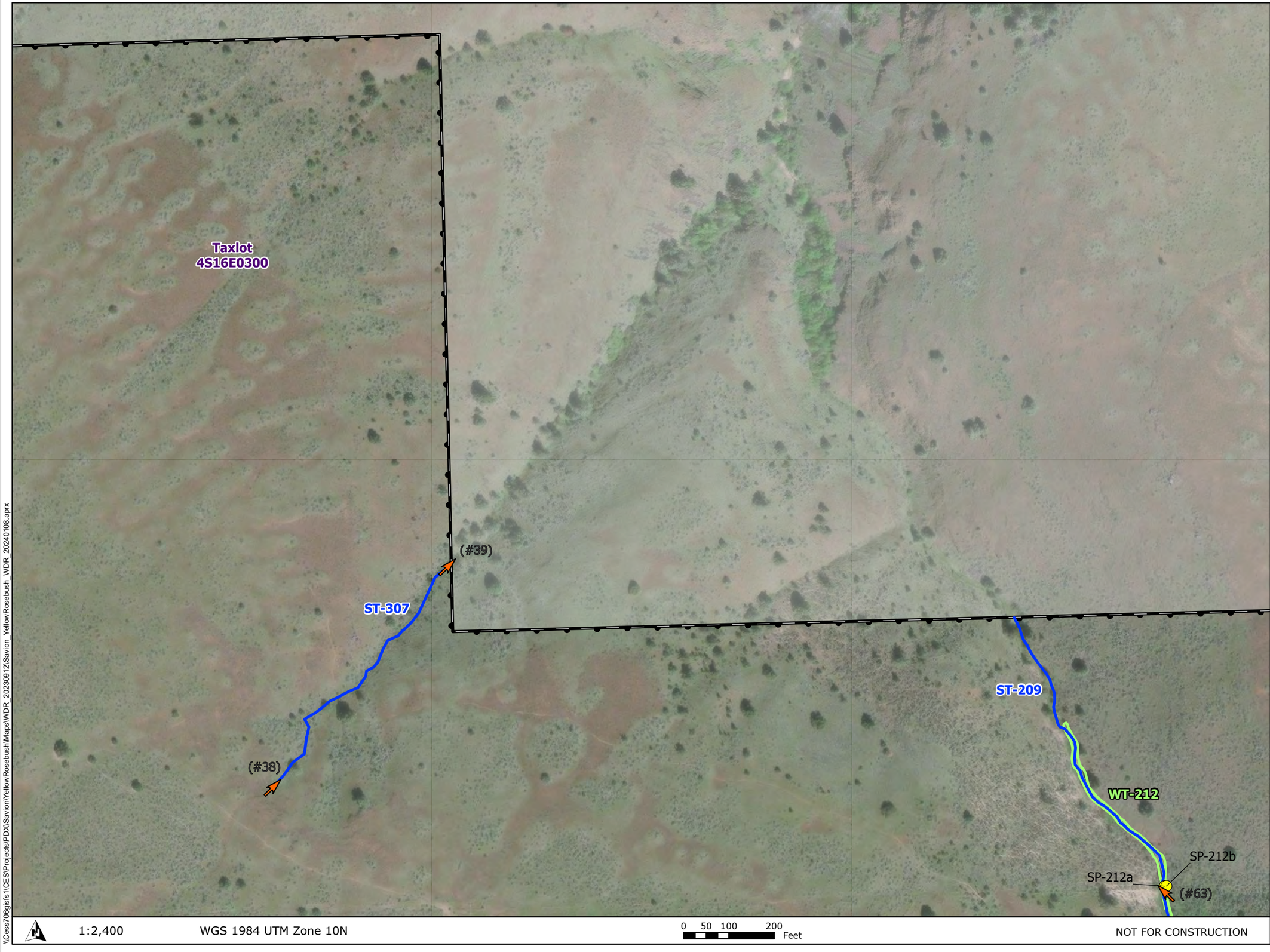
Yellow Rosebush Energy Park

Figure 5.1.02
Wetland Delineation Map

WASCO COUNTY, OR

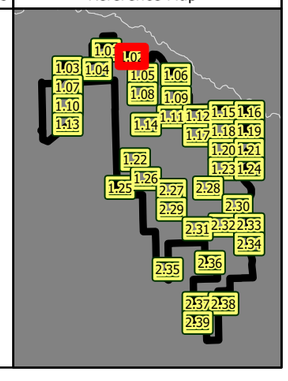


- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Sample Plot
- Field Delineated Stream
- Field Delineated Wetland

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N 0 50 100 200 Feet

NOT FOR CONSTRUCTION

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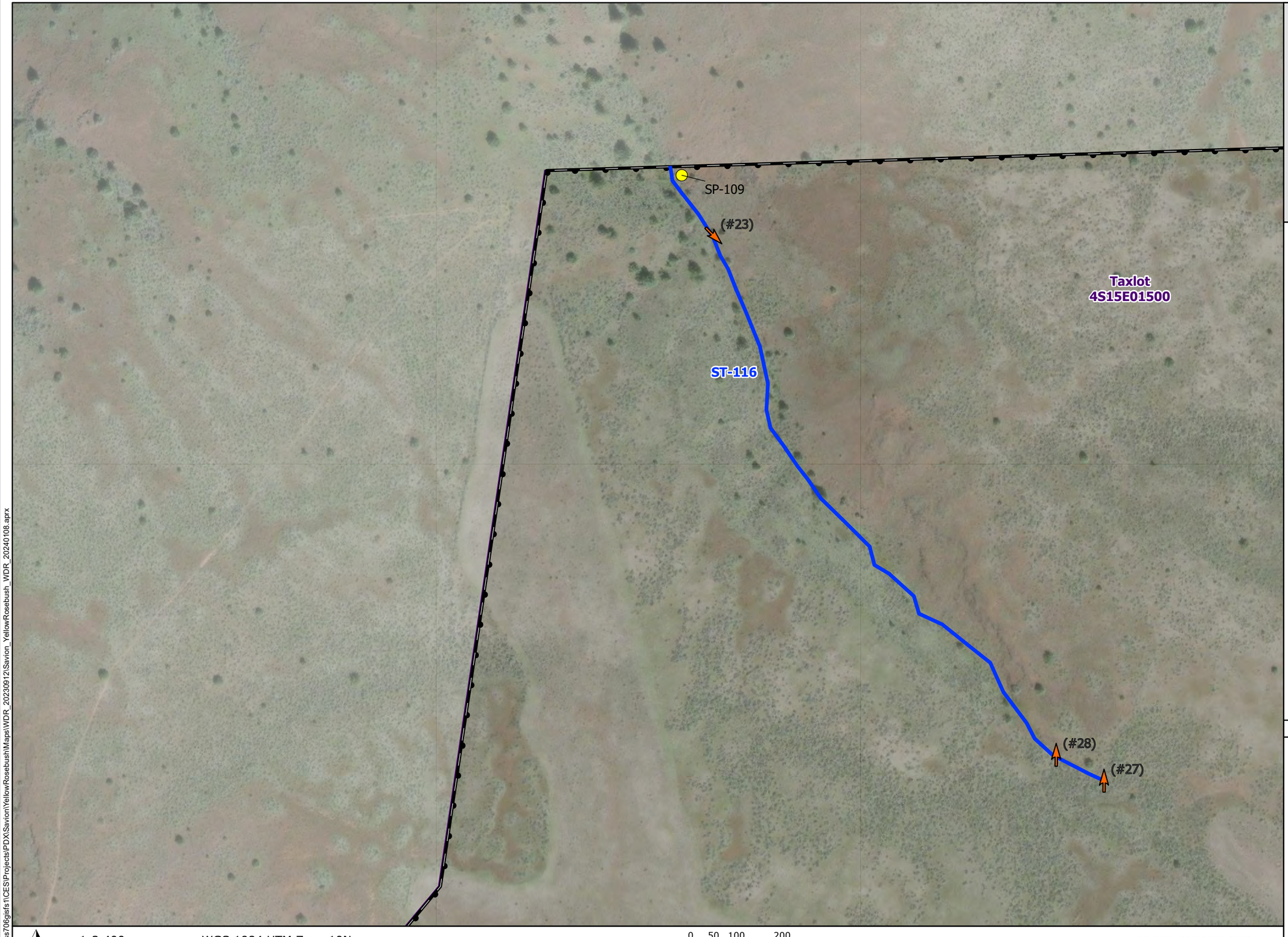
Yellow Rosebush Energy Park

Figure 5.1.03
Wetland Delineation Map

WASCO COUNTY, OR

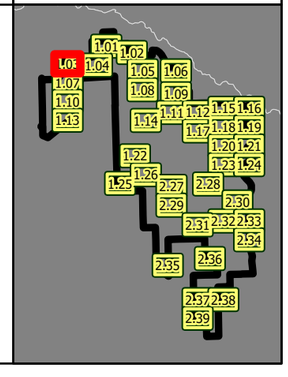


- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Sample Plot
- Field Delineated Stream

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N 0 50 100 200 Feet

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.1.04
Wetland Delineation Map

WASCO COUNTY, OR

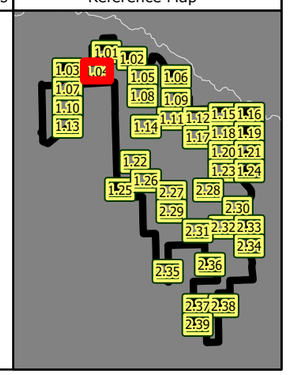
SP-107
(#22)
ST-309
ST-310
(#4)
ST-309
Taxlot
4S15E01500

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Sample Plot
- Field Delineated Stream

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH
SAVION
A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N 0 50 100 200 Feet NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.1.05
Wetland Delineation Map

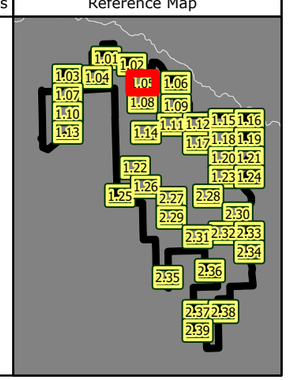
WASCO COUNTY, OR

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Sample Plot
- Field Delineated Stream
- Field Delineated Wetland

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N 0 50 100 200 Feet NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.1.06
Wetland Delineation Map

WASCO COUNTY, OR

Taxlot
4S16E0300

ST-419

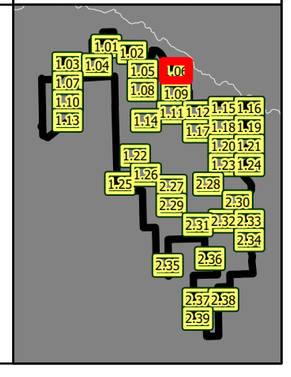
(#81)

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Field Delineated Stream

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N

0 50 100 200 Feet

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.1.07
Wetland Delineation Map

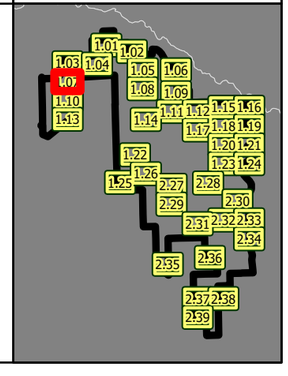
WASCO COUNTY, OR

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Sample Plot
- Field Delineated Stream
- Field Delineated Wetland

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N 0 50 100 200 Feet NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.1.08
Wetland Delineation Map

WASCO COUNTY, OR

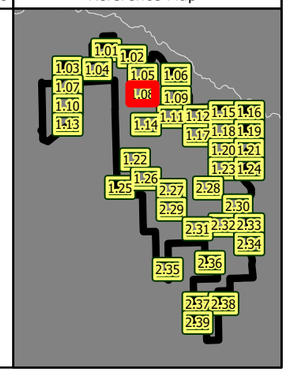
(#56)
ST-211
ST-215
(#58)
(#69)
ST-210
(#61)
(#60)
ST-209
(#59)
Taxlot
4S16E0300
ST-208
(#55)

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Field Delineated Stream

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N 0 50 100 200 Feet NOT FOR CONSTRUCTION

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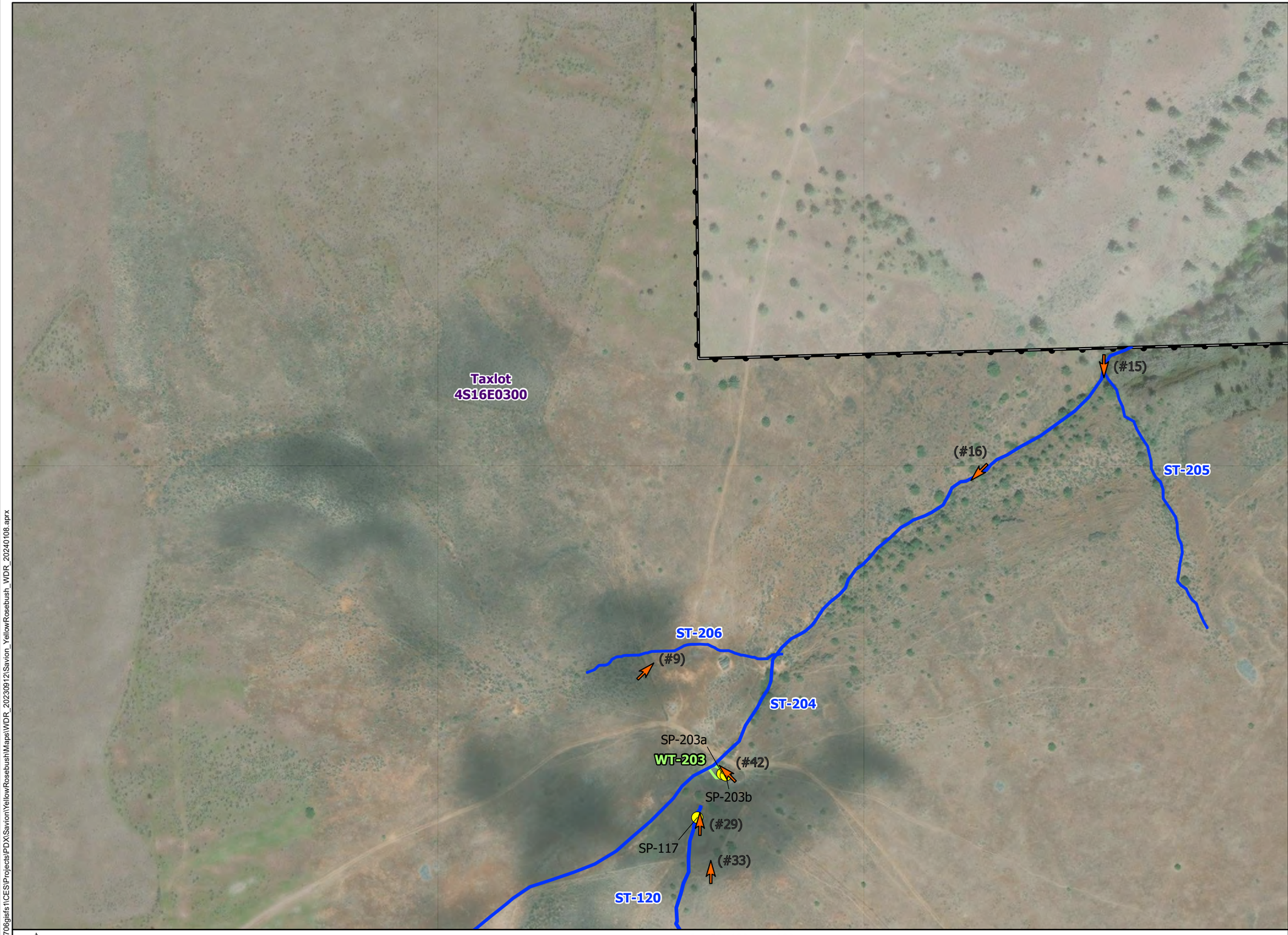
Yellow Rosebush Energy Park

Figure 5.1.09
Wetland Delineation Map

WASCO COUNTY, OR

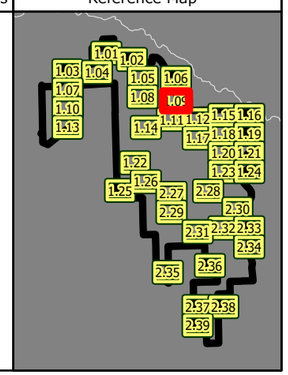


- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Sample Plot
- Field Delineated Stream
- Field Delineated Wetland

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N 0 50 100 200 Feet

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.1.10
Wetland Delineation Map

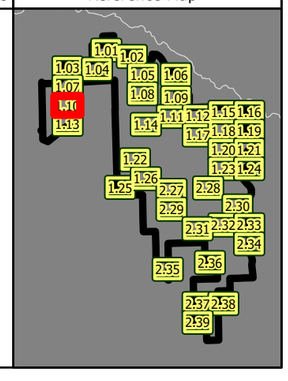
WASCO COUNTY, OR

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Sample Plot
- Field Delineated Stream

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

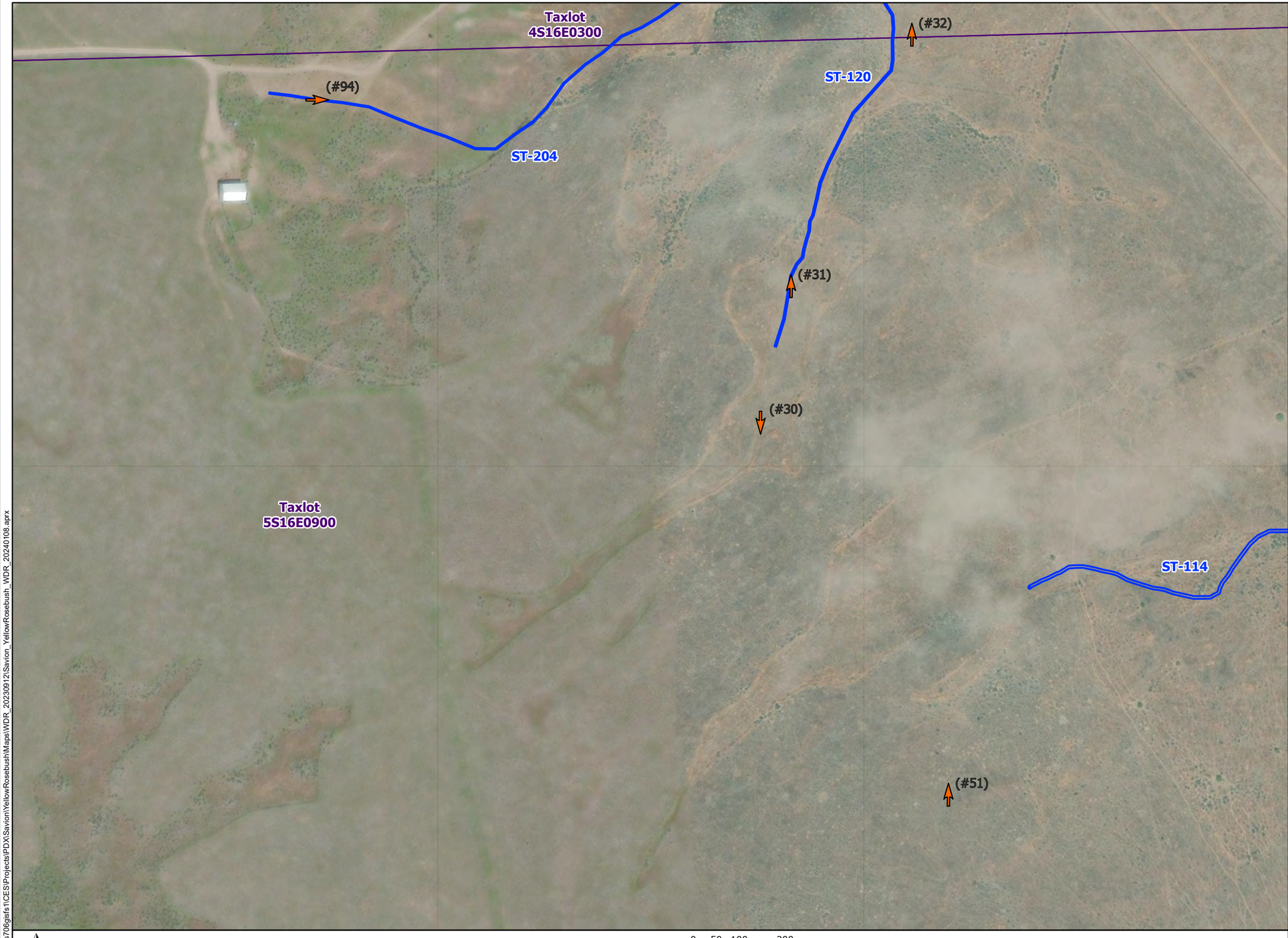
TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N 0 50 100 200 Feet

NOT FOR CONSTRUCTION

\\Cess706gisfs1\CES\Projects\PDX\SavionYellowRosebush\Maps\WDR_20230912\Savion_YellowRosebush_WDR_20240108.aprx



Yellow Rosebush Energy Park

Figure 5.1.11
Wetland Delineation Map

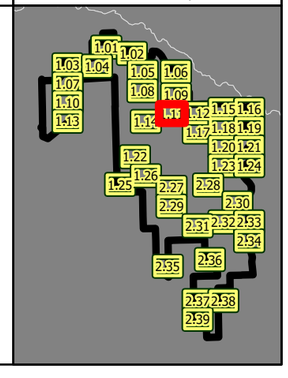
WASCO COUNTY, OR

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Field Delineated Stream

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N 0 50 100 200 Feet NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.1.12
Wetland Delineation Map

WASCO COUNTY, OR

Taxlot 4S16E0300

Taxlot 5S16E0900

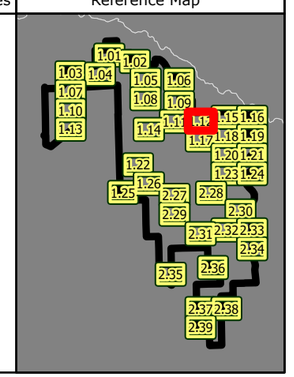
(#49)
SP-124b
SP-124a
WT-124
ST-121
ST-414
(#75)
(#48)
SP-123a
SP-123b
WT-123
(#53)
(#52)
(#54)
ST-114
ST-125
ST-125
ST-121
(#50)

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Sample Plot
- Field Delineated Stream
- Field Delineated Wetland

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N

0 50 100 200 Feet

NOT FOR CONSTRUCTION

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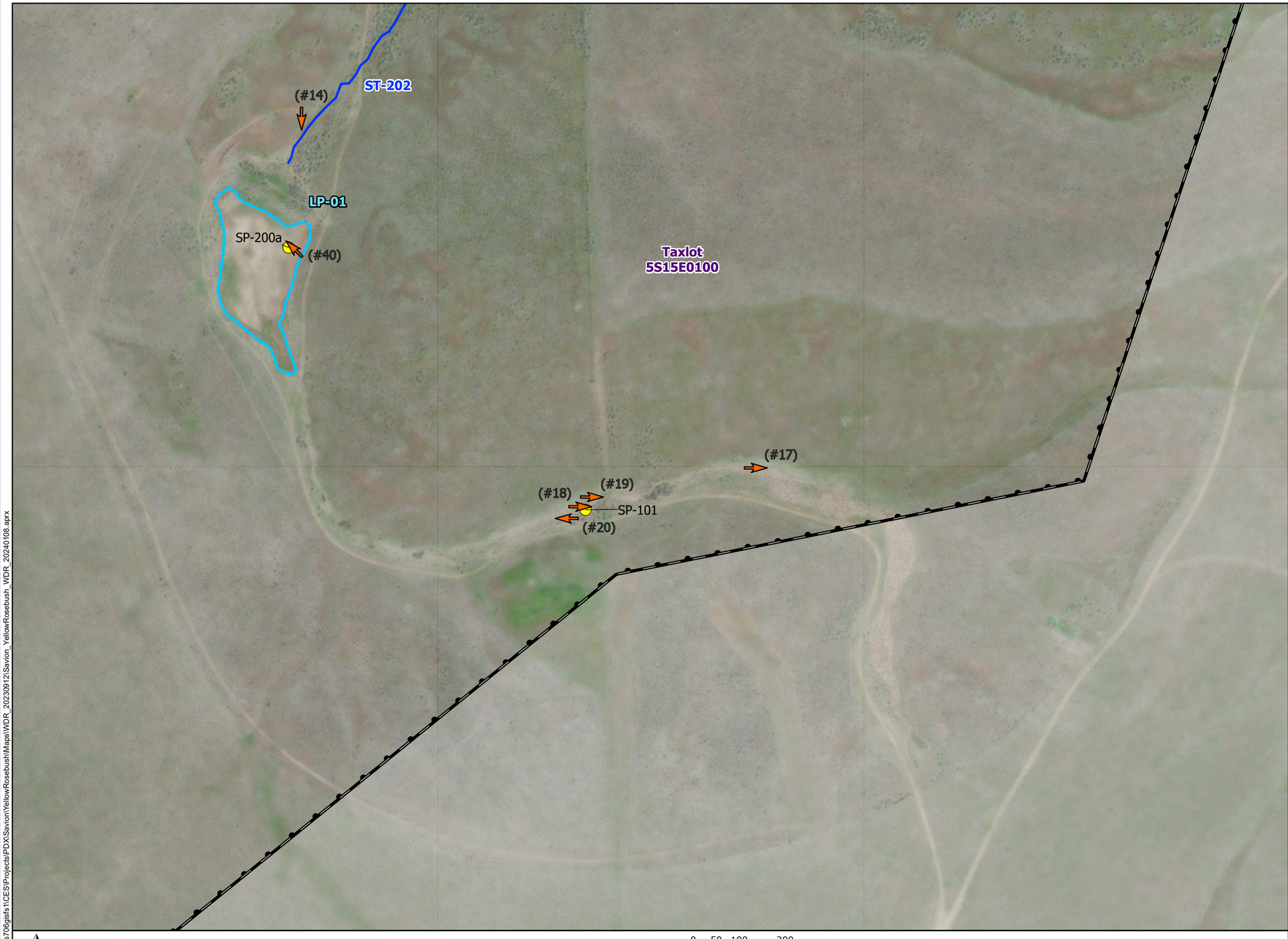


Yellow Rosebush Energy Park

Figure 5.1.13
Wetland Delineation Map

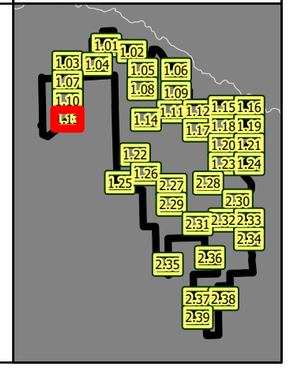
WASCO COUNTY, OR

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Sample Plot
- Field Delineated Stream
- Desktop Delineated Other Water Feature

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N 0 50 100 200 Feet

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.1.14
Wetland Delineation Map

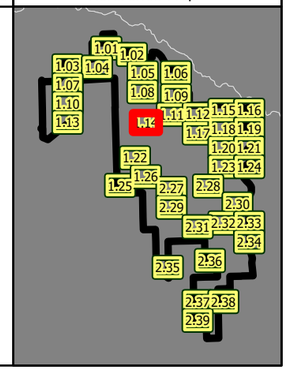
WASCO COUNTY, OR

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N

0 50 100 200 Feet

NOT FOR CONSTRUCTION

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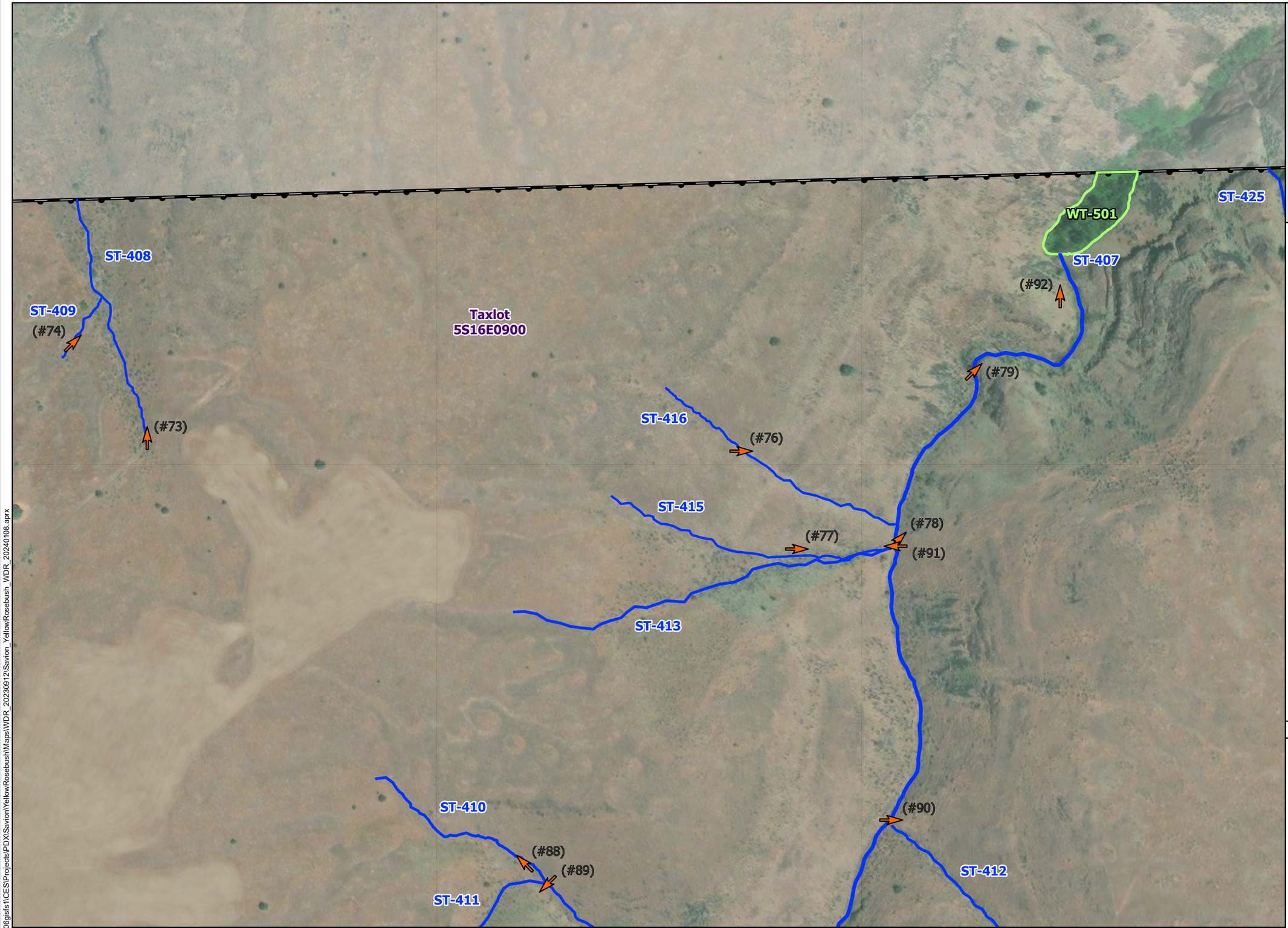
Yellow Rosebush Energy Park

Figure 5.1.15
Wetland Delineation Map

WASCO COUNTY, OR

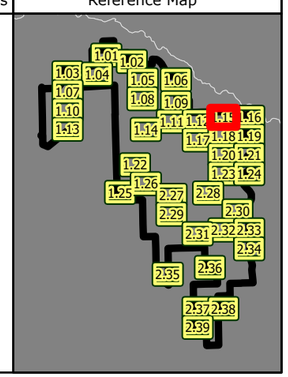


Study Area
Taxlot Boundary
Photo Point (# Photo Number)
Field Delineated Stream
Field Delineated Wetland

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N 0 50 100 200 Feet NOT FOR CONSTRUCTION

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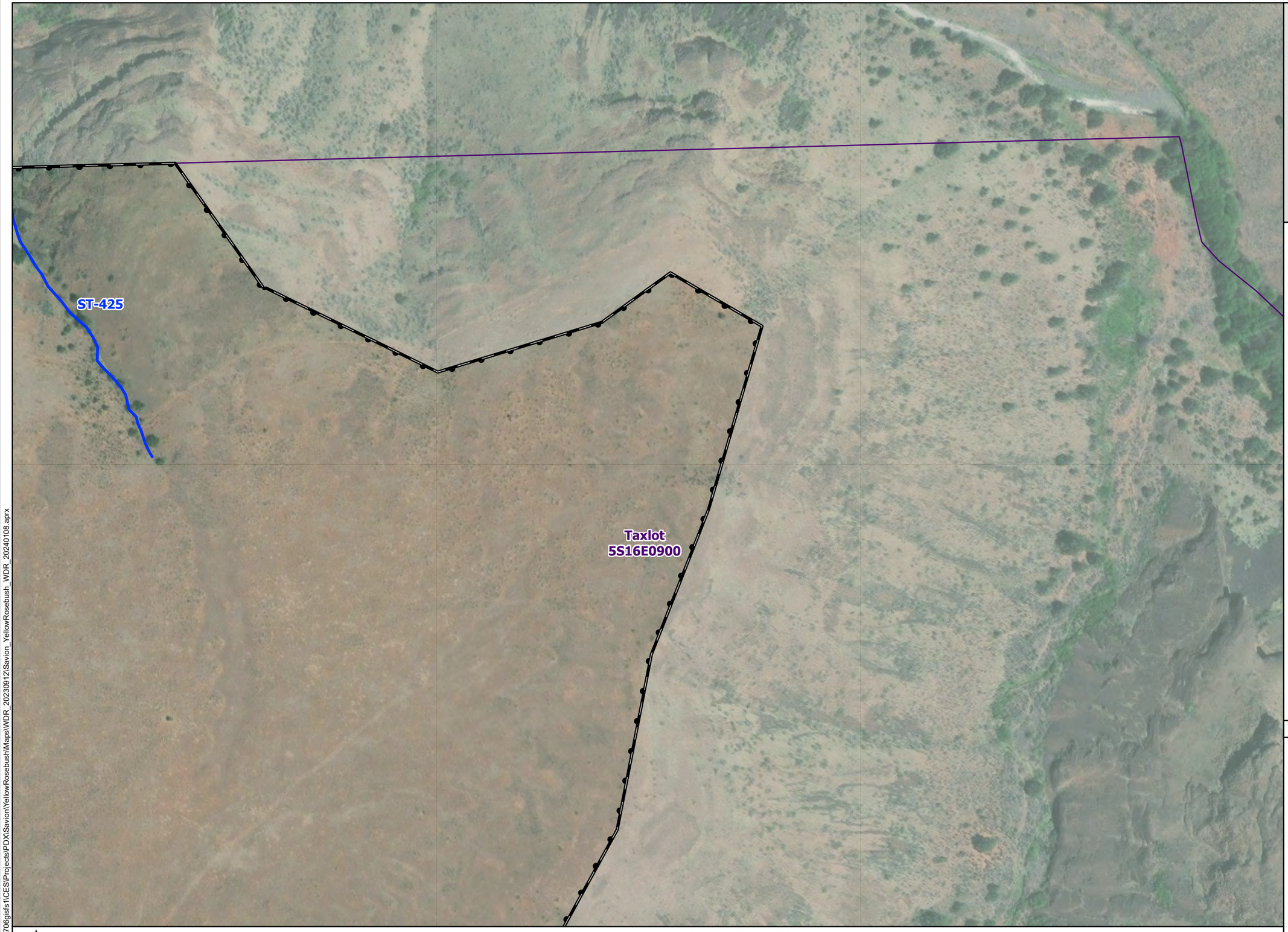
Yellow Rosebush Energy Park

Figure 5.1.16
Wetland Delineation Map

WASCO COUNTY, OR

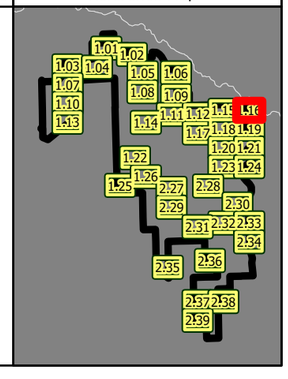


- Study Area
- Taxlot Boundary
- Field Delineated Stream

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N 0 50 100 200 Feet

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.1.17
Wetland Delineation Map

WASCO COUNTY, OR

(#47) WT-122
SP-122a
SP-122b
ST-121
LP-02
(#46)
ST-124
ST-121
(#45)
(#5)
(#6)
Taxlot
5S16E0900
WT-313
(#8)
(#7)
SP-315
SP-316
ST-121
(#44)
ST-121
(#43)

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Sample Plot
- Field Delineated Stream
- Field Delineated Wetland
- Desktop Delineated Other Water Feature

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources

Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic

Reference Map

1:2,400 WGS 1984 UTM Zone 10N 0 50 100 200 Feet NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.1.18
Wetland Delineation Map

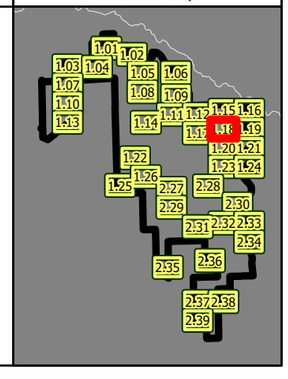
WASCO COUNTY, OR

- Study Area
- Taxlot Boundary
- Field Delineated Stream

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N

0 50 100 200 Feet

NOT FOR CONSTRUCTION

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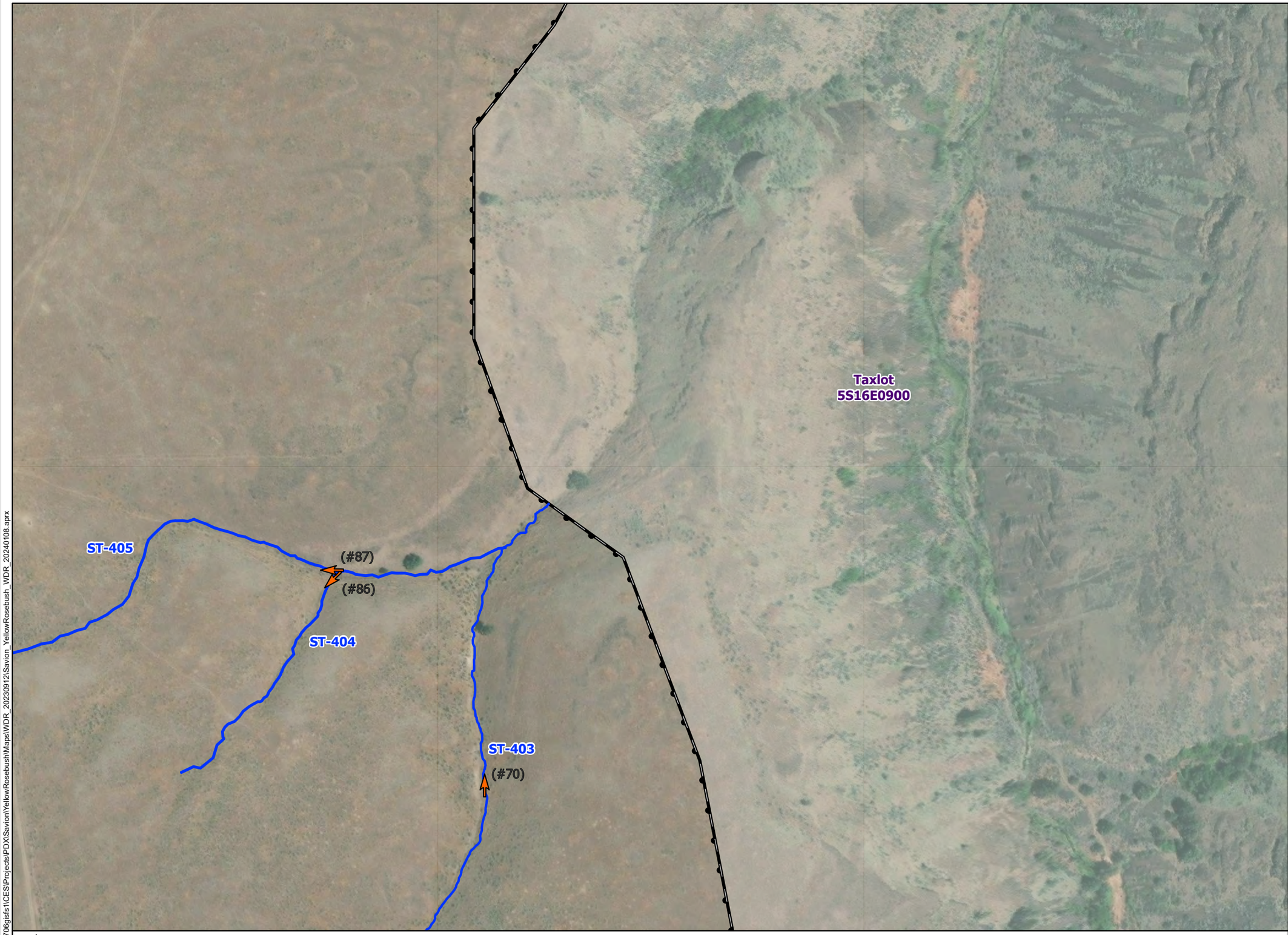
Yellow Rosebush Energy Park

Figure 5.1.19
Wetland Delineation Map

WASCO COUNTY, OR

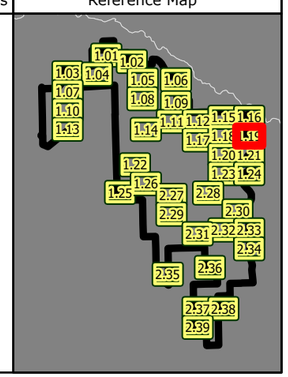


- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Field Delineated Stream

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N 0 50 100 200 Feet NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.1.20
Wetland Delineation Map

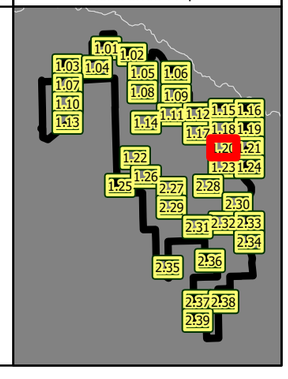
WASCO COUNTY, OR

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Sample Plot
- Field Delineated Stream

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N 0 50 100 200 Feet

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.1.21
Wetland Delineation Map

WASCO COUNTY, OR

ST-403

(#85)

Taxlot
5S16E0900

ST-400

(#83)

(#84)

Taxlot
5S16E01300

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Field Delineated Stream

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources

Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic

Reference Map

1:2,400 WGS 1984 UTM Zone 10N 0 50 100 200 Feet

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.1.22
Wetland Delineation Map

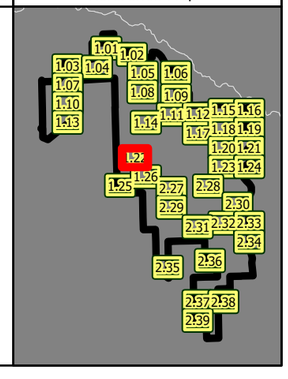
WASCO COUNTY, OR

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N 0 50 100 200 Feet NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.1.23
Wetland Delineation Map

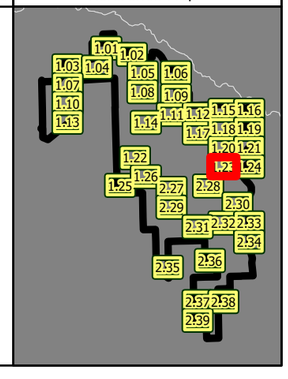
WASCO COUNTY, OR

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Field Delineated Stream

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N 0 50 100 200 Feet NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.1.24
Wetland Delineation Map

WASCO COUNTY, OR

Taxlot
5S16E0900

Taxlot
5S16E01300

ST-426

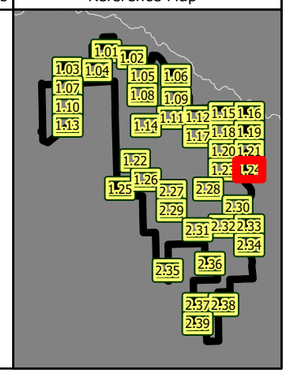
(#116)

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Field Delineated Stream

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N

0 50 100 200 Feet

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.1.25
Wetland Delineation Map

WASCO COUNTY, OR

Taxlot 5S15E0100

Taxlot 5S16E0900

(#98)

Taxlot 5S16E01000

ST-454

(#129)

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Field Delineated Stream

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

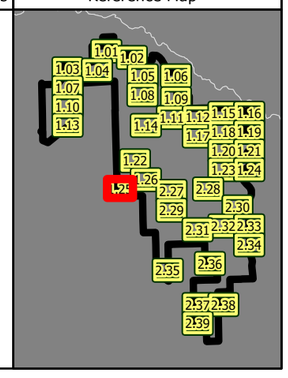
TETRA TECH

SAVION
A RENEWABLE ENERGY COMPANY

Data Sources

Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic

Reference Map



1:2,400

WGS 1984 UTM Zone 10N

0 50 100 200 Feet

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.1.26
Wetland Delineation Map

WASCO COUNTY, OR

Taxlot
5S16E0900

(#82)

Taxlot
5S16E01000

Taxlot 5S16E01100

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources

Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic

Reference Map

1:2,400 WGS 1984 UTM Zone 10N

0 50 100 200 Feet

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.2.27
Wetland Delineation Map

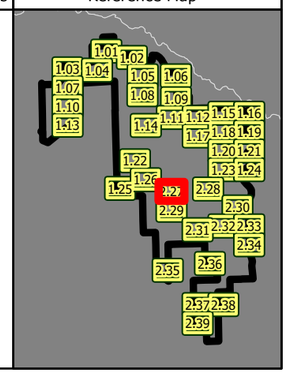
WASCO COUNTY, OR

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Field Delineated Stream
- Desktop Delineated Other Water Feature

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

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Yellow Rosebush Energy Park

Figure 5.2.28
Wetland Delineation Map

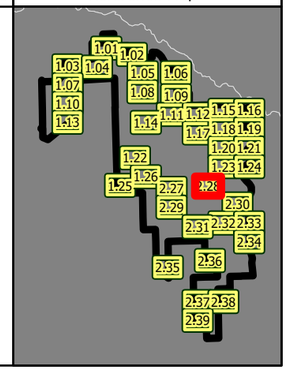
WASCO COUNTY, OR

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Sample Plot

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N 0 50 100 200 Feet

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.2.29
Wetland Delineation Map

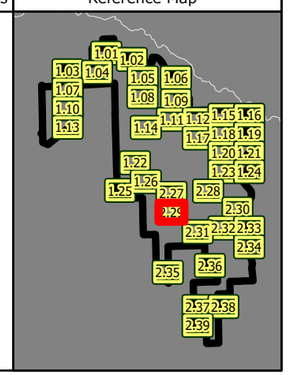
WASCO COUNTY, OR

- Study Area
- Taxlot Boundary
- Field Delineated Stream

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

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Yellow Rosebush Energy Park

Figure 5.2.30
Wetland Delineation Map

WASCO COUNTY, OR

(#117)
ST-427
(#118)
(#119)
ST-429
ST-428
ST-430
ST-431
(#120)
(#121)
Taxlot
5S16E01300

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Field Delineated Stream

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources

Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic

Reference Map

1:2,400 WGS 1984 UTM Zone 10N 0 50 100 200 Feet

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Yellow Rosebush Energy Park

Figure 5.2.31
Wetland Delineation Map

WASCO COUNTY, OR

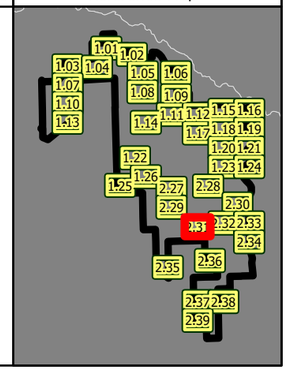
(#102)
(#100)
(#101)
WT-440
SP-440a
(#103)
SP-440b
Taxlot
5S16E01300
(#104)
(#105)
SP-442

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Sample Plot
- Field Delineated Wetland

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N

0 50 100 200 Feet

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.2.32
Wetland Delineation Map

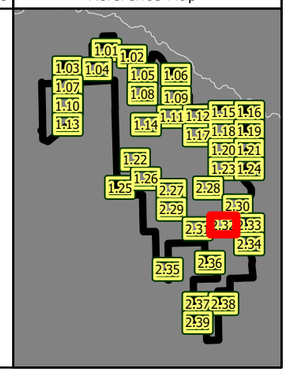
WASCO COUNTY, OR

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Field Delineated Stream

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N 0 50 100 200 Feet

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.2.33
Wetland Delineation Map

WASCO COUNTY, OR

ST-432

(#122)

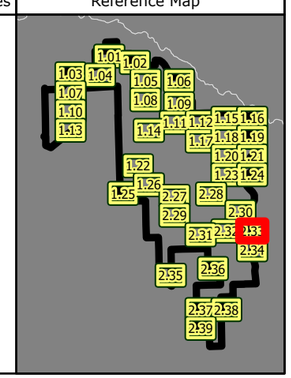
Taxlot
5S16E01300

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Field Delineated Stream

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

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WGS 1984 UTM Zone 10N

0 50 100 200 Feet

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.2.34
Wetland Delineation Map

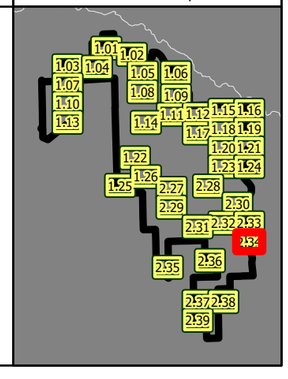
WASCO COUNTY, OR

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Field Delineated Stream

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N 0 50 100 200 Feet

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.2.35
Wetland Delineation Map

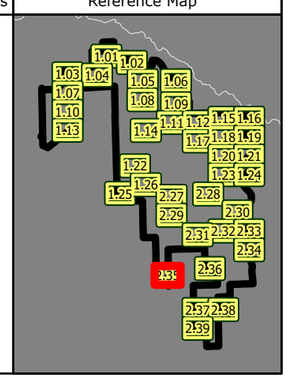
WASCO COUNTY, OR

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Sample Plot

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N 0 50 100 200 Feet

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.2.36
Wetland Delineation Map

WASCO COUNTY, OR

Taxlot
5S16E01300

Taxlot
5S16E02000

Taxlot
5S16E02400

SP-443b
SP-443a
(#106)
WT-443

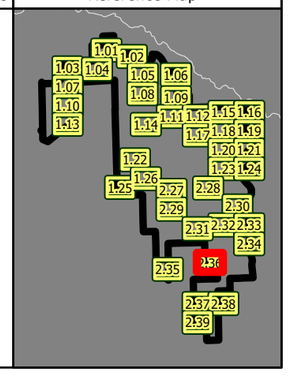
SP-434b
SP-434a
WT-434
(#107)

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Sample Plot
- Field Delineated Wetland

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N 0 50 100 200 Feet

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.2.37
Wetland Delineation Map

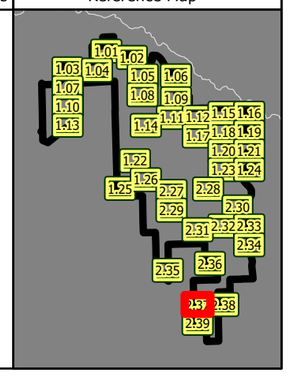
WASCO COUNTY, OR

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Field Delineated Stream

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N 0 50 100 200 Feet

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Yellow Rosebush Energy Park

Figure 5.2.38
Wetland Delineation Map

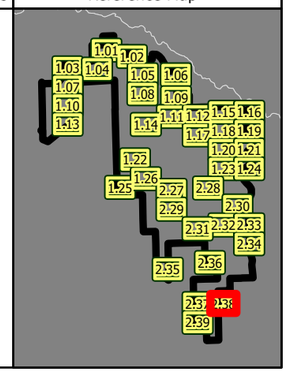
WASCO COUNTY, OR

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Sample Plot
- Field Delineated Wetland

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N 0 50 100 200 Feet

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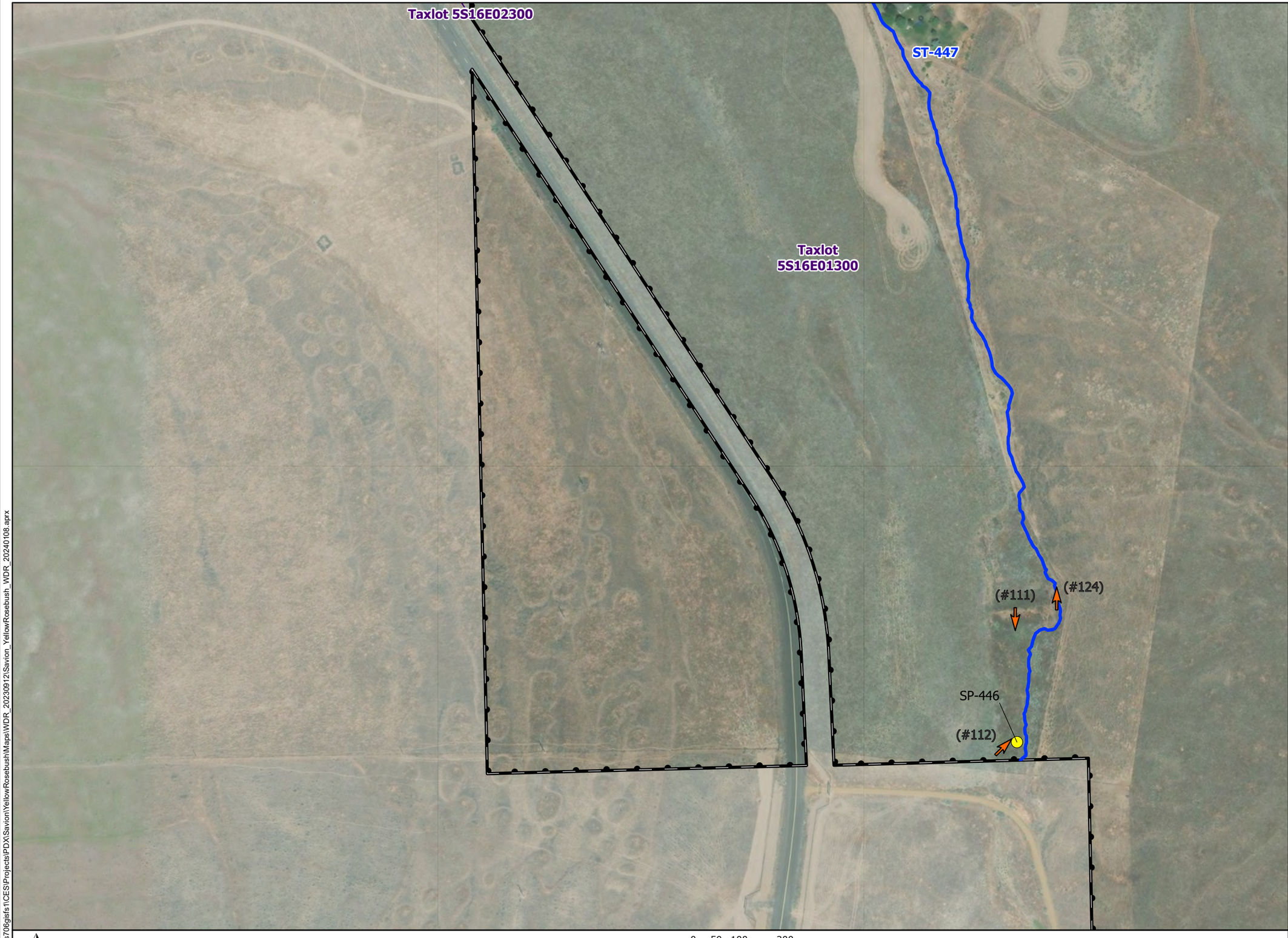


Yellow Rosebush Energy Park

Figure 5.2.39
Wetland Delineation Map

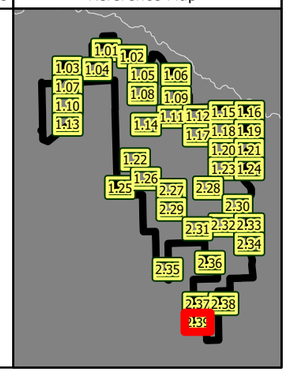
WASCO COUNTY, OR

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Sample Plot
- Field Delineated Stream

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N

0 50 100 200 Feet

NOT FOR CONSTRUCTION

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Appendix A. USACE Datasheets

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U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

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

Project/Site: Yellow Rosebush City/County: Wasco Sampling Date: 6/27/2023
Applicant/Owner: Savion State: OR Sampling Point: SP-101
Investigator(s): Joe Parzych, Lynda Oosterhuis Section, Township, Range: T04S, R15E
Landform (hillside, terrace, etc.): Swale Local relief (concave, convex, none): concave Slope (%): 2
Subregion (LRR): LRR B Lat: 45.157797° Long: -120.843690° Datum: WGS 84
Soil Map Unit Name: Bakeoven-Condon complex, 0-20% slopes NWI classification: none
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Plot taken in concave swale, in lowest portion of feature in standing water. Water feeding into this feature is from a hose, these were determined to be flooded uplands.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. None			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1. None			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. *Taeniatherum caput-medusae*	50	Yes	UPL
2. *Cirsium arvense*	25	Yes	FACU
3. *Epilobium ciliatum*	5	No	FACW
4. *Thinopyrum intermedium*	20	No	UPL
5. *Achillea millefolium*	15	No	FACU
6.			
7.			
8.			
	115 =Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 0 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	5	x 2 =	10
FAC species	0	x 3 =	0
FACU species	40	x 4 =	160
UPL species	70	x 5 =	350
Column Totals:	115 (A)		520 (B)

Prevalence Index = B/A = 4.52

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks:
Vegatation is a mix of upland and FACU and FACW due to altered hydrology.

SOIL

Sampling Point: SP-101

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	7.5YR 3/2	100					Loamy/Clayey	no hydric soil indicators

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: hard ground

Depth (inches): 8

Hydric Soil Present? **Yes** ___ **No** X

Remarks:
Area was actively receiving irrigation and appears to be routinely flood irrigated.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1) **(Nonriverine)**
- ___ Sediment Deposits (B2) **(Nonriverine)**
- ___ Drift Deposits (B3) **(Nonriverine)**
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ___	Depth (inches): 1
Water Table Present?	Yes X	No ___	Depth (inches): 1
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Irrigation pipe with flowing water present. Area appears to be regularly flood irrigated.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

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

Project/Site: Yellow Rosebush City/County: Wasco Sampling Date: 6/27/2023
Applicant/Owner: Savion State: OR Sampling Point: SP-105
Investigator(s): Joe Parzych, Lynda Oosterhuis Section, Township, Range: T4S, R15E
Landform (hillside, terrace, etc.): terrace Local relief (concave, convex, none): concave Slope (%): 0
Subregion (LRR): LRR B Lat: 45.157797° Long: -120.843690° Datum: WGS 84
Soil Map Unit Name: Bakeoven-Condon complex, 0-20% slopes NWI classification: riverine
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Upland depression suspected of being a possible wetland that was confirmed as upland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. *Ericameria nauseosa*	5	No	UPL
2. *Poa secunda*	25	Yes	FACU
3. *Taeniatherum caput-medusae*	5	No	UPL
4. *Poa bulbosa*	30	Yes	FACU
5. *Bromus tectorum*	5	No	UPL
6. *Hordeum jubatum*	8	No	FAC
7.			
8.			
	78 =Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 22 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	8	x 3 =	24
FACU species	55	x 4 =	220
UPL species	15	x 5 =	75
Column Totals:	78 (A)		319 (B)
Prevalence Index = B/A =			4.09

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks:

SOIL

Sampling Point: SP-105

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	7.5YR 4/1	100					Loamy/Clayey	rocks at 2"

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: rocks

Depth (inches): 2

Hydric Soil Present? **Yes** ___ **No** X

Remarks:
No hydric soils present. Refusal at 2" due to rocks.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ 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)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No wetland hydrology present.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

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

Project/Site: Yellow Rosebush City/County: Wasco Sampling Date: 6/27/2023
Applicant/Owner: Savion State: OR Sampling Point: SP-107
Investigator(s): Joe Parzych, Lynda Oosterhuis Section, Township, Range: T04S, R15E
Landform (hillside, terrace, etc.): swale Local relief (concave, convex, none): concave Slope (%): 1
Subregion (LRR): LRR B Lat: 45.157797° Long: -120.843690° Datum: WGS 84
Soil Map Unit Name: Bakeoven-Condon complex, 0-20% slopes NWI classification: PUSAh
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Confirming upland conditons at NWI mapped pond location that was found to be not present.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1. *Aretmesia tridentata*	20	Yes	UPL
2.			
3.			
4.			
5.			
	20 =Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. *Taeniatherum caput-medusae*	55	Yes	UPL
2. *Achillea millefolium*	10	No	FACU
3. *Bromus tectorum*	10	No	UPL
4. *Tragopogon porrifolius*	5	No	UPL
5.			
6.			
7.			
8.			
	80 =Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 20 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	10	x 4 =	40
UPL species	90	x 5 =	450
Column Totals:	100 (A)		490 (B)
Prevalence Index = B/A =			4.90

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks:
Upland vegetation dominated by Taeniatherum caput-medusea.

SOIL

Sampling Point: SP-107

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 3/1	100					Loamy/Clayey	Silt loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: hard ground

Depth (inches): 10

Hydric Soil Present? **Yes** ___ **No** X

Remarks:
No hydric soils.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ 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)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No wetland hydrology present.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

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

Project/Site: Yellow Rosebush City/County: Wasco Sampling Date: 6/27/2023
Applicant/Owner: Savion State: OR Sampling Point: SP-109
Investigator(s): Joe Parzych, Lynda Oosterhuis Section, Township, Range: T04S, R15E
Landform (hillside, terrace, etc.): terrace Local relief (concave, convex, none): concave Slope (%): 20
Subregion (LRR): LRR B Lat: 45.157797° Long: -120.843690° Datum: WGS 84
Soil Map Unit Name: Lickskillet Extremely stoney loam, slopes 40-70% NWI classification: ?
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No x

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Upland confirmation along NHD mapped streamline.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Juniperus occidentalis*	10	Yes	UPL
2.			
3.			
4.			
	10	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15' radius)			
1. *Artemisia tridentata*	5	Yes	UPL
2.			
3.			
4.			
5.			
	5	=Total Cover	
Herb Stratum (Plot size: 5' radius)			
1. *Achillea millefolium*	15	Yes	FACU
2. *Balsamorhiza sagittata*	15	Yes	UPL
3. *Tragopogon porrifolius*	5	No	UPL
4. *Poa secunda*	20	Yes	FACU
5. *Poa bulbosa*	5	No	FACU
6. *Pseudoroegneria spicata*	20	Yes	UPL
7.			
8.			
	80	=Total Cover	
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
		=Total Cover	

% Bare Ground in Herb Stratum 10 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 6 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	40	x 4 =	160
UPL species	55	x 5 =	275
Column Totals:	95 (A)		435 (B)

Prevalence Index = B/A = 4.58

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks:
Upland species

SOIL

Sampling Point: SP-109

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 3/2	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 5

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ 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)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** x

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
No wetland hydrology present.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

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

Project/Site: Yellow Rosebush City/County: Wasco Sampling Date: 6/27/2023
Applicant/Owner: Savion State: OR Sampling Point: SP-117
Investigator(s): Joe Parzych, Lynda Oosterhuis Section, Township, Range: T04S, R15E
Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): concave Slope (%): 0
Subregion (LRR): LRR B Lat: 45.157797° Long: -120.843690° Datum: WGS 84
Soil Map Unit Name: Bakeoven-Condon complex, 0-20% slopes NWI classification: PUSAh
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ____ No X
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Upland confirmation plot at NHD mapped intermittent pond. Hydric soil indicators and wetland hydrology indicators present, however vegetation is upland. Area is believed to lack an adequate hydroperiod to support hydrophytes.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. None			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1. None			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. *Taeniatherum caput-medusae*	35	Yes	UPL
2. *Ventenata dubia*	10	No	UPL
3. *Sisymbrium altissimum*	10	No	FACU
4.			
5.			
6.			
7.			
8.			
	55 =Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1. None			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 45 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 1 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	10	x 4 =	40
UPL species	45	x 5 =	225
Column Totals:	55 (A)		265 (B)

Prevalence Index = B/A = 4.82

Hydrophytic Vegetation Indicators:
____ Dominance Test is >50%
____ Prevalence Index is ≤3.0[1]
____ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks:

SOIL

Sampling Point: SP-117

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	7.5YR 3/1	95	7.5YR 5/8	5	RM	M	Loamy/Clayey	silty clay

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: rocks

Depth (inches): 6

Hydric Soil Present? **Yes** X **No** ___

Remarks:
refusal at 6" due to rock.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ 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)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- X Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

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

Project/Site: Yellow Rosebush City/County: Wasco Sampling Date: 6/30/2023
Applicant/Owner: Savion State: OR Sampling Point: SP-122A
Investigator(s): Joe Parzych, Lynda Oosterhuis Section, Township, Range: T04S, R15E
Landform (hillside, terrace, etc.): Swale Local relief (concave, convex, none): concave Slope (%): 5
Subregion (LRR): LRR B Lat: 45.157797° Long: -120.843690° Datum: WGS 84
Soil Map Unit Name: Bakeoven-Condon complex, 0-20% slopes NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
The plot represents wetland conditions in a shallow swale along an ephemeral channel.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. *Juncus tenuis*	70	Yes	FACW
2. *Carex sp.*	20	Yes	FACW
3. *Poa bulbosa*	10	No	FACU
4.			
5.			
6.			
7.			
8.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1. None			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 0 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	90	x 2 =	180
FAC species	0	x 3 =	0
FACU species	10	x 4 =	40
UPL species	0	x 5 =	0
Column Totals:	100 (A)		220 (B)
Prevalence Index = B/A =			2.20

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
X Prevalence Index is ≤3.0[1]
____ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
____ Problematic Hydrophytic Vegetation[1] (Explain)
[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** x **No** ____

Remarks:
FACW assumed for Carex sp.

SOIL

Sampling Point: SP-122A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 3/1	90	7.5YR 4/6	10	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: rocks

Depth (inches): 2

Hydric Soil Present? **Yes** X **No** ___

Remarks:
Refusal due to rocks at 3"

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ 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)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

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

Project/Site: Yellow Rosebush City/County: Wasco Sampling Date: 6/30/2023
Applicant/Owner: Savion State: OR Sampling Point: SP-122B
Investigator(s): Joe Parzych, Lynda Oosterhuis Section, Township, Range: T04S, R15E
Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): Convex Slope (%): 3
Subregion (LRR): LRR B Lat: 45.157797° Long: -120.843690° Datum: WGS 84
Soil Map Unit Name: Bakeoven-Condon complex, 0-20% slopes NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
This plot represents upland conditions on a swale side-slope, just outside of the linear wetland represented by SP-122A.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. *Poa bulbosa*	60	Yes	FACU
2. *Taeniatherum caput-medusae*	30	Yes	UPL
3.			
4.			
5.			
6.			
7.			
8.			
	90 =Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 10 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	60	x 4 =	240
UPL species	30	x 5 =	150
Column Totals:	90 (A)		390 (B)

Prevalence Index = B/A = 4.33

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks:

SOIL

Sampling Point: SP-122B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-1	10YR 3/1	90	7.5YR 4/6	10	RM	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Rock

Depth (inches): 1

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ 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)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

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

Project/Site: Yellow Rosebush City/County: Wasco Sampling Date: 6/30/2023
Applicant/Owner: Savion State: OR Sampling Point: SP-123A
Investigator(s): Joe Parzych, Lynda Oosterhuis Section, Township, Range: T04S, R15E
Landform (hillside, terrace, etc.): channel bottom Local relief (concave, convex, none): concave Slope (%): 5
Subregion (LRR): LRR B Lat: 45.157797° Long: -120.843690° Datum: WGS 84
Soil Map Unit Name: Bakeoven-Condon complex, 0-20% slopes NWI classification: PSSA
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
Wetland plot.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. *Juncus tenuis*	25	Yes	FACW
2. *Carex sp.*	5	No	FACW
3.			
4.			
5.			
6.			
7.			
8.			
	30 =Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 70 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 1 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	30	x 2 =	60
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	30 (A)		60 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
X Prevalence Index is ≤3.0[1]
____ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks:

SOIL

Sampling Point: SP-123A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 3/1	90	7.5YR 4/6	10	RM	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: rock

Depth (inches): 2

Hydric Soil Present? **Yes** X **No** ___

Remarks:
Refusal at 2" due to rocks.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ 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)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- X Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

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

Project/Site: Yellow Rosebush City/County: Wasco Sampling Date: 6/30/2023
Applicant/Owner: Savion State: OR Sampling Point: SP-123B
Investigator(s): Joe Parzych, Lynda Oosterhuis Section, Township, Range: T04S, R15E
Landform (hillside, terrace, etc.): sideslope Local relief (concave, convex, none): convex Slope (%): 5
Subregion (LRR): LRR B Lat: 45.157797° Long: -120.843690° Datum: WGS 84
Soil Map Unit Name: Bakeoven- Condon complex, 0-20% slopes NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Upland plot just outside of wetland area represented by SP-123A.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. None			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1. None			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. *Poa bulbosa*	40	Yes	FACU
2. *Bromus japonicus*	10	Yes	FACU
3.			
4.			
5.			
6.			
7.			
8.			
	50 =Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 50 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	50	x 4 =	200
UPL species	0	x 5 =	0
Column Totals:	50 (A)		200 (B)

Prevalence Index = B/A = 4.00

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks:
Upland species.

SOIL

Sampling Point: SP-123B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-1	10YR 3/1	100					Loamy/Clayey	Loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: rocks

Depth (inches): 1

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ 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)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

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

Project/Site: Yellow Rosebush City/County: Wasco Sampling Date: 6/30/2023
Applicant/Owner: Savion State: OR Sampling Point: SP-124A
Investigator(s): Joe Parzych, Lynda Oosterhuis Section, Township, Range: T04S, R15E
Landform (hillside, terrace, etc.): channel bottom Local relief (concave, convex, none): concave Slope (%): 5
Subregion (LRR): LRR B Lat: 45.157797° Long: -120.843690° Datum: WGS 84
Soil Map Unit Name: Bakeoven-Condon complex, 0-20% slopes NWI classification: PSSB
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
Plot represents wetland conditions within a narrow channel in deep canyon.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1. *Alnus rhombifolia*	5	Yes	FACW
2. *Prunus virginiana*	5	Yes	FAC
3.			
4.			
5.			
	10 =Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. *Epilobium ciliatum*	30	Yes	FACW
2. *Mimulus guttatus*	20	Yes	OBL
3. *Aquilegia formosa*	50	Yes	FAC
4.			
5.			
6.			
7.			
8.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 0 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)
Total Number of Dominant Species Across All Strata: 5 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	20	x 1 =	20
FACW species	35	x 2 =	70
FAC species	55	x 3 =	165
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	110 (A)		255 (B)

Prevalence Index = B/A = 2.32

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
X Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks:

SOIL

Sampling Point: SP-124A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	7.5YR 3/1	100					Loamy/Clayey	Loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- X 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: hard ground/rocks

Depth (inches): 8

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1) **(Nonriverine)**
- ___ Sediment Deposits (B2) **(Nonriverine)**
- ___ Drift Deposits (B3) **(Nonriverine)**
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- X Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ___	Depth (inches): 1
Water Table Present?	Yes X	No ___	Depth (inches): 0
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

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

Project/Site: Yellow Rosebush City/County: Wasco Sampling Date: 6/30/2023
Applicant/Owner: Savion State: OR Sampling Point: SP-124B
Investigator(s): Joe Parzych, Lynda Oosterhuis Section, Township, Range: T04S, R15E
Landform (hillside, terrace, etc.): hillside Local relief (concave, convex, none): convex Slope (%): 10
Subregion (LRR): LRR B Lat: 45.157797° Long: -120.843690° Datum: WGS 84
Soil Map Unit Name: Bakeoven-Condon complex, 0-20% slopes NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation____, Soil____, or Hydrology____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation____, Soil____, or Hydrology____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Sideslope above channel.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1. *Artemisia tridentata*	5	Yes	UPL
2.			
3.			
4.			
5.			
	5 =Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. *Bromus japonicus*	20	Yes	FACU
2. *Bromus tectorum*	25	Yes	UPL
3. *Poa bulbosa*	20	Yes	FACU
4. *Achillea millefolium*	5	No	FACU
5.			
6.			
7.			
8.			
	70 =Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 30 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 4 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	45	x 4 =	180
UPL species	30	x 5 =	150
Column Totals:	75 (A)		330 (B)
Prevalence Index = B/A =	4.40		

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)
[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks:
No hydrophytic vegetation present.

SOIL

Sampling Point: SP-124B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	7.5YR 3/1	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: rocks

Depth (inches): 3

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ 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)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

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

Project/Site: Yellow Rosebush City/County: Wasco Sampling Date: 6/27/2023
Applicant/Owner: Savion State: OR Sampling Point: SP-200A
Investigator(s): Kevin Fagan, Katie Pyne Section, Township, Range: S02, T05S, R15E
Landform (hillside, terrace, etc.): Depressional area Local relief (concave, convex, none): Concave Slope (%): 2
Subregion (LRR): LRR B Lat: 45.1681313° Long: -120.8937267° Datum: WGS 84
Soil Map Unit Name: Condon-Bakeoven complex, 2 to 20 percent slopes (62884) NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
This location was initially suspected to be a wetland based on aerial imagery and due to the presence of surface soil cracks, but was determined non-wetland, based on high chroma soil matrix, trace redox, and suspected lack of a hydro-period adequate to support hydrophytes.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30' radius)			
1.			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. *bromus tectorum*	10	No	UPL
2. *taeniatherum caput-medusae*	20	Yes	UPL
3. *Lepidium perfoliatum*	10	No	FACU
4. *Bromus japonicus*	20	Yes	FACU
5.			
6.			
7.			
8.			
	60 =Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 40 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	30	x 4 =	120
UPL species	30	x 5 =	150
Column Totals:	60 (A)		270 (B)

Prevalence Index = B/A = 4.50

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks:

SOIL

Sampling Point: SP-200A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/3	97	5YR 4/4	3	C	M	Loamy/Clayey	Distinct redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Bedrock

Depth (inches): 6

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

Chroma value does not meet for F6, while percentage of redox does not meet for F8.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) **(Nonriverine)**
- ___ Sediment Deposits (B2) **(Nonriverine)**
- ___ Drift Deposits (B3) **(Nonriverine)**
- X Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

The flow pattern of the contributing drainage was altered due to the presence of a berm that held water in the depressional area of this livestock pond.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

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

Project/Site: Yellow Rosebush City/County: Wasco Sampling Date: 6/27/2023
Applicant/Owner: Savion State: OR Sampling Point: SP-201A
Investigator(s): Kevin Fagan, Katie Pyne Section, Township, Range: S35, T04S, R15E
Landform (hillside, terrace, etc.): Gully Local relief (concave, convex, none): concave Slope (%): 5
Subregion (LRR): LRR B Lat: 45.1780787° Long: -120.8947594° Datum: WGS 84
Soil Map Unit Name: Bakeoven Condon complex, 2 to 20 percent slopes (62881) NWI classification: PEM1B
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
The plot represents wetland condtions in a linear wetland that covers the invert of a gully along which the groundwater surface elevation interface is apparently near the ground surface.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. *Mimulus lewisii*	15	Yes	FACW
2. *Typha latifolia*	30	Yes	OBL
3. *Mentha arvensis*	15	Yes	FACW
4. *Urtica dioica*	15	Yes	FAC
5.			
6.			
7.			
8.			
	75 =Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 25 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)
Total Number of Dominant Species Across All Strata: 4 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	30	x 1 =	30
FACW species	30	x 2 =	60
FAC species	15	x 3 =	45
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	75 (A)		135 (B)

Prevalence Index = B/A = 1.80

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
X Prevalence Index is ≤3.0[1]
____ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks:

SOIL

Sampling Point: SP-201A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 2/1	100					Mucky Loam/Clay	abundant organic material and roots

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Redox (S5)
- ___ Stripped Matrix (S6)
- X Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- X Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: bedrock

Depth (inches): 10

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1) **(Nonriverine)**
- ___ Sediment Deposits (B2) **(Nonriverine)**
- ___ Drift Deposits (B3) **(Nonriverine)**
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- X Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ___	Depth (inches): 0
Water Table Present?	Yes X	No ___	Depth (inches): 0
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

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

Project/Site: Yellow Rosebush City/County: Wasco Sampling Date: 6/27/2023
Applicant/Owner: Savion State: OR Sampling Point: SP-201B
Investigator(s): Kevin Fagan, Katie Pyne Section, Township, Range: S35, T04S, R15E
Landform (hillside, terrace, etc.): Gully Local relief (concave, convex, none): concave Slope (%): 5
Subregion (LRR): LRR B Lat: 45.1780673° Long: -120.8947872° Datum: WGS 84
Soil Map Unit Name: Bakeoven Condon complex, 2 to 20 percent slopes (62881) NWI classification: PEM1B
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
The location is an upland plot, just outside of the wetland represented by SP-201A.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1. *Artemisia tridentata*	30	Yes	UPL
2.			
3.			
4.			
5.			
	30 =Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. *bromus tectorum*	30	Yes	UPL
2. *poa bulbosa*	30	Yes	FACU
3. *Thinopyrum intermedium*	5	No	UPL
4. *Cirsium arvense*	5	No	FACU
5.			
6.			
7.			
8.			
	70 =Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 30 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 3 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	35	x 4 =	140
UPL species	65	x 5 =	325
Column Totals:	100 (A)		465 (B)
Prevalence Index = B/A =			4.65

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks:

SOIL

Sampling Point: WT-201B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/3	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: bedrock

Depth (inches): 6

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ 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)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

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

Project/Site: Yellow Rosebush City/County: Wasco Sampling Date: 6/27/2023
Applicant/Owner: Savion State: OR Sampling Point: SP-203A
Investigator(s): Katie Pyne, Kevin Fagan Section, Township, Range: S32 T04S R16E
Landform (hillside, terrace, etc.): Flat Local relief (concave, convex, none): concave Slope (%): 2
Subregion (LRR): LRR B Lat: 45.1718645° Long: -120.8446017° Datum: WGS 84
Soil Map Unit Name: Bakeoven Condon Complex, 2 to 20 percent slopes NWI classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology X naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
The plot represents wetland conditions upgradient of human-made impoundment that intercepts an ephemeral drainage.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30' radius)			
1.			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. *Persicaria punctata*	40	Yes	OBL
2. *Rumex crispus*	10	No	FAC
3. *Hordeum jubatum*	4	No	FAC
4. *Eleocharis palustris*	20	Yes	OBL
5. *Plantago major*	5	No	FAC
6.			
7.			
8.			
	79 =Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 21 % Cover of Biotic Crust ____

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	60	x 1 =	60
FACW species	0	x 2 =	0
FAC species	19	x 3 =	57
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	79 (A)		117 (B)
Prevalence Index = B/A =			1.48

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
X Prevalence Index is ≤3.0[1]
____ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
____ Problematic Hydrophytic Vegetation[1] (Explain)
[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks:

SOIL

Sampling Point: SP-203A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 3/2	95	7.5YR 4/6	5	C	PL/M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- X Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: bedrock

Depth (inches): 6

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) **(Nonriverine)**
- ___ Sediment Deposits (B2) **(Nonriverine)**
- ___ Drift Deposits (B3) **(Nonriverine)**
- X Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- X Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

The wetland is a depressional surface on the invert of a human made retention basin. The basin is bound on the downstream side by an earthen berm that impounds flows that would otherwise move downstream of the location. Similar to a stormwater basin, there is an overflow pipe with an invert approximately 6-feet above the wetland surface.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

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

Project/Site: Yellow Rosebush City/County: Wasco Sampling Date: 6/27/2023
Applicant/Owner: Savion State: OR Sampling Point: WT-203B
Investigator(s): Katie Pyne, Kevin Fagan Section, Township, Range: T04S, R15E
Landform (hillside, terrace, etc.): depressional area Local relief (concave, convex, none): concave Slope (%): 1
Subregion (LRR): LRR B Lat: 45.1718560° Long: -120.8445701° Datum: WGS 84
Soil Map Unit Name: Bakeoven Condon Complex, 2 to 20 percent slopes NWI classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
The plot represents upland conditions just outside of the wetland represented by SP-203A.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. *Sisymbrium altissimum*	10	No	FACU
2. *Taeniatherum caput-medusae*	50	Yes	UPL
3. *Bromus tectorum*	20	Yes	UPL
4.			
5.			
6.			
7.			
8.			
	80 =Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 20 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	10	x 4 =	40
UPL species	70	x 5 =	350
Column Totals:	80 (A)		390 (B)

Prevalence Index = B/A = 4.88

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks:

SOIL

Sampling Point: WT-203B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 3/3	100					Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: bedrock

Depth (inches): 5

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ 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)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Yellow Rosebush City/County: Wasco Sampling Date: 6/30/2023
Applicant/Owner: Savion State: OR Sampling Point: WT-212A
Investigator(s): Katie Pyne and Kevin Fagan Section, Township, Range: S31, T04S, R16E
Landform (hillside, terrace, etc.): Gully Local relief (concave, convex, none): concave Slope (%): 5
Subregion (LRR): LRR B Lat: 45.1835657° Long: -120.8587442° Datum: WGS 84
Soil Map Unit Name: Bakeoven Condon Complex, 2 to 20 percent slopes NWI classification: PEM1C
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
This location is a plot in a gully-bound wetland, the upper half of the wetland is heavily trampled by cattle, south of a fence-line. The wetland is fed by seeps along the gully invert in the upper half of the wetland. One seep upslope and east, is developed for cattle, overflows & returns to wetland.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30' radius)			
1.			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. *Typha latifolia*	75	Yes	OBL
2. *Urtica dioica*	15	No	FAC
3. *Juncus balticus*	5	No	FACW
4. *Mimulus guttatus*	5	No	OBL
5.			
6.			
7.			
8.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 0 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 1 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	80	x 1 =	80
FACW species	5	x 2 =	10
FAC species	15	x 3 =	45
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		135 (B)

Prevalence Index = B/A = 1.35

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
X Prevalence Index is ≤3.0[1]
____ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
____ Problematic Hydrophytic Vegetation[1] (Explain)
[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks:

SOIL

Sampling Point: WT-212A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 3/2	95	5YR 3/4	5	C	M	Sandy	loamy sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- X 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)
- X Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: rock

Depth (inches): 16

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1) **(Nonriverine)**
- ___ Sediment Deposits (B2) **(Nonriverine)**
- ___ Drift Deposits (B3) **(Nonriverine)**
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- X Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ___	Depth (inches): 0
Water Table Present?	Yes X	No ___	Depth (inches): 0
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Yellow Rosebush City/County: Wasco Sampling Date: 6/30/2023
Applicant/Owner: Savion State: OR Sampling Point: WT-212B
Investigator(s): Katie Pyne, Kevin Fagan Section, Township, Range: T04S, R15E
Landform (hillside, terrace, etc.): Gully Local relief (concave, convex, none): concave Slope (%): 5
Subregion (LRR): LRR B Lat: 45.1835655° Long: -120.8587335° Datum: WGS 84
Soil Map Unit Name: Bakeoven Condon Complex, 2 to 20 percent slopes NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
The plot represents upland conditions just outside of the wetland represented by SP-212A.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Juniperus occidentalis*	30	Yes	UPL
2.			
3.			
4.			
	30	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15' radius)			
1. *Artemisia tridentata*	20	Yes	UPL
2.			
3.			
4.			
5.			
	20	=Total Cover	
Herb Stratum (Plot size: 5' radius)			
1. *Bromus tectorum*	20	Yes	UPL
2. *Cirsium arvense*	10	Yes	FACU
3. *Poa bulbosa*	10	Yes	FACU
4.			
5.			
6.			
7.			
8.			
	40	=Total Cover	
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
		=Total Cover	

% Bare Ground in Herb Stratum 60 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 5 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	20	x 4 =	80
UPL species	70	x 5 =	350
Column Totals:	90 (A)		430 (B)

Prevalence Index = B/A = 4.78

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks:

SOIL

Sampling Point: WT-212B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 3/2	100					Loamy/Clayey	silt loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: rock

Depth (inches): 10

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ 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)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Yellow Rosebush City/County: Wasco Sampling Date: 6/30/2023
Applicant/Owner: Savion State: OR Sampling Point: WT-212C
Investigator(s): Katie Pyne and Kevin Fagan Section, Township, Range: S31 T04S R16E
Landform (hillside, terrace, etc.): Gully Local relief (concave, convex, none): concave Slope (%): 5
Subregion (LRR): LRR B Lat: 45.1830409° Long: -120.8586609° Datum: WGS 84
Soil Map Unit Name: Bakeoven Condon Complex, 2 to 20 percent slopes NWI classification: PEM1C
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation X , Soil X , or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____ , Soil ____ , or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
The plot represents a location in the same wetland represented by SP-212A in the portion of the wetland that was heavily disturbed by cattle. Vegetation and soils are distrubed however the area is a wetland that would likely be recolonized by hydrophytes with cattle exclusion.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. *Matricaria discoidea*	10	Yes	FACU
2. *Veronica anagallis-aquatica*	5	No	OBL
3. *Acmispon americanus*	20	Yes	UPL
4.			
5.			
6.			
7.			
8.			
	35 =Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 65 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	5	x 1 =	5
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	10	x 4 =	40
UPL species	20	x 5 =	100
Column Totals:	35 (A)		145 (B)

Prevalence Index = B/A = 4.14

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
X Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks:
Wetland vegetaion was heavily trampled/destroyed by cattle in the vicinity of this plot resulting in far less cover than if cattle were not accessing the area.

SOIL

Sampling Point: WT-212C

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 3/2	100					Loamy/Clayey	sandy loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- X 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: rock

Depth (inches): 16

Hydric Soil Present? **Yes** X **No** ___

Remarks:

Upland soils had been apparently sloughed down onto the gully invert resulting in difficulty in meeting hydric soil indicators although hydrogen sulphide odor was observed as the primary indicator for soil.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1) **(Nonriverine)**
- ___ Sediment Deposits (B2) **(Nonriverine)**
- ___ Drift Deposits (B3) **(Nonriverine)**
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- X Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ___	Depth (inches): 0
Water Table Present?	Yes X	No ___	Depth (inches): 0
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

The wetland had several areas with wetness emanating from the break in slope of the hillside and gully invert, although these areas were not producing appreciable surface flow. Up-slope a shallow well had been constructed and developed to fill a cattle trough just below it but upgradient and east of the wetland, this trough overflowed back to the wetland.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-CO-R

OMB Control #: 0710-0024, Exp: 11/30/2024
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Yellow Rosebush City/County: Wasco Sampling Date: 6/30/2023
Applicant/Owner: Savion State: OR Sampling Point: WT-212D
Investigator(s): Katie Pyne and Kevin Fagan Section, Township, Range: S31, T04S, R16E
Landform (hillside, terrace, etc.): Gully Local relief (concave, convex, none): concave Slope (%): 5
Subregion (LRR): LRR B Lat: 45.1830335° Long: -120.8586300° Datum: WGS 84
Soil Map Unit Name: Bakeoven Condon Complex, 2 to 20 percent slopes NWI classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
This location is an upland plot just outside of the cattle damaged wetland extent that is represented by SP-212C.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Juniperus occidentalis*	10	Yes	UPL
2.			
3.			
4.			
	10	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15' radius)			
1. *Artemisia tridentata*	30	Yes	UPL
2. *Ericameria nauseosa*	10	Yes	UPL
3.			
4.			
5.			
	40	=Total Cover	
Herb Stratum (Plot size: 5' radius)			
1. *Bromus tectorum*	50	Yes	UPL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	50	=Total Cover	
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
		=Total Cover	

% Bare Ground in Herb Stratum 50 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 4 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	100	x 5 =	500
Column Totals:	100 (A)		500 (B)
Prevalence Index = B/A =			5.00

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)
[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks:

SOIL

Sampling Point: WT-212D

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 3/2	100					Loamy/Clayey	silt loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: rock

Depth (inches): 10

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ 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)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

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

Project/Site: Yellow Rosebush City/County: Wasco Sampling Date: 6/27/2023
Applicant/Owner: Savion State: OR Sampling Point: SP-302
Investigator(s): Jess Taylor, Summer Roberts Section, Township, Range: T04S, R15E
Landform (hillside, terrace, etc.): Plateau Local relief (concave, convex, none): Concave Slope (%): 0
Subregion (LRR): LRR B Lat: 45.157797° Long: -120.843690° Datum: WGS 84
Soil Map Unit Name: Lickskillet extremely stony loam, 40 to 70 percent slopes (62901) NWI classification: None.
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil X, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
The plot represents upland conditions in an excavated depression, in a swale feature, apparently installed to develop a shallow groundwater source that is several feet below the modified grade. A convoluted network of piping is present at the location.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. *Typha latifolia*	25	Yes	OBL
2. *Cirsium arvense*	28	Yes	FACU
3. *Medicago sativa*	8	No	UPL
4. *Achillea millefolium*	8	No	FACU
5.			
6.			
7.			
8.			
	69 =Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 31 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	25	x 1 =	25
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	36	x 4 =	144
UPL species	8	x 5 =	40
Column Totals:	69 (A)		209 (B)

Prevalence Index = B/A = 3.03

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks:

SOIL

Sampling Point: SP-302

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 3/2	100					Loamy/Clayey	Silt Loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** ___ **No** X

Remarks:
No redox and no sulfur smell.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ 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)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Landowner has excavated holding ponds within an ephemeral drainage. No standing water currently or other signs of hydrology.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

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

Project/Site: Yellow Rosebush City/County: Wasco Sampling Date: 6/27/2023
Applicant/Owner: Savion State: OR Sampling Point: SP-315
Investigator(s): Jess Taylor, Summer Roberts Section, Township, Range: T04S, R15E
Landform (hillside, terrace, etc.): Plateau Local relief (concave, convex, none): Concave Slope (%): 0
Subregion (LRR): LRR B Lat: 45.157797° Long: -120.843690° Datum: WGS 84
Soil Map Unit Name: Condon-Bakeoven complex, 2 to 20 percent slopes (62884) NWI classification: None.
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil X, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil X, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
Excavated livestock pond, vegetation starting to grow but the pond has dried up. Pacific tree frogs were found within cracking soils.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. *Eleocharis palustris*	95	Yes	OBL
2. *Polygonum aviculare*	8	No	FAC
3. *Sisymbrium altissimum*	5	No	FACU
4.			
5.			
6.			
7.			
8.			
	108 =Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 0 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 1 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	95	x 1 =	95
FACW species	0	x 2 =	0
FAC species	8	x 3 =	24
FACU species	5	x 4 =	20
UPL species	0	x 5 =	0
Column Totals:	108 (A)		139 (B)

Prevalence Index = B/A = 1.29

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
X Prevalence Index is ≤3.0[1]
____ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks:

SOIL

Sampling Point: SP-315

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 2/2	70	10YR 4/6	30	C	M	Loamy/Clayey	Clay Loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- X Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:

Excavated livestock pond with mixed soils. Concentrated redox feature is a clay inclusion. May have been from a pond liner.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1) **(Nonriverine)**
- ___ Sediment Deposits (B2) **(Nonriverine)**
- ___ Drift Deposits (B3) **(Nonriverine)**
- X Surface Soil Cracks (B6)
- X Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 6

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

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

Project/Site: Yellow Rosebush City/County: Wasco Sampling Date: 6/27/2023
Applicant/Owner: Savion State: OR Sampling Point: SP-316
Investigator(s): Jess Taylor, Summer Roberts Section, Township, Range: T04S, R15E
Landform (hillside, terrace, etc.): Plateau Local relief (concave, convex, none): None. Slope (%): 0
Subregion (LRR): LRR B Lat: 45.157797° Long: -120.843690° Datum: WGS 84
Soil Map Unit Name: Condon-Bakeoven complex, 2 to 20 percent slopes (62884) NWI classification: None.
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Upland plot for SP-315 (excavated pond).

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. *Thinopyrum intermedium*	15	No	UPL
2. *Bromus tectorum*	35	Yes	UPL
3. *Vulpia microstachys*	20	Yes	UPL
4. *Taeniatherum caput-medusae*	25	Yes	UPL
5.			
6.			
7.			
8.			
	95 =Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 5 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 3 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	95	x 5 =	475
Column Totals:	95 (A)		475 (B)
Prevalence Index = B/A =			5.00

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)
[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks:

SOIL

Sampling Point: SP-316

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 3/2	100					Loamy/Clayey	Silt Loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:
No redox and no sulfur smell.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ 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)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Upland plot for SP-315 (excavated pond).

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

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

Project/Site: Yellow Rosebush City/County: Wasco Sampling Date: 7/18/2023
Applicant/Owner: Savion State: OR Sampling Point: SP-406
Investigator(s): Jess Taylor, Katie Pyne Section, Township, Range: T04S, R15E
Landform (hillside, terrace, etc.): Plateau Local relief (concave, convex, none): Concave Slope (%): 0
Subregion (LRR): LRR B Lat: 45.155591 Long: -120.825437 Datum: WGS 84
Soil Map Unit Name: Condon silt loam, 2 to 12 percent slopes NWI classification: PUSAh
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Confirm NWI, no hydric soils or wetland vegetation. No water in bermed livestock pond.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. *Taeniatherum caput-medusae*	50	Yes	UPL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	50 =Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 50 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 1 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	50	x 5 =	250
Column Totals:	50 (A)		250 (B)
Prevalence Index = B/A =			5.00

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks:

SOIL

Sampling Point: SP-406

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 3/2	100					Loamy/Clayey	Silt Loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ 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)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

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

Project/Site: Yellow Rosebush City/County: Wasco Sampling Date: 7/18/2023
Applicant/Owner: Savion State: OR Sampling Point: SP-417
Investigator(s): Jess Taylor, Katie Pyne Section, Township, Range: T04S, R15E
Landform (hillside, terrace, etc.): Plateau Local relief (concave, convex, none): Concave Slope (%): 0
Subregion (LRR): LRR B Lat: 45.160211 Long: -120.830397 Datum: WGS 84
Soil Map Unit Name: Condon-Bakeoven complex, 20 to 20 percent slopes NWI classification: PUSAh
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
This plot confirms a National Wetlands Inventory mapped pond feature as non-wetland, no hydric soils or wetland vegetation. Livestock pond is not filled.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1. *Artemisia tridentata*	20	Yes	UPL
2.			
3.			
4.			
5.			
	20 =Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. *Poa bulbosa*	20	Yes	FACU
2. *Bromus tectorum*	15	Yes	UPL
3.			
4.			
5.			
6.			
7.			
8.			
	35 =Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 65 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 3 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	20	x 4 =	80
UPL species	35	x 5 =	175
Column Totals:	55 (A)		255 (B)
Prevalence Index = B/A =			4.64

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks:

SOIL

Sampling Point: SP-417

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 3/2	100					Loamy/Clayey	Silt Loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: rock

Depth (inches): 16

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ 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)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

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

Project/Site: Yellow Rosebush City/County: Wasco Sampling Date: 7/19/2023
Applicant/Owner: Savion State: OR Sampling Point: SP-434A
Investigator(s): Jess Taylor, Katie Pyne Section, Township, Range: T04S, R15E
Landform (hillside, terrace, etc.): Plateau Local relief (concave, convex, none): Concave Slope (%): 0
Subregion (LRR): LRR B Lat: 45.124761 Long: -120.830377 Datum: WGS 84
Soil Map Unit Name: Condon-Bakeoven complex, 2 to 20 percent slopes NWI classification: None.
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ____ No X
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
The plot represents wetland conditions in a vernal pool in rangeland with problematic vegetion.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. *Lepidium draba*	10	Yes	UPL
2. *Erodium cicutarium*	5	Yes	UPL
3. *Epilobium densiflorum*	5	Yes	FACW
4.			
5.			
6.			
7.			
8.			
	20 =Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 90 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 3 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	5	x 2 =	10
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	15	x 5 =	75
Column Totals:	20 (A)		85 (B)
Prevalence Index = B/A =			4.25

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
X Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** ____

Remarks:
Due to hydrologic intermittency, and problemlatic encroachment of exotics in part due to grazing in the system, vegetation does not meet.

SOIL

Sampling Point: SP-434A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/2	100					Loamy/Clayey	Silt Loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- X Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: rock

Depth (inches): 4

Hydric Soil Present? **Yes** X **No** ___

Remarks:
The soils are lacking apparent redox features, a common problem of vernal pool wetlands in the region.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) **(Nonriverine)**
- ___ Sediment Deposits (B2) **(Nonriverine)**
- ___ Drift Deposits (B3) **(Nonriverine)**
- X Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Algal crust on surface of soil.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

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

Project/Site: Yellow Rosebush City/County: Wasco Sampling Date: 7/19/2023
Applicant/Owner: Savion State: OR Sampling Point: SP-434B
Investigator(s): Jess Taylor, Katie Pyne Section, Township, Range: T04S, R15E
Landform (hillside, terrace, etc.): Plateau Local relief (concave, convex, none): Concave Slope (%): 0
Subregion (LRR): LRR B Lat: 45.124786 Long: -120.830394 Datum: WGS 84
Soil Map Unit Name: Condon-Bakeoven complex, 2 to 20 percent slopes NWI classification: None.
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Upland representative for SP-434A.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. *Taeniatherum caput-medusae*	80	Yes	UPL
2. *Achillea millefolium*	10	No	FACU
3. *Bromus tectorum*	10	No	UPL
4.			
5.			
6.			
7.			
8.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 0 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 1 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	10	x 4 =	40
UPL species	90	x 5 =	450
Column Totals:	100 (A)		490 (B)

Prevalence Index = B/A = 4.90

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks:

SOIL

Sampling Point: SP-434B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 3/3	100					Loamy/Clayey	Silt Loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Rock Restriction

Depth (inches): 12

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) **(Nonriverine)**
- ___ Sediment Deposits (B2) **(Nonriverine)**
- ___ Drift Deposits (B3) **(Nonriverine)**
- X Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Algal crust on surface of soil.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

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

Project/Site: Yellow Rosebush City/County: Wasco Sampling Date: 7/19/2023
Applicant/Owner: Savion State: OR Sampling Point: SP-440A
Investigator(s): Jess Taylor, Katie Pyne Section, Township, Range: T04S, R15E
Landform (hillside, terrace, etc.): Plateau Local relief (concave, convex, none): Concave Slope (%): 0
Subregion (LRR): LRR B Lat: 45.135566 Long: -120.840026 Datum: WGS 84
Soil Map Unit Name: Bakeoven-Condon complex, 2 to 20 percent slopes NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
The plot represents conditions in a vernal pool within an excavated livestock pond. The depressional feature is potentially fed by overflow from uphill excavated livestock pond that does not meet hydric criteria. There is no outlet.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. *Navarretia intertexta*	30	Yes	FACW
2. *Polygonum aviculare*	50	Yes	FAC
3.			
4.			
5.			
6.			
7.			
8.			
	80 =Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 20 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	30	x 2 =	60
FAC species	50	x 3 =	150
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	80 (A)		210 (B)

Prevalence Index = B/A = 2.63

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
X Prevalence Index is ≤3.0[1]
____ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks:

SOIL

Sampling Point: SP-440A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 3/6	100					Loamy/Clayey	Silt Loam with gravel

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- X Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Rock Restriction

Depth (inches): 2

Hydric Soil Present? **Yes** X **No** ___

Remarks:

The soils are lacking apparent redox features, a common problem of vernal pool wetlands in the region.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) **(Nonriverine)**
- ___ Sediment Deposits (B2) **(Nonriverine)**
- ___ Drift Deposits (B3) **(Nonriverine)**
- X Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

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

Project/Site: Yellow Rosebush City/County: Wasco Sampling Date: 7/19/2023
Applicant/Owner: Savion State: OR Sampling Point: SP-440B
Investigator(s): Jess Taylor, Katie Pyne Section, Township, Range: T04S, R15E
Landform (hillside, terrace, etc.): Plateau Local relief (concave, convex, none): Concave Slope (%): 0
Subregion (LRR): LRR B Lat: 45.135530 Long: -120.840005 Datum: WGS 84
Soil Map Unit Name: Bakeoven-Condon complex, 2 to 20 percent slopes NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Upland representative for SP-440A.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1. *Chrysothamnus viscidiflorus*	5	Yes	UPL
2.			
3.			
4.			
5.			
	5 =Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. *Pseudoroegneria spicata*	40	Yes	UPL
2. *Poa secunda*	15	Yes	FACU
3.			
4.			
5.			
6.			
7.			
8.			
	55 =Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 45 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 3 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	15	x 4 =	60
UPL species	45	x 5 =	225
Column Totals:	60 (A)		285 (B)

Prevalence Index = B/A = 4.75

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks:

SOIL

Sampling Point: SP-440B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/3	100					Loamy/Clayey	Silt loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: rock

Depth (inches): 6

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ 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)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

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

Project/Site: Yellow Rosebush City/County: Wasco Sampling Date: 7/19/2023
Applicant/Owner: Savion State: OR Sampling Point: SP-442
Investigator(s): Jess Taylor, Katie Pyne Section, Township, Range: T04S, R15E
Landform (hillside, terrace, etc.): Plateau Local relief (concave, convex, none): Concave Slope (%): 0
Subregion (LRR): LRR B Lat: 45.132538 Long: -120.837636 Datum: WGS 84
Soil Map Unit Name: Playas NWI classification: PEM1J
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
The plot confirms the absence of wetland features in a National Wetlands Inventory-mapped emergent wetland. It appears to be a drained playa, now planted with a Conservation Reserve Program seed mix.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1. *Artemisia cana*	5	Yes	FACU
2.			
3.			
4.			
5.			
	5 =Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. *Taeniatherum caput-medusae*	60	Yes	UPL
2. *Lomatium grayi*	30	Yes	UPL
3. *Achillea millefolium*	15	No	FACU
4.			
5.			
6.			
7.			
8.			
	105 =Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 10 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 3 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	20	x 4 =	80
UPL species	90	x 5 =	450
Column Totals:	110 (A)		530 (B)

Prevalence Index = B/A = 4.82

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks:

SOIL

Sampling Point: SP-442

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	10YR 4/2	100					Loamy/Clayey	Clay loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Rock Restriction

Depth (inches): 12

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ 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)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? Yes ___ No X Depth (inches): ___

(includes capillary fringe)

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

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

Project/Site: Yellow Rosebush City/County: Wasco Sampling Date: 7/19/2023
Applicant/Owner: Savion State: OR Sampling Point: SP-443A
Investigator(s): Jess Taylor, Katie Pyne Section, Township, Range: T04S, R15E
Landform (hillside, terrace, etc.): Plateau Local relief (concave, convex, none): Concave Slope (%): 0
Subregion (LRR): LRR B Lat: 45.125470 Long: -120.832751 Datum: WGS 84
Soil Map Unit Name: Condon silt loam, 2 to 12 percent slopes NWI classification: PUSAh
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
The plot is representative of an excavated livestock pond that is a wetland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. *Plagiobothrys leptocladus*	10	Yes	OBL
2. *Psilocarphus brevissimus*	15	Yes	FACW
3. *Polygonum aviculare*	10	Yes	FAC
4.			
5.			
6.			
7.			
8.			
	35 =Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 65 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)
Total Number of Dominant Species Across All Strata: 3 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	10	x 1 =	10
FACW species	15	x 2 =	30
FAC species	10	x 3 =	30
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	35 (A)		70 (B)

Prevalence Index = B/A = 2.00

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
X Prevalence Index is ≤3.0[1]
____ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks:

SOIL

Sampling Point: SP-443A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 3/2	95	7.5YR 3/4	5	C	M	Loamy/Clayey	Clay Loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: rock

Depth (inches): 10

Hydric Soil Present? **Yes** X **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) **(Nonriverine)**
- ___ Sediment Deposits (B2) **(Nonriverine)**
- ___ Drift Deposits (B3) **(Nonriverine)**
- X Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

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

Project/Site: Yellow Rosebush City/County: Wasco Sampling Date: 7/19/2023
Applicant/Owner: Savion State: OR Sampling Point: SP-443B
Investigator(s): Jess Taylor, Katie Pyne Section, Township, Range: T04S, R15E
Landform (hillside, terrace, etc.): Plateau Local relief (concave, convex, none): Concave Slope (%): 0
Subregion (LRR): LRR B Lat: 45.125509 Long: -120.832757 Datum: WGS 84
Soil Map Unit Name: Condon silt loam, 2 to 12 percent slopes NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Upland representative for SP-443A.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. *Taeniatherum caput-medusae*	100	Yes	UPL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 0 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 1 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	100	x 5 =	500
Column Totals:	100 (A)		500 (B)
Prevalence Index = B/A =			5.00

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks:

SOIL

Sampling Point: SP-443B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 3/3	100					Loamy/Clayey	Silt Loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ 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)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

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

Project/Site: Yellow Rosebush City/County: Wasco Sampling Date: 7/19/2023
Applicant/Owner: Savion State: OR Sampling Point: SP-445A
Investigator(s): Jess Taylor, Katie Pyne Section, Township, Range: T04S, R15E
Landform (hillside, terrace, etc.): Plateau Local relief (concave, convex, none): Concave Slope (%): 0
Subregion (LRR): LRR B Lat: 45.110885 Long: -120.832103 Datum: WGS 84
Soil Map Unit Name: Condon-Bakeoven complex, 2 to 20 percent slopes NWI classification: PUSAh
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No ____
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? **Yes** X **No** ____

Remarks:
The plot is representative of wetland conditions in an excavated livestock pond. The feature is lacking obvious hydric soils, however is dominated with hydrophytes and has wetland hydrology suggesting it is a wetland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. *Navarretia intertexta*	20	Yes	FACW
2. *Taeniatherum caput-medusae*	10	No	UPL
3. *Poa bulbosa*	5	No	FACU
4. *Deschampsia danthonioides*	15	Yes	FACW
5. *Polygonum aviculare*	5	No	FAC
6.			
7.			
8.			
	55 =Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 45 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	35	x 2 =	70
FAC species	5	x 3 =	15
FACU species	5	x 4 =	20
UPL species	10	x 5 =	50
Column Totals:	55 (A)		155 (B)
Prevalence Index = B/A =			2.82

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
____ Prevalence Index is ≤3.0[1]
____ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
____ Problematic Hydrophytic Vegetation[1] (Explain)
[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks:

SOIL

Sampling Point: SP-445A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 3/2	100					Loamy/Clayey	Silt Loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Rock Restriction

Depth (inches): 3

Hydric Soil Present? **Yes** ___ **No** X

Remarks:
Hydrologically, the feature is similar to a vernal pool, and the soils are lacking apparent redox features, a common problem of vernal pool wetlands in the region.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) **(Nonriverine)**
- ___ Sediment Deposits (B2) **(Nonriverine)**
- ___ Drift Deposits (B3) **(Nonriverine)**
- X Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

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

Project/Site: Yellow Rosebush City/County: Wasco Sampling Date: 7/19/2023
Applicant/Owner: Savion State: OR Sampling Point: SP-445B
Investigator(s): Jess Taylor, Katie Pyne Section, Township, Range: T04S, R15E
Landform (hillside, terrace, etc.): Plateau Local relief (concave, convex, none): Concave Slope (%): 0
Subregion (LRR): LRR B Lat: 45.110897 Long: -120.832130 Datum: WGS 84
Soil Map Unit Name: Condon-Bakeoven complex, 2 to 20 percent slopes NWI classification: None.
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
Upland representative for SP-445A.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30' radius)			
1.			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. *Poa bulbosa*	40	Yes	FACU
2. *Taeniatherum caput-medusae*	40	Yes	UPL
3.			
4.			
5.			
6.			
7.			
8.			
	80 =Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 20 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	40	x 4 =	160
UPL species	40	x 5 =	200
Column Totals:	80 (A)		360 (B)
Prevalence Index = B/A =			4.50

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)
[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks:

SOIL

Sampling Point: SP-445B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 3/3	100					Loamy/Clayey	Silt Loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Rock Restriction

Depth (inches): 6

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ 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)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? Yes ___ No X Depth (inches): ___

(includes capillary fringe)

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

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

Project/Site: Yellow Rosebush City/County: Wasco Sampling Date: 7/19/2023
Applicant/Owner: Savion State: OR Sampling Point: SP-446
Investigator(s): Jess Taylor, Katie Pyne Section, Township, Range: T04S, R15E
Landform (hillside, terrace, etc.): Plateau Local relief (concave, convex, none): Concave Slope (%): 0
Subregion (LRR): LRR B Lat: 45.105598 Long: -120.835641 Datum: WGS 84
Soil Map Unit Name: Condon-Bakeoven complex, 2 to 20 percent slopes NWI classification: PUSAh
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No ____
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
The plot confirms there is no wetland as indicated in the National Wetland Inventory data set which indicates the presence of a freshwater pond at the location. A lack of soils and hydrology indicators indicate there is no wetland upgradient of the berm in the drainage.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. *Plantago lanceolata*	100	Yes	FAC
2. *Leymus cinereus*	15	No	FAC
3.			
4.			
5.			
6.			
7.			
8.			
	115 =Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 0 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 1 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	115	x 3 =	345
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	115 (A)		345 (B)

Prevalence Index = B/A = 3.00

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
____ Prevalence Index is ≤3.0[1]
____ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks:

SOIL

Sampling Point: SP-446

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 3/2	100					Loamy/Clayey	Silt Loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ 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)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

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

Project/Site: Yellow Rosebush City/County: Wasco Sampling Date: 7/19/2023
Applicant/Owner: Savion State: OR Sampling Point: SP-448
Investigator(s): Jess Taylor, Katie Pyne Section, Township, Range: T04S, R15E
Landform (hillside, terrace, etc.): Plateau Local relief (concave, convex, none): Concave Slope (%): 0
Subregion (LRR): LRR B Lat: 45.105598 Long: -120.835641 Datum: WGS 84
Soil Map Unit Name: Condon-Bakeoven complex, 2 to 20 percent slopes NWI classification: PEM1J
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
The plot confirms the absence of wetland characteristics in a National Wetlands Inventory-mapped emergent wetland. It appears to be a former drained playa, now planted with a Conservation Reserve Program seed mix.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' raduis)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. *Triticum aestivum*	30	Yes	UPL
2. *Poa bulbosa*	20	No	FACU
3. *Taeniatherum caput-medusae*	50	Yes	UPL
4. *Bromus tectorum*	10	No	UPL
5. *Bromus japanicus*	10	No	UPL
6.			
7.			
8.			
	120 =Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 0 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	20	x 4 =	80
UPL species	100	x 5 =	500
Column Totals:	120 (A)		580 (B)
Prevalence Index = B/A =			4.83

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks:

SOIL

Sampling Point: SP-448

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-16	10YR 4/2	100					Loamy/Clayey	Clay

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** ___ **No** X

Remarks:
Soil is damp at 10in.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ 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)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-07-24; the proponent agency is CECW-CO-R

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

Project/Site: Yellow Rosebush City/County: Wasco Sampling Date: 7/19/2023
Applicant/Owner: Savion State: OR Sampling Point: SP-449
Investigator(s): Jess Taylor, Katie Pyne Section, Township, Range: T04S, R15E
Landform (hillside, terrace, etc.): Plateau Local relief (concave, convex, none): Concave Slope (%): 0
Subregion (LRR): LRR B Lat: 45.146810 Long: -120.832791 Datum: WGS 84
Soil Map Unit Name: Condon-Bakeoven complex, 2 to 20 percent slopes NWI classification: PUSAh
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? **Yes** ____ **No** X

Remarks:
The upland plot confirms non-wetland in an area mapped as a freshwater pond feature in the National Wetlands Inventory dataset.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	=Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. *Bromus tectorum*	5	No	UPL
2. *Tragopogon dubius*	5	No	UPL
3. *Taeniatherum caput-medusae*	90	Yes	UPL
4.			
5.			
6.			
7.			
8.			
	100 =Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	=Total Cover		

% Bare Ground in Herb Stratum 0 % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 1 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	100	x 5 =	500
Column Totals:	100 (A)		500 (B)
Prevalence Index = B/A =			5.00

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks:

SOIL

Sampling Point: SP-449

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 3/3	100					Loamy/Clayey	Silt Loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Iron-Manganese Masses (F12) **(LRR D)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Rock Restriction

Depth (inches): 10

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ 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)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Appendix B. Photolog

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Photo 1. 6/27/2023. Ephemeral drainage ST-300 with A. tridentata in slight channel. Looking NE.

Photo 2. 6/27/2023. Ephemeral drainage ST-303 has upland vegetation including juniper and cheatgrass. Looking S.

Photo 3. 6/27/2023. No bed or banks for ST-303 within project area NW of this point. Road crossing and cattle infrastructure. Looking NW.

Photo 4. 6/27/2023. Ephemeral drainage ST-309 is slight and runs in swale in sagebrush. Looking NW.

Photo 5. 6/27/2023. No bed or banks on NHD, no culvert under road. Looking NW.

Photo 6. 6/27/2023. No bed or banks on NHD line. Looking NW.

Photo 7. 6/27/2023. Water source for livestock pond wetland WT-313 is pipe coming out of the ground. Looking SE.

Photo 8. 6/27/2023. Excavated livestock pond wetland WT-313, wetland veg starting to grow where pond has receded. Looking NW.

Photo 9. 6/27/2023. Ephemeral drainage ST-206 general conditions. Looking NE.

Photo 10. 6/27/2023. Looking over WT-201 dominated by cattail. An old pump is visible that was apparently used to extract water from the subsurface in the wetland that is still used as a water source for cattle troughs. Looking N.

Photo 11. 6/27/2023. Stream ST-202 downstream conditions, surveyor standing at boundary of wetland (WT-201) inside drainage. Looking N.

Photo 12. 6/27/2023. General conditions in this reach of ST-202. Looking S.

Photo 13. 6/27/2023. General conditions in this reach of ST-202. Looking N.

Photo 14. 6/27/2023. Stream ST-202 originates below berm. Looking S.

Photo 15. 6/27/2023. Stream ST-205 runs off this terrace and joins with ST-204 before flowing north. Looking S.

Photo 16. 6/27/2023. General conditions in this reach of ephemeral stream ST-204. Looking SW.

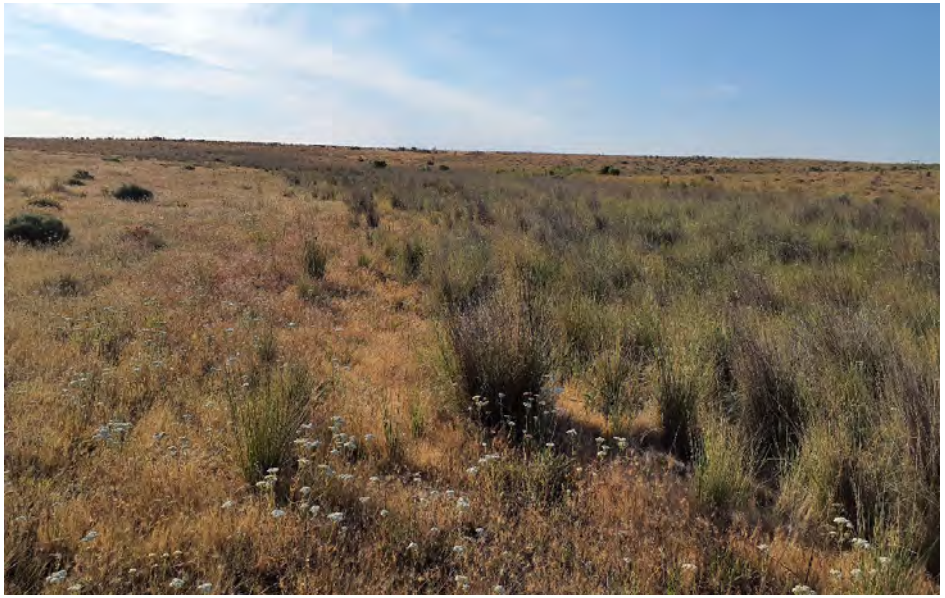

Photo 17. 6/27/2023. No defined bed or banks on NHD line in this area. Looking E.

Photo 18. 6/27/2023. Artificially flooded upland swale (sample plot SP-101) does not meet hydric criteria. Looking E.

Photo 19. 6/27/2023. Pipe transporting water to upland swale. Looking E.

Photo 20. 6/27/2023. Flooded upland due to current irrigation, does not meet wetland criteria. Looking W.

Photo 21. 6/27/2023. Sample plot SP-105 in abandoned livestock pond. Does not meet hydric criteria. Looking E.

Photo 22. 6/27/2023. Abandoned livestock pond on NWI does not have hydric veg or hydrology indicators. Sample plot SP-107. Looking NW.

Photo 23. 6/27/2023. Ephemeral stream (ST-116) general conditions. Looking SE.

Photo 24. 6/27/2023. Ephemeral stream (ST-115) general conditions. Looking NW.

Photo 25. 6/27/2023. No drainage in this section of the NHD line. Looking NW.

Photo 26. 6/27/2023. Ephemeral stream (ST-115) headwaters. Looking NW.

Photo 27. 6/27/2023. Headwaters for ST-116, ephemeral drainage about 4 feet wide in swale. Looking N.

Photo 28. 6/27/2023. General conditions in this reach of ephemeral stream ST-116. Looking N.

Photo 29. 6/27/2023. Another abandoned livestock pond listed on the NWI no longer meets hydric criteria. Sample plot SP-117. Looking N.

Photo 30. 6/27/2023. No drainage in this section of the NHD line. Looking S.

Photo 31. 6/27/2023. Ephemeral stream ST-121 headwaters. Looking N.

Photo 32. 6/27/2023. No bed or banks on NHD line. Looking N.

Photo 33. 6/27/2023. Overview of dry livestock pond that does not meet hydric criteria. Looking N.

Photo 34. 6/27/2023. Two metal-lined water troughs for cattle are filled by pipe. Looking E.

Photo 35. 6/27/2023. Sample plot SP-302 taken in area with overflow from pipe in the ground where cattails are growing. Soils are not hydric and there is no standing water. Looking E.

Photo 36. 6/27/2023. No more bed or banks beyond this point for ephemeral stream ST-303. Looking S.

Photo 37. 6/27/2023. Shallow scabland will carry water but no bed or banks. Areas like this common throughout project area next to canyon. Looking E.

Photo 38. 6/27/2023. Ephemeral stream ST-307 general conditions for this reach. Looking NE.

Photo 39. 6/27/2023. Drainage (ST-307) continues northeast outside of survey area. Looking NE.

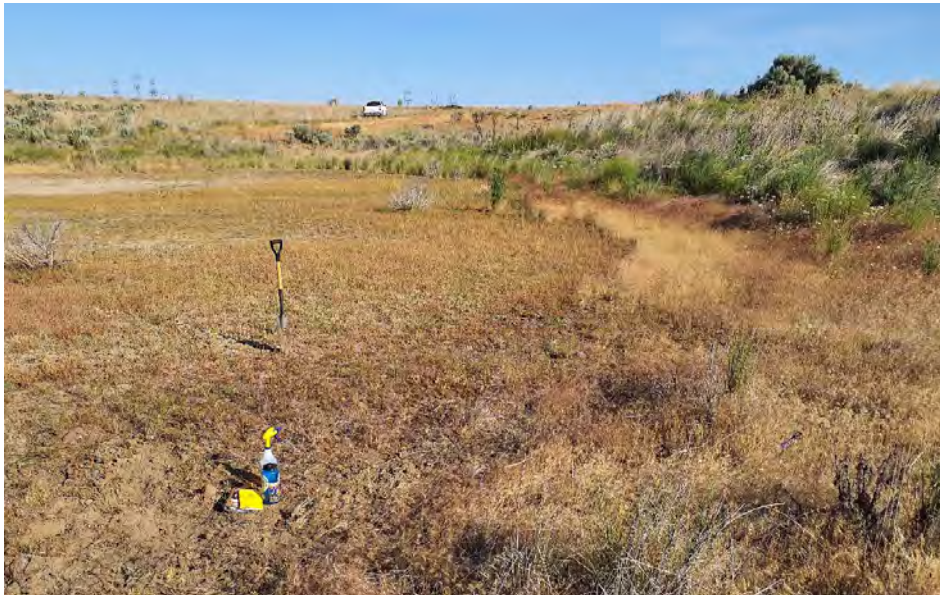

Photo 40. 6/27/2023. Looking NW along dry livestock pond (LP-01) boundary, berm to the right dry livestock pond to the left. Sample Plot (SP-200), site does not meet hydric criteria. Looking NW.

Photo 41. 6/27/2023. Overview of conditions in wetland WT-201. Looking SE.

Photo 42. 6/27/2023. Overview of conditions in wetland WT-203. Looking NW.

Photo 43. 6/30/2023. No bed or banks on NHD line. Looking S.

Photo 44. 6/30/2023. General conditions in this reach of ephemeral stream ST-121. Looking S.

Photo 45. 6/30/2023. General conditions in this reach of ephemeral stream ST-121. Looking S.

Photo 46. 6/30/2023. Excavated livestock pond (LP-02) in this reach of ephemeral stream ST-121. Looking S.

Photo 47. 6/30/2023. Wetland WT-122, in bed and banks of ephemeral stream ST-121. Looking N.

Photo 48. 6/30/2023. Overview of wetland WT-123 inside banks of ST-121. Looking N.

Photo 49. 6/30/2023. Wetland WT-124 in banks of ST-121 has surface water in this furthest downstream reach. Looking E.

Photo 50. 6/30/2023. Overview of ephemeral stream ST-125. Looking .

Photo 51. 6/30/2023. Headwaters for ephemeral drainage ST-125. Looking .

Photo 52. 6/30/2023. No bed or banks. Looking NE.

Photo 53. 6/30/2023. Ephemeral streams ST-125 and ST-114 merge here and flow east. Looking E.

Photo 54. 6/30/2023. General conditions in ephemeral stream ST-114. Looking NE.

Photo 55. 6/30/2023. ST-209 does not continue uphill from this point. Looking SE.

Photo 56. 6/30/2023. Ephemeral drainage ST-211 does not continue uphill from this point. Looking SW.

Photo 57. 6/30/2023. General conditions in ephemeral stream ST-211. Looking NE.

Photo 58. 6/30/2023. General conditions in ephemeral stream ST-215. Looking N.

Photo 59. 6/30/2023. General conditions in this reach of ephemeral stream ST-208. Looking S.

Photo 60. 6/30/2023. General conditions in this reach of ephemeral stream ST-209. Looking S.

Photo 61. 6/30/2023. General conditions in this reach of ephemeral stream ST-210. Looking W.

Photo 62. 6/30/2023. General conditions in this reach of ephemeral stream ST-210. Looking S.

Photo 63. 6/30/2023. Wetland WT-212 north of fence with vegetation and soils heavily disturbed by cattle. Looking NW.

Photo 64. 6/30/2023. General conditions in this reach of ephemeral stream ST-213. Looking W.

Photo 65. 6/30/2023. General conditions in this reach of ephemeral stream ST-214. Looking E.

Photo 66. 6/30/2023. No bed or banks uphill from here for ST-213. Looking W.

Photo 67. 6/30/2023. General conditions in this reach of ephemeral stream ST-215. Looking E.

Photo 68. 6/30/2023. No bed or banks uphill from here for ST-215. Looking W.

Photo 69. 6/30/2023. No bed or banks uphill from here for this branch of ephemeral stream ST-215. Looking S.

Photo 70. 7/18/2023. Ephemeral drainage ST-403 drains to canyon. Looking N.

Photo 71. 7/18/2023. Bermed drainage (ST-407) has pipe connected to cistern uphill. Likely filled when cattle are present. Sample plot SP-406 does not meet hydric criteria. Looking E.

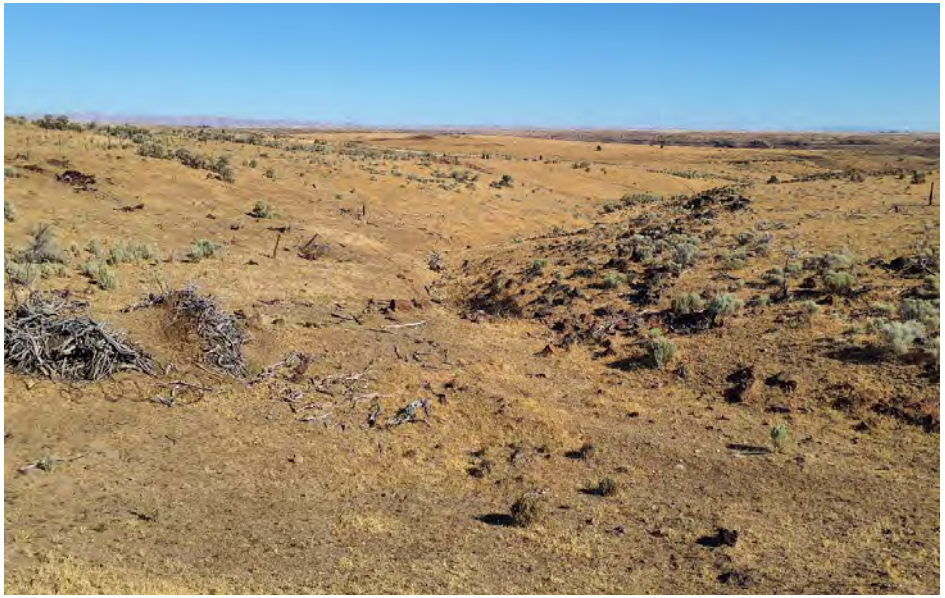

Photo 72. 7/18/2023. Ephemeral drainage ST-407 general conditions in this reach (below bermed empty livestock pond). Looking N.

Photo 73. 7/18/2023. Ephemeral drainage ST-408, 1 foot wide drains to canyon. Looking N.

Photo 74. 7/18/2023. Ephemeral drainage ST-409 flows to ST-408. Looking NE.

Photo 75. 7/18/2023. Ephemeral drainage ST-414 drains to canyon. Looking N.

Photo 76. 7/18/2023. Ephemeral drainage ST-416 runs into canyon. Looking E.

Photo 77. 7/18/2023. Ephemeral drainage (ST-415) on steep slope, drains to canyon. Looking E.

Photo 78. 7/18/2023. General conditions in this reach of ephemeral stream ST-407. Looking NE.

Photo 79. 7/18/2023. No pedestrian access beyond this point. Likely wetland (WT-501) or intermittent downstream in this reach of ST-407. Looking NE.

Photo 80. 7/18/2023. No wetland in abandoned livestock pond listed on NWI, sample plot SP-417. Looking NE.

Photo 81. 7/18/2023. Ephemeral drainage ST-419 general conditions. Looking E.

Photo 82. 7/18/2023. No water or vegetation on area where orthoimagery is green. Looking E.

Photo 83. 7/18/2023. General conditions in ephemeral stream ST-400. Looking NE.

Photo 84. 7/18/2023. No bed or banks uphill from here for ephemeral stream ST-400. Looking W.

Photo 85. 7/18/2023. No bed or banks on area that looks like drainage in orthoimagery. Looking SW.

Photo 86. 7/18/2023. General conditions in ephemeral stream ST-404. Looking SW.

Photo 87. 7/18/2023. General conditions in ephemeral stream ST-405. Looking W.

Photo 88. 7/18/2023. General conditions in ephemeral stream ST-410. Looking NW.

Photo 89. 7/18/2023. General conditions in ephemeral stream ST-411. Looking SW.

Photo 90. 7/18/2023. General conditions in ephemeral stream ST-412. Looking E.

Photo 91. 7/18/2023. General conditions in ephemeral stream ST-413. Looking W.

Photo 92. 7/18/2023. Inaccessible due to topography. Overview of stream ST-407 and potential riverine wetland (WT-501). Looking N.

Photo 93. 7/18/2023. General conditions in ephemeral stream ST-418. Looking S.

Photo 94. 7/18/2023. General conditions in ephemeral stream ST-204. Looking E.

Photo 95. 7/18/2023. No bed or banks on NHD line. Looking W.

Photo 96. 7/18/2023. No bed or banks on NHD line. Looking NW.

Photo 97. 7/18/2023. No bed or banks on NHD line. Looking N.

Photo 98. 7/18/2023. No bed or banks in scabland feature. Looking NW.

Photo 99. 7/19/2023. Dark spot in orthoimagery is a rock pile. Looking W.

Photo 100. 7/19/2023. White colored line on orthoimagery is scraped mineral soil behind terrace in abandoned cropfield. Looking W.

Photo 101. 7/19/2023. Dark area on orthoimagery is a rockpile. Looking N.

Photo 102. 7/19/2023. Abandoned livestock pond does not have hydric veg or hydrology indicators. Looking W.

Photo 103. 7/19/2023. Excavated livestock pond meets vernal pool criteria. Vernal pool WT-440. Looking N.

Photo 104. 7/19/2023. Excavated livestock pond does not meet hydric criteria. Medusahead and bare rocky soil. Looking NW.

Photo 105. 7/19/2023. Overview of former playa. Playa was actively farmed until being planted with CRP mix. Looking SE.

Photo 106. 7/19/2023. Excavated livestock pond is wetland (WT-443). Looking SW.

Photo 107. 7/19/2023. Vernal pool (WT-444) in rangeland. Looking W.

Photo 108. 7/19/2023. No wetland in excavated livestock pond. Looking E.

Photo 109. 7/19/2023. Excavated livestock pond does not have wetland features. Looking S.

Photo 110. 7/19/2023. Small wetland (WT-445) in excavated livestock pond. Looking SE.

Photo 111. 7/19/2023. No wetland behind berm in drainage, silver sage and tumble mustard. Looking S.

Photo 112. 7/19/2023. No wetland in NWI, sample plot SP-446. Looking NE.

Photo 113. 7/19/2023. Former playa has been drained, plowed, and planted. Sample plot SP-447. Looking NW.

Photo 114. 7/19/2023. Ephemeral drainage ST-407, very little evidence of any flow. Looking N.

Photo 115. 7/19/2023. No wetland on NWI in excavated livestock pond. Medusahead and Salsify in sample plot SP-449. Looking SE.

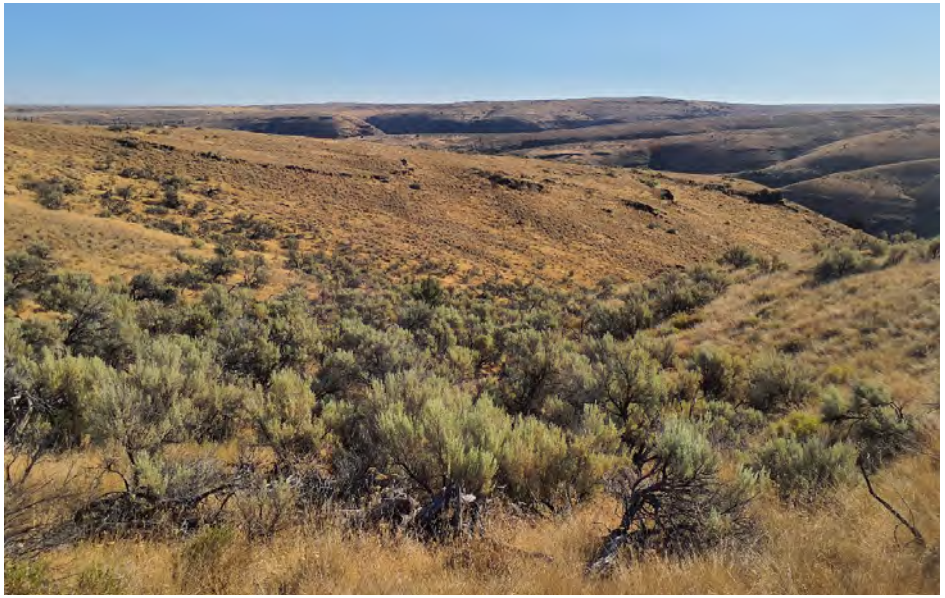

Photo 116. 7/19/2023. General conditions in ephemeral stream ST-426. Looking NE.

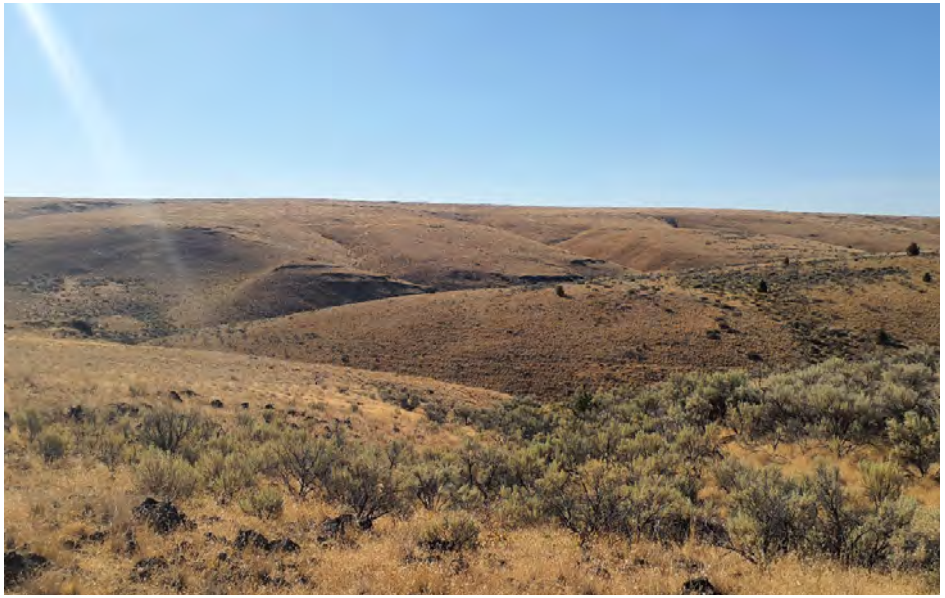

Photo 117. 7/19/2023. General conditions in ephemeral stream ST-427. Looking E.

Photo 118. 7/19/2023. General conditions in ephemeral stream ST-428. Looking E.

Photo 119. 7/19/2023. General conditions in ephemeral stream ST-429. Looking SW.

Photo 120. 7/19/2023. General conditions in ephemeral stream ST-430. Looking N.

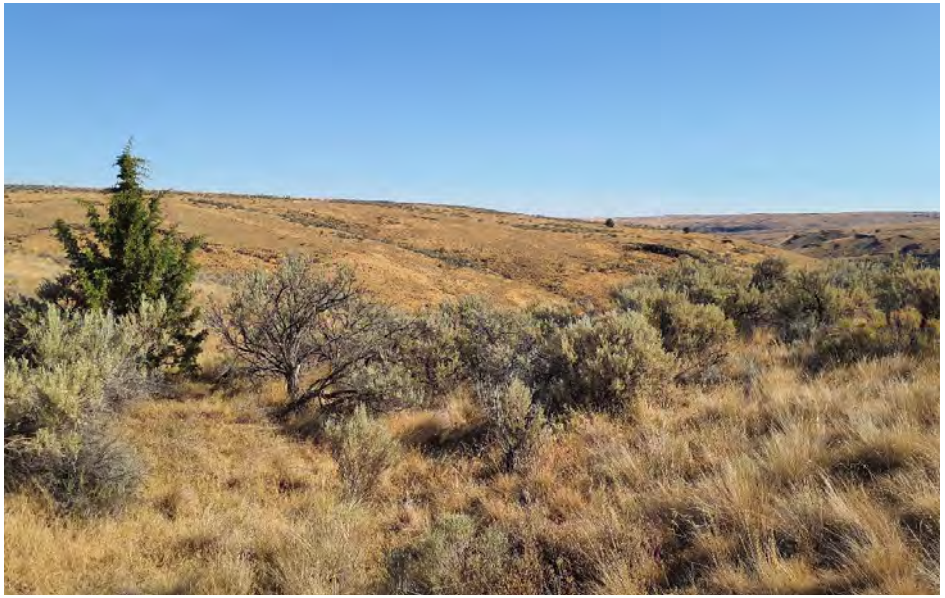

Photo 121. 7/19/2023. General conditions in ephemeral stream ST-431. Looking N.

Photo 122. 7/19/2023. General conditions in ephemeral stream ST-432. Looking E.

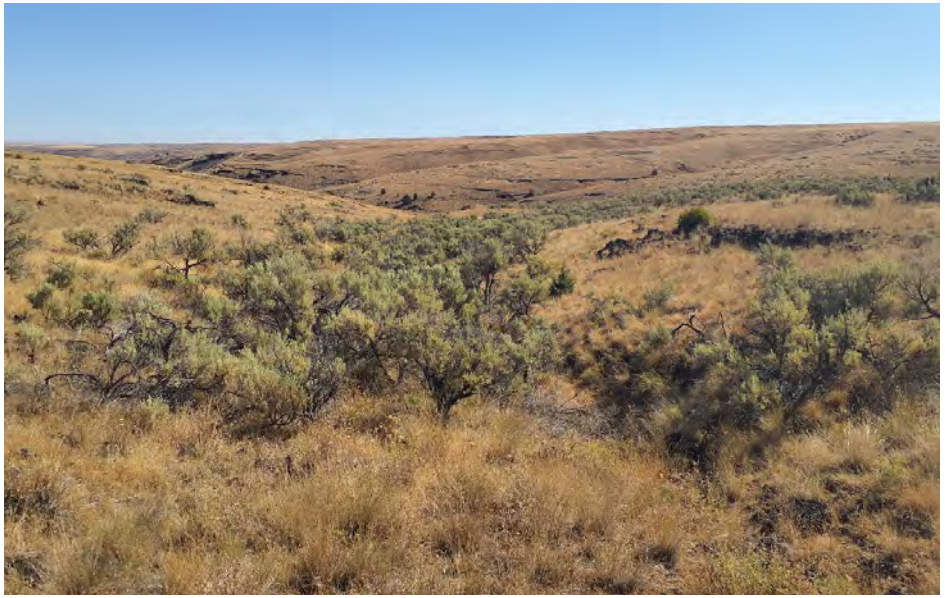

Photo 123. 7/19/2023. General conditions in ephemeral stream ST-433. Looking NE.

Photo 124. 7/19/2023. Intermittent stream ST-447 general conditions in this reach. Looking N.

Photo 125. 7/19/2023. Intermittent stream ST-447 general conditions in this reach. Looking SE.

Photo 126. 7/20/2023. Livestock pond (LP-03) in ephemeral stream ST-450 has no wetland features. Looking S.

Photo 127. 7/20/2023. Ephemeral drainage ST-451, drains to ST-450. Looking NW.

Photo 128. 7/20/2023. Ephemeral stream ST-450 drains to excavated livestock pond (LP-04). No wetland features. Looking NE.

Photo 129. 7/20/2023. Ephemeral stream ST-454 flows to wetland approximately 1,000 feet offsite to the west. Looking E.

Photo 130. 7/20/2023. Overview of ephemeral stream ST-450. Looking S.

Photo 131. 7/20/2023. ST-450 does not continue on other side of two track road. Looking N.

Attachment J-2. Wetlands and Other Waters Delineation Report – Supplemental Information

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Wetlands and Other Waters Delineation Report – Supplemental Information

Yellow Rosebush Energy Center

Prepared for
Yellow Rosebush Energy Center, LLC

Prepared by

September 2025

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This September 2025 supplement includes updated information for the October 2023 Wetlands and Other Waters Delineation Report for the Yellow Rosebush Energy Center, Wasco County, Oregon, prepared for Yellow Rosebush Energy Center, LLC by Tetra Tech, Inc. These attachments reflect data from pedestrian surveys to delineate wetlands and other waters that were performed on November 6, 2024, and June 26, 30, July 17 to 21, 2023.

List of Figures

List of Appendices

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Figure

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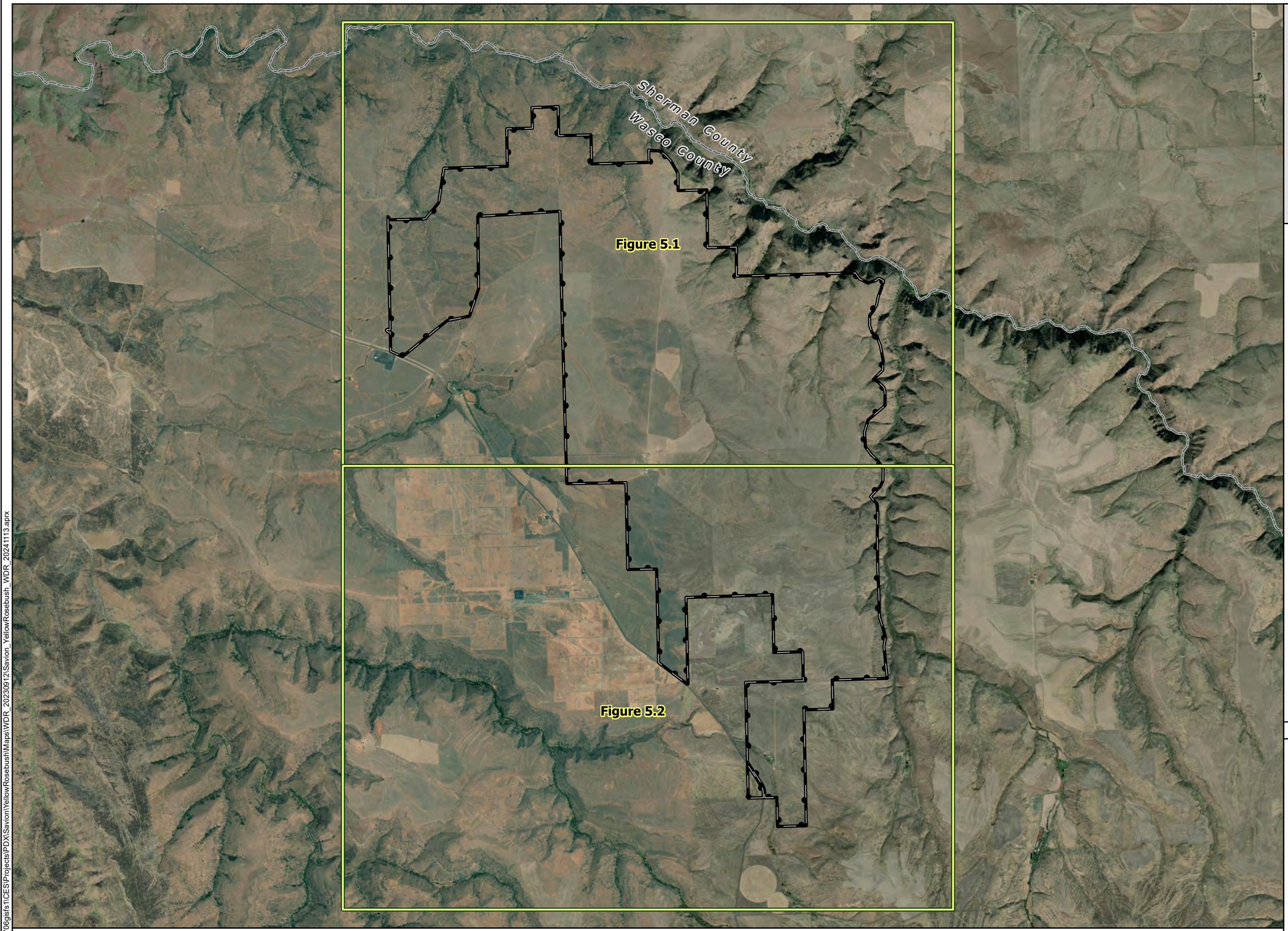
Yellow Rosebush Energy Park

Figure 5
Wetland Delineation Index Map

WASCO COUNTY, OR



Map Grid
Study Area
County Boundary

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH

SAVION
A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Aerial	

1:50,000

WGS 1984 UTM Zone 10N

0 0.5 1 2 3 4 Miles

NOT FOR CONSTRUCTION

\\Cess706gisfs1\CES\Projects\PDX\Savion\YellowRosebush\Maps\WDR_20230912\Savion_YellowRosebush_WDR_20241113.aprx

Yellow Rosebush Energy Park

Figure 5.1
Wetland Delineation Detail Map

WASCO COUNTY, OR

Figure 5.1.01
Figure 5.1.02
Figure 5.1.03
Figure 5.1.04
Figure 5.1.05
Figure 5.1.06
Figure 5.1.07
Figure 5.1.08
Figure 5.1.09
Figure 5.1.10
Figure 5.1.11
Figure 5.1.12
Figure 5.1.13
Figure 5.1.14
Figure 5.1.15
Figure 5.1.16
Figure 5.1.17
Figure 5.1.18
Figure 5.1.19
Figure 5.1.20
Figure 5.1.21
Figure 5.1.22
Figure 5.1.23
Figure 5.1.24
Figure 5.1.25
Figure 5.1.26
Figure 5.1.27
Figure 5.1.28
Figure 5.1.29

Taxlot 4S16E0300
Taxlot 4S15E01500
Taxlot 5S15E0100
Taxlot 5S16E0900
Taxlot 5S16E01100
Taxlot 5S16E01000
Taxlot 5S16E01300

- Detailed Map Grid
- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Sample Plot
- Field Delineated Stream
- Desktop Delineated Other Water Feature
- Field Delineated Wetland

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH
SAVION
A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Aerial	Figure 5.1 Figure 5.2

1:24,000 WGS 1984 UTM Zone 10N

0 0.5 1 2 Miles

NOT FOR CONSTRUCTION

\\Cess706glsfs1\CES\Projects\PDX\Savion\YellowRosebush\Maps\WDR_20230912\Savion_YellowRosebush_WDR_20241113.aprx

Yellow Rosebush Energy Park

Figure 5.2 Wetland Delineation Detail Map

WASCO COUNTY, OR

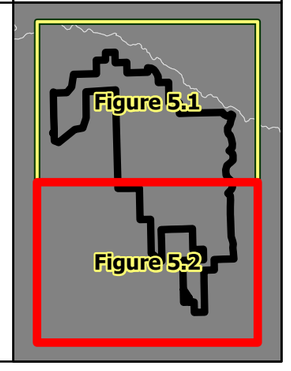
Figure 5.1.27
Figure 5.1.28
Figure 5.1.29
Figure 5.2.30
Figure 5.2.31
Taxlot 5S16E01000
Figure 5.2.32
Figure 5.2.33
Figure 5.2.34
Figure 5.2.35
Figure 5.2.36
Taxlot 5S16E02000
Figure 5.2.37
Figure 5.2.38
Taxlot 5S16E01300
Taxlot 5S16E02400
Figure 5.2.39
Taxlot 5S16E02300
Figure 5.2.40
Figure 5.2.41
Figure 5.2.42

- Detailed Map Grid
- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Sample Plot
- Field Delineated Stream
- Desktop Delineated Other Water Feature
- Field Delineated Wetland

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Aerial	

1:24,000 WGS 1984 UTM Zone 10N 0 0.5 1 2 Miles

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.1.01
Wetland Delineation Map

WASCO COUNTY, OR

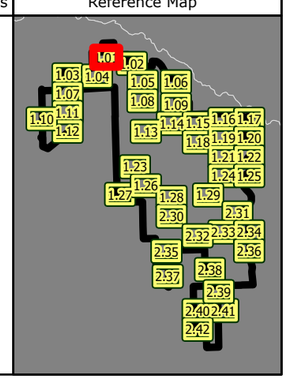
(#34)
(#3)
(#35)
(#2)
SP-302
ST-303
(#36)
ST-300
(#1)
Taxlot
4S16E0300
(#37)

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Sample Plot
- Field Delineated Stream

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N

0 125 250 500 750 1,000 Feet

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.1.02
Wetland Delineation Map

WASCO COUNTY, OR

Taxlot
4S16E0300

(#39)

ST-307

(#38)

ST-209

WT-212

SP-212b

SP-212a

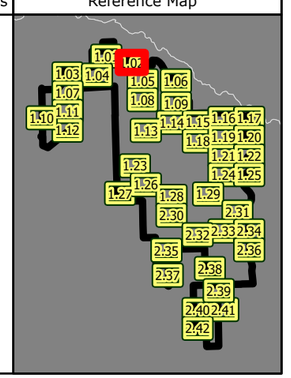
(#63)

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Sample Plot
- Field Delineated Stream
- Field Delineated Wetland

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N

0 125 250 500 750 1,000 Feet

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.1.03
Wetland Delineation Map

WASCO COUNTY, OR

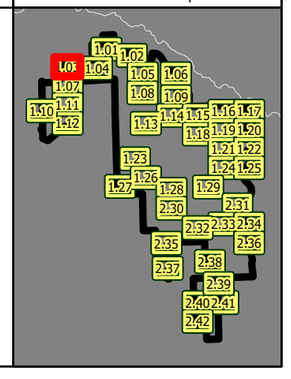
SP-109
(#23)
ST-116
(#28)
(#27)

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Sample Plot
- Field Delineated Stream

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N 0 125 250 500 750 1,000 Feet

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.1.04
Wetland Delineation Map

WASCO COUNTY, OR

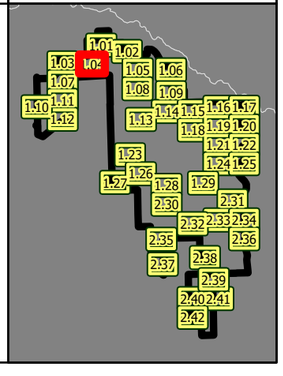
SP-107
(#22)
ST-309
ST-310
(#4)
ST-309

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Sample Plot
- Field Delineated Stream

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N 0 125 250 500 750 1,000 Feet

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.1.05
Wetland Delineation Map

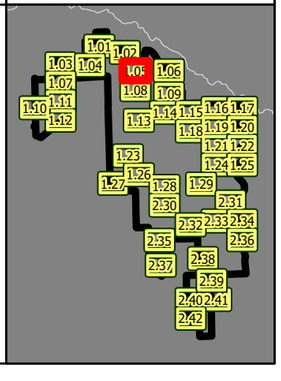
WASCO COUNTY, OR

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Sample Plot
- Field Delineated Stream
- Field Delineated Wetland

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N

0 125 250 500 750 1,000 Feet

NOT FOR CONSTRUCTION

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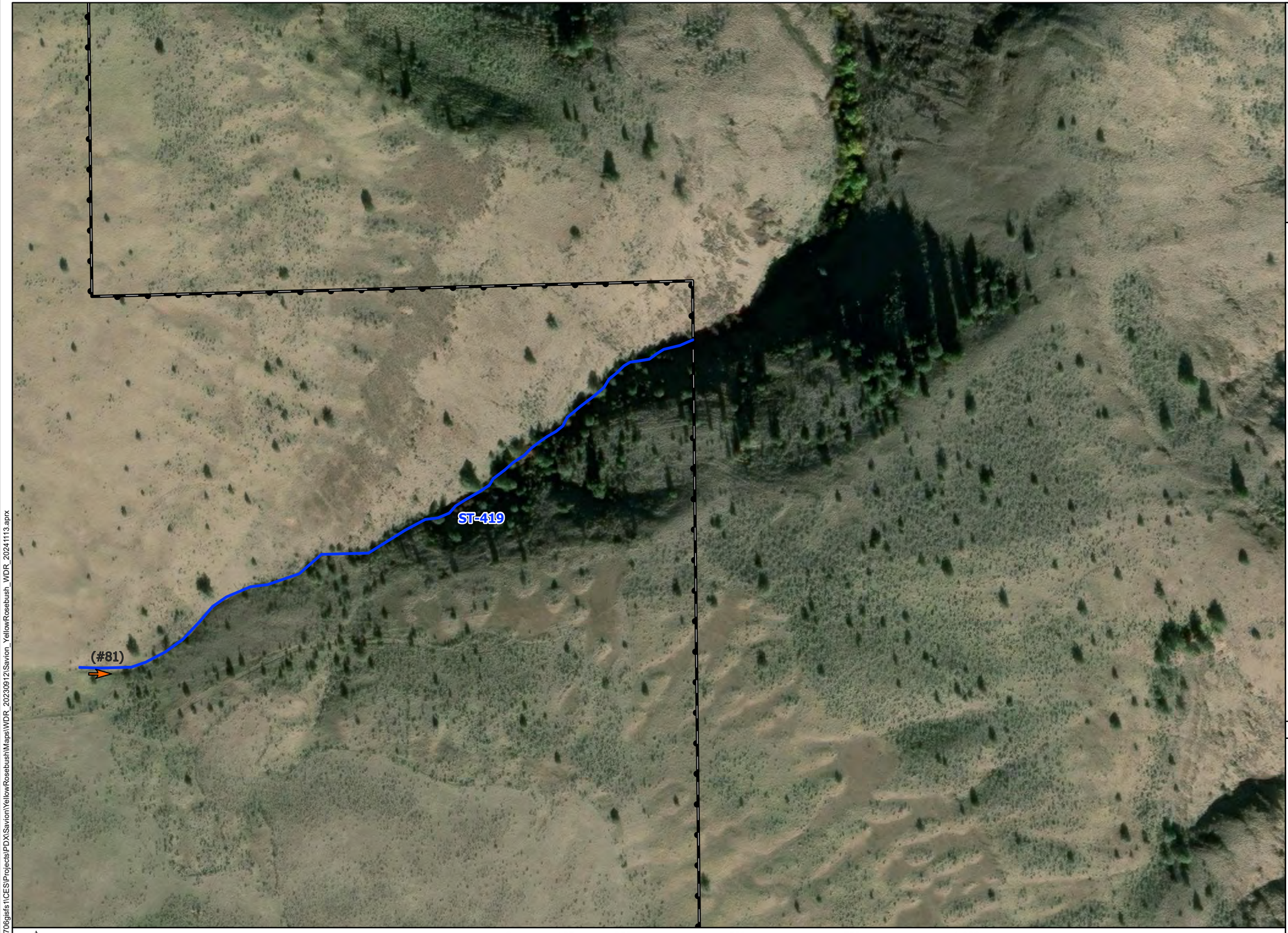

Yellow Rosebush Energy Park

Figure 5.1.06
Wetland Delineation Map

WASCO COUNTY, OR

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Field Delineated Stream

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources

Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic

Reference Map

1:2,400 WGS 1984 UTM Zone 10N

0 125 250 500 750 1,000 Feet

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.1.07
Wetland Delineation Map

WASCO COUNTY, OR

Taxlot 4S15E01500

(#24)

(#41)

WT-201

SP-201a

(#10)

SP-201b

(#11)

ST-115

(#26)

(#25)

ST-202

(#12)

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Sample Plot
- Field Delineated Stream
- Field Delineated Wetland

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

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1:2,400

WGS 1984 UTM Zone 10N

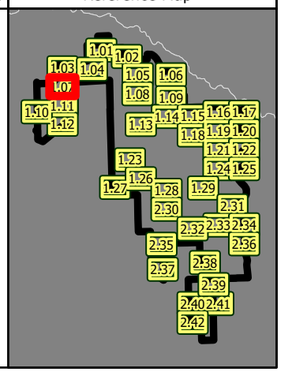
0 125 250 500 750 1,000 Feet

NOT FOR CONSTRUCTION

Data Sources

Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic

Reference Map



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Yellow Rosebush Energy Park

Figure 5.1.08
Wetland Delineation Map

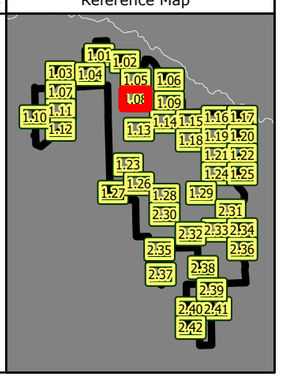
WASCO COUNTY, OR

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Field Delineated Stream

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

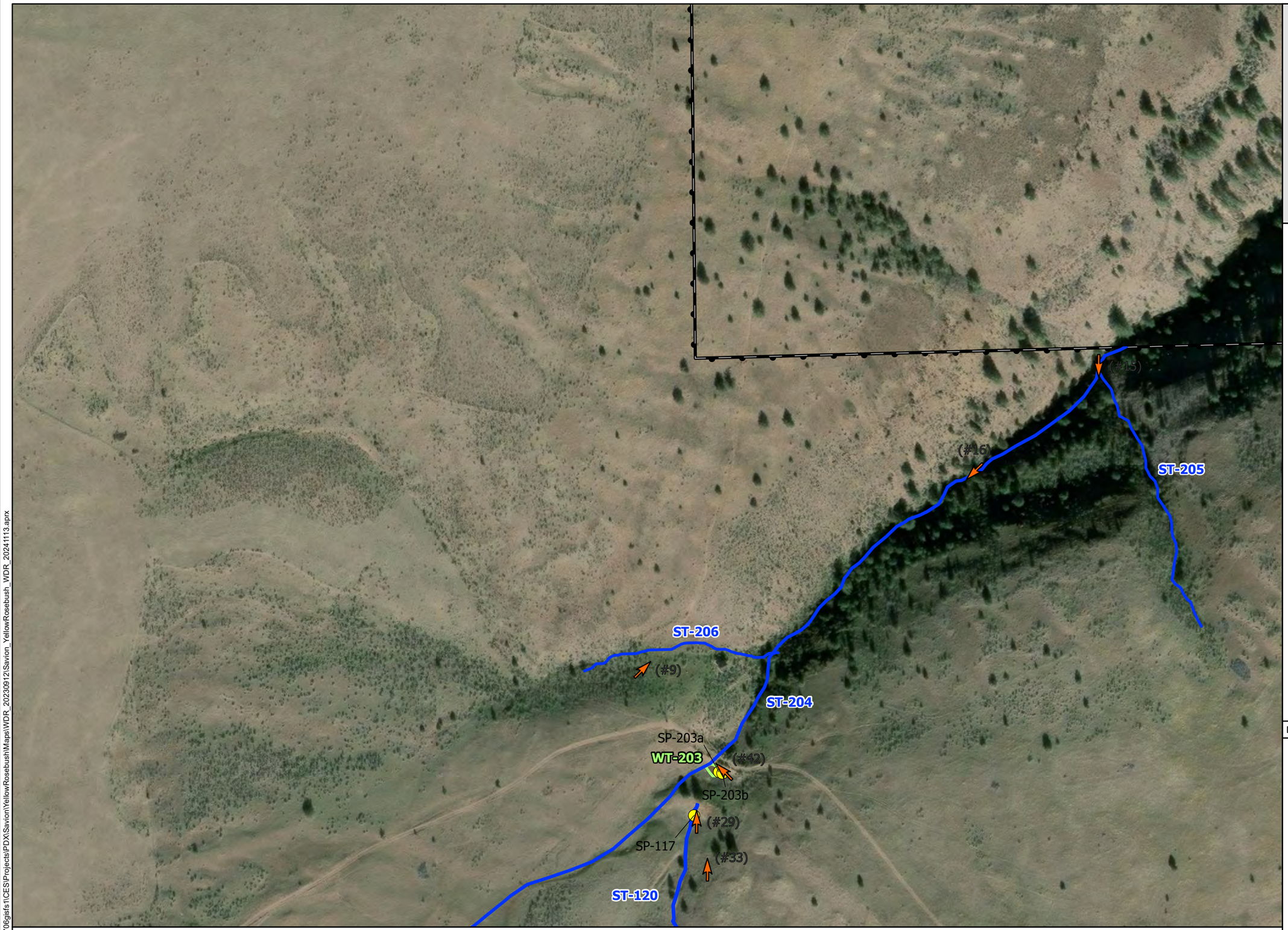
1:2,400 WGS 1984 UTM Zone 10N 0 125 250 500 750 1,000 Feet NOT FOR CONSTRUCTION

\\Cess706gisfs1\CES\Projects\PDX\Savion\YellowRosebush\Maps\WDR_20230912\Savion_YellowRosebush_WDR_20241113.aprx

Yellow Rosebush Energy Park

Figure 5.1.09
Wetland Delineation Map

WASCO COUNTY, OR

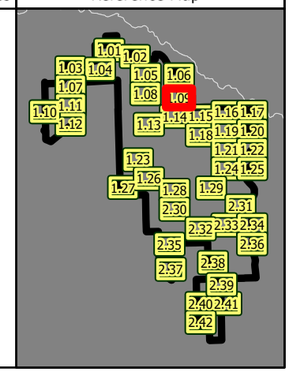


- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Sample Plot
- Field Delineated Stream
- Field Delineated Wetland

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N

0 125 250 500 750 1,000 Feet

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.1.10
Wetland Delineation Map

WASCO COUNTY, OR

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Sample Plot
- Field Delineated Wetland

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

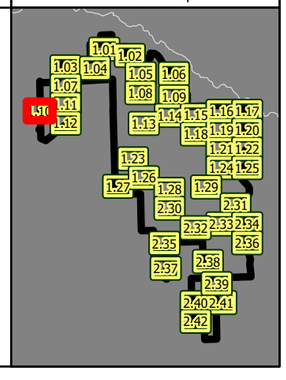
TETRA TECH

SAVION
A RENEWABLE ENERGY COMPANY

Data Sources

Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic

Reference Map



1:2,400

WGS 1984 UTM Zone 10N

0 125 250 500 750 1,000 Feet

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.1.11
Wetland Delineation Map

WASCO COUNTY, OR

ST-202

(#13)

Taxlot
5S15E0100

(#21)

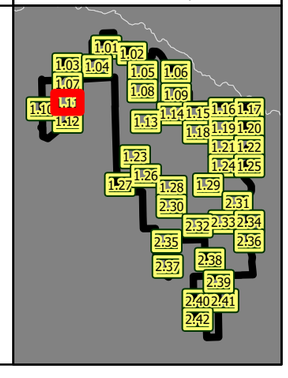
SP-105

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Sample Plot
- Field Delineated Stream

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N

0 125 250 500 750 1,000 Feet

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.1.12
Wetland Delineation Map

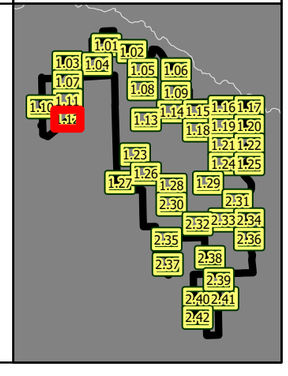
WASCO COUNTY, OR

Study Area
Taxlot Boundary
Photo Point (# Photo Number)
Sample Plot
Field Delineated Stream
Desktop Delineated Other Water Feature

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N 0 125 250 500 750 1,000 Feet

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.1.13
Wetland Delineation Map

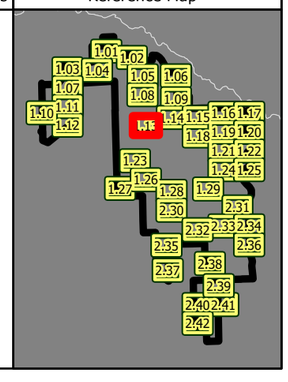
WASCO COUNTY, OR

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N 0 125 250 500 750 1,000 Feet

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.1.14
Wetland Delineation Map

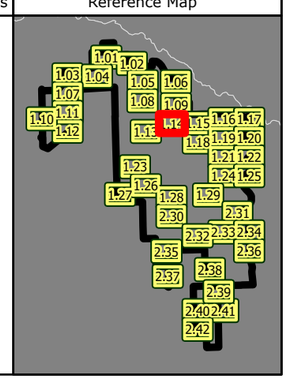
WASCO COUNTY, OR

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Field Delineated Stream

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N 0 125 250 500 750 1,000 Feet

NOT FOR CONSTRUCTION

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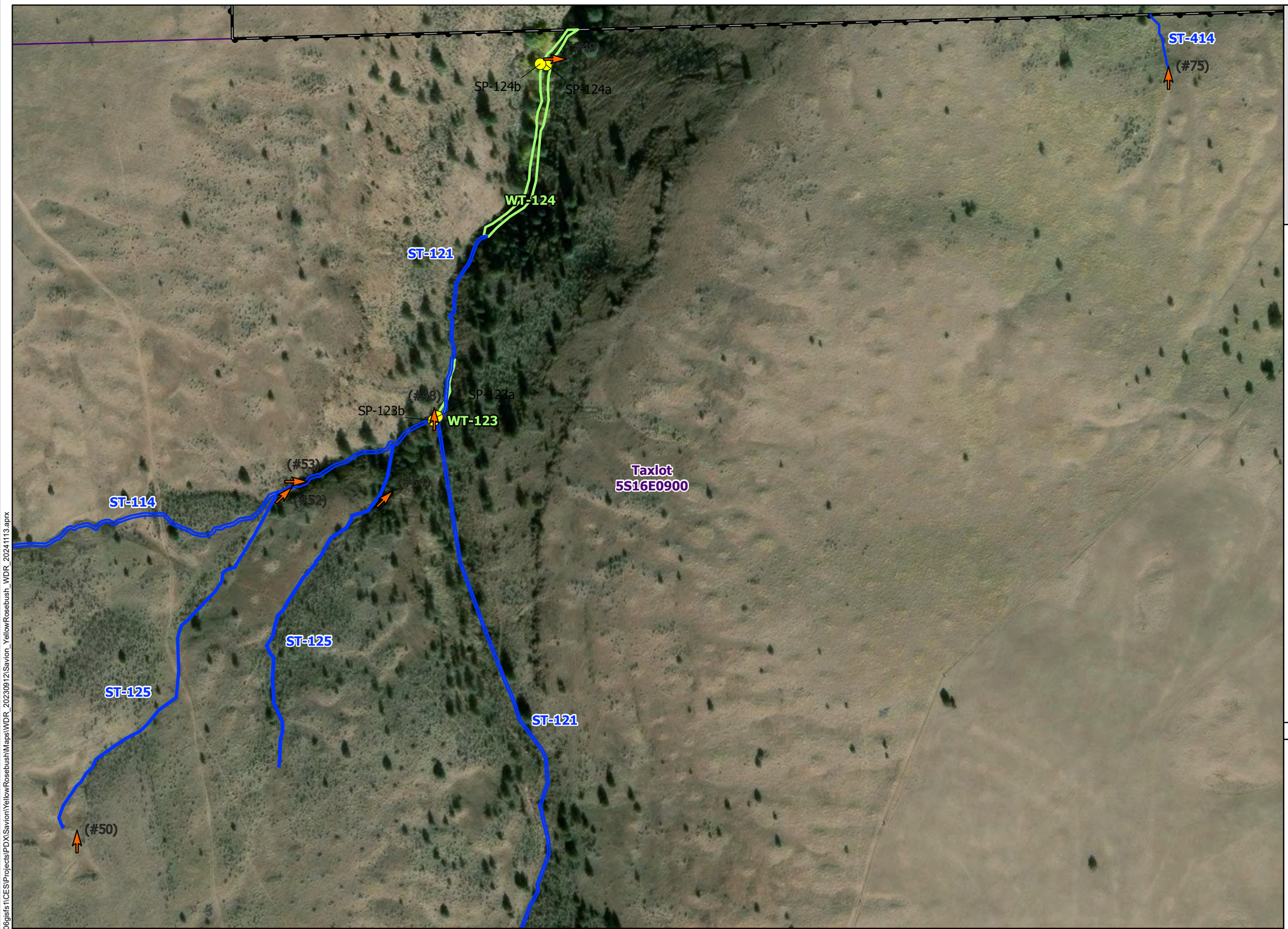
Yellow Rosebush Energy Park

Figure 5.1.15
Wetland Delineation Map

WASCO COUNTY, OR

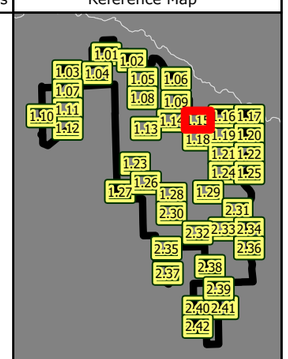


- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Sample Plot
- Field Delineated Stream
- Field Delineated Wetland

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N

0 125 250 500 750 1,000 Feet

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.1.16
Wetland Delineation Map

WASCO COUNTY, OR

ST-408
ST-409
(#74)
(#73)
ST-416
(#76)
ST-415
(#77)
ST-413
ST-410
(#88)
(#89)
ST-411
WT-501
ST-425
(#92)
(#79)
ST-407a
ST-407b
(#78)
(#91)
(#90)
ST-412
ST-407b

Study Area
Taxlot Boundary
Photo Point (# Photo Number)
Field Delineated Stream
Field Delineated Wetland

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH
SAVION
A RENEWABLE ENERGY COMPANY

Data Sources

Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic

Reference Map

1:2,400
WGS 1984 UTM Zone 10N
0 125 250 500 750 1,000 Feet
NOT FOR CONSTRUCTION

\\Cess706gisfs1\CES\Projects\PDX\Savion\YellowRosebush\Maps\WDR_20230912\Savion_YellowRosebush_WDR_20241113.aprx

Yellow Rosebush Energy Park

Figure 5.1.17
Wetland Delineation Map

WASCO COUNTY, OR

ST-425

Taxlot
5S16E0900

Study Area
Taxlot Boundary
Field Delineated Stream

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH

SAVION
A RENEWABLE ENERGY COMPANY

Data Sources

Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic

Reference Map

1:2,400

WGS 1984 UTM Zone 10N

0 125 250 500 750 1,000 Feet

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.1.18
Wetland Delineation Map

WASCO COUNTY, OR

(#47)
WT-122
SP-122a
SP-122b
ST-121
LP-02
(#46)
ST-124
ST-121
(#45)
(#5)
(#6)
WT-313
(#8)
(#7)
SP-315
SP-316
ST-121
Taxlot
5S16E0900
(#44)
ST-121
(#43)

Study Area
Taxlot Boundary
Photo Point (# Photo Number)
Sample Plot
Field Delineated Stream
Desktop Delineated Other Water Feature
Field Delineated Wetland

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH
SAVION
A RENEWABLE ENERGY COMPANY

Data Sources

Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic

Reference Map

1:2,400
WGS 1984 UTM Zone 10N
0 125 250 500 750 1,000 Feet
NOT FOR CONSTRUCTION

\\Cess706glsfs1\CES\Projects\PDX\Savion\YellowRosebush\Maps\WDR_20230912\Savion_YellowRosebush_WDR_20241113.aprx

Yellow Rosebush Energy Park

Figure 5.1.19
Wetland Delineation Map

WASCO COUNTY, OR

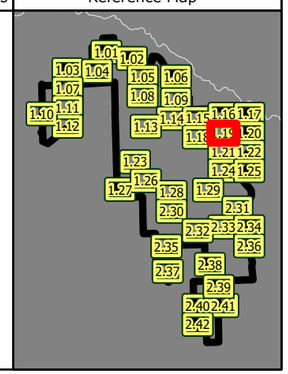
ST-411
ST-410
ST-412
ST-407b
Taxlot
5S16E0900
ST-418

Study Area
Taxlot Boundary
Field Delineated Stream

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH
SAVION
A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N

0 125 250 500 750 1,000 Feet

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.1.20
Wetland Delineation Map

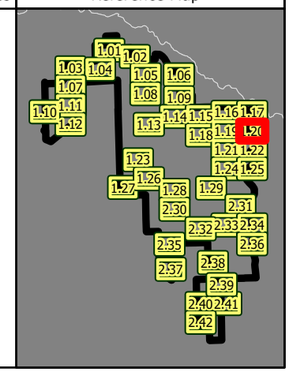
WASCO COUNTY, OR

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Field Delineated Stream

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N 0 125 250 500 750 1,000 Feet

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.1.21
Wetland Delineation Map

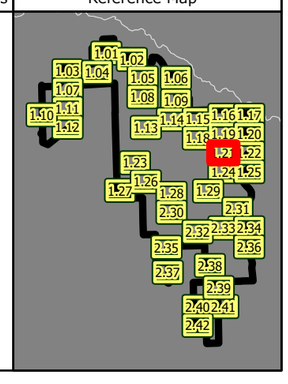
WASCO COUNTY, OR

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Sample Plot
- Field Delineated Stream

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N 0 125 250 500 750 1,000 Feet

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.1.22
Wetland Delineation Map

WASCO COUNTY, OR

ST-403

(#85)

Taxlot
5S16E0900

ST-400

(#83)

(#84)

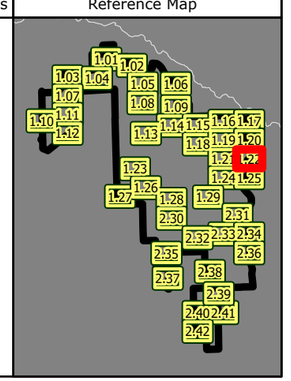
Taxlot
5S16E01300

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Field Delineated Stream

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N 0 125 250 500 750 1,000 Feet

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.1.23
Wetland Delineation Map

WASCO COUNTY, OR

(#96)

Taxlot
5S16E0900

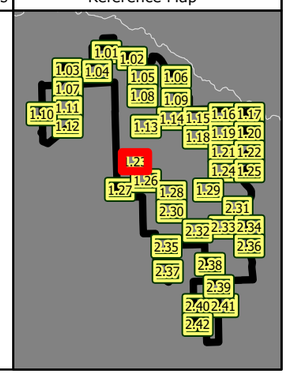
(#97)

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N 0 125 250 500 750 1,000 Feet

NOT FOR CONSTRUCTION

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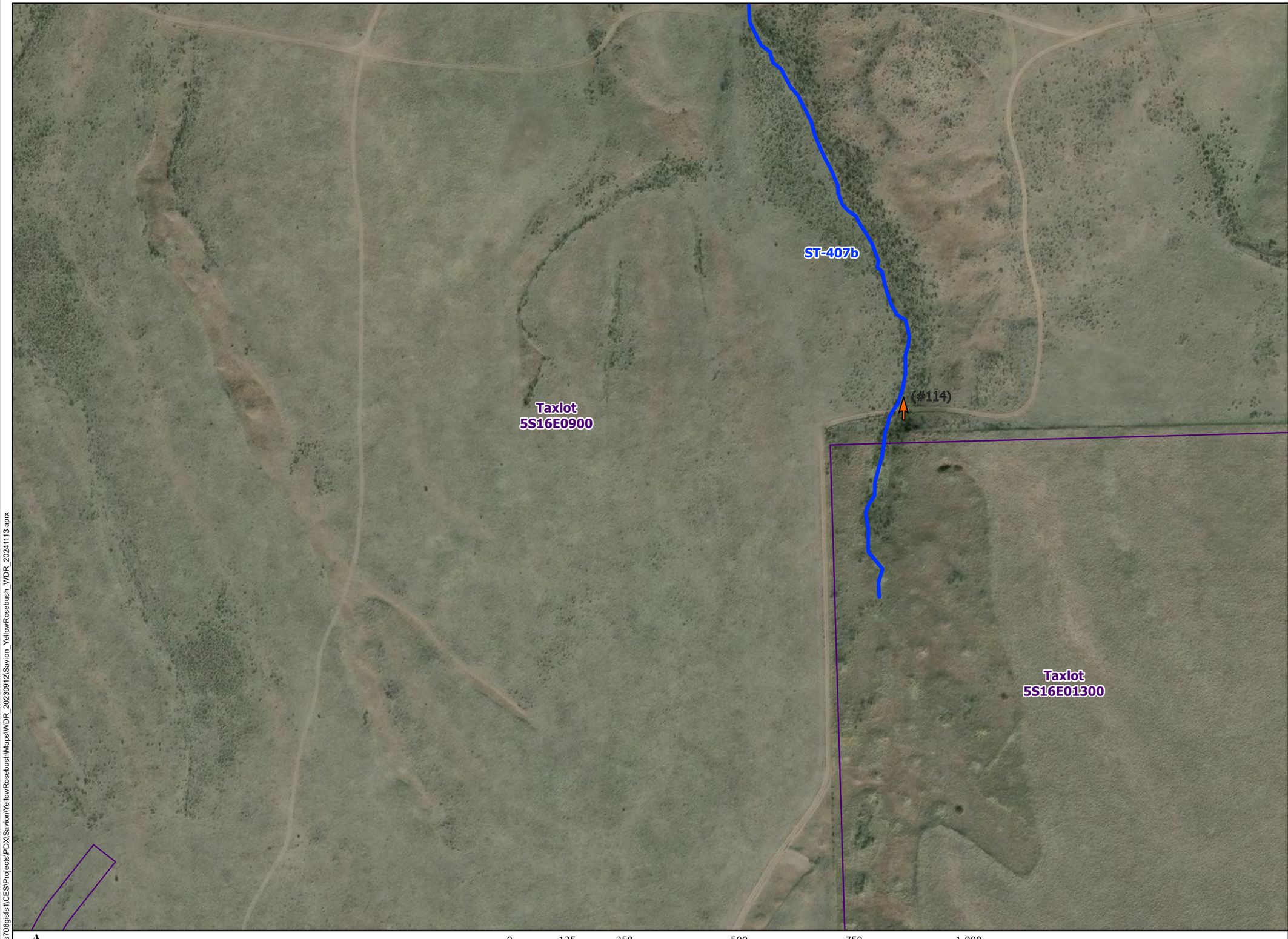


Yellow Rosebush Energy Park

Figure 5.1.24
Wetland Delineation Map

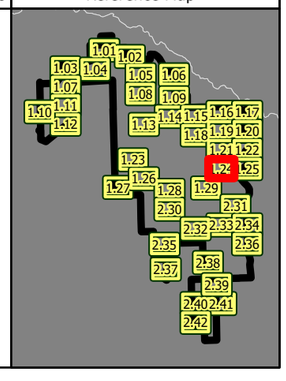
WASCO COUNTY, OR

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Field Delineated Stream

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N 0 125 250 500 750 1,000 Feet

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.1.25
Wetland Delineation Map

WASCO COUNTY, OR

Taxlot
5S16E0900

ST-426

(#116)

Taxlot
5S16E01300

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Field Delineated Stream

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources

Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic

Reference Map

1:2,400 WGS 1984 UTM Zone 10N

0 125 250 500 750 1,000 Feet

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.1.26
Wetland Delineation Map

WASCO COUNTY, OR

Taxlot
5S16E0900

(#82)

Taxlot
5S16E01000

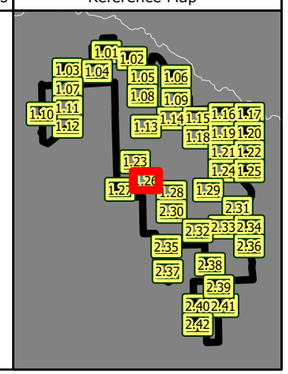
Taxlot 5S16E01100

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N

0 125 250 500 750 1,000 Feet

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.1.27
Wetland Delineation Map

WASCO COUNTY, OR

Taxlot 5S15E0100

Taxlot 5S16E0900

(#98)

ST-454

(#129)

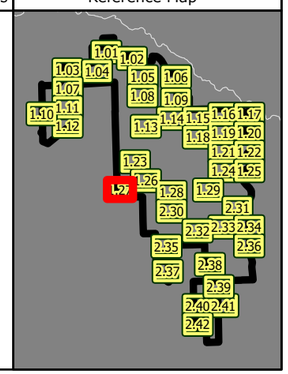
- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Field Delineated Stream

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH

SAVION
A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400

WGS 1984 UTM Zone 10N

0 125 250 500 750 1,000 Feet

NOT FOR CONSTRUCTION

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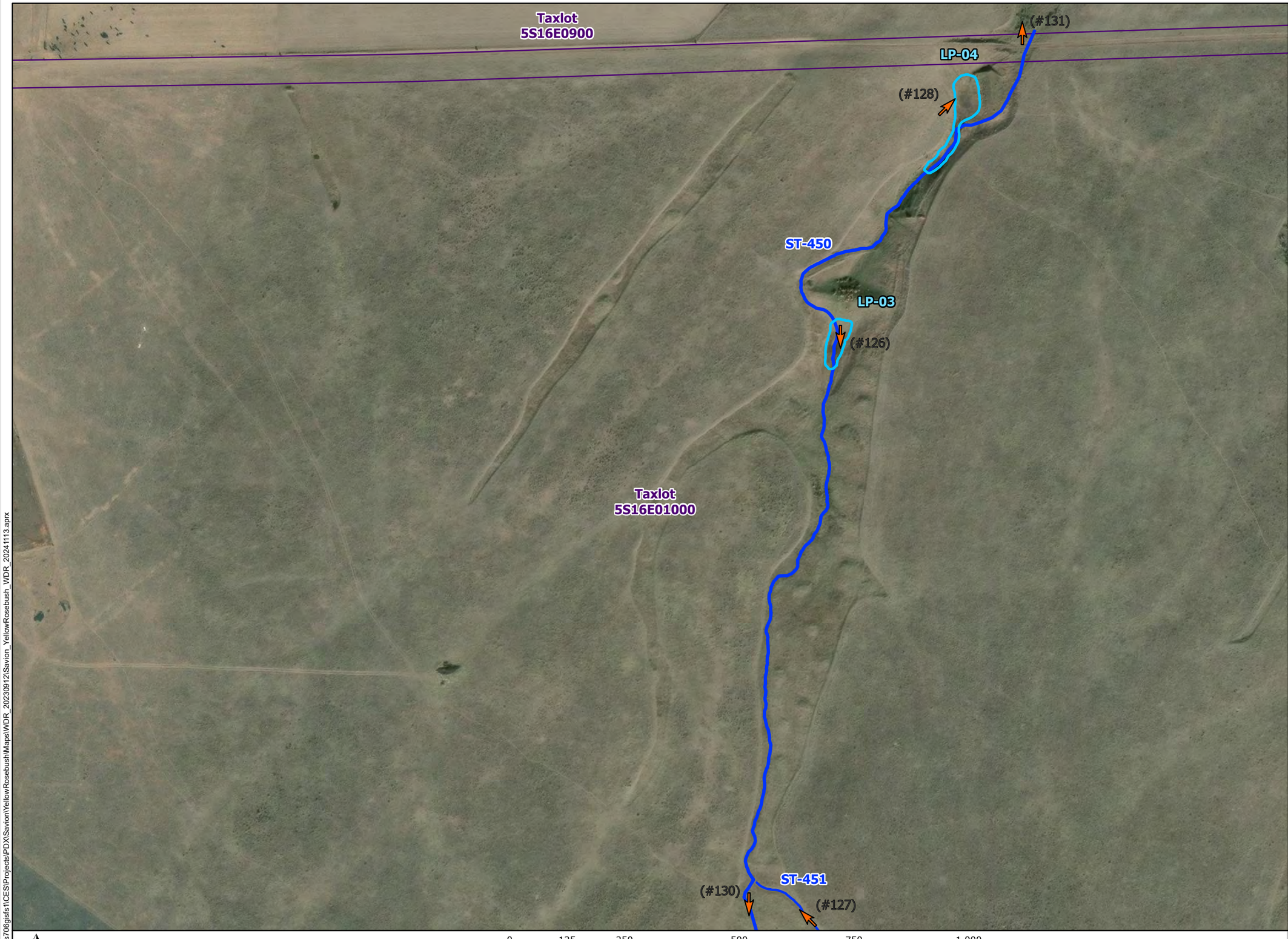


Yellow Rosebush Energy Park

Figure 5.1.28
Wetland Delineation Map

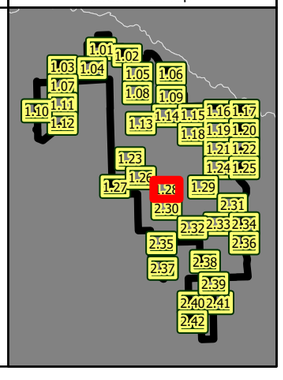
WASCO COUNTY, OR

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Field Delineated Stream
- Desktop Delineated Other Water Feature

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N

0 125 250 500 750 1,000 Feet

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.1.29
Wetland Delineation Map

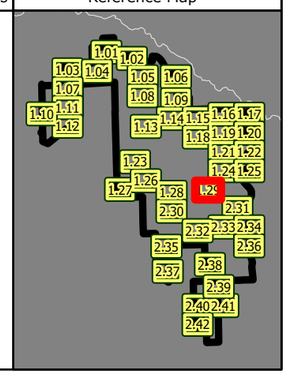
WASCO COUNTY, OR

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Sample Plot

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N 0 125 250 500 750 1,000 Feet

NOT FOR CONSTRUCTION

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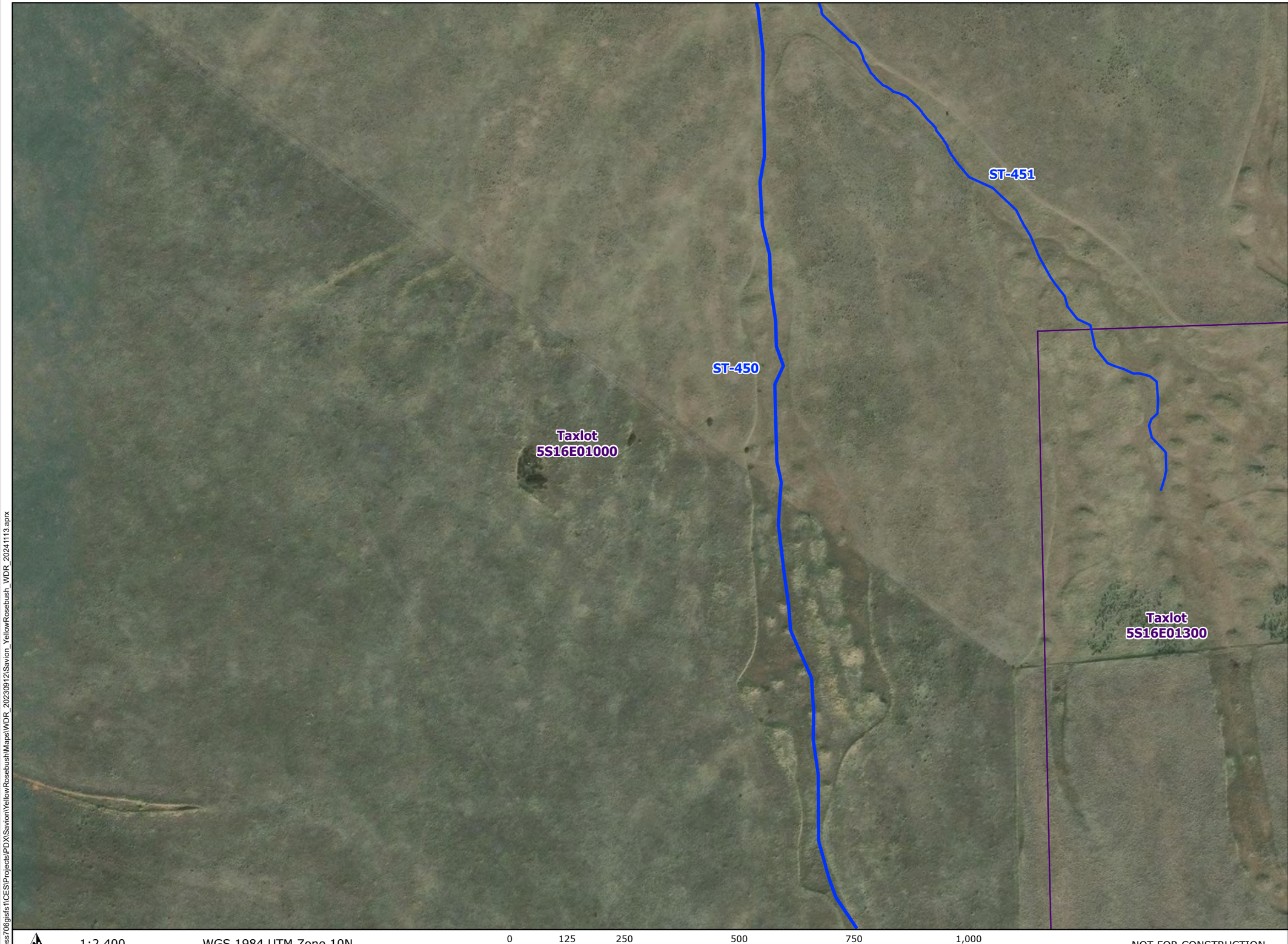


Yellow Rosebush Energy Park

Figure 5.2.30
Wetland Delineation Map

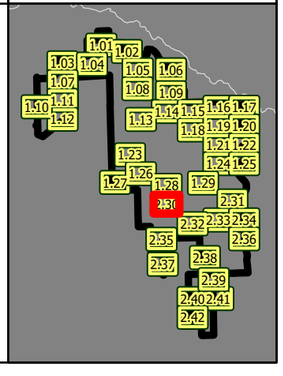
WASCO COUNTY, OR

- Study Area
- Taxlot Boundary
- Field Delineated Stream

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

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Yellow Rosebush Energy Park

Figure 5.2.31
Wetland Delineation Map

WASCO COUNTY, OR

(#117)
(#118)
(#119)
(#120)
(#121)
ST-427
ST-428
ST-429
ST-430
ST-431
Taxlot
5S16E01300

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Field Delineated Stream

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N 0 125 250 500 750 1,000 Feet

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.2.32
Wetland Delineation Map

WASCO COUNTY, OR

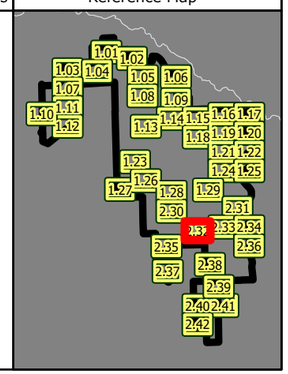
(#102)
(#100)
(#101)
WT-440
SP-440a
(#103)
SP-440b
(#104)
Taxlot
5S16E01300
(#105)
SP-442

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Sample Plot
- Field Delineated Wetland

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH
SAVION
A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N 0 125 250 500 750 1,000 Feet

NOT FOR CONSTRUCTION

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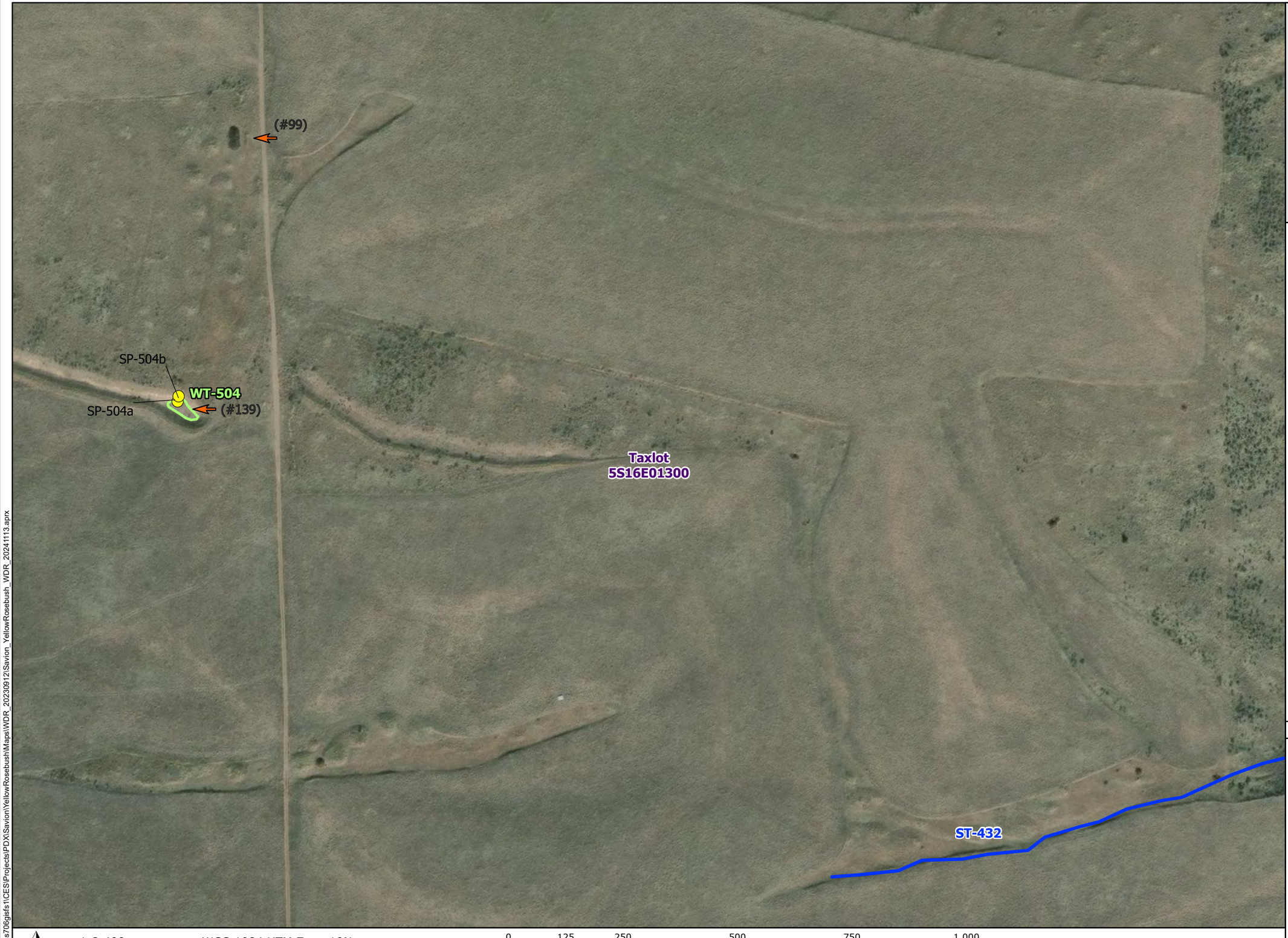


Yellow Rosebush Energy Park

Figure 5.2.33
Wetland Delineation Map

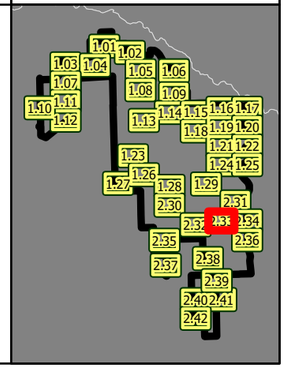
WASCO COUNTY, OR

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Sample Plot
- Field Delineated Stream
- Field Delineated Wetland

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N 0 125 250 500 750 1,000 Feet

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.2.34
Wetland Delineation Map

WASCO COUNTY, OR

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Field Delineated Stream

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

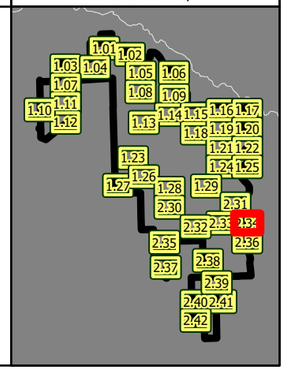
Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources

Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic

Reference Map



1:2,400 WGS 1984 UTM Zone 10N 0 125 250 500 750 1,000 Feet

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.2.35
Wetland Delineation Map

WASCO COUNTY, OR

(#134)

UP-501

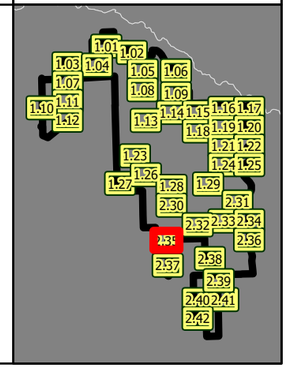
Taxlot
5S16E02000

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Sample Plot

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N

0 125 250 500 750 1,000 Feet

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.2.36
Wetland Delineation Map

WASCO COUNTY, OR

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Field Delineated Stream

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH

SAVION
A RENEWABLE ENERGY COMPANY

Data Sources

Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic

Reference Map

1:2,400

WGS 1984 UTM Zone 10N

0 125 250 500 750 1,000 Feet

NOT FOR CONSTRUCTION

\\Cess706gisfs1\CES\Projects\PDX\Savion\YellowRosebush\Maps\WDR_20230912\Savion_YellowRosebush_WDR_20241113.aprx

Yellow Rosebush Energy Park

Figure 5.2.37
Wetland Delineation Map

WASCO COUNTY, OR

(#133)

UP-500

SP-448

(#113)

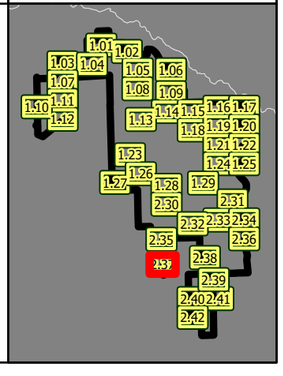
Taxlot
5S16E02000

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Sample Plot

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N 0 125 250 500 750 1,000 Feet

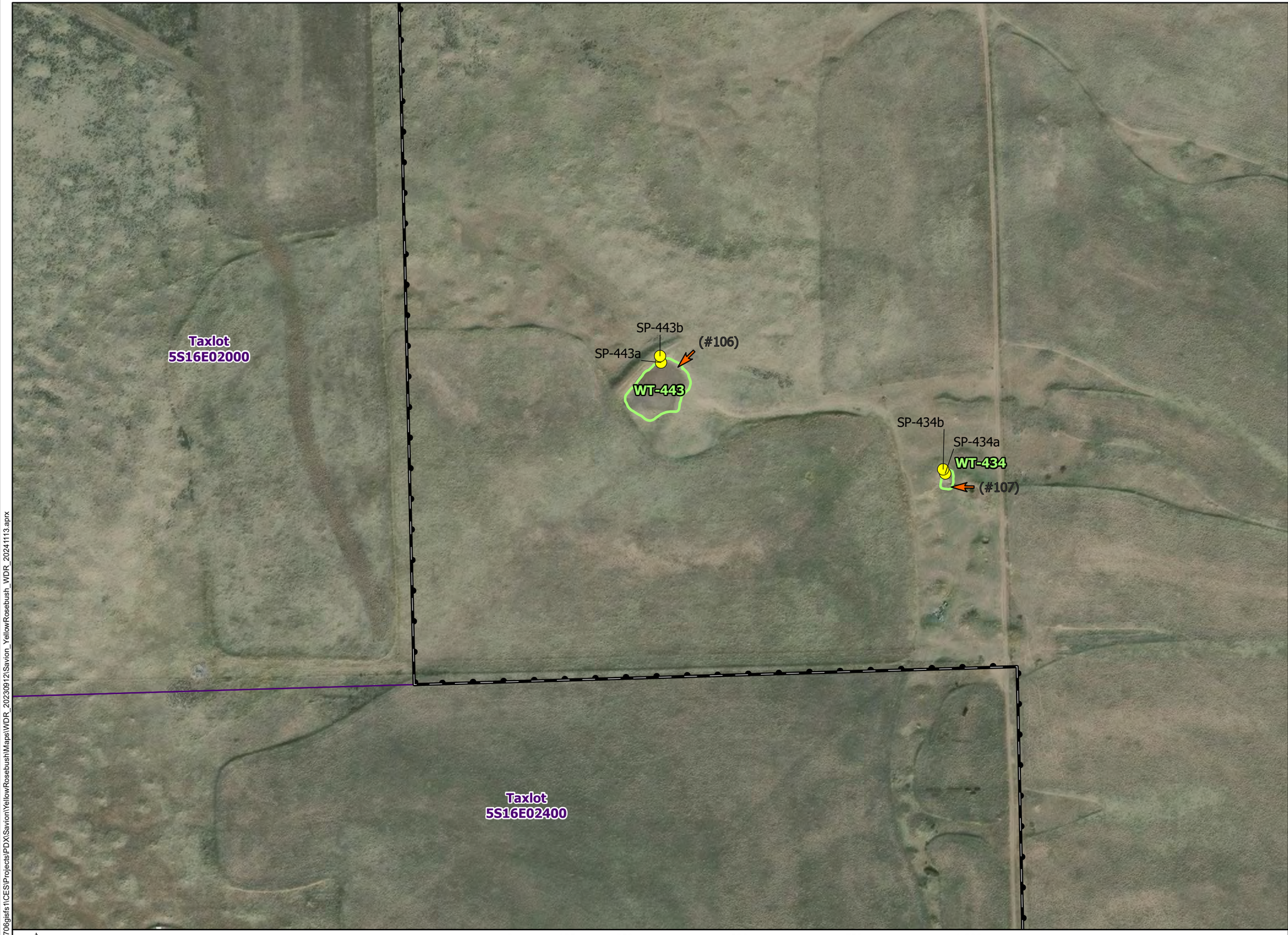
NOT FOR CONSTRUCTION

\\Cess706gisfs1\CES\Projects\PDX\Savion\YellowRosebush\Maps\WDR_20230912\Savion_YellowRosebush_WDR_20241113.aprx

Yellow Rosebush Energy Park

Figure 5.2.38
Wetland Delineation Map

WASCO COUNTY, OR

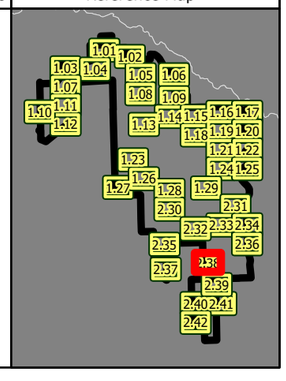


- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Sample Plot
- Field Delineated Wetland

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N 0 125 250 500 750 1,000 Feet

NOT FOR CONSTRUCTION

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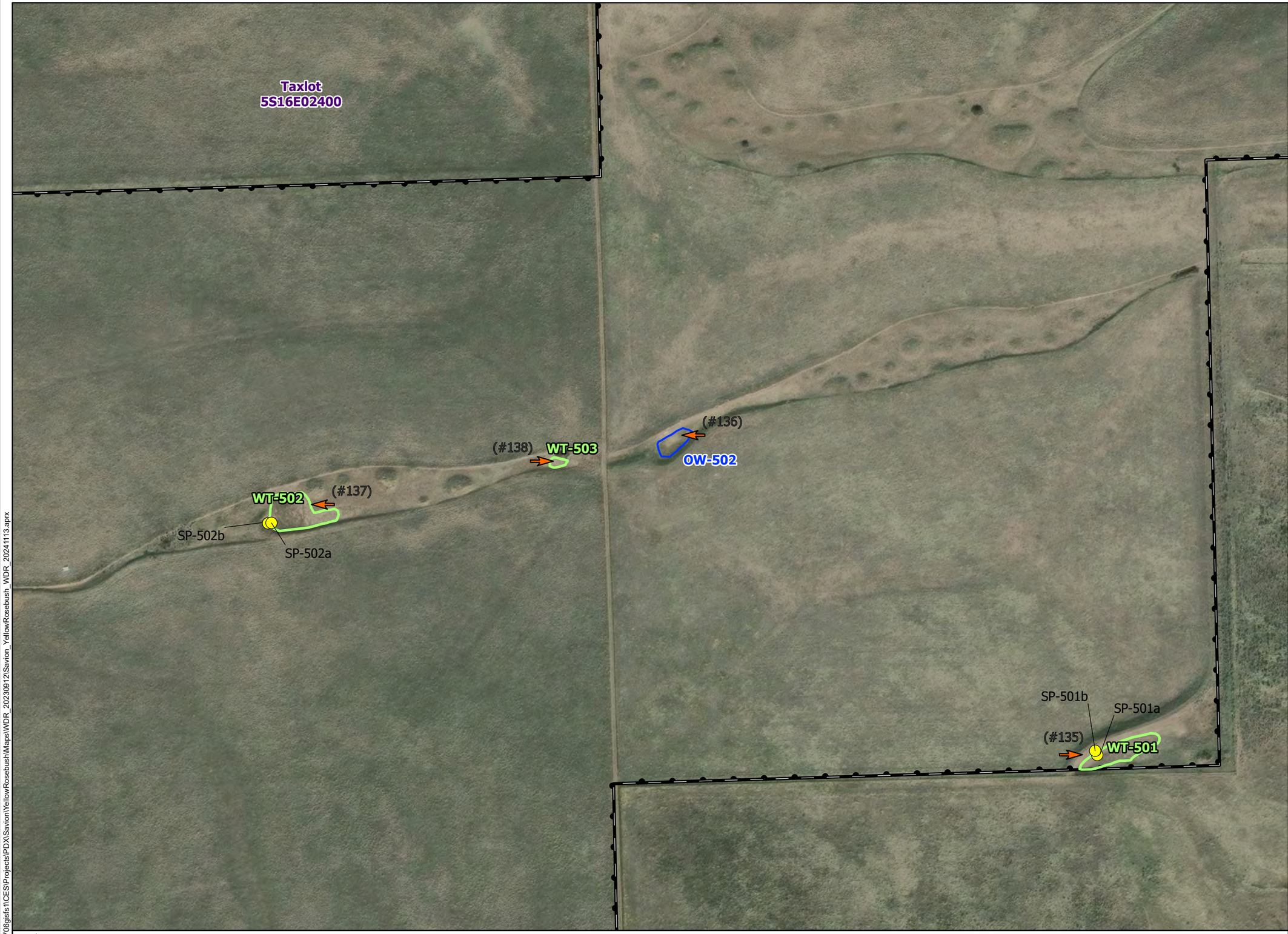
Yellow Rosebush Energy Park

Figure 5.2.39
Wetland Delineation Map

WASCO COUNTY, OR

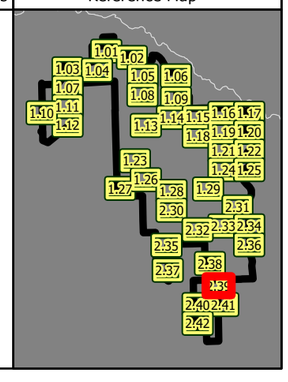


- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Sample Plot
- Field Delineated Stream
- Field Delineated Wetland

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N

0 125 250 500 750 1,000 Feet

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.2.40
Wetland Delineation Map

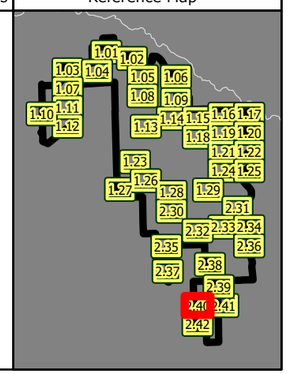
WASCO COUNTY, OR

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Field Delineated Stream

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N

0 125 250 500 750 1,000 Feet

NOT FOR CONSTRUCTION

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Yellow Rosebush Energy Park

Figure 5.2.41
Wetland Delineation Map

WASCO COUNTY, OR

(#109)

(#108)

SP-445b

SP-445a

(#110)

WT-445

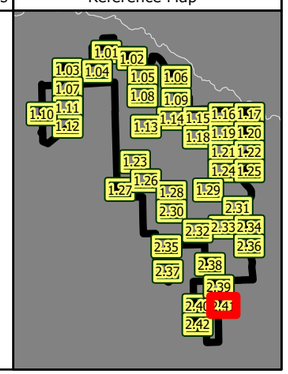
- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Sample Plot
- Field Delineated Wetland

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH

SAVION
A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

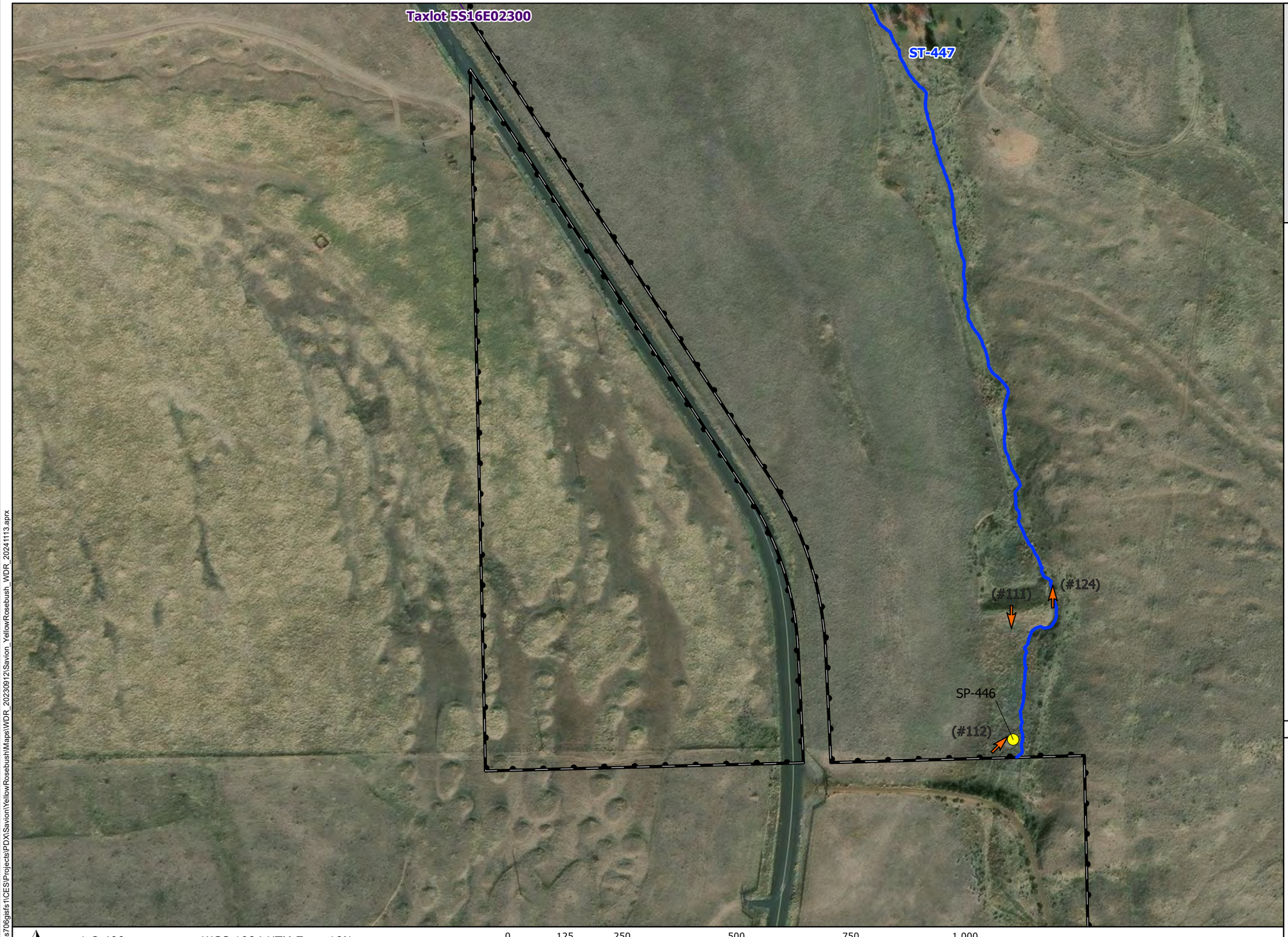
1:2,400

WGS 1984 UTM Zone 10N

0 125 250 500 750 1,000 Feet

NOT FOR CONSTRUCTION

\\Cess706gisfs1\CES\Projects\PDX\Savion\YellowRosebush\Maps\WDR_20230912\Savion_YellowRosebush_WDR_20241113.aprx



Yellow Rosebush Energy Park

Figure 5.2.42
Wetland Delineation Map

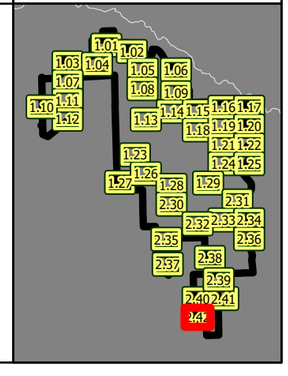
WASCO COUNTY, OR

- Study Area
- Taxlot Boundary
- Photo Point (# Photo Number)
- Sample Plot
- Field Delineated Stream

All delineated wetlands and waters are considered to extend outside of the study area unless otherwise noted

Wetland boundaries, sample plots, and photo points were collected using a sub-meter grade GPS device collecting real-time, sub-meter GNSS data. Mapped features are </= 1 meter of the ground location.

TETRA TECH SAVION A RENEWABLE ENERGY COMPANY

Data Sources	Reference Map
Savion-Project Infrastructure; Tiger-Roads; ESRI-Topographic	

1:2,400 WGS 1984 UTM Zone 10N

0 125 250 500 750 1,000 Feet

NOT FOR CONSTRUCTION

\\Cess706gisfs1\CES\Projects\PDX\Savion\YellowRosebush\Maps\WDR_20230912\Savion_YellowRosebush_WDR_20241113.aprx

Appendix A.

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WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Yellow Rose Bush City/County: Wasco County Sampling Date: 2024-11-06

Applicant/Owner: Savion State: Oregon Sampling Point: SP-500a

Investigator(s): Lauren Stebbins, Edward Strohmaier Section, Township, Range: sec 35 T004S R015E

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0-2

Subregion (LRR): LRR B, MLRA 8 Lat: 45.170824 Long: -120.900674 Datum: WGS84

Soil Map Unit Name: Condon silt loam, 2 to 12 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓ No _____	**Is the Sampled Area within a Wetland?** **Yes ✓ No _____**
Hydric Soil Present?	Yes ✓ No _____	
Wetland Hydrology Present?	Yes ✓ No _____	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. Hordeum marinum	25	Y	FAC
2. Polygonum polygaloides	20	Y	FACW
3. Gnaphalium palustre	20	Y	FACW
4. Epilobium campestre	15	N	OBL
5. Bromus tectorum	5	N	NI
6.			
7.			
8.			
	85.0 = Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	0 = Total Cover		

% Bare Ground in Herb Stratum 15 % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	15	x 1 =	15
FACW species	40	x 2 =	80
FAC species	25	x 3 =	75
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	80 (A)		170.00 (B)

Prevalence Index = B/A = 2.12

Hydrophytic Vegetation Indicators:

✓ Dominance Test is >50%

✓ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes ✓ No _____**

Remarks:

SOIL

Sampling Point: SP-500a

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/2	100					SICL	
4-10	10YR 3/3	100					SICL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ✓ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Rock

Depth (inches): 10

Hydric Soil Present? **Yes** ✓ **No** ___

Remarks:

Problematic soils

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ 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)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ✓ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✓ Depth (inches): ___

Water Table Present? Yes ___ No ✓ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ✓ Depth (inches): ___

Wetland Hydrology Present? **Yes** ✓ **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Yellow Rose Bush City/County: Wasco County Sampling Date: 2024-11-06

Applicant/Owner: Savion State: Oregon Sampling Point: SP-500b

Investigator(s): Lauren Stebbins, Edward Strohmaier Section, Township, Range: sec 35 T004S R015E

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 0-2

Subregion (LRR): LRR B, MLRA 8 Lat: 45.170866 Long: -120.900653 Datum: WGS84

Soil Map Unit Name: Condon silt loam, 2 to 12 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. Bromus tectorum	55	Y	NI
2. Festuca idahoensis	20	Y	FACU
3. Achillea millefolium	15	N	FACU
4. Thinopyrum intermedium	10	N	NI
5.			
6.			
7.			
8.			
	100.0 = Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	0 = Total Cover		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	35	x 4 =	140
UPL species	0	x 5 =	0
Column Totals:	35 (A)		140.00 (B)

Prevalence Index = B/A = 4.0

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks:

SOIL

Sampling Point: SP-500b

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 2/2	100					SIL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Rock

Depth (inches): 8

Hydric Soil Present? Yes _____ No ✓

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ 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)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Yellow Rose Bush City/County: Wasco County Sampling Date: 2024-11-06

Applicant/Owner: Savion State: Oregon Sampling Point: SP-501a

Investigator(s): Edward Strohmaier, Lauren Stebbins Section, Township, Range: sec 21 T005S R016E

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0-2

Subregion (LRR): LRR B, MLRA 8 Lat: 45.116437 Long: -120.825789 Datum: WGS84

Soil Map Unit Name: Condon silt loam, 2 to 12 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓ No _____	**Is the Sampled Area within a Wetland?** **Yes ✓ No _____**
Hydric Soil Present?	Yes ✓ No _____	
Wetland Hydrology Present?	Yes ✓ No _____	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. Epilobium campestre	30	Y	OBL
2. Eleocharis palustris	25	Y	OBL
3. Gnaphalium palustre	15	N	FACW
4. Polygonum aviculare	10	N	FAC
5.			
6.			
7.			
8.			
	80.0 = Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	0 = Total Cover		

% Bare Ground in Herb Stratum 20 % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	55	x 1 =	55
FACW species	15	x 2 =	30
FAC species	10	x 3 =	30
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	80 (A)		115.00 (B)

Prevalence Index = B/A = 1.44

Hydrophytic Vegetation Indicators:

✓ Dominance Test is >50%

✓ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes ✓ No _____**

Remarks:

SOIL

Sampling Point: SP-501a

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 2/2	100					SICL	
4-10	10YR 2/2	95	5YR 4/6	5	C	M	SICL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ✓ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Rock

Depth (inches): 10

Hydric Soil Present? Yes ✓ **No** ___

Remarks:

Rocks on surface and throughout profile.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ 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)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ✓ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✓ Depth (inches): ___

Water Table Present? Yes ___ No ✓ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ✓ Depth (inches): ___

Wetland Hydrology Present? Yes ✓ **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Yellow Rose Bush City/County: Wasco County Sampling Date: 2024-11-06

Applicant/Owner: Savion State: Oregon Sampling Point: SP-501b

Investigator(s): Edward Strohmaier, Lauren Stebbins Section, Township, Range: sec 21 T005S R016E

Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): None Slope (%): 3-7

Subregion (LRR): LRR B, MLRA 8 Lat: 45.116468 Long: -120.825802 Datum: WGS84

Soil Map Unit Name: Condon silt loam, 2 to 12 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. Taeniatherum caput-medusae	55	Y	NI
2. Poa bulbosa	45	Y	FACU
3.			
4.			
5.			
6.			
7.			
8.			
	100.0 = Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	0 = Total Cover		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	45	x 4 =	180
UPL species	0	x 5 =	0
Column Totals:	45 (A)		180.00 (B)

Prevalence Index = B/A = 4.0

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks:

SOIL

Sampling Point: SP-501b

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 3/2	100					SIL	
3-10	10YR 2/2	100					SICL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Rock

Depth (inches): 10

Hydric Soil Present? Yes _____ No ✓

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ 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)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Yellow Rose Bush City/County: Wasco County Sampling Date: 2024-11-06

Applicant/Owner: Savion State: Oregon Sampling Point: SP-502a

Investigator(s): Edward Strohmaier, Lauren Stebbins Section, Township, Range: sec 20 T005S R016E

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0-2

Subregion (LRR): LRR B, MLRA 8 Lat: 45.117959 Long: -120.832698 Datum: WGS84

Soil Map Unit Name: Condon-Bakeoven complex, 2 to 20 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓ No _____	**Is the Sampled Area within a Wetland?** **Yes ✓ No _____**
Hydric Soil Present?	Yes ✓ No _____	
Wetland Hydrology Present?	Yes ✓ No _____	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. Myosurus minimus	75	Y	OBL
2. Navarretia intertexta	5	N	FACW
3.			
4.			
5.			
6.			
7.			
8.			
	80.0 = Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	0 = Total Cover		

% Bare Ground in Herb Stratum 20 % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	75	x 1 =	75
FACW species	5	x 2 =	10
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	80 (A)		85.00 (B)

Prevalence Index = B/A = 1.06

Hydrophytic Vegetation Indicators:

✓ Dominance Test is >50%

✓ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes ✓ No _____**

Remarks:

SOIL

Sampling Point: SP-502a

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/2	90	10YR 3/6	10	C	M	SICL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ✓ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Rock refusal

Depth (inches): 4

Hydric Soil Present? Yes ✓ No ___

Remarks:

Rocks on surface and exposed bedrock

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ 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)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ✓ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✓ Depth (inches): ___

Water Table Present? Yes ___ No ✓ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ✓ Depth (inches): ___

Wetland Hydrology Present? Yes ✓ No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Yellow Rose Bush City/County: Wasco County Sampling Date: 2024-11-06

Applicant/Owner: Savion State: Oregon Sampling Point: SP-502b

Investigator(s): Edward Strohmaier, Lauren Stebbins Section, Township, Range: sec 20 T005S R016E

Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): None Slope (%): 3-7

Subregion (LRR): LRR B, MLRA 8 Lat: 45.117958 Long: -120.832727 Datum: WGS84

Soil Map Unit Name: Condon-Bakeoven complex, 2 to 20 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____ No ✓	
Wetland Hydrology Present?	Yes _____ No ✓	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. Taeniatherum caput-medusae	55	Y	NI
2. Achillea millefolium	20	Y	FACU
3. Thinopyrum intermedium	15	N	NI
4. Tragopogon dubius	10	N	NI
5.			
6.			
7.			
8.			
	100.0 = Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	0 = Total Cover		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	20	x 4 =	80
UPL species	0	x 5 =	0
Column Totals:	20 (A)		80.00 (B)

Prevalence Index = B/A = 4.0

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks:

SOIL

Sampling Point: SP-502b

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 3/4	100					SICL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Rock

Depth (inches): 10

Hydric Soil Present? Yes _____ No ✓

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ 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)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Yellow Rose Bush City/County: Wasco County Sampling Date: 2024-11-06

Applicant/Owner: Savion State: Oregon Sampling Point: SP-504a

Investigator(s): Lauren Stebbins, Edward Strohmaier Section, Township, Range: sec 17 T005S R016E

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0-2

Subregion (LRR): LRR B, MLRA 8 Lat: 45.136269 Long: -120.830788 Datum: WGS84

Soil Map Unit Name: Bakeoven-Condon complex, 2 to 20 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓ No _____	**Is the Sampled Area within a Wetland?** **Yes ✓ No _____**
Hydric Soil Present?	Yes ✓ No _____	
Wetland Hydrology Present?	Yes ✓ No _____	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. Deschampsia danthonioides	45	Y	FACW
2. Navarretia intertexta	45	Y	FACW
3. Psilocarphus brevissimus	10	N	FACW
4.			
5.			
6.			
7.			
8.			
	100.0 = Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	0 = Total Cover		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		200.00 (B)

Prevalence Index = B/A = 2.0

Hydrophytic Vegetation Indicators:

✓ Dominance Test is >50%

✓ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes ✓ No _____**

Remarks:

SOIL

Sampling Point: SP-504a

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/3	100					SIL	
4-7	10YR 4/3	100					SI	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ✓ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Rock

Depth (inches): 7

Hydric Soil Present? **Yes** ✓ **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ 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)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ✓ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✓ Depth (inches): ___

Water Table Present? Yes ___ No ✓ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ✓ Depth (inches): ___

Wetland Hydrology Present? **Yes** ✓ **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Yellow Rose Bush City/County: Wasco County Sampling Date: 2024-11-06

Applicant/Owner: Savion State: Oregon Sampling Point: SP-504b

Investigator(s): Edward Strohmaier, Lauren Stebbins Section, Township, Range: sec 17 T005S R016E

Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): None Slope (%): 3-7

Subregion (LRR): LRR B, MLRA 8 Lat: 45.136300 Long: -120.830780 Datum: WGS84

Soil Map Unit Name: Bakeoven-Condon complex, 2 to 20 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. Taeniatherum caput-medusae	25	Y	NI
2. Thinopyrum intermedium	20	Y	NI
3. Poa bulbosa	15	Y	FACU
4.			
5.			
6.			
7.			
8.			
	60.0 = Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	0 = Total Cover		

% Bare Ground in Herb Stratum 40 % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	15	x 4 =	60
UPL species	0	x 5 =	0
Column Totals:	15 (A)		60.00 (B)

Prevalence Index = B/A = 4.0

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks:

SOIL

Sampling Point: SP-504b

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/3	100					SCL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Rock refusal

Depth (inches): 4

Hydric Soil Present? Yes _____ No ✓

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ 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)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Yellow Rose Bush City/County: Wasco County Sampling Date: 2024-11-06

Applicant/Owner: Savion State: Oregon Sampling Point: UP-500

Investigator(s): Edward Strohmaier, Lauren Stebbins Section, Township, Range: sec 19 T005S R016E

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): Microtopography Slope (%): 0-2

Subregion (LRR): LRR B, MLRA 8 Lat: 45.125456 Long: -120.853487 Datum: WGS84

Soil Map Unit Name: Playas NWI classification: PEM1J

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. Ventenata dubia	55	Y	NI
2. Taeniatherum caput-medusae	45	Y	NI
3. Bromus tectorum	5	N	NI
4.			
5.			
6.			
7.			
8.			
	105.0 = Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	0 = Total Cover		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	0 (A)		0.00 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks:

SOIL

Sampling Point: UP-500

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 4/1	100					SICL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Rock

Depth (inches): 10

Hydric Soil Present? Yes _____ No ✓

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ 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)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Yellow Rose Bush City/County: Wasco County Sampling Date: 2024-11-06

Applicant/Owner: Savion State: Oregon Sampling Point: UP-501

Investigator(s): Edward Strohmaier, Lauren Stebbins Section, Township, Range: sec 18 T005S R016E

Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 0-2

Subregion (LRR): LRR B, MLRA 8 Lat: 45.130583 Long: -120.850788 Datum: WGS84

Soil Map Unit Name: Condon silt loam, 2 to 12 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	0 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.			
2.			
3.			
4.			
5.			
	0 = Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. Ventenata dubia	55	Y	NI
2. Bromus tectorum	20	Y	NI
3. Thinopyrum intermedium	20	Y	NI
4. Taeniatherum caput-medusae	5	N	NI
5.			
6.			
7.			
8.			
	100.0 = Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
	0 = Total Cover		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	0 (A)		0.00 (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks:

SOIL

Sampling Point: UP-501

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 4/2	100					SICL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ 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 Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Rock

Depth (inches): 10

Hydric Soil Present? Yes _____ No ✓

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ 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)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Appendix B.

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Photo Point 132.jpg, Date: 11/6/2024, Notes: Upland mound within vernal pool., Direction: NW

Photo Point 133.jpg, Date: 11/6/2024, Notes: No wetland indicators present., Direction: SE

Photo Point 134.jpg, Date: 11/6/2024, Notes: Cheatgrass and intermediate wheat grass dominants. No hydrology indicators., Direction: NW

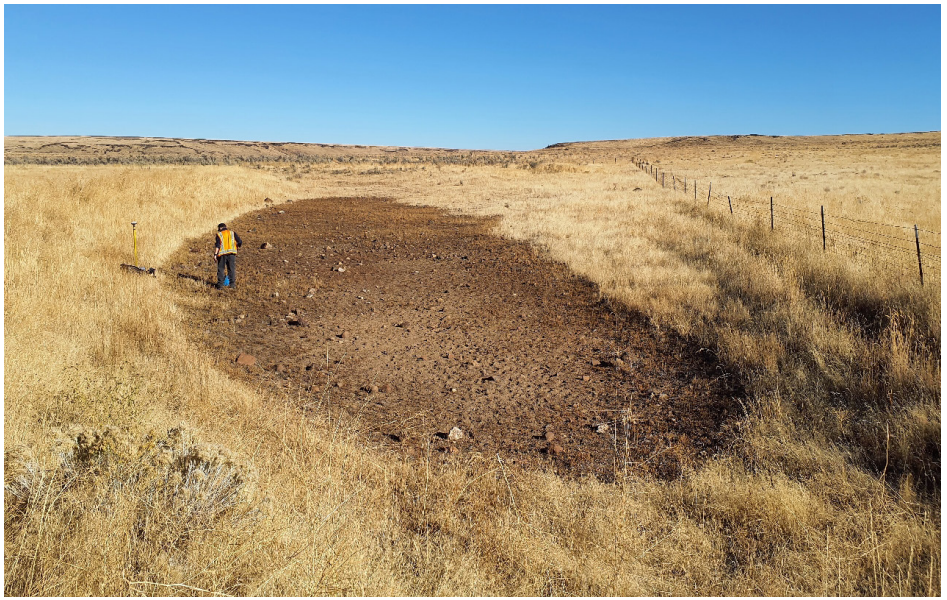

Photo Point 135.jpg, Date: 11/6/2024, Notes: Wetland with berm to the north, vernal pool species present., Direction: E

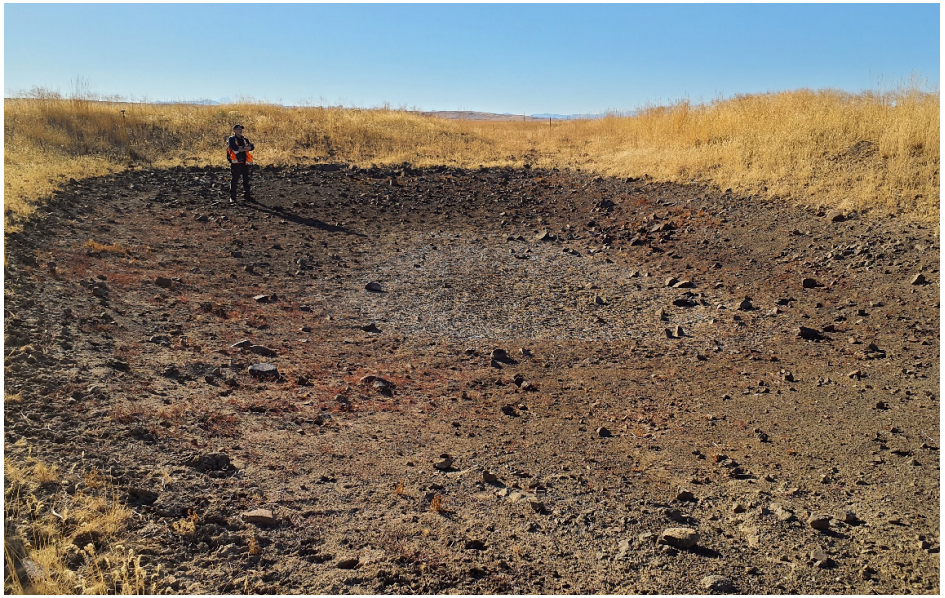

Photo Point 136.jpg, Date: 11/6/2024, Notes: Dry pond with less than 5% vegetation., Direction: W

Photo Point 137.jpg, Date: 11/6/2024, Notes: Vernal pool within swale., Direction: W

Photo Point 138.jpg, Date: 11/6/2024, Notes: Small vernal pool, reference sample plots to the west., Direction: E

Photo Point 139.jpg, Date: 11/6/2024, Notes: Wetland with silty soils and vernal pool species., Direction: W