


MEMO

To: Bob Patterson, City of Pendleton, Oregon
From: Shiloh Simrell, Biologist 
Subject: **City of Pendleton, Oregon - N.W. H Avenue - State Environmental Review Process (SERP)**
Date: November 21, 2022
Job/File No. 77-60-111 (w/encl.)
cc: Brad Baird, P.E., Anderson Perry & Associates, Inc. (AP) (w/encl.)
Dana Kurtz, Senior Environmental Scientist, AICP, AP (w/o encl.)

Introduction

The purpose of this memo is to provide a complete environmental review for the City of Pendleton's N.W. H Avenue project. The environmental review is intended to assist with meeting requirements for the SERP. This memo is cursory in nature and may need to be revised once site design and funding is known so design impacts can be analyzed and revisions can be made to meet any specific funding program requirements. This memo includes the existing environment of the project area and the environmental consequences of the proposed action alternative and the no action alternative.

Project Description and Location

The City of Pendleton intends to construct a bus barn on a portion of an 8.9-acre site located south of N.W. H Avenue. The bus barn is anticipated to occupy only 0.6 acre of the site; however, the City is requesting an environmental review of the entire site. Future development will likely include ground disturbance and impervious surfaces. For the purpose of this memo, "project" refers to the construction of the bus barn. Although a likely location has been identified, this memo assumes that the bus barn could potentially be located on any portion of the 8.9-acre site. If additional construction needs are identified, this memo could be updated to include a review of impacts associated with additional work.

The proposed project area is located in the City of Pendleton, Umatilla County, Oregon. The proposed project area is located between N.W. H Avenue and N.W. K Avenue and bounded by N.W. 49th Street and N.W. 47th Street in the northwest portion of the City near the Pendleton Airport. The legal description for the proposed project area is Township 2 North, Range 32 East, Section 5, Willamette Meridian (see Attachment A, Figures).

Existing Environment

The following resources were reviewed, and potential impacts to each resource are described along with potential mitigation measures and required permits. This section is divided into two sections: resources that are not anticipated to affect the project area and resources that may affect the project area.

The following resource categories are not anticipated to affect the project area.

Air Quality

Umatilla County is not listed as a designated nonattainment or maintenance county (Environmental Protection Agency [EPA], 2022a) (see Attachment B, Documentation). The project may involve an increase in short-term emissions for construction but would not have a long-term impact on air quality. Best management practices to manage fugitive dust will be implemented during construction. Oregon Department of Environmental Quality (DEQ) guidance would be adhered to for all construction involving non-friable asbestos-insulated water (transite) pipes. The project is not anticipated to have long-term impacts on air quality.

Drinking Water

Development on this property would likely not involve direct discharges to groundwater or negative impacts to drinking water resources for the City of Pendleton, either during construction or post-construction. If drinking water will be used on site, it is anticipated to be used through the City's existing municipal supply. The project area is not located within or near a sole source aquifer for drinking water (EPA, 2022b) (see Attachment B, Documentation). Therefore, the project is not anticipated to impact drinking water resources.

Coastal Resources

In Oregon, the Coastal Zone Management Act applies to Clatsop, Columbia, Tillamook, Washington, Yamhill, Lincoln, Polk, Benton, Lane, Douglas, Coos, and Curry Counties. The entire City of Pendleton is within Umatilla County, outside Oregon's coastal zone (Oregon Department of Land Conservation and Development [DLCDC], 2022) (see Attachment B, Documentation). The project will not require consultation with the DLCDC and will not impact the Coastal Zone Management Area.

Hazardous Materials, Solid Waste, and Pollution Prevention

The DEQ Facility Profiler-lite permitted sites map shows no permitted sites within the immediate vicinity of the project area (DEQ, 2022). Five environmental cleanup sites are located within a 2-mile radius of the project area (see Attachment B, Documentation).

- Dobyns & Hart Pest Control - Pendleton (1105). Contaminated site; no further action required. The pesticide facility burned on December 21, 1990. Stabilization and disposal of the fire debris were completed on September 23, 1991. A no further action determination was issued on July 6, 1992. This site is unlikely to affect the project area based on distance and cleanup actions.

- Robert Hart Storage Facility (5818). Contaminated site; no further action required. In January 2013, the DEQ's Hazardous Waste (HW) program documented a large amount of improperly managed containers of pesticides at this site and evidence of soil contamination. The operators removed and properly disposed of the containers under an order issued by the HW Program. A no further action determination was issued on April 12, 2016. This site is unlikely to affect the project area based on distance and cleanup actions.
- Hart-Springbok Chemical (Former) (5019). Contaminated site; suspect site requiring further investigation. A warehouse fire occurred on July 14, 2011. The majority of chemicals were reportedly agricultural herbicides, including diuron, glyphogon, amine 2-40, and Base Camp Roundup. Yellow-stained soil was discovered after the July 2011 removal action. A 10,000-gallon underground storage tank was also discovered on site. The EPA performed a comprehensive Targeted Brownfields Assessment at the site in May 2013. Analytes detected above established regulatory criteria were limited to two metals, eight pesticides, two polyaromatic hydrocarbons, and four semi-volatile organic compounds. Further, the 2,3,7,8-tetrachlorodibenzo-P-dioxin toxicity equivalence exceeded regulatory criteria at some locations. Additional cleanup actions are required to be performed at the site to address the contamination. This site is unlikely to affect the project area based on distance from the contaminated site.
- Eastern Oregon Adolescent Multi-Treatment Center (EOAMTC) (1899). Contaminated site; listed on the Confirmed Release List (CRL) or inventory. This site is the proposed location of the EOAMTC. As part of the development process, the U.S. Department of Agriculture recommended a site assessment to evaluate the former agricultural chemical storage facility located immediately north and upslope of the site. The chlorinated pesticide dieldrin was detected in the soil. The contamination is believed to have migrated from an off-site source and occurred before EOMATC purchased the property, but the time of release is unknown. Due to the depth of groundwater in the area (greater than 100 feet), it is unlikely that the release at this site has impacted groundwater. The site was capped on August 10, 1998. Further remediation in the form of altering on- and off-site drainage and developing/implementing a cap-maintenance program will be required for a DEQ no further action determination. This site is unlikely to affect the project area based on the project area being upgradient from the contaminated site.
- Hart-Swenson Property - TL 317 (2000). Contaminated site; listed on CRL or inventory. Known releases of contamination from this site consist of chlorinated pesticides (mainly dieldrin) that have impacted shallow soil and drainage ditches. These releases were recorded on October 1, 1998; however, the time of release is unknown. An Expanded Preliminary Assessment (XPA) was completed on December 16, 1998. A Remedial Investigation/Feasibility Study is recommended to identify the nature and extent of contamination and assess potential remedial actions. The site is a medium priority for further investigation based on XPA results. This site is unlikely to affect the project area based on the project area being upgradient from the contaminated site.

Due to the distance of the project area from the environmental cleanup sites listed above, it is unlikely that contaminated soil and/or groundwater from these sites would be encountered during construction.

Natural Resources and Energy Supply

New development would likely require the use of consumable resources. Supplies of electricity and fuels are sufficient to accommodate the current and future demands of the City. Therefore, the project is not anticipated to have any impacts on natural resources and energy supply resources.

Socioeconomics and Low Income and Minority Populations

The project area is currently undeveloped, with one building on the southern edge of the project area. The proposed development will not require the relocation of residents or community businesses, will not reduce the service levels of roads serving the City and surrounding communities, and will not disrupt or divide the physical arrangement of an established community. Within the City of Pendleton the percentage of minority residents is 16 percent and the percentage of low income residents is 38 percent (EPA, 2022c) (see Attachment B, Documentation). The project is not anticipated to have negative impacts on socioeconomics and low income and minority populations.

Wild and Scenic Rivers

The urban growth boundary and incorporated city limits of Pendleton are located within the Umatilla River Watershed (HUC8 ID No. 17070103), and no rivers in this watershed are designated as wild and scenic on the National Wild and Scenic Rivers System (NWSRS) (NWSRS, 2022) (see Attachment B, Documentation). Therefore, the project is not anticipated to have any impacts on wild and scenic rivers.

Floodplains

According to the Federal Emergency Management Agency (FEMA) Flood Map Service Center, the project area is located within Zone X, area of minimal flood hazard (FEMA, 2022) (see Attachment B, Documentation). Therefore, the project is not anticipated to have any impacts on floodplain resources.

Park Land or Other Public Lands of Recognized Scenic or Recreational Value

The project area does not occur within or near park land or public lands of recognized scenic or recreational value (City of Pendleton Parks and Recreation Department, 2022) (see Attachment B, Documentation). Therefore, the project is not anticipated to have any impacts on park land or other public lands of recognized scenic or recreational value.

The following resource categories may affect the project. Environmental consequences are addressed below.

Historic and Cultural Resources

The Oregon Archaeological Records Remote Access database was consulted on July 18, 2022, by Rebecca Friedlander, M.A., RPA, AP project archaeologist. The search indicated there were no cultural resources within the project area. Ten previous surveys have been conducted within 1 mile

of the project area. The surveys were primarily completed for infrastructure improvements, particularly at parks, highways, and the airport. None of the surveys overlap the project area (Oregon Parks and Recreation Department [OPRD], 2022a).

Several structures are listed as unevaluated for inclusion to the National Register of Historic Places (NRHP) or non-contributing to a historic district within 1 mile of the project area, including building foundations from World War II and airport runways 11-29 and 7-25 (Colon et al., 2021; Valentino et al., 2017). These structures are not expected to be impacted by the proposed project.

The Oregon Historic Sites Database was consulted for historic properties within 1 mile of the project area. The Pendleton Airport is approximately 0.5 mile north of the project area. It is listed eligible/contributing for inclusion to the NRHP. The Pendleton Airport Gatehouses are also 0.5 mile north of the project area and are listed as undetermined/unevaluated for inclusion to the NRHP. Neither of these properties is anticipated to be impacted by the proposed project. No historic properties are listed on the NRHP within 1 mile of the project area (OPRD, 2022b).

A cultural resource inventory was conducted within the project area on June 10, 2022, by Lindsay Costigan, B.S. (AP staff archaeologist) and Rebecca Friedlander, M.A., RPA (AP project archaeologist) and supervised off site by Stephanie O'Brien, M.A., RPA (AP senior archaeologist). This inventory resulted in the identification of no cultural resources, although ground visibility was generally poor throughout the project area. No further work is needed at this time. AP recommends, if required by project funding or desired by the City due to a potential to encounter cultural resources, excavation of shovel test probes (STPs) to identify subsurface cultural resources within the proposed project footprint once the locations and designs of structures and improvements have been finalized (see Attachment C, Cultural Resource Inventory Report).

Wetlands and Rivers

The U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory Mapper shows that no wetlands or waterways occur within the project area (USFWS, 2022a). A wetland determination was conducted by Shiloh Simrell, AP biologist, on June 10, 2022. No wetlands or waterways were identified within the project area (see Attachment B, Documentation). Any expansion of impervious surfaces may require a DEQ Post-Construction Stormwater Management Plan. A National Pollutant Discharge Elimination System (NPDES) 1200-C Construction Stormwater Permit would be required if construction disturbs more than 1 acre of land and has the potential to discharge to surface waters.

Farmland

The project area is located within city limits and within land zoned Light Industrial. The project area is not located within Exclusive Farm Use (EFU) land (see Attachment B, Documentation). According to the Natural Resources Conservation Service (NRCS) Web Soil Survey, the project area is listed as prime farmland if irrigated (NRCS, 2022). A land use request application may need to be submitted to the Umatilla County Department of Land Use Planning for the project; this should be verified upon final design.

Protected Species and Habitat

Lists of federally protected species for the project area were obtained from the USFWS and the National Marine Fisheries Service (NMFS) databases. The USFWS list indicates that bull trout (*Salvelinus confluentus*) may occur within the project area (USFWS, 2022b). According to StreamNet, bull trout occur only within the Umatilla River, approximately 1 mile south of the project area (StreamNet, 2022). The NMFS list indicates that Middle Columbia River steelhead (*Oncorhynchus mykiss*) may occur within the project area (NMFS, 2022). According to StreamNet, steelhead occur only within the Umatilla River, approximately 1 mile south of the project area (StreamNet, 2022). Due to the distance to the Umatilla River from the project area, species residing in the river are unlikely to be affected by the project (see Attachment D, Biological Evaluation [BE]). However, if additional construction needs are identified, the BE could be updated to include a review of potential impacts associated with additional work.

Environmental Consequences

Environmental consequences for each of the applicable environmental impact categories are addressed for the project. Two alternatives are discussed in this section: the proposed action alternative and the no action alternative. Environmental consequences are not discussed for air quality; drinking water; coastal resources; hazardous materials, solid waste, and pollution prevention; natural resources and energy supply; socioeconomics and low income and minority populations; wild and scenic rivers; floodplains; and park land or other public lands of recognized scenic or recreational value because no impacts to these resources are anticipated.

Historic and Cultural Resources

Proposed Action

No cultural resources were recorded in or within 1 mile of the project area. No NRHP-listed or historically significant properties within 1 mile of the project area are anticipated to be impacted. A cultural resource inventory was conducted within the project area on June 10, 2022. This inventory resulted in the identification of no cultural resources, although ground visibility was generally poor throughout the project area. No further work is needed at this time. AP recommends, if required by project funding or desired by the City due to a potential to encounter cultural resources, excavation by STPs to identify subsurface cultural resources within the proposed project footprint once the locations and designs of structures and improvements have been finalized. It is anticipated that when funding is determined, the lead agency would conduct any needed consultation.

No Action Alternative

Under the no action alternative, there would be no impacts to historic and cultural resources.

Wetlands and Rivers

Proposed Action

No wetlands or waterways were identified within the project area. Therefore, wetlands and waterways will not be impacted as a result of the proposed action, and no additional work is anticipated to be required. Any expansion of impervious surfaces may require a DEQ Post-Construction Stormwater Management Plan. An NPDES 1200-C Construction Stormwater Permit will be required if construction disturbs more than 1 acre of land and has the potential to discharge to surface waters.

No Action Alternative

Under the no action alternative, there would be no impacts to wetlands and rivers.

Farmland

Proposed Action

The project area is located within land zoned Light Industrial. The project area is not located within EFU zoned land. Therefore, the proposed action is anticipated to have no impact to farmland. A land use request application may need to be submitted to the Umatilla County Department of Land Use Planning for the project; this should be verified upon final design.

No Action Alternative

Under the no action alternative, there would be no impacts to farmland.

Protected Species and Habitat

Proposed Action

Federally protected species utilize the Umatilla River approximately 1 mile south of the project area. Due to the distance from the Umatilla River to the project area, it is anticipated that species residing in the river are unlikely to be affected by the proposed action. No additional work is anticipated to be required. However, if additional construction needs are identified, the BE could be updated to include a review of impacts associated with additional work. It is anticipated that when funding is determined, the lead agency would conduct any needed consultation.

No Action Alternative

Under the no action alternative, there would be no impacts to protected species and habitat.

Conclusion

The conclusion of this SERP memo is that no impacts to air quality; drinking water; coastal resources; hazardous materials, solid waste, and pollution prevention; natural resources and energy supply; socioeconomics and low-income minority populations; wild and scenic rivers; floodplains; or park land or other public lands of recognized scenic or recreational value are anticipated. Impacts to historic and cultural resources, wetlands and rivers, farmland, or protected species and habitat may require additional work, as discussed in the Environmental Consequences section of this memo, to ensure compliance with land use laws (Land Use Application and 1200-C Permit) and cultural resources protection.

If additional details related to project design or funding are available, this memo should be updated with new analysis as needed.

References

City of Pendleton Parks & Recreation (2022). Parks Map. Accessed July 2022.
<https://pendletonparksandrec.com/parksrec/page/parks-map>.

Colon, Justin B, Johanna Kahn, and Katherine Wilson (2021). Runway 29 Threshold Displacement and Hotspot Mitigation, Eastern Oregon Regional Airport, Pendleton, Umatilla County, Oregon. Report Number 31721. On file at the Oregon SHPO, Salem, Oregon.

Federal Emergency Management Agency (2022). FEMA Flood Map Service Center. Accessed July 2022.
<https://msc.fema.gov/portal/search?AddressQuery=97801>.

National Marine Fisheries Service (2022). Protected Resources App. Accessed July 2022.
<https://www.webapps.nwfsc.noaa.gov/portal/apps/webappviewer/index.html?id=7514c715b8594944a6e468dd25aaacc9>.

National Wild and Scenic Rivers System (2022). National Wild and Scenic Rivers System in the U.S. Accessed July 2022.
<https://nps.maps.arcgis.com/apps/MapJournal/index.html?appid=ba6debd907c7431ea765071e9502d5ac#>.

Natural Resources Conservation Service (2022). Web Soil Survey. Accessed July 2022.
<https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>.

Oregon Department of Environmental Quality (DEQ) (2022). DEQ Facility Profiler-Lite Permitted Sites. Accessed July 2022. <https://hdcgcx1.deq.state.or.us/Html5viewer291/?viewer=FacilityProfilerLite>.

Oregon Department of Land Conservation and Development (2022). Interactive Map of the Oregon Coastal Zone. Accessed July 2022. <https://www.coastalatlantlas.net/czfinder/>.

Oregon Parks and Recreation Department (OPRD) (2022a). Oregon Archaeological Records Remote Access. Accessed July 2022. maps.prd.state.or.us/shpo/archaeoview.html

OPRD (2022b). Oregon Historic Sites Database. Accessed July 2022. heritagedata.prd.state.or.us/historic

StreamNet (2022). StreamNet Mapper. Accessed July 2022.

<https://psmfc.maps.arcgis.com/apps/webappviewer/index.html?id=3be91b0a32a9488a901c3885bbfc2b0b>.

U.S. Environmental Protection Agency (EPA) (2022a). Counties Designated as “Nonattainment” or “Maintenance” for Clean Air Act’s National Ambient Air Quality Standards (NAAQS). Accessed July 2022. <https://www3.epa.gov/airquality/greenbook/map/mapnmpoll.pdf>.

EPA (2022b). Interactive Map of Sole Source Aquifers. Accessed July 2022.

<https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=9ebb047ba3ec41ada1877155fe31356b>.

EPA (2022c). EJScreen: Environmental Justice Screening and Mapping Tool. Accessed July 2022.

<https://ejscreen.epa.gov/mapper/>.

U.S. Fish and Wildlife Service (USFWS) (2022a). National Wetlands Inventory. Surface Waters and Wetlands. Accessed July 2022. <https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/>.

USFWS (2022b). Information for Planning and Consultation Official Species List. Accessed July 2022.

<https://ecos.fws.gov/ipac/>.

Valentino, Alice, Katie Wilson, and Chris Lockwood (2017). Eastern Oregon Regional Airport Runway 7-25 Rehabilitation Project, Pendleton, Umatilla County, Oregon. Report Number 29490. On file at the Oregon SHPO, Salem, Oregon.

SS/jg

Enclosures

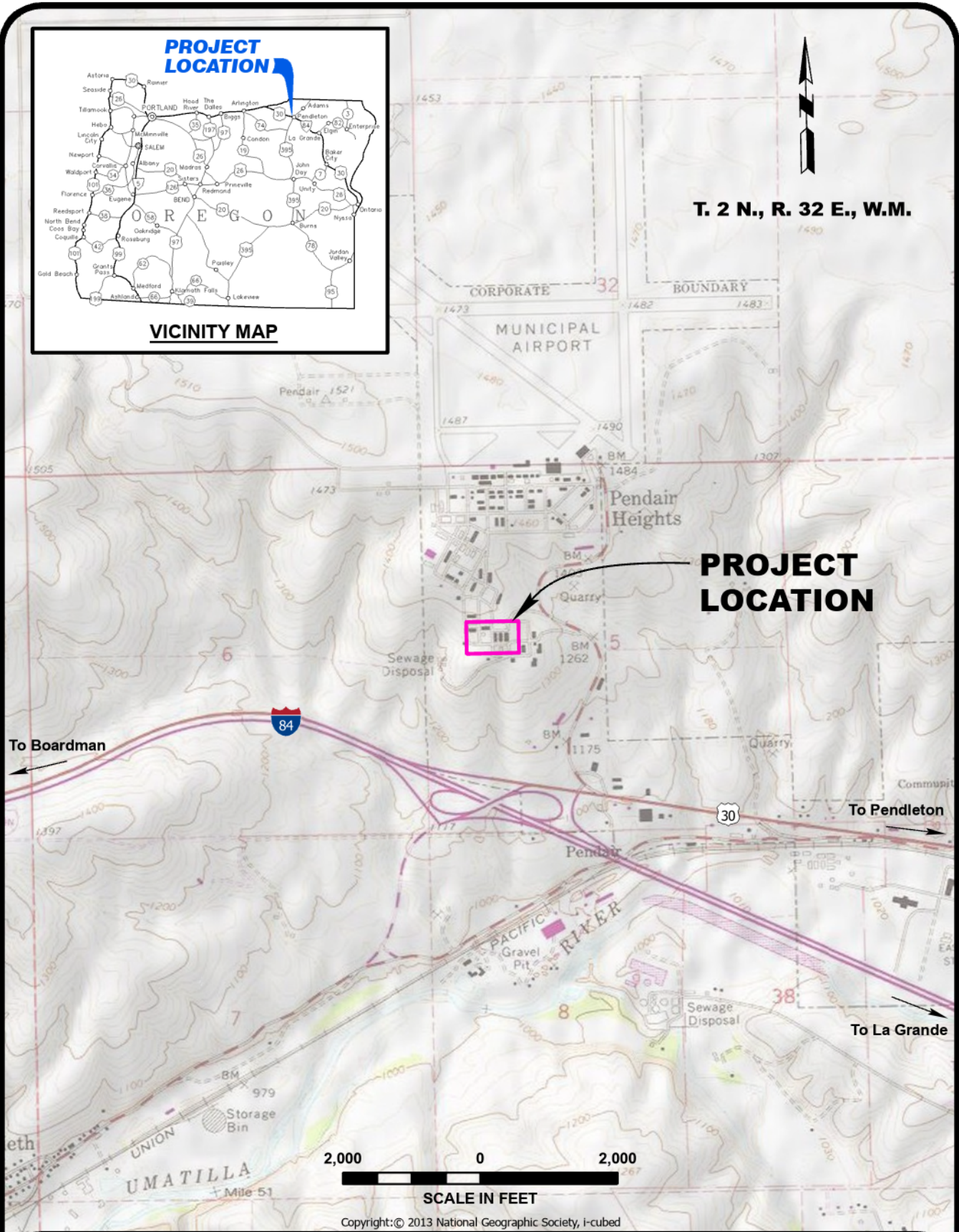
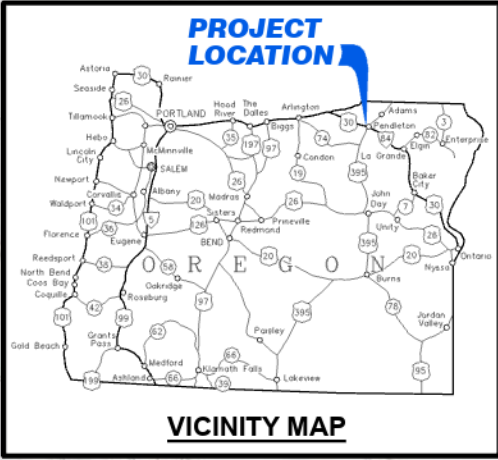
Attachment A - Figures

Attachment B - Documentation

Attachment C - Cultural Resource Inventory Report

Attachment D - Biological Evaluation

ATTACHMENT A
Figures



X:\Clients\Pendleton OR\77-60 EnvServices-NW H Ave\SERP-77-60-Figures.aprx, SERP-77-60-FIG01_LocVic, 7/18/2022 10:55 AM, gsaumbier

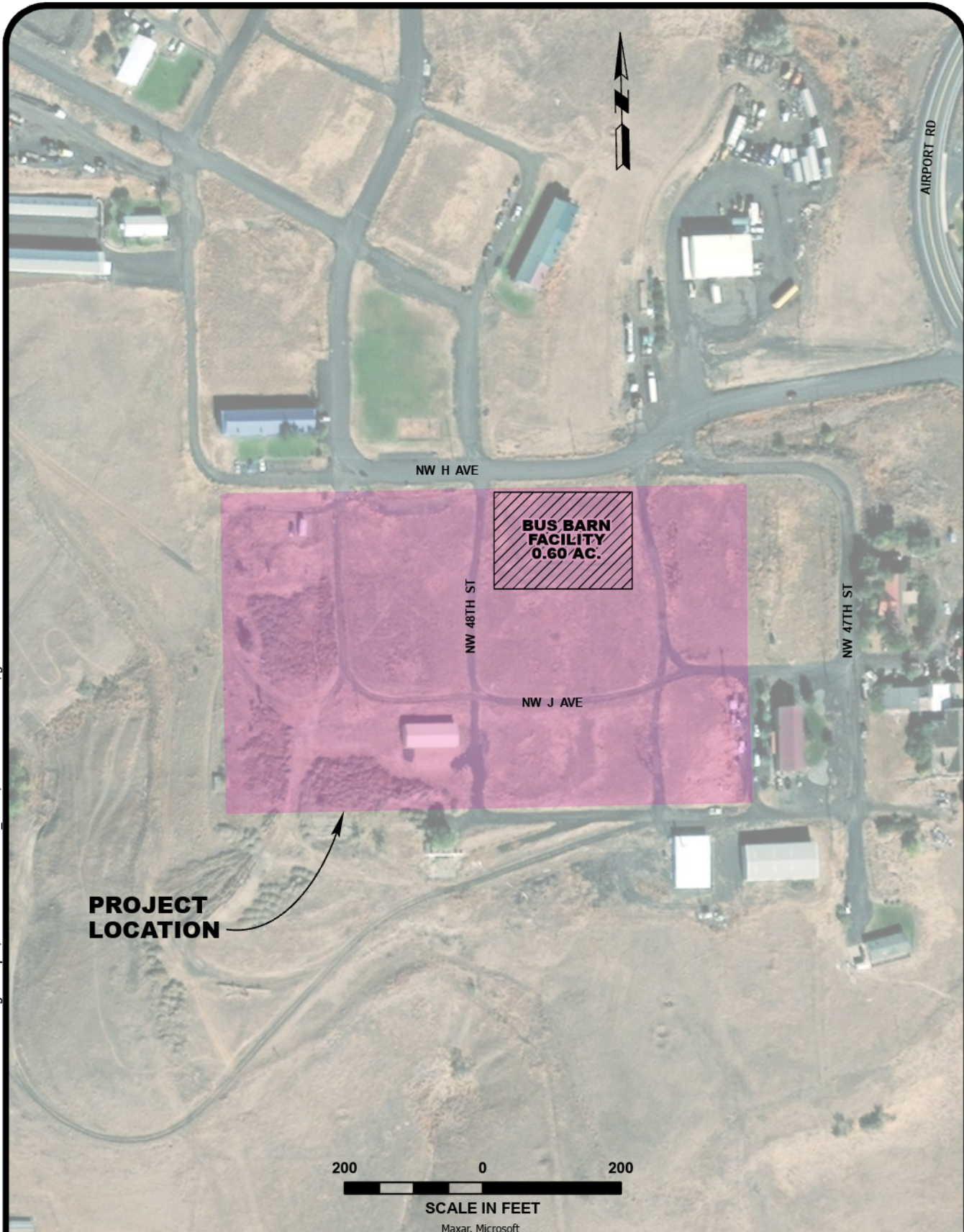


**CITY OF
PENDLETON, OREGON**
N.W. H AVENUE
STATE ENVIRONMENTAL REVIEW PROCESS MEMO

LOCATION AND VICINITY MAPS

**FIGURE
1**

X:\clients\Pendleton OR\77-60 EnvServices-NW H Ave\SERP\M-77-60-Figures.aprx, SERPM-77-60-FIG02_Aerial, 7/18/2022 10:55 AM, gsaubier



**PROJECT
LOCATION**

**BUS BARN
FACILITY
0.60 AC.**

NW H AVE

NW 48TH ST

NW J AVE

NW 47TH ST

AIRPORT RD

200 0 200

SCALE IN FEET

Maxar, Microsoft

ap anderson
perry
& associates, inc.

**CITY OF
PENDLETON, OREGON**
N.W. H AVENUE
STATE ENVIRONMENTAL REVIEW PROCESS MEMO

FIGURE

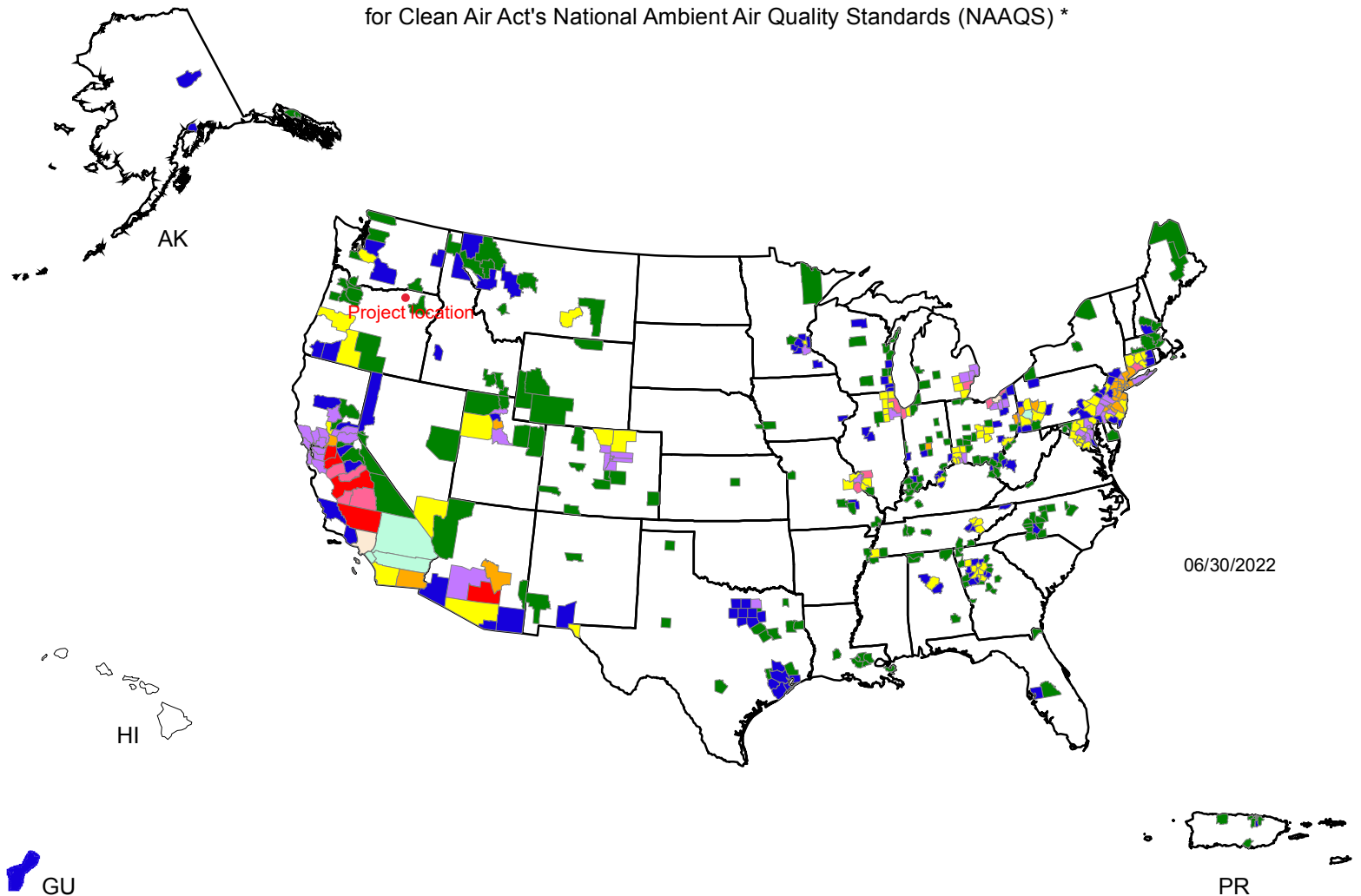
2

AERIAL PHOTOGRAPH

ATTACHMENT B
Documentation

Counties Designated "Nonattainment" or "Maintenance"

for Clean Air Act's National Ambient Air Quality Standards (NAAQS) *



Legend **

- County Designated Nonattainment or Maintenance for 9 NAAQS Pollutants
- County Designated Nonattainment or Maintenance for 8 NAAQS Pollutants
- County Designated Nonattainment or Maintenance for 7 NAAQS Pollutants
- County Designated Nonattainment or Maintenance for 6 NAAQS Pollutants
- County Designated Nonattainment or Maintenance for 5 NAAQS Pollutants
- County Designated Nonattainment or Maintenance for 4 NAAQS Pollutants
- County Designated Nonattainment or Maintenance for 3 NAAQS Pollutants
- County Designated Nonattainment or Maintenance for 2 NAAQS Pollutants
- County Designated Nonattainment or Maintenance for 1 NAAQS Pollutants


* The National Ambient Air Quality Standards (NAAQS) are health standards for Carbon Monoxide, Lead (1978 and 2008), Nitrogen Dioxide, 8-hour Ozone (2008), Particulate Matter (PM-10 and PM-2.5 (1997, 2006 and 2012), and Sulfur Dioxide.(1971 and 2010)

** Included in the counts are counties designated for NAAQS and revised NAAQS pollutants. Revoked 1-hour (1979) and 8-hour Ozone (1997) are excluded. Partial counties, those with part of the county designated nonattainment and part attainment, are shown as full counties on the map.

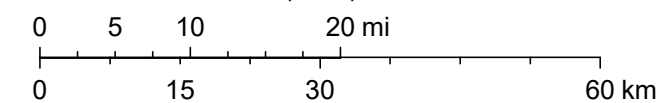
ArcGIS Web AppBuilder



7/15/2022, 12:24:14 PM

 Sole_Source_Aquifers

1:1,155,581



Esri, HERE, Garmin, NGA, USGS, NPS



Facility Profiler-Lite Sites

Environmental Cleanup Site Information (ECSI)

- Contaminated Site. Listed on CRL or Inventory
- Contaminated Site. No further action required
- Contaminated Site. Suspect site requiring further investigation
- Study Area. Listed on CRL or Inventory
- Study Area. Suspect site requiring further investigation

Hazardous Waste (HAZWASTE)

- Generator
- TSD

Leaking Underground Storage Tanks (LUST)

- Regulated LUST - Cleanup started
- Regulated LUST - Reported
- Regulated LUST - Cleanup completed
- Non-regulated LUST - Cleanup started
- Non-regulated LUST - Reported
- Non-regulated LUST - Cleanup completed

Solid Waste Information Facility Tracking (SWIFT)

Tracking, Reporting & Admin. of Air Contaminated Sources (TRAACS)

Underground Storage Tanks (UST)



Project location

Location: City: Pendleton city
 Ring (buffer): 0-mile radius
 Description:

Summary of ACS Estimates	2015 - 2019
Population	16,365
Population Density (per sq. mile)	1,513
People of Color Population	3,628
% People of Color Population	22%
Households	5,754
Housing Units	6,641
Housing Units Built Before 1950	1,863
Per Capita Income	26,466
Land Area (sq. miles) (Source: SF1)	10.81
% Land Area	99%
Water Area (sq. miles) (Source: SF1)	0.08
% Water Area	1%

	2015 - 2019 ACS Estimates	Percent	MOE (±)
Population by Race			
Total	16,365	100%	488
Population Reporting One Race	15,648	96%	1,037
White	13,772	84%	448
Black	319	2%	79
American Indian	427	3%	97
Asian	290	2%	127
Pacific Islander	47	0%	34
Some Other Race	792	5%	252
Population Reporting Two or More Races	718	4%	102
Total Hispanic Population	1,887	12%	234
Total Non-Hispanic Population	14,478		
White Alone	12,737	78%	441
Black Alone	311	2%	79
American Indian Alone	378	2%	97
Non-Hispanic Asian Alone	260	2%	127
Pacific Islander Alone	47	0%	34
Other Race Alone	211	1%	253
Two or More Races Alone	533	3%	81
Population by Sex			
Male	8,652	53%	241
Female	7,714	47%	298
Population by Age			
Age 0-4	914	6%	96
Age 0-17	3,556	22%	224
Age 18+	12,809	78%	254
Age 65+	2,612	16%	184

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race.

N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2015 - 2019

Location: City: Pendleton city
 Ring (buffer): 0-mile radius
 Description:

	2015 - 2019 ACS Estimates	Percent	MOE (±)
Population 25+ by Educational Attainment			
Total	11,275	100%	262
Less than 9th Grade	359	3%	81
9th - 12th Grade, No Diploma	923	8%	114
High School Graduate	3,342	30%	141
Some College, No Degree	3,162	28%	160
Associate Degree	1,275	11%	86
Bachelor's Degree or more	2,213	20%	122
Population Age 5+ Years by Ability to Speak English			
Total	15,451	100%	467
Speak only English	14,099	91%	395
Non-English at Home ¹⁺²⁺³⁺⁴	1,352	9%	136
¹ Speak English "very well"	929	6%	131
² Speak English "well"	236	2%	51
³ Speak English "not well"	135	1%	56
⁴ Speak English "not at all"	53	0%	42
³⁺⁴ Speak English "less than well"	187	1%	69
²⁺³⁺⁴ Speak English "less than very well"	423	3%	73
Linguistically Isolated Households*			
Total	17	100%	22
Speak Spanish	17	100%	19
Speak Other Indo-European Languages	0	0%	12
Speak Asian-Pacific Island Languages	0	0%	12
Speak Other Languages	0	0%	12
Households by Household Income			
Household Income Base	5,754	100%	143
< \$15,000	811	14%	101
\$15,000 - \$25,000	539	9%	82
\$25,000 - \$50,000	1,261	22%	116
\$50,000 - \$75,000	1,154	20%	86
\$75,000 +	1,989	35%	126
Occupied Housing Units by Tenure			
Total	5,754	100%	143
Owner Occupied	3,282	57%	124
Renter Occupied	2,472	43%	123
Employed Population Age 16+ Years			
Total	13,217	100%	285
In Labor Force	7,446	56%	230
Civilian Unemployed in Labor Force	623	5%	117
Not In Labor Force	5,771	44%	221

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of anyrace.

N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS)

*Households in which no one 14 and over speaks English "very well" or speaks English only.

Location: City: Pendleton city
 Ring (buffer): 0-mile radius
 Description:

	2015 - 2019 ACS Estimates	Percent	MOE (±)
Population by Language Spoken at Home*			
Total (persons age 5 and above)	8,339	100%	397
English	7,634	92%	397
Spanish	543	7%	153
French	2	0%	17
French Creole	N/A	N/A	N/A
Italian	N/A	N/A	N/A
Portuguese	N/A	N/A	N/A
German	11	0%	19
Yiddish	N/A	N/A	N/A
Other West Germanic	N/A	N/A	N/A
Scandinavian	N/A	N/A	N/A
Greek	N/A	N/A	N/A
Russian	N/A	N/A	N/A
Polish	N/A	N/A	N/A
Serbo-Croatian	N/A	N/A	N/A
Other Slavic	N/A	N/A	N/A
Armenian	N/A	N/A	N/A
Persian	N/A	N/A	N/A
Gujarathi	N/A	N/A	N/A
Hindi	N/A	N/A	N/A
Urdu	N/A	N/A	N/A
Other Indic	N/A	N/A	N/A
Other Indo-European	2	0%	17
Chinese	0	0%	17
Japanese	N/A	N/A	N/A
Korean	0	0%	17
Mon-Khmer, Cambodian	N/A	N/A	N/A
Hmong	N/A	N/A	N/A
Thai	N/A	N/A	N/A
Laotian	N/A	N/A	N/A
Vietnamese	45	1%	116
Other Asian	62	1%	71
Tagalog	4	0%	17
Other Pacific Island	N/A	N/A	N/A
Navajo	N/A	N/A	N/A
Other Native American	N/A	N/A	N/A
Hungarian	N/A	N/A	N/A
Arabic	0	0%	17
Hebrew	N/A	N/A	N/A
African	N/A	N/A	N/A
Other and non-specified	32	0%	36
Total Non-English	705	8%	561

Data Note: Detail may not sum to totals due to rounding. Hispanic population can be of any race.
 N/A means not available. **Source:** U.S. Census Bureau, American Community Survey (ACS) 2015 - 2019.
 *Population by Language Spoken at Home is available at the census tract summary level and up.



National Wild and Scenic River System in the U.S.

Wild and Scenic Rivers

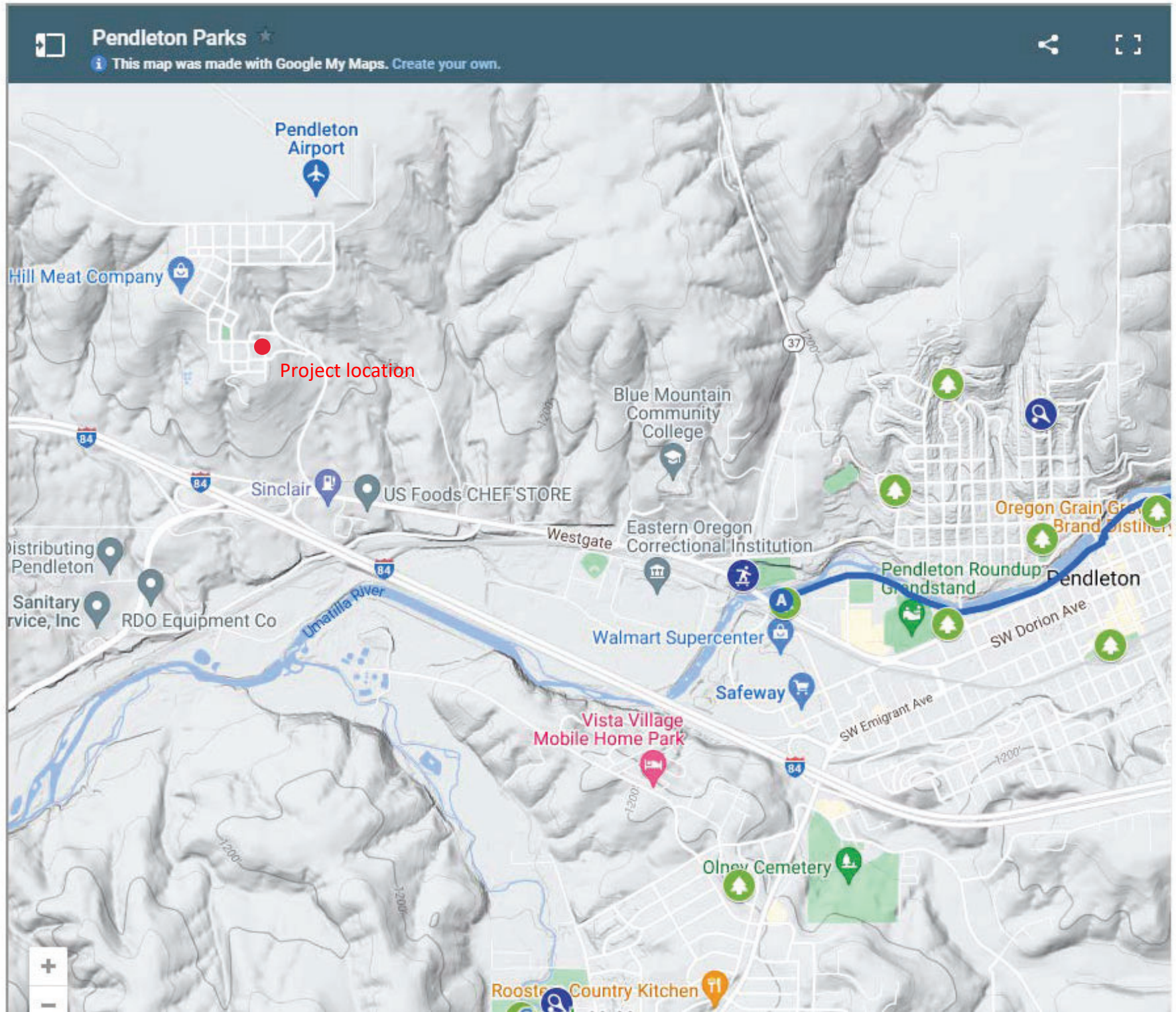
There are 226 national wild and scenic rivers in 40 States and the Commonwealth of Puerto Rico, totaling more than 13,412 miles (as of April 2019). This is a little more than one-quarter of one percent of the nation's rivers.



Photo (above). West Fork of the Chattooga River, Georgia and South Carolina (Tim Palmer).

The United States Forest Service, National Park Service, Bureau of Land Management, and the United States Fish and Wildlife are the four primary federal agencies with responsibility for the National Wild and

Parks Map





National Wetlands Inventory

surface waters and wetlands

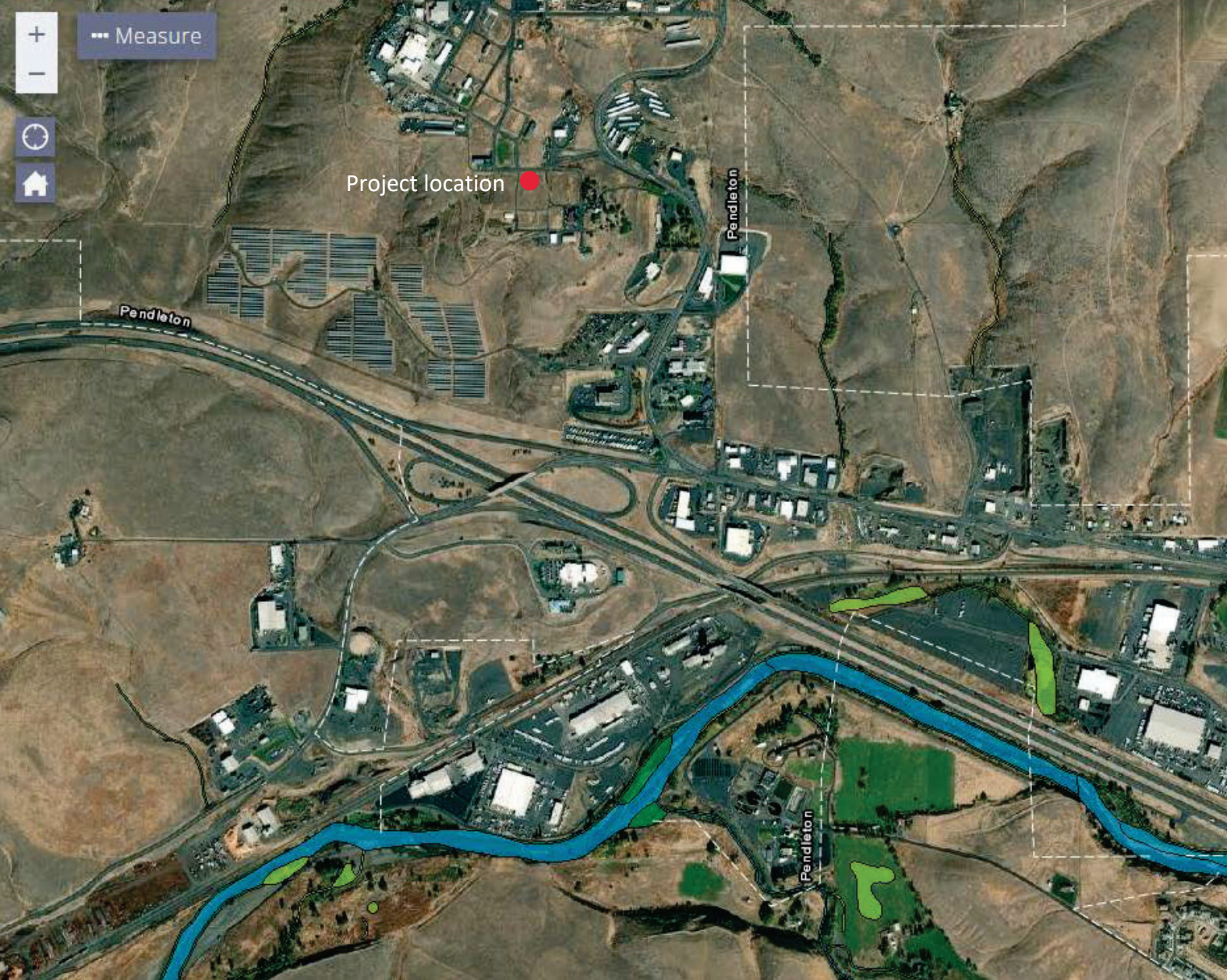
BASEMAPS >

MAP LAYERS >

- Wetlands 1 2
- Riparian 1 2
- Riparian Mapping Areas 1 2
- Data Source 1 2
 - Source Type
 - Image Scale
 - Image Year
- Areas of Interest ?
- FWS Managed Lands 1 2
- Historic Wetland Data 1 2

+ Measure

-



**City of Pendleton, Oregon
N.W. H Avenue
Wetland Determination
Site Photographs**



Photograph 1 - Looking northwest at plot 1. Photograph taken by Shiloh Simrell on June 10, 2022.



Photograph 2 - Looking northeast at plot 2. Photograph taken by Shiloh Simrell on June 10, 2022.



Photograph 3 - Looking north at plot 3. Photograph taken by Shiloh Simrell on June 10, 2022.



Photograph 4 - Looking northwest at plot 4. Photograph taken by Shiloh Simrell on June 10, 2022.



Photograph 5 - Looking southwest at plot 5. Photograph taken by Shiloh Simrell on June 10, 2022.



Photograph 6 - Looking southwest at plot 6. Photograph taken by Shiloh Simrell on June 10, 2022.



Photograph 7 - Looking southeast at plot 7. Photograph taken by Shiloh Simrell on June 10, 2022.



Photograph 8 - Looking south at plot 8. Photograph taken by Shiloh Simrell on June 10, 2022.



WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: City of Pendleton - Environmental Services for 8.9 Acres Sou City/County: Pendleton/Umatilla Sampling Date: 06/10/2022
 Applicant/Owner: City of Pendleton State: Oregon Sampling Point: 1
 Investigator(s): Shiloh Simrell Section, Township, Range: T2N R32E Section 5
 Landform (hillslope, terrace, etc): Hillslope Local relief (concave, convex, none): concave Slope (%): 5
 Subregion (LRR): B Lat: 45.681868 Long: -118.84601683 Datum: WM
 Soil Map Unit Name: Walla Walla silt loam, 1 to 7 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 <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>				
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>				
Remarks:						

VEGETATION - Use scientific names of plants.

<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%;">Tree Stratum (Plot size: _____)</th> <th style="width: 10%;">Absolute % Cover</th> <th style="width: 10%;">Dominant Species?</th> <th style="width: 10%;">Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>2. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>3. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>4. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td colspan="4" style="text-align: right;">0 = Total Cover</td></tr> </tbody> </table> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%;">Sapling/Shrub Stratum (Plot size: _____)</th> <th style="width: 10%;">Absolute % Cover</th> <th style="width: 10%;">Dominant Species?</th> <th style="width: 10%;">Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>2. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>3. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>4. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>5. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td colspan="4" style="text-align: right;">0 = Total Cover</td></tr> </tbody> </table> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%;">Herb Stratum (Plot size: <u>4m2</u>)</th> <th style="width: 10%;">Absolute % Cover</th> <th style="width: 10%;">Dominant Species?</th> <th style="width: 10%;">Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. <u>Bromus tectorum / Downy chess, Cheat grass, Downy chess</u></td><td style="text-align: center;">60</td><td style="text-align: center;">Yes</td><td style="text-align: center;">NI</td></tr> <tr><td>2. <u>Erodium / Stork's bill</u></td><td style="text-align: center;">40</td><td style="text-align: center;">Yes</td><td style="text-align: center;">NI</td></tr> <tr><td>3. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>4. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>5. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>6. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>7. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>8. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td colspan="4" style="text-align: right;">100 = Total Cover</td></tr> </tbody> </table> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%;">Woody Vine Stratum (Plot size: _____)</th> <th style="width: 10%;">Absolute % Cover</th> <th style="width: 10%;">Dominant Species?</th> <th style="width: 10%;">Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>2. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td colspan="4" style="text-align: right;">0 = Total Cover</td></tr> </tbody> </table> <p>% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____</p>	Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	1. _____	_____	_____	_____	2. _____	_____	_____	_____	3. _____	_____	_____	_____	4. _____	_____	_____	_____	0 = Total Cover				Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	1. _____	_____	_____	_____	2. _____	_____	_____	_____	3. _____	_____	_____	_____	4. _____	_____	_____	_____	5. _____	_____	_____	_____	0 = Total Cover				Herb Stratum (Plot size: <u>4m2</u>)	Absolute % Cover	Dominant Species?	Indicator Status	1. <u>Bromus tectorum / Downy chess, Cheat grass, Downy chess</u>	60	Yes	NI	2. <u>Erodium / Stork's bill</u>	40	Yes	NI	3. _____	_____	_____	_____	4. _____	_____	_____	_____	5. _____	_____	_____	_____	6. _____	_____	_____	_____	7. _____	_____	_____	_____	8. _____	_____	_____	_____	100 = Total Cover				Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	1. _____	_____	_____	_____	2. _____	_____	_____	_____	0 = Total Cover				<p>Dominance Test worksheet:</p> <p>Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)</p> <p>Total Number of Dominant Species Across All Strata: <u>2</u> (B)</p> <p>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.0</u> (A/B)</p> <p>Prevalence Index worksheet:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;">Total % Cover of:</th> <th style="width: 10%;"></th> <th style="width: 10%;">Multiply by:</th> <th style="width: 10%;"></th> </tr> </thead> <tbody> <tr><td>OBL species</td><td style="text-align: center;">0</td><td>x 1 =</td><td style="text-align: center;">0</td></tr> <tr><td>FACW species</td><td style="text-align: center;">0</td><td>x 2 =</td><td style="text-align: center;">0</td></tr> <tr><td>FAC species</td><td style="text-align: center;">0</td><td>x 3 =</td><td style="text-align: center;">0</td></tr> <tr><td>FACU species</td><td style="text-align: center;">0</td><td>x 4 =</td><td style="text-align: center;">0</td></tr> <tr><td>UPL species</td><td style="text-align: center;">100</td><td>x 5 =</td><td style="text-align: center;">500</td></tr> <tr><td>Column Totals:</td><td style="text-align: center;">100</td><td>(A)</td><td style="text-align: center;">500 (B)</td></tr> </tbody> </table> <p style="text-align: right;">Prevalence Index = B/A = <u>5.0</u></p> <p>Hydrophytic Vegetation Indicators:</p> <p><input type="checkbox"/> Dominance Test is >50%</p> <p><input type="checkbox"/> Prevalence Index ≤3.0¹</p> <p><input type="checkbox"/> Morphological Adaptations¹ (Provide supporting</p> <p><input type="checkbox"/> Problematic Hydrophytic Vegetation¹ (Explain)</p> <p>¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.</p> <p>Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	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)
Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status																																																																																																																																						
1. _____	_____	_____	_____																																																																																																																																						
2. _____	_____	_____	_____																																																																																																																																						
3. _____	_____	_____	_____																																																																																																																																						
4. _____	_____	_____	_____																																																																																																																																						
0 = Total Cover																																																																																																																																									
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status																																																																																																																																						
1. _____	_____	_____	_____																																																																																																																																						
2. _____	_____	_____	_____																																																																																																																																						
3. _____	_____	_____	_____																																																																																																																																						
4. _____	_____	_____	_____																																																																																																																																						
5. _____	_____	_____	_____																																																																																																																																						
0 = Total Cover																																																																																																																																									
Herb Stratum (Plot size: <u>4m2</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																																																																																																																						
1. <u>Bromus tectorum / Downy chess, Cheat grass, Downy chess</u>	60	Yes	NI																																																																																																																																						
2. <u>Erodium / Stork's bill</u>	40	Yes	NI																																																																																																																																						
3. _____	_____	_____	_____																																																																																																																																						
4. _____	_____	_____	_____																																																																																																																																						
5. _____	_____	_____	_____																																																																																																																																						
6. _____	_____	_____	_____																																																																																																																																						
7. _____	_____	_____	_____																																																																																																																																						
8. _____	_____	_____	_____																																																																																																																																						
100 = Total Cover																																																																																																																																									
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status																																																																																																																																						
1. _____	_____	_____	_____																																																																																																																																						
2. _____	_____	_____	_____																																																																																																																																						
0 = Total Cover																																																																																																																																									
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)																																																																																																																																						
Remarks:																																																																																																																																									

SOIL

Sampling Point: 1

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-7	10YR 4/3	100					Sandy Loam	Could not dig past 7 due to rock.

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

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

- | | |
|--|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) |
| <input type="checkbox"/> Stratified Layers (A5) (LRR C) | <input type="checkbox"/> Depleted Matrix (F3) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR D) | <input type="checkbox"/> Redox Dark Surface (F6) |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Depressions (F8) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Vernal Pools (F9) |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | |

Indicators for Problematic Hydric Soils³:

- 1 cm Muck (A9) **(LRR C)**
- 2 cm Muck (A10) **(LRR B)**
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type: _____
Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

- | | |
|--|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Salt Crust (B11) |
| <input type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Biotic Crust (B12) |
| <input type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Aquatic Invertebrates (B13) |
| <input type="checkbox"/> Water Marks (B1) (Nonriverine) | <input type="checkbox"/> Hydrogen Sulfide Odor (C1) |
| <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) |
| <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) | <input type="checkbox"/> Presence of Reduced Iron (C4) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Thin Muck Surface (C7) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | <input type="checkbox"/> 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 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:

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: City of Pendleton - Environmental Services for 8.9 Acres Sou City/County: Pendleton/Umatilla Sampling Date: 06/10/2022
 Applicant/Owner: City of Pendleton State: Oregon Sampling Point: 2
 Investigator(s): Shiloh Simrell Section, Township, Range: T2N R32E Section 5
 Landform (hillslope, terrace, etc): Hillslope Local relief (concave, convex, none): none Slope (%): 0
 Subregion (LRR): B Lat: 45.6815305 Long: -118.84560217 Datum: WM
 Soil Map Unit Name: Walla Walla silt loam, 1 to 7 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 <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>				
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>				
Remarks:						

VEGETATION - Use scientific names of plants.

<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%;">Tree Stratum (Plot size: _____)</th> <th style="width: 10%;">Absolute % Cover</th> <th style="width: 10%;">Dominant Species?</th> <th style="width: 10%;">Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>2. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>3. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>4. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td colspan="4" style="text-align: right;">0 = Total Cover</td></tr> </tbody> </table> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%;">Sapling/Shrub Stratum (Plot size: _____)</th> <th style="width: 10%;">Absolute % Cover</th> <th style="width: 10%;">Dominant Species?</th> <th style="width: 10%;">Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>2. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>3. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>4. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>5. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td colspan="4" style="text-align: right;">0 = Total Cover</td></tr> </tbody> </table> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%;">Herb Stratum (Plot size: <u>4m2</u>)</th> <th style="width: 10%;">Absolute % Cover</th> <th style="width: 10%;">Dominant Species?</th> <th style="width: 10%;">Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. <u>Bassia scoparia / Mexican-fireweed</u></td><td><u>40</u></td><td><u>Yes</u></td><td><u>FAC</u></td></tr> <tr><td>2. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>3. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>4. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>5. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>6. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>7. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>8. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td colspan="4" style="text-align: right;">40 = Total Cover</td></tr> </tbody> </table> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%;">Woody Vine Stratum (Plot size: _____)</th> <th style="width: 10%;">Absolute % Cover</th> <th style="width: 10%;">Dominant Species?</th> <th style="width: 10%;">Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>2. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td colspan="4" style="text-align: right;">0 = Total Cover</td></tr> </tbody> </table> <p>% Bare Ground in Herb Stratum <u>60</u> % Cover of Biotic Crust _____</p>	Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	1. _____	_____	_____	_____	2. _____	_____	_____	_____	3. _____	_____	_____	_____	4. _____	_____	_____	_____	0 = Total Cover				Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	1. _____	_____	_____	_____	2. _____	_____	_____	_____	3. _____	_____	_____	_____	4. _____	_____	_____	_____	5. _____	_____	_____	_____	0 = Total Cover				Herb Stratum (Plot size: <u>4m2</u>)	Absolute % Cover	Dominant Species?	Indicator Status	1. <u>Bassia scoparia / Mexican-fireweed</u>	<u>40</u>	<u>Yes</u>	<u>FAC</u>	2. _____	_____	_____	_____	3. _____	_____	_____	_____	4. _____	_____	_____	_____	5. _____	_____	_____	_____	6. _____	_____	_____	_____	7. _____	_____	_____	_____	8. _____	_____	_____	_____	40 = Total Cover				Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	1. _____	_____	_____	_____	2. _____	_____	_____	_____	0 = Total Cover				<p>Dominance Test worksheet:</p> <p>Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)</p> <p>Total Number of Dominant Species Across All Strata: <u>1</u> (B)</p> <p>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0</u> (A/B)</p> <p>Prevalence Index worksheet:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;">Total % Cover of:</th> <th style="width: 10%;"></th> <th style="width: 10%;">Multiply by:</th> <th style="width: 10%;"></th> </tr> </thead> <tbody> <tr><td>OBL species</td><td><u>0</u></td><td>x 1 =</td><td><u>0</u></td></tr> <tr><td>FACW species</td><td><u>0</u></td><td>x 2 =</td><td><u>0</u></td></tr> <tr><td>FAC species</td><td><u>40</u></td><td>x 3 =</td><td><u>120</u></td></tr> <tr><td>FACU species</td><td><u>0</u></td><td>x 4 =</td><td><u>0</u></td></tr> <tr><td>UPL species</td><td><u>0</u></td><td>x 5 =</td><td><u>0</u></td></tr> <tr><td>Column Totals:</td><td><u>40</u></td><td>(A)</td><td><u>120</u> (B)</td></tr> </tbody> </table> <p style="text-align: center;">Prevalence Index = B/A = <u>3.0</u></p> <p>Hydrophytic Vegetation Indicators:</p> <p><input checked="" type="checkbox"/> Dominance Test is >50%</p> <p><input checked="" type="checkbox"/> Prevalence Index ≤3.0¹</p> <p><input type="checkbox"/> Morphological Adaptations¹ (Provide supporting _____)</p> <p><input type="checkbox"/> Problematic Hydrophytic Vegetation¹ (Explain _____)</p> <p>¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.</p> <p>Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	Total % Cover of:		Multiply by:		OBL species	<u>0</u>	x 1 =	<u>0</u>	FACW species	<u>0</u>	x 2 =	<u>0</u>	FAC species	<u>40</u>	x 3 =	<u>120</u>	FACU species	<u>0</u>	x 4 =	<u>0</u>	UPL species	<u>0</u>	x 5 =	<u>0</u>	Column Totals:	<u>40</u>	(A)	<u>120</u> (B)
Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status																																																																																																																																						
1. _____	_____	_____	_____																																																																																																																																						
2. _____	_____	_____	_____																																																																																																																																						
3. _____	_____	_____	_____																																																																																																																																						
4. _____	_____	_____	_____																																																																																																																																						
0 = Total Cover																																																																																																																																									
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status																																																																																																																																						
1. _____	_____	_____	_____																																																																																																																																						
2. _____	_____	_____	_____																																																																																																																																						
3. _____	_____	_____	_____																																																																																																																																						
4. _____	_____	_____	_____																																																																																																																																						
5. _____	_____	_____	_____																																																																																																																																						
0 = Total Cover																																																																																																																																									
Herb Stratum (Plot size: <u>4m2</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																																																																																																																						
1. <u>Bassia scoparia / Mexican-fireweed</u>	<u>40</u>	<u>Yes</u>	<u>FAC</u>																																																																																																																																						
2. _____	_____	_____	_____																																																																																																																																						
3. _____	_____	_____	_____																																																																																																																																						
4. _____	_____	_____	_____																																																																																																																																						
5. _____	_____	_____	_____																																																																																																																																						
6. _____	_____	_____	_____																																																																																																																																						
7. _____	_____	_____	_____																																																																																																																																						
8. _____	_____	_____	_____																																																																																																																																						
40 = Total Cover																																																																																																																																									
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status																																																																																																																																						
1. _____	_____	_____	_____																																																																																																																																						
2. _____	_____	_____	_____																																																																																																																																						
0 = Total Cover																																																																																																																																									
Total % Cover of:		Multiply by:																																																																																																																																							
OBL species	<u>0</u>	x 1 =	<u>0</u>																																																																																																																																						
FACW species	<u>0</u>	x 2 =	<u>0</u>																																																																																																																																						
FAC species	<u>40</u>	x 3 =	<u>120</u>																																																																																																																																						
FACU species	<u>0</u>	x 4 =	<u>0</u>																																																																																																																																						
UPL species	<u>0</u>	x 5 =	<u>0</u>																																																																																																																																						
Column Totals:	<u>40</u>	(A)	<u>120</u> (B)																																																																																																																																						
Remarks:																																																																																																																																									

SOIL

Sampling Point: 2

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-9	10YR 4/3	100					Silt Loam	Could not dig past 9 due to rock.

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

<p>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</p> <p><input type="checkbox"/> Histosol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5) (LRR C)</p> <p><input type="checkbox"/> 1 cm Muck (A9) (LRR D)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1)</p> <p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p>	<p>Indicators for Problematic Hydric Soils³:</p> <p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p> <p><input type="checkbox"/> Vernal Pools (F9)</p>	<p><input type="checkbox"/> 1 cm Muck (A9) (LRR C)</p> <p><input type="checkbox"/> 2 cm Muck (A10) (LRR B)</p> <p><input type="checkbox"/> Reduced Vertic (F18)</p> <p><input type="checkbox"/> Red Parent Material (TF2)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p> <p>³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.</p>
---	---	--

<p>Restrictive Layer (if present):</p> <p>Type: _____</p> <p>Depth (inches): _____</p>	<p>Hydric Soil Present? Yes _____ No <u>X</u></p>
---	---

Remarks:

HYDROLOGY

<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators (minimum of one required: check all that apply)</p> <p><input type="checkbox"/> Surface Water (A1)</p> <p><input type="checkbox"/> High Water Table (A2)</p> <p><input type="checkbox"/> Saturation (A3)</p> <p><input type="checkbox"/> Water Marks (B1) (Nonriverine)</p> <p><input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)</p> <p><input type="checkbox"/> Drift Deposits (B3) (Nonriverine)</p> <p><input type="checkbox"/> Surface Soil Cracks (B6)</p> <p><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</p> <p><input type="checkbox"/> Water-Stained Leaves (B9)</p>		<p>Secondary Indicators (2 or more required)</p> <p><input type="checkbox"/> Salt Crust (B11)</p> <p><input type="checkbox"/> Biotic Crust (B12)</p> <p><input type="checkbox"/> Aquatic Invertebrates (B13)</p> <p><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</p> <p><input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)</p> <p><input type="checkbox"/> Presence of Reduced Iron (C4)</p> <p><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</p> <p><input type="checkbox"/> Thin Muck Surface (C7)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>	<p><input type="checkbox"/> Water Marks (B1) (Riverine)</p> <p><input type="checkbox"/> Sediment Deposits (B2) (Riverine)</p> <p><input type="checkbox"/> Drift Deposits (B3) (Riverine)</p> <p><input type="checkbox"/> Drainage Patterns (B10)</p> <p><input type="checkbox"/> Dry-Season Water Table (C2)</p> <p><input type="checkbox"/> Crayfish Burrows (C8)</p> <p><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</p> <p><input type="checkbox"/> Shallow Aquitard (D3)</p> <p><input type="checkbox"/> FAC-Neutral Test (D5)</p>
--	--	--	---

<p>Field Observations:</p> <p>Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____</p> <p>Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____</p> <p>Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____</p> <p>(includes capillary fringe)</p>	<p>Wetland Hydrology Present? Yes _____ No <u>X</u></p>
---	---

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

Remarks:

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: City of Pendleton - Environmental Services for 8.9 Acres Sou City/County: Pendleton/Umatilla Sampling Date: 06/10/2022
 Applicant/Owner: City of Pendleton State: Oregon Sampling Point: 3
 Investigator(s): Shiloh Simrell Section, Township, Range: T2N R32E Section 5
 Landform (hillslope, terrace, etc): Hillslope Local relief (concave, convex, none): concave Slope (%): 5
 Subregion (LRR): B Lat: 45.68165267 Long: -118.84447633 Datum: WM
 Soil Map Unit Name: Walla Walla silt loam, 1 to 7 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 <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Remarks:					

VEGETATION - Use scientific names of plants.

<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%;">Tree Stratum (Plot size: _____)</th> <th style="width: 10%;">Absolute % Cover</th> <th style="width: 10%;">Dominant Species?</th> <th style="width: 10%;">Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>2. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>3. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>4. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td colspan="4" style="text-align: right;">0 = Total Cover</td></tr> </tbody> </table> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%;">Sapling/Shrub Stratum (Plot size: _____)</th> <th style="width: 10%;">Absolute % Cover</th> <th style="width: 10%;">Dominant Species?</th> <th style="width: 10%;">Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>2. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>3. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>4. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>5. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td colspan="4" style="text-align: right;">0 = Total Cover</td></tr> </tbody> </table> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%;">Herb Stratum (Plot size: <u>4m2</u>)</th> <th style="width: 10%;">Absolute % Cover</th> <th style="width: 10%;">Dominant Species?</th> <th style="width: 10%;">Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. <i>Elymus trachycaulus</i> / Slender wheatgrass</td><td>80</td><td>Yes</td><td>FACU</td></tr> <tr><td>2. <i>Medicago minima</i> / Small bur clover, Burclover</td><td>20</td><td>Yes</td><td>NI</td></tr> <tr><td>3. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>4. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>5. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>6. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>7. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>8. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td colspan="4" style="text-align: right;">100 = Total Cover</td></tr> </tbody> </table> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%;">Woody Vine Stratum (Plot size: _____)</th> <th style="width: 10%;">Absolute % Cover</th> <th style="width: 10%;">Dominant Species?</th> <th style="width: 10%;">Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>2. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td colspan="4" style="text-align: right;">0 = Total Cover</td></tr> </tbody> </table> <p>% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____</p>	Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	1. _____	_____	_____	_____	2. _____	_____	_____	_____	3. _____	_____	_____	_____	4. _____	_____	_____	_____	0 = Total Cover				Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	1. _____	_____	_____	_____	2. _____	_____	_____	_____	3. _____	_____	_____	_____	4. _____	_____	_____	_____	5. _____	_____	_____	_____	0 = Total Cover				Herb Stratum (Plot size: <u>4m2</u>)	Absolute % Cover	Dominant Species?	Indicator Status	1. <i>Elymus trachycaulus</i> / Slender wheatgrass	80	Yes	FACU	2. <i>Medicago minima</i> / Small bur clover, Burclover	20	Yes	NI	3. _____	_____	_____	_____	4. _____	_____	_____	_____	5. _____	_____	_____	_____	6. _____	_____	_____	_____	7. _____	_____	_____	_____	8. _____	_____	_____	_____	100 = Total Cover				Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	1. _____	_____	_____	_____	2. _____	_____	_____	_____	0 = Total Cover				<p>Dominance Test worksheet:</p> <p>Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)</p> <p>Total Number of Dominant Species Across All Strata: <u>2</u> (B)</p> <p>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.0</u> (A/B)</p> <p>Prevalence Index worksheet:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;">Total % Cover of:</th> <th style="width: 10%;"></th> <th style="width: 10%;">Multiply by:</th> <th style="width: 10%;"></th> </tr> </thead> <tbody> <tr><td>OBL species</td><td><u>0</u></td><td>x 1 =</td><td><u>0</u></td></tr> <tr><td>FACW species</td><td><u>0</u></td><td>x 2 =</td><td><u>0</u></td></tr> <tr><td>FAC species</td><td><u>0</u></td><td>x 3 =</td><td><u>0</u></td></tr> <tr><td>FACU species</td><td><u>80</u></td><td>x 4 =</td><td><u>320</u></td></tr> <tr><td>UPL species</td><td><u>20</u></td><td>x 5 =</td><td><u>100</u></td></tr> <tr><td>Column Totals:</td><td><u>100</u> (A)</td><td></td><td><u>420</u> (B)</td></tr> </tbody> </table> <p style="text-align: right;">Prevalence Index = B/A = <u>4.2</u></p> <p>Hydrophytic Vegetation Indicators:</p> <p><input type="checkbox"/> Dominance Test is >50%</p> <p><input type="checkbox"/> Prevalence Index ≤3.0¹</p> <p><input type="checkbox"/> Morphological Adaptations¹ (Provide supporting</p> <p><input type="checkbox"/> Problematic Hydrophytic Vegetation¹ (Explain)</p> <p>¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.</p> <p>Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	Total % Cover of:		Multiply by:		OBL species	<u>0</u>	x 1 =	<u>0</u>	FACW species	<u>0</u>	x 2 =	<u>0</u>	FAC species	<u>0</u>	x 3 =	<u>0</u>	FACU species	<u>80</u>	x 4 =	<u>320</u>	UPL species	<u>20</u>	x 5 =	<u>100</u>	Column Totals:	<u>100</u> (A)		<u>420</u> (B)
Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status																																																																																																																																						
1. _____	_____	_____	_____																																																																																																																																						
2. _____	_____	_____	_____																																																																																																																																						
3. _____	_____	_____	_____																																																																																																																																						
4. _____	_____	_____	_____																																																																																																																																						
0 = Total Cover																																																																																																																																									
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status																																																																																																																																						
1. _____	_____	_____	_____																																																																																																																																						
2. _____	_____	_____	_____																																																																																																																																						
3. _____	_____	_____	_____																																																																																																																																						
4. _____	_____	_____	_____																																																																																																																																						
5. _____	_____	_____	_____																																																																																																																																						
0 = Total Cover																																																																																																																																									
Herb Stratum (Plot size: <u>4m2</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																																																																																																																						
1. <i>Elymus trachycaulus</i> / Slender wheatgrass	80	Yes	FACU																																																																																																																																						
2. <i>Medicago minima</i> / Small bur clover, Burclover	20	Yes	NI																																																																																																																																						
3. _____	_____	_____	_____																																																																																																																																						
4. _____	_____	_____	_____																																																																																																																																						
5. _____	_____	_____	_____																																																																																																																																						
6. _____	_____	_____	_____																																																																																																																																						
7. _____	_____	_____	_____																																																																																																																																						
8. _____	_____	_____	_____																																																																																																																																						
100 = Total Cover																																																																																																																																									
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status																																																																																																																																						
1. _____	_____	_____	_____																																																																																																																																						
2. _____	_____	_____	_____																																																																																																																																						
0 = Total Cover																																																																																																																																									
Total % Cover of:		Multiply by:																																																																																																																																							
OBL species	<u>0</u>	x 1 =	<u>0</u>																																																																																																																																						
FACW species	<u>0</u>	x 2 =	<u>0</u>																																																																																																																																						
FAC species	<u>0</u>	x 3 =	<u>0</u>																																																																																																																																						
FACU species	<u>80</u>	x 4 =	<u>320</u>																																																																																																																																						
UPL species	<u>20</u>	x 5 =	<u>100</u>																																																																																																																																						
Column Totals:	<u>100</u> (A)		<u>420</u> (B)																																																																																																																																						
Remarks:																																																																																																																																									

SOIL

Sampling Point: 3

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-24	10YR 4/3	100					Silty Clay Loam	

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

<p>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</p> <p><input type="checkbox"/> Histosol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5) (LRR C)</p> <p><input type="checkbox"/> 1 cm Muck (A9) (LRR D)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1)</p> <p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p>	<p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p> <p><input type="checkbox"/> Vernal Pools (F9)</p>	<p>Indicators for Problematic Hydric Soils³:</p> <p><input type="checkbox"/> 1 cm Muck (A9) (LRR C)</p> <p><input type="checkbox"/> 2 cm Muck (A10) (LRR B)</p> <p><input type="checkbox"/> Reduced Vertic (F18)</p> <p><input type="checkbox"/> Red Parent Material (TF2)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p> <p>³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.</p>
---	--	---

<p>Restrictive Layer (if present):</p> <p>Type: _____</p> <p>Depth (inches): _____</p>	<p>Hydric Soil Present? Yes _____ No <u>X</u></p>
---	---

Remarks:

HYDROLOGY

<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators (minimum of one required: check all that apply)</p> <p><input type="checkbox"/> Surface Water (A1)</p> <p><input type="checkbox"/> High Water Table (A2)</p> <p><input type="checkbox"/> Saturation (A3)</p> <p><input type="checkbox"/> Water Marks (B1) (Nonriverine)</p> <p><input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)</p> <p><input type="checkbox"/> Drift Deposits (B3) (Nonriverine)</p> <p><input type="checkbox"/> Surface Soil Cracks (B6)</p> <p><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</p> <p><input type="checkbox"/> Water-Stained Leaves (B9)</p>		<p>Secondary Indicators (2 or more required)</p> <p><input type="checkbox"/> Salt Crust (B11)</p> <p><input type="checkbox"/> Biotic Crust (B12)</p> <p><input type="checkbox"/> Aquatic Invertebrates (B13)</p> <p><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</p> <p><input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)</p> <p><input type="checkbox"/> Presence of Reduced Iron (C4)</p> <p><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</p> <p><input type="checkbox"/> Thin Muck Surface (C7)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>	<p><input type="checkbox"/> Water Marks (B1) (Riverine)</p> <p><input type="checkbox"/> Sediment Deposits (B2) (Riverine)</p> <p><input type="checkbox"/> Drift Deposits (B3) (Riverine)</p> <p><input type="checkbox"/> Drainage Patterns (B10)</p> <p><input type="checkbox"/> Dry-Season Water Table (C2)</p> <p><input type="checkbox"/> Crayfish Burrows (C8)</p> <p><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</p> <p><input type="checkbox"/> Shallow Aquitard (D3)</p> <p><input type="checkbox"/> FAC-Neutral Test (D5)</p>
--	--	--	---

<p>Field Observations:</p> <p>Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____</p> <p>Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____</p> <p>Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____</p> <p>(includes capillary fringe)</p>	<p>Wetland Hydrology Present? Yes _____ No <u>X</u></p>
---	---

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

Remarks:

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: City of Pendleton - Environmental Services for 8.9 Acres Sou City/County: Pendleton/Umatilla Sampling Date: 06/10/2022
 Applicant/Owner: City of Pendleton State: Oregon Sampling Point: 4
 Investigator(s): Shiloh Simrell Section, Township, Range: T2N R32E Section 5
 Landform (hillslope, terrace, etc): Hillslope Local relief (concave, convex, none): concave Slope (%): 3
 Subregion (LRR): B Lat: 45.6816495 Long: -118.84447833 Datum: WM
 Soil Map Unit Name: Walla Walla silt loam, 1 to 7 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 <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Remarks:					

VEGETATION - Use scientific names of plants.

<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%;">Tree Stratum (Plot size: _____)</th> <th style="width: 10%;">Absolute % Cover</th> <th style="width: 10%;">Dominant Species?</th> <th style="width: 10%;">Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>2. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>3. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>4. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td colspan="4" style="text-align: right;">0 = Total Cover</td></tr> </tbody> </table> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%;">Sapling/Shrub Stratum (Plot size: _____)</th> <th style="width: 10%;">Absolute % Cover</th> <th style="width: 10%;">Dominant Species?</th> <th style="width: 10%;">Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>2. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>3. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>4. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>5. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td colspan="4" style="text-align: right;">0 = Total Cover</td></tr> </tbody> </table> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%;">Herb Stratum (Plot size: <u>4m2</u>)</th> <th style="width: 10%;">Absolute % Cover</th> <th style="width: 10%;">Dominant Species?</th> <th style="width: 10%;">Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. <i>Erodium</i> / Stork's bill</td><td>50</td><td>Yes</td><td>NI</td></tr> <tr><td>2. <i>Bassia scoparia</i> / Mexican-fireweed</td><td>20</td><td>Yes</td><td>FAC</td></tr> <tr><td>3. <i>Medicago minima</i> / Small bur clover, Burclover</td><td>20</td><td>Yes</td><td>NI</td></tr> <tr><td>4. <i>Elymus trachycaulus</i> / Slender wheatgrass</td><td>10</td><td>No</td><td>FACU</td></tr> <tr><td>5. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>6. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>7. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>8. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td colspan="4" style="text-align: right;">100 = Total Cover</td></tr> </tbody> </table> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%;">Woody Vine Stratum (Plot size: _____)</th> <th style="width: 10%;">Absolute % Cover</th> <th style="width: 10%;">Dominant Species?</th> <th style="width: 10%;">Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>2. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td colspan="4" style="text-align: right;">0 = Total Cover</td></tr> </tbody> </table> <p>% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____</p>	Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	1. _____	_____	_____	_____	2. _____	_____	_____	_____	3. _____	_____	_____	_____	4. _____	_____	_____	_____	0 = Total Cover				Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	1. _____	_____	_____	_____	2. _____	_____	_____	_____	3. _____	_____	_____	_____	4. _____	_____	_____	_____	5. _____	_____	_____	_____	0 = Total Cover				Herb Stratum (Plot size: <u>4m2</u>)	Absolute % Cover	Dominant Species?	Indicator Status	1. <i>Erodium</i> / Stork's bill	50	Yes	NI	2. <i>Bassia scoparia</i> / Mexican-fireweed	20	Yes	FAC	3. <i>Medicago minima</i> / Small bur clover, Burclover	20	Yes	NI	4. <i>Elymus trachycaulus</i> / Slender wheatgrass	10	No	FACU	5. _____	_____	_____	_____	6. _____	_____	_____	_____	7. _____	_____	_____	_____	8. _____	_____	_____	_____	100 = Total Cover				Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	1. _____	_____	_____	_____	2. _____	_____	_____	_____	0 = Total Cover				<p>Dominance Test worksheet:</p> <p>Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)</p> <p>Total Number of Dominant Species Across All Strata: <u>3</u> (B)</p> <p>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33.3</u> (A/B)</p> <p>Prevalence Index worksheet:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;">Total % Cover of:</th> <th style="width: 10%;"></th> <th style="width: 10%;">Multiply by:</th> <th style="width: 10%;"></th> </tr> </thead> <tbody> <tr><td>OBL species</td><td><u>0</u></td><td>x 1 =</td><td><u>0</u></td></tr> <tr><td>FACW species</td><td><u>0</u></td><td>x 2 =</td><td><u>0</u></td></tr> <tr><td>FAC species</td><td><u>20</u></td><td>x 3 =</td><td><u>60</u></td></tr> <tr><td>FACU species</td><td><u>10</u></td><td>x 4 =</td><td><u>40</u></td></tr> <tr><td>UPL species</td><td><u>70</u></td><td>x 5 =</td><td><u>350</u></td></tr> <tr><td>Column Totals:</td><td><u>100</u> (A)</td><td></td><td><u>450</u> (B)</td></tr> </tbody> </table> <p style="text-align: right;">Prevalence Index = B/A = <u>4.5</u></p> <p>Hydrophytic Vegetation Indicators:</p> <p><input type="checkbox"/> Dominance Test is >50%</p> <p><input type="checkbox"/> Prevalence Index ≤3.0¹</p> <p><input type="checkbox"/> Morphological Adaptations¹ (Provide supporting</p> <p><input type="checkbox"/> Problematic Hydrophytic Vegetation¹ (Explain)</p> <p>¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.</p> <p>Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	Total % Cover of:		Multiply by:		OBL species	<u>0</u>	x 1 =	<u>0</u>	FACW species	<u>0</u>	x 2 =	<u>0</u>	FAC species	<u>20</u>	x 3 =	<u>60</u>	FACU species	<u>10</u>	x 4 =	<u>40</u>	UPL species	<u>70</u>	x 5 =	<u>350</u>	Column Totals:	<u>100</u> (A)		<u>450</u> (B)
Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status																																																																																																																																						
1. _____	_____	_____	_____																																																																																																																																						
2. _____	_____	_____	_____																																																																																																																																						
3. _____	_____	_____	_____																																																																																																																																						
4. _____	_____	_____	_____																																																																																																																																						
0 = Total Cover																																																																																																																																									
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status																																																																																																																																						
1. _____	_____	_____	_____																																																																																																																																						
2. _____	_____	_____	_____																																																																																																																																						
3. _____	_____	_____	_____																																																																																																																																						
4. _____	_____	_____	_____																																																																																																																																						
5. _____	_____	_____	_____																																																																																																																																						
0 = Total Cover																																																																																																																																									
Herb Stratum (Plot size: <u>4m2</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																																																																																																																						
1. <i>Erodium</i> / Stork's bill	50	Yes	NI																																																																																																																																						
2. <i>Bassia scoparia</i> / Mexican-fireweed	20	Yes	FAC																																																																																																																																						
3. <i>Medicago minima</i> / Small bur clover, Burclover	20	Yes	NI																																																																																																																																						
4. <i>Elymus trachycaulus</i> / Slender wheatgrass	10	No	FACU																																																																																																																																						
5. _____	_____	_____	_____																																																																																																																																						
6. _____	_____	_____	_____																																																																																																																																						
7. _____	_____	_____	_____																																																																																																																																						
8. _____	_____	_____	_____																																																																																																																																						
100 = Total Cover																																																																																																																																									
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status																																																																																																																																						
1. _____	_____	_____	_____																																																																																																																																						
2. _____	_____	_____	_____																																																																																																																																						
0 = Total Cover																																																																																																																																									
Total % Cover of:		Multiply by:																																																																																																																																							
OBL species	<u>0</u>	x 1 =	<u>0</u>																																																																																																																																						
FACW species	<u>0</u>	x 2 =	<u>0</u>																																																																																																																																						
FAC species	<u>20</u>	x 3 =	<u>60</u>																																																																																																																																						
FACU species	<u>10</u>	x 4 =	<u>40</u>																																																																																																																																						
UPL species	<u>70</u>	x 5 =	<u>350</u>																																																																																																																																						
Column Totals:	<u>100</u> (A)		<u>450</u> (B)																																																																																																																																						
Remarks:																																																																																																																																									

SOIL

Sampling Point: 4

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-8	10YR 4/3	100					Silty Clay Loam	Could not dig past 8 due to cobble

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils³:
<input type="checkbox"/> Histic Sol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

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

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <u>X</u>
--	---

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:		
<u>Primary Indicators (minimum of one required: check all that apply)</u>		<u>Secondary Indicators (2 or more required)</u>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
---	---

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

Remarks:

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: City of Pendleton - Environmental Services for 8.9 Acres Sou City/County: Pendleton/Umatilla Sampling Date: 06/10/2022
 Applicant/Owner: City of Pendleton State: Oregon Sampling Point: 5
 Investigator(s): Shiloh Simrell Section, Township, Range: T2N R32E Section 5
 Landform (hillslope, terrace, etc): Hillslope Local relief (concave, convex, none): concave Slope (%): 45
 Subregion (LRR): B Lat: 45.68280633 Long: -118.84360933 Datum: WM
 Soil Map Unit Name: Walla Walla silt loam, 1 to 7 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 <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Remarks:					

VEGETATION - Use scientific names of plants.

<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%;">Tree Stratum (Plot size: _____)</th> <th style="width: 10%;">Absolute % Cover</th> <th style="width: 10%;">Dominant Species?</th> <th style="width: 10%;">Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>2. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>3. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>4. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td colspan="4" style="text-align: right;">_____ = Total Cover</td></tr> </tbody> </table> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%;">Sapling/Shrub Stratum (Plot size: _____)</th> <th style="width: 10%;">Absolute % Cover</th> <th style="width: 10%;">Dominant Species?</th> <th style="width: 10%;">Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>2. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>3. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>4. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>5. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td colspan="4" style="text-align: right;">_____ = Total Cover</td></tr> </tbody> </table> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%;">Herb Stratum (Plot size: <u>4m2</u>)</th> <th style="width: 10%;">Absolute % Cover</th> <th style="width: 10%;">Dominant Species?</th> <th style="width: 10%;">Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. <u>Elymus trachycaulus / Slender wheatgrass</u></td><td><u>100</u></td><td><u>Yes</u></td><td><u>FACU</u></td></tr> <tr><td>2. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>3. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>4. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>5. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>6. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>7. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>8. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td colspan="4" style="text-align: right;">_____ = Total Cover</td></tr> </tbody> </table> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%;">Woody Vine Stratum (Plot size: _____)</th> <th style="width: 10%;">Absolute % Cover</th> <th style="width: 10%;">Dominant Species?</th> <th style="width: 10%;">Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>2. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td colspan="4" style="text-align: right;">_____ = Total Cover</td></tr> </tbody> </table> <p>% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____</p>	Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	1. _____	_____	_____	_____	2. _____	_____	_____	_____	3. _____	_____	_____	_____	4. _____	_____	_____	_____	_____ = Total Cover				Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	1. _____	_____	_____	_____	2. _____	_____	_____	_____	3. _____	_____	_____	_____	4. _____	_____	_____	_____	5. _____	_____	_____	_____	_____ = Total Cover				Herb Stratum (Plot size: <u>4m2</u>)	Absolute % Cover	Dominant Species?	Indicator Status	1. <u>Elymus trachycaulus / Slender wheatgrass</u>	<u>100</u>	<u>Yes</u>	<u>FACU</u>	2. _____	_____	_____	_____	3. _____	_____	_____	_____	4. _____	_____	_____	_____	5. _____	_____	_____	_____	6. _____	_____	_____	_____	7. _____	_____	_____	_____	8. _____	_____	_____	_____	_____ = Total Cover				Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	1. _____	_____	_____	_____	2. _____	_____	_____	_____	_____ = Total Cover				<p>Dominance Test worksheet:</p> <p>Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)</p> <p>Total Number of Dominant Species Across All Strata: <u>1</u> (B)</p> <p>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.0</u> (A/B)</p> <p>Prevalence Index worksheet:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;">Total % Cover of:</th> <th style="width: 10%;"></th> <th style="width: 10%;">Multiply by:</th> <th style="width: 10%;"></th> </tr> </thead> <tbody> <tr><td>OBL species</td><td><u>0</u></td><td>x 1 =</td><td><u>0</u></td></tr> <tr><td>FACW species</td><td><u>0</u></td><td>x 2 =</td><td><u>0</u></td></tr> <tr><td>FAC species</td><td><u>0</u></td><td>x 3 =</td><td><u>0</u></td></tr> <tr><td>FACU species</td><td><u>100</u></td><td>x 4 =</td><td><u>400</u></td></tr> <tr><td>UPL species</td><td><u>0</u></td><td>x 5 =</td><td><u>0</u></td></tr> <tr><td>Column Totals:</td><td><u>100</u> (A)</td><td></td><td><u>400</u> (B)</td></tr> </tbody> </table> <p style="text-align: center;">Prevalence Index = B/A = <u>4.0</u></p> <p>Hydrophytic Vegetation Indicators:</p> <p>___ Dominance Test is >50%</p> <p>___ Prevalence Index ≤3.0¹</p> <p>___ Morphological Adaptations¹ (Provide supporting</p> <p>___ Problematic Hydrophytic Vegetation¹ (Explain)</p> <p>¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.</p> <p>Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	Total % Cover of:		Multiply by:		OBL species	<u>0</u>	x 1 =	<u>0</u>	FACW species	<u>0</u>	x 2 =	<u>0</u>	FAC species	<u>0</u>	x 3 =	<u>0</u>	FACU species	<u>100</u>	x 4 =	<u>400</u>	UPL species	<u>0</u>	x 5 =	<u>0</u>	Column Totals:	<u>100</u> (A)		<u>400</u> (B)
Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status																																																																																																																																						
1. _____	_____	_____	_____																																																																																																																																						
2. _____	_____	_____	_____																																																																																																																																						
3. _____	_____	_____	_____																																																																																																																																						
4. _____	_____	_____	_____																																																																																																																																						
_____ = Total Cover																																																																																																																																									
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status																																																																																																																																						
1. _____	_____	_____	_____																																																																																																																																						
2. _____	_____	_____	_____																																																																																																																																						
3. _____	_____	_____	_____																																																																																																																																						
4. _____	_____	_____	_____																																																																																																																																						
5. _____	_____	_____	_____																																																																																																																																						
_____ = Total Cover																																																																																																																																									
Herb Stratum (Plot size: <u>4m2</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																																																																																																																						
1. <u>Elymus trachycaulus / Slender wheatgrass</u>	<u>100</u>	<u>Yes</u>	<u>FACU</u>																																																																																																																																						
2. _____	_____	_____	_____																																																																																																																																						
3. _____	_____	_____	_____																																																																																																																																						
4. _____	_____	_____	_____																																																																																																																																						
5. _____	_____	_____	_____																																																																																																																																						
6. _____	_____	_____	_____																																																																																																																																						
7. _____	_____	_____	_____																																																																																																																																						
8. _____	_____	_____	_____																																																																																																																																						
_____ = Total Cover																																																																																																																																									
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status																																																																																																																																						
1. _____	_____	_____	_____																																																																																																																																						
2. _____	_____	_____	_____																																																																																																																																						
_____ = Total Cover																																																																																																																																									
Total % Cover of:		Multiply by:																																																																																																																																							
OBL species	<u>0</u>	x 1 =	<u>0</u>																																																																																																																																						
FACW species	<u>0</u>	x 2 =	<u>0</u>																																																																																																																																						
FAC species	<u>0</u>	x 3 =	<u>0</u>																																																																																																																																						
FACU species	<u>100</u>	x 4 =	<u>400</u>																																																																																																																																						
UPL species	<u>0</u>	x 5 =	<u>0</u>																																																																																																																																						
Column Totals:	<u>100</u> (A)		<u>400</u> (B)																																																																																																																																						
Remarks:																																																																																																																																									

SOIL

Sampling Point: 5

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-16	10YR 4/2	100					Silty Clay Loam	Could not dig past 16 due to rocks.

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils³:
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

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

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <u>X</u>
--	---

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:		
Primary Indicators (minimum of one required: check all that apply)		Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations:		Wetland Hydrology Present? Yes _____ No <u>X</u>
Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____		
Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____		
Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)		

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

Remarks:

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: City of Pendleton - Environmental Services for 8.9 Acres Sou City/County: Pendleton/Umatilla Sampling Date: 06/10/2022
 Applicant/Owner: City of Pendleton State: Oregon Sampling Point: 6
 Investigator(s): Shiloh Simrell Section, Township, Range: T2N R32E Section 5
 Landform (hillslope, terrace, etc): Hillslope Local relief (concave, convex, none): concave Slope (%): 45
 Subregion (LRR): B Lat: 45.68279667 Long: -118.84362617 Datum: WM
 Soil Map Unit Name: Walla Walla silt loam, 1 to 7 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 <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Remarks:					

VEGETATION - Use scientific names of plants.

<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%;">Tree Stratum (Plot size: _____)</th> <th style="width: 10%;">Absolute % Cover</th> <th style="width: 10%;">Dominant Species?</th> <th style="width: 10%;">Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>2. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>3. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>4. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td colspan="4" style="text-align: right;">0 = Total Cover</td></tr> </tbody> </table> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%;">Sapling/Shrub Stratum (Plot size: _____)</th> <th style="width: 10%;">Absolute % Cover</th> <th style="width: 10%;">Dominant Species?</th> <th style="width: 10%;">Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>2. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>3. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>4. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>5. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td colspan="4" style="text-align: right;">0 = Total Cover</td></tr> </tbody> </table> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%;">Herb Stratum (Plot size: <u>4m2</u>)</th> <th style="width: 10%;">Absolute % Cover</th> <th style="width: 10%;">Dominant Species?</th> <th style="width: 10%;">Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. <u>Elymus trachycaulus / Slender wheatgrass</u></td><td><u>50</u></td><td><u>Yes</u></td><td><u>FACU</u></td></tr> <tr><td>2. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>3. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>4. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>5. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>6. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>7. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>8. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td colspan="4" style="text-align: right;">50 = Total Cover</td></tr> </tbody> </table> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%;">Woody Vine Stratum (Plot size: _____)</th> <th style="width: 10%;">Absolute % Cover</th> <th style="width: 10%;">Dominant Species?</th> <th style="width: 10%;">Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>2. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td colspan="4" style="text-align: right;">0 = Total Cover</td></tr> </tbody> </table> <p>% Bare Ground in Herb Stratum <u>50</u> % Cover of Biotic Crust _____</p>	Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	1. _____	_____	_____	_____	2. _____	_____	_____	_____	3. _____	_____	_____	_____	4. _____	_____	_____	_____	0 = Total Cover				Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	1. _____	_____	_____	_____	2. _____	_____	_____	_____	3. _____	_____	_____	_____	4. _____	_____	_____	_____	5. _____	_____	_____	_____	0 = Total Cover				Herb Stratum (Plot size: <u>4m2</u>)	Absolute % Cover	Dominant Species?	Indicator Status	1. <u>Elymus trachycaulus / Slender wheatgrass</u>	<u>50</u>	<u>Yes</u>	<u>FACU</u>	2. _____	_____	_____	_____	3. _____	_____	_____	_____	4. _____	_____	_____	_____	5. _____	_____	_____	_____	6. _____	_____	_____	_____	7. _____	_____	_____	_____	8. _____	_____	_____	_____	50 = Total Cover				Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	1. _____	_____	_____	_____	2. _____	_____	_____	_____	0 = Total Cover				<p>Dominance Test worksheet:</p> <p>Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)</p> <p>Total Number of Dominant Species Across All Strata: <u>1</u> (B)</p> <p>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.0</u> (A/B)</p> <p>Prevalence Index worksheet:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;">Total % Cover of:</th> <th style="width: 10%;"></th> <th style="width: 10%;">Multiply by:</th> <th style="width: 10%;"></th> </tr> </thead> <tbody> <tr><td>OBL species</td><td><u>0</u></td><td>x 1 =</td><td><u>0</u></td></tr> <tr><td>FACW species</td><td><u>0</u></td><td>x 2 =</td><td><u>0</u></td></tr> <tr><td>FAC species</td><td><u>0</u></td><td>x 3 =</td><td><u>0</u></td></tr> <tr><td>FACU species</td><td><u>50</u></td><td>x 4 =</td><td><u>200</u></td></tr> <tr><td>UPL species</td><td><u>0</u></td><td>x 5 =</td><td><u>0</u></td></tr> <tr><td>Column Totals:</td><td><u>50</u> (A)</td><td></td><td><u>200</u> (B)</td></tr> </tbody> </table> <p style="text-align: center;">Prevalence Index = B/A = <u>4.0</u></p> <p>Hydrophytic Vegetation Indicators:</p> <p><input type="checkbox"/> Dominance Test is >50%</p> <p><input type="checkbox"/> Prevalence Index ≤3.0¹</p> <p><input type="checkbox"/> Morphological Adaptations¹ (Provide supporting</p> <p><input type="checkbox"/> Problematic Hydrophytic Vegetation¹ (Explain)</p> <p>¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.</p> <p>Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	Total % Cover of:		Multiply by:		OBL species	<u>0</u>	x 1 =	<u>0</u>	FACW species	<u>0</u>	x 2 =	<u>0</u>	FAC species	<u>0</u>	x 3 =	<u>0</u>	FACU species	<u>50</u>	x 4 =	<u>200</u>	UPL species	<u>0</u>	x 5 =	<u>0</u>	Column Totals:	<u>50</u> (A)		<u>200</u> (B)
Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status																																																																																																																																						
1. _____	_____	_____	_____																																																																																																																																						
2. _____	_____	_____	_____																																																																																																																																						
3. _____	_____	_____	_____																																																																																																																																						
4. _____	_____	_____	_____																																																																																																																																						
0 = Total Cover																																																																																																																																									
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status																																																																																																																																						
1. _____	_____	_____	_____																																																																																																																																						
2. _____	_____	_____	_____																																																																																																																																						
3. _____	_____	_____	_____																																																																																																																																						
4. _____	_____	_____	_____																																																																																																																																						
5. _____	_____	_____	_____																																																																																																																																						
0 = Total Cover																																																																																																																																									
Herb Stratum (Plot size: <u>4m2</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																																																																																																																						
1. <u>Elymus trachycaulus / Slender wheatgrass</u>	<u>50</u>	<u>Yes</u>	<u>FACU</u>																																																																																																																																						
2. _____	_____	_____	_____																																																																																																																																						
3. _____	_____	_____	_____																																																																																																																																						
4. _____	_____	_____	_____																																																																																																																																						
5. _____	_____	_____	_____																																																																																																																																						
6. _____	_____	_____	_____																																																																																																																																						
7. _____	_____	_____	_____																																																																																																																																						
8. _____	_____	_____	_____																																																																																																																																						
50 = Total Cover																																																																																																																																									
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status																																																																																																																																						
1. _____	_____	_____	_____																																																																																																																																						
2. _____	_____	_____	_____																																																																																																																																						
0 = Total Cover																																																																																																																																									
Total % Cover of:		Multiply by:																																																																																																																																							
OBL species	<u>0</u>	x 1 =	<u>0</u>																																																																																																																																						
FACW species	<u>0</u>	x 2 =	<u>0</u>																																																																																																																																						
FAC species	<u>0</u>	x 3 =	<u>0</u>																																																																																																																																						
FACU species	<u>50</u>	x 4 =	<u>200</u>																																																																																																																																						
UPL species	<u>0</u>	x 5 =	<u>0</u>																																																																																																																																						
Column Totals:	<u>50</u> (A)		<u>200</u> (B)																																																																																																																																						
Remarks: <u>Large angular gravel fill</u>																																																																																																																																									

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

Depth (inches)	Matrix		Redox Features			Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹		
0							Large angular gravel fill. Could not reach s

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils³:
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

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

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/>
--	--

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:		
<u>Primary Indicators (minimum of one required: check all that apply)</u>		<u>Secondary Indicators (2 or more required)</u>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations:		Wetland Hydrology Present? Yes _____ No <input checked="" type="checkbox"/>
Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____		
Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____		
Saturation Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)		

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

Remarks:

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: City of Pendleton - Environmental Services for 8.9 Acres Sou City/County: Pendleton/Umatilla Sampling Date: 06/10/2022
 Applicant/Owner: City of Pendleton State: Oregon Sampling Point: 7
 Investigator(s): Shiloh Simrell Section, Township, Range: T2N R32E Section 5
 Landform (hillslope, terrace, etc): Hillslope Local relief (concave, convex, none): concave Slope (%): 2
 Subregion (LRR): B Lat: 45.68283717 Long: -118.84407133 Datum: WM
 Soil Map Unit Name: Walla Walla silt loam, 1 to 7 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 <u> </u>	No <u>X</u>	Is the Sampled Area within a Wetland?	Yes <u> </u>	No <u>X</u>
Hydric Soil Present?	Yes <u> </u>	No <u>X</u>			
Wetland Hydrology Present?	Yes <u> </u>	No <u>X</u>			
Remarks:					

VEGETATION - Use scientific names of plants.

<table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Tree Stratum (Plot size: <u> </u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>2. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>3. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>4. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td colspan="4" style="text-align: right;"><u>0</u> = Total Cover</td></tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Sapling/Shrub Stratum (Plot size: <u> </u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>2. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>3. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>4. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>5. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td colspan="4" style="text-align: right;"><u>0</u> = Total Cover</td></tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Herb Stratum (Plot size: <u>4m2</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. <i>Erodium</i> / Stork's bill</td><td style="text-align: center;">50</td><td style="text-align: center;">Yes</td><td style="text-align: center;">NI</td></tr> <tr><td>2. <i>Elymus trachycaulus</i> / Slender wheatgrass</td><td style="text-align: center;">10</td><td style="text-align: center;">No</td><td style="text-align: center;">FACU</td></tr> <tr><td>3. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>4. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>5. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>6. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>7. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>8. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td colspan="4" style="text-align: right;"><u>60</u> = Total Cover</td></tr> </table> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Woody Vine Stratum (Plot size: <u> </u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> <tr><td>1. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td>2. <u> </u></td><td><u> </u></td><td><u> </u></td><td><u> </u></td></tr> <tr><td colspan="4" style="text-align: right;"><u>0</u> = Total Cover</td></tr> </table> <p>% Bare Ground in Herb Stratum <u>40</u> % Cover of Biotic Crust <u> </u></p>	Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>0</u> = Total Cover				Sapling/Shrub Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>0</u> = Total Cover				Herb Stratum (Plot size: <u>4m2</u>)	Absolute % Cover	Dominant Species?	Indicator Status	1. <i>Erodium</i> / Stork's bill	50	Yes	NI	2. <i>Elymus trachycaulus</i> / Slender wheatgrass	10	No	FACU	3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	6. <u> </u>	<u> </u>	<u> </u>	<u> </u>	7. <u> </u>	<u> </u>	<u> </u>	<u> </u>	8. <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>60</u> = Total Cover				Woody Vine Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status	1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>0</u> = Total Cover				<p>Dominance Test worksheet:</p> <p>Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)</p> <p>Total Number of Dominant Species Across All Strata: <u>1</u> (B)</p> <p>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.0</u> (A/B)</p> <p>Prevalence Index worksheet:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: center;">Multiply by:</th> </tr> <tr><td>OBL species <u>0</u></td><td style="text-align: center;">x 1 = <u>0</u></td></tr> <tr><td>FACW species <u>0</u></td><td style="text-align: center;">x 2 = <u>0</u></td></tr> <tr><td>FAC species <u>0</u></td><td style="text-align: center;">x 3 = <u>0</u></td></tr> <tr><td>FACU species <u>10</u></td><td style="text-align: center;">x 4 = <u>40</u></td></tr> <tr><td>UPL species <u>50</u></td><td style="text-align: center;">x 5 = <u>250</u></td></tr> <tr><td>Column Totals: <u>60</u> (A)</td><td style="text-align: center;"><u>290</u> (B)</td></tr> </table> <p style="text-align: right;">Prevalence Index = B/A = <u>4.83</u></p> <p>Hydrophytic Vegetation Indicators:</p> <p><u> </u> Dominance Test is >50%</p> <p><u> </u> Prevalence Index ≤3.0¹</p> <p><u> </u> Morphological Adaptations¹ (Provide supporting</p> <p><u> </u> Problematic Hydrophytic Vegetation¹ (Explain)</p> <p>¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.</p> <p>Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u></p>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>0</u>	x 3 = <u>0</u>	FACU species <u>10</u>	x 4 = <u>40</u>	UPL species <u>50</u>	x 5 = <u>250</u>	Column Totals: <u>60</u> (A)	<u>290</u> (B)
Tree Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status																																																																																																																								
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																																																																																																								
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																																																																																																								
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																																																																																																								
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																																																																																																								
<u>0</u> = Total Cover																																																																																																																											
Sapling/Shrub Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status																																																																																																																								
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																																																																																																								
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																																																																																																								
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																																																																																																								
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																																																																																																								
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																																																																																																								
<u>0</u> = Total Cover																																																																																																																											
Herb Stratum (Plot size: <u>4m2</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																																																																																																								
1. <i>Erodium</i> / Stork's bill	50	Yes	NI																																																																																																																								
2. <i>Elymus trachycaulus</i> / Slender wheatgrass	10	No	FACU																																																																																																																								
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																																																																																																								
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																																																																																																								
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																																																																																																								
6. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																																																																																																								
7. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																																																																																																								
8. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																																																																																																								
<u>60</u> = Total Cover																																																																																																																											
Woody Vine Stratum (Plot size: <u> </u>)	Absolute % Cover	Dominant Species?	Indicator Status																																																																																																																								
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																																																																																																								
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>																																																																																																																								
<u>0</u> = Total Cover																																																																																																																											
Total % Cover of:	Multiply by:																																																																																																																										
OBL species <u>0</u>	x 1 = <u>0</u>																																																																																																																										
FACW species <u>0</u>	x 2 = <u>0</u>																																																																																																																										
FAC species <u>0</u>	x 3 = <u>0</u>																																																																																																																										
FACU species <u>10</u>	x 4 = <u>40</u>																																																																																																																										
UPL species <u>50</u>	x 5 = <u>250</u>																																																																																																																										
Column Totals: <u>60</u> (A)	<u>290</u> (B)																																																																																																																										
Remarks:																																																																																																																											

SOIL

Sampling Point: 7

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-5	10YR 4/3						Silty Clay Loam	Could not dig past 5 due to rocks.

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

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils³:
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

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

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes _____ No <u>X</u>
--	---

Remarks: Could not dig past 5 due to rock

HYDROLOGY

Wetland Hydrology Indicators:		
<u>Primary Indicators (minimum of one required: check all that apply)</u>		<u>Secondary Indicators (2 or more required)</u>
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations: Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>X</u>
---	---

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

Remarks:

WETLAND DETERMINATION DATA FORM - Arid West Region

Project/Site: City of Pendleton - Environmental Services for 8.9 Acres Sou City/County: Pendleton/Umatilla Sampling Date: 06/10/2022
 Applicant/Owner: City of Pendleton State: Oregon Sampling Point: 8
 Investigator(s): Shiloh Simrell Section, Township, Range: T2N R32E Section 5
 Landform (hillslope, terrace, etc): Hillslope Local relief (concave, convex, none): none Slope (%): 0
 Subregion (LRR): B Lat: 45.68261417 Long: -118.84512067 Datum: WM
 Soil Map Unit Name: Walla Walla silt loam, 1 to 7 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 <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Wetland Hydrology Present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Remarks:					

VEGETATION - Use scientific names of plants.

<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Tree Stratum (Plot size: _____)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>2. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>3. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>4. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td colspan="4" style="text-align: right;">0 = Total Cover</td></tr> </tbody> </table> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Sapling/Shrub Stratum (Plot size: _____)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>2. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>3. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>4. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>5. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td colspan="4" style="text-align: right;">0 = Total Cover</td></tr> </tbody> </table> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Herb Stratum (Plot size: <u>4m2</u>)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. <i>Thelypodopsis</i> / Tumblemustard</td><td style="text-align: center;">40</td><td style="text-align: center;">Yes</td><td style="text-align: center;">NI</td></tr> <tr><td>2. <i>Onopordum acanthium</i> / Scotch cottonthistle</td><td style="text-align: center;">15</td><td style="text-align: center;">Yes</td><td style="text-align: center;">NI</td></tr> <tr><td>3. <i>Secale cereale</i> / Rye</td><td style="text-align: center;">15</td><td style="text-align: center;">Yes</td><td style="text-align: center;">NI</td></tr> <tr><td>4. <i>Hordeum jubatum</i> / Fox tail barley</td><td style="text-align: center;">10</td><td style="text-align: center;">No</td><td style="text-align: center;">FAC</td></tr> <tr><td>5. <i>Avena sativa</i> / Wild oat, Cultivated oat</td><td style="text-align: center;">10</td><td style="text-align: center;">No</td><td style="text-align: center;">UPL</td></tr> <tr><td>6. <i>Lolium perenne</i> / Perennial rye grass</td><td style="text-align: center;">10</td><td style="text-align: center;">No</td><td style="text-align: center;">FAC</td></tr> <tr><td>7. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>8. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td colspan="4" style="text-align: right;">100 = Total Cover</td></tr> </tbody> </table> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Woody Vine Stratum (Plot size: _____)</th> <th style="text-align: center;">Absolute % Cover</th> <th style="text-align: center;">Dominant Species?</th> <th style="text-align: center;">Indicator Status</th> </tr> </thead> <tbody> <tr><td>1. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>2. _____</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td colspan="4" style="text-align: right;">0 = Total Cover</td></tr> </tbody> </table> <p>% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____</p>	Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	1. _____	_____	_____	_____	2. _____	_____	_____	_____	3. _____	_____	_____	_____	4. _____	_____	_____	_____	0 = Total Cover				Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	1. _____	_____	_____	_____	2. _____	_____	_____	_____	3. _____	_____	_____	_____	4. _____	_____	_____	_____	5. _____	_____	_____	_____	0 = Total Cover				Herb Stratum (Plot size: <u>4m2</u>)	Absolute % Cover	Dominant Species?	Indicator Status	1. <i>Thelypodopsis</i> / Tumblemustard	40	Yes	NI	2. <i>Onopordum acanthium</i> / Scotch cottonthistle	15	Yes	NI	3. <i>Secale cereale</i> / Rye	15	Yes	NI	4. <i>Hordeum jubatum</i> / Fox tail barley	10	No	FAC	5. <i>Avena sativa</i> / Wild oat, Cultivated oat	10	No	UPL	6. <i>Lolium perenne</i> / Perennial rye grass	10	No	FAC	7. _____	_____	_____	_____	8. _____	_____	_____	_____	100 = Total Cover				Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	1. _____	_____	_____	_____	2. _____	_____	_____	_____	0 = Total Cover				<p>Dominance Test worksheet:</p> <p>Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)</p> <p>Total Number of Dominant Species Across All Strata: <u>3</u> (B)</p> <p>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.0</u> (A/B)</p> <p>Prevalence Index worksheet:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Total % Cover of:</th> <th style="text-align: center;">Multiply by:</th> <th style="text-align: center;">Result</th> </tr> </thead> <tbody> <tr><td>OBL species</td><td style="text-align: center;">x 1 =</td><td style="text-align: center;">0</td></tr> <tr><td>FACW species</td><td style="text-align: center;">x 2 =</td><td style="text-align: center;">0</td></tr> <tr><td>FAC species</td><td style="text-align: center;">x 3 =</td><td style="text-align: center;">60</td></tr> <tr><td>FACU species</td><td style="text-align: center;">x 4 =</td><td style="text-align: center;">0</td></tr> <tr><td>UPL species</td><td style="text-align: center;">x 5 =</td><td style="text-align: center;">400</td></tr> <tr><td>Column Totals:</td><td style="text-align: center;">(A) (B)</td><td style="text-align: center;">460</td></tr> </tbody> </table> <p>Prevalence Index = B/A = <u>4.6</u></p> <p>Hydrophytic Vegetation Indicators:</p> <p><input type="checkbox"/> Dominance Test is >50%</p> <p><input type="checkbox"/> Prevalence Index ≤3.0¹</p> <p><input type="checkbox"/> Morphological Adaptations¹ (Provide supporting</p> <p><input type="checkbox"/> Problematic Hydrophytic Vegetation¹ (Explain)</p> <p>¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.</p> <p>Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input type="checkbox"/></p>	Total % Cover of:	Multiply by:	Result	OBL species	x 1 =	0	FACW species	x 2 =	0	FAC species	x 3 =	60	FACU species	x 4 =	0	UPL species	x 5 =	400	Column Totals:	(A) (B)	460
Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status																																																																																																																															
1. _____	_____	_____	_____																																																																																																																															
2. _____	_____	_____	_____																																																																																																																															
3. _____	_____	_____	_____																																																																																																																															
4. _____	_____	_____	_____																																																																																																																															
0 = Total Cover																																																																																																																																		
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status																																																																																																																															
1. _____	_____	_____	_____																																																																																																																															
2. _____	_____	_____	_____																																																																																																																															
3. _____	_____	_____	_____																																																																																																																															
4. _____	_____	_____	_____																																																																																																																															
5. _____	_____	_____	_____																																																																																																																															
0 = Total Cover																																																																																																																																		
Herb Stratum (Plot size: <u>4m2</u>)	Absolute % Cover	Dominant Species?	Indicator Status																																																																																																																															
1. <i>Thelypodopsis</i> / Tumblemustard	40	Yes	NI																																																																																																																															
2. <i>Onopordum acanthium</i> / Scotch cottonthistle	15	Yes	NI																																																																																																																															
3. <i>Secale cereale</i> / Rye	15	Yes	NI																																																																																																																															
4. <i>Hordeum jubatum</i> / Fox tail barley	10	No	FAC																																																																																																																															
5. <i>Avena sativa</i> / Wild oat, Cultivated oat	10	No	UPL																																																																																																																															
6. <i>Lolium perenne</i> / Perennial rye grass	10	No	FAC																																																																																																																															
7. _____	_____	_____	_____																																																																																																																															
8. _____	_____	_____	_____																																																																																																																															
100 = Total Cover																																																																																																																																		
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status																																																																																																																															
1. _____	_____	_____	_____																																																																																																																															
2. _____	_____	_____	_____																																																																																																																															
0 = Total Cover																																																																																																																																		
Total % Cover of:	Multiply by:	Result																																																																																																																																
OBL species	x 1 =	0																																																																																																																																
FACW species	x 2 =	0																																																																																																																																
FAC species	x 3 =	60																																																																																																																																
FACU species	x 4 =	0																																																																																																																																
UPL species	x 5 =	400																																																																																																																																
Column Totals:	(A) (B)	460																																																																																																																																
Remarks:																																																																																																																																		

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-7	10YR 4/3	100					Silt Loam	Could not dig past 7 due to rocks.

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

<p>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</p> <p><input type="checkbox"/> Histosol (A1)</p> <p><input type="checkbox"/> Histic Epipedon (A2)</p> <p><input type="checkbox"/> Black Histic (A3)</p> <p><input type="checkbox"/> Hydrogen Sulfide (A4)</p> <p><input type="checkbox"/> Stratified Layers (A5) (LRR C)</p> <p><input type="checkbox"/> 1 cm Muck (A9) (LRR D)</p> <p><input type="checkbox"/> Depleted Below Dark Surface (A11)</p> <p><input type="checkbox"/> Thick Dark Surface (A12)</p> <p><input type="checkbox"/> Sandy Mucky Mineral (S1)</p> <p><input type="checkbox"/> Sandy Gleyed Matrix (S4)</p>	<p>Indicators for Problematic Hydric Soils³:</p> <p><input type="checkbox"/> Sandy Redox (S5)</p> <p><input type="checkbox"/> Stripped Matrix (S6)</p> <p><input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)</p> <p><input type="checkbox"/> Loamy Gleyed Matrix (F2)</p> <p><input type="checkbox"/> Depleted Matrix (F3)</p> <p><input type="checkbox"/> Redox Dark Surface (F6)</p> <p><input type="checkbox"/> Depleted Dark Surface (F7)</p> <p><input type="checkbox"/> Redox Depressions (F8)</p> <p><input type="checkbox"/> Vernal Pools (F9)</p>	<p><input type="checkbox"/> 1 cm Muck (A9) (LRR C)</p> <p><input type="checkbox"/> 2 cm Muck (A10) (LRR B)</p> <p><input type="checkbox"/> Reduced Vertic (F18)</p> <p><input type="checkbox"/> Red Parent Material (TF2)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p> <p>³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.</p>
---	---	--

<p>Restrictive Layer (if present):</p> <p>Type: _____</p> <p>Depth (inches): _____</p>	<p>Hydric Soil Present? Yes _____ No <u>X</u></p>
---	---

Remarks:

HYDROLOGY

<p>Wetland Hydrology Indicators:</p> <p>Primary Indicators (minimum of one required: check all that apply)</p> <p><input type="checkbox"/> Surface Water (A1)</p> <p><input type="checkbox"/> High Water Table (A2)</p> <p><input type="checkbox"/> Saturation (A3)</p> <p><input type="checkbox"/> Water Marks (B1) (Nonriverine)</p> <p><input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)</p> <p><input type="checkbox"/> Drift Deposits (B3) (Nonriverine)</p> <p><input type="checkbox"/> Surface Soil Cracks (B6)</p> <p><input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)</p> <p><input type="checkbox"/> Water-Stained Leaves (B9)</p>		<p>Secondary Indicators (2 or more required)</p> <p><input type="checkbox"/> Salt Crust (B11)</p> <p><input type="checkbox"/> Biotic Crust (B12)</p> <p><input type="checkbox"/> Aquatic Invertebrates (B13)</p> <p><input type="checkbox"/> Hydrogen Sulfide Odor (C1)</p> <p><input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)</p> <p><input type="checkbox"/> Presence of Reduced Iron (C4)</p> <p><input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)</p> <p><input type="checkbox"/> Thin Muck Surface (C7)</p> <p><input type="checkbox"/> Other (Explain in Remarks)</p>	<p><input type="checkbox"/> Water Marks (B1) (Riverine)</p> <p><input type="checkbox"/> Sediment Deposits (B2) (Riverine)</p> <p><input type="checkbox"/> Drift Deposits (B3) (Riverine)</p> <p><input type="checkbox"/> Drainage Patterns (B10)</p> <p><input type="checkbox"/> Dry-Season Water Table (C2)</p> <p><input type="checkbox"/> Crayfish Burrows (C8)</p> <p><input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)</p> <p><input type="checkbox"/> Shallow Aquitard (D3)</p> <p><input type="checkbox"/> FAC-Neutral Test (D5)</p>
--	--	--	---

<p>Field Observations:</p> <p>Surface Water Present? Yes _____ No <u>X</u> Depth (inches): _____</p> <p>Water Table Present? Yes _____ No <u>X</u> Depth (inches): _____</p> <p>Saturation Present? Yes _____ No <u>X</u> Depth (inches): _____ (includes capillary fringe)</p>	<p>Wetland Hydrology Present? Yes _____ No <u>X</u></p>
--	---

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

Remarks:

National Flood Hazard Layer FIRMMette




























118°50'58"W 45°41'8"N



Legend

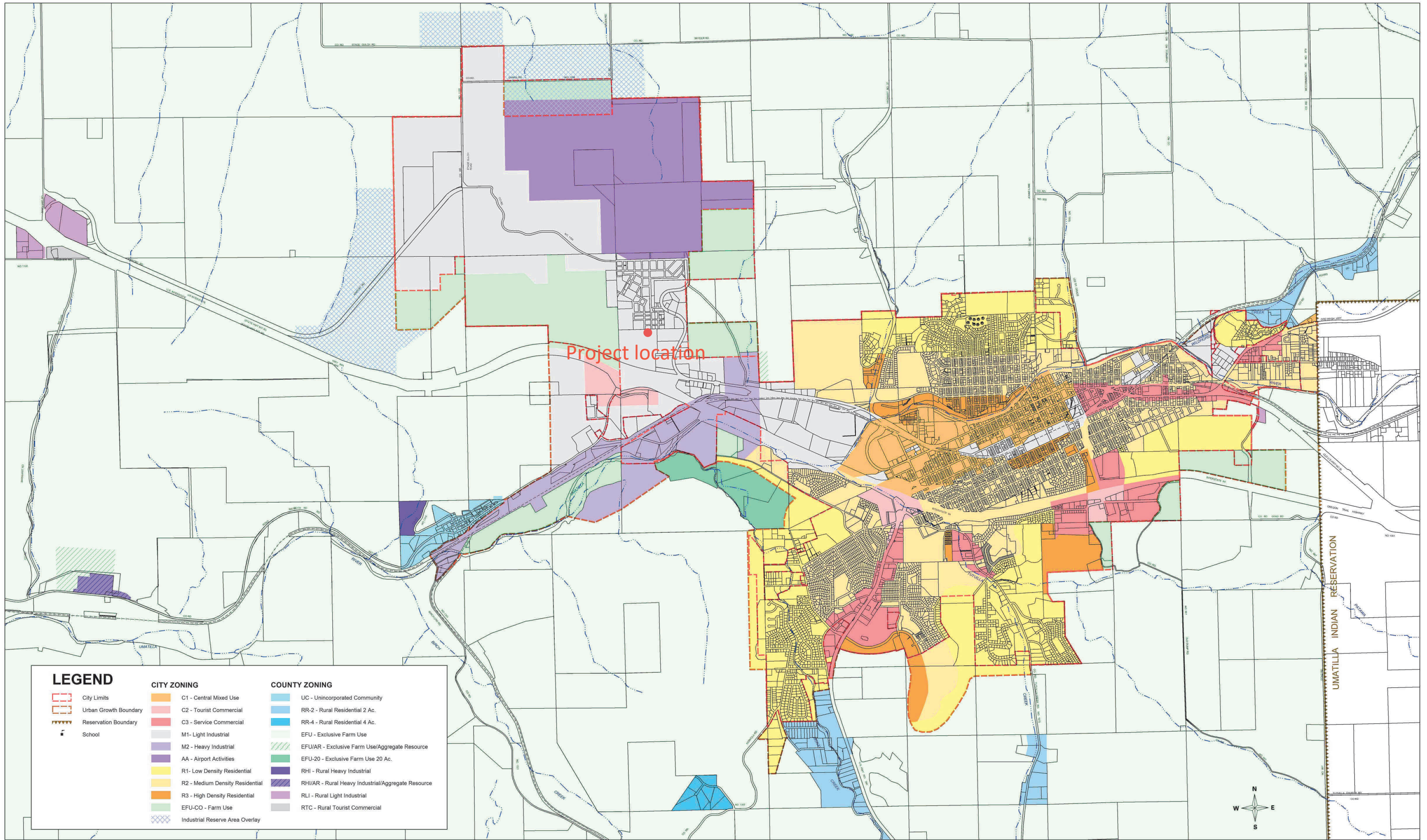
SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

- | | |
|------------------------------------|---|
| SPECIAL FLOOD HAZARD AREAS |  Without Base Flood Elevation (BFE)
<i>Zone A, V, A99</i>
 With BFE or Depth <i>Zone AE, AO, AH, VE, AR</i>
 Regulatory Floodway |
| OTHER AREAS OF FLOOD HAZARD |  0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile <i>Zone X</i>
 Future Conditions 1% Annual Chance Flood Hazard <i>Zone X</i>
 Area with Reduced Flood Risk due to Levee. See Notes. <i>Zone X</i>
 Area with Flood Risk due to Levee <i>Zone D</i> |
| OTHER AREAS |  NO SCREEN Area of Minimal Flood Hazard <i>Zone X</i>
 Effective LOMRs
 Area of Undetermined Flood Hazard <i>Zone D</i> |
| GENERAL STRUCTURES |  Channel, Culvert, or Storm Sewer
 Levee, Dike, or Floodwall |
| OTHER FEATURES |  20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
 17.5 Coastal Transect
 Base Flood Elevation Line (BFE)
 Limit of Study
 Jurisdiction Boundary
 Coastal Transect Baseline
 Profile Baseline
 Hydrographic Feature |
| MAP PANELS |  Digital Data Available
 No Digital Data Available
 Unmapped |
- 
-  The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **7/18/2022 at 2:14 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

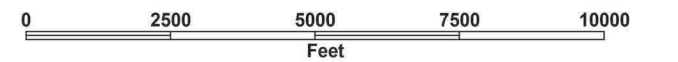
This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



LEGEND

CITY ZONING		COUNTY ZONING	
	City Limits		UC - Unincorporated Community
	Urban Growth Boundary		RR-2 - Rural Residential 2 Ac.
	Reservation Boundary		RR-4 - Rural Residential 4 Ac.
	School		EFU - Exclusive Farm Use
	C1 - Central Mixed Use		EFU/AR - Exclusive Farm Use/Aggregate Resource
	C2 - Tourist Commercial		EFU-20 - Exclusive Farm Use 20 Ac.
	C3 - Service Commercial		RHI - Rural Heavy Industrial
	M1 - Light Industrial		RHI/AR - Rural Heavy Industrial/Aggregate Resource
	M2 - Heavy Industrial		RLI - Rural Light Industrial
	AA - Airport Activities		RTC - Rural Tourist Commercial
	R1 - Low Density Residential		
	R2 - Medium Density Residential		
	R3 - High Density Residential		
	EFU-CO - Farm Use		
	Industrial Reserve Area Overlay		

CITY OF PENDLETON, OREGON & VICINITY



MAP DISCLAIMER: No warranty is made by Umatilla County as to the accuracy, reliability or completeness of this data. Parcel data should be used for reference purposes only. Not for legal use. Created in GeoMedia Professional by J Allford, Umatilla County Planning Department, 12/29/10, Updated 4/15/15

y:\workspace\planning\projects\PendletonZoning4_15_15.gws

ATTACHMENT C
Cultural Resource Inventory Report

**CULTURAL RESOURCE INVENTORY
FOR THE
CITY OF PENDLETON
N.W. H AVENUE
UMATILLA COUNTY, OREGON**

NOVEMBER 2022



Prepared For:
City of Pendleton
500 S.W. Dorion Avenue
Pendleton, Oregon 97801

CONTAINS PRIVILEGED INFORMATION—DO NOT RELEASE

**CULTURAL RESOURCE INVENTORY
FOR THE
CITY OF PENDLETON
N.W. H AVENUE
UMATILLA COUNTY, OREGON**

November 11, 2022

By:
Lindsay L. Costigan, B.S.

Prepared For:
City of Pendleton
500 S.W. Dorion Avenue
Pendleton, Oregon 97801

Prepared By:
Anderson Perry & Associates, Inc.
1901 N. Fir Street
La Grande, Oregon 97850

CONTAINS PRIVILEGED INFORMATION—DO NOT RELEASE

Executive Summary

On June 10, 2022, Anderson Perry & Associates, Inc. (AP) conducted a cultural resource inventory for the City of Pendleton's N.W. H Avenue project. The City of Pendleton requested AP perform the inventory in anticipation of future development of the property, including the construction of a bus barn. The survey was implemented at the request of Bob Patterson, public works director, City of Pendleton. A total of 8.1 acres was inventoried on City-owned property.

The proposed project area is located in the City of Pendleton, Umatilla County, Oregon. The proposed project area is located between N.W. H Avenue and N.W. K Avenue and bounded by N.W. 49th Drive and N.W. 47th Street in the northwest portion of the City near the Pendleton Airport. The legal description for the proposed project area is Township 2 North, Range 32 East, Section 5, Willamette Meridian.

Fieldwork was conducted to ensure compliance with Oregon Revised Statutes (ORS) 358.905 through 358.961, which prohibit the excavation, injury, destruction, or alteration of an archaeological site or removal of artifacts on public or private land in Oregon.

This inventory resulted in the identification of no cultural resources. AP recommends excavation by shovel test probes (STPs) to identify subsurface cultural resources within the proposed project footprint once the locations and designs of structures and improvements have been finalized.

Table of Contents

Executive Summary	ES-1
Project Description	1
Project Background	1
Environmental Setting	1
A. Geomorphology and Geology	3
B. Flora and Fauna.....	3
Cultural Setting.....	4
A. Precontact Overview.....	4
Period I - 11,550 to 6950/6350 BP	4
Period II - 6950/6350 to 3850 BP	5
Period III - 3850 BP to 230 BP (AD 1720)	5
B. Historical Overview	5
C. Ethnographic Overview.....	8
Literature Review	10
Field Methodology	14
Inventory Results.....	14
A. Pedestrian Survey	17
Results and Recommendations	18
References.....	19

TABLE

Table 1 Surveys Conducted within 1 Mi of the APE.....	10
---	----

FIGURES

Figure 1. Location and vicinity maps.....	2
Figure 2. Aerial view of the Pendleton Airbase, circa 1941. The APE is located at the upper left of the photo. Photo courtesy of the Oregon History Project.	7
Figure 3. Doolittle Raiders before the Tokyo Raid. Photo courtesy of the Naval History and Heritage Command.	8
Figure 4. Triple Nickle Smokejumpers. Photo courtesy of TripleNickle.com.....	8
Figure 5. APE with former structure locations based on 1956 aerial imagery and 1966 topographic map provided by the USGS.	16
Figure 6. Overview from center of APE, facing north/northwest.	17
Figure 7. APE overview from N.W. H Avenue, facing southeast.	18

APPENDIX

Appendix I Inadvertent Discovery Plan	
---------------------------------------	--

Project Description

The City of Pendleton intends to construct a bus barn on a portion of an 8.9-acre site located south of N.W. H Avenue. The bus barn is anticipated to occupy only 0.6 acre of the site; however, the City is requesting a review of the entire site. The bus barn is anticipated to result in 0.6 acre of new impervious surface, either gravel or pavement. Project Location

The proposed project area is located in the City of Pendleton, Umatilla County, Oregon. The proposed project area is located between N.W. H Avenue and N.W. K Avenue and bounded by N.W. 49th Drive and N.W. 47th Street in the northwest portion of the City near the Pendleton Airport. The legal description for the proposed project area is Township 2 North, Range 32 East, Section 5, Willamette Meridian (Figure 1).

Project Background

The City of Pendleton requested AP conduct a cultural resource inventory for the N.W. H Avenue project. Fieldwork was conducted to ensure compliance with ORS 358.905 through 358.961, which prohibit the excavation, injury, destruction, or alteration of an archaeological site or removal of artifacts on public or private land in Oregon. The survey was implemented at the request of Bob Patterson, public works director, City of Pendleton.

Fieldwork was conducted by Lindsay Costigan, B.S. (staff archaeologist) and Rebecca Friedlander, M.A. (project archaeologist) and supervised off site by Stephanie O'Brien, M.A. (senior archaeologist), who meets the Secretary of the Interior's (SOI) Standards for Archaeology. A pedestrian survey of the area of potential effect (APE) was conducted. The APE encompasses the area described in the Project Location. A total of 8.1 acres was inventoried on City-owned property.

Environmental Setting

The APE is located within the City of Pendleton approximately 1 mile (mi) north of the Umatilla River. This portion of the City is situated on a south-facing hillside northwest of downtown and utilized primarily for commercial and industrial purposes, including those associated with the nearby Pendleton Airport. The region is arid and generally used for agriculture. Elevations in the APE range from approximately 1,350 to 1,400 feet (ft) above sea level.

The APE occurs within the Pleistocene Lake Basins ecoregion of the Columbia Basin physiographic province, which is characterized by an arid climate, cool winters, and hot summers, with local conditions influenced by elevation. The proposed project area is located within the shrub-steppe vegetation zone, characterized by big sagebrush and bluebunch wheatgrass (Franklin and Dyrness 1988). Areas surrounding the APE have been disturbed by decades of development that have introduced non-native trees, grasses, and weeds.

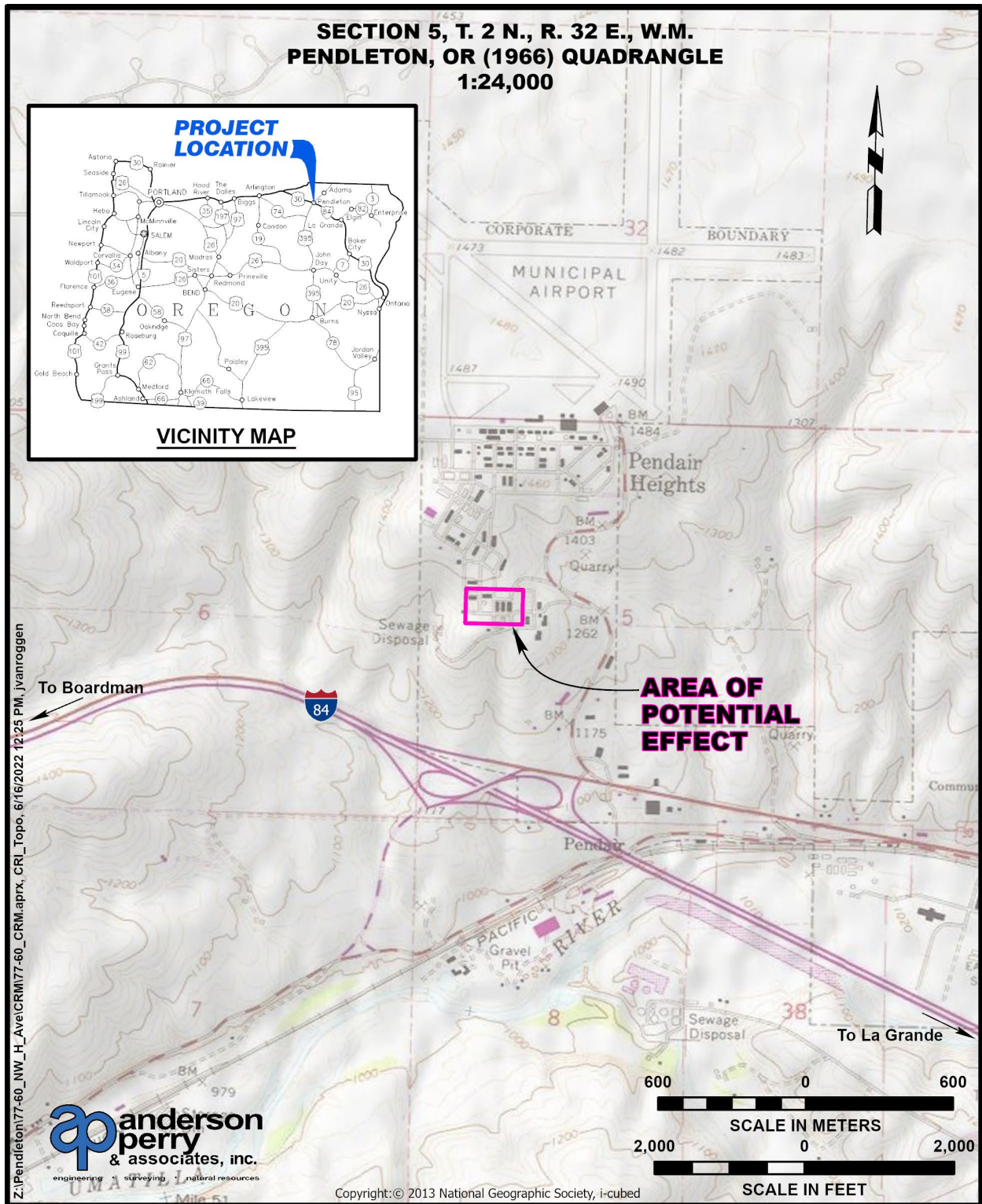


Figure 1. Location and vicinity maps.

CONTAINS PRIVILEGED INFORMATION—DO NOT RELEASE

A. Geomorphology and Geology

The APE is located on the northern portion of the Deschutes-Umatilla Plateau. This province extends 200 mi west from the Blue Mountains to the Cascades, is 100 mi across at its widest, and contains elevations ranging from a few hundred feet above sea level to approximately 4,000 ft above sea level (Orr and Orr 2006:131). The Deschutes-Umatilla Plateau is characterized by interspersed deeply incised canyons and broad uplands and is well watered by rivers and tributaries (Orr and Orr 2006:131). Region boundaries are difficult to define in the Deschutes-Umatilla Plateau, because margins are covered by thick layers of middle to late Miocene lavas. This volcanic plateau is characterized by rapid eruptive rates rather than fluidity (Orr and Orr 2006:132).

Columbia River basalts, specifically Grande Ronde basalts, characterize this area. From the late Miocene and early Pliocene, basins near Madras, The Dalles, Arlington, and McKay have accumulated volcanic and fluvial sediments (which preserve fossil and plant remains). The dark gray, fine-grained, tholeiitic Columbia River basalts are the central geologic feature of this province. These deposits originated when a succession of lava flows created the broad, level plateau in horizontal sheet-like deposits (Orr and Orr 2006:132-133). Lava flows in the Pliocene and Pleistocene from Newberry Crater and vents near Bend created deep gorges, and late Pleistocene glacial floods, primarily the Missoula floods, caused water and sediment to back up across the Deschutes-Umatilla Plateau. During this flooding, the fluctuations of Lake Condon (which primarily stretched from its constriction at The Dalles, Oregon, to Hermiston, Oregon, and at times as far east as the Wallula Gap) caused gravel, sand, and silt to settle along the basin in rhythmic graded beds (Miller 2014).

The geology of the Pendleton area consists of mostly tuffaceous sedimentary rocks and unconsolidated, alluvial deposits that lie above Miocene, mafic volcanic rock. Wanapum basalt deposits extend through the center of Umatilla County, including the area south of Pendleton, and were deposited through the Pliocene and Miocene. Alluvial deposits from the Umatilla River have been utilized by local agricultural pursuits (Miller 2014; U.S. Geological Survey [USGS] 2022).

Modern soils in the vicinity of the proposed project area are mapped solely as Walla Walla silt loam with 1 to 7 percent slopes. This soil is characterized as non-hydric, well-drained loess silt with a depth to water table of more than 80 inches (U.S. Department of Agriculture Natural Resources Conservation Service 2022).

B. Flora and Fauna

Native species common to this area of the Columbia Plateau include big sagebrush (*Artemisia tridentata*), bluebunch wheatgrass (*Agropyron spicatum*), sagebrush mariposa lily (*Calochortus macrocarpus*), Sandberg bluegrass (*Poa secunda*), Cusick's bluegrass (*Poa cusickii Vasey*), and low pussytoes (*Antennaria dimorpha*) (Bryce and Omernik 1997; Franklin and Dyrness 1988). Vegetation in the APE generally consists of non-native grasses and weeds with some errant crops. Areas surrounding the APE have been disturbed by decades of farming, ranching, and development, which have introduced non-native vegetation.

Common wildlife in the region of the proposed project area consists of a wide range of mammal, bird, and fish species. The Umatilla Subbasin Plan defines focal species as those used to develop management strategies to enhance the quality of the environment for all species. Focal terrestrial

species include the pileated woodpecker (*Dryocopus pileatus*), white-headed woodpecker (*Picoides albolarvatus*), red-naped sapsucker (*Sphyrapicus nuchalis*), ferruginous hawk (*Buteo regalis*), grasshopper sparrow (*Ammodramus savannarum*), sagebrush sparrow (*Amphispiza nevadensis*), Columbia spotted frog (*Rana luteiventris*), yellow warbler (*Dendroica petechia*), American beaver (*Castor canadensis*), and great blue heron (*Ardea herodias*) (Northwest Power and Conservation Council [NPCC] 2004).

Numerous resident and anadromous fish species inhabit the Umatilla subbasin. Focal aquatic species include summer steelhead/redband trout (*Oncorhynchus mykiss*), coho salmon (*Oncorhynchus kisutch*), spring and fall Chinook salmon (*Oncorhynchus tshawytscha*), and bull trout (*Salvelinus confluentus*) (NPCC 2004).

Cultural Setting

The cultural setting of Oregon represents the meeting of three cultural and natural regions, each based within a distinct geographic region (Ray 1936; Walker 1998). In the area of Oregon east of the Cascades, two culture regions divide the area. To the south is the northern Great Basin culture area, which represents the earliest evidence of humans in the state, and to the north is the southern Columbia Plateau culture area, where the proposed project occurs.

A. Precontact Overview

The proposed project area is located within the southwest region of the southern Columbia Plateau culture area. The cultural chronology for this area has been split into three periods and corresponding subperiods based on the research history of the area (Ames et al. 1998).

Period I - 11,550 to 6950/6350 BP

This period is split into the Paleoindian (Clovis) period and the post-Clovis period. Period IA (11,500 to 11,000 BP) consists mainly of Clovis-fluted projectile point surface finds. In Oregon, Clovis projectile points are also found in the northern Great Basin, the western valleys, the coast, and likely represent a highly dispersed group of people who migrated across diverse landscapes in search of game and forage (Aikens et al. 2011). Period IB (11,000 to 6000/7000 BP) consists of a “broad-spectrum” hunter-gatherer subsistence economy; high seasonal and annual mobility; low population densities; and a technology geared to maximum flexibility” (Ames et al. 1998:103). Notable archaeological sites of this period include Marmes Rockshelter (45FR50), Lind Coulee (45GR97), Kirkwood Bar (10IH699), and Granite Point Locality 1 (45WT41).

In Oregon’s southwest Columbia Plateau, evidence of this early occupation was found at the Roadcut site (35WS8) east of The Dalles Dam (Cressman et al. 1960). Radiocarbon dating from the Roadcut site indicate the area was utilized as long ago as 11,300 to 8800 cal BP (Aikens et al. 2011). An abundance of salmon bones was also found at the site in contexts dating to 9300 cal BP, indicating early use of salmon as a major food source (Butler 1993; Cressman et al. 1960). Windust-type projectile points, heavy choppers, ovate biface knives, net sinkers or bolas stones, and elk and deer antler tools were among the other artifacts found during excavation (Aikens et al. 2011). Nearby, the Wildcat Canyon site (35GM9), located just above the confluence of the John Day and Columbia Rivers, reflects a cultural assemblage of the same

general age, and is characterized by Windust-type points, large knives and scrapers, and occasional milling stones and manos (Cole 1968; Dumond and Minor 1983).

Period II - 6950/6350 to 3850 BP

Period II is defined by shifts in settlement and subsistence patterns as well as changes within the artifact assemblage. Semi-subterranean pithouses appear for the first time and a shift to a subsistence strategy more heavily based on root-gathering and fishing occur. Mobility appears to be on the decline, especially in riverine areas rich in resources (Ames et al. 1998).

Within the southwest region, the Cottonwood Creek site (35GR1507), located west of Dayville, dates to approximately 6600 to 5000 BP. The site yielded 2,600 pieces of animal bone and more than 200 pieces of freshwater mussel shell, with fully identifiable pieces, and the presence of a variety of stone tools indicate a location that people continually returned to process game and root and seed plants (Aikens et al. 2011; Endzweig 2001).

Period III - 3850 BP to 230 BP (AD 1720)

This period is marked by the widespread use of pithouses, a heavy reliance on fishing (particularly salmon), salmon storage, camas exploitation, and land-use patterns such as seasonal canyon villages and upland and mountain hunting and special use camps. After AD 500, longhouses also enter the archaeological record (Ames et al. 1998).

In the southwest region, this period is split into subperiod IIIA (2900 BP to AD 1000) and subperiod IIIB (AD 1000 to Contact). Subperiod IIIA is characterized by pithouse villages and more temporary living surfaces, suggesting that people may have lived in semi-subterranean structures or tent-like structures set well into the ground for some seasons and in less permanent tent-like shelters set on the surface during other seasons. Earth ovens, pestles, and mauls are often found in association with pithouses, and large cemeteries are represented in this period and the following period. Fishing was of increasing importance, as indicated by faunal remains and notched pebble net sinkers. Deer, some elk, bison, and sheep are also present in the faunal record (Ames et al. 1998:116). Subperiod IIIB indicates much continuity from the previous period with subsistence practices remaining largely the same, though with some changes in housing styles and the adoption of some artifact and burial styles from farther west (Ames et al. 1998:117). Representing a shift in burial style, the Hoover Creek site (35WH58), located north of Fossil, consists of a cremation pit similar to those found along the Columbia River. Artifacts found in association with the site date it to the early historic period (Cressman et al. 1960).

B. Historical Overview

Contact with European Americans in the inland northwest first occurred in 1805, when Lewis and Clark and their expedition traveled the Clearwater, Snake, and Columbia Rivers. Trappers and traders followed. Through the early nineteenth century, the British-owned North West Company, the Hudson's Bay Company, and the Pacific Fur Company (owned by John Jacob Astor), competed for dominance in the region and established and bought forts along the Columbia and Snake Rivers. In 1813, the Pacific Fur Company failed, and its assets were purchased by the North West Company. The establishment of Fort Nez Percés (or Old Fort Walla Walla) by traders Donald MacKenzie and

Alexander Ross of the North West Company in 1818 gave the company a strong foothold in the Columbia River area. In 1821, the North West Company was forcibly merged by the British government with the Hudson's Bay Company (Dodd 1977).

The construction and acquisition of Forts Boise and Hall in 1834 and 1837, respectively, along with the clearing of a wagon trail to Fort Hall, caused an increase in traffic through the area. Spurred by the "Great Revival" of the 1820s and 1830s, and following the overland trail established by Native American groups and then utilized by the trading companies, missionaries Reverend Jason Lee, Henry H. Spalding, and Marcus Whitman led the movement to establish missions throughout present-day Oregon, Washington, and Idaho to proselytize the area's Native American people (Dodd 1977). In 1840, a group that may have included trappers Robert Newell and Joseph Meek arrived at Fort Nez Percés and became one of the first wagon groups to reach the Columbia River (Mead 2006). Beginning in the 1840s, this route became known as the Oregon Trail.

While most people simply passed through eastern Oregon, their sights set on lands to the west, Marcus Whitman and his wife Narcissa established a Presbyterian mission in the Walla Walla Valley in 1836. Friction between local Cayuse groups and the Whitmans soon arose, and tensions were compounded by the influx of white settlers passing through the area on the Oregon Trail into Oregon and Washington territories. A devastating measles epidemic in 1847 and the belief that the Whitmans bore responsibility for the disease culminated in a Cayuse uprising in which Marcus and Narcissa Whitman and eleven other white settlers were killed (Stern 1998:413-414). The Cayuse War ensued, and while five members of the Cayuse tribe were eventually handed over to be tried for the murder of the Whitmans, sporadic conflicts continued for several years. In 1855, a treaty was signed, setting aside a reservation for the Cayuse, Walla Walla, and Umatilla tribes in the Cayuse region of the Umatilla Valley (Stern 1998).

Settlers traveling on the Oregon Trail continued to migrate into the Willamette Valley and surrounding areas until the area was close to overflowing. This forced later settlers to homestead the eastern parts of the state, which had been passed over in earlier times. Water supplies in these more arid areas could not sustain mass agriculture, thus, various irrigation projects were launched. In Morrow and Umatilla Counties, private enterprises began constructing irrigation systems between 1903 and 1906. The U.S. Bureau of Reclamation began to investigate the feasibility of a large-scale irrigation system in the area in 1903. In 1907, the irrigation system project, now named the Umatilla Project, was authorized by SOI Ethan A. Hitchcock, who released \$1,000,000 for construction. Between 1907 and 1918, work was conducted to construct numerous dams and canals, which comprise the Umatilla Project irrigation system, including the Cold Springs Dam, the McKay Dam, the Feed Canal and Diversion Dam, the Maxwell Canal and Diversion Dam, the Three Mile Falls Diversion Dam, and the West Extension Canal (Stene 1993).

Moses Goodwin purchased land in present-day Pendleton from a squatter in the early 1860s. In 1868, Mr. Goodwin deeded 2.5 acres of the land to Umatilla County to begin construction of various City and County administrative buildings. Pendleton was also platted in 1868 and was named for Senator George H. Pendleton of Ohio. Development of the City continued through the first decades of the twentieth century, and all City services were centralized at City Hall in 1908 (City of Pendleton 2021). Growth was bolstered by Union Pacific Railroad rail lines that passed through the City. Local attorney Roy Raley established a post-harvest rodeo and celebration, which prompted the development of the famous Pendleton Round-Up (City of Pendleton 2021). Pendleton Woolen Mills

opened in 1909, and the Eastern Oregon State Hospital was established in 1912 (East Oregonian 2018). Blue Mountain Community College was established in 1963 (East Oregonian 2018).

Originally constructed in the 1930s, Pendleton’s airport was expanded by the construction of new runways, hangars, and other buildings for use by 2,500 service members during the beginning of the American involvement in World War II (WWII). Airbase construction cost \$1.6 million and was completed in 1941; 122 structures were built by W.C. Smith & Co., of Duluth, Minnesota, and runway construction and expansion was completed by E.C. Gerber of Oregon City (Figure 2). The residents of Pendleton raised \$100,000 to build 100 officers’ houses, while the federal government provided \$400,000 for the construction of 85 units to house non-commissioned officers and civilians working at the airbase (Allen 2005; Doyle 2022).



Figure 2. Aerial view of the Pendleton Airbase, circa 1941. The APE is located at the upper left of the photo. Photo courtesy of the Oregon History Project.

The U.S. Army Air Force’s 17th Bombardment Group, known as the Doolittle Raiders, was transferred to Pendleton in June 1941 to defend shipping lanes along the Northwest coast and carry out a bombing mission on Tokyo in retaliation for the bombing of Pearl Harbor (Figure 3). After the Doolittle Raiders were transferred in 1942, the field was primarily used for training fighter pilots. During the summer of 1945, the 555th Parachute Infantry Battalion, or Triple Nickle Smokejumpers, was stationed in Pendleton to combat forest fires ignited by Japanese balloons carrying bombs. The Triple Nickles were an all-Black infantry unit of the nation’s first airborne firefighters (Doyle 2022) (Figure 4).



Figure 3. Doolittle Raiders before the Tokyo Raid.
Photo courtesy of the Naval History and Heritage Command.



Figure 4. Triple Nickle Smokejumpers. Photo courtesy of TripleNickle.com.

When the war ended in 1945, Pendleton Field was one of 11 airfields in Oregon to be declared as surplus property. Management of the airport property was taken over by the City of Pendleton in 1948. The base is now part of the Pendleton Airport, which also includes the Pendleton Army Aviation Support Facility, a Chinook helicopter unit of the Oregon Army National Guard (Allen 2005; Doyle 2022).

C. Ethnographic Overview

Historical evidence indicates the vicinity of the proposed project area was utilized by the Umatilla, Cayuse, and Western Columbia River Sahaptins (also known as the Tenino or Warm Springs Indians) (Hunn and French 1998; Ray 1936; Suphan 1974). Named *Ímatalam Wána*, the Umatilla River corridor was used by the Cayuse, Umatilla, and Walla Walla people as a winter village and seasonal camp and for gathering plant foods, materials, and medicines; fishing; hunting; trading; grazing; and as a trail to the Columbia River. The Umatilla River is also referred to as *Hiyowátalam* by the Cayuse and Nez Perce. *Nixyáwii*, meaning “aspen springs,” refers to a spring near Mission, Oregon. A large settlement, famous for horse racing and celebrations, was located nearby. *Kayús* is a former village site, located east of present-day Pendleton. A female prophet, *Texnúunwey* or *Xaxnúunwey*, lived in the village and her songs are still sung today. *Tíimeniń*, meaning “marked rock,” describes an inscribed rock located southeast of Pendleton. The rock was likely destroyed during the construction of Interstate 84 (I-84) (Hunn et al. 2015).

Historically, the Cayuse spoke a distinct language known as *Waiilatpuan*, which is sometimes regarded as coming from its own language family but has also been included in the Sahaptin group and Plateau Penutian subgroup. The Umatilla and Walla Walla, who have been long associated with the Cayuse, spoke dialects of Sahaptin (Stern 1998:395; Suphan 1974). Due to trade relationships and intermarriage with the Nez Perce Tribe, the language transitioned over time within the group until Nez Perce became the dominant language, with influences from the traditional language. Today, this dialect is called *Nuumiipuutím* and is spoken by the Cayuse Nez Perce community on the Umatilla Reservation (Engum and Conner 2015:XIX). Umatilla is a dialect of the Columbia River Sahaptin subgroup and Walla Walla is a dialect of the Northeast Sahaptin subgroup (Hunn et al. 2015:17). Since the Cayuse, Umatilla, and Walla Walla utilized some of the same territory,

sometimes at the same time, no strict boundaries existed between the three groups (Suphan 1974; Swindell 1942). The three groups practiced seasonal rounds and would travel between winter village sites along the Columbia River and summer camp sites in the nearby mountains to take advantage of prime fishing, hunting, and gathering as the seasons changed. Inter-marriage between the three groups and with other co-located groups was common, and villages often encompassed a composite of people from varying groups (Stern 1998:396-402). Politically, villages were considered autonomous. Village headmen and pre-eminent leaders from a group of villages comprised band chiefs (Ray 1942; Stern 1998:402-403).

By 1730, the Cayuse had adopted the horse and, along with the Nez Perce, Flathead, and others, traveled seasonally to the Plains to hunt for buffalo. Some Umatilla and Walla Walla groups joined these expeditions, while others chose to utilize the riverine environment. Changes arose in these Indian groups from exposure to the Plains' influence, and these changes were then introduced to the groups' western neighbors (Conner and Lang 2006:30; Ray 1939; Stern 1998:396).

Three treaties were signed in 1855 between the U.S. government, the Walla Walla Tribe, the Umatilla Tribe, the Cayuse Tribe, the Nez Perce Tribe, and the Yakama Tribe, establishing three reservations including the Umatilla Indian Reservation on Cayuse land. Although the treaties were signed in 1855, the U.S. Senate ratified them four years later, after Oregon had achieved statehood (Minthorn 2006:68-69). After ratification, the Cayuse were militarily escorted to the reservation and, by the late nineteenth century, the Walla Walla and the Umatilla were ordered to migrate there. The three groups also brought with them relatives from the Palus Tribe (Pond and Hester 2006:95-96). Not all members of the tribes were relocated and, in the 1860s, members of the Walla Walla and Umatilla Tribes continued to move seasonally on and off the reservation (Stern 1998:415). However, by 1871 the tribes had lost 95 percent of their traditional land and were forced onto reservations. In 1885, Congress passed the Slater Act, an allotment and homesteading act aimed at forcing Native American tribes to take on individual landownership and redistributing remaining reservation lands. This act reduced the Cayuse, Umatilla, and Walla Walla Reservation from 245,699 acres to 158,000 acres (Luce and Johnson 2006:174). In 1887, the General Land Allotment Act, also known as the Dawes Act, further reduced reservation lands (Pond and Hester 2006:95-96). In 1949, the General Council of the Umatilla Tribe voted to form a constitutional government, thus establishing the Confederated Tribes of the Umatilla Indian Reservation (CTUIR). That vote was one step among many since the Treaty of 1855 in the CTUIR's fight for sovereignty (Luce and Johnson 2006).

The Western Columbia River Sahaptins, a Sahaptin-speaking group, lived primarily along the southern shore of the Columbia River and down the southern watersheds of its tributaries, including Eightmile Creek, the John Day River, and the Deschutes River (Hunn and French 1998:378-379; Toepel et al. 1980:31-32). For subsistence, the Western Columbia River Sahaptins relied on summer and fall fisheries at low elevations near the rivers, while root harvesting in the spring drew people farther away from the major water sources. Winters were spent in villages at lower elevations on or near adjacent rivers (Hunn and French 1998:383-384). Roots commonly collected and harvested in meadows included bitterroot, lomatiums, yellowbell, camas, false onion, Indian carrot, Indian potato, and edible valerian (Hunn and French 1998:380-381). Berries, seeds, sprouts, stems, leaves, and inner bark of various species were also important resources. Salmon was the primary fish consumed, along with whitefish, Northern squawfish, chiselmouth, peamouth, and red-sided shiner.

Hunting focused mainly on the highly sought-after mule deer (both interior and blacktail) (Hunn and French 1998:382).

Since 1937, the Western Columbia River Sahaptins have been part of the Confederated Tribes of the Warm Springs Reservation of Oregon, along with three groups of Kiksht-speaking (Upper Chinook) Wasco Indians and Northern Paiute Indian groups. The Warm Springs Indian Reservation, created in 1855, consists of 1,019 square mi of land located in central Oregon, northwest of Madras (Hunn and French 1998:389-390).

Literature Review

A literature review of the APE and the area 1 mi around it was conducted using the Oregon Archaeological Records Remote Access database by Lindsay Costigan on May 25, 2022. The search indicated that eight cultural resource surveys have been conducted within 1 mi of the APE and resulted in the identification of no cultural resources (Table 1).

TABLE 1
SURVEYS CONDUCTED WITHIN 1 MI OF THE APE

NADB Report No.	Report Title	Author	Year
9225	Archaeological Assessment of Proposed Radar and NWS Office Sites, Pendleton Municipal Airport, Pendleton, Oregon	John Woodward	1988
19305	Cultural Resource Surveys of the Brogoitti Industrial Land and Airport Industrial Land, Umatilla County, Oregon	Sarah W. Haug (CTUIR Cultural Resources Protection Program)	2004
29170	Cultural Resources Identification Survey, at the NorWest Energy 9, LLC (Pendleton Solar) Site, Umatilla County, Oregon	Donald L. Craig (TRC Companies, Inc.)	2017
29490	Eastern Oregon Regional Airport Runway Rehabilitation Project, Pendleton, Umatilla County, Oregon	Alicia Valentino, Katie Wilson, and Chris Lockwood (Environmental Science Associates, Inc. [ESA])	2017
29801	City of Pendleton Sewer Infrastructure Improvement Project, Cultural Resources Assessment, Pendleton, Umatilla County, Oregon	Alicia Valentino, Katherine Wilson, and Chris Lockwood (ESA)	2018
30086	Eastern Oregon Regional Airport Unmanned Aircraft System Development Area, Cultural Resources Assessment, Pendleton, Umatilla County, Oregon (revised)	Johanna Kahn, Alicia Valentino, and Paula Johnson (ESA)	2018
31594	Cultural Resource Monitoring Report for the City of Pendleton Unmanned Aerial Systems Phase IV Industrial Park, Umatilla County, Oregon	Lindsay L. Costigan (AP)	2020
31721	Runway 29 Threshold Displacement and Hotspot Mitigation, Eastern Oregon Regional Airport, Pendleton, Umatilla County, Oregon - Cultural Resources Assessment	Justin B. Colon, Johanna Kahn, and Katherine F. Wilson (ESA)	2021

NADB = National Archaeological Database

Surveys within the search radius have been conducted for airport, industrial park, and infrastructure improvements; solar array installation; and cultural resource monitoring. No previous surveys have taken place within the APE.

According to the Oregon Historic Sites Database, historic properties within 1 mi of the APE include the Pendleton Airport gatehouses (National Register of Historic Places [NRHP] eligibility unevaluated) and Pendleton Airbase (determined eligible for the NRHP).

The Pendleton Airbase was nominated for the NRHP in 1985 based on its association with WWII and economic growth of Pendleton and was assigned a period of significance of 1941 to 1945. A 2018 recording of the Pendleton Airbase property performed by ESA divides the airbase into four portions: the airfield, hardstands area, magazine area, and cantonment and operations area. The APE for the N.W. H Avenue project is included in the cantonment and operations area. This area once contained approximately 250 buildings and a sewage treatment plant; structures within the APE were likely wood-framed administration and/or housing structures clad in wood siding. Four buildings similar to those within the APE are still present in the cantonment area outside the APE and are used for apartments (identified by ESA as Buildings 704, 707, 835, and 904). Such buildings were constructed hastily and were meant to be temporary; hundreds of these buildings have been built and demolished within the Pendleton Airbase boundaries (Kahn et. al 2018).

A 1986 Programmatic Memorandum of Agreement (MOA) between the U.S. Department of Defense (DOD), Advisory Council on Historic Preservation, and National Conference of State Historic Preservation Officers described justification for demolition of several buildings at the Pendleton Airbase. The MOA stated that the DOD would compile historical and structural information on demolished buildings; this documentation was not submitted to the National Park Service or Library of Congress as stipulated.

Available historical General Land Office (GLO) records, USGS topographic maps, Geo. A. Ogle & Co. maps, Metsker maps, and aerial imagery were reviewed prior to fieldwork for evidence of historical sites in the vicinity of the APE. See Figure 5.

An 1865 GLO survey map indicates the APE was vacant at that time. The combined “Walla Walla to Umatilla Road/Old Emigrant Road/Oregon Trail” is depicted in an east/west alignment approximately 0.75 mi south of the APE. The nearest landmark shown on the GLO map is a home owned by Judge Johnson at the foot of the hill near the modern location of the Umatilla County Public Works. Some areas in the Umatilla River floodplain have been claimed and farmed (GLO 1865). GLO records indicate portions of the APE were patented to Thomas H. Lacefield in 1892, Benjamin C. Ridder in 1896, and Aaron L. Thoroughman in 1894.

A 1914 Ogle map indicates the APE was owned by A.B. Dillon. A nearby homestead at the modern location of Pendleton Bottling is the presumed residence of Dillon. Old Airport Road is present, and an unnamed road along the southern boundary of Section 5 follows the old Oregon Trail alignment (Ogle 1914). A 1932 Metsker map indicates the APE was undeveloped and owned by Alex Gammey. In the vicinity, the “Columbia River Highway” is present along the north side of the railroad tracks through Pendleton south of the APE (Metsker 1932).

Historical USGS topographic maps indicate that, in 1935, Old Airport Road was used to access the modern airport area east of the modern Airport Road, while Airport Road was first shown in its current alignment in 1953 (USGS 1935, 1953). I-84 was also first shown in 1953, spurring development of

Pendleton around its alignment (USGS 1953). By 1966, several structures were located within and near the APE, as the entirety of the airport industrial area near the APE has been developed, including a sewage disposal facility southwest of the APE and quarry east of the APE (USGS 1966). Eleven structures in varying shapes and sizes are shown within the APE.

Aerial imagery provided by the USGS and Umatilla County Surveyor's Office indicate the structures (now all removed) were present within the APE in 1956, and the area was landscaped with trees (USGS 1956). The 1956 imagery indicates a maximum of 13 buildings were located within the APE. Seven of the 13 buildings are landscaped indicating they may have been used for administration or lodging, while the remaining five buildings of various shapes and sizes, were likely used for storage (USGS 1956).

Modern imagery provided by the USGS and Google Earth indicates the structures were present in 1974, and all had been removed by 1994. The only structure currently remaining in the APE, a pole barn, was constructed between 1994 and 2001. Portions of the APE were plowed and/or raked between 2010 and 2020, and building foundations are no longer visible on the latest (2021) aerial imagery.

A review of historical documentation, maps, and existing site records indicated that anticipated cultural resources within the APE may include historic-period artifacts related to use of the APE as lodging for individuals working at the airport during the mid-twentieth century.

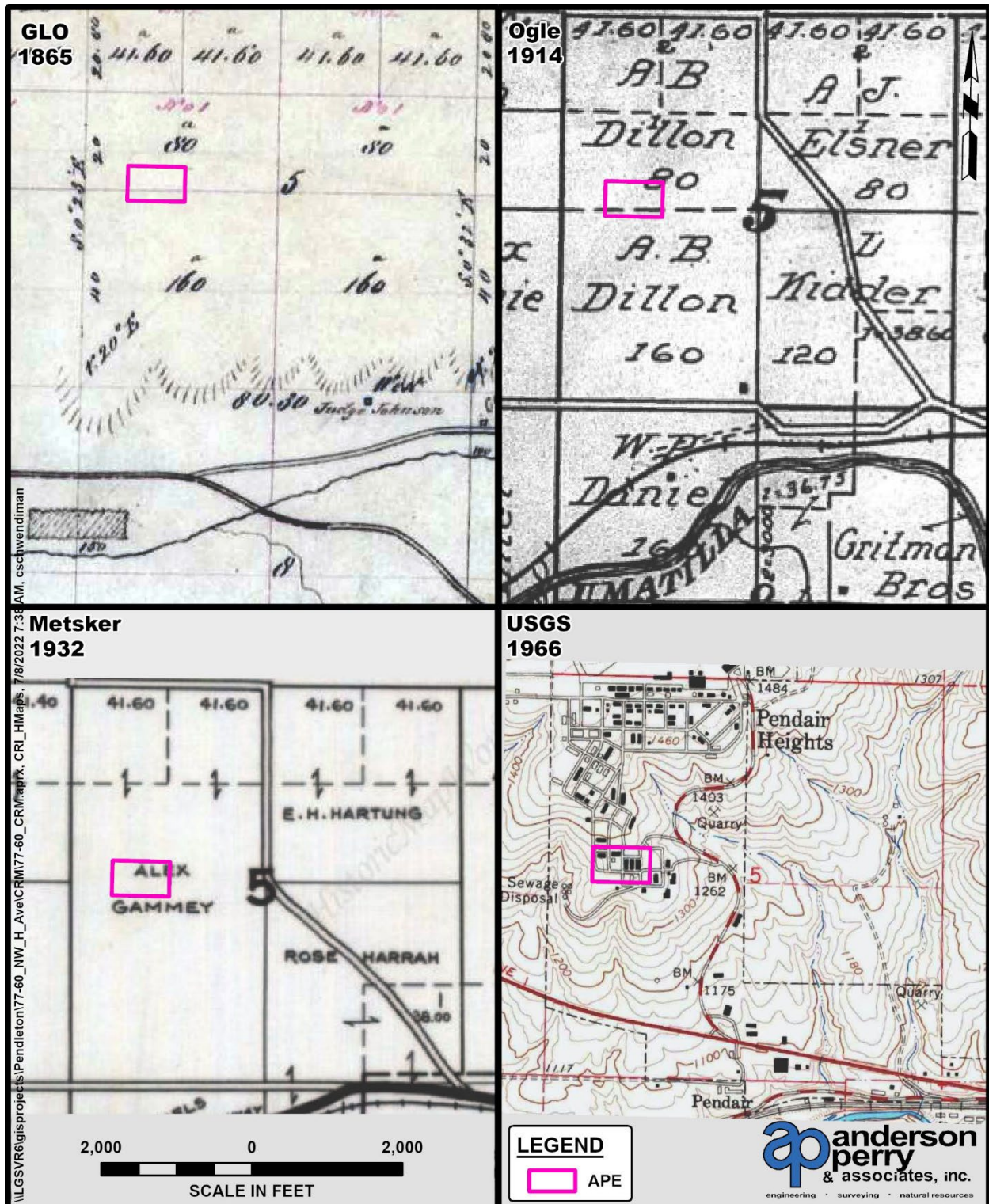


Figure 5. Historical maps with APE.

Field Methodology

The objectives of the inventory were to locate, document, and evaluate cultural resources within the APE. Potential impacts were to be identified and avoided or proposed for mitigation. The APE for this project was defined as the footprint of the proposed project.

A research design consisting of an intensive pedestrian survey was proposed for this project. The archaeologists walked parallel transects spaced no more than 20 meters (m) (66 ft) apart within the entire APE. Upon completion of the surface inspection, a Trimble R1 GPS receiver would be utilized to map any discovered cultural resources, including diagnostic artifacts and other relevant features. Cultural resources would be photographed, and site data would be entered on the appropriate Oregon site recording form. However, no cultural resources were found during the inventory.

For this project, an archaeological site was defined as ten or more artifacts, or one or more archaeological features, within a spatially definable area, that were likely to have resulted from patterned cultural activity. Isolates would be defined as any artifacts numbering nine or less that are more than 50 years old and are not considered an archaeological feature. A historic-period built resource would be defined as an existing element of the built environment that is not in ruin.

Site significance was considered according to the National Register Criteria for Evaluation of Significance as outlined in the National Park Service Bulletin *How to Apply the National Register Criteria for Evaluation* (1997), as follows:

“The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and

- a) that are associated with events that have made a significant contribution to the broad patterns of our history; or
- b) that are associated with the lives of persons significant to our past; or
- c) that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- d) that have yielded, or may be likely to yield, information important in prehistory or history.”

If the cursory site recording did not yield sufficient information to determine site eligibility, then sites would be deemed “unevaluated.” Such sites are treated as potentially eligible and are avoided until a determination of eligibility can be completed.

Inventory Results

A pedestrian survey was conducted June 10, 2022, by Lindsay Costigan and Rebecca Friedlander. Weather conditions were generally overcast and rainy with temperatures between 55 and 60 degrees Fahrenheit. The APE is located at the southern periphery of the airport/industrial area northwest of Pendleton among rolling hills (Figure 6). The APE is situated upon a south-facing hillside with a gentle slope. The APE contains a network of gravel roads that divide the area into parcels. Most parcels currently contain no structures, and a buried water line and utility poles are installed in the APE. The

only structure within the APE is a pole barn located within the southwest quadrant of the APE, and a small garden containing grapes has been planted south of the structure.

Known previous disturbances within the APE include construction and demolition of buildings, installation and use of a network of graveled roads, and plowing; observed disturbances include some landscape modification (plowing, berming, etc.), a garden area, and installation of water utilities and utility poles. Previous disturbance within the APE has likely caused substantial disturbance to native sediments through much of the proposed project area. Vegetation includes a multitude of non-native grasses and weeds, as well as occasional alfalfa and grain varieties. A majority of the APE had been mowed at the time of survey.

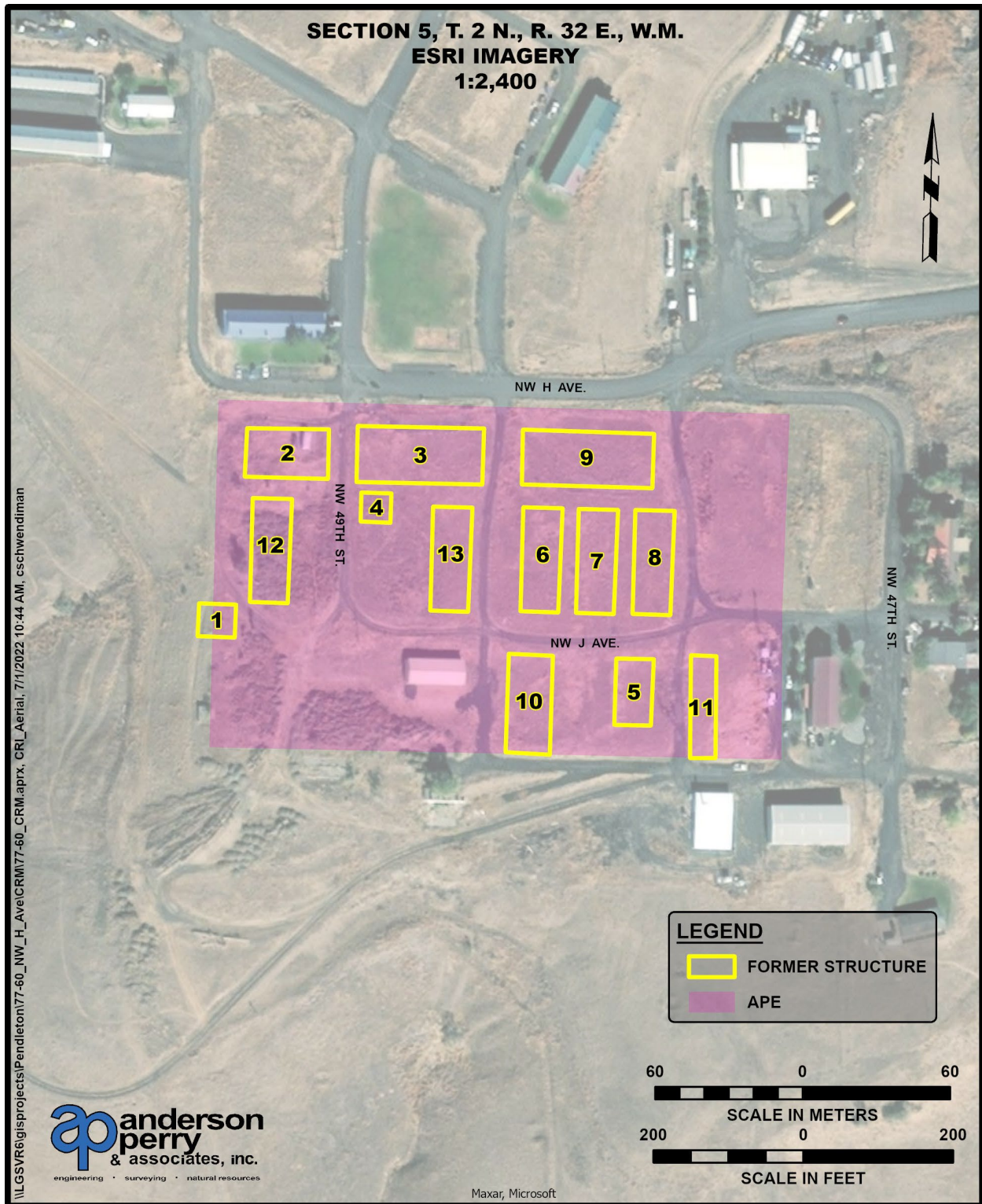


Figure 6. APE with former structure locations based on 1956 aerial imagery and 1966 topographic map provided by the USGS.

A. Pedestrian Survey

An intensive pedestrian survey, which is considered 100 percent coverage, was conducted for the entirety of the APE. The archaeologists conducted 20-m spaced transects moving from north to south across the APE. Ground surface visibility was generally poor and ranged from 0 to 20 percent in mowed and unmowed vegetated areas, which comprise approximately 90 percent of the APE. The remainder of the APE contains graveled access roads, which also provided 0 to 20 percent ground surface visibility (Figures 7 and 8).

During the inventory, two portions of concrete sidewalk were identified adjacent to Buildings 6 and 3, respectively. Additionally, fragments of flat glass, brick, and ceramic sewer pipe were identified throughout the property; while these artifacts are not temporally diagnostic or necessarily associated with the WWII-era structures, they are the type of artifacts that are likely associated with the presence and demolition of structures on the property.



Figure 7. Overview from center of APE, facing north/northwest.



Figure 8. APE overview from N.W. H Avenue, facing southeast.

Results and Recommendations

The APE is the former location of 13 structures constructed circa 1941 during use of the Pendleton Airport for wartime training. These structures were demolished in the late 1980s. Artifact fragments typically associated with building demolition were identified within the APE, but none were temporally diagnostic and do not constitute an archaeological site. Furthermore, Oregon State Historic Preservation Office (SHPO) standards state that historic features in ruin, including removed structures and foundations, are not eligible for site classification until 75 years after demolition on non-federal public property, unless they possess exceptional significance. The former structures alone do not possess exceptional significance and are not subject to recording as an archaeological site at this time.

This inventory resulted in the identification of no cultural resources. No further work is needed at this time. AP recommends subsurface excavation of STPs to identify subsurface cultural resources within the proposed project footprint once the locations and designs of structures and improvements have been finalized.

This inventory addresses the proposed project only as specified in the project description. Changes in the horizontal or vertical APE may necessitate additional archaeological investigation. In the event that an archaeological resource is discovered during project operations, work will cease in that area, the resource will be left in its original state of discovery if possible, and a professional archaeologist will be contacted to assess the discovery, as described in the project Inadvertent Discovery Plan (Appendix I). In addition, SHPO and the appropriate tribes will be notified regarding the discovery.

References

- Aikens, Melvin C., Thomas J. Connolly, and Dennis L. Jenkins
2011 *Oregon Archaeology*. Oregon State University Press, Corvallis, Oregon.
- Allen, Cain
2005 Pendleton Field. Oregon Historical Society. Electronic document,
<https://www.oregonhistoryproject.org/articles/historical-records/pendleton-field/#.Yp5DDKjMKUI>,
accessed June 6, 2022.
- Ames, Kenneth M., Don E. Dumond, Jerry R. Galm, and Rick Minor
1998 Prehistory of the Southern Plateau. In *Plateau*, edited by Deward E. Walker, Jr., pp. 103-119.
Handbook of North American Indians, Vol. 12, William C. Sturtevant, general editor, Smithsonian
Institution, Washington, D.C.
- Bryce, Sandra A. and James M. Omernik
1997 Level IV Ecoregions of the Blue Mountains Ecoregion of Oregon, Washington, and Idaho. In
*Hierarchical Subdivisions of the Columbia Plateau and Blue Mountains Ecoregions, Oregon and
Washington*, edited by Sharon E. Clarke and Sandra A. Bryce, pp. 24-55. USDA Forest Service, Pacific
Northwest Research Station, Portland, Oregon.
- Butler, Virginia L.
1993 Natural Versus Cultural Salmonid Remains: Origin of The Dalles Roadcut Bones, Columbia River,
Oregon, U.S.A. *Journal of Archaeological Science* 20(1):1-24.
- Cole, David L.
1968 *Archaeological Investigations in Area 6 of Site 35GM9, the Wildcat Canyon Site*. Museum of
Natural and Cultural History, University of Oregon, Eugene, Oregon. Submitted to the National Park
Service.
- Connor, Roberta and William L. Lang
2006 Early Contact and Incursion, 1700-1850. In *Wiyáxayxt As Days Go By Wiyákaaʔawn: Our
History, Our Land, and Our People The Cayuse, Umatilla, and Walla Walla*, edited by Jennifer Karson,
pp. 23-60. Tamástsiikt Cultural Institute, Pendleton, Oregon.
- Cressman, Luther S., with David L. Cole, Wilbur A. Davis, Thomas M. Newman, and Daniel J. Scheans
1960 Cultural Sequences at The Dalles, Oregon: A Contribution to Pacific Northwest Prehistory.
Transactions of the American Philosophical Society 50(10).
- Dodd, Gordon B.
1977 *Oregon: A Bicentennial History*. W.W. Norton & Company, Inc., New York, New York.
- Doyle, Susan Badger
2022 Pendleton Field. Oregon Historical Society. Web page,
https://www.oregonencyclopedia.org/articles/pendleton_field/#.Yp5GTajMKUm, accessed June 6, 2022.

Dumond, Don D. and Rick Minor

1983 *Archaeology in the John Day Reservoir: The Wildcat Canyon Site, 35-GM-9*. University of Oregon Anthropological Papers No. 30, University of Oregon, Eugene, Oregon.

East Oregonian

2018 *Pendleton History*. Web page, https://www.eastoregonian.com/news/pendleton-history/article_d9a9aa09-f1c6-5283-9366-8b80a2d964e0.html, accessed June 28, 2021.

Endzweig, Pamela E.

2001 *Archaeological Investigations at the Cottonwood Creek Site (35GR1507): Middle and Late Holocene Occupations in the Upper John Day Valley, Oregon*. State Museum of Anthropology, University of Oregon, Report No. 2001-1, Eugene, Oregon.

Engum, Jennifer Karson and Roberta Conner

2015 *Šapášukwatimat 'For You to Understand the Writing.'* In *Čáw Pawá Láakni, They Are Not Forgotten: Sahaptian Place Names Atlas of the Cayuse, Umatilla, and Walla Walla*, edited by Eugene S. Hunn, E. Thomas Morning Owl, Philip E. Cash Cash, Jennifer Karson Engum, with Daniel B. Haug, Roberta Conner, Bruce J. Rigsby, John M. Chess, and Modesta J. Minthorn, pp. XIX. Tamástlikt Cultural Institute, Pendleton, Oregon.

Franklin, Jerry F., and C. T. Dyrness

1988 *Natural Vegetation of Oregon and Washington*. Oregon State University Press, Corvallis, Oregon.

General Land Office

1865 Cadastral survey map of Township 2 North, Range 32 East, Willamette Meridian. U.S. Bureau of Land Management. Electronic document, <https://gloreCORDS.blm.gov/default.aspx>, accessed April 14, 2022.

Hunn, Eugene S. and David H. French

1998 Western Columbia River Sahaptins. In *Plateau*, edited by Deward E. Walker, Jr., pp. 378-394. Handbook of North American Indians, Vol. 12, William C. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.

Hunn, Eugene S., E. Thomas Morning Owl, Phillip E. Cash Cash, and Jennifer Karson Engum

2015 *Čáw Pawá Láakni, They Are Not Forgotten: Sahaptian Place Names Atlas of the Cayuse, Umatilla, and Walla Walla*. Tamástlikt Cultural Institute, Pendleton, Oregon.

Kahn, Johanna, Alicia Valentino, and Paula Johnson

2018 Eastern Oregon Regional Airport Unmanned Aircraft System Development Area, Cultural Resources Assessment, Pendleton, Umatilla County, Oregon (revised). SHPO Report No. 30086. On file at the Oregon SHPO, Salem, Oregon.

Luce, Charles F. and William Johnson

2006 The Beginning of Modern Tribal Governance and Enacting Sovereignty. In *Wiyáxayxt As Days Go By Wiyáakaa?awn: Our History, Our Land, and Our People The Cayuse, Umatilla, and Walla Walla*, edited by Jennifer Karson, pp. 151-192. Tamástlikt Cultural Institute, Pendleton, Oregon.

Mead, George R.

2006 *A History of Union County, with an Appendix: The Chinese in Oregon*. E-Cat Worlds, La Grande, Oregon.

Metsker, Charles

1932 Township 4 N., Range 32 E., Pendleton, McKay Creek. In the atlas *Umatilla County 1932*. Metsker Map Company.

Miller, Marli B.

2014 *Roadside Geology of Oregon, Second Edition*. Mountain Press Publishing Company, Missoula, Montana.

Minthorn, Antone

2006 Wars, Treaties, and the Beginning of Reservation Life. In *Wiyáxayxt As Days Go By Wiyáakaaʔawn: Our History, Our Land, and Our People The Cayuse, Umatilla, and Walla Walla*, edited by Jennifer Karson, pp. 61-92. Tamástsiht Cultural Institute, Pendleton, Oregon.

Northwest Power and Conservation Council

2004 Umatilla Subbasin Plan. In Upper Middle Mainstem Subbasin Plan. Submitted to the Northwest Power and Conservation Council, Portland, Oregon.

Ogle, George

1914 Township 4 N., Range 32 E., Pendleton - Left. In the atlas *Umatilla County 1914*. Geo. A. Ogle & Co., Chicago, Illinois.

Orr, William N., and Elizabeth L. Orr

2006 *Geology of the Pacific Northwest*. 2nd ed. Waveland Press, Inc., Long Grove, Illinois.

Pendleton, City of

2021 History of Pendleton. Web page, <https://pendleton.or.us/community/page/history-pendleton>, accessed June 28, 2021.

Pond, Ronald J. and Daniel W. Hester

2006 Through Change and Transition: Treaty Commitments Made and Broken. In *Wiyáxayxt As Days Go By Wiyáakaaʔawn: Our History, Our Land, and Our People The Cayuse, Umatilla, and Walla Walla*, edited by Jennifer Karson, pp. 93-150. Tamástsiht Cultural Institute, Pendleton, Oregon.

Ray, Verne F.

1936 Native Villages and Groupings of the Columbia Plateau. *Pacific Northwest Quarterly* 27(2):99-152.

1939 *Cultural Relations in the Plateau of Northwestern America*. Publications of the Frederick Webb Hodge Anniversary Publication Fund 3. Southwestern Museum, Los Angeles, California.

1942 *Culture Element Distributions: XXII, Plateau*. University of California Anthropological Records Vol. 8, Pt. 2. University of California Press, Berkeley, California.

Stene, Eric A.

1993 *Umatilla Project*. On file at the U.S. Department of the Interior Bureau of Reclamation, Cascades-Columbia Area Office, Yakima, Washington.

Stern, Theodore

1998 Cayuse, Umatilla, and Walla Walla. In *Plateau*, edited by Deward E. Walker, Jr., pp. 395-419. Handbook of North American Indians, Vol. 12, William C. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.

Suphan, Robert J.

1974 Ethnological Report on the Umatilla, Walla Walla, and Cayuse Indians Relative to Sociopolitical Organization and Land Use. In *Oregon Indians II*, edited by David Agee Horr, pp. 85-180. American Indian Ethnohistory: Indians of the Northwest, Garland, New York.

Swindell, Jr., Edward G.

1942 *Report on Source, Nature, and Extent of the Fishing, Hunting, and Miscellaneous Related Rights of Certain Indian Tribes in Washington and Oregon*. U.S. Department of the Interior, Office of Indian Affairs, Division of Forestry and Grazing, Los Angeles, California.

Toepel, Kathryn Anne, William F. Willingham, and Rick Minor

1980 Cultural Resource Overview of BLM Lands in North-Central Oregon: Ethnography, Archaeology, History. In *University of Oregon Anthropological Papers* 17:1-228.

U.S. Department of Agriculture, Natural Resources Conservation Service

2022 Web Soil Survey. Electronic database, <http://websoilsurvey.nrcs.usda.gov/>, accessed May 27, 2022.

U.S. Department of the Interior, National Park Service

1997 *How to Apply the National Register Criteria for Evaluation*. National Register Bulletin 15. National Park Service, Washington, D.C.

U.S. Geological Survey

1935 Topographic Map. Pendleton, OR 1:125,000 scale.

1953 Topographic Map. Pendleton, OR 1:250,000 scale.

1956 Aerial Image. NZ-4P-105. August 9, 1956.

1966 Topographic Map. Pendleton, OR 7.5' series.

2022 Mineral Resources Online Spatial Data. Electronic database, <http://mrddata.usgs.gov/geology/state/state.php?state=OR>, accessed May 27, 2022.

Walker, Jr., Deward E.

1998 Introduction. In *Plateau*, edited by Deward E. Walker, Jr., pp. 297-313. Handbook of North American Indians, Vol. 12, William C. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.

APPENDIX I
INADVERTENT DISCOVERY PLAN

**CITY OF PENDLETON
N.W. H AVENUE
UMATILLA COUNTY, OREGON
CULTURAL RESOURCE INADVERTENT DISCOVERY PLAN**

For the purposes of this Inadvertent Discovery Plan, the following definitions will be used:

Archaeological resources are defined as objects, structures, artifacts, implements, and locations of prehistoric or historic human use, whether previously recorded or still unrecognized. Examples include, but are not limited to:

- Known or suspected animal or human bone, whole or fragmented;
- One or more precontact artifacts such as stone tools (including arrowheads) or the stone debris or chips created from the production of these tools;
- A buried layer of shell;
- Soil stains, charcoal, or other soil anomalies that could have been created by human use;
- Glass bottles, ceramic pieces, tin cans, and other household trash suspected to be more than 50 years old;
- Abandoned public works features such as wooden pipes or concrete cisterns suspected to be more than 50 years old;
- Machinery or industrial features suspected to be more than 50 years old; and
- Abandoned transportation lines such as trolley or railroad tracks suspected to be more than 50 years old.

Archaeological sites are defined as ten or more archaeological artifacts or one or more archaeological features, such as, but not limited to, those above.

A **find** describes a potential archaeological resource inadvertently discovered by project activities.

A **professional archaeologist** is defined as an individual who meets the Secretary of the Interior's (SOI) Standards for an Archaeologist (36 Code of Federal Regulations, Part 61, Appendix A), or an individual possessing a bachelor's or graduate degree in archaeology, anthropology, or closely related field and/or extensive experience including a minimum of 24 months of active fieldwork experience in the geographic or cultural region of the proposed construction or laboratory processing/analysis of materials from the geographic or cultural region of the proposed construction, who is working under direct supervision of an SOI-qualified individual.

IN THE EVENT THAT ARCHAEOLOGICAL RESOURCES ARE ENCOUNTERED:

1. Halt all work within a 30-meter (m) (100-foot [ft]) range of the discovery.
2. The cultural resource will be left in place, as discovered. If the discovery is an individual object or objects, do not remove the object or pile discovered objects away from the original discovery unless crew safety is compromised.
3. If a professional archaeologist is not already present, the project manager shall immediately notify a professional archaeologist to inspect the discovery.

4. If the discovery constitutes an archaeological site, the archaeologist will consult with the Oregon State Historic Preservation Office (SHPO) and the appropriate tribes to determine further action.
5. An archaeological permit may be needed if the cultural resources represent a site and the area cannot be avoided by construction activities. Obtaining a permit may take up to 30 days. The site will then be recorded and evaluated. Eligibility of the site must be concurred with by SHPO. Construction may resume only after the recommendations of SHPO are met.
6. No cultural resources will be removed from the project site without consulting the professional archaeologist.

If in doubt, call it in.

IN THE EVENT THAT HUMAN SKELETAL REMAINS ARE ENCOUNTERED:

The treatment of Native American human remains will follow the State of Oregon's published plan, *Treatment of Native American Human Remains Discovered Inadvertently or Through Criminal Investigations on Private and Public, State-Owned Lands in Oregon*, available online (https://www.oregonlegislature.gov/cis/Documents/treatment_remains111412.pdf).

1. Halt all work within a 30-m (100-ft) range of the human remains. Do not call 911 or speak with the media. Do not take pictures unless directed to do so by a professional archaeologist.
2. The project engineer or professional archaeologist will contact the Oregon State Police (OSP) to verify the presence of human remains.
3. The remains will be protected in a manner that will prevent further disturbance or deterioration until further recommendations are received. Cover the remains from view, prevent damage or exposure, restrict access, and leave in place until directed otherwise.
4. The remains may require analysis by a physical anthropologist to determine age and cultural affiliation.
5. If verified as human remains and suspected to be Native American, OSP, SHPO, the Legislative Commission on Indian Services (LCIS), and the appropriate tribes will be contacted by the project engineer or professional archaeologist (see Contact List, below).
6. If verified as human remains and suspected to be Native American, both the discovered human remains and their associated objects are protected under state law and should be treated in a sensitive and respectful manner by all parties involved (Oregon Revised Statutes [ORS] 97.740-.994 and 358.905-.961).

State law (ORS 97.745 [4]) requires that any human remains suspected to be Native American shall be reported to all of the following agencies/individuals (see phone numbers listed below):

1. OSP: Sergeant Chris Heuberger
2. SHPO: John Pouley, State Archaeologist
3. LCIS: Patrick Flanagan, Executive Director
4. All appropriate Native American Tribes provided by the LCIS

CONTACT LIST

Project Archaeologist: Stephanie O'Brien, RPA, Anderson Perry & Associates, Inc., 509-529-9260 (office) or 818-634-9432 (cell)

OSP - Pendleton Area Command: 541-278-4090

OSP (in cases of suspected Native American remains): Sergeant Craig Heuberger, 503-508-0779

SHPO: John Pouley, 503-986-0675 (office) or 503-480-9164 (cell)

LCIS: Patrick Flanagan, 503-986-1067, and (in cases of suspected Native American remains), Elissa Bullion, State Physical Anthropologist, 503-986-1067

Confederated Tribes of the Umatilla Indian Reservation: Carey Miller, Tribal Historic Preservation Officer (THPO), 541-429-7234, or Teara Farrow Ferman, Department of Natural Resources Program Manager, 541-276-3447

Confederated Tribes of the Warm Springs Reservation: Robert Brunoe, THPO, 541-553-2002, or Christian Nauer, Archaeologist, 541-553-2026 (office) or 541-420-2758 (cell)

Nez Perce Tribe: Patrick Baird, THPO, 208-621-3851 or 208-791-8610

ATTACHMENT D
Biological Evaluation

BIOLOGICAL EVALUATION
FOR THE
CITY OF PENDLETON, OREGON
N.W. H AVENUE
AUGUST 2022



Prepared for
City of Pendleton, Oregon
500 S.W. Dorion Avenue
Pendleton, Oregon 97801

BIOLOGICAL EVALUATION
FOR THE
CITY OF PENDLETON, OREGON
N.W. H AVENUE
August 2022

Prepared For:
City of Pendleton
500 S.W. Dorion Avenue
Pendleton, Oregon 97801

Prepared By:
Anderson Perry & Associates, Inc.
1901 N. Fir Street
La Grande, Oregon 97850

La Grande, Redmond, and Hermiston, Oregon
Walla Walla, Washington

Table of Contents

Project Description	1
Endangered Species Act-listed Species	1
Bull Trout	1
Middle Columbia River Distinct Population Segment Steelhead	1
Northern Rocky Mountain Distinct Population Segment Gray Wolf.....	2
Essential Fish Habitat	2
Summary	2
References	3

Attachments

- Attachment A Figures
- Attachment B Documentation

Project Description

The City of Pendleton intends to construct a bus barn on a portion of an 8.9-acre site located south of N.W. H Avenue. The bus barn is anticipated to occupy only 0.6 acre of the site; however, the City is requesting an environmental review of the entire site. The bus barn is anticipated to result in 0.6 acre of new impervious surface, either gravel or pavement. This Biological Evaluation (BE) is intended to assist with meeting requirements for the State Environmental Review Process. For the purpose of this BE, “project” refers to the construction of the bus barn. Although a likely location has been identified, this BE assumes that the bus barn could potentially be located on any portion of the 8.9-acre site. If additional construction needs are identified, this BE could be updated to include a review of impacts associated with additional work. See Attachment A, Figures.

Endangered Species Act-listed Species

The federally protected species listed below for the project area were obtained from the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service databases (USFWS, 2022; NMFS, 2022). Potential effects as a result of the proposed project are evaluated.

Bull Trout

All populations of bull trout (*Salvelinus confluentus*) in the conterminous USA were listed as threatened in November 1999 (64 FR 58910). Bull trout are typically associated with the colder streams in a river system and use complex forms of cover. The life history of bull trout is described in detail in the final rule to list the coterminous USA populations as a threatened species (64 FR 58910).

According to StreamNet, the closest occurrence of bull trout is in the Umatilla River, approximately 1 mile south of the project area (StreamNet, 2022) (see Attachment B, Documentation). An Oregon Biodiversity Information Center (ORBIC) database search returned results of bull trout presence within a 2-mile radius of the study area. However, no waterways occur within the project area (ORBIC, 2022).

According to the USFWS Information for Planning and Consultation (IPaC) list, the project area does not contain bull trout critical habitat.

No in-water work will occur, and no reported occupied habitat for bull trout or critical habitat will be affected. Therefore, the proposed project is expected to have **no effect** on bull trout or its critical habitat.

Middle Columbia River Distinct Population Segment Steelhead

The Middle Columbia River distinct population segment (DPS) of steelhead (*Oncorhynchus mykiss*) was listed as threatened on March 25, 1999 (64 FR 14517). Its threatened status was reaffirmed on January 5, 2006 (71 FR 834) and upheld in the five-year review on August 15, 2011 (76 FR 50448). This DPS includes all naturally spawned anadromous steelhead populations below natural and manmade impassable barriers in streams from above the Wind River, Washington, and the Hood

River, Oregon (exclusive), upstream to and including the Yakima River, Washington, as well as seven artificial propagation programs.

Critical habitat for this DPS was designated on September 2, 2005 (70 FR 52630).

According to StreamNet, the closest occurrence of steelhead is in the Umatilla River, approximately 1 mile south of the project area (StreamNet, 2022) (see Attachment B, Documentation). An ORBIC database search returned results of Middle Columbia River steelhead presence within a 2-mile radius of the study area. However, no waterways occur within the project area (ORBIC, 2022).

Critical habitat for this DPS was designated on September 2, 2005 (70 FR 52630). The Umatilla River contains designated critical habitat for steelhead approximately 1 mile south of the project area.

No in-water work will occur, and no reported occupied habitat for Middle Columbia River DPS steelhead or critical habitat will be affected. Therefore, the proposed project is expected to have **No effect** on Middle Columbia River DPS steelhead or its critical habitat.

Northern Rocky Mountain Distinct Population Segment Gray Wolf

The project area is located within the range of the Northern Rocky Mountain DPS of gray wolf. The gray wolf was delisted on November 3, 2020 (85 FR 69778). Following a February 10, 2022, court order, protection was reinstated under the Endangered Species Act (ESA) for gray wolves in the contiguous 48 states and Mexico, with the exception of the Northern Rocky Mountain DPS.

The USFWS IPaC list shows that the gray wolf may occur within the project area; however, the project area is located east of the federal wolf delisting boundary and, therefore, gray wolves are not federally listed within the project area.

The project's location near the City of Pendleton and its urban setting makes it unlikely gray wolves would occupy the project area. An ORBIC database search did not return results of gray wolf presence within a 2-mile radius of the study area (ORBIC, 2022). Therefore, the proposed project is expected to have **no effect** on Northern Rocky Mountain DPS of gray wolf.

Essential Fish Habitat

The project area is within essential fish habitat (EFH) for Chinook salmon and coho salmon, as designated under the Magnuson-Stevens Fishery Conservation and Management Act and amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267). Project construction will not have adverse impacts on EFH, as no in-water work will occur. Therefore, it is expected that the proposed project will have **no effect** on EFH.

Summary

This BE is intended to satisfy preliminary analysis for Section 7(c) of the ESA. Once funding and additional project details are known, it is recommended that this BE be updated to assess additional impacts, if any. The City will continue to remain alert for changes in status of these species and will be prepared to reevaluate potential project impacts if necessary. Overall, the proposed project is expected to have **no effect** on any ESA-listed species or their habitat.

References

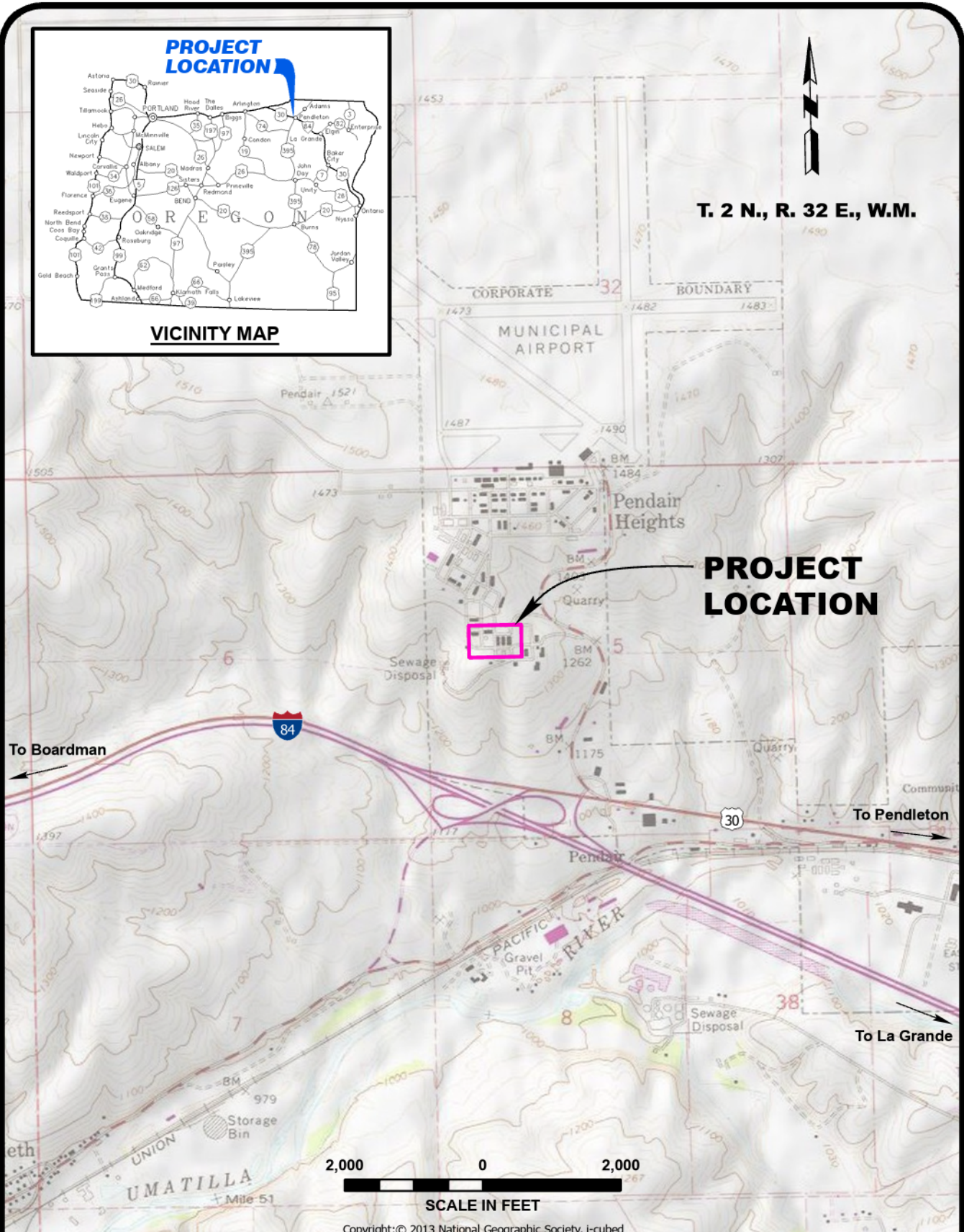
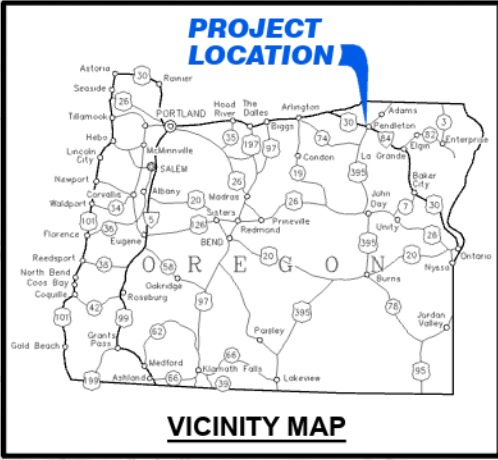
- Federal Register for March 25, 1999 (64 FR 14517). Endangered and Threatened Species: Threatened Status for Two ESUs of Steelhead in Washington and Oregon. Final Rule.
- Federal Register for November 1, 1999 (64 FR 58910). Endangered and Threatened Wildlife and Plants; Determination of Threatened Status for Bull Trout in the Coterminous United States. Final Rule.
- Federal Register for September 2, 2005 (70 FR 52630). Endangered and Threatened Species; Designation of Critical Habitat for 12 Evolutionarily Significant Units of West Coast Salmon and Steelhead in Washington, Oregon, and Idaho. Final Rule.
- Federal Register for January 5, 2006 (71 FR 834). Final Listing Determinations for 10 Distinct Population Segments of West Coast Steelhead. Final Rule.
- Federal Register for August 15, 2011 (76 FR 50448). Federal Endangered and Threatened Species; Five-year Reviews for 17 Evolutionarily Significant Units and Distinct Population Segments of Pacific Salmon and Steelhead. Notice of Availability of Five-year Reviews.
- Federal Register for November 3, 2020 (85 FR 69778). Endangered and Threatened Wildlife and Plants; Removing the Gray Wolf (*Canis lupus*) From the List of Endangered and Threatened Wildlife; Final Rule.
- National Marine Fisheries Service. 2022. Protected Resources App. Accessed July 2022.
<https://www.webapps.nwfsc.noaa.gov/portal/apps/webappviewer/index.html?id=7514c715b8594944a6e468dd25aaacc9>.
- Oregon Biodiversity Information Center. 2022. Rare, Threatened, and Endangered Species of Oregon. Database search on July 19, 2022. Oregon State University, Portland, Oregon.
- StreamNet. 2022. GIS Data: StreamNet online mapping service. Accessed July 2022.
<https://www.streamnet.org/home/data-maps/sn-mapper/>.
- U.S. Fish and Wildlife Service. 2022. Information for Planning and Consultation Official Species List. Accessed July 2022. <https://ecos.fws.gov/ipac/>.

Attachment Table of Contents

Attachment A Figures

Attachment B Documentation

ATTACHMENT A
Figures



X:\Clients\Pendleton OR\77-60 EnvServices-NW H Ave\GIS\77-60 NW H Ave.aprx, BE-77-60-FIG01 LocVic, 7/1/2022 11:51 AM, dchristman



**CITY OF
PENDLETON, OREGON**
N.W. H AVENUE
BIOLOGICAL EVALUATION

LOCATION AND VICINITY MAPS

**FIGURE
1**

X:\Clients\Pendleton OR\77-60 EnvServices-NW H Ave\GIS\77-60_NW_H_Ave.aprx, BE-77-60-FIG02_Aerial, 7/1/2022 11:50 AM, dchristman



PROJECT LOCATION

**BUS BARN FACILITY
0.60 AC.**

NW H AVE

NW 48TH ST

NW J AVE

NW 47TH ST

AIRPORT RD

200 0 200
SCALE IN FEET
Maxar, Microsoft



**CITY OF
PENDLETON, OREGON**
N.W. H AVENUE
BIOLOGICAL EVALUATION

**FIGURE
2**

AERIAL PHOTOGRAPH

ATTACHMENT B
Documentation

OREGON BIODIVERSITY INFORMATION CENTER

Institute for Natural Resources



Mail Stop: INR
Post Office Box 751
Portland, Oregon 97207
503.725.9950
<http://inr.oregonstate.edu/orbic>

July 19, 2022

Shiloh Simrell
Anderson-Perry & Associates, Inc.
1901 N Fir
La Grande, OR 97850-0939

Dear Ms. Simrell:

Thank you for requesting information from the Oregon Biodiversity Information Center (ORBIC). We have conducted a data system search for rare, threatened, and endangered plant, animal, and fungi records for your NW H Ave Project in Pendleton.

Ten (10) element occurrence records were noted within a two-mile radius of your project and are included on the enclosed database report.

This database search has returned records of Golden Eagle nests that originated with the US Fish and Wildlife Service, which makes the following disclaimers regarding this information:

1. No warranty is made by US Fish & Wildlife Service as to the accuracy, reliability or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. The information may not meet National Map Accuracy Standards. This project was developed through digital means and may be updated without notification.
2. Golden eagle nest location data presented here is not intended for land use planning and analysis purposes and should be considered draft. Location data is provided solely for use in developing an inventory strategy intended to determine precise nest locations and develop a breeding population estimate for Oregon.
3. The data were based on reports from others, often second or third-hand interpretations from files, rather than original field work.
4. This data reflects only those nest sites that were reported through 2018.
5. The locations were described inconsistently, often covered large areas such as a square mile, and were not field-verified for accuracy.
6. Statewide coverage was unknown. There was no systematic survey of the landscape. Locations were gathered opportunistically or as part of local projects. Consequently, the absence of a location on the map does not mean that there was not a golden eagle nest in the area.
7. Current nest locations within breeding areas may be different from those portrayed on the maps, especially tree nests which are more ephemeral than cliff nests.
8. The nest use data were not collected annually or following an accepted protocol. Consequently, summaries or comparisons have little value.

Due to our agreement with the USFWS, locations for golden eagles are masked to the section level. For more information contact Brendan White at the US Fish and Wildlife Service at Brendan_White@fws.gov or 503-231-6971.

Please remember that a lack of rare element information from a given area does not necessarily indicate there are no significant elements present, only that there is no information known to us from the site. To ensure there are no significant elements present that may be affected by your project, you should inventory the site during the appropriate season.

This data is confidential and for the specific purposes of your project and is **not to be distributed**. Please also note that as our database is continually updated, the data in this report should be considered current for a maximum of one year from the date it was generated and should not be cited thereafter.

Please forward the included invoice to the appropriate party in your organization for payment.

If you need additional information or have any further questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in cursive script that reads "Lindsey Wise".

Lindsey Wise
Biodiversity Data Manager
lindsey.wise@pdx.edu
503.725.9951

encl.: **invoice (INR-071922-LKW2)**
database report and data key



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Oregon Fish And Wildlife Office
2600 Southeast 98th Avenue, Suite 100
Portland, OR 97266-1398
Phone: (503) 231-6179 Fax: (503) 231-6195

In Reply Refer To:
Project Code: 2022-0060178
Project Name: City of Pendleton NW H Avenue

July 01, 2022

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). This is not a consultation.

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see <https://www.fws.gov/birds/policies-and-regulations.php>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see <https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
 - USFWS National Wildlife Refuges and Fish Hatcheries
 - Migratory Birds
 - Wetlands
-

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Oregon Fish And Wildlife Office

2600 Southeast 98th Avenue, Suite 100

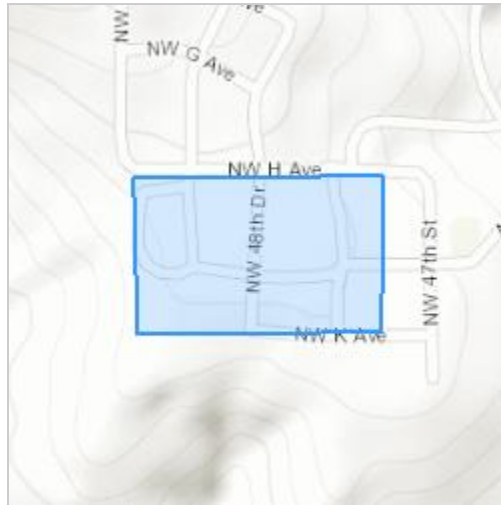
Portland, OR 97266-1398

(503) 231-6179

Project Summary

Project Code: 2022-0060178
Event Code: None
Project Name: City of Pendleton NW H Avenue
Project Type: Acquisition of Lands
Project Description: City of Pendleton NW H Avenue
Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@45.682148,-118.84488229111324,14z>



Counties: Umatilla County, Oregon

Endangered Species Act Species

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Gray Wolf <i>Canis lupus</i> Population: U.S.A.: All of AL, AR, CA, CO, CT, DE, FL, GA, IA, IN, IL, KS, KY, LA, MA, MD, ME, MI, MO, MS, NC, ND, NE, NH, NJ, NV, NY, OH, OK, PA, RI, SC, SD, TN, TX, VA, VT, WI, and WV; and portions of AZ, NM, OR, UT, and WA. Mexico. There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/4488	Endangered

Fishes

NAME	STATUS
Bull Trout <i>Salvelinus confluentus</i> Population: U.S.A., conterminous, lower 48 states There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/8212	Threatened

Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

THERE ARE NO FWS MIGRATORY BIRDS OF CONCERN WITHIN THE VICINITY OF YOUR PROJECT AREA.

Migratory Birds FAQ

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical](#)

[Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Wetlands

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.

IPaC User Contact Information

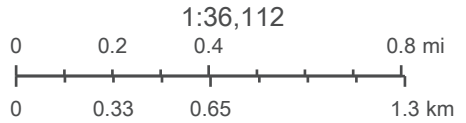
Agency: Pendleton city
Name: Shiloh Simrell
Address: 1901 Fir St.
City: La Grande
State: OR
Zip: 97850
Email: ssimrell@andersonperry.com
Phone: 5419638309

StreamNet



7/15/2022, 9:39:16 AM

- Columbia Basin Boundary
- Migration only
- Nodal (adult residence)
- Foraging
- Rearing and migration
- Spawning and rearing
- Year-round use
- Unknown



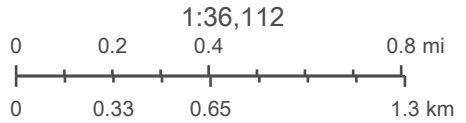
PSMFC GIS, Maxar, StreamNet, Pacific States Marine Fisheries Commission

StreamNet



7/15/2022, 9:40:54 AM

- Columbia Basin Boundary
- Rearing and migration
- Unknown
- Migration only
- Spawning and rearing



PSMFC GIS, Maxar, StreamNet, Pacific States Marine Fisheries Commission