



Environmental Science & Assessment, LLC

MEMORANDUM

DATE: November 21, 2014 (REVISED)
TO: Valerie Sutton City of Beaverton
CC: Ed Bartholemy
FROM: Jack Dalton
RE: Oregon Goal 5 and Metro Title 13 Natural Resource Determination
- Scholls Ferry Road Properties

Environmental Science & Assessment, LLC (ES&A) conducted a wetland and natural resource determination for two sites along Scholls Ferry Road in Washington County (Figure 1). One site is comprised of two taxlots (Tax Map 2S10600, lots 301 and 302) is located at 18485 SW Scholls Ferry Road and the other site is a single tax lot (Tax Map 2S10600, lot 700) located at 17811 SW Scholls Ferry Road (Figure 2). The site investigation was prepared to assist the landowner and the City of Beaverton in determining the presence of all potentially jurisdictional wetland or waterways and any other significant wildlife habitat resources.

Under the state of Oregon's Goal 5 (OAR 660-023-0030) and Metro Title 13 (Metro Code Section 3.07.1310 - 3.07.1370), local jurisdictions are required to inventory and evaluate natural resources defined under Goal 5. Title 13 specifically seeks to conserve, protect and restore "continuously ecologically viable streamside corridor systems" (Metro 2013). Site data collection and mapping provided in this report identifies any Goal 5 resources and evaluates whether any on site resources are significant enough to warrant special protection measures.

METHODOLOGY

ES&A performed two levels of investigation for the site. The first involved a review of existing natural resource mapping for the site. The second involved an onsite wetland determination by ES&A staff including site data collection and boundary mapping.

Figures are provided in Appendix A. Reviewed on-line natural resource mapping is provided in Appendix B. The wetland determination data and assessment summary is provided in Appendix C. Photos are provided in Appendix D.

Wetlands

The wetland determination data collection and mapping was conducted on March 29 and July 24, 2013. The wetland areas on the site were identified using methods consistent U.S. Army Corps of Engineers *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region*, (US Army Corps of Engineers 2010). This methodology defines criteria for hydrology, soils, and vegetation that determine the jurisdictional status of wetlands for the Pacific Northwest.

Representative wetland determination data plots were collected for the northern property at 18485 SW Scholls Ferry Road and the southern property at 17811 SW Scholls Ferry Road. Two (2) data plots were collected at the northern property and one (1) at the southern property to document the presence or absence of wetland conditions. The wetland boundary and data plot locations were mapped using a GPS hand-held mapping unit with sub-meter accuracy (Figure 3). The wetland determination data provides relevant information on the vegetative cover, soil conditions and hydrology, if present (Appendix C).

Wildlife Habitat Assessment

Potential wildlife habitats on site were evaluated by a pedestrian survey of on-site wetland and upland habitats. All potential habitats on-site were investigated and connections to off-site wildlife habitats were noted. This on-site investigation evaluates the level to which existing habitat provides food and cover habitat components and other components may contribute to habitat value.

RESULTS

Existing Resource Mapping

ES&A reviewed available public mapping and data to assist in the identification and assessment of natural resources on site. Reviewed data included:

- *US Geological Survey (USGS) Topographic Map: Beaverton, Oregon 7.5-minute quadrangle (USGS1985)*. The USGS map does not indicate any wetland or open water features on the two sites. A main drainage flows south, east of the northern site and the impounded drainage is shown to the southeast. The topography of the area is primarily a south facing slope with drainage off-site to the south (Figure 1).
- *National Wetland Inventory (NWI) Map: Beaverton, Oregon 7.5-minute quadrangle (2012)*. The NWI map for the area does not indicate any wetlands on the site. It does show the impoundment and emergent wetland southeast of the northern site.

- *City of Beaverton Local Wetland Inventory (LWI) Map: Beaverton, Oregon 7.5-minute quadrangle (2001)*. The LWI map for the area does not indicate any wetlands on the site.
- *National Resource Conservation Service Washington County Soil Survey*. The soil survey indicates most of the north and south sites are non-hydric soils, with moderately to well drained soils. The Delena silt loam, 3-12% slopes (16C) is poorly drained and rated hydric. It is located south of the northern site and on the south end of the southern site along Scholls Ferry Road. Cascade silt loam, 3-7% slopes (7B) and 7-12% slopes (7C) is somewhat poorly drained and located on both sites uphill of the mapped Delena soils. Portions of the mapped Cascade soils are within the mapped wetland on the north site.
- *Metro Data Resource Center MetroMap (2012)*. The metro natural resource mapping indicates drainages east and west of the northern site and maps wetlands within both areas. No significant water quality natural resources are mapped on either site. The small remnant oak forest habitat is mapped on the southern edge of the northern site.
- *WACO SNR Mapping (2013)*. Drainages and the impoundment are shown on the SNR mapping for the area.
- *Aerial photography (Google Earth): Aerial photos from 2012 back through 2000 and in 1994* indicate the northern site has been actively managed as open pasture. The southern site has been in various crop rotations back through at least 1994. The riparian area southeast of the northern site has been forested throughout the recent past and the impounded drainage to the south is evident. Evidence of open ditches are observable in some years in the northeast corner of the northern site, just north of the off-site riparian area. However, most recent aerials available show these areas absent, presumably due to maintaining the existing drain tiles (Figure 3).

EXISTING CONDITIONS

Northern Site

The 36.5-acre northern site is primarily used as a pasture for buffalo ranching. A residential house is located in the southwest corner of the site and another structure used for livestock is located along the northwest boundary. Access to the property is from the southwest corner off of SW Scholls Ferry Road.

The topography throughout the site slopes to the south and southeast with the steepest slopes along the eastern edge. The western end of the site is the high point and topography slopes off steeply south of the residence at the southwest corner. The eastern half of the site has a drainage basin that extends from the northeast corner through the site to the south. The low point of the site is located along the broad riparian drainage basin on the southeastern boundary.

The entire site is open pasture with a mix of grasses and upland weedy species. The fields on the site are managed for grazing. The sloped area south of the residential house historically was a mixed Oak and Douglas fir forest habitat, but had recently been logged at the time of the site visit. The coniferous tree grove in the middle of the site, just south of center, planted in fir trees had been harvested by the end of the summer of this year.

Two wetlands and one remnant stream swale were identified on site (Figure 3). Both the wetlands and the stream segment border the southeastern side of the site. The two wetland areas on site are contiguous with the undisturbed forested wetlands along the southeastern boundary. The two forested wetland areas on site measure 20,908 square feet (0.48 acres) and 7,405 (0.17 acres) and follow the flatter topography along the edge of the off-site riparian corridor east of the site (Figure 3).

The swale area in the northeastern corner of the site has historically been drain tiled, but some segments of the tiles were damaged by the grazing buffalo early in 2013. The landowner repaired the drain tiles and replaced the culvert at the southeastern edge of the site (Figure 3).

Southern Site

The 9-acre southern site is roughly square in shape with one residential home, a pump house and large-animal shelter located in the central east portion of the site landscaped with mature trees. A dirt driveway from the southeast provides access to the site. The topography of the study area slopes down towards the south from an elevation of 330 feet above sea level to approximately 280 feet. The northern and western portions of the site are planted with hazelnut trees with a low growing herbaceous cover with primarily bare soils and some weeds. The area immediately west and south of the house is currently planted in wheat production (Figure 4).

A data plot was collected just west of the driveway in the low point of the site in the southeast corner (Figure 4). No wetland hydrology or vegetation was present, but remnant soils were observed (Appendix B). The site is effectively de-watered by the presence of drain tiles and the roadside ditch along the north edge of SW Scholls Ferry Road. The ditch is three feet below the field elevation and several drain tile outfalls were observed in the ditch.

Wildlife Habitat Assessment

The only significant wildlife habitat on either site is associated with the riparian corridor and forested wetlands along the southeastern edge of the north site. The fir tree grove in the center of the site was densely planted and lacked any significant native understory cover. Habitat functions were limited to perching and cover for avian species and small mammals, possibly. Food sources were highly limited due to the lack of understory native vegetation in the fir

monoculture. Additionally, the grove was actively being cleared, so the limited cover functions were being impacted further at the time of the site visit.

The only other area of potential significant wildlife habitat was the mixed Douglas fir/Oregon White Oak south of the residence, but most of this area had recently been cleared, limiting the existing habitat functions. The Oak forest habitat was already impacted by the presence of the Douglas fir, so the higher value habitat components associated with Oak savannah or woodland were likely already lacking prior to the clearing.

Jurisdictional Status

The forested wetlands, being adjacent to the off-site drainages to the southeast are linked to downstream tributaries to the Tualatin River southwest of the site. Due to this downstream connection, all wetlands are jurisdictional with the State of Oregon and regulated through the Department of State Lands (DSL). These resources are also subject to Section 404 of the Clean Water Act as administered by the US Army Corps of Engineers (USACE).

Additional hydrologic and mapping information would still need to be collected to complete a concurred wetland boundary delineation from state and federal agencies. USACE and DSL make the final jurisdictional determination.

Once the site is brought into the City of Beaverton city limits, all wetland and water resources on site will be subject to Clean Water Services (CWS) under the Design and Construction Standards (R&O 07-20). The site will be added to the CWS storm and sewer service area and will require vegetated corridors (buffers) for any wetland or waterway on site. Both stream and wetland features will require a 50 foot corridor under current CWS rules.

Conclusion

All potential resources meeting the definition of Oregon's Goal 5 (OAR 660-023-0030) and Metro Title 13 (Metro Code Section 3.07.1310 - 3.07.1370) have been investigated and identified. Farming practices have altered the hydrologic regime and historic upland habitat on both of the north and south parcels in the study area.

The resources on the northern site include degraded forested wetland along the south and southeastern edges of the parcel. Any historical waterways or other channels that may have been present in the northern end of the site have been altered by on-going agricultural practices.

The open pasture area provides some upland grassland habitat, but has been altered with agricultural uses and does not afford special protections. Additionally, other significant upland habitat is no longer present on site due to the lack of forest cover and clearing associated with past agricultural practices.

The wetlands on-site along the southeastern and southern end of the parcel are not high functioning habitat due to the lack of native understory vegetation and lack of multi-storied vegetative cover. The significant natural resources are located east of the north parcel within the off-site riparian/wetland corridor (Figure 3).

No natural resources are present on the southern site along SW Scholls Ferry Road. The property is currently in agricultural use, so habitat elements are minimal and existing open pasture areas are regularly disturbed so those portions of the site would not afford special protections. The southern end of the site has been effectively drained with drain tile and ditching so potential wetland are no longer present (Figure 4).