

TECHNICAL MEMORANDUM

TO: Brian Kalab, Insight Engineering
FROM: Rone Brewer; Sound Ecological Endeavors, LLC; (206) 595-7481
DATE July 24, 2016

**RE: WETLAND RECONNAISSANCE
FRITZBERG PROPERTY
MARYSVILLE, WA
SNOHOMISH COUNTY PARCEL # 31052800301200**

On July 1, 2016, Sound Ecological Endeavors, LLC (Sound Eco) conducted a wetland reconnaissance for above referenced 10.03 acre subject property located at approximately 16100 Smokey Point Boulevard near Smokey Point, Washington, within the City of Marysville limits (SW Quarter Section 28, Township 31N, Range 05E). This effort was conducted to provide preliminary assessment of the likely presence or absence of City critical areas and, if present, approximate wetland and stream location, categorization, and buffer widths on the subject property.

Prior to the site visit Sound Eco examined U.S. Fish and Wildlife Service's (USFWS's) National Wetland Inventory (NWI) maps and the Natural Resource Conservation Service's (NRCS's) Web Soil Survey (<http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>) for the subject property and near vicinity. The NWI maps showed no wetlands on or adjacent to the subject property. Soil at the subject property is mapped as Custer Fine Sandy Loam on the western third, and Norma Loam on the eastern two-thirds. Both soils are listed by the NRCS as having formed under hydric conditions. Washington Department of Fish and Wildlife (WDFW) Priority Habitats and Species (PHS) maps also were examined and no WDFW PHS locations are documented on or adjacent to the subject property. The Washington Department of Natural Resources (WDNR) listed no special feature wetlands within the same Section, Township, and Range.

During the visit, site features, vegetation communities, soil conditions, and potential/likely water sources were examined across the subject property and specifically at five data plots located across the property. The presence/absence of U.S. Army Corps of Engineers (Corps 1987, 2010) wetland indicators also was investigated. The subject property is quite level, likely cleared and/or farmed in the early 1900s. Soils across most of the property predominantly were silty sand to sand, with sandy silt/loam in one northwestern location. The soils did not match Norma Loam description and did not have a surface (A-) horizon similar to the Custer Fine Sandy Loam, but otherwise appeared similar to the Custer subsurface horizons. No Corps hydric soil indicators were identified at any of the data plots or at other soil test areas, particularly because of high chroma in the top 10 to 12 inches below the ground surface (bgs).

No surface water or signs thereof were noted on the subject property. Sandy soils suggest rapid infiltration of water into the soil. WDFW Salmonscape stream and fish presence maps show a watercourse 200 feet (ft) south of the subject property, with the modeled presence of multiple fish species including federally threatened Chinook salmon. City of Marysville fish distribution maps do not show any fish species within the watercourse. City of Marysville critical areas maps show a downstream portion of this watercourse (approximately 300 ft southeast of the subject property) as a stream with a buffer. This watercourse was examined along the length of the subject property during the site visit and is not a ditch, but rather is an agricultural drainage swale having no defined bed or banks nor a high water mark (i.e., no defining characteristics of a stream) along the length of the subject property. This swale is not regulated surface water body along the length of the subject property.

Given the sand at the subject property, wetland hydrology indicators must be present on the surface or within six inches bgs. No surface or subsurface water was identified during the site visit to a depth of greater than 24 inches bgs. Thus, not even the dry season Corps wetland hydrology indicator is met, indicating wetland hydrology is not present at the subject property.

The subject property vegetation is dominated by a bitter cherry deciduous forest cover. Bitter cherry trees are listed by the Corps as Facultative-Upland and so, are not a wetland indicator. The shrub layer is dominated by Salmonberry, a Facultative wetland indicator species. The herb layer includes trailing blackberry (dewberry), salal, and sword fern, with areas covered by false-lily of the valley. All of these herbaceous species except false-lily-of-the-valley are Facultative-Upland and so, are not wetland indicators. At the location of the false-lily-of-the-valley in the northwest portion of the subject property, other predominant plants included both Facultative and Facultative-Upland species, meeting a hydrophytic vegetation indicator.

No priority habitats or species were indicated on the subject property by the WDFW. No other protected/critical species or City species of local importance were identified on or adjacent to the subject property. Thus, no fish and wildlife habitat areas were identified on or adjacent to the subject property.

In summary, the hydrophytic vegetation wetland indicator was present in the northwestern portion of the subject property only, but at no location were hydric soil or wetland hydrology indicators found. Therefore, no wetlands were indicated on the subject property. Of interest, hydrophytic vegetation was often co-located with non-hydrophytic vegetation clearly showing little distinction in the hydrologic preferences of these Facultative and Facultative-Upland species. No other protected fish and wildlife or fish and wildlife habitat areas were identified on the subject property.

If you have any further questions or requests for Sound Eco, please feel free to call or email anytime at (206) 595-7481 or RBrewer@SoundEco.com. Thank you for the opportunity to be of service.