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**Subject: Evaluation of 130 Mesa Road (APN 193-020-38) Study Area for Wetland Attributes using U.S. Army Corps of Engineers Arid West Determination Manual, Bolin, CA.**

At the request of the Bolin Community Land Trust (BCLT), a wetlands assessment using US Army Engineers (Corps) methodology of an approximately 1.5 acre area (study area) within a 20 acre parcel at 130 Mesa Road in Bolin was conducted on October 16, 2022. The BCLT is proposing to utilize an existing livestock yard/pen to provide temporary housing for persons living on the adjacent Tacherra Ranch in mobile recreation vehicles (RV). The BCLT is proposing to place multiple RVs within the livestock pen and provide utility connections through areas of existing disturbance. In addition to the RVs, a new, on-site wastewater system would be constructed on the subject project (within the defined study area). Last, the RV area would be accessed via an existing, gravel based, ranch road that provides direct access to Mesa Road to the south.

An area of approximately 217 feet by 890 feet was investigated along the northern parcel boundary (Figure 1). In addition, areas adjacent to the east and west of the ranch road and the area to the north of the livestock yard were investigated to characterize their potential for wetlands. For the areas outside the study area, a general assessment of the vegetative conditions in relationship to meeting the Corps wetland parameter was conducted as mapped in Figure 1.

The purpose of this memo is to describe the conditions of the study area using the U.S. Army Corps of Engineers, Arid West Manual (Corps 2008), to provide Wetland Determination Data Sheets with vegetation, soils, and hydrology data, and to map the resources assisting engineering with the placement of the proposed septic site. This memo does not constitute a formal wetland delineation, but it summarizes the results from field survey and background research using Corps criteria. Corps Wetland determinations are based on the meeting of their three parameter criteria while California Coastal Commission (CCC) wetlands are based on the presence of one Corp criterion as described below. This memo also considers the Policies for new development contained in the current Local Coastal Program, adopted in August 2021.

**Existing Conditions**

The 1.5 acre study area consists of lands in the northern portion of the parcel which are vegetated with non-native annual grassland and are annually grazed by cattle. Between Gaspers Lane to the north and Mesa Road to the south approximately 90 acres of land gently slopes southerly, including the 20-acre 130 Mesa Road property. The study area occurs over a rise in elevation and contains an area with relatively

little slope in comparison to lands to the west and south which slope more visibly toward Mesa Road. Lands to the north slope gently uphill.

**Methods**

Using Corps wetland determination methodology the study area was investigated for the presence of wetland vegetation, hydric soils, and wetland hydrology. Seven data points were established along an elevation change within the study area. Data points were established within three meter square areas and soil test pits were dug to a depth of 14 inches. Wetted soils were compared to standardized Munsell Color chips to determine soils colors. Measurements to determine data point locations were taken from the adjacent fence lines in the field, which are visible on aerial photography. GPS points were also taken using GoogleMaps as a secondary location source. The measurements were used to plot data points and draw boundaries for the observed differences within the study area.

Desktop review of all available GoogleEarth mapping was conducted to detect potential aerial signatures of different habitat types, vegetation shifts, or hydrology indicators within the study area. The Natural Resources Conservation Service (NRCS) Soil Survey was reviewed for hydric soils data. The National Wetland Inventory (NWI) was accessed to determine if wetlands have been mapped within the study area previously.

**Results**

Table 1 below summarizes the vegetation, soils, and hydrology outcome derived from field data on the Corps Wetland Determination Data Forms (Attachment). Figure 1 exhibits the results of the field work including data points and the mapping of potential CCC and Corps wetlands. Upland areas do not show a color signature within the maps with the exception of the ranch roads and livestock yard. The majority of the study area does not meet any of the Corps parameters to be determine wetland. NRCS soil survey data did not indicate hydric soils and the NWI did not identify wetlands in the study area location or anywhere on the larger parcel.

A strip of land on the south edge of the study area was observed to exhibit vegetation with a greater percent of facultative species where the elevations begin to drop. Corps wetlands support a prevalence of hydrophytic vegetation with 50 percent or more of species assigned the designation of facultative (FAC, equally likely to occur in wetland and non-wetlands), facultative wetland (FACW, usually occur in wetland but occasionally in non-wetlands), and obligate (OBL, occurs almost always under natural conditions in wetlands). Moving southerly from the study area the lands support greater than 50 percent hydrophytic vegetation. Also some areas in the south of the study area exhibit soils that show stronger signs of concentrations (oxidation) and meet the criteria to be considered hydric.

<b>Data Point</b>	<b>Vegetation</b>	<b>Soils</b>	<b>Hydrology</b>
1			
2A			
2B		X	
3A			
3B		X	
4A			
4B	X		

All areas within the proposed septic study area fail to meet the Corps three parameter wetland criteria.

The study area lacks signs of wetland hydrology on the soil surface, beneath the soil surface, and on aerial photography. Primary and secondary indicators of wetland hydrology were not observed in the study area. The study area and lands around the study area were observed with abundant to excessive gopher activity which indicates the loose nature of the soils and lack of saturation of the soils outside the rainy season. While not a Corps hydrology parameter for an area not being a wetland, areas that support wetland conditions generally lack abundant rodent activity. The presence of one Corps parameter, either vegetation or soils, in the southeast region of the study area meets the CCC definition of a wetland, and this area is identified in Figures 1 and is described on wetland determination data sheets. No new development is proposed in this area.

In areas south of the livestock yard and adjacent to the east and west sides of the access road, data points with soils test pits were not recorded. Construction is not proposed in these areas and mapping was conducted to give the general conditions of the lands in this area. Immediately adjacent to the ranch road, the vegetation met the minimum criteria to be determined a CCC wetland with the presence of greater than 50 percent FAC plant species; there was a lack of FACW or OBL plant species in the areas mapped as CCC wetlands. However, the existing ranch road will not be widened or improved upon, and therefore this ranch road acts as an existing buffer to sensitive areas onsite. Activity within the larger 130 Mesa Road parcel would be contained to the access road, the livestock yard, and proposed septic area.

Further to the east and south, the plant community shifted to include species with FACW or OBL rankings and it is presumed that the soils and hydrology meet the Corps wetland parameters and this area is mapped as Corps wetlands. All activity associated with the livestock yard and proposed septic area is greater than 100 feet from potential Corps wetlands.

### **Summary**

Within the study area an upland polygon of approximately 1.73 acres is found from the northern fence line extending south and west. Approximately 0.55 acres of one parameter CCC wetland was identified along the southeastern portion of the study area. No portion of the study area meets the three parameter criteria for 404 wetlands regulated by the Corps. Based on maps provided by the septic engineering firm, Eckman Environmental, the septic mounds have been situated in a location that is outside of jurisdictional wetland features or environmentally sensitive habitat areas. A 50-foot setback to these onsite features is sufficient for the proposed development and no further analysis is needed. In addition, the proposed RV area and access road will be located on areas of existing disturbance and do not require additional buffers. If you have any questions regarding the findings presented in this memo please contact me at (408) 591-6465.

Sincerely,



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Attachments