Exhibit K – Wildlife Conservation Plan

MEMORANDUM

To: Jesse Winterowd, Managing Principal
From: Anita Cate Smyth, SPWS
Date: August 8, 2022
Re: Wildlife Conservation Plan: Reed Farm Dwelling property

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INTRODUCTION

This memorandum:

1. Provides a summary of a field survey conducted on July 26, 2022. This survey was intended to document field conditions on the subject property, determine the impacts of proposed development on the SEC-zoned areas, and identify potential mitigation opportunities on the property.

2. Was prepared to document compliance with the requirements of Multnomah County's environmental overlays on the site.

3. Provides a Wildlife Conservation Plan consistent with requirements of MCC 39.5860(C)

As shown on Figure 1 below, mapping designations applicable to the property include SEC-h (Wildlife Habitat, brown hatch), which is mapped over the entirety of the property as well as most of the West Hills, and SEC-s (Streams, blue hatch), which overlays the stream corridor of Bannister Creek and its tributary.

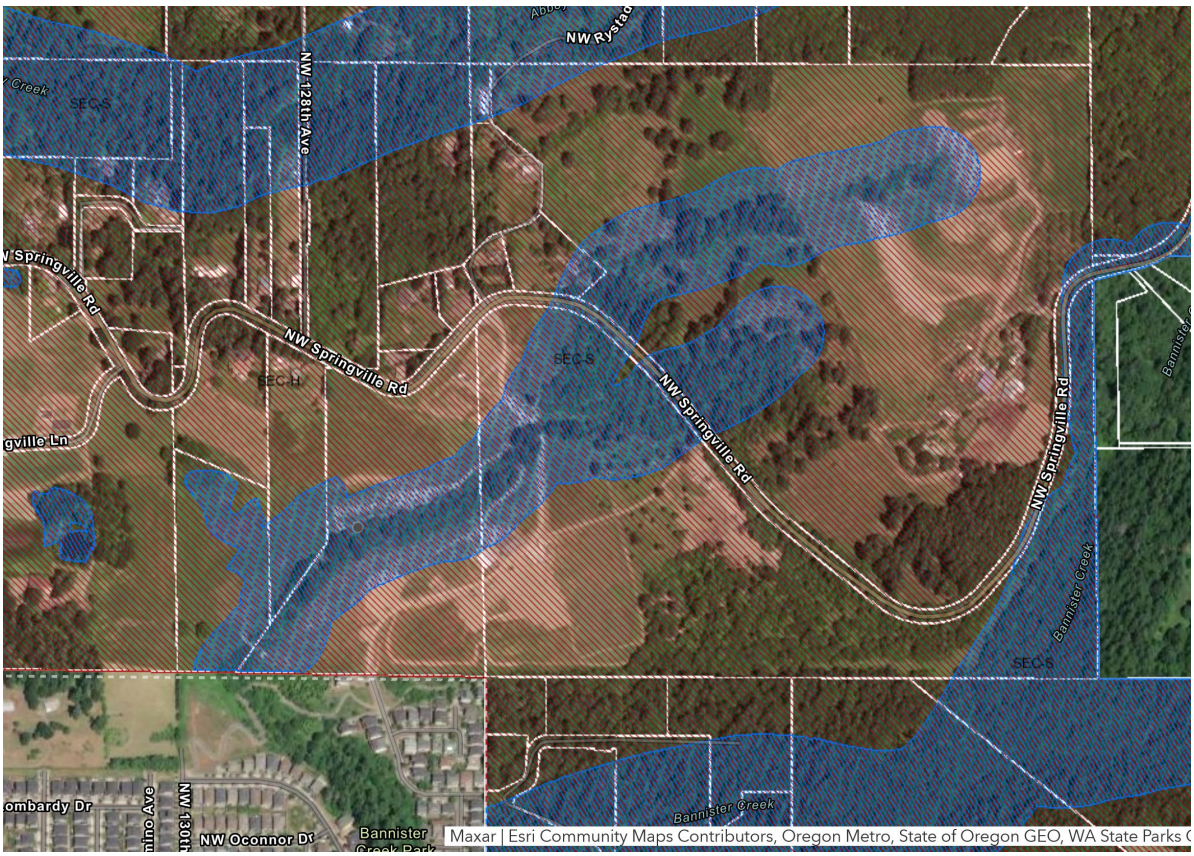

Figure 1: Site and Environmental Overlays

The subject property comprises all of tax lots 2800 and 3100 in Township 1 north, Range 1 west, Section 16 and tax lot 600 in Township 1 north, Range 1 west, Section 15C. It is located at 12424 NW Springville Road in unincorporated Multnomah County, Oregon and comprises approximately 84 acres. According to Multnomah County's online interactive zoning map, the subject property contains SEC-h (wildlife habitat) and SEC-s (stream).

Overall, the property slopes to the south, with the Bannister Creek corridor crossing the study area from northeast to southwest. It flows through a narrow channel with near-vertical sides leading to narrow terraces before climbing to the surrounding grade. The stream corridor is generally wooded with a mix of evergreen and deciduous trees and the remainder of the property is herbaceous. The property has a history of agricultural use and is currently used for egg farming and Boer goat breeding.

DESCRIPTION OF HABITAT CONDITION

The subject property contains four primary habitat areas, as shown on Figure 2 below: the Bannister Creek corridor, the meadow area on either side of the stream corridor, the area used for chicken egg production, and an upland forest in the southeastern portion of the site. The proposed farm dwelling is on the north side of the site, within the "meadow area".

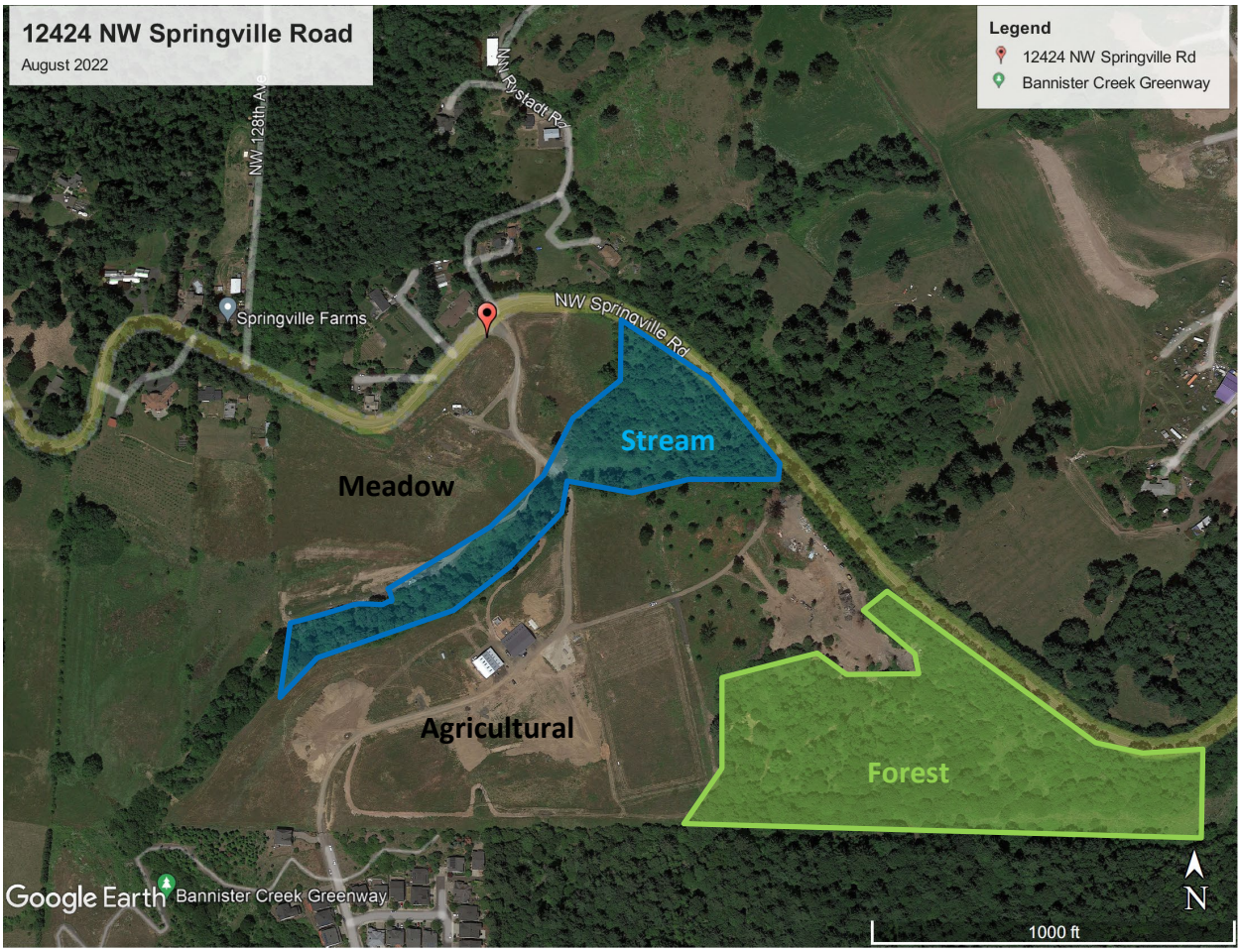

Figure 2. Site overview with habitat types

Stream

Bannister Creek and a small tributary enter the study area near the northwestern edge of the study area, with the confluence just east of the property line dividing the two parcels comprising the study area.

Bannister Creek (Figure 1) flows southwesterly across the property, joining Bronson Creek offsite to the southwest. Bronson Creek flows into Beaverton Creek, ultimately flowing into the Tualatin River. The tributary stream corridor is steeply incised down to the stream channel. The channel lacks adjacent wetlands, but flow in late July indicates groundwater support of stream hydrology.

Figure 3. Stream corridor looking downstream. Channel is 6 to 10 feet below ferns.

The uplands above the stream channel are forested. Dominant species include bigleaf maple (*Acer macrophyllum*), black cottonwood (*Populus balsamifera*) red alder (*Alnus rubra*) and occasional Douglas fir (*Pseudotsuga menziesii*). In areas with heavy tree cover, the understory is sparsely vegetated with swordfern (*Polystichum munitum*), California dewberry (*Rubus ursinus*), and common snowberry (*Symphoricarpos albus*). Where tree cover is lighter or in edge areas, a dense shrub community has developed. Common dominant species include beaked hazelnut (*Corylus cornuta*), vine maple (*Acer circinatum*), English hawthorn (*Crategus monogyna*). Himalayan blackberry (*Rubus armeniacus*) has established narrow but dense colonies in the understory along the shrub interface with open conditions such as along the roadway adjacent to the riparian corridor.

Meadow

Most of the study area is an open meadow not currently used for farming or other activities. this area is vegetated with introduced grasses typically used as pasture forage. Species include tall fescue (*Festuca arundinacea*), velvetgrass (*Holcus lanatus*), orchardgrass (*Dactylus glomerata*), bluegrasses (*Poa spp.*), and creeping bentgrass (*Agrostis stolonifera*). Himalayan blackberry, English hawthorn, docks (*Rumex acetocella; Rumex acetocella*), thistles (*Cirsium arvense; C. vulgare*), teasel, and tansy ragwort (*Senecio jacobaea*)

Figure 4. Meadow area, looking toward NW Springville Road and proposed home site.

were occasionally observed. The homeowner is engaging in active management to reduce cover of invasive species. Himalayan blackberry was present, but generally young and sparse, suggesting that mowing or other maintenance activities are keeping the spread of blackberry in check in this area.

Agricultural Area

This area comprises an area south of the stream corridor currently used for chicken egg production. It contains the chicken barn and graveled area surrounding it. The northern edge is the stream corridor, and eastern edge is the forested area described below. Property lines form the western and southern boundaries. This area is vegetated similarly to the Meadow community above but with more areas subject to periodic disturbance.

Farm use is provided an exception from SEC zone regulation (MCC 39.5515(A)(1)). Additionally, the proposed farm dwelling lies on the opposite (north) side of the stream corridor from this area and will not affect it.

Forest

The proposed farm dwelling is over 400 feet away, on the opposite side of the stream corridor, from this area and will not affect it. The forest area was not investigated as part of this document.

FUNCTIONAL ASSESSMENT

The MCC emphasizes an array of functional characteristics and resource values. The primary considerations on this site relate to riparian functions and wildlife resources; some of these functions provide on-site resources while others potentially affect the quality of habitats downstream or elsewhere. Flood storage is not a function typically observed in headwater streams such as the ones on the subject property because of landscape position and geomorphology: the physics of hydrology on steeper slopes do not lend themselves to pool formation and wide floodplains that allow storage of high flows.

Fish-related resources are primarily indirect, as no fish are present in the stream reach of the subject property. However, the tree canopy and riparian corridor provide leaf litter and other inputs that support the food chain downstream, and thermal cover to prevent the water from heating and affecting temperature-sensitive fish in fish-bearing waters downstream. The riparian corridor provides limited cover used by deer and coyotes transiting across the property; they appear to be using the access road for movement as the upland area with vegetated cover is narrow along the stream. Animal trails indicate there is movement across the stream corridor as well as along it.

Dead trees containing cavities for nesting birds were also observed, and one snag appeared to support pileated woodpecker activity. The canopy and understory have not been altered as part of past site activities and the applicant has no plans for future actions beyond control of noxious

species such as Himalayan blackberry, English ivy (*Hedera helix*) and English hawthorn; thus, the proposal has no impact on downstream fish resources, usage of the property as a movement corridor or other wildlife habitat functions.

Terrestrial species make use of the Meadow area. Specifically, hawks and falcons hunt small mammals in this area, as do coyotes. The trees in the riparian corridor provide perching and observation for predatory birds into this zone.

The areas of greatest wildlife habitat value are the riparian corridors. The large trees, variety of native vegetation, low cover of invasive species, distance to developed uses, proximity to water, adjacency to other habitat types on-site as well as connectivity to other habitat areas support a broad array of species as discussed above. The agricultural uses do not include alterations to the species composition, land uses, increased proximity to or intensified uses near the riparian corridor, or changes to fencing that might impede terrestrial movement. Consequently, the site activities have had minimal on wildlife resources.

The riparian corridors surrounding headwater streams provide water quality and other benefits through several mechanisms.

- A sufficiently wide natural area between the water resource and more intensive uses provides a separation to prevent direct contribution of fertilizers, pesticides, sediment, and other deleterious materials from entering the waterway.
- The presence of a canopy over and around water resources prevents direct solar contact with the water that would otherwise heat it.
- A wide buffer such as that on the subject property creates an island of cooler air that preserves the generally cooler temperatures in headwater streams.
- The root systems and foliar cover anchor soil and prevent erosion that would contribute to turbidity and sedimentation downstream.

Strong shoreline anchoring is a function of the type, quantity, and quality of the vegetation community near a water source and the steepness of the site. At this property, we observed a steep slope leading down to the waterways. However, the vegetation community is comprised of a dense tree canopy, which lessens the erosive impact of rainfall, and deep-rooted native trees and shrubs that anchor the soil in place. Herbaceous cover tends to vary inversely with the opacity of tree canopy cover but is also present especially along the larger tributary due to greater cover of deciduous trees that allow greater light penetration.

Previous residential site activities took place in previously developed areas near the existing driveway in the northern section of the study area and did not alter any vegetation in the riparian corridor and thus the site activities had no impact on shoreline anchoring and riparian habitat functions. Similarly, agricultural activities are sited well outside the riparian corridor and a review of aerial photography does not suggest cover over it has been reduced over time.

DISCUSSION OF PROJECT IMPACTS

This WCP relates to development of a farm dwelling and access to that farm dwelling. While few trees exist in the meadow and agricultural portions of the property, the SEC-h overlay is mapped over the entirety of the property. See Sheet C-701 to see the location of the project relative to natural features.

The effect of the construction of these features on the SEC, individually and cumulatively, is negligible for the following reasons:

1. The applicant proposes construction of a farm dwelling farther back from the SEC-s zone and closer to NW Springville Road than existing structures removed in 2007.
2. The area proposed for construction supports pasture grasses and invasive forbs and blackberry. The project does not propose removal of native vegetation. The construction envelope was already disturbed by prior development on the site.
3. Access to the proposed dwelling primarily uses existing farm access roads; the proposed access presents no impact to habitat areas and retains a distance of over 250 feet from the stream resource on site.

Placing the proposed dwelling in the proposed location clusters the development near the roadway and other homes, minimizing the influence of development on wildlife through human activity, lighting, and interruption of movement corridors.

Based on the distance from the Bannister Creek mainstem and tributary, the lack of direct impact to water resources, the lack of alterations to the surrounding riparian areas, lack of changes to existing agricultural practices, ability to prevent indirect deleterious effects by avoiding impact to canopy cover and managing stormwater from the new impervious surfaces, and the concentration of new construction within and adjacent to already cleared areas, the soil stabilization surrounding the buildings is adequate to protect stream and wildlife habitat resources on the subject property.

Mitigation

Under Chapter 39.5860(C), the applicant must propose a wildlife conservation plan if the standards of Section B cannot be met. In this case, the project cannot meet Section B because, while the proposed development is entirely within cleared areas and lies within 200 feet from NW Springville Road, Multnomah County considers the driveway to be more than 500 feet long. Thus, the applicant must propose a wildlife conservation plan in accordance with Subsection 3.

Wildlife Conservation Plan

To go beyond protection of existing resources and achieve active enhancement of existing resources for approval, the applicant proposes the removal of additional invasive species along the interface of the SEC-s and SEC-h overlays, between the gravel farm access road and the stream corridor.

Figure 5. Riparian corridor. Proposed mitigation would expand it toward the viewer.

The property owners shall manage Himalayan blackberry, English hawthorn, and English ivy to reduce cover of established colonies at the edge of the riparian corridor. These species are listed in the Nuisance Plant List (MCC 39.5580, Table 1). At this time the invasive cover in the open meadow area is light, but heavier in the interface area between open meadow and the riparian zone of Bannister Creek and its tributary. Colonies can be expected to expand in size and density if not actively managed.

Removal practices may include mechanical removal of above-ground stems. Where invasive species have formed dense colonies and where blackberry is resprouting following mechanical removal, the applicant may utilize goats to further effect removal of those species and prevent recolonization. The applicant does not propose to use herbicides as part of the program to remove nuisance species given the proximity to water resources.

Under MCC 39.5860(C)(3), the wildlife conservation plan demonstrates compliance as follows:

(a) That measures are included in order to reduce impacts to forested areas to the minimum necessary to serve the proposed development by restricting the amount of clearance and length/width of cleared areas and disturbing the least amount of forest canopy cover.

Response: The project is located entirely within cleared areas and no trees are proposed for removal. This standard is met.

(b) That any newly cleared area associated with the development is not greater than one acre, excluding from this total the area of the minimum necessary accessway required for fire safety purposes.

Response: The project is located entirely within cleared areas and no trees are proposed for removal. No newly cleared areas are proposed. This standard is met.

(c) That no fencing will be built and existing fencing will be removed outside of areas cleared for the site development except for existing cleared areas used for agricultural purposes.

Response: No fencing related to the proposed farm dwelling is proposed to be constructed on the subject property. The site contains fencing to retain and protect farm animals. Existing agricultural fences will remain in place. This standard is met.

(d) That revegetation of existing cleared areas on the property at a 2:1 ratio with newly cleared areas occurs if such cleared areas exist on the property.

Response: No tree removal is proposed, and no newly cleared areas exist; thus, the 2:1 ratio standard is not applicable.

(e) That revegetation and enhancement of disturbed stream riparian areas occurs along drainages and streams located on the property.

Response: While the project proposes no disturbance to stream riparian areas – and stays entirely outside of the 250-foot buffer area around Bannister Creek – this WCP proposes enhancement by means of nuisance species removal within SEC-s overlay areas along Bannister Creek and its tributary.