

**2020/2021 Aleutian Goose Habitat Evaluation – Riverside Ranch – Salt River
Ecosystem Restoration Project – Memorandum**

**Prepared for and by the Humboldt County Resource Conservation District
February 2021**

Approximately 72 acres of land is retained on Phase 1 (Riverside Ranch) of the Salt River Ecosystem Restoration Project to be agriculturally managed for short grass habitat for Aleutian cackling geese as well as other wetland associated birds and native vegetation such as western lily and early blue violet.

Riverside Ranch is owned by California Department of Fish and Wildlife (CDFW) and has leased the agricultural areas of Riverside Ranch to an agricultural producer to manage the property for short grass habitat with agricultural practices. CDFW short grass habitat is governed by the following criteria:

DATES	SWARD HEIGHT (inches)
April 1 to August 31	3" to 6"
September 1 to November 30	2" to 4"
December 1 to March 30	1.5" to 3"

Ocular estimation of vegetative composition will be done once prior to spring turnout and in the late fall/early winter.

A field visit was performed on February 10, 2021, prior to spring turnout. It should be noted that geese have not been observed in the Ferndale bottoms area during the 2020/2021 winter. Reduced rainfall may contribute to their absence (as of February 2021, rainfall is 50% of annual winter average). Aleutian and Canada geese were present further north in the Humboldt Bay area.

Methods:

Two pasture fields were selected to be evaluated. Field 1 is near the Riverside Ranch barn and Field 2 is located on the northern edge of the Riverside Ranch property (figure 1). Both fields were selected as large trees and shrubs are absent. Tall vegetation

hinder geese from foraging in areas as these could be areas where predators can hide or roost.

Primary pasture vegetation was identified. Other habitat features were noted such as areas of standing water and bare ground. Five sites in each field were randomly chosen to take sward height measurements. Measurements were averaged for each field.

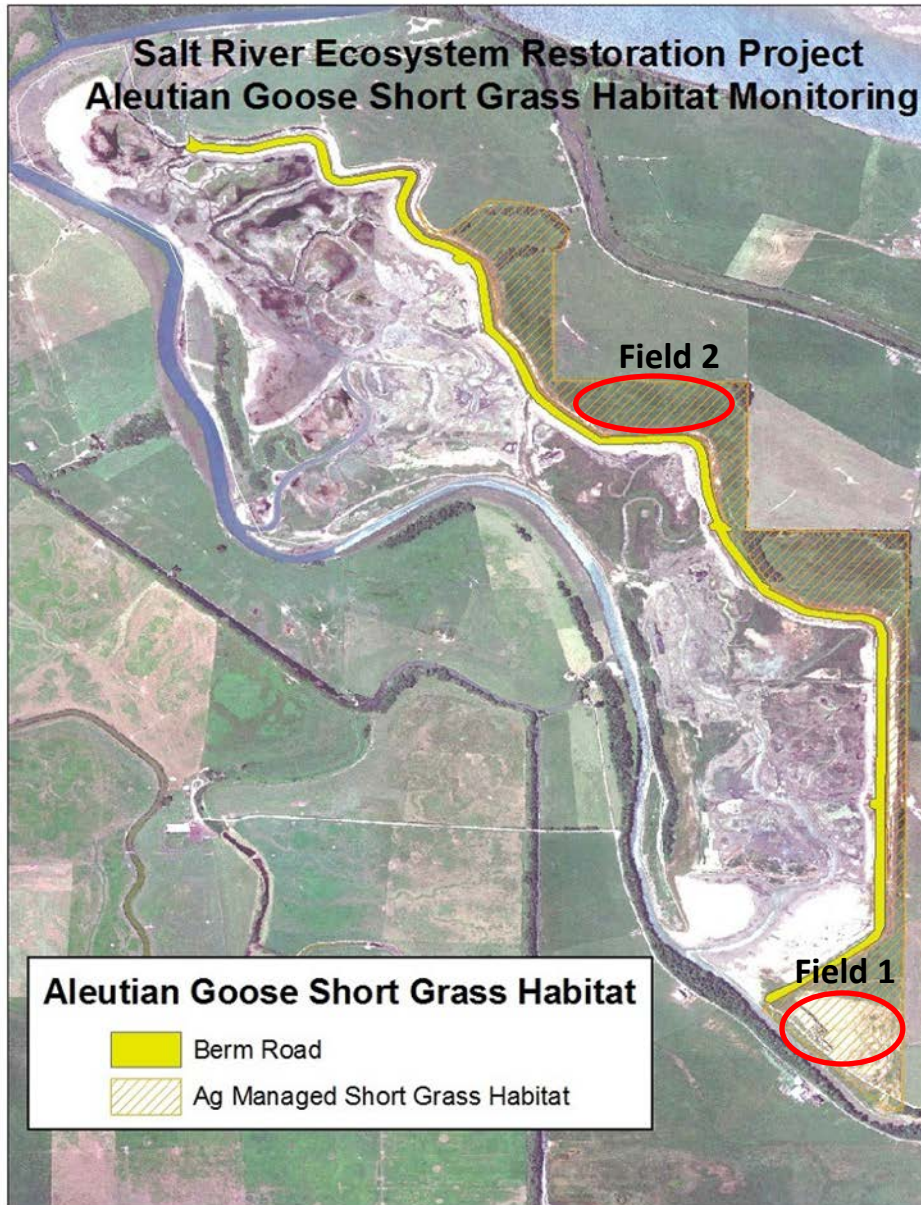


Figure 1: Map of Riverside Ranch with sampled fields on the agriculturally managed areas for short grass habitat.

Results:

The fields were sampled in February 2021. Results for sward height and habitat features are shown in table 1:

Table 1: Short grass habitat monitoring results for Riverside Ranch – February 2021

FIELD	MONTH	AVERAGE SWARD HEIGHT (inches)	CDFW SWARD HEIGHT CRITERIA (Dec to March) (inches)	VEGETATION AND FEATURES
1	Feb	3.6	1.5 to 3	Dominant rye grass, sparse bent grass, and sparse clover. Dense green pasture. Small ponds of standing water.
2	Feb	2.7	1.5 to 3	Sparse bent grass, sparse clover, sparse rye, undesirable wetland species such as juncus. Frequent bare ground and some small ponds of standing water.

Discussion:

Pasture fields were evaluated for short grass habitat in February 2021. The fields were agriculturally managed by using light weight cows (heifers) to graze the pastures. Cows were removed from the pastures in late winter. Grass sward heights were sampled across two fields where biologists determined geese would prefer in terms of access. Sward heights were averaged and the values equaled 3.6 inches and 2.7 inches in the respective fields. CDFW requires that sward height be in the range of 1.5 inches to 3 inches from December to March. The average sward height in field 1 (3.6 inches) is slightly exceeding the criteria range. However, field 1 appeared to have productive grass habitat and small water features that are more desirable to geese (Figure 1). Average sward height in field 2 falls in the range of the December-March criteria, however, the vegetation composition is not as desirable (sparse rye grass with wetland species) and frequent bare ground was observed (Figure 2).



Figures 1 (left) and 2 (right). Field 1 (Figure 1) shows lush pastures with water features. Field 2 (Figure 2) shows sparse pasture with juncus clumps, bare ground, and water features.

Overall, the agricultural fields provide habitat for migrating geese and other species. Previously, the fields laid fallow for five years and is not being managed under a lease agreement with CDFW. Short grass habitat is moving in a positive trajectory for Riverside Ranch.