

Photo/Image Credits from Grassland Ecology and Conservation Grazing Presentation (Lewis Reed) for December 17, 2019 Grazing Policy Amendment Workshop.

Slide 1 - Introduction

Background image: Toto Ranch coastal prairie, San Mateo County. Karl Kroeber

Slide 2 -Overview

Background image: Native purple needle grass (*Stipa pulchra*) on rangeland in Alameda County. Lewis Reed

Slide 3 – Global Map.

Background image: Habitat diversity in Santa Clara County. Lewis Reed

Slide 4 – Global Biodiversity Hotspots.

Map from Meyers et al. 2000.

Background image: Habitat diversity in Santa Clara County. Lewis Reed

Slide 5 – Grasslands as a critical part of our biodiversity.

Background image: Coastal Prairie San Mateo County. Lewis Reed

Slide 6 – Examples of grassland biodiversity.

Background image: Wildflowers in Alameda County Rangeland. Lewis Reed

Western Burrowing Owl: Lewis Reed

American Badger: Lewis Reed

Johnny Jump-up (*Viola pedunculata*): James Gonsman

Artists Popcorn Flower (*Plagiobothrys chorisianus* var. *chorisianus*): Dylan Neubauer

San Francisco Garter Snake: Matt Sharp-Chaney

Red-legged frog: Lewis Reed

Callippe Silverspot Butterfly: Sarah Swenty (USFWS)

Slide 7 – Ecosystem Services Associated with our Grasslands

Background image: View across grasslands at Los Trancos Open Space Preserve. Lewis Reed

Slide 8 – Ecosystem Services: Carbon Sequestration

Background image: Native California Brome (*Bromus carinatus*) on grazed rangeland in La Honda Creek Preserve. Lewis Reed/Midpen

Slide 9 – Ecosystem Services: Watershed function.

Background image: Los Vaqueros Reservoir Watershed (Contra Costa County). J.V. Littell (bahiker.com)

Slide 10 - Ecosystem Services: Recreation – Habitat for People.

Hiking, biking, horseback riding, and dog walking in District grasslands. Midpen (openspace.org)

Slide 11 – Conservation/Resource Management Challenges in our Grasslands

Background image: Coastal prairie at Johnston Ranch (San Mateo County) with California oat grass (*Danthonia californica*) and other native species. Lewis Reed/Midpen

Slide 12 – Options for Managing Grassland Resources

Prescribed Fire: The Nature Conservancy (nature.org)

Mowing to maintain grassland: Midpen

Slide 13 – Conservation Grazing

Background image: North Table Mountain Preserve (Butte County) – managed with cattle grazing to promote renowned wildflower blooms as well as many other grassland species. Lewis Reed

Slide 14 – How can grazing benefit native flora and fauna?

Short-eared owl: Glenn Florey

Red-legged frog: Lewis Reed

Wildflowers and native grasses in a grazed area at Russian Ridge Open Space Preserve: Lewis Reed

A robust stand of Dwarf plantain (*Plantago erecta*) – larval host plant for the threatened Bay checkerspot butterfly – Johnston Ranch, San Mateo County. Lewis Reed/Midpen

Bay checkerspot butterfly. Steve Martarano (USFWS)

Slide 15 – Grazing and Fuel Management

Background image: Fire in tall-grass prairie. Lewis Reed

Un-grazed and grazed grasslands at La Honda Creek Preserve (upper and lower foreground respectively). Lewis Reed/Midpen

Slide 16 – Supporting Local Agricultural Heritage

Background image: Cattle at Driscoll Ranch San Mateo County. Lewis Reed/Midpen

Slide 17 – Conclusion

Background image: Coastal prairie at Toto Ranch San Mateo County. Karl Kroeber

Western Burrowing Owl: Lewis Reed