CALIFORNIA DEPARTMENT OF FISH and WILDLIFE

GOALS

1. By 2025, Collaborate with fire control agencies to define criteria to allow natural mixed intensity fires to burn

2. By 2025, increase in hydrophilic vegetation presence and SGCN use of meadows

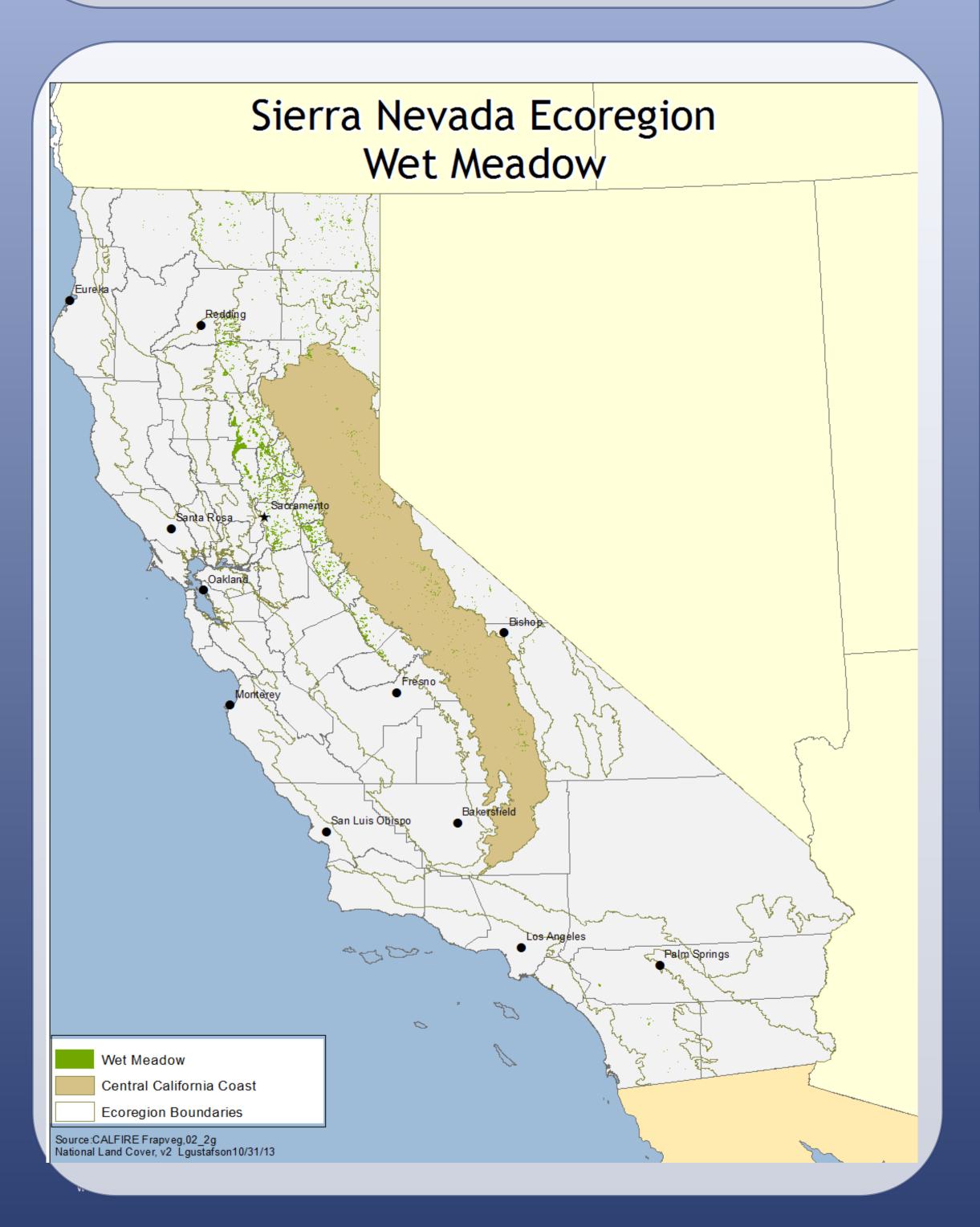
3. By 2025, Maintain and /or increase the number and size of functional meadows

4. By 2025, maintain hydrologic connectivity within meadow complexes

5. By 2025, maintain meadow functionality by reducing sediment input from grazing, roads, and railroads

6. By 2025, maintain native species composition in high elevation meadows

7. By 2025, design and implement plan to slow or restore the flow of runoff through meadows.



California State Wildlife Action Plan Update 2015 Sierra Nevada Ecoregion

DRAFT STRATEGY: High Elevation Wet Meadows

The State Wildlife Action Plan examines the health of wildlife and prescribes actions to conserve wildlife and vital habitat before they become more rare and more costly to protect. The plan also promotes wildlife conservation while furthering responsible development and addressing the needs of a growing human population.

SENSITIVE SPECIES

DUSKY-FOOTED WOODRAT WILLOW FLYCATCHER MOUNTAIN BEAVER ORNATE SHREW SPOTTED OWL RUBBER BOA CALIFORNIA RED-LEGGED FROG PEREGRINE FALCON **GREAT GRAY OWL** SANDHILL CRANE RED FOX GOLDEN EAGLE BANK SWALLOW RINGTAIL AMERICAN BADGER WHITE-TAILED KITE **AMERICAN MARTEN BLACK-TAILED JACKRABBIT** BROAD-FOOTED MOLE **CALIFORNIA MOUNTAIN** KINGSNAKE CALIFORNIA QUAIL CASCADES FROG GOPHER SNAKE **GREATER SAGE-GROUSE** LONG-EARED OWL MT. LYELL SHREW NORTHERN HARRIER **BLACK SWIFT** FISHER LONG-EARED MYOTIS MOUNTAIN LION NORTHERN FLYING SQUIRREL





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Cascade frog. Frank E. (Ed) Ely 3) 1999 California Academy of Sciences



Pacific fisher. Gerald and Buff Corsi © 2007 California Academy of Sciences



ENVIRONMENTAL STRESSES

Change in average annual temperature

Change in annual average precipitation

Change in snow pack (amount and duration)

Change in sediment erosion-deposition regime

Change in natural fire regime

Change extreme events

Change in soil moisture

Change in runoff and river flow

Change in groundwater tables

Change in community structure or composition

Change in succession processes and ecosystem development

Avalanches/Landslides

Change in spatial extent of community



Name

Pamela Flick David Passovo Tiffany Meyer Julie Newman Geoff Geupel Margarita Gordu Chrissy Howell Don Yasuda Junko Hoshi



Defenders of Wildlife Calfire Calfire CDFW-R2 **Blue Point Conservation** CDFW-R4 USFS USFS CDFW-HCPB













HUMAN RELATED IMPACTS

Roads & railroads Problematic native species (Parasites/pathogens)

Invasive plants/animals

Dams & water management/use

Fire and fire suppression

Inappropriate livestock farming and ranching

Annual and perennial non-timber crops

Mining & quarrying

Housing and urban areas

Tourism & recreation areas

Logging & wood harvesting

Hunting & collecting terrestrial animals

Agricultural & forestry effluents

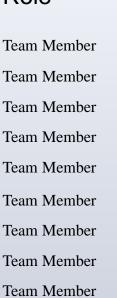
Industrial & military effluents

Recreational activities

1. Protect land through acquisition or Conservation Easements a.Objectives

b.Activities

Role







STRATEGIES, OBJECTIVES AND ACTIVITIES

- i. Restore and protect degraded wet meadow habitat ii.Conserve high quality wet meadow habitat
- i. Coordinate with WCB, develop CAPP's or LAE
- ii.Identify and coordinate with conservation partners
- iii.Identify existing conserved areas to form linkages
- iv.Identify and prioritize areas of conservation emphasis (ACE)
- v.Identify willing landowners
- vi.Obtain funding for program implementation, land acquisition and restoration
- vii.Direct project mitigation to priority areas needing conservation
- viii.Direct and use conservation banking to address impacts to wet meadow habitat
- 2. Provide input on grazing management plans a.Objectives
 - i. Reduce negative impacts from allotment grazing practices
 - ii.Improve enforcement of grazing lease conditions iii.Permanently retire problematic grazing allotments
- b.Activities
 - i. Coordinate with federal agencies to better link grazing leases, BMPs, Standard Practices and SAAs.
 - ii.Conduct review of proposed allotment leases
 - iii.Coordinate with development of TMDL
 - iv.Work with Federal agencies to amend/alter lease criteria that favor conservation
 - v.Coordinate with NRCS to implement Standard Practices and provide incentives
 - vi.Incentivize rotational grazing, seasonal resting
 - vii.Advocate for improved capacity within Federal agencies in range specialists
 - viii.Develop/support education and outreach in cooperation with NRCS and UC Cooperative Extension to leaseholders and private landowners on management practices that benefit wildlife
 - ix.Review existing science and support ongoing research on grazing practices in high elevation meadows.
 - x.Work with Cattleman's Association and California Rangeland Conservation Coalition to explore efficacy of developing grass banks.
- 3. Implement grazing practices that benefit meadow ecosystems a.Objectives
 - i. Reduce grazing impacts to wet meadow function and structure
 - ii.Implement practices to reduce cattle use of meadows b.Activities
 - i. Coordinate with USFS, NRCS, RCDs, and private landowners, consult with UC Extension
 - ii.Link to Education and outreach strategy
 - iii.Identify and work with existing stakeholder groups,
 - watershed groups, etc., involved in meadow conservation iv.Review and update grazing management practices that
 - benefit wildlife, promote restoration standard practices