



# State Wildlife Action Plan 2015 Update

## **Southern Cascades Ecoregion**

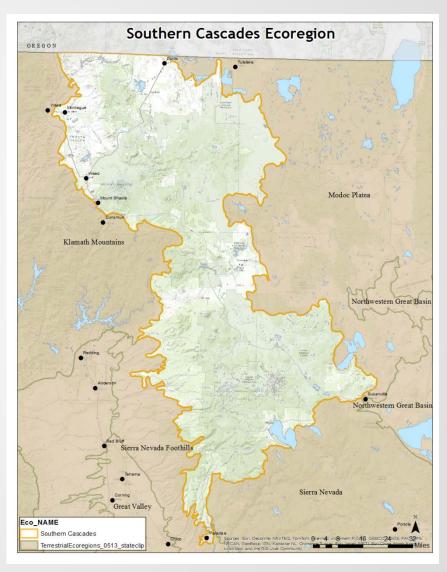
Montane Conifer and Hardwood Forest

Western N. A. Temperate Grassland & Meadow Redding SWAP Public Meeting

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## Southern Cascades Ecoregion

- Southern Limit of Cascade Range in North America
- Bounded by Great Basin, Klamath Mountains and Sierra Nevada Range and Foothills
- Volcanic Mountains
- Mt. Shasta and Mt. Lassen
- Elevations 1500 -14,000 ft.
- Public Lands: USFS, BLM,
   NPS
- Many unique species



# Southern Cascades Ecoregion Habitats

- Montane Conifer forest\*
- Temperate Grassland \*
- Sagebrush Steppe
- Riparian Forest and Scrub
- Oak Woodlands
- Alpine zone
- Wetlands, fens, bogs
- Vernal pools



Photo: Ken Morefield, CDFW

## Montane Conifer and Hardwood Forest

- Dominated by conifers with significant hardwoods component
- Widely distributed in Ecoregion
- Striking vegetation zonation with elevation
- Important conifers:
   ponderosa pine, jeffrey
   pine, sugar pine, douglas fir,
   incense cedar
- Important hardwoods: black oak, white oak, tanoak



Mt. Shasta from McCloud area Photo: Richard Lis, CDFW



Sierra Nevada Red Fox

Photo: Jennifer Carlson, CDFW







Pacific Fisher

Photo: Pete Figura, CDFW

### **Mammals**

- Snowshoe Hare
- Long-eared Myotis
- Ring-tailed cat





Marten
Photo: Kevin Smith, CDFW

Badger Photo: Miller, NPS



Mountain Beaver
Photo: Dr. Lloyd Glenn Ingles
California Academy of Sciences



Northern Flying Squirrel
Photo: Dr. Lloyd Glenn Ingles,
California Academy of Sciences

### **Reptiles & Amphibians**

- Long-toed salamander
- Rubber Boa

#### **Birds**

- Golden Eagle
- Spotted Owl
- Yellow warbler
- Sooty Grouse
- Black swift



Western Tailed Frog
Photo: William Flaxington



Bald Eagle
Photographer Unknown

## **Environmental Stresses**

- Changes in Natural Fire Regime
- Changes in Community Dynamics
- Changes in Biotic Interactions and Successional Processes
- Climate Change
- Increased Habitat Fragmentation
- Volcanic Activity

Cypripedium montanum
Photo: Richard Lis, CDFW

Porcupine

Photo: Ken Morefield, CDFW





## **Human-Caused Threats**

- Forest Management Practices
- Mismanaged Grazing
- Recreational activities (summer and winter)
- Renewable Energy
- Fire and Fire Suppression
- Utility and Service Lines
- Invasive species
- Marijuana Growing



Photo: Brett Furnas, CDFW

## Strategies

- Assess role of fire in community dynamics
- Research and management on fire return intervals
- Monitoring of species and populations
- Monitor spatial distribution and species composition and changes over time
- Outreach and education



**Bear**Photo: Pete Figura, CDFW

## Western North American Temperate Grassland and Meadow

- Relict distribution that is poorly understood
- Species composition poorly known
- May provide important transitional habitat
- Certain areas highly invaded by non-native grasses
- Cyclic burning of nonnatives, increases invasion by non-natives



Photo: Richard Lis, CDFW

Species were selected based upon their probability to use this habitat for a significant part of lifecycle.

#### **Mammals**

- American badger
- California vole
- Brush Rabbit
- Black-tailed Jackrabbit
- Broad-footed mole
- Vagrant shrew



Black-tailed Jackrabbit
Photo: Photographer Unknown, California Academy of Sciences

#### **Birds**

- Northern harrier
- Savanna sparrow
- Sandhill crane
- Burrowing owl
- Long-eared owl
- Vesper sparrow



Sandhill Crane

Photo: Gerald and Buff Corsi, California Academy of Sciences

#### **Reptiles**

- Calif. Mtn. Kingsnake
- Gopher snake



#### Gopher Snake

Photo: Alden M. Johnson California Academy of Sciences

Calif. Mountain Kingsnake

Photo: John H. Tashjian, California Academy of Sciences

## **Environmental Stresses**

## **Changes In:**

- Community structure and composition
- Spatial distribution
- Biotic interactions and community dynamics
- Natural fire regime
- Successional processes



Pronghorn Antelope
Photo: Richard Lis, CDFW

## **Human-Caused Threats**

- Revegetation with Nonnatives
- Mismanaged Grazing
- Annual or Perennial Nontimber Crops
- Fire suppression—invasion by native trees (juniper, ponderosa pine)
- Invasive Annual Grasses



Mule Deer

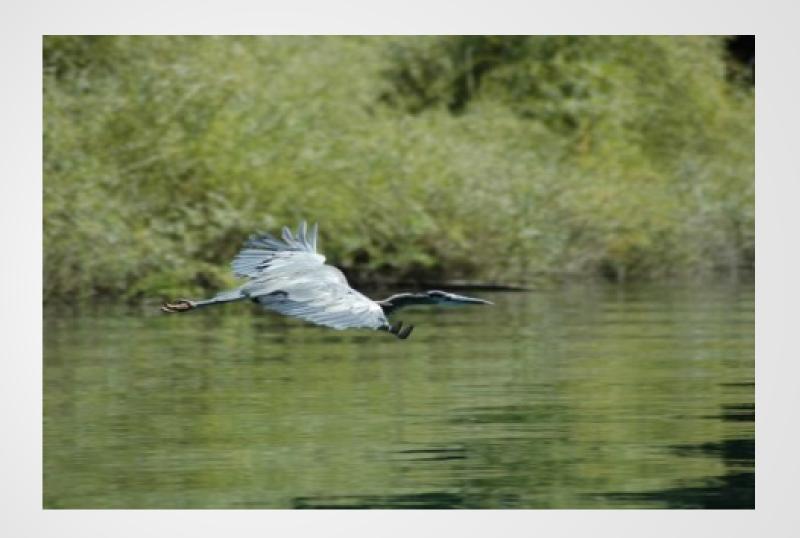
Photo: Richard Lis, CDFW

## Strategies

- Mapping current area and extent
- Estimate historic extent
- Assess current connectivity and potential historic connectivity
- Develop baseline data of species composition, evaluate community structure
- Determine non-native species composition and effects on target
- Assess role of fire in community dynamics.



Bunchgrass
Photo: Richard Lis, CDFW



**Great Blue Heron** 

Photo: Ken Morefield, CDFW