



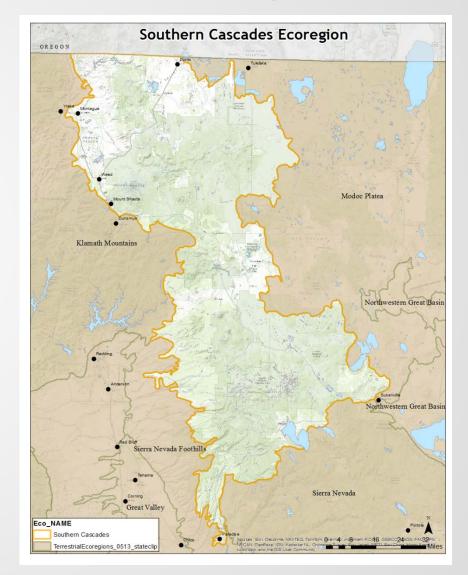
State Wildlife Action Plan 2015 Update

Southern Cascades Ecoregion Montane Conifer and Hardwood Forest South Lake Tahoe Public Meeting

> Richard Lis, Ph.D., Senior Environmental Scientist November 7, 2013

Southern Cascades Ecoregion

- Bounded by Great Basin, Klamath Mountains and Sierra Nevada Mtns.
- Southern limit of Cascades
- Volcanic Mountains
- Mt. Shasta and Mt. Lassen
- Elevations 1500 -14,000 ft.
- Public Lands: USFS, BLM, NPS
- Many unique endemic 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 hardwoods mixed
- 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



Mammals

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



Wolverine Photo: Photographer Unknown, NPS



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

<u>Birds</u>

- 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 Impacts

- Timber Harvesting
- Over-grazing
- Recreational activities (summer and winter)
- Renewable Energy
- Fire and Fire Suppression
- Utility and Service Lines
- Invasive species
- Marijuana Growing

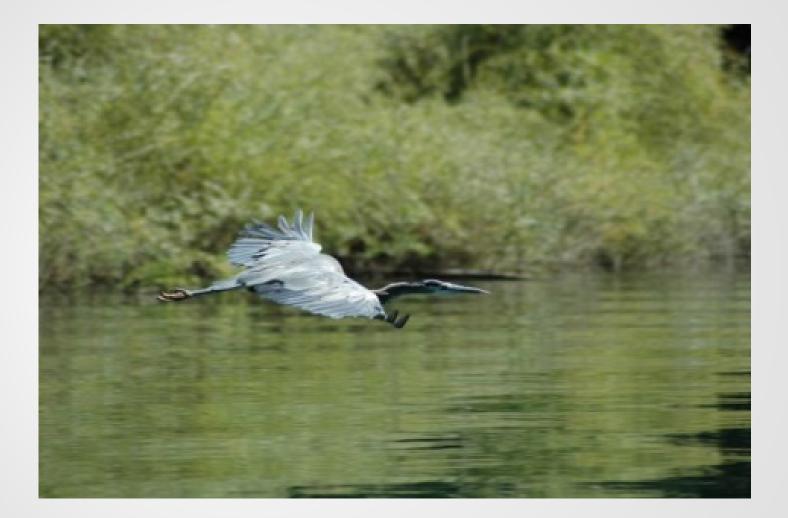


Strategies

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



Spiraea douglasii, Photo: Richard Lis, CDFW



Great Blue Heron Photo: Ken Morefield, CDFW