



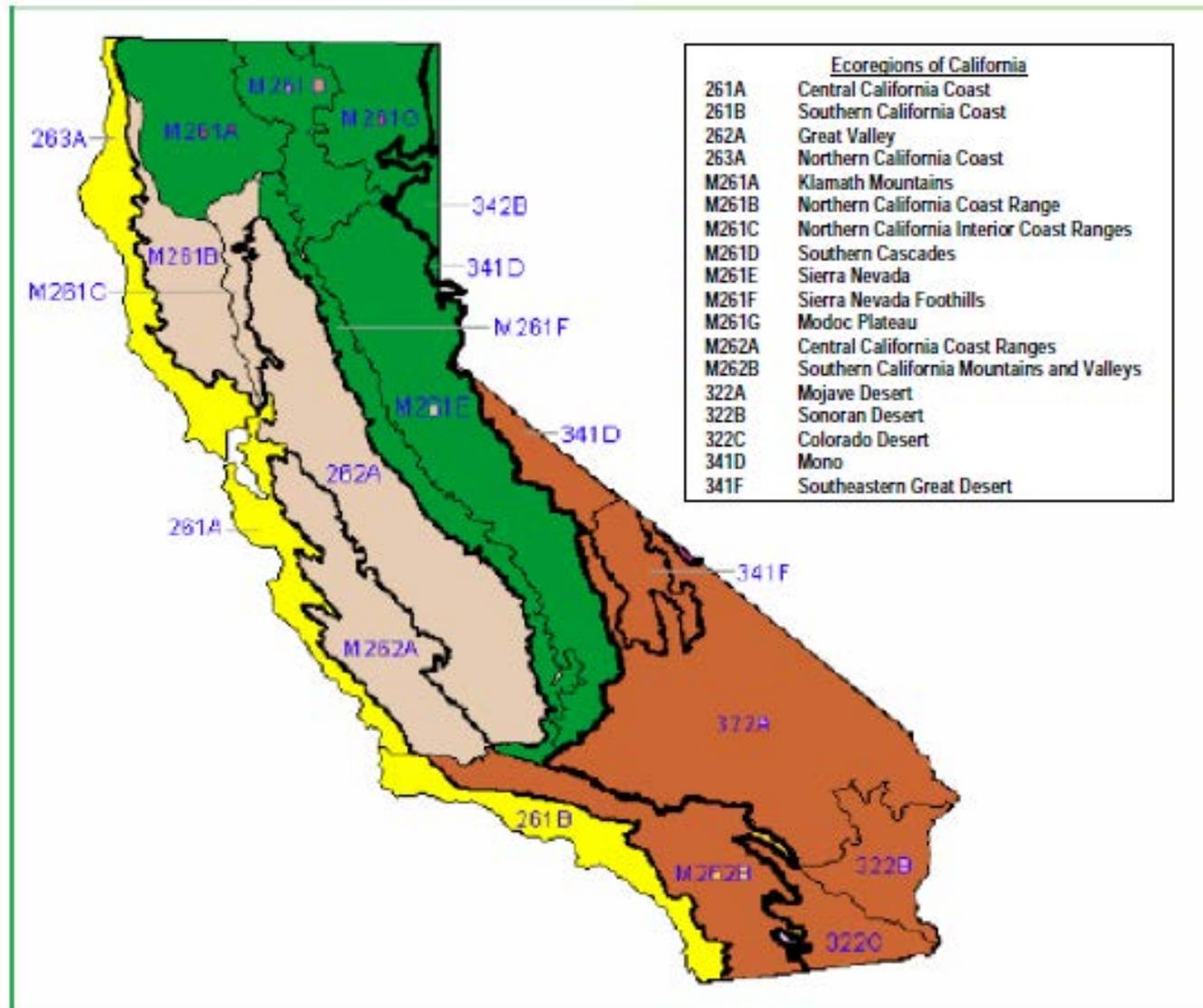
State Wildlife Action Plan 2015 Update

Michael Giusti, Senior Environmental Scientist

October 28, 2013

California Wildlife Action Plan Update 2013

Ecoregional Teams



Bailey, R.G. 1998. Ecoregions. The ecosystem geography of the Oceans and Continents. Springer, New York. 175 pp.

Mojave Desert Ecoregion

- Bounded by Arizona and Nevada on the Eastern border
- Includes the Mojave desert
- Owens Valley and low elevations of Death Valley
- Stops at the base of the San Bernardino Mtns and San Gabriel Mtns on the western edge in southern San Bernardino and northern Riverside counties.



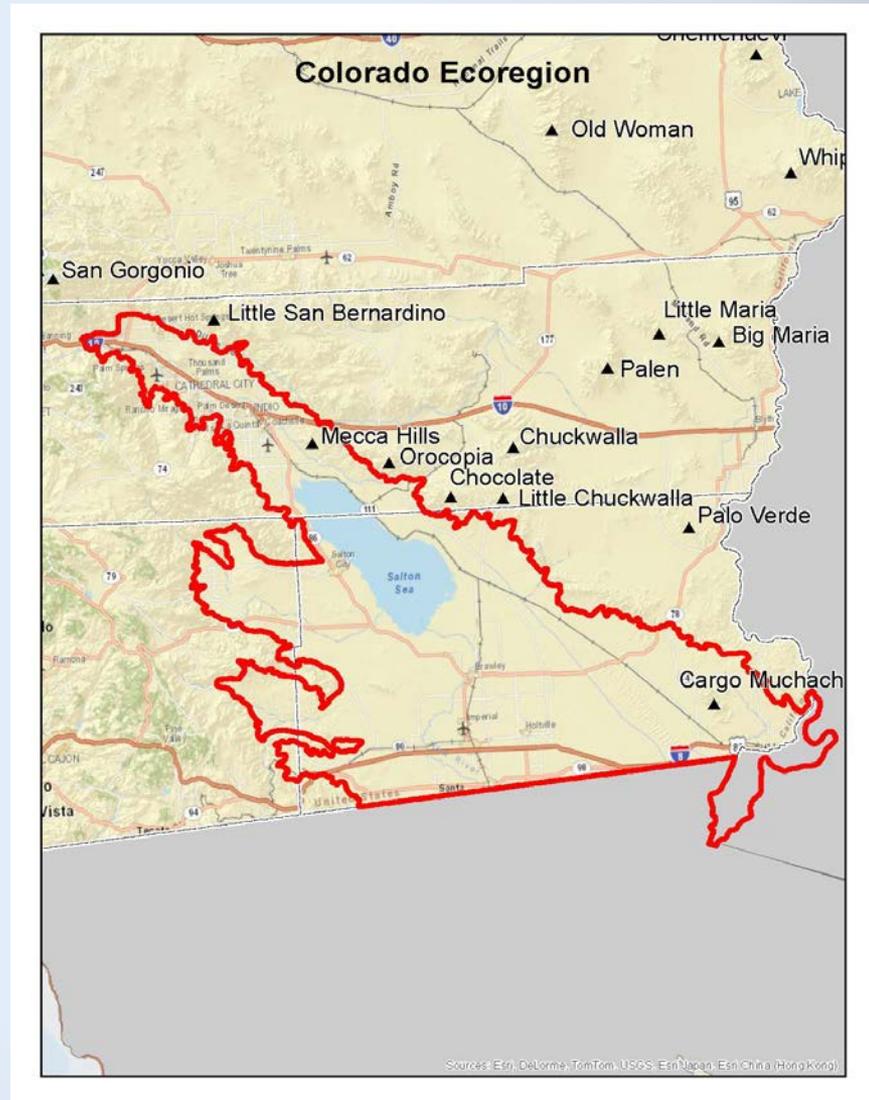
Sonoran Desert Ecoregion

- Located in the eastern portion of the Desert Province.
- Approximately 45 miles north, west and south of the town of Blythe
- Eastern boundary is the Colorado River



Colorado Desert Ecoregion

- Area surrounding the Salton Sea
- Extends to the Mexican border
- Includes the Coachella Valley and Palm Springs



Mojave, Sonoran and Colorado Ecoregions habitats

- Desert scrub
- Alkali desert scrub
- Desert Riparian
- Desert wash
- Palm oasis
- Saline emergent wetland
- Fresh emergent wetland



Desert Scrub

Mojave, Sonoran and Colorado Ecoregions habitats



Alkali Desert Scrub

Riparian Desert Wash



About the Target Habitats

- Desert targets are mixed in their occurrence
- Can use one ecoregion target in another area
- Chosen based on indicator species
- Additional targets to be addressed:
 - Sand dunes
 - Wetlands
 - Grasslands
 - Pines
 - Riparian



Species of Greatest Conservation Need

- Keystone/Indicator species
- Presence in multiple ecoregions
- Use a wide variety of habitat types.
- Indicator species
 - Desert Tortoise
 - Bighorn sheep
 - Mojave Ground Squirrel
 - Sage Grouse



Species of Greatest Conservation Need



Nelson Bighorn Sheep

Greater Sage Grouse



Species of Greatest Conservation Need



Armargosa Vole

Owens Lake Pocket Gopher



Species of Greatest Conservation Need



Golden Eagle

American Badger



Species of Greatest Conservation Need



Least Bell's Vireo

Willow Flycatcher



Species of Greatest Conservation Need



Fringe-toed Lizard

Flat-tailed Horned Lizard



Species of Greatest Conservation Need



Couch's Spadefoot Toad

Arroyo Toad



Species of Greatest Conservation Need



Gila Monster

Legless Lizard



Species of Greatest Conservation Need



Pallid Bat

Western Mastiff Bat



Environmental Stresses

- Habitat Fragmentation
- Altered natural Fire regime
- Groundwater table
- Flooding
- Spatial extent of target
- Community structure and composition
- Climate Change



Human-related Impacts

- Invasive species
- Renewable energy development and operation
- Development
- Recreational activities
- Effluents
- Military activities
- Agriculture
- Problematic native species
- Fire and Fire suppression



Strategies

- Cooperative Management partnerships
- Protect habitat through acquisition or conservation easement
- Resource assessment
- Provide Economic incentives
- Outreach and education
- Manage invasive species
- Provide training
- Reintroduce native species
- Partner for joint advocacy



Funding

- State Wildlife Grant requirement
- Section 6 Threatened and Endangered Species Funding
- Multi species habitat conservation plans
- Co-operative partnerships
- Legislative funding
- Bond funding



California Native Plant Society

Thank you for coming

We appreciate your input

Questions?



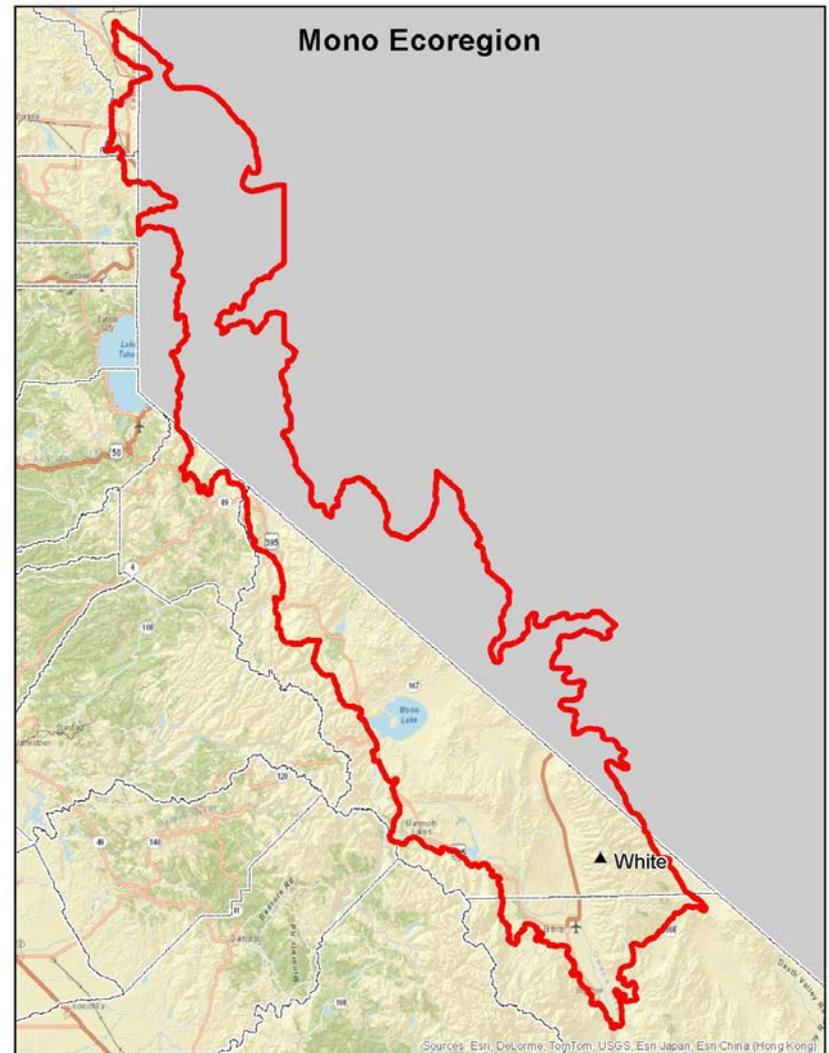
State Wildlife Action Plan 2015 Update

Alisa Ellsworth, Environmental Scientist

October 28, 2013

Mono Ecoregion

- The eastside of the Sierras
- Upper Owens Valley
- Nevada state line
- Walker River Basin
- Base of the Sierra west of Bishop, Mono Lake, Mammoth Lakes and Bridgeport
- Small portion east of Portola



Habitats of the Mono Ecoregion

- Sagebrush
- Pinyon-juniper
- Bitterbrush
- Aspen
- Riparian
- Wet and Alkali meadow
- Fresh-water Emergent



Sagebrush

- Less Protection than other habitats
- Threats from
 - Development
 - Grazing
 - Wildfire
- Many sagebrush dependent or associated species



Species of Greatest Conservation Need



Nelson Bighorn Sheep

Greater Sage Grouse



Species of Greatest Conservation Need



Pygmy rabbit



Short-eared owl

Stresses

- Ecosystem Changes
 - Area & Extent of Habitat
 - Community structure or composition
 - Successional Dynamics
 - Fire Regimes
 - Climate Change



Threats

- Problematic native plants
- Housing and urban areas
- Invasive plants/animals
- Fire and fire suppression



Strategies

- Protection of land
 - Identify high quality habitat for protection
 - Protect land through acquisition, conservation easement or lease
- Resource Management
 - Promote healthy sage brush ecosystems
 - Example: Managed Grazing
- Management Partnerships and Coordination
 - Coordinate with local agencies and counties
 - Identify funding sources



Strategies (cont.)

- Data Collection and Analysis
 - Prioritize/Coordinate research efforts
 - Continue monitoring of PJ and cheat grass encroachment
- Provide Economic Incentives
 - Example: Establish stewardship payments to landowners practicing sound resource management



Thank you for coming

We appreciate your input

Questions?



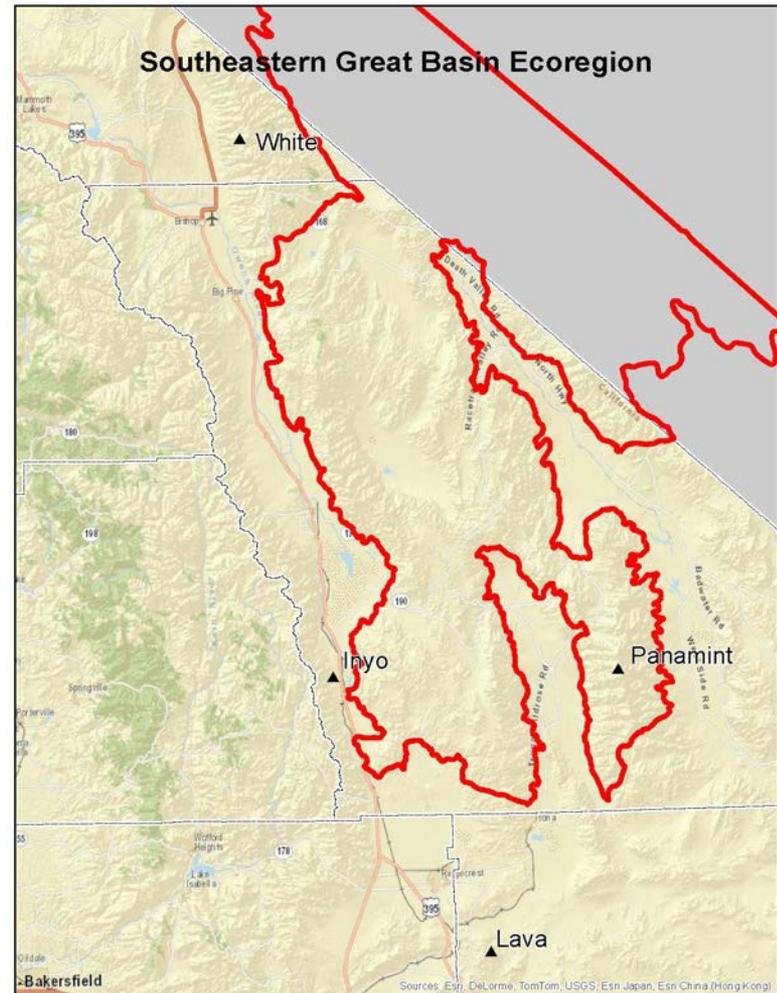
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Mike Morrison, Environmental Scientist

October 28, 2013

Southeastern Great Basin Ecoregion

- >50% is in Death Valley National Park
- Includes northern portion of China Lake Naval Weapons Station
- Inyo Mountains east to Nevada border
- Almost entirely within Inyo County north of the Mojave Desert.



Habitats of Southeastern Great Basin Ecoregion

- Pinyon-Juniper Woodland
- Joshua Tree Woodland
- Sagebrush
- Desert Scrub
- Alkali Desert Scrub
- Desert Wash
- Saltbrush Scrub



Desert Riparian

Desert Riparian

- Scarcity of surface water in inland deserts.
- Many species are dependent upon desert riparian.
- Habitat is distributed throughout the Southeast Great Basin
- Highest densities located in the southern portion of the ecoregion.



Species of Greatest Conservation Need



Inyo California Towhee

Inyo Mountains Slender Salamander



Species of Greatest Conservation Need



Nelson Bighorn Sheep

Panamint Alligator Lizard



Stresses and Threats

- STRESSES
 - Loss or change in biotic interactions
 - Changes to community structure or composition
 - Loss or change in biotic interactions
 - Changes in functional processes of ecosystem
 - Climate Change
- THREATS
 - Problematic native plants
 - Invasive plants and animals



Strategies

- Establish cooperative partnership with all interested groups
 - Share information and partner priorities
 - Engage in decision making process
 - Identify conservation needs of target habitat
 - Develop a collaborative conservation management plan
 - Identify funding sources to implement projects

Strategies (cont.)

- Manage invasive species
 - Control invasive and problematic native vegetation
 - Conduct invasive and problematic native plant removal projects
 - Control invasive mammals (feral equines)
 - Conduct roundups (moratorium)
 - Investigate other control methods
 - Prevent riparian (springs) habitat degradation
 - Construct exclusion fencing
 - Post project monitoring (present obstacle)



Thank you for coming

We appreciate your input

Questions?