



Department of Game and Fish



# STATE WILDLIFE ACTION PLAN for New Mexico

22 November 2016



Ecological & Environmental Planning

# Background

- 2000 PUBLIC LAW 107–63 established the **State Wildlife Grants (SWG) Program**;
- To benefit wildlife and their habitats for **species not hunted or fished**;
- States required to develop a comprehensive wildlife conservation plan by 1 Oct 2005;
- New Mexico has received almost **\$19 million** in SWG funds since 2001
- Department has funded 76 grants and over 120 Share with Wildlife projects



Ecological & Environmental Planning

# Required Elements

1. Distribution and abundance state's wildlife **Species of Greatest Conservation Need** (SGCN);
2. Location and condition of **key habitats**;
3. Assess **threats** which may affect SGCN or their habitats;
4. Identify **actions to conserve** SGCN and their habitats;
5. Plan to **monitor** SGCN and their habitats;
6. Schedule **state review** of Strategy at least every ten years;
7. **Coordinate** with federal, state, and local agencies and tribes that manage significant land areas;
8. Provide for necessary **public participation**.

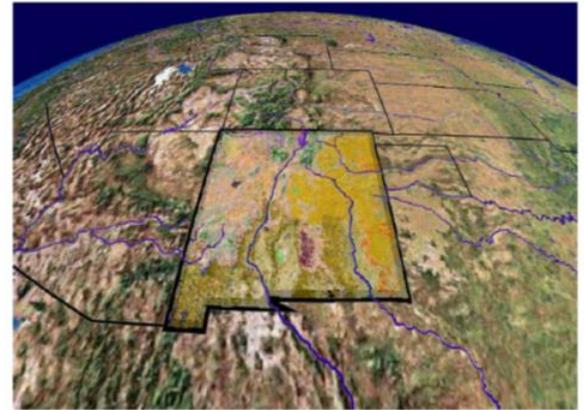


Ecological & Environmental Planning

# Comprehensive Wildlife Conservation Strategy (CWCS) for New Mexico

- New Mexico prepared its CWCS
- Fish and Wildlife Service approved Strategy in 2006
- Must be reviewed and revised every 10 years

## Comprehensive Wildlife Conservation Strategy For New Mexico



Prepared by:

New Mexico Department of Game and Fish

In cooperation with:

Over 170 public agencies, conservation organizations, commodity interests, municipalities, private partners, and tribal representatives.

February 14, 2006



Ecological & Environmental Planning

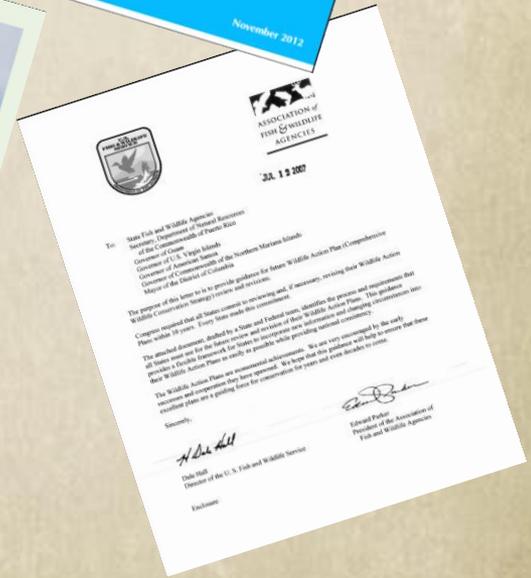
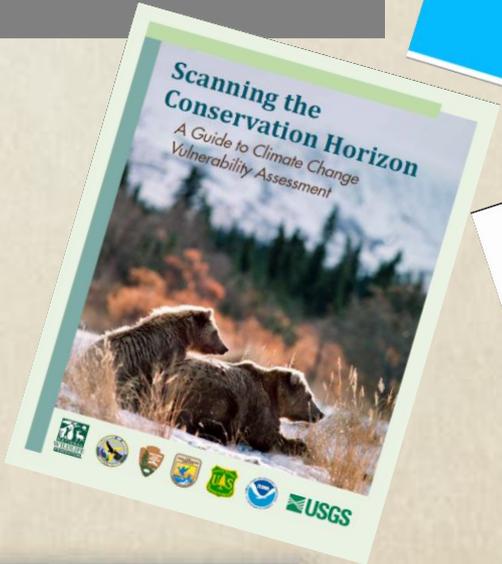
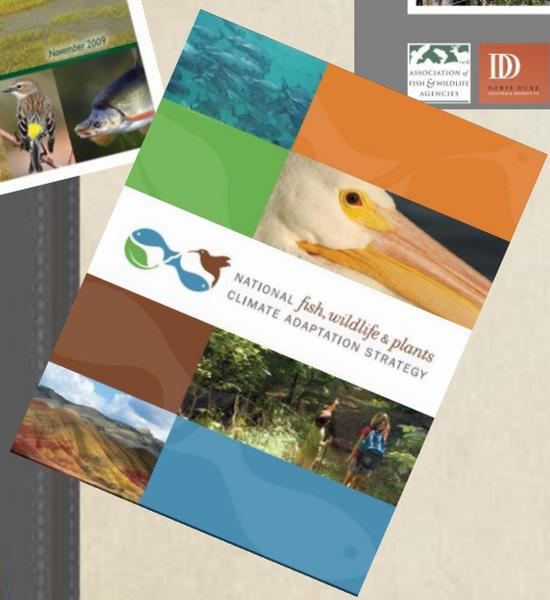
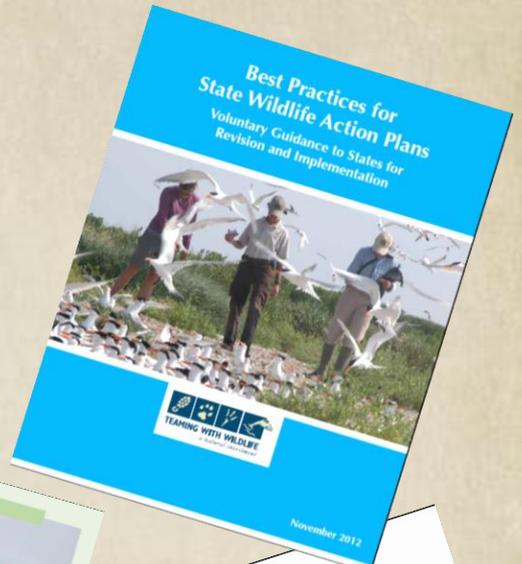
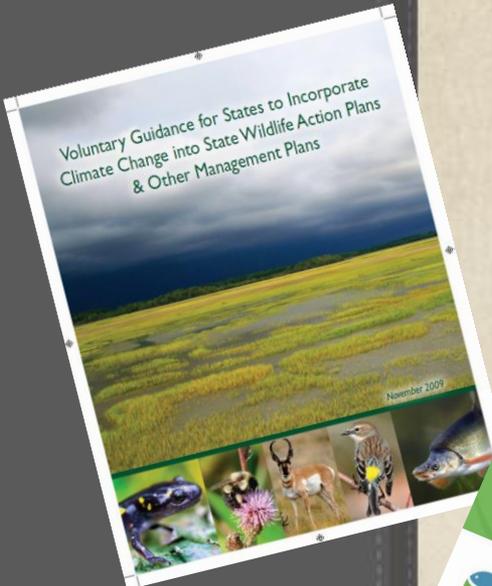
# 10 Year Formal Review and Revision

- Started review in 2015
- Process requirements
  - Identify Species of Greatest Conservation Need (SGCN)
  - Link threats to species
  - Link conservation needs to species
  - Address climate change
- State Wildlife Action Plan (SWAP) approved in 2017



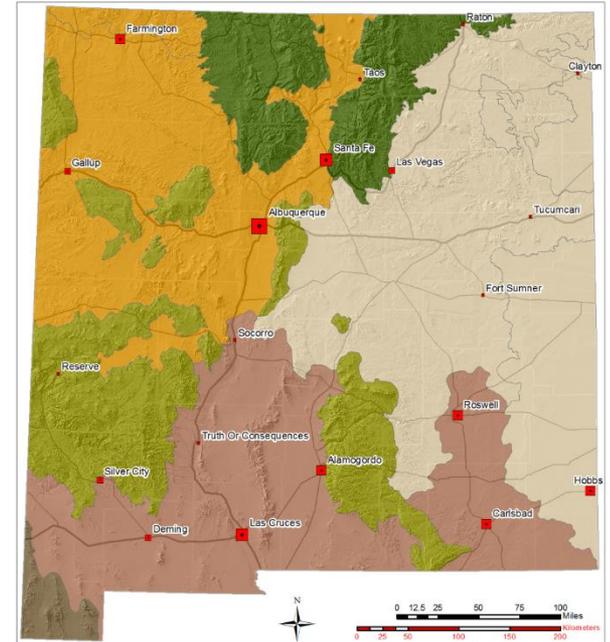
Ecological & Environmental Planning

# Guidance and Resources



Ecological & Environmental Planning

# Ecoregion Organization



- Ecoregions**
- Colorado Plateaus
  - High Plains and Tablelands
  - Arizona/New Mexico Mountains
  - Chihuahuan Desert
  - Southern Rocky Mountains
  - Madrean Archipelago



Ecological & Environmental Planning

# Identify SCGN



Ecological & Environmental Planning

# SGCN Selection

- Department statutorily responsible for taxa
- Exclude legally harvested with statutory protection as game or sport fish unless also state listed Threatened or Endangered
- Declining
- Vulnerable
- Endemic
- Disjunct
- Keystone
- Department expert opinion



Ecological & Environmental Planning

# SGCN

Category Taxon	I	H	S	D	F	Total
Amphibians	1	4	5	2	2	14
Birds	18	10	30	9	5	72
Crustaceans	0	1	0	27	2	30
Fish	9	2	5	0	13	29
Mammals	9	3	3	3	6	24
Molluscs	1	26	3	10	6	46
Reptiles	1	6	6	4	3	20
Total	39	52	52	55	37	235

I: Immediate priority species

H: Specialized or limited habitat species

S: Susceptible species

D: Species with conservation data gaps

F: Federally-listed species

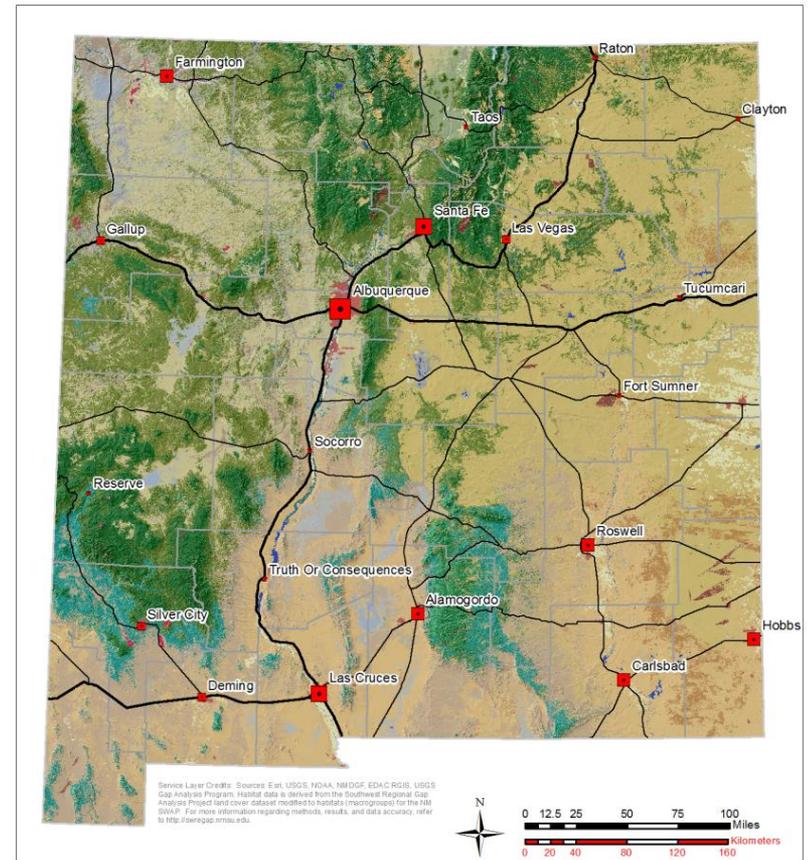


Ecological & Environmental Planning

# Key Habitats

- 30 Key terrestrial habitats
- 3 Introduced Semi-natural
- 5 Other land cover
- 8 Key aquatic habitats

Classified using the peer reviewed U. S. National Vegetation Classification system



## Land Cover - Habitats

Cliff, Scree & Rock Vegetation	Intermountain Dwarf Sagebrush Shrubland	Recently Disturbed or Modified
And West Interior Freshwater Emergent Marsh	Intermountain Juniper Woodland	Rocky Mountain Alpine Vegetation
Barren	Intermountain Saltbush Shrubland	Rocky Mountain Lower Montane Forest
Chihuahuan Desert Scrub	Intermountain Tall Sagebrush Shrubland	Rocky Mountain Montane Riparian Forest
Chihuahuan Semi-Desert Grassland	Introduced Riparian and Wetland Vegetation	Rocky Mountain Montane Shrubland
Developed & Urban	Introduced Upland Vegetation - Annual Grassland	Rocky Mountain Pinyon - Juniper Woodland
Great Plains Floodplain Forest	Introduced Upland Vegetation - Perennial Grassland and Forbland	Rocky Mountain Subalpine-High Montane Conifer Forest
Great Plains Mixedgrass Prairie	Madrean Lowland Evergreen Woodland	Rocky Mountain Subalpine-High Montane Meadow
Great Plains Sand Grassland & Shrubland	Madrean Montane Forest & Woodland	Southwest Riparian Forest
Great Plains Shortgrass Prairie	Montane-Subalpine Wet Shrubland & Wet Meadow	Warm & Cool Desert Alkali-Saline Wetland
Herbaceous Agricultural Vegetation	Open Water	Warm Desert Lowland Riparian Shrubland
Intermountain Arroyo Riparian Scrub	Quarries, Mines, Gravel Pits and Oil Wells	Warm Interior Chaparral
Intermountain Dry Shrubland & Grassland		Warm-Desert Arroyo Riparian Scrub



Ecological & Environmental Planning

# Threats

- Based on the IUCN general categories
- Identified by ecoregion
  1. Residential and Commercial Development
  2. Agriculture and Aquaculture
  3. Energy Production and Mining
  4. Transportation and Utility Corridors
  5. Biological Resource Use
  6. Human Intrusions and Disturbance
  7. Natural System Modification
  8. Invasive and Problematic Species
  9. Pollution
  10. Climate Change



Ecological & Environmental Planning

# Conservation Actions

- General categories based on IUCN classification system
- The actions applicable to New Mexico include:
  1. Land/Water Management
  2. Species Management
  3. Law Enforcement and Prosecution
  4. Livelihood, Economic, and Moral Incentives
  5. Conservation Designation and Planning
  6. Law and Policy
  7. Research and Monitoring
  8. Awareness Raising/Education and Training
  9. Institutional Development



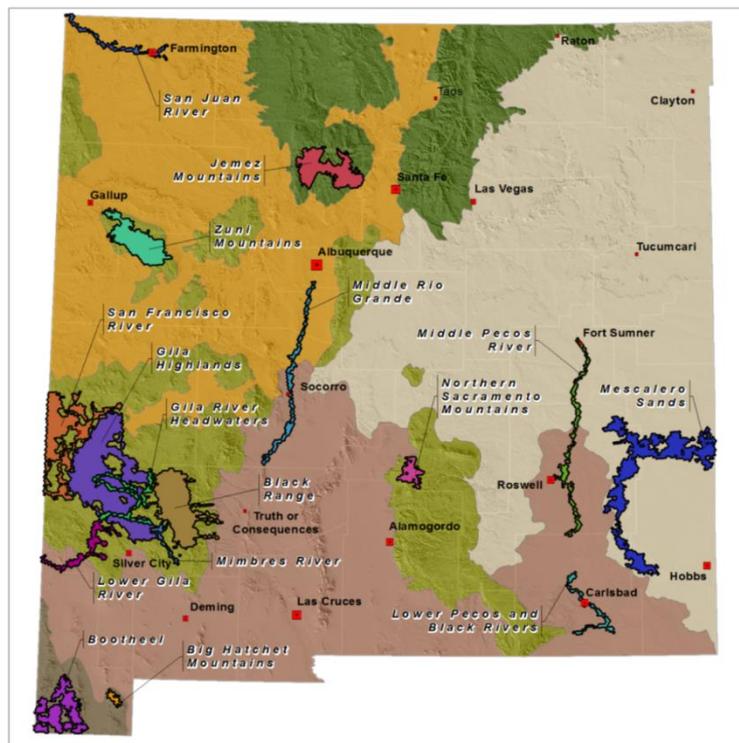
Ecological & Environmental Planning

# Assess Climate Change



Ecological & Environmental Planning

# Conservation Opportunity Areas



Service Layer Credits: Sources: Esri, USGS, NOAA, NMDFE, EDAC RGIS, EPA

Conservation Opportunity Areas



Include:

- San Juan River
- Jemez Mountains
- Zuni Mountains
- Middle Rio Grande
- San Francisco River
- Gila Highlands
- Gila River Headwaters
- Black Range
- Lower Gila River
- Mimbres River
- Bootheel
- Big Hatched Mountains
- Northern Sacramento Mountains
- Middle Pecos River
- Lower Pecos and Black Rivers
- Mescalero Sands



Ecological & Environmental Planning

# Other Required Elements

- Description of monitoring species and habitats
- Implementation through coordination
- Review and revision (before 2025 if warranted)



Ecological & Environmental Planning

# SWAP Web Portal

NEW MEXICO DEPARTMENT OF GAME AND FISH

[New Mexico Conservation Information System](#)

BISON-M

NMERT

NM CHAT

SWAP

Share with Wildlife



## New Mexico State Wildlife Action Plan

NATURAL HERITAGE  
NEW MEXICO



 OVERVIEW

 SPECIES

 ECOREGIONS

 HABITATS

 THREATS AND  
CONSERVATION  
ACTIONS

 CONSERVATION  
OPPORTUNITY  
AREAS

 MONITORING

 CLIMATE CHANGE

Welcome to the State Wildlife Action Plan for New Mexico, your portal for exploring the conservation needs and opportunities for New Mexico's wildlife and their habitats.

[Learn about Species of Greatest Conservation Need and where they live.](#)

[Read about Threats and Potential Conservation Actions.](#)

[Explore Conservation Opportunity Areas.](#)

Search...



Related Resources

<https://nmswap.org/>



Ecological & Environmental Planning

# Questions



Ecological & Environmental Planning