The New Mexico Wildlife Corridors Action Plan

Presented by

The Wildlife Corridors Action Plan Team

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Overview

- History of Past Actions
- The Wildlife Corridors Act
- Tasks Completed
- The Top 11 Priority Areas (top 5 hotspots and 6 wildlife corridors)
- What’s Next
History of Past Actions

Wildlife Mitigation Efforts in New Mexico
History of Past Actions
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Past Wildlife Mitigation Efforts in New Mexico
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New Mexico Wildlife Corridors Act (SB 228)

Signed by Governor Michelle Lujan Grisham
On March 28, 2019

Directs NMDOT and NMDGF to develop a Wildlife Corridors Action Plan
The Wildlife Corridors Action Plan

- Identifies wildlife linkages across the state for large mammals and species of concern

- Identifies highway segments where we can promote motorists’ safety and wildlife connectivity

- Encourages NMDOT and NMDGF to use the best available science, and collaborate with Tribal governments, non-government organizations, federal land management agencies, private landowners, and the public to identify mitigation actions
Six Large Mammal Focal Species
Private Landowners

Any involvement is optional

Figure 1. Land stewardship: owners and managers of New Mexico's land.
Action Plan Tasks Completed

Task 1: Data Gathering
Task 2: Data Analyses
Task 3: Field Reconnaissance of Priority Areas
Task 4: Benefit-cost Analysis
Task 5: Action Plan Development
Task 6: Public Involvement
Task 7: Wildlife Corridors Project List
Task 1 - Data Gathering

Data and GIS Layers from:

- NMDOT
- NMDGF
- Tribal Natural Resource Dept.’s
- Academic researchers
- Natural Heritage Program
- USGS
- Non-profit organizations
- Past modeling publications
20 Species of Concern

Photo Credit: M. Watson

Photo Credit: W. Brashear TXPW

All Uncredited Photos from U.S. Federal Agencies: USFWS, USGS, USFS, NPS
Distribution Maps

Species occurrence maps or data (specimen records, remote camera photographs, road-killed animals)
Climate Change
Task 2 - Data Analyses
Scientific Modeling of Crash & Wildlife Movement Data

Hot Spot Modeling of Crash Data

Optimized Hotspot Analysis using the Getis-Ord Gi* Statistic in ArcGIS

Habitat Linkage Modeling for Six Focal Species

Habitat Linkage Modeling using UNICOR, single species & combined 6 species
Selection of the Top 5 Hotspots & Top 6 Corridors

**WVC Hotspots**
Factors:
- Transportation
- Wildlife
- Feasibility
Factors were quantified, resulted in top 5 priority hotspots

**Wildlife Corridors**
Factors:
- Linkage Modeling
- SO 3362 Priority Areas
- NMDGF GPS Collar Data
- Non-Profit and Agency Input
- Tribal GPS Locational Data
- Tribal Carcass/Crash Data
Prioritization decided by Team and Agency partners
Wildlife Corridor Modeling

Habitat linkages intersecting roads
Task 3 - Field Reconnaissance Of Priority Areas

ArcGIS Survey 123 Pictures, map, details, designed by Arizona Game and Fish Department
Task 4 - Benefit-Cost Analysis of Top 10 Hotspots/Corridor Projects

Benefits of reduced animal-vehicle collisions per year per mile x 75 years x percentage reduction of Animal-Vehicle Collisions expected

Cost of proposed mitigation
Task 5 Develop the Action Plan

More on that under Task 7
Task 6 Public Involvement 2020 - 2021

2020
• Sent Notice Letters to stakeholders, including agencies, non-profits, Tribes
• Public notice
• 8 public meetings, 5 occurred – Raton, Albuquerque, Santa Fe, Farmington, & Las Cruces
• Website to submit comments
• Email address to submit comments

2021
• Contacted all Tribes to ask for input
• Released 2020 Annual Report via website
Public Involvement 2020 - 2021

84 individuals participated in five public meetings

Over 30 comments received, Top 8 Comments:

• Support for the Plan
• Locations to focus on
• Inclusion of species other than 6 target species
• Speed limit enforcement
• Fencing improvement
• Data sharing
• Adherence to the Act
• Focus on wildlife migration routes
Public Involvement 2022

Current Public Events

• Draft Action Plan released January 12, 2022

• February 2022 – 2 virtual public meetings hosted

• Comment period ends on March 12, 2022
Input from the Public, Tribes, Researchers, Non-Profits

**Selection of Top Wildlife Corridors**

**Tribal Data**
- Wildlife GPS Locations
- Carcass Data

**Non-Profit Input**
- Camera Trap Data
- Public Support Docs

**Public Comments**
- Support for specific corridors and WVC hotspots

**Researcher Data**
- Wildlife GPS Locations
- Corridor Modeling Maps
Task 7 Wildlife Corridors and Hotspots Project List

Based on:

- Project potential to reduce wildlife-vehicle collisions
- Project potential to improve wildlife corridors
- Benefit-cost analysis (economics)
- Local community support of project
- Adjacent land-use and ownership
The Top11 Wildlife-Vehicle Collision Hotspots and Wildlife Corridors

Photo credit: NMDOT & AGFD
The Top 5 Wildlife-Vehicle Crash Hotspots

- North of Cuba
- Silver City
- Bent
- Ruidoso
- Glorieta Pass
The Top 6 Wildlife Corridors

- Chama
- Rio Grande Del Norte Nat’l Mon
- Sandia-Jemez Mountains
- Peloncillo Mountains
- South of Raton – Pronghorn Triangle
- Questa to Red River
US 550 North of Cuba WVC Hotspot

Photo credit: AZGFD
US 180 & NM 90 Silver City WVC Hotspot

Photo credit: NMDGF

Photo credit: US NPS
US 70 & NM 48 Ruidoso
WVC Hotspot

Photo credit: NMDGF

Photo credit: US NPS

Map extent

Explanation
- Proposed bridge
- Proposed bridge retrofit
- Proposed culvert retrofit
- Proposed overpass
- Proposed fence
- Crash hotspot
- NMDOT maintained road

Land ownership
- U.S. Bureau of Land Management
- U.S. Forest Service
- Tribal
- Private
- NM state land

NMDOT WILDLIFE CORRIDORS ACTION PLAN
US 70 and NM 48 Ruidoso
Recommended Potential Mitigation Action with Land Ownership

0 1 2 Miles

Ruidoso

Mescalero Apache Tribal Lands

Sierra Blanca Regional Airport

Mountain
I-25 Glorieta Pass Hotspot

Photo Credit: CDOT, CPW, ECO-resolutions

Glorieta Pass

Photo Credit: NMDGF

Map extent

NMDOT WILDLIFE CORRIDORS ACTION PLAN
I-25 Glorieta Pass
Recommended Potential Mitigation Action with Land Ownership

Photo Credit: NMDGF
US 70 Bent Sacramento Mountains WVC Hotspot

Photo credit: AZGFD
The Top 6 Wildlife Corridors
US 64 & US 84
Chama
Wildlife Corridor

Photo credit: P. Cramer

Photo credit: NMDGF
US 285 Rio Grande del Norte National Monument Wildlife Corridor
I-25, US 64, NM 505 & NM 445 South of Raton to Maxwell, the Pronghorn Triangle Wildlife Corridor
I-10 Peloncillo Mountains Steins Wildlife Corridor

Photo credit: AGFD
I-25 & US 550
Sandia-Jemez Mountains
Wildlife Corridor

Photo credit: NMDGF

Photo credit: NMDGF

Photo credit: NMDGF

Photo credit: CDOT, CPW, ECO-

Photo credit: P. Cramer, UDOT, UDWR
NM 38 Questa to Red River Wildlife Corridor

Photo credit: AGFD
New Mexico’s Top 11 WVC Hotspots & Wildlife Corridors
WHAT’S NEXT

• Winter 2022 – Accept Comments
• Spring 2022 - Update and release Final Action Plan
• Ongoing - Secure funds and plan for top projects
• Ongoing – Continue to update the Action Plan

Photo Credit: Mark Watson, NMDGF
HOW TO PROVIDE COMMENTS

- Review the plan and share your input with us by email, mail, or phone before March 12, 2022.

- Visit: https://wildlifeactionplan.nmdotprojects.org/

- Email: wildlife.corridors@state.nm.us

- Mail: Draft Wildlife Corridors Action Plan
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Comments & Questions