



New Mexico DEPARTMENT OF
TRANSPORTATION
MOBILITY FOR EVERYONE

February 1, 2022

The New Mexico Wildlife Corridors Action Plan

Presented by
The Wildlife Corridors Action Plan Team

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a Geo-Logic Company



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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



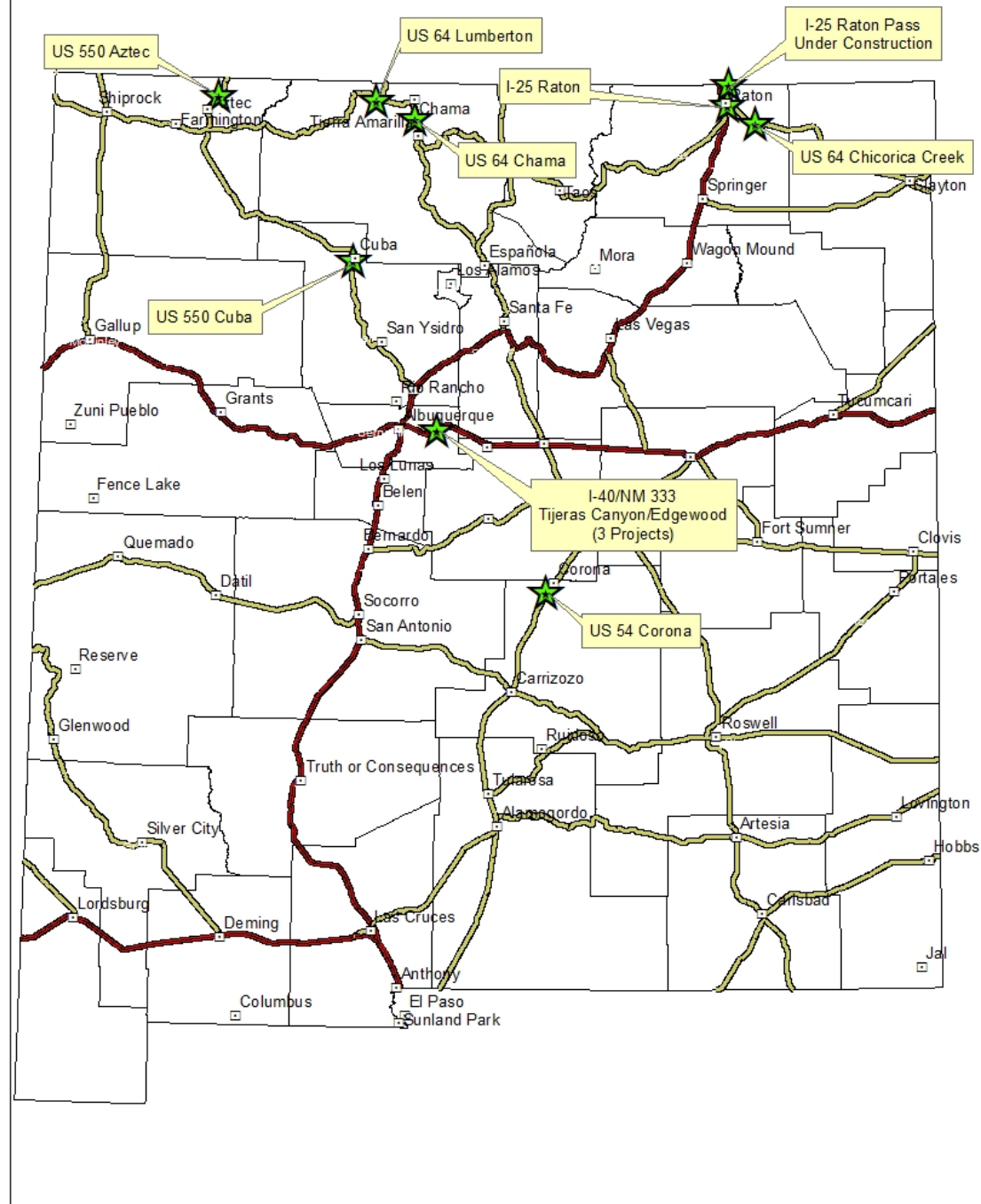
Photo taken from internet



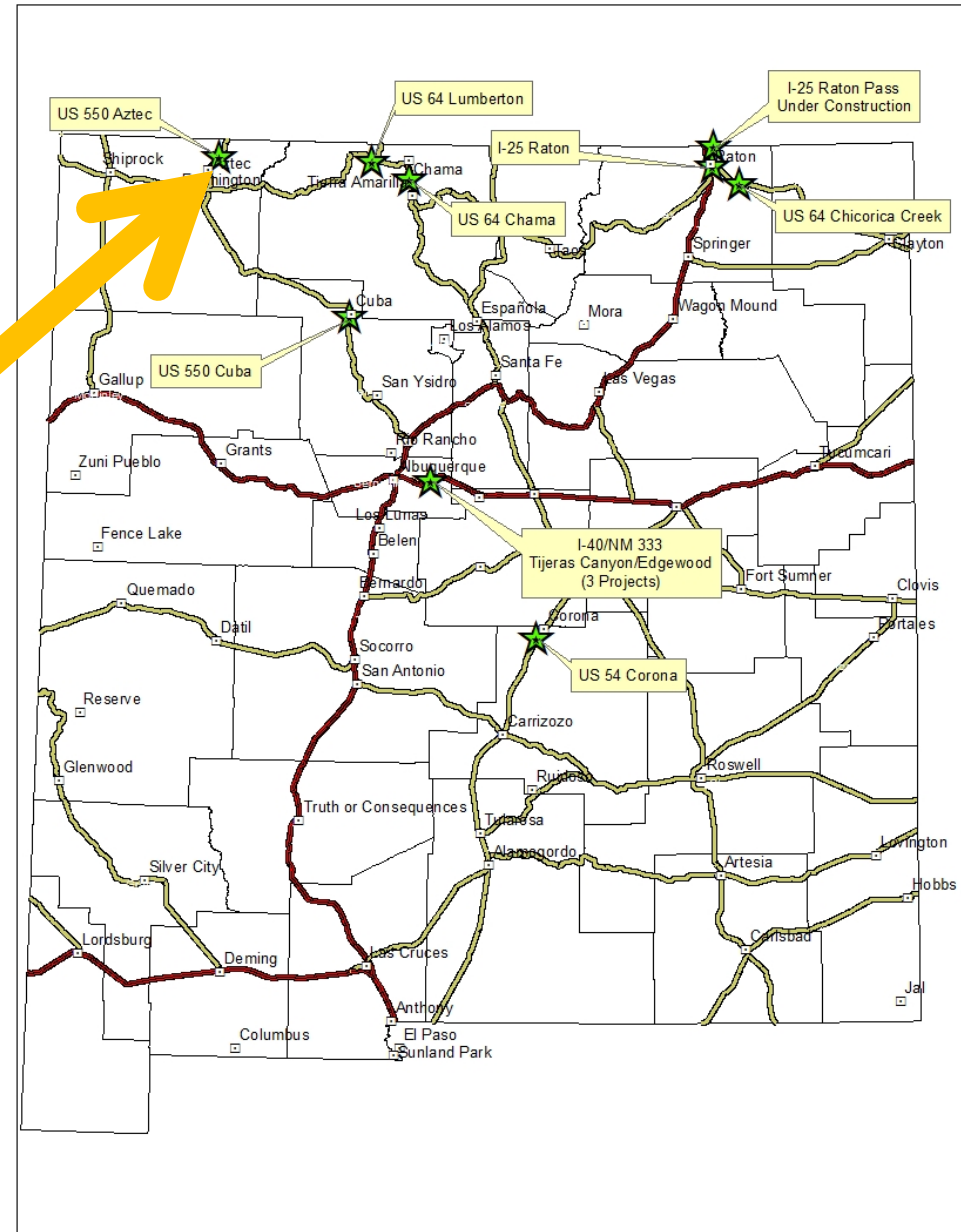
Photo Credit: M. Watson

History of Past Actions

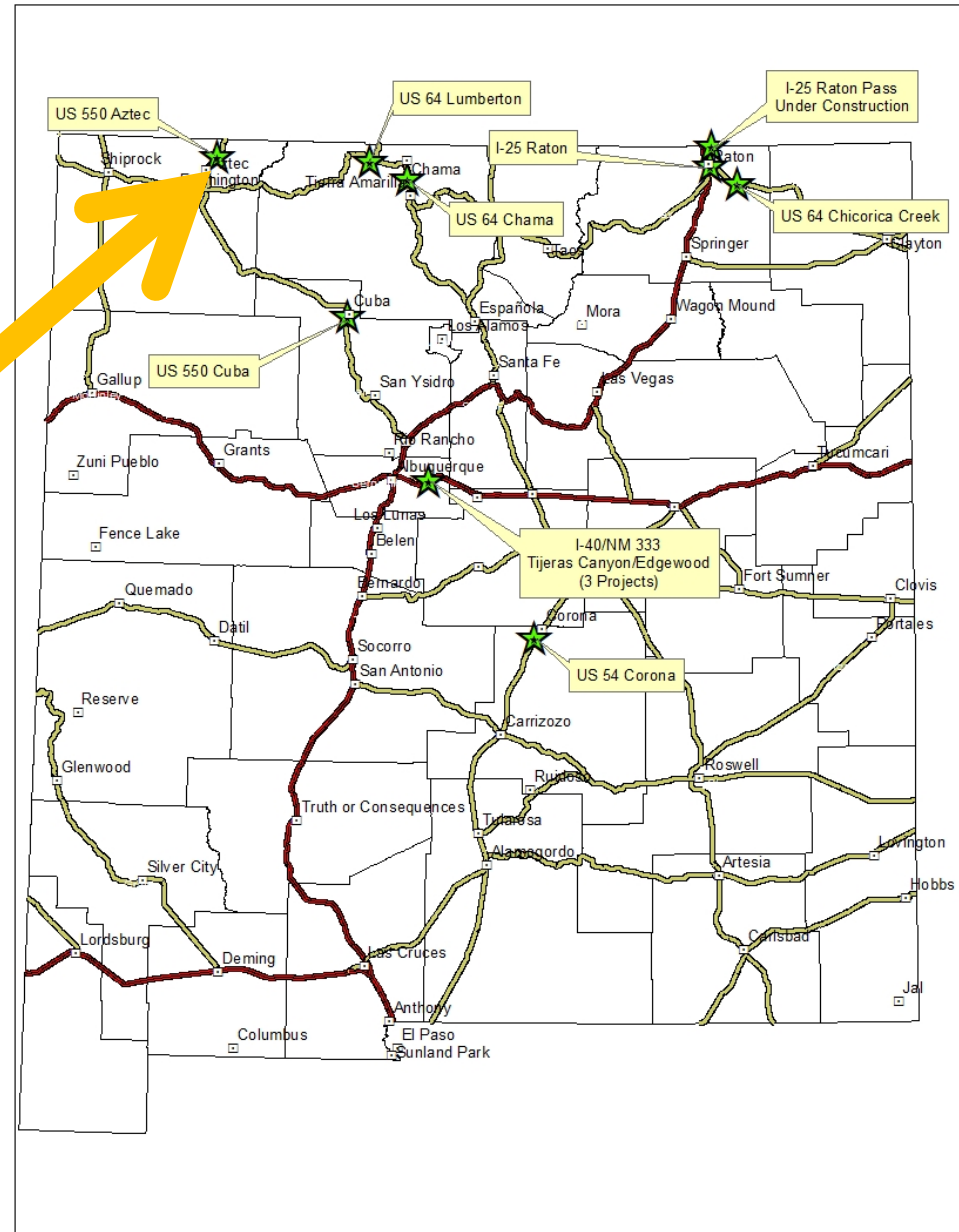
Wildlife Mitigation Efforts in New Mexico



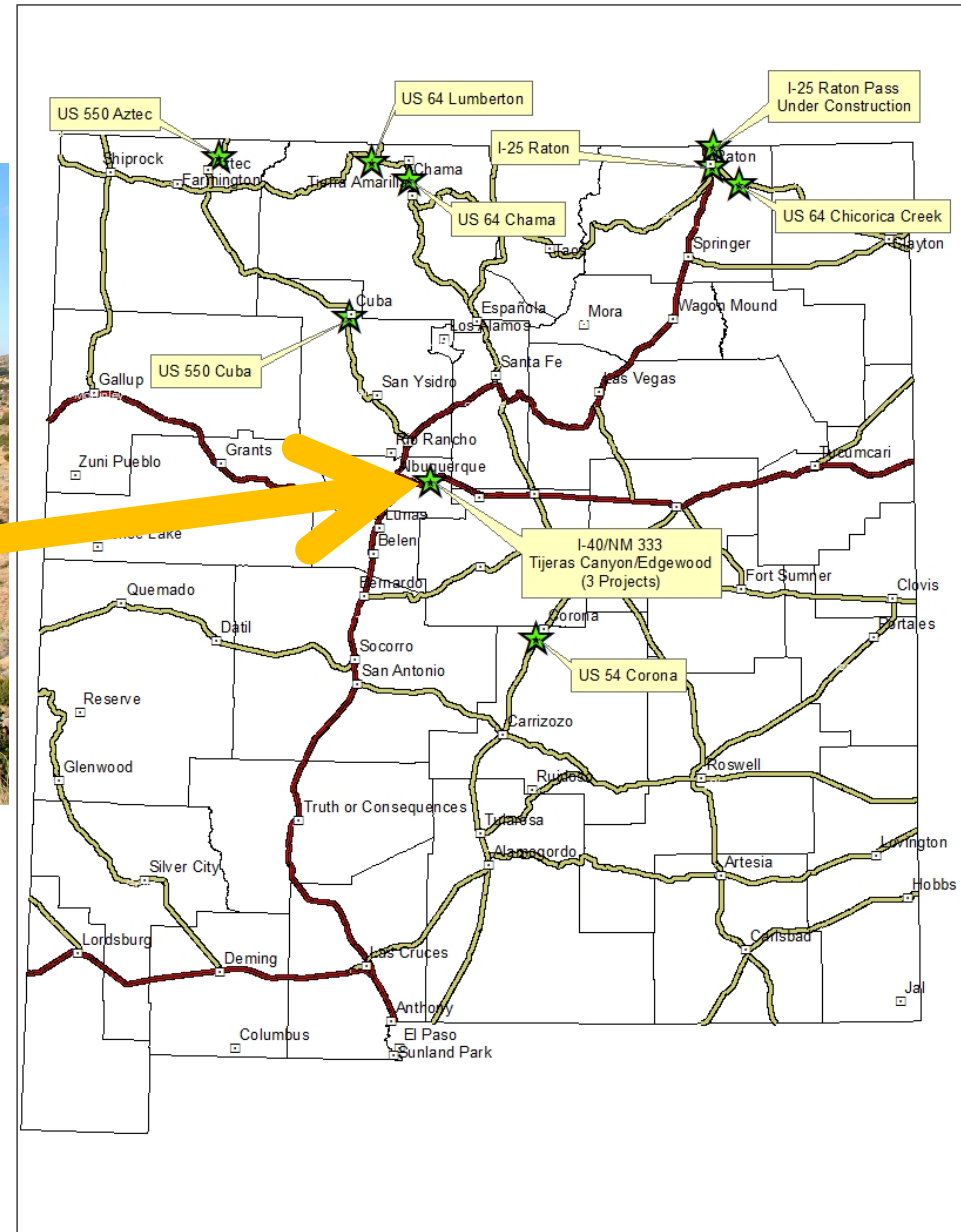
History of Past Actions



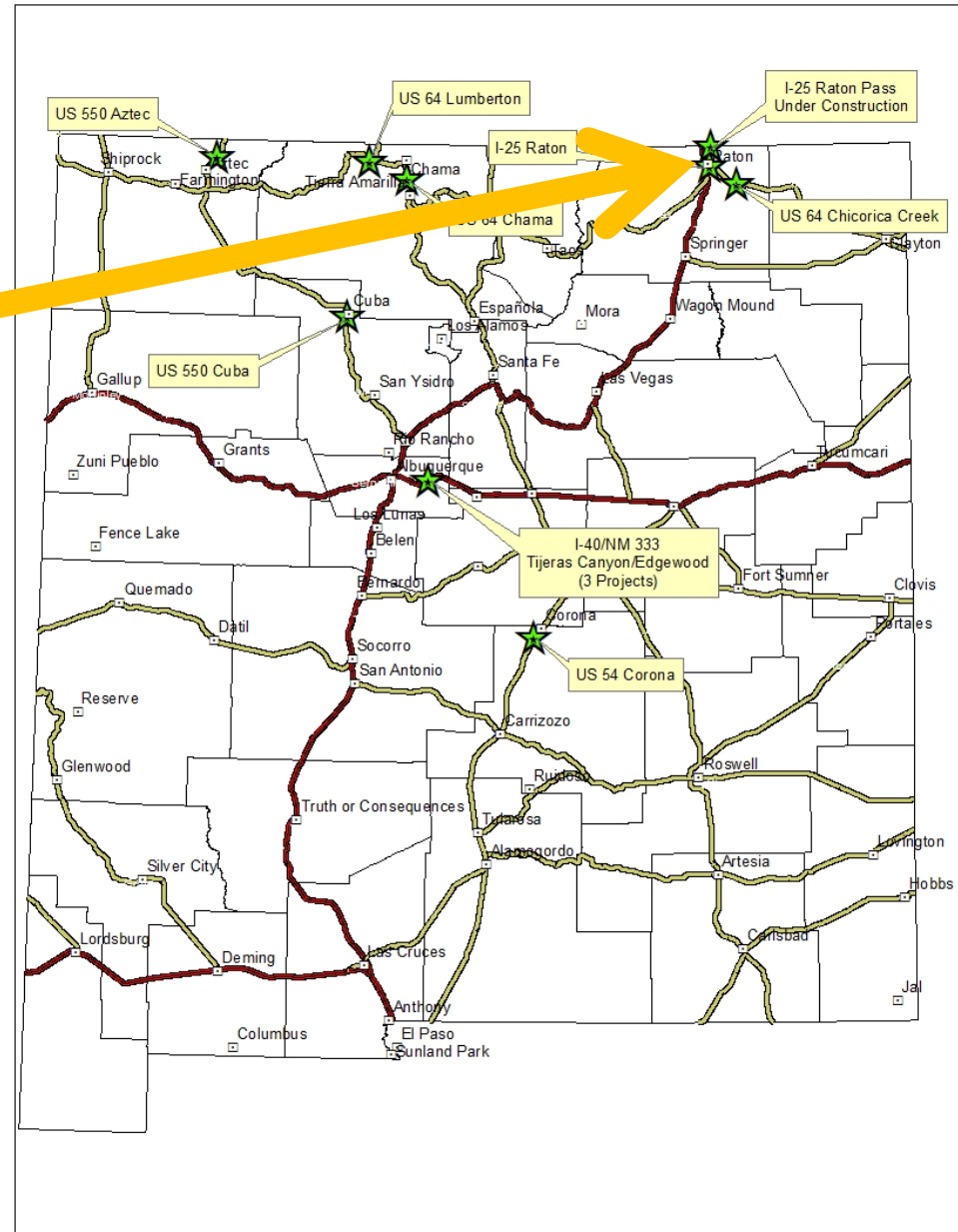
History of Past Actions



Past Wildlife Mitigation Efforts in New Mexico



Past Wildlife Mitigation Efforts in New Mexico



New Mexico Wildlife Corridors Act (SB 228)

Signed by Governor Michelle Lujan Grisham
On March 28, 2019

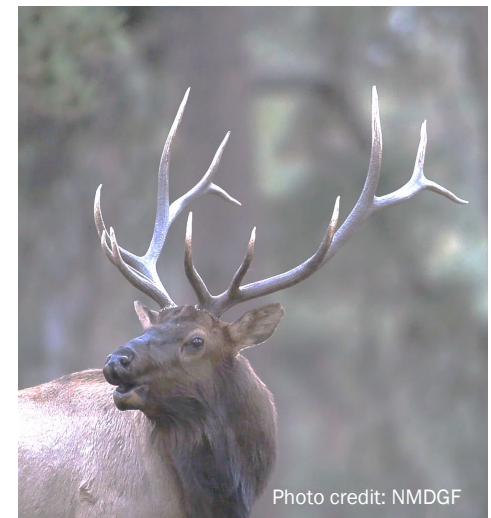
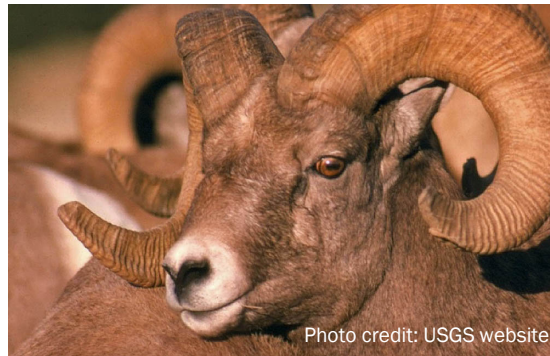
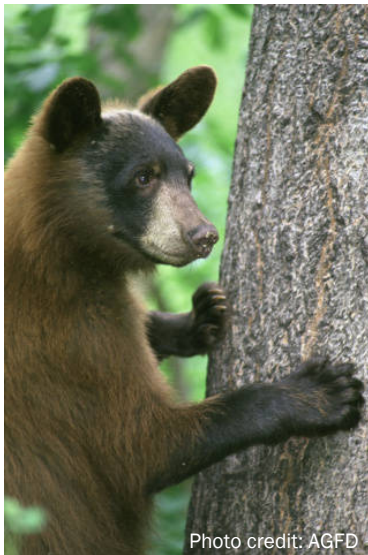
Directs NMDOT and NMDGF to develop a Wildlife
Corridors Action Plan



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



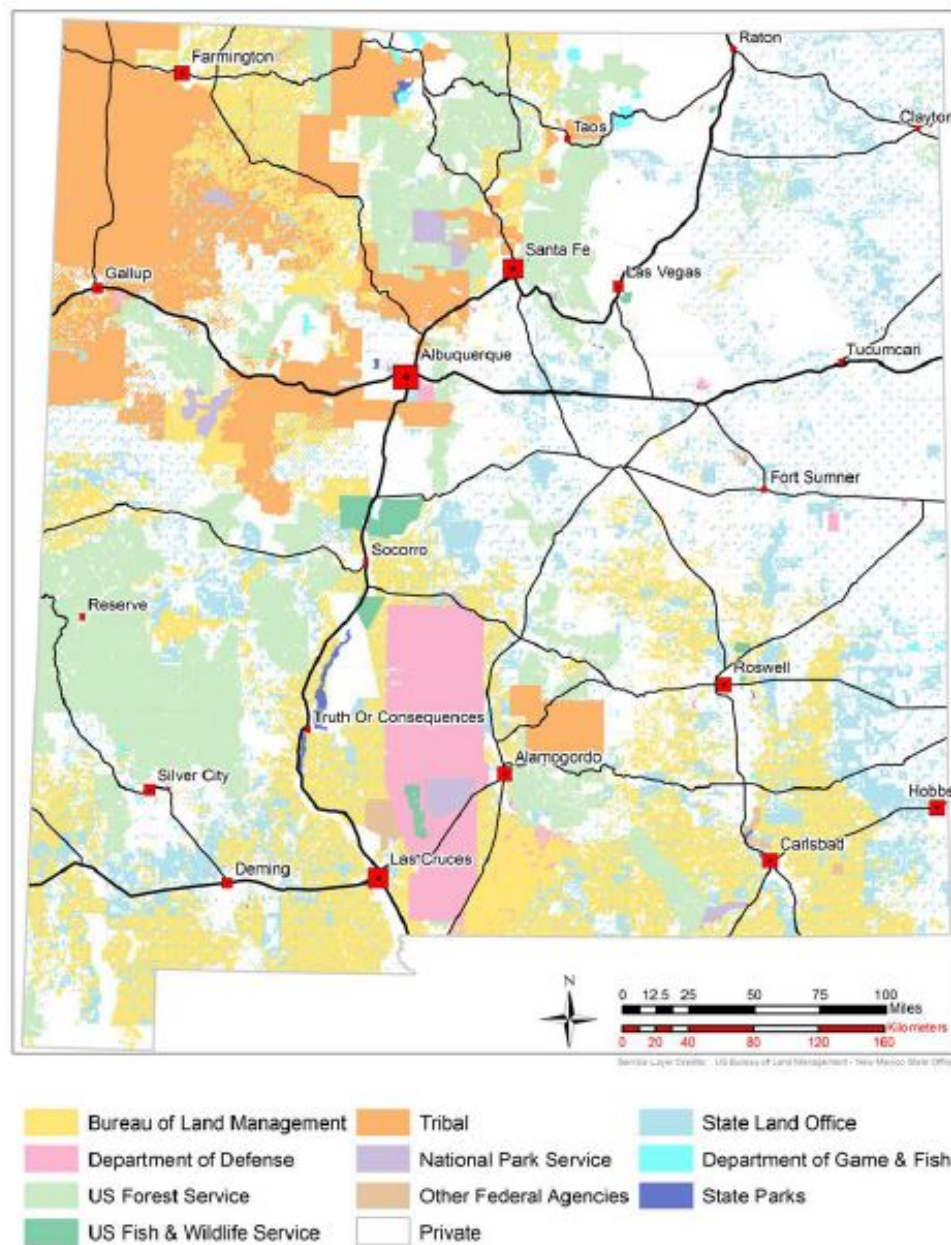


Figure 1. Land stewardship: owners and managers of New Mexico's land.

Private Landowners

Any involvement is optional

Figure taken from State Wildlife Action Plan for New Mexico (NMDGF 2016)

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

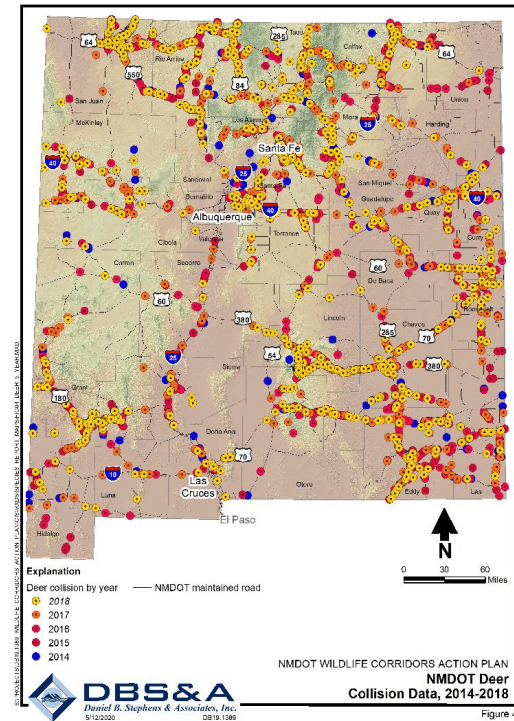
Task 7: Wildlife Corridors Project List



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



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)

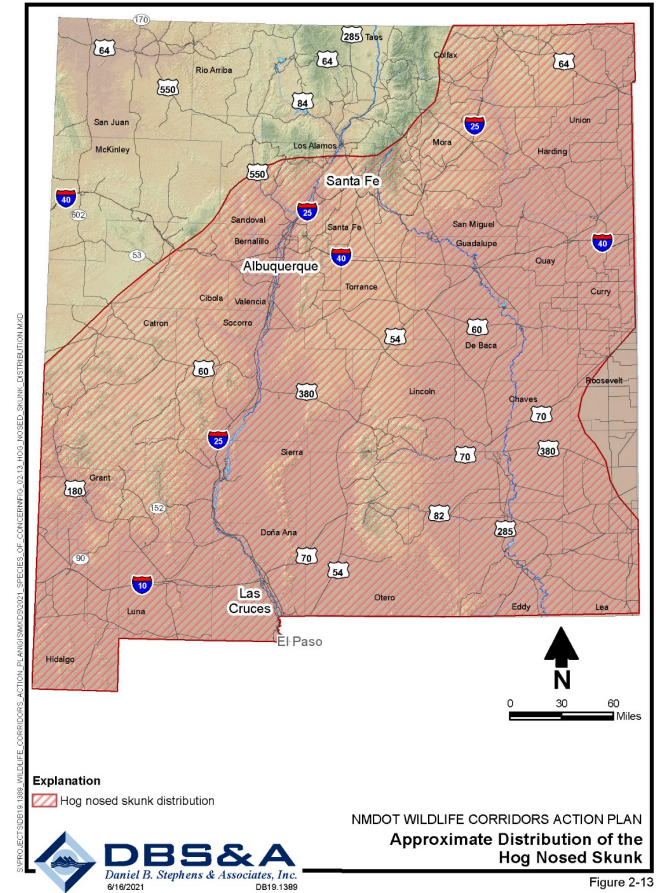
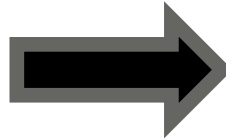
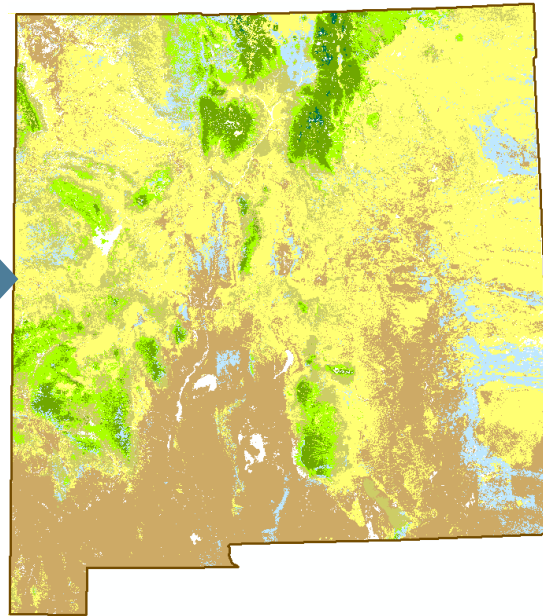
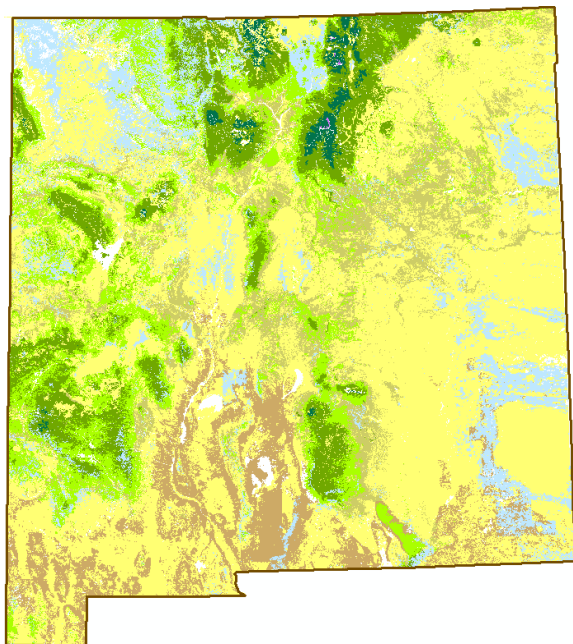
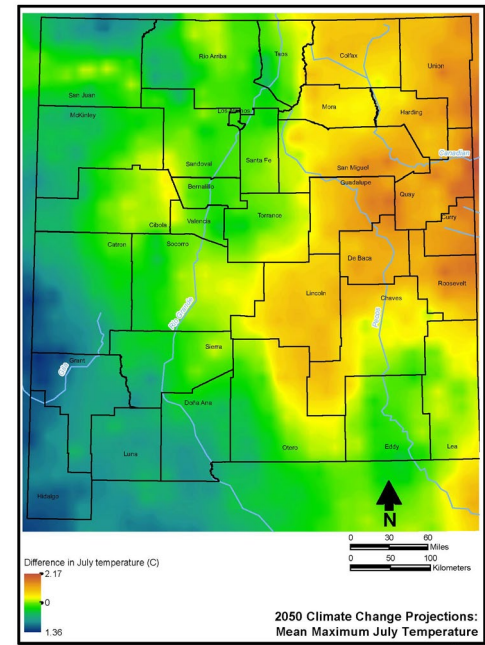


Figure 2-13

Climate Change



System Type

| | |
|--|-------------------|
| | Forest, subalpine |
| | Forest, montane |
| | Woodland |
| | Woodland, savanna |
| | Shrubland |
| | Grassland |
| | Desert |
| | Not analyzed* |

* non-vegetated, sparsely vegetated, riparian, land use

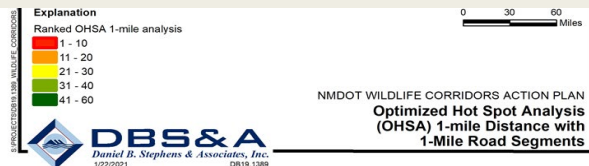
Task 2 - Data Analyses

Scientific Modeling of Crash & Wildlife Movement Data

Hot Spot Modeling of Crash Data



Optimized Hotspot Analysis using the Getis-Ord G_i^* 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

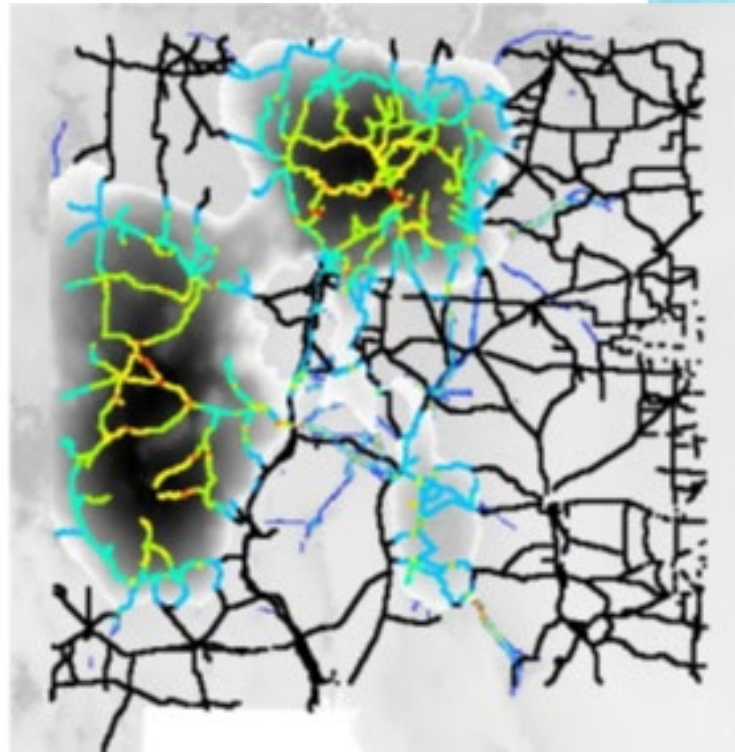
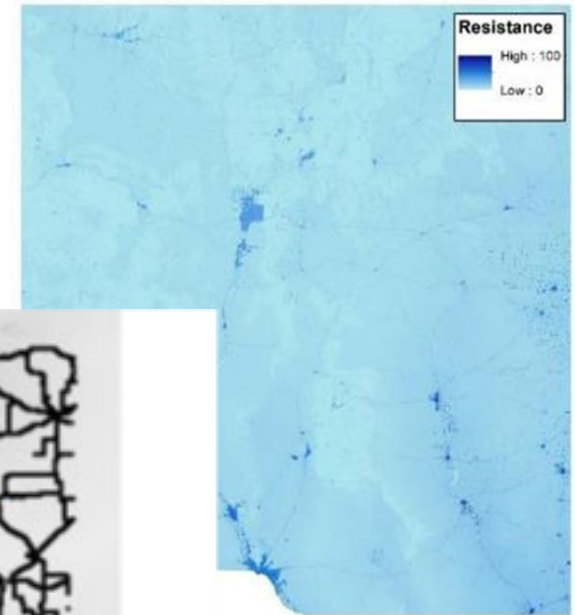
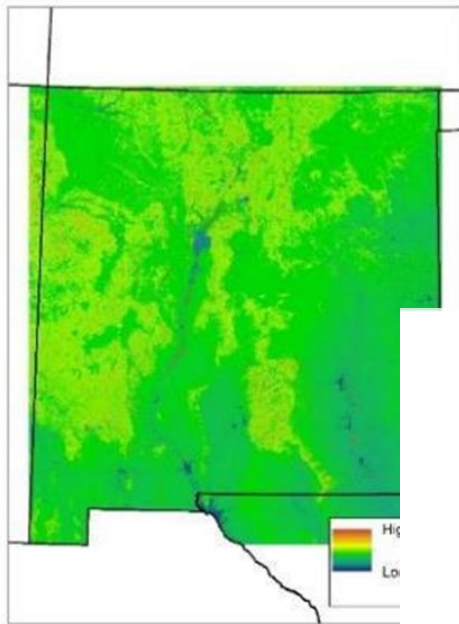
Wildlife Corridors

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

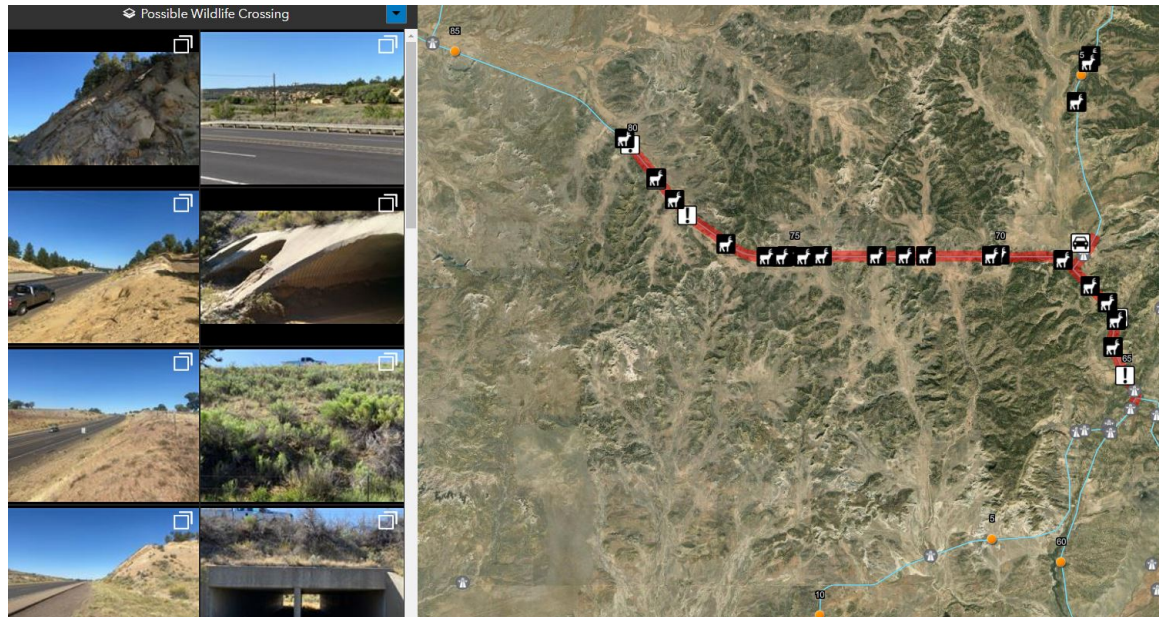
Wildlife Corridor Modeling



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

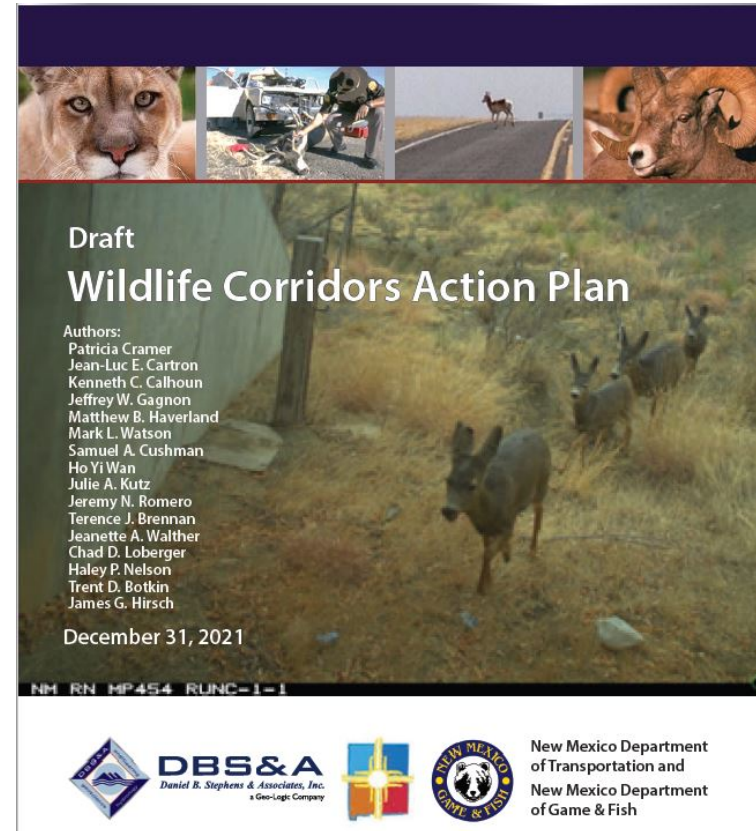
Over 30 comments received, Top 8 Comments:

- 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

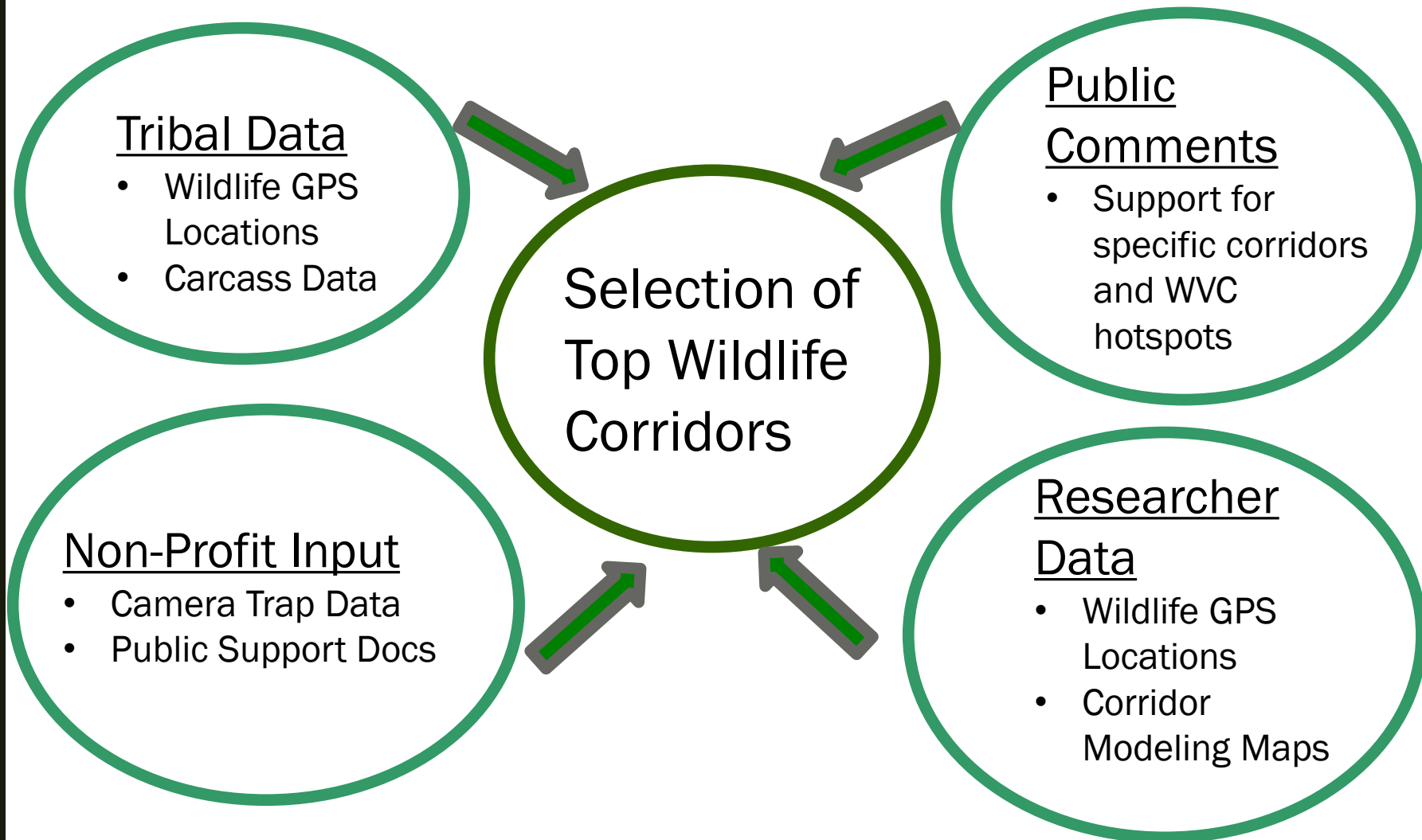
Public Involvement 2022

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



Task 7 Wildlife Corridors and Hotspots Project List

Based on:

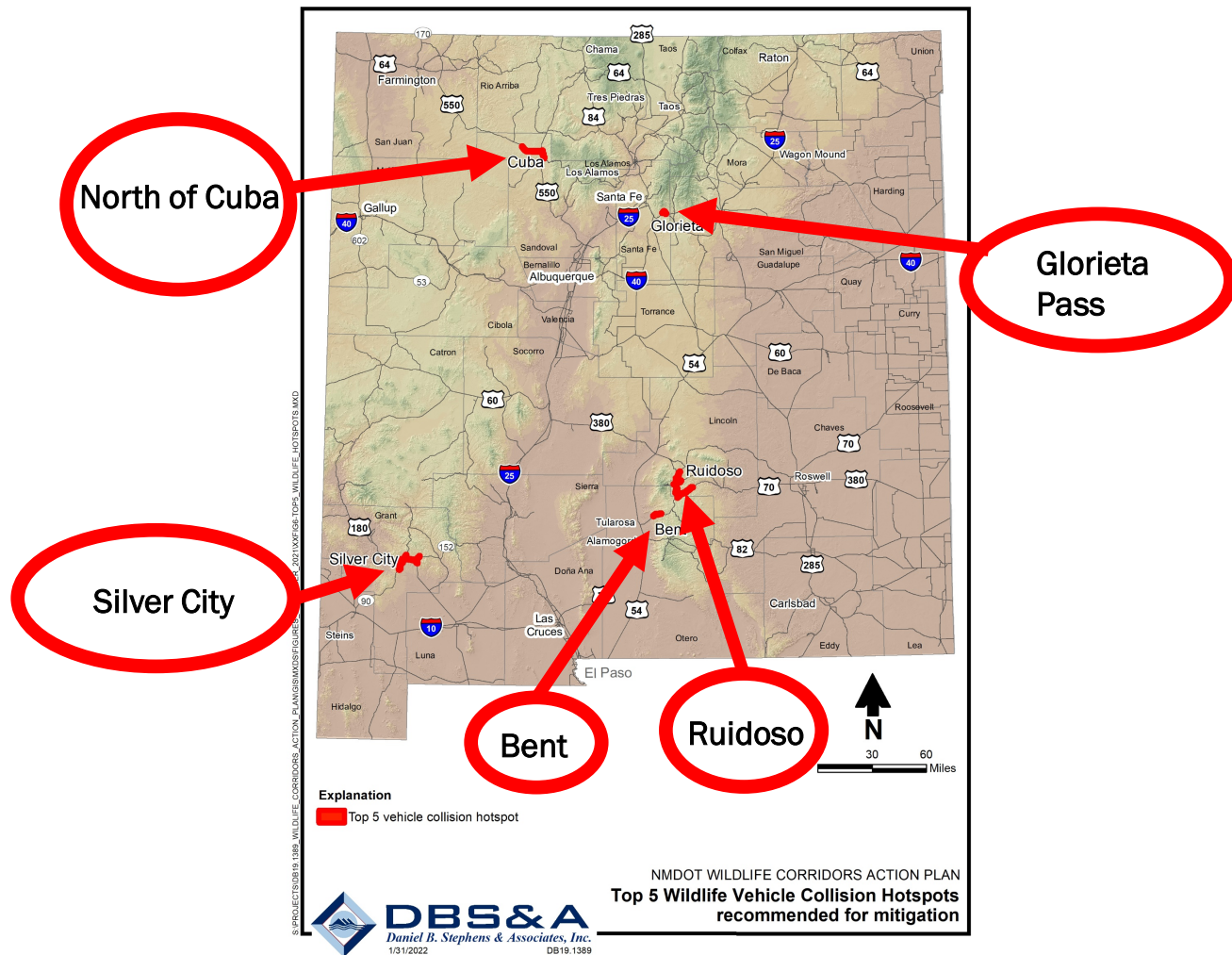
- Project potential to reduce wildlife-vehicle collisions
- Project potential to improve wildlife corridors
- Benefit-cost analysis (economics)
- Local community support of project
- Adjacent land-use and ownership

The Top 11 Wildlife-Vehicle Collision Hotspots and Wildlife Corridors

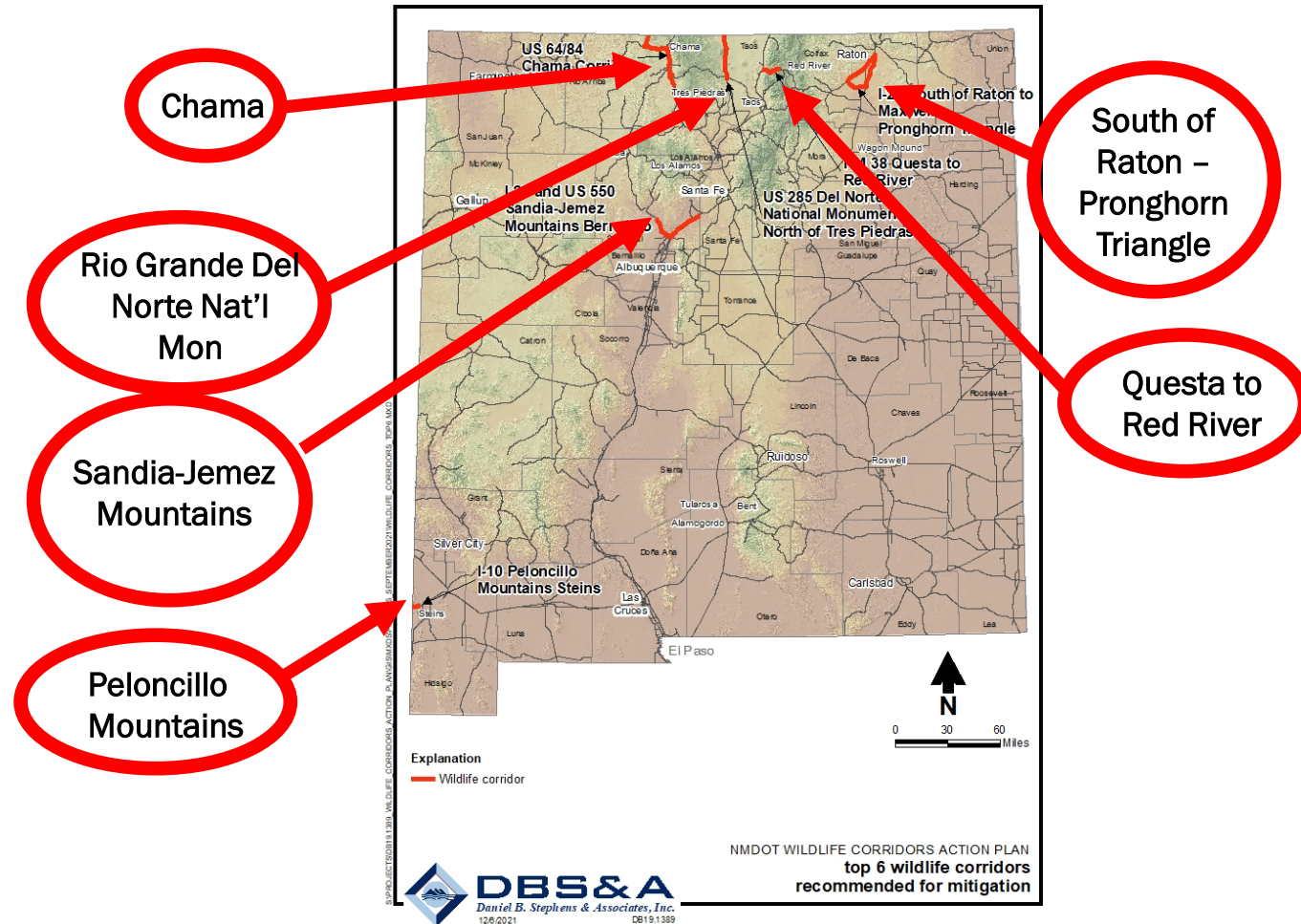


Photo credit: NMDOT & AGFD

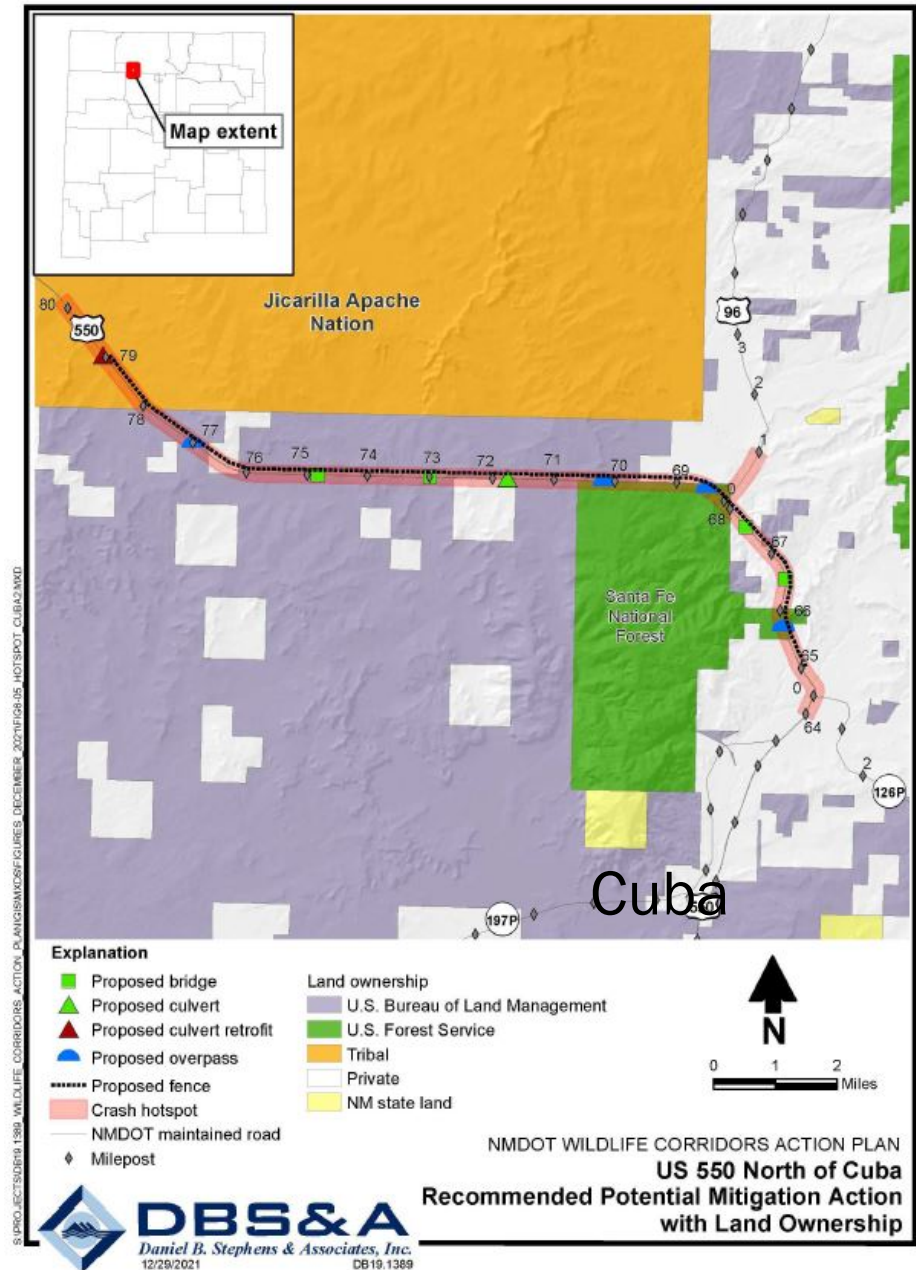
The Top 5 Wildlife-Vehicle Crash Hotspots



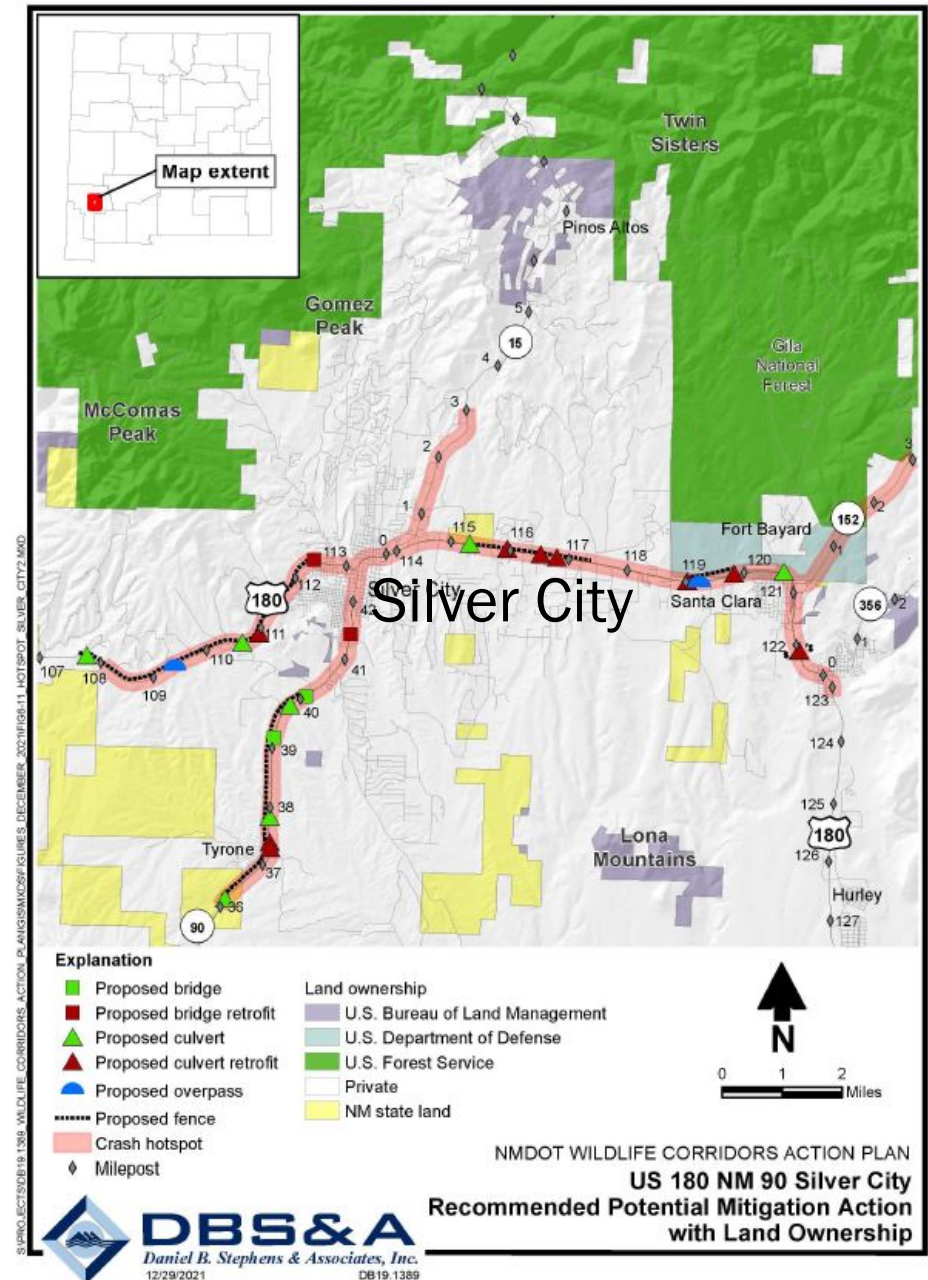
The Top 6 Wildlife Corridors



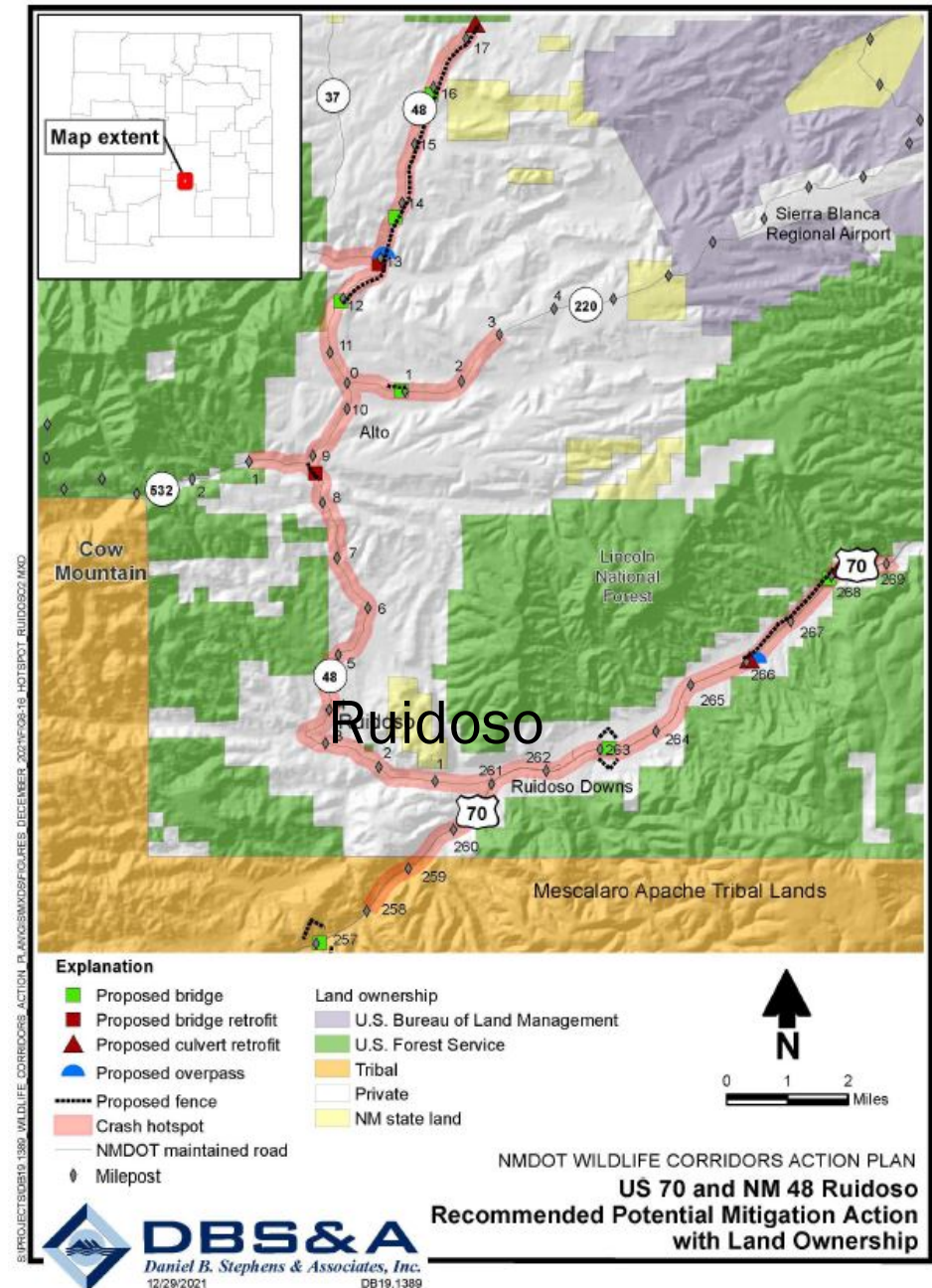
US 550 North of Cuba WVC Hotspot



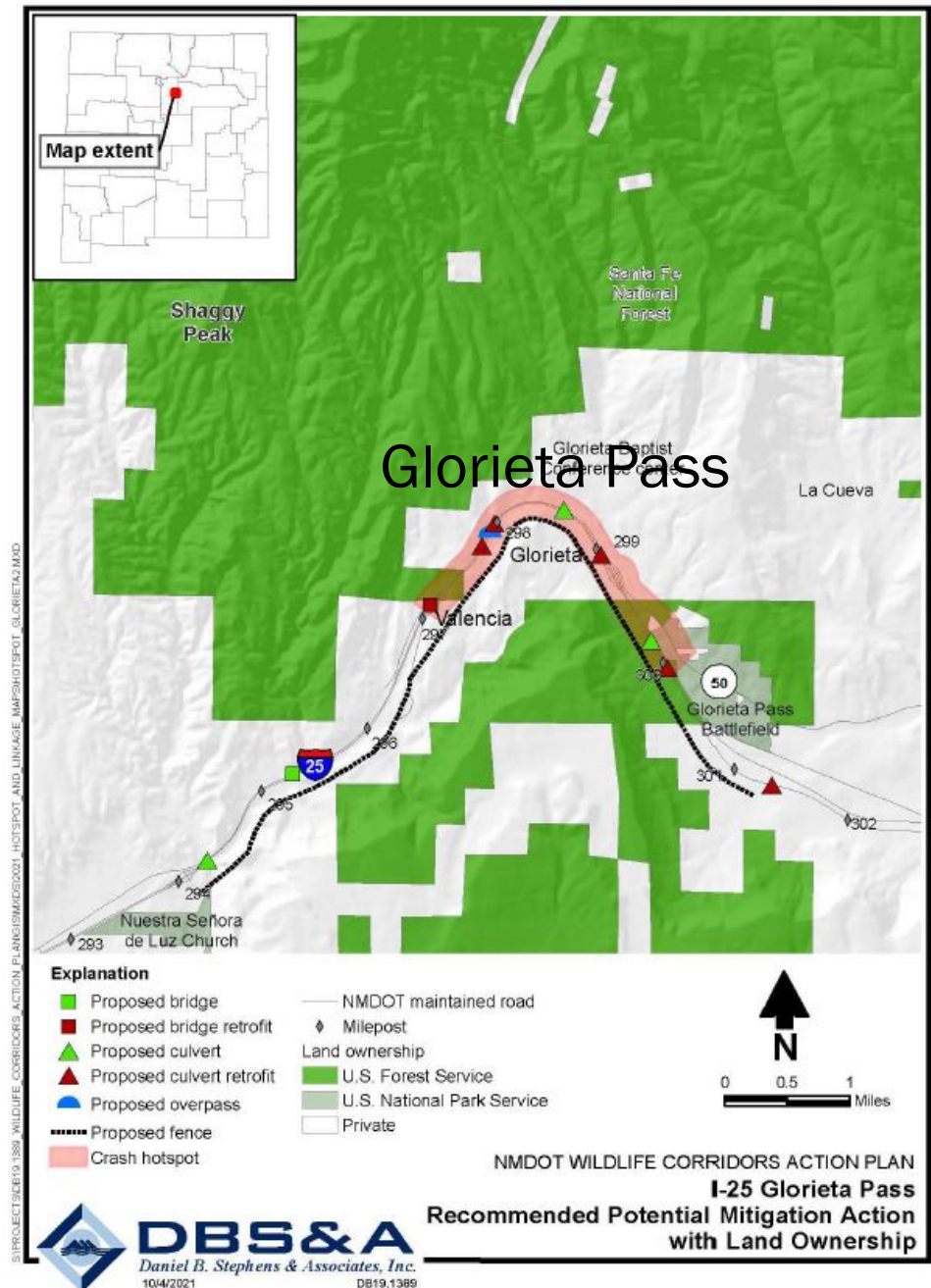
US 180 & NM 90 Silver City WVC Hotspot



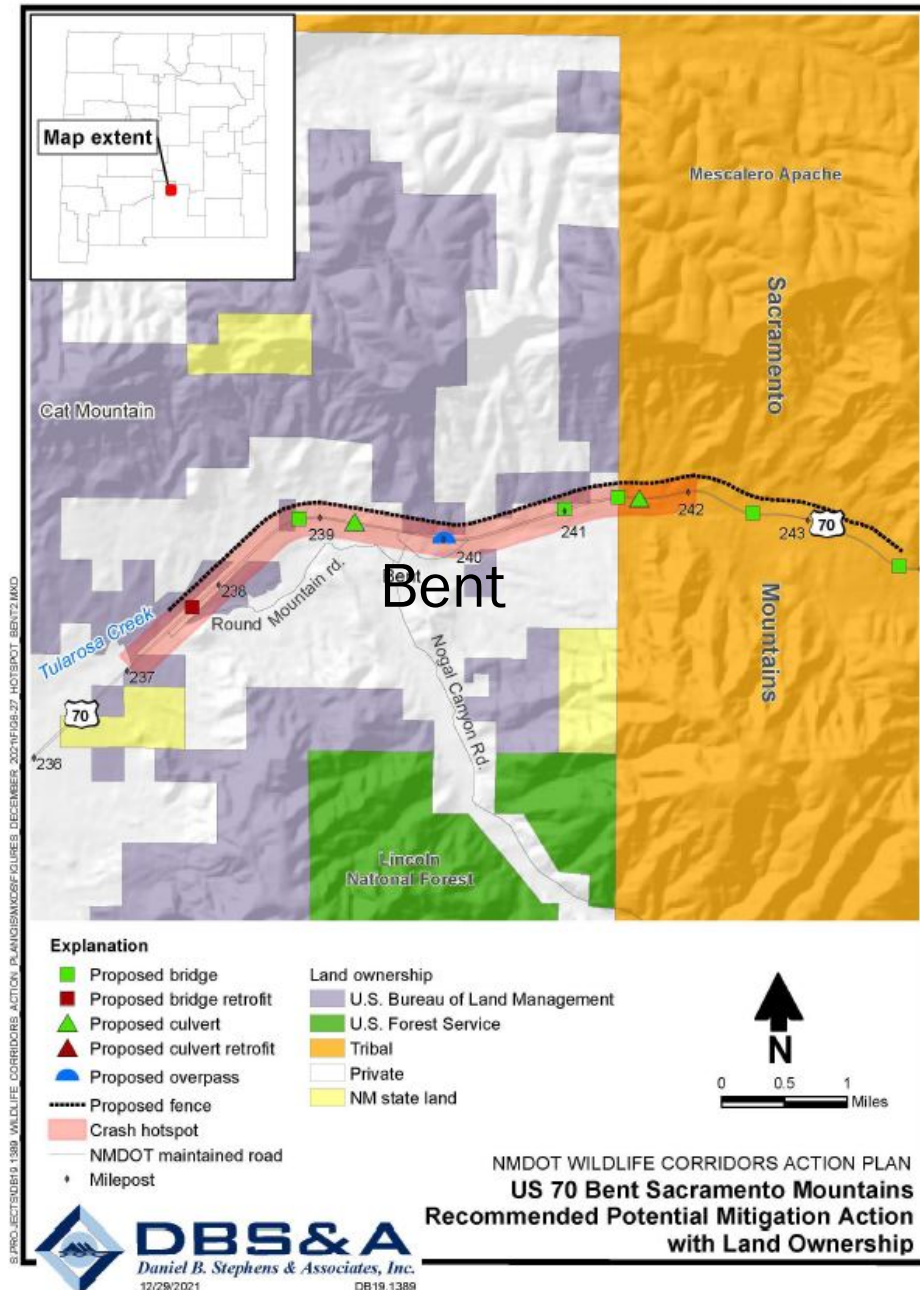
US 70 & NM 48 Ruidoso WVC Hotspot



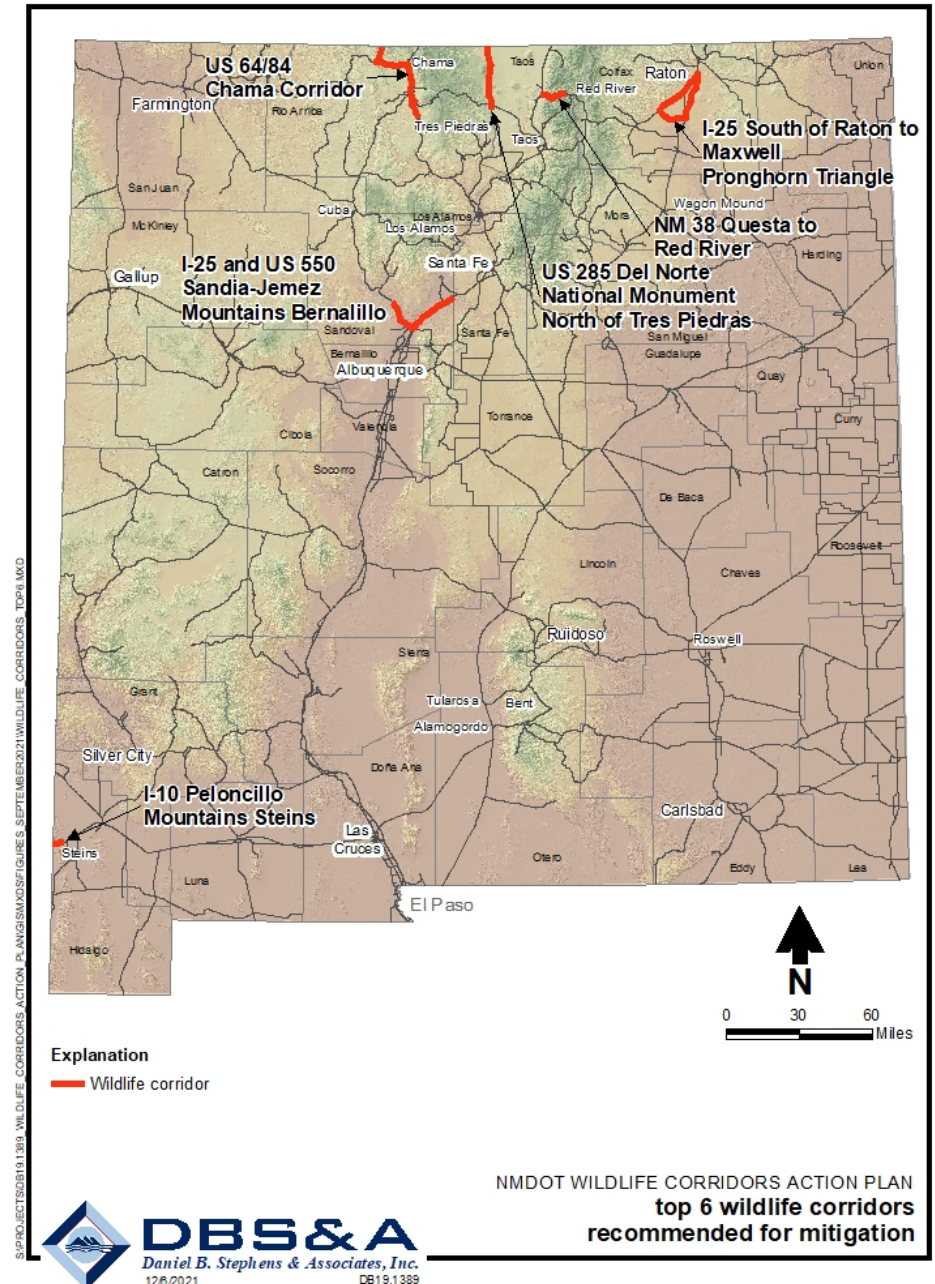
I-25 Glorieta Pass Hotspot



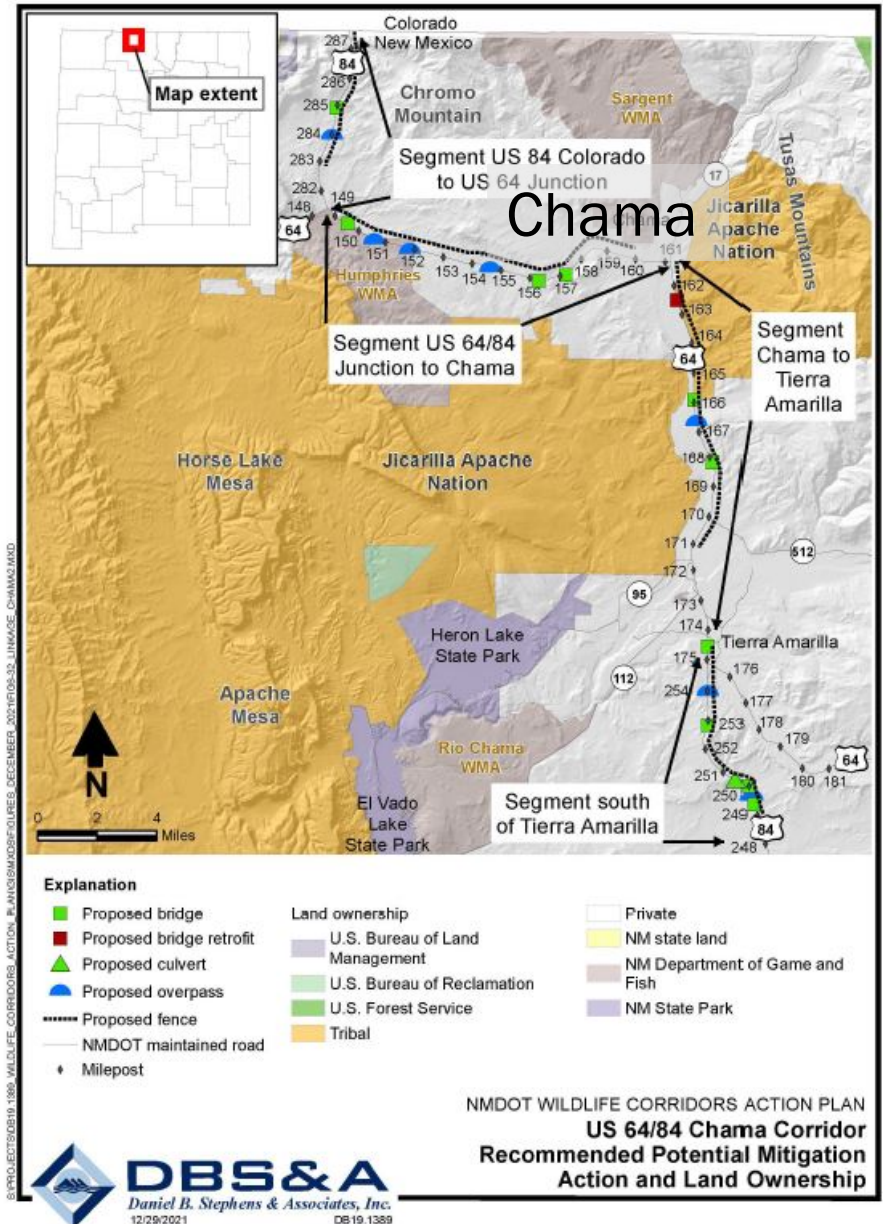
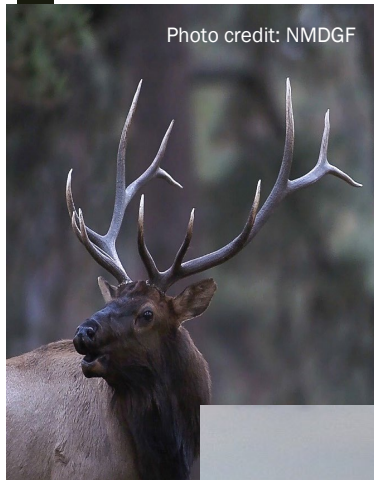
US 70 Bent Sacramento Mountains WVC Hotspot



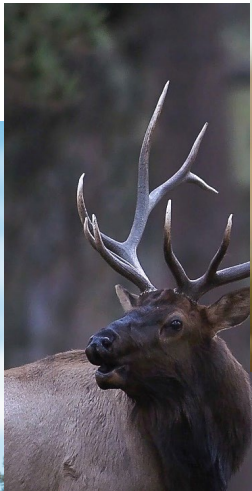
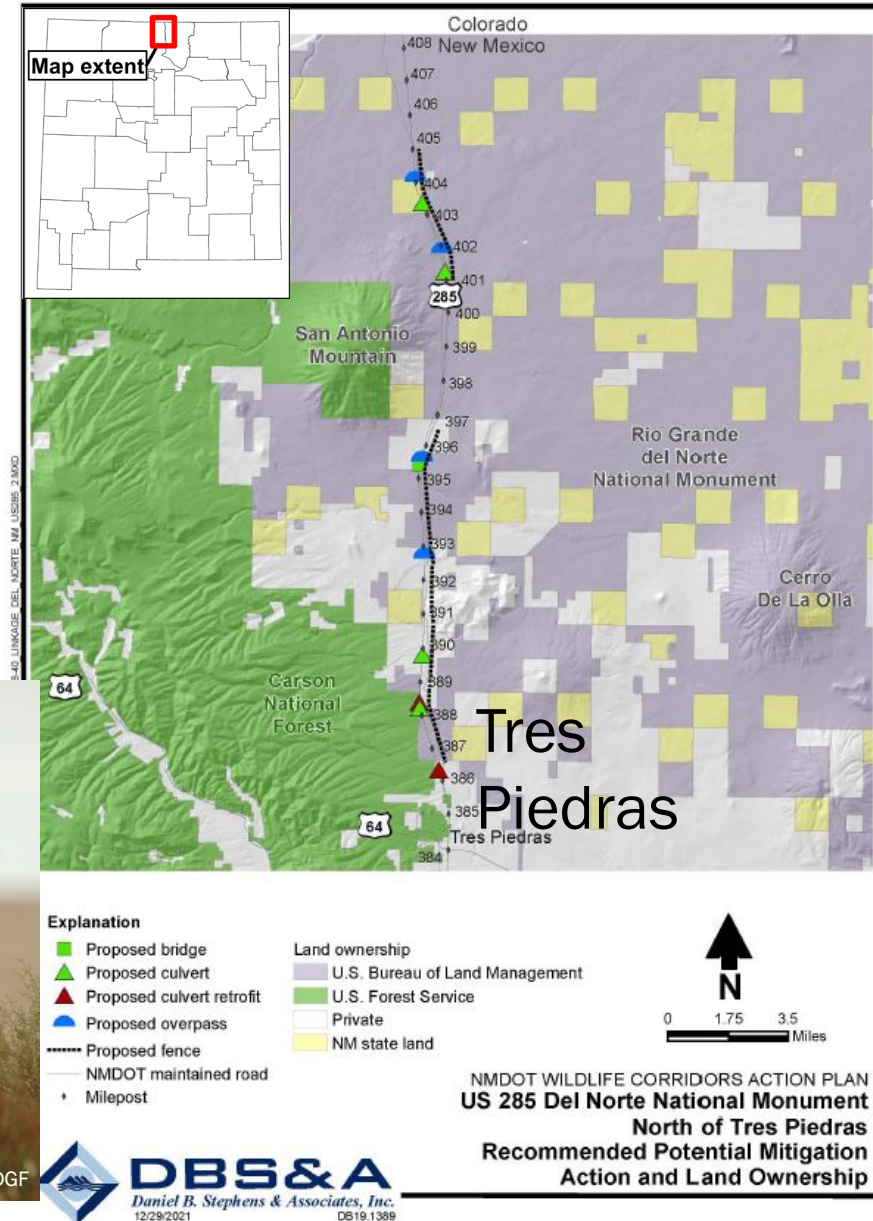
The Top 6 Wildlife Corridors



US 64 & US 84 Chama Wildlife Corridor



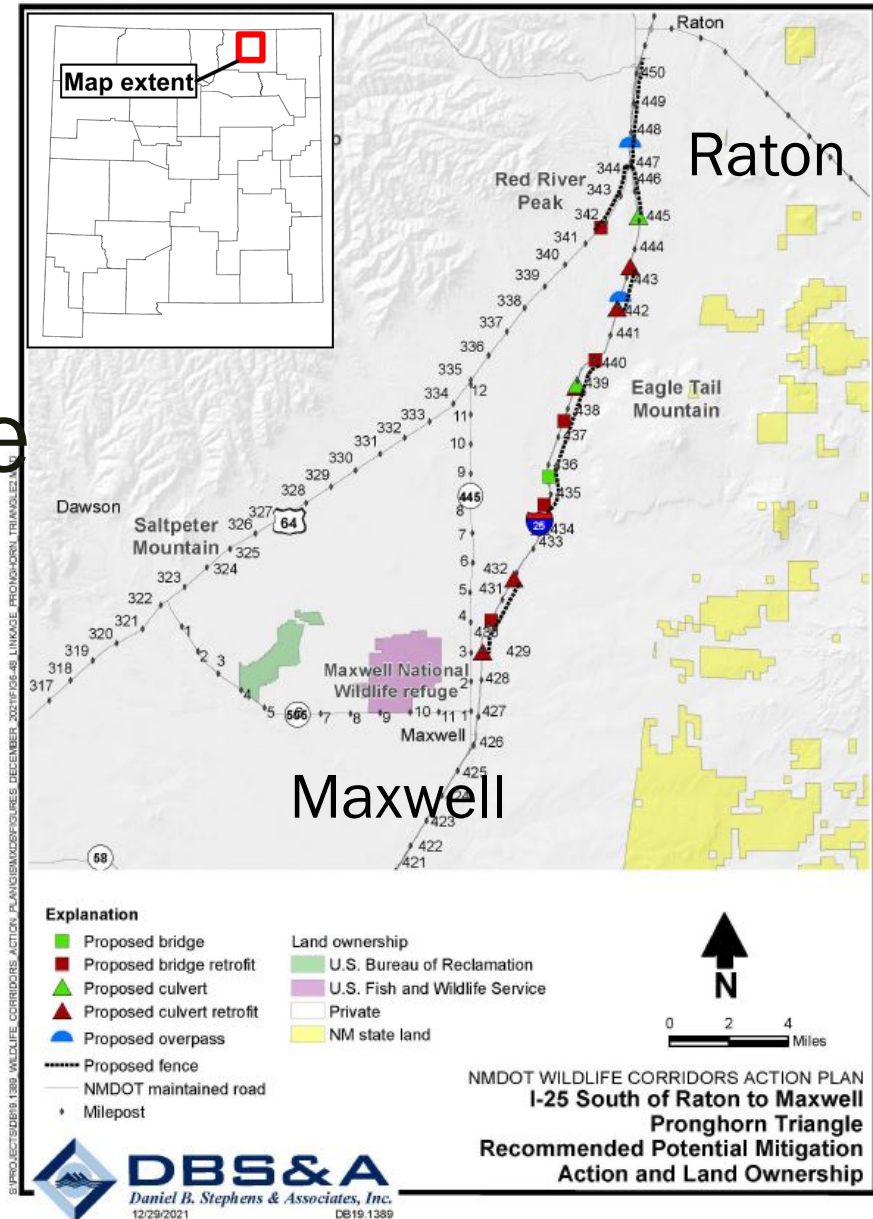
US 285 Rio Grande del Norte National Monument Wildlife Corridor



I-25, US 64, NM 505 & NM 445 South of Raton to Maxwell, the Pronghorn Triangle Wildlife Corridor



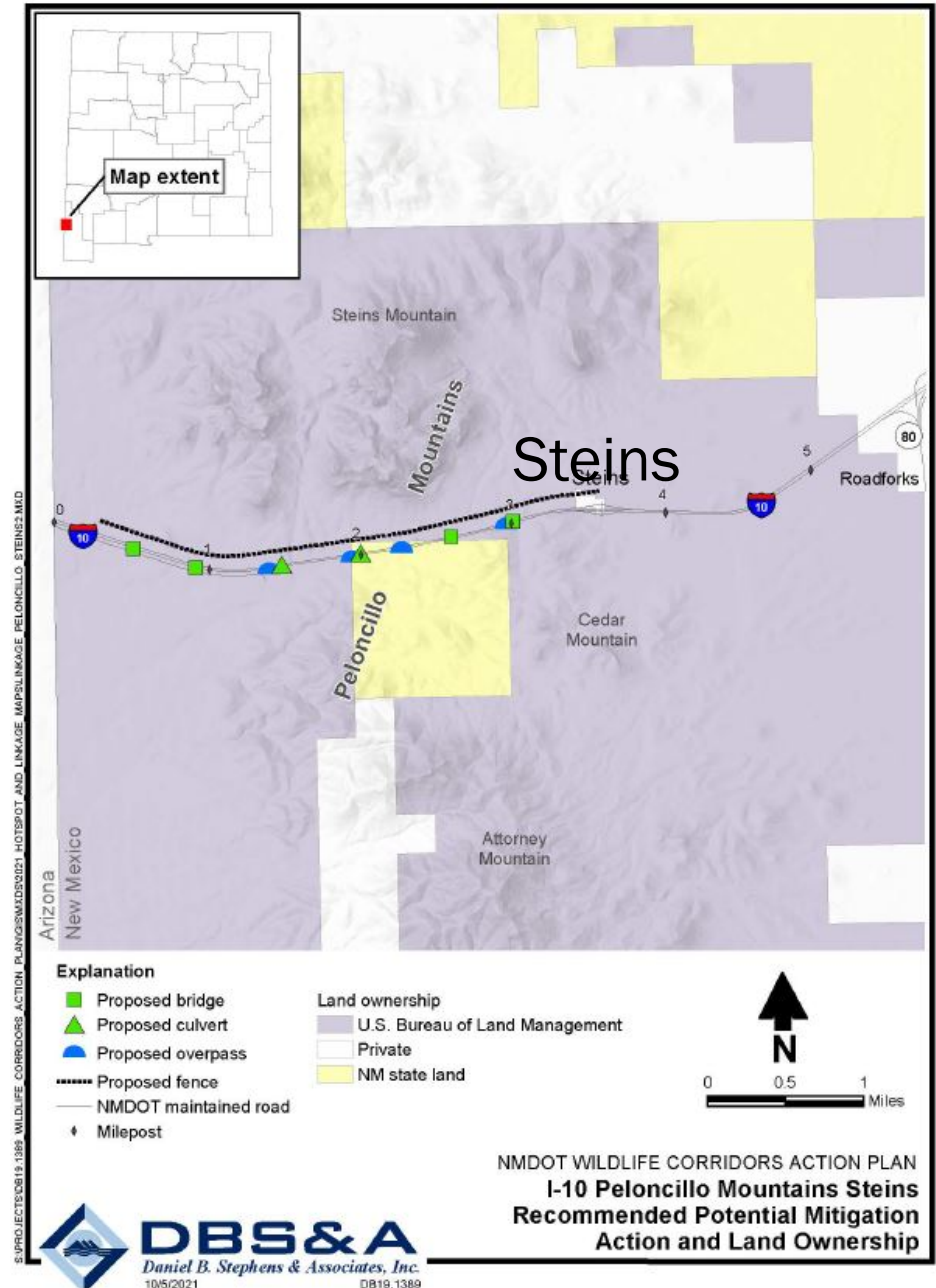
Photo credit: NMDGF



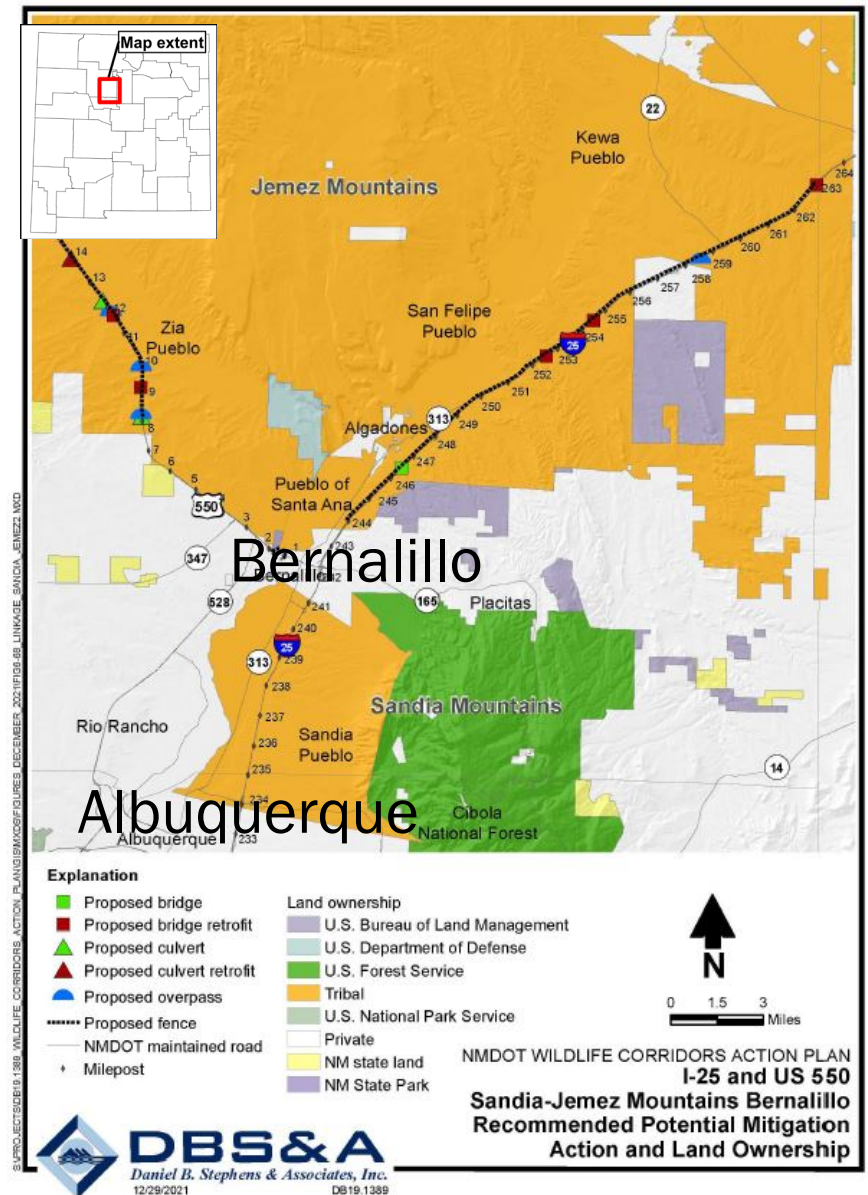
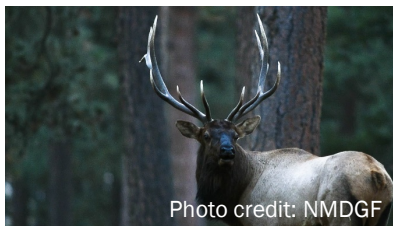
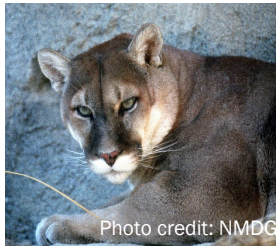
I-10 Peloncillo Mountains Steins Wildlife Corridor



Photo credit: AGFD



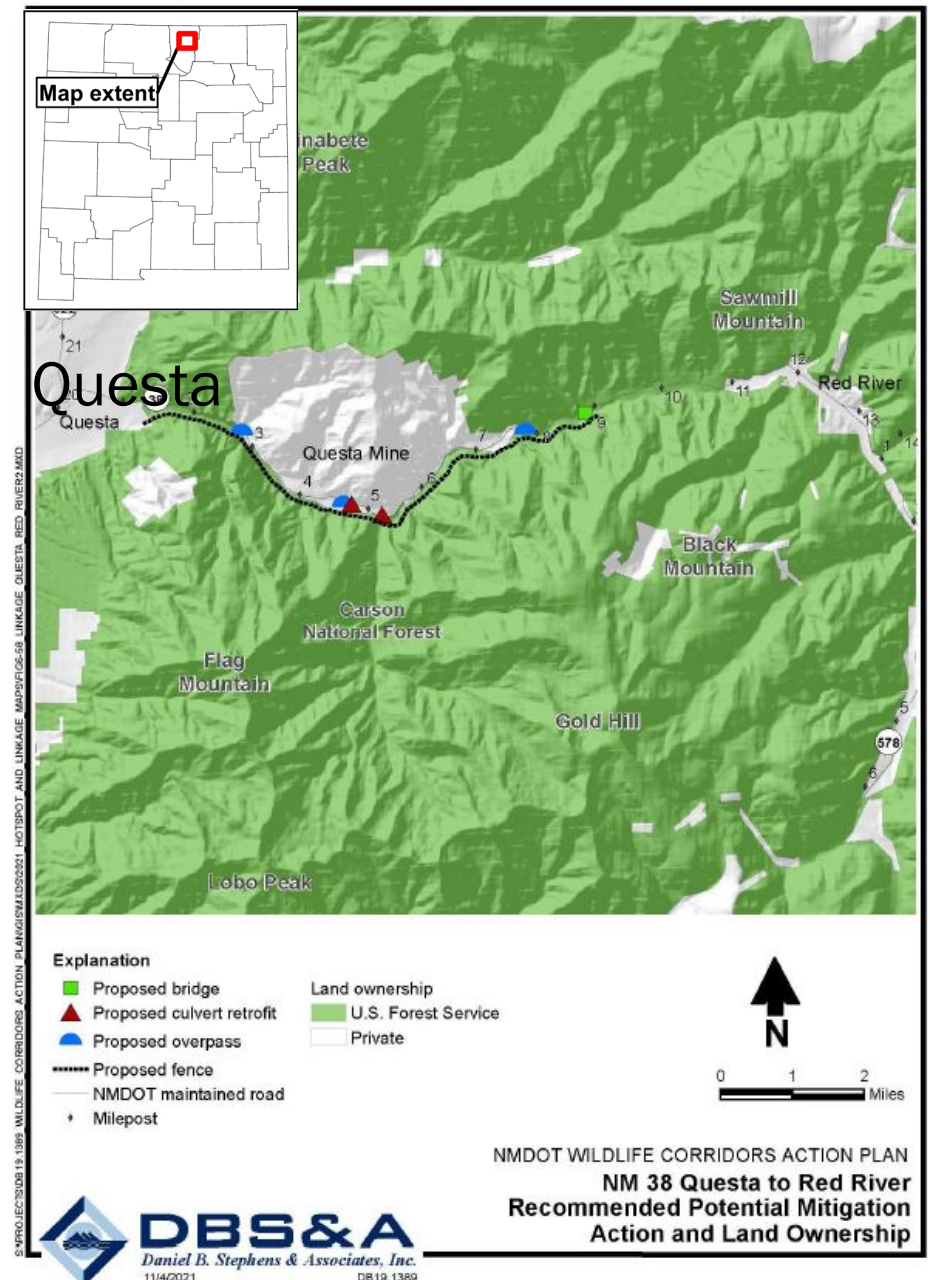
I-25 & US 550 Sandia-Jemez Mountains Wildlife Corridor



NM 38 Questa to Red River Wildlife Corridor

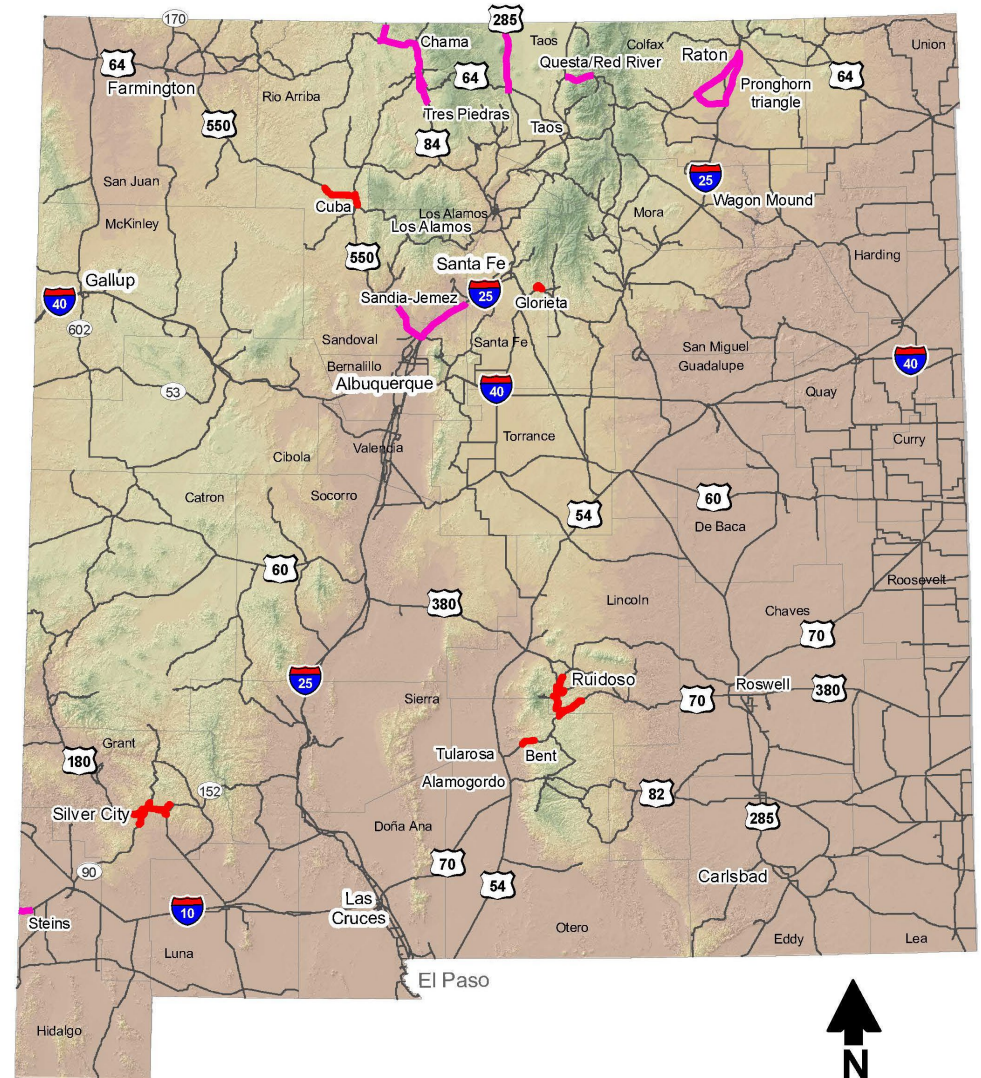


Photo credit: AGFD



New Mexico's Top 11 WVC Hotspots & Wildlife Corridors

S:\PROJECTS\DB19.1389 WILDLIFE CORRIDORS ACTION PLAN\GIS\MXD\FIGURES DECEMBER 2021\FIGS-01\WILDLIFE CORRIDORS AND HOTSPOTS.MXD



Explanation

- Top hotspot
- Wildlife corridor

NMDOT WILDLIFE CORRIDORS ACTION PLAN
**Top 6 Wildlife Corridors and
Top 5 Hotspots
Recommended for Mitigation**



DBS&A
Daniel B. Stephens & Associates, Inc.
12/29/2021 DB19.1389

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
Attn: Matthew Haverland
1120 Cerrillos Road, RM 206
P.O. Box 1149
Santa Fe, NM 87505
- Call: 505-470-3656



Comments & Questions



Photo Credit: M. Watson