

**HABITAT PARTNERSHIP COMMITTEE
HABITAT ENHANCEMENT AND WILDLIFE MANAGEMENT PROPOSAL**

HPC Project Number:	18-523
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PROJECT INFORMATION

Project Title:	Pronghorn Antelope Fawn Enhancement GMUs 34/35
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Game Management Unit:	34 & 35	Region:	5
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Local Habitat Partnership Committee (LHPC):	Was the project presented to the LHPC?
Sierra Vista- Douglas HPC	Yes

Project Location: (Please provide lat/long in decimal degrees or meters of project area using datum WGS84 or NAD83. If project is larger than one point, please include them all. Provide an accompanying shapefile as an attachment for the project area).

LATITUDE/NORTHING:

LONGITUDE/EASTING:

MULTIPLE LOCATION COORDINATES:
Please separate coordinate pairs with names & commas. (ex. Bob's Tank 34.365, -110.663. Clear Spring 34.55, -110.107, etc.):
see map for polygons
34A/B & 35A/B

Project Type:	Wildlife Management	Number of acres that will be enhanced:	
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Water Project Action (if applicable):	NA
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Habitat Restoration Action (if applicable):	NA
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Other Project Type and Action (if applicable):	Fawn Enhancement
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Has this project been submitted in previous years?	Yes
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PROJECT SUMMARY

Describe the proposed action only. Please use plain English, what action are you proposing? (If applicable, please reference any completed compliance including EAC#).

Brief Project Summary:
The Pronghorn Antelope Fawn Enhancement project for 2019 is a continuation of efforts conducted in 2013-2015 to enhance pronghorn fawn survival by utilizing targeted removal of coyotes in pronghorn habitat in GMUs 34A, 34B, 35A, and 35B. Removal will occur March-June, prior to and during the peak pronghorn fawning season. Gunning and trapping methods will be utilized by a Department contractor, Department personnel, and volunteers. Mule deer fawns are also expected to benefit from coyote removals.

Primary Big Game Wildlife Species to Benefit:	Pronghorn antelope, mule deer
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Implementation Schedule (Month/Day/Year)	START DATE: 3/19	COMPLETION DATE: 6/19
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PROJECT FUNDING

Project Funding	Itemized Use of Funds
<p>*Qualifying Cost Share should be restricted to support (materials, compliance, and or labor) of the proposed action ONLY (same time and place). Please do not include previously purchased supplies or past completed work.</p>	<p>Please email separate quotes if HPC funds are to be used to purchase materials or contracted labor: HPC@azgfd.gov.</p>
<p><u>HPC Funds Requested</u></p> <p>Amount: \$10,000</p> <p><u>Cost Share or Matching Funds</u></p> <p>NA</p> <p>Amount: \$0</p> <p><u>Percent Match (of the total project cost)</u></p> <p><u>Total Project Cost</u></p> <p>Amount: \$ 10000</p>	<p>Funds will cover cost of hiring contractor for services from March-June, 2019.</p>

ENVIRONMENTAL COMPLIANCE

Please indicate the status of the Project's compliance. if you are unsure, please reference:

HPC Compliance Checklist (<https://www.azgfd.com/wildlife/hpc/forms/>).

If you have questions regarding the requirement of an EAC, contact AGFD's Project Evaluation Program: (<https://www.azgfd.com/wildlife/planning/projevalprogram/>).

***Please email supporting compliance documents to HPC@azgfd.gov ***

AGFD EA Checklist Completed:	In progress	Completion Date:	In progress
NEPA Completed:	NA	Completion Date:	NA
State Historic Preservation Office/ Archaeological Clearance:	NA	Completion Date:	NA

CONTACT INFORMATION

Applicant

The project applicant is the responsible party for seeing the work through to completion.

APPLICANT NAME: Brittany Oleson

PHONE: 480-216-4488

ORGANIZATION: AGFD

EMAIL: boleson@azgfd.gov

ADDRESS:

AGFD Project Proponent

The Project Proponent is responsible for compliance, implementation, and annual/final reporting requirements.

AGFD CONTACT NAME: SAA

PHONE: SAA

Cooperators

COOPERATOR NAME(S), ORGANIZATION, ROLE IN PROJECT: Brittany Oleson, AZGFD Wildlife Manager for 35A and 35B, HPC applicant and proponent; Brian Aragon, AZGFD Wildlife Manager for 34A and 34B, project support; Glen Dickens and John Millican, Arizona Antelope Foundation, project support and contractor coordi

Brittany Oleson, AZGFD Wildlife Manager for 35A and 35B, HPC applicant and proponent; Brian Aragon, AZGFD Wildlife Manager for 34A and 34B, project support; Glen Dickens and John Millican, Arizona Antelope Foundation, project support and contractor coordination; Bureau of Land Management, land management agency for large portion of project area; Sonoita plains ranchers (private landowners and lessees), grant and facilitate access

PROJECT NEED AND DESCRIPTION

Please use direct language: why is this project important? What problem will be solved? How will you implement it, and how will the habitat be enhanced? Please include # of acres, methods, roles, and any phases. Please be specific and thorough.

NEED STATEMENT – PROBLEM ANALYSIS: Pronghorn antelope, once numbering in the hundreds, were nearly extirpated from the Sonoita-Elgin plains and the San Rafael Valley by the 1940s. In 1950 the Arizona Game and Fish Department began reintroduction efforts throughout the range and successfully restored herds. By the mid-1960s there were more than 100 pronghorn in the San Rafael Valley alone. By the early-2000s, however, the pronghorn population had again plummeted. In 2010, with only 50 pronghorn surveyed, the Arizona Antelope Foundation and the Arizona Game and Fish Department sprang into action, closing the hunts and forming the Southeastern Arizona Grasslands Pronghorn Initiative. Only 26 pronghorn remained by 2011. Recognizing that the population would continue its nosedive because fawns were not surviving, the first Pronghorn Antelope Fawn Enhancement Project was implemented in 2012. Targeted removal of coyotes during the fawning season, restoration of grassland habitat by removing invading mesquites, and modification of barbed-wire fence in pronghorn movement corridors immediately led to an increase in pronghorn numbers. In January 2014, the growing pronghorn herds were supplemented with nearly 50 pronghorn from the Prescott area and New Mexico. The pronghorn population rebounded spectacularly and the hunt reopened in 2016. Pronghorn in GMUs 34 and 35 now number over 250 animals spread out across the Elgin-Sonoita Plains and San Rafael

Valley, where herds can once again be seen roaming the grasslands.

Recruitment of fawns is vital to achieving a sustainable herd size. Well-established populations are capable of absorbing the impacts of natural predation levels, however small recovering populations are especially sensitive to depredation. Part of the first Pronghorn Antelope Fawn Enhancement Project was targeted removal of coyotes during the fawning season when pronghorn are especially vulnerable. Annual pronghorn surveys show a clear impact of coyote removal on pronghorn fawn survival.

See the table summary of GMU 35 Pronghorn survey data from 2007-2018. Note the average fawn:doe ratio of 11 for 2007-2011, prior to coyote removal efforts. Compare that average to the fawn:doe ratio of 45 from 2012-2015, after targeted annual coyote removals during the fawning season. The fawn:doe ratio then began to drop again from 2016-2018, following the cessation of coyote removals.

Unit	Year	Bucks	Does	Fawns	Uncl	Total	Bucks/ 100 Does	Fawns/ 100 Does	Coyotes Removed
35	2007	12	43	18	0	73	28	42	0
	2008	18	65	3	0	86	28	5	0
	2009	9	53	1	0	63	17	2	0
	2010	6	43	1	0	50	14	2	0
	2011	5	18	1	2	26	28	6	0
	2012	5	43	20	0	68	12	47	23
	2013	9	43	18	0	70	21	42	118
	2014	30	80	20	0	130	38	25	34
	2015	30	85	54	0	169	35	64	25
	2016	44	156	39	0	239	28	25	0
2017	51	108	22	0	181	47	20	0	
2018	38	100	15	0	160	38	15	0	

The first Pronghorn Antelope Fawn Enhancement Project for GMUS 34 and 35 set objectives of an adult pronghorn population of at least 250 animals and a fawn:doe ratio of at least 40. While the population has hovered around the 250 mark for the last few years, the fawn:doe ratio has been well below 40 since coyote removals ceased in 2015. There is thus a need to begin another round of coyote removal efforts to again bolster pronghorn fawn recruitment.

PROJECT DESCRIPTION AND STRATEGIES: The Pronghorn Antelope Fawn Enhancement Project for 2019 is a continuation of efforts conducted in 2013-2015 to enhance pronghorn fawn survival by utilizing targeted removal of coyotes in pronghorn habitat in GMUs 34A, 34B, 35A, and 35B. Removal will occur March-June, prior to and during the peak pronghorn fawning season. Brent Parker, a contractor who has been utilized by the Department for this work in the past, will utilize methods including calling, sitting water sources, locating dens, and trapping. Removals will also occur opportunistically by Department personnel and public volunteers through normal hunting activities.

SPECIFICALLY HOW WILL YOU PROMOTE THIS PROJECT AND ACKNOWLEDGE THE AZ GAME & FISH DEPARTMENT HPC PROGRAM?

LAND OWNERSHIP AT THE PROJECT SITE(S): Other

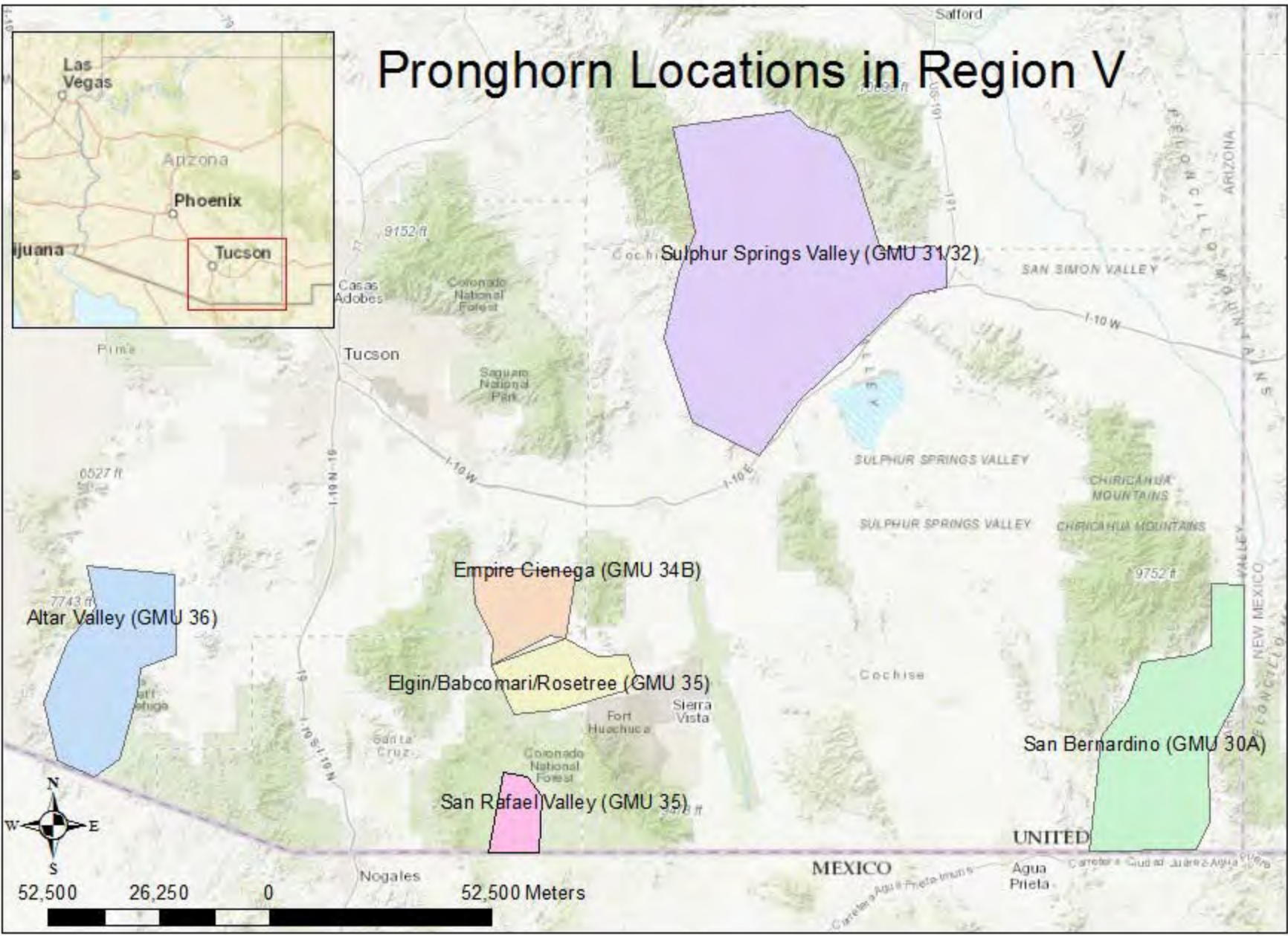
PROJECT MONITORING PLAN: Annual ground and aerial surveys will continue to be conducted to estimate population size and fawn:doe ratios. Coyote removals will occur annually (pending annual HPC funding request approvals) for three years, followed by a three year rest and evaluation period. If

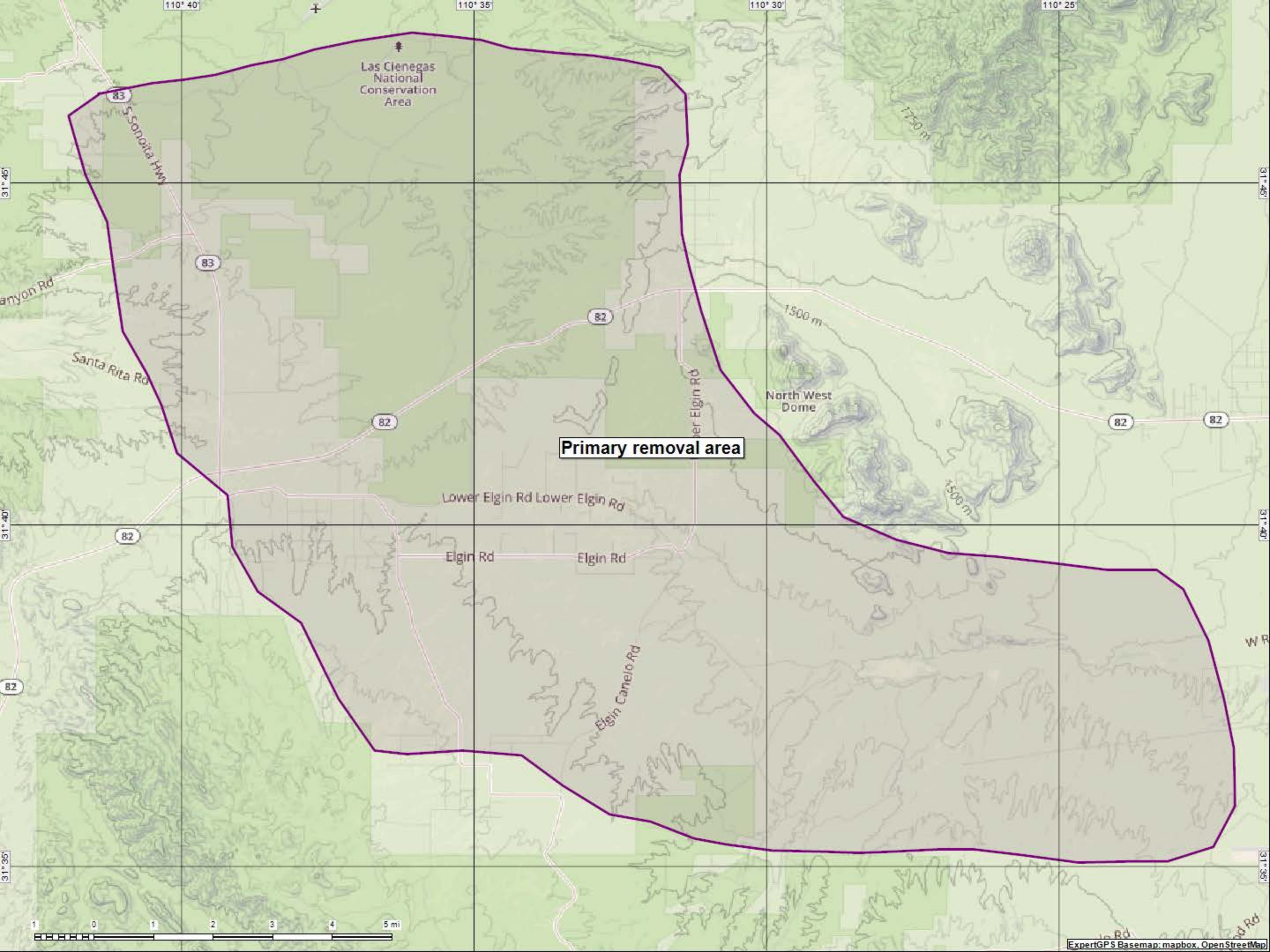
after the three year evaluation period the population is below 250 total animals or the fawn:doe ratio is below 35 (minimum guidelines), funding will be pursued for an additional three years of coyote removals.

PROJECT MAINTENANCE:

PROJECT COMPLETION REPORT TO BE FILED BY: Brittany Oleson

Pronghorn Locations in Region V





Las Cienegas
National
Conservation
Area

Primary removal area

North West
Dome

