

# Assessment of Horses on the Apache National Forest

Apache-Sitgreaves National Forests

Prepared by Ralph Fink, detailed Forest Range Program Manager

*June 2021*

## Introduction

The purpose of this assessment is to review available information and inform the Forest Supervisor in making a determination of the legal status of the Apache Horses. This document summarizes the information on the origin of the horses found on the Alpine and Springerville Ranger Districts, Apache-Sitgreaves National Forests.

## Background

Currently there are approximately 300-400 horses located in the Black River region of the Apache National Forest (Figure 1). In 1971, Congress passed the Wild Horse and Burro Act. This Act directed Forests to identify any unclaimed horses or burros located on the lands they manage. Records indicate there were no unclaimed horses on the Apache National Forest at the time the Act was passed.

## Relationship of Apache Horses to Heber Wild Horse Territory

An analysis of travel corridors found it highly unlikely that the present-day Black River Horses (Apache Horses) could be a result of migration from the HWHT due to natural and manmade barriers and dispersal characteristics of horses. Figures 2 and 3 display many of the barriers to dispersal located on the Apache-Sitgreaves National Forests. Similar barriers are present on the Fort Apache Indian Reservation; however, the data was not available to the Forest in the form necessary to create a map. Forest records on the HWHT do not support any assumption that the herd migrated from the Sitgreaves National Forest.

# Apache-Sitgreaves National Forests Apache Horse Analysis Vicinity Map

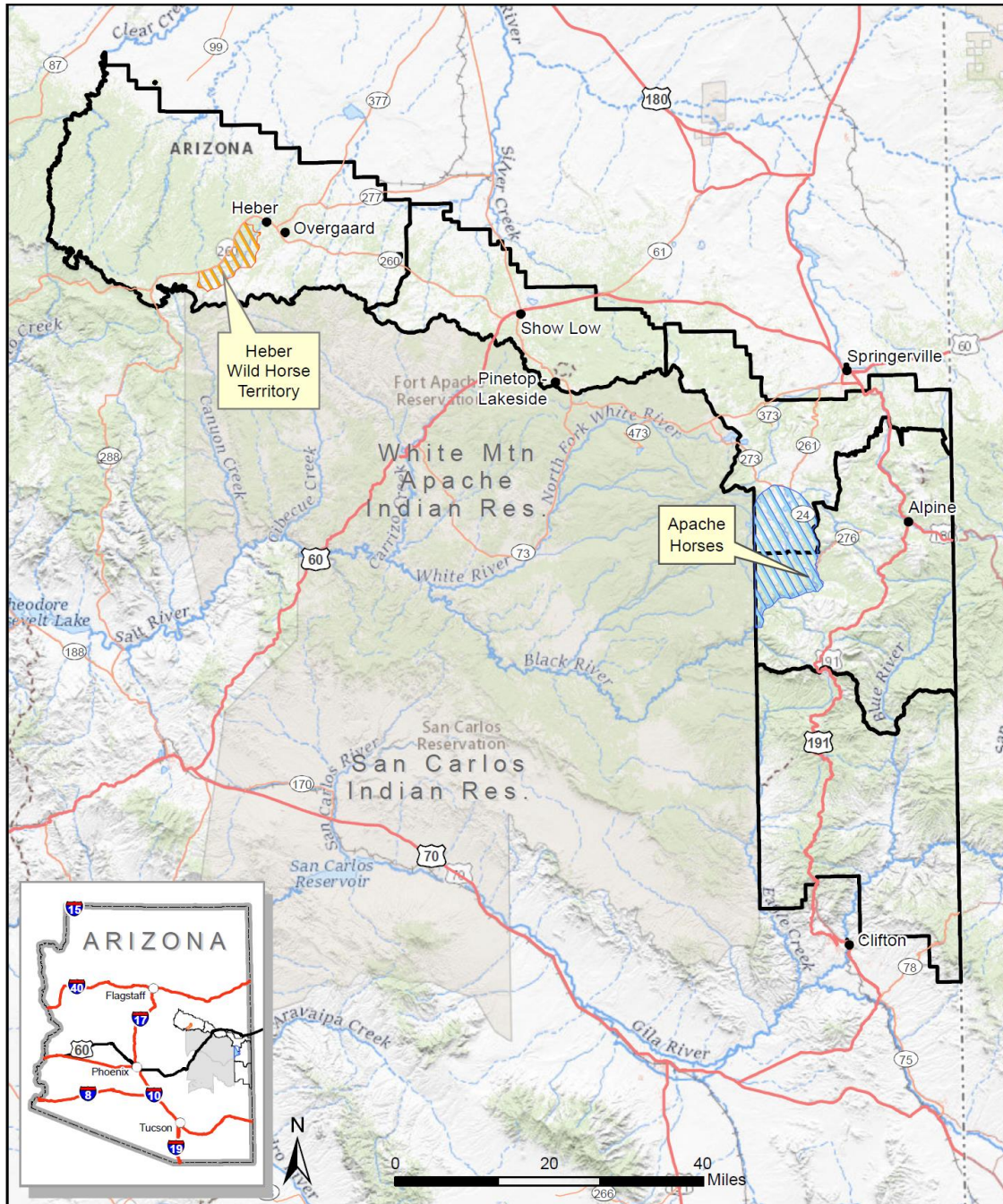


Figure 1: Horse Vicinity Map

Travel Corridor Barrier Analysis  
on the Apache-Sitgreaves National Forests  
in relation to Black River Horses

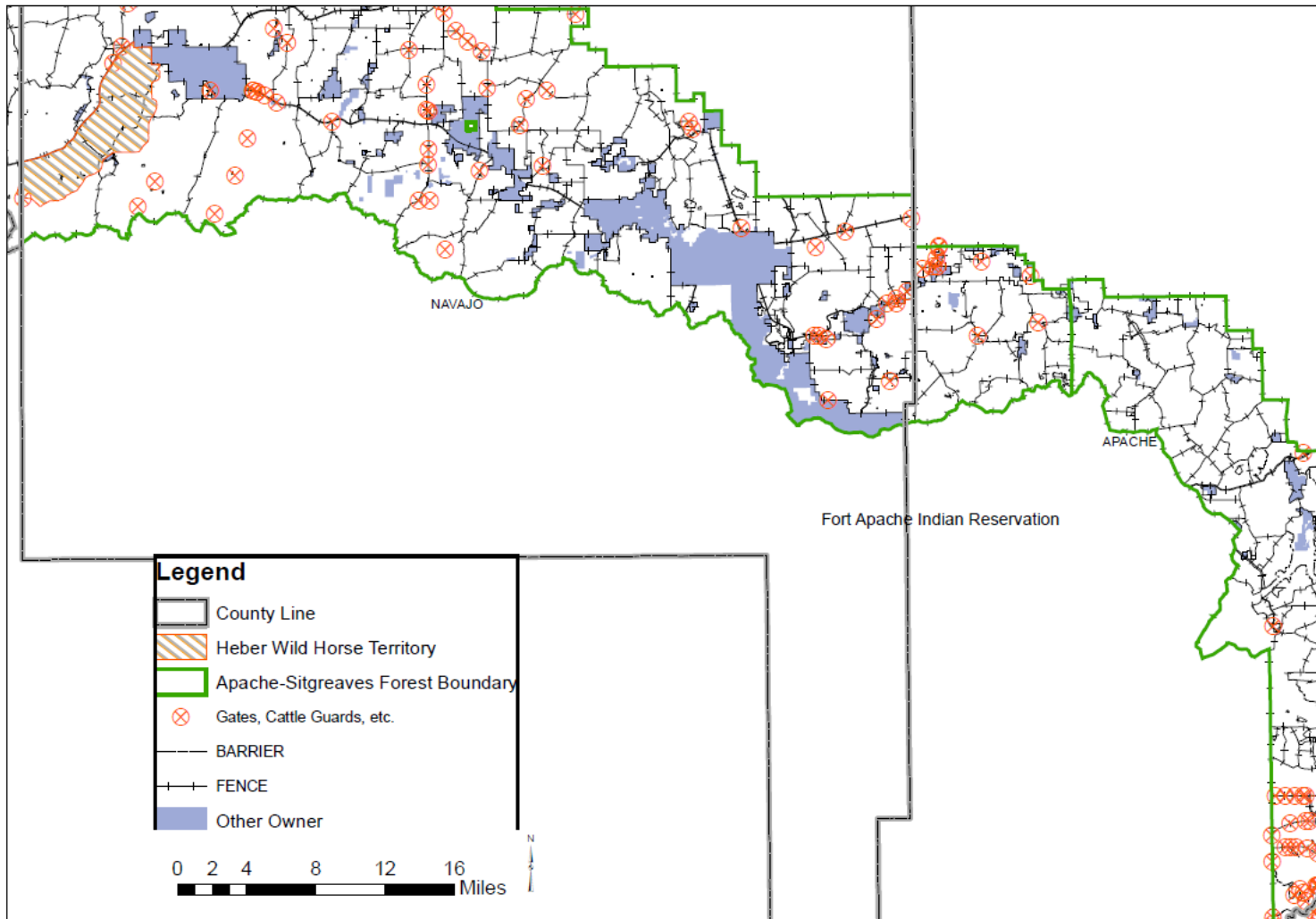


Figure 2: Travel Corridor Barrier Analysis



# Travel Corridor Separation Analysis on the Apache-Sitgreaves National Forests in relation to Black River Horses

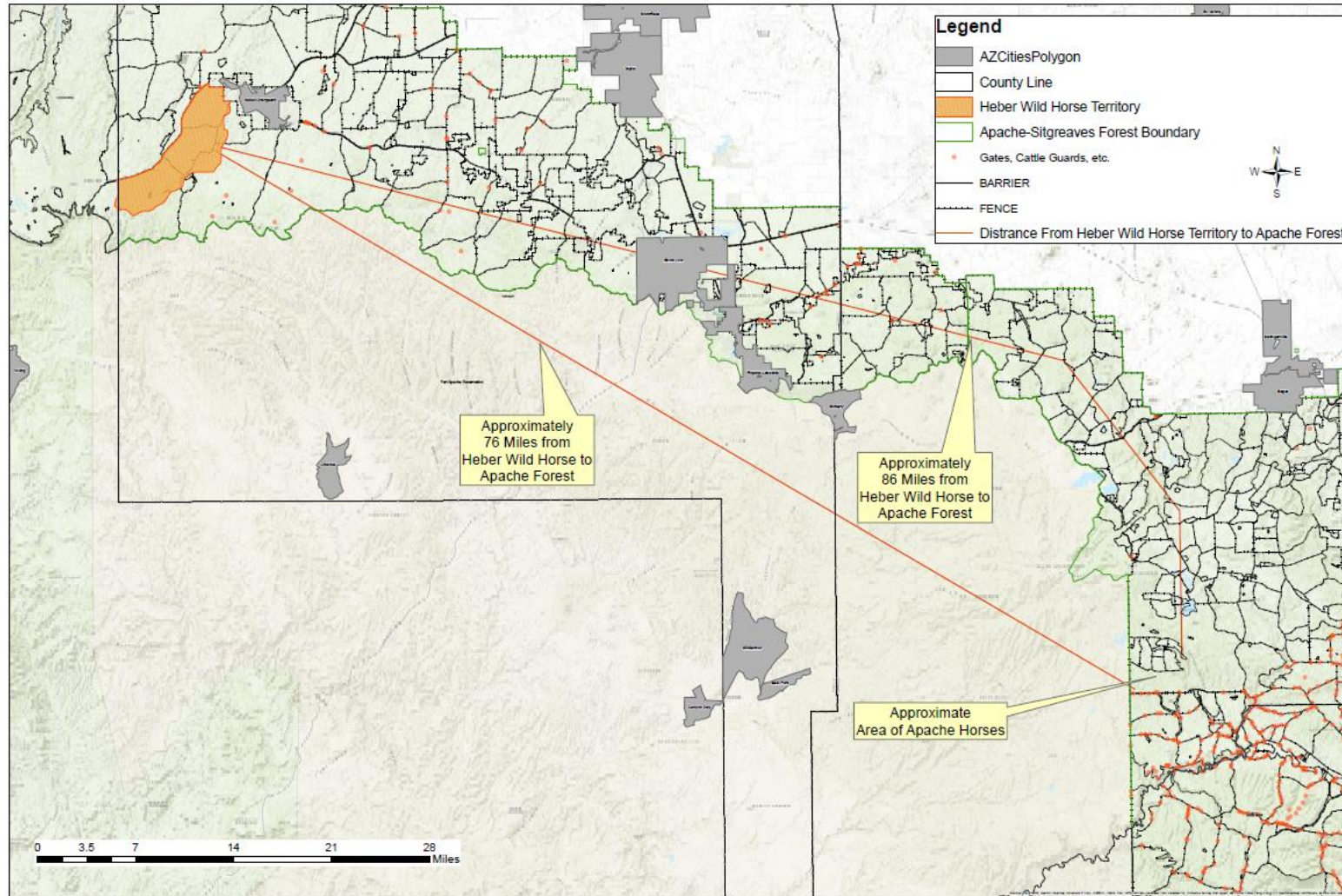


Figure 3: Travel Corridor Separation Analysis

## Forest Service Research on Apache Horses

In early 2020, Forest Service historians conducted a review of range management records for the Sprucedale-Reno and West Fork allotments (Figures 4 and 5) to evaluate the historical presence of unauthorized livestock.<sup>1</sup> Findings from that report include the following:

- Prior to the 1940s, there were no records of unauthorized livestock on these two allotments.
- From the 1940s to 1990s, the occurrences of unauthorized horses were attributed to animals associated with surrounding grazing permits.
- In the 1990s, the occurrence of unauthorized horses in this area increased, with animals originating from the Sprucedale-Reno Allotment and Fort Apache Indian Reservation.
- From the 2000s to present, the unauthorized horses have exponentially increased in this area with a 2018 University of Arizona study<sup>2</sup> estimating a population of 260 animals within the study area.
- No unauthorized horses or other livestock were present on the Forest for any length of time prior to the mid-1990s.
- Close reading of the material indicates no consistent presence of unauthorized livestock and only minimal trespass on the West Fork and Sprucedale-Reno Allotments until the 2000s.
- Before the mid-1990s, most incidents of unauthorized livestock appear to have occurred as a result of fence problems between allotments rather than between allotments and the reservation.

Neighboring allotments have been impacted due to the expansion of the horses.

Based on available information, the historians concluded that there were no free-roaming, unauthorized horses consistently resident on either the Sprucedale-Reno or the West Fork Allotments between the 1940s and the mid-1990s.

## Grazing Allotment Decisions and Black River Conservation Area

The Sprucedale-Reno and West Fork allotments represent the core area where the unauthorized horse issue originated and expanded from. These allotments are located on the Apache Zone and border the Fort Apache Indian Reservation to the west (Figures 4 and 5).

### Sprucedale-Reno Allotment

A NEPA decision signed December 5, 1995 authorized two grazing permits on the Sprucedale-Reno allotment:

- W. Wiltbank – 223 cattle (cow/calf), July 15 to October 31.
- E. Wiltbank – 85 horses and 8 cattle (cow/calf), July 15 to October 31.

---

<sup>1</sup> Kline, R. D. 2020 Apache-Sitgreaves National Forests Unauthorized Livestock History, USDA Forest Service Enterprise Program.

<sup>2</sup> Blum, B., Noelle, S., Nichols, M., Ruyle, G., 2018. Examination of the Ecological Interactions of Free-Roaming Horses on Montane Riparian Systems on the Apache-Sitgreaves National Forest, Arizona, USA. Tucson: University of Arizona School of Natural Resources and the Environment.

This decision also identified a need for the following enclosures:

- Fence Corduroy, Double Cienega and Fish Creeks to create riparian enclosures.
- Fence Reach 3 and a portion of Reach 2 on Conklin Creek and fence Conklin Cienega.

Based on discussions with district range management specialists, the permittees opted to remove some of the pastures associated with these riparian systems from grazing rotation due to challenges with implementing the riparian management identified in the NEPA decision. Cat, Black River and Perry Springs pastures have not had authorized livestock use since 1990.

### West Fork Allotment

The West Fork Allotment has had two NEPA decisions over the last 30 years. The first decision, Revised Allotment Management Plan (West Fork Allotment), was signed on May 14, 1993. It identified:

- Allow 310 head of livestock to graze the allotment annually, for five months (June 1 – October 31), during the initial six-year grazing cycle.
- Exclude livestock grazing from Centerfire Creek in the Middle and North Pastures.
- The construction of a riparian pasture.
- Two riparian enclosures (excludes all grazing use by elk and livestock), each ¼ mile in length (one on Boggy Creek and one on Centerfire Creek).
- The length of critical stream channels along Centerfire, Boggy and Wildcat Creeks will be protected from all grazing (i.e. livestock and elk), will increase from 0 miles to 0.5 miles (10% of all critical reaches).
- Seventy three percent (3.73 miles) of the 5.15 miles of critical stream reaches will be fenced to exclude domestic livestock and 0.5 miles (10%) will be fenced to exclude grazing by elk and livestock.
- Critical riparian habitat along Centerfire and Boggy Creeks will be protected from all grazing (livestock and elk) and will increase from 0 to 12 acres, and the acres protected from livestock grazing will increase from 0 to 81 acres.

The second NEPA decision, West Fork Allotment, Allotment Management Plan Analysis, signed September 27, 2005, supersedes the 1993 decision and includes:

- 129 adult cattle (cow/calf pairs) will be permitted to graze on the West Fork Allotment from July 15 to October 31 each year; this number includes associated bulls.
- Range developments to exclude livestock from the main riparian stream on the allotment include construction of approximately 3.1 miles of new fence (in four segments), relocation of one-tenth mile of fence, and provision of water in one pasture.
- Exclusion of livestock from grazing sensitive or critical areas (West Fork Black River and Home, Boggy, Centerfire and Wildcat Creeks).

The North West, Middle West and South Pastures have been excluded from grazing since 1993.



# Apache-Sitgreaves National Forests Range Allotments Vicinity Map

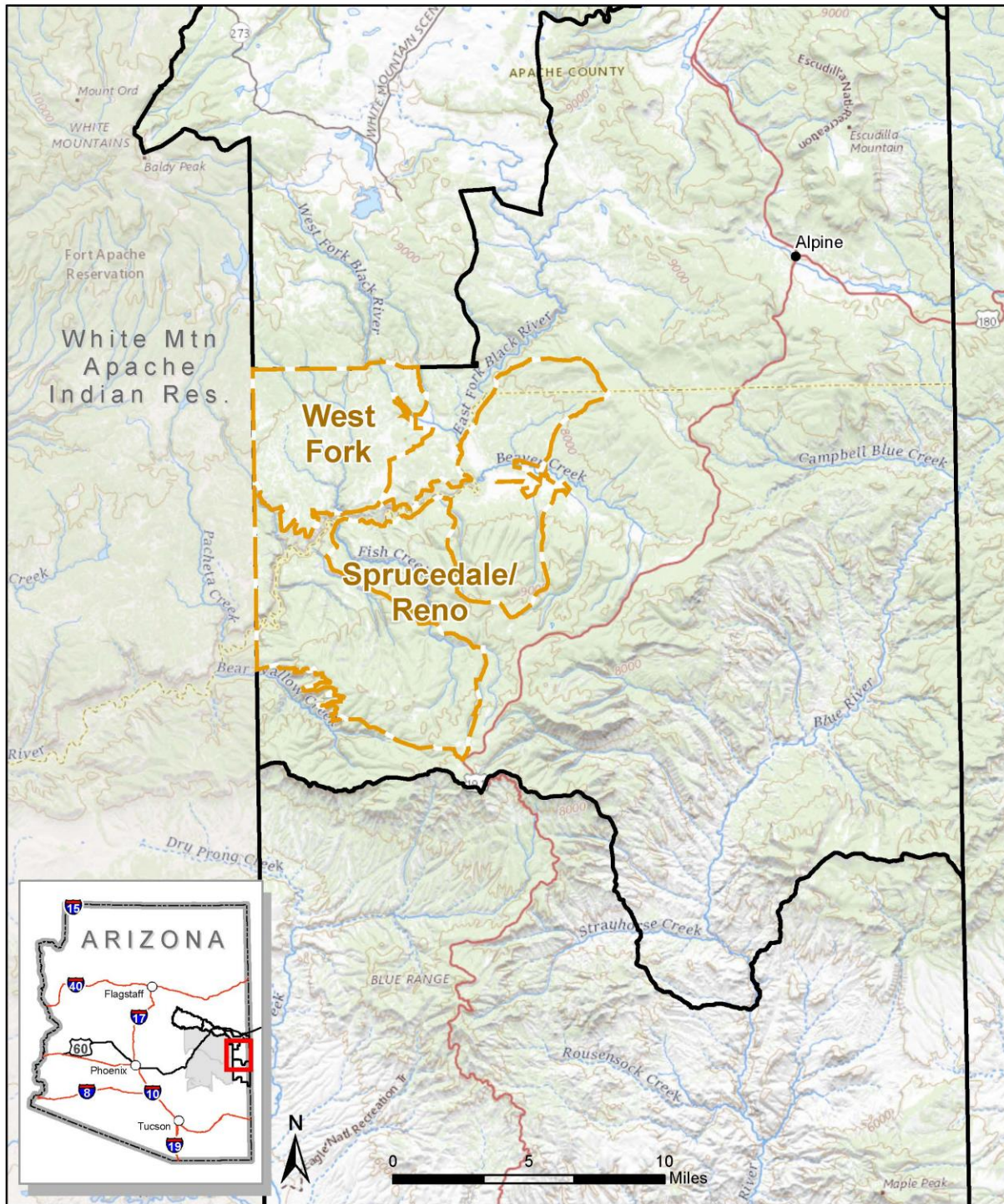


Figure 4: Sprucedale Reno and Westfork Allotments Vicinity Map



Apache-Sitgreaves National Forests  
 Apache Horse Analysis  
 Sprucedale/Reno and Westfork Allotments and Pastures

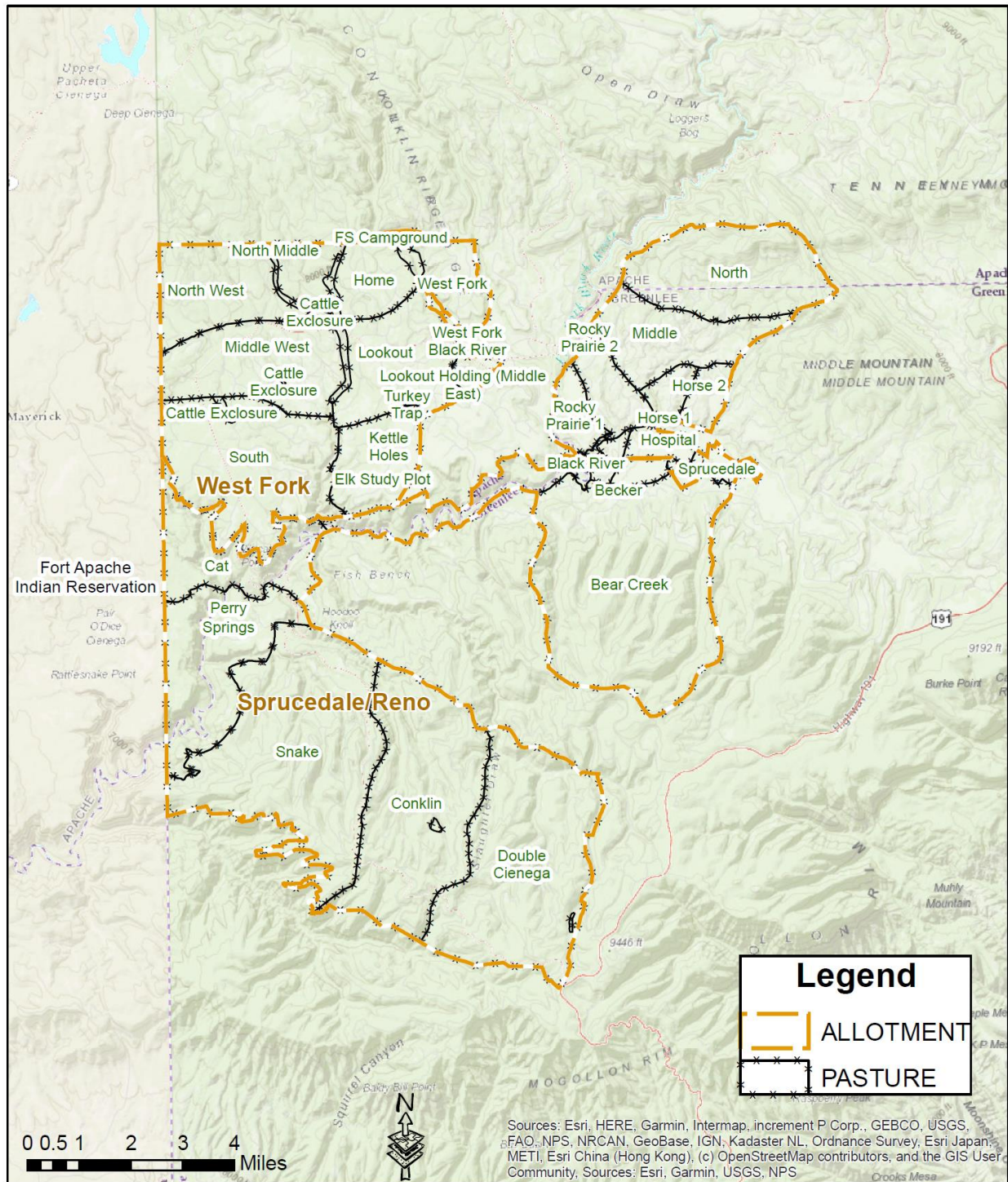


Figure 5: Pastures in the Sprucedale Reno and Westfork Allotments



## Black River Conservation Area

In 2005, the Apache-Sitgreaves National Forests, Arizona Elk Society and livestock permittees entered into a Memorandum of Understanding (MOU) on several grazing allotments to address conflicts with recreation, threatened and endangered fisheries and livestock grazing. This MOU removed pastures in several allotments from livestock grazing, removed interior fences, and realigned boundary fences and their associated maintenance responsibilities. The pastures identified in this MOU were incorporated into the Black River Conservation Area through Forest Plan Revision for the Apache-Sitgreaves National Forests (2015).

Unauthorized horses originated along the Black River on the Sprucedale-Reno and West Fork Allotments along Forest Service Road (FSR) 25 from Buffalo Crossing to Wild Cat Crossing. Removal of portions of grazing allotments from use by these two NEPA decisions and the MOU created a challenge. Portions of the fences surrounding these areas were no longer assigned to a permittee for maintenance and permittees no longer monitored these locations for stray livestock. This allowed for stray livestock to disperse further into the surrounding areas on the Forest.

## Fencing Issues

Many allotments and pasture fences in the Southwest Region were installed in the 1930s and 1940's when forests used the help of the Civilian Conservation Corps to divide large allotments with several permittees into much smaller allotments with few permittees or an individual permittee. Pasture fencing was also installed to assist with grazing rotations. As time has progressed, fences have been added, removed, replaced, and rerouted. Portions of the boundary fence between Fort Apache Indian Reservation and the Apache National Forest were reconstructed in the 1970's.

In the 1990's, when unauthorized horses began to increase, many of these fences were 20-60 years old in varying levels of condition, maintenance and upkeep. During this same time, tribes lost funding to assist in maintenance and reconstruction of fences for shared boundaries. These factors, compounded with the removal of fences from permittee maintenance responsibility, increasing elk numbers, pressure from horses and other livestock, fire, high wind events and falling trees all contributed to the challenge of managing livestock movements with fences. While these challenges exist with most fences, the 1990's appear to be the inflection point in which fencing maintenance exceeded the Forest's capacity largely due to workforce and funding. This is an issue shared across the region and has progressively worsened.

Wildfire has also contributed to fencing problems across the region. The Wallow Fire occurred in 2011 and burned over 500,000 acres, largely on the Apache-Sitgreaves National Forests (Figure 6). Approximately 14 miles of boundary fence between the Forest and Fort Apache Indian Reservation was impacted by the Wallow Fire. A post-fire inspection of this fence line showed varying degrees of fire damage to a fence that was largely in poor condition prior to the Wallow Fire. The 14 miles of damaged fence have since been repaired.

# Apache-Sitgreaves National Forests Apache Horse Analysis Wallow Fire Scar

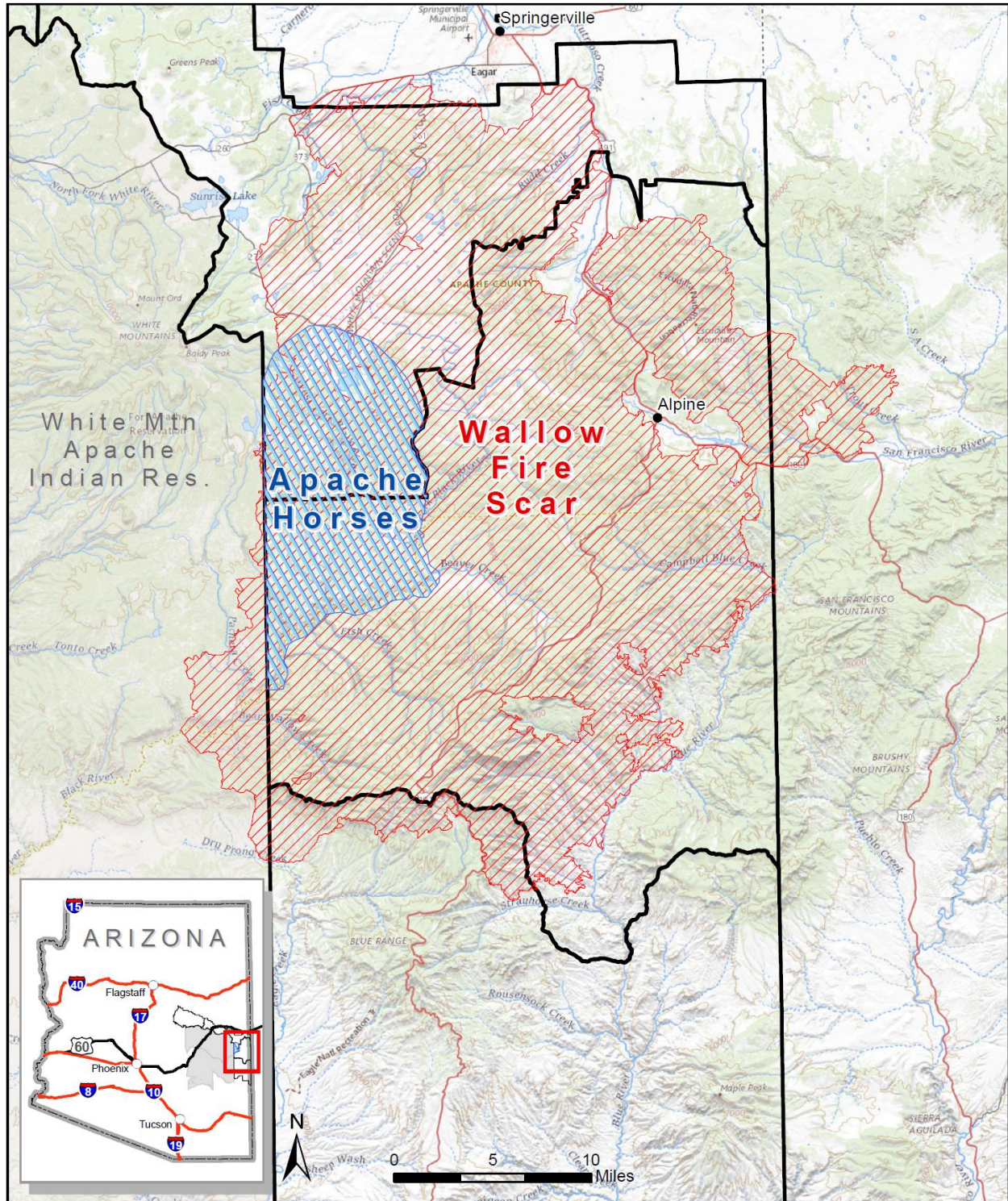


Figure 6: Wallow Fire Scar



## Factors Potentially Influencing Increase in Unauthorized Horse Population

In June of 2011 the United States Government Accountability Office submitted a report to congress on the unintended consequences from the Cessation of domestic slaughter. The following information is a summary of this report as it pertains to issues of abandonment and neglect.

In 2007, all domestic slaughter of horses ceased in the United States. Since 2007 there has been a reported increase in horse abandonments and an increase in investigations for horse abuse and neglect.<sup>3</sup> State officials attributed the decline in horse welfare to many factors, but primarily to the cessation of domestic slaughter and the U.S. economic downturn.

While the Forest does not have records of individual cases of abandonment, horses often will be abandoned in areas where other horses are present. Horses with domesticated traits have been observed in the Black River area.

## Other Influencing Factors

A herd of 60-70 Rocky Mountain elk (*Cervus canadensis* subsp. *nelsoni*) were first introduced within the Apache-Sitgreaves National Forests around 1913 following the extirpation of Merriam's elk (*Cervus canadensis* subsp. *merriami*) from the area in 1890s. By the 1990s, Rocky Mountain elk populations were large enough to support an increased opportunity for hunting. While elk-livestock conflicts had existed prior to this time, these conflicts became much more noticeable across the landscape in the 1990's, especially regarding fencing issues.

Additionally, climate in this area has changed. Prior to the early 2000s, this area received substantial snowfall that would force wildlife and horses to lower elevations and off forest lands during the winter months. Warmer temperatures and less snowfall have resulted in stray horses remaining in this area year-round. If the expanding horse population persists, a mass winter kill could be expected if winter precipitation and weather conditions return to historical norms; many animals would likely be trapped without an opportunity to move to lower elevations.

## Summary

When the Wild Horse and Burro Act was passed by Congress in 1971, there were no free-roaming horses documented on the Apache National Forest and no territory was established. While horses were found on the Sitgreaves National Forest, resulting in the establishment of the Heber Wild Horse Territory, the horses now found on the Apache National Forest are not connected to the Heber horses. In the mid-1990's, instances of unauthorized horses from the Sprucedale-Reno Allotment began to increase. In the mid-2000's, the issues of unauthorized livestock from the Sprucedale-Reno Allotment and neighboring Fort Apache Indian Reservation became more prevalent and the number of unauthorized horses exponentially increased with time

---

<sup>3</sup> GAO 2011. Horse Welfare Action Needed to Address Unintended Consequences from Cessation of Domestic Slaughter, Report to Congressional Committees.

While not detailed above as it is outside the scope of this assessment, there are indications that the Apache horses are causing detrimental environmental impacts on the Apache National Forest. This includes direct effects to habitats of federally listed species including the New Mexico meadow jumping mouse, Chiricahua leopard frog, narrow-headed gartersnake, loach minnow and Apache trout, and indirect effects to habitats of Three Forks springsnail and Mexican spotted owl. Other environmental impacts include reduction in forage for wildlife and authorized livestock, and challenges in managing critical watersheds.



## Appendix A: Code of Federal Regulations

36 CFR 222.8 (a) (1) and (3): Cooperation in control of estray or unbranded livestock, animal diseases, noxious farm weeds, and use of pesticides.

(a) Insofar as it involves National Forest System lands and other lands under Forest Service control or the livestock which graze thereupon, the Chief, Forest Service, will cooperate with:

(1) State, county, and Federal agencies in the application and enforcement of all laws and regulations relating to livestock diseases, sanitation and noxious farm weeds.

(3) State cattle and sheep sanitary or brand boards in control of estray and unbranded livestock to the extent it does not conflict with the Wild Free-Roaming Horse and Burro Act of December 15, 1971.

36 CFR 261.7 (a) and (b)

The following are prohibited:

(a) Placing or allowing unauthorized livestock to enter or be in the National Forest System or other lands under Forest Service control.

(b) Not removing unauthorized livestock from the National Forest System or other lands under Forest Service control when requested by a forest officer.

36 CFR 262.10: Impoundment and disposal of unauthorized livestock.

Unauthorized livestock or livestock in excess of those authorized by a grazing permit on the National Forest System, which are not removed therefrom within the periods prescribed by this regulation, may be impounded and disposed of by a forest officer as provided herein.

(a) When a Forest officer determines that such livestock use is occurring, has definite knowledge of the kind of livestock, and knows the name and address of the owners, such livestock may be impounded any time five days after written notice of intent to impound such livestock is mailed by certified or registered mail or personally delivered to such owners.

(b) When a Forest officer determines that such livestock use is occurring, but does not have complete knowledge of the kind of livestock, or if the name of the owner is unknown, such livestock may be impounded any time 15 days after the date a notice of intent to impound livestock is first published in a local newspaper and posted at the county courthouse and in one or more local post offices. The notice will identify the area in which it will be effective.

(c) Unauthorized livestock or livestock in excess of those authorized by a grazing permit on National Forest System which are owned by persons given notice under paragraph (a) of this section, and any such livestock in areas for which a notice has been posted and published under paragraph (b) of this section, may be impounded without further notice any time within the 12-month period immediately following the effective date of the notice or notices given under paragraphs (a) and (b) of this section.

(d) Following the impoundment of livestock, a notice of sale of impounded livestock will be published in a local newspaper and posted at the county courthouse and in one or more local post

offices. The notice will describe the livestock and specify the date, time, and place of the sale. The date shall be at least five days after the publication and posting of such notice.

(e) The owner may redeem the livestock any time before the date and time set for the sale by submitting proof of ownership and paying for all expenses incurred by the United States in gathering, impounding, and feeding or pasturing the livestock. However, when the impoundment costs exceed fair market value a minimum acceptable redemption price at fair market value may be established for each head of livestock.

(f) If the livestock are not redeemed on or before the date and time fixed for their sale, they shall be sold at public sale to the highest bidder, providing this bid is at or above the minimum amount set by the Forest Service. If a bid at or above the minimum amount is not received, the livestock may be sold at private sale at or above the minimum amount, reoffered at public sale, condemned and destroyed, or otherwise disposed of. When livestock are sold pursuant to this regulation, the forest officer making the sale shall furnish the purchaser a bill or other written instrument evidencing the sale. Agreements may be made with State agencies whereby livestock of unknown ownership and livestock of known ownership, which are not redeemed by the owner, are released to the agency for disposal in accordance with State law, Provided, That remuneration of proceeds from the sale of said animals in excess of costs of impoundment and to arrange for disposal of livestock of known ownership will be refunded to the former owner.

#### 36 CFR 220.6 Categorical exclusions (d) (1)

(a) General. A proposed action may be categorically excluded from further analysis and documentation in an EIS or EA only if there are no extraordinary circumstances related to the proposed action and if:

(1) The proposed action is within one of the categories established by the Secretary at 7 CFR part 1b.3; or

(2) The proposed action is within a category listed in § 220.6(d) and (e).

(d) Categories of actions for which a project or case file and decision memo are not required. A supporting record and a decision memo are not required, but at the discretion of the responsible official, may be prepared for the following categories:

(1) Orders issued pursuant to 36 CFR part 261—Prohibitions to provide shortterm resource protection or to protect public health and safety.



## Appendix B: Definitions

**Unauthorized Livestock:** Unauthorized livestock means any cattle, sheep, goat, hog, or equine not defined as a wild free-roaming horse or burro by § 222.20(b)(13), which is not authorized by permit to be upon the land on which the livestock is located and which is not related to use authorized by a grazing permit; provided, that noncommercial pack and saddle stock used by recreationists, travelers, other Forest visitors for occasional trips, as well as livestock to be trailed over an established driveway when there is no overnight stop on Forest Service administered land do not fall under this definition. 36 CFR 261.2

**Wild Horses:** Wild free-roaming horses and burros mean all unbranded and unclaimed horses and burros and their progeny that have used lands of the National Forest System on or after December 15, 1971, or do hereafter use these lands as all or part of their habitat, but does not include any horse or burro introduced onto the National Forest System on or after December 15, 1971, by accident, negligence, or willful disregard of private ownership. Unbranded, claimed horses and burros for which the claim is found to be erroneous, are also considered as wild and free-roaming if they meet the criteria above. 36 CFR 222.60 (b) (13)

**Stray:** "Stray animal" as used in this article means livestock, bison or ratites whose owner is unknown or cannot be located, or any such animal whose owner is known but permits the animal to roam at large on the streets, alleys, roads, range or premises of another without permission, except that this section does not apply to livestock where the principles of a federal permit, federal allotment or federal lease are in dispute. 3-1401. Definition of stray animal

## Appendix C: References

Arizona State Legislature, March 10, 2021 Arizona Revised Statutes Title 3 – Agriculture,  
<https://www.azleg.gov/arsDetail/?title=3>

Blum, B., Noelle, S., Nichols, M., Ruyle, G., 2018. Examination of the Ecological Interactions of Free-Roaming Horses on Montane Riparian Systems on the Apache-Sitgreaves National Forest, Arizona, USA. Tuscon: University of Arizona School of Natural Resources and the Environment

GAO, 2011 Horse Welfare Action Needed to Address Unintended Consequences from Cessation of Domestic Slaughter, Report to Congressional Committees.

Kline, R. D., Quarles, L. D., 2021 Unauthorized Livestock History, USDA Forest Service Enterprise Program.

Records of the Apache-Sitgreaves National Forests.

U.S. Government, July 1, 2020 Code of Federal Regulations, Title 36, Parks, Forests, and Property, Parts 200 to 299, U.S. Government Publishing Office