

ALLOTMENT MANAGEMENT PLAN
FOR THE
CLAY SPRINGS ALLOTMENT
BLACK MESA RANGER DISTRICT
APACHE - SITGREAVES NATIONAL FORESTS

PERMITTEE NAME Chf Smith DATE: 2-8-2002
PERMITTEE NAME Loren Jackson DATE: 4-24-09 12-12-1998
PERMITTEE NAME Alpha Jackson DATE: 2/8-2002
PERMITTEE NAME Hayden K. Flake DATE: 2/8/02
DISTRICT RANGER Kate Klein DATE: 2/8/02

I. INTRODUCTION

The Clay Springs Allotment is located in the vicinity of the community of Clay Springs, within portions of Townships 10N and Ranges 19E; Township 11N, Range 19E; and Township 12N, Range 19E, Gila and Salt River Meridian (G&SRM), Navajo County, Arizona. The allotment contains approximately 23,440 acres, comprised of 7,500 acres of Pinyon-juniper (PJ) vegetation, 10,100 acres of pine, 630 acres of riparian, 5,210 acres of open and savannah Woodland. Elevations range from 6,000 feet in the north to near 7,000 feet in the southern part of the allotment.

This allotment management plan (AMP) shall set forth the objectives, management requirements, improvements needed and monitoring and evaluation standards for the Clay Springs Allotment as outlined in the Forest Plan and the Decision Notice signed by the Forest Supervisor on December 5, 1995.

II. OBJECTIVES

A. Range Condition

The long-term goal for the allotment range condition is to improve range conditions to fair or better in the P/J type and Good to Excellent within the Pine type, on Full Capacity (FC) range.

For the short-term objective strive to achieve a 10-15% increase in Fair condition range within 10 years after full implementation of the AMP, in all types.

B. Cool Season Species

Increase the Cool Season quantity and diversity in the P/J by 20% above the 1994 cluster readings at all transects.

C. Browse Condition and Production

Increase browse quantity and health of the Four-wing saltbush and winterfat within the Powerline and Town pastures.

D. Riparian Management

Manage to achieve an age structure of mature 20-30%, sapling and pole 40-50%, and seedling 20-40%.

E. Ground Cover and Soil Condition

Increase ground cover comprised of vegetation (decreaser and increaser species) to a desired level of: 1) 50-60% in the P/J within FC range; 2) 60%+ within the riparian areas; 3) Strive to achieve 60% ground cover within Pine VSS 1 and "A" stands.

F. Vegetative Structural Stages (VSS)

Objective is to achieve the following VSS distributions within 15 years of the date of the AMP on the allotment (specific treatment areas are in the improvement section):

Desired

VSS 1 = 10%
 VSS 2A = 10%
 VSS 2B = 5%
 VSS 3A = 10%
 VSS 3B = 5%
 VSS 4A = 20%
 VSS 4B = 10%
 VSS 4C = 10%
 VSS 5A = 10%
 VSS 5C = 10%

Size classes:

VSS 1 = 0 to 0.2 inches Diameter Root Crown (DRC)
 VSS 2 = 0.2 to 3" DRC
 VSS 3 = 3 to 9" DRC
 VSS 4 = 9 to 12" DRC
 VSS 5 = 12+" DRC

Canopy Closure

VSS 1 = 0%
 A = 10 - 20%
 B = 21 - 40%
 C = 40+%

G. Wildlife

- Have 30% of the available forage for wild ungulates as per Ari-Pine Resource Area Desired Future Conditions (12/93). Strive to achieve within 5 years. This will be measured by monitoring wildlife utilization in areas of the herd unit with no cattle grazing (rested pastures/cattle exclosures).

III. MANAGEMENT

Three Term Grazing Permits will be issued:

Flake	208 head with an 11/1 to 2/28 season of use
Jackson	4 head with an 11/1 to 5/31 season of use 6 head with a 6/1 to 10/31 season of use
Clint Smith	18 head with an 11/1 to 5/31 season of use 32 head with a 6/1 to 10/31 season of use

The following is the tentative grazing schedule for the Clay Spring allotment:

<u>PASTURE</u>	<u>SMITH</u>	<u>FLAKE</u>	<u>JACKSON</u>	<u>DATES</u>
TOWN	18 HD	208 HD	4 HD	11/1/01 TO 12/20/01
POWERLINE	18 HD	208 HD	4 HD	12/21/01 TO 1/31/02
+IL	18 HD	208 HD	4 HD	2/1/02 TO 2/28/02
+IL	18 HD	0 HD	4 HD	3/1/02 TO 5/31/02
SUMMER SOUTH	32 HD	0 HD	6 HD	6/1/02 TO 9/11/02
SUMMER NORTH	32 HD	0 HD	6 HD	9/12/02 TO 10/31/02

<u>PASTURE</u>	<u>SMITH</u>	<u>FLAKE</u>	<u>JACKSON</u>	<u>DATES</u>
POWERLINE	18 HD	208 HD	4 HD	11/1/02 TO 12/12/02
+IL	18 HD	208 HD	4 HD	12/13/02 TO 1/14/03
TOWN	18 HD	208 HD	4 HD	1/15/03 TO 2/28/03
TOWN	18 HD	0 HD	4 HD	3/1/03 TO 5/31/03
SUMMER SOUTH	32 HD	0 HD	6 HD	6/1/03 TO 9/11/03
SUMMER NORTH	32 HD	0 HD	6 HD	9/12/03 TO 10/31/03

<u>PASTURE</u>	<u>SMITH</u>	<u>FLAKE</u>	<u>JACKSON</u>	<u>DATES</u>
+IL	18 HD	208 HD	4 HD	11/1/03 TO 12/3/03
TOWN	18 HD	208 HD	4 HD	12/4/03 TO 1/22/04
POWERLINE	18 HD	208 HD	4 HD	1/23/04 TO 2/28/04
POWERLINE	18 HD	0 HD	4 HD	3/1/04 TO 5/31/04
SUMMER NORTH	32 HD	0 HD	6 HD	6/1/04 TO 7/17/04
SUMMER SOUTH	32 HD	0 HD	6 HD	7/18/04 TO 10/31/04

<u>PASTURE</u>	<u>SMITH</u>	<u>FLAKE</u>	<u>JACKSON</u>	<u>DATES</u>
TOWN	18 HD	208 HD	4 HD	11/1/04 TO 12/20/04
POWERLINE	18 HD	208 HD	4 HD	12/21/04 TO 1/31/05
+IL	18 HD	208 HD	4 HD	2/1/05 TO 2/28/05
+IL	18 HD	0 HD	4 HD	3/1/05 TO 5/31/05
SUMMER SOUTH	32 HD	0 HD	6 HD	6/1/05 TO 9/11/05
SUMMER NORTH	32 HD	0 HD	6 HD	9/12/05 TO 10/31/05

<u>PASTURE</u>	<u>SMITH</u>	<u>FLAKE</u>	<u>JACKSON</u>	<u>DATES</u>
POWERLINE	18 HD	208 HD	4 HD	11/1/05 TO 12/12/05
+IL	18 HD	208 HD	4 HD	12/13/05 TO 1/14/06
TOWN	18 HD	208 HD	4 HD	1/15/06 TO 2/28/06
TOWN	18 HD	0 HD	4 HD	3/1/06 TO 5/31/06
SUMMER SOUTH	32 HD	0 HD	6 HD	6/1/06 TO 9/11/06
SUMMER NORTH	32 HD	0 HD	6 HD	9/12/06 TO 10/31/06

PASTURE	SMITH	FLAKE	JACKSON	DATES
+IL	18 HD	208 HD	4 HD	11/1/06 TO 12/3/06
TOWN	18 HD	208 HD	4 HD	12/4/06 TO 1/22/07
POWERLINE	18 HD	208 HD	4 HD	1/23/07 TO 2/28/07
POWERLINE	18 HD	0 HD	4 HD	3/1/07 TO 5/31/07
SUMMER NORTH	32 HD	0 HD	6 HD	6/1/07 TO 7/17/07
SUMMER SOUTH	32 HD	0 HD	6 HD	7/18/07 TO 10/31/07

PASTURE	SMITH	FLAKE	JACKSON	DATES
TOWN	18 HD	208 HD	4 HD	11/1/07 TO 12/20/07
POWERLINE	18 HD	208 HD	4 HD	12/21/07 TO 1/31/08
+IL	18 HD	208 HD	4 HD	2/1/08 TO 2/28/08
+IL	18 HD	0 HD	4 HD	3/1/08 TO 5/31/08
SUMMER SOUTH	32 HD	0 HD	6 HD	6/1/08 TO 9/11/08
SUMMER NORTH	32 HD	0 HD	6 HD	9/12/08 TO 10/31/08

This pasture rotation serves as a guide and may need to be adjusted on a yearly basis.

The desired utilization levels will be as follows: 30% of herbaceous forage species, 25% of terminal buds of riparian shrubs and trees, and 45% on browse species (see monitoring section for more details).

Livestock shall not enter the allotment until the scheduled date identified on the AOP or Grazing Permit. The Permittee shall provide at least 5 days advance notice of entering the allotment, the location of entry, and the means by which the livestock will be placed on the allotment. All livestock, including strays shall be removed from the allotment by the last day shown on the AOP and Grazing Permit.

All livestock must be branded or marked, as identified on the current brand certificates in the Term Grazing Permit.

A request for an extension of the grazing season must be received in writing at least 30 days before the end of the season, which shall state the reason for extension. Excess forage is not automatic grounds for approving extensions. Approval will be determined on resource needs (soil protection, seed crop for next year, etc.) and not based on permittee convenience. Approval applies to only current year and previous years' approval does not constitute automatic approval for succeeding years. Any extensions will be paid for at the current grazing fee rate. A request for non-use must be received in writing at least 45 days prior to the grazing season.

Livestock may be moved from pasture to pasture within 3 days of the planned rotation dates. At least 90 percent of the permitted livestock must be moved by the scheduled date, and all livestock must be moved into the correct pasture within 3 days after the scheduled leave date. The permittee must notify the District Ranger if there is a need to deviate from planned rotation dates.

Livestock allowed to remain in pastures beyond the specified rotation date, allowed to drift between pastures, or allowed in a rested pasture will be considered a violation of the Term Grazing Permit. Animals on the allotment after the "off" date may be billed for at the unauthorized use rate and may be subject to other administrative actions on the permit.

Livestock will be managed to avoid concentrated use in any one area, especially riparian areas. A full-time rider may be necessary to disperse livestock and deter concentrations in preferred areas. Permittee shall manage livestock to utilize the less preferred areas by hauling water, placing salt or supplement feed, and herding as needed to achieve proper use.

Salt and mineral blocks may be placed in lightly used areas until the desired level of forage use is achieved. Blocks will not be placed in areas within a quarter mile of water or a riparian area and ideally no closer than 1/2 mile. Blocks will not be placed in over-used areas, meadow bottoms, along roads, along trails, or in heavily used recreation areas. Every time blocks are put out, they need to be placed at different sites. Blocks will be placed on sites not susceptible to erosion.

The permittee is encouraged to have off-Forest range to use in the event drought, excess forage utilization or other unforeseen events that necessitate early livestock removal. When these conditions occur, the District Ranger, with input from the permittee, will make the determination if livestock removal is required for resource protection. Drought situations may alter grazing sequence or length of grazing period. The season or numbers may be adjusted in proportion to the amount of moisture that has been received to date.

The number of livestock and/or season of use may be adjusted if the forage use standards or other management objectives are not being met. Livestock will be moved to the next pasture in the grazing schedule or off the Forest when utilization standards are exceeded.

IV. Improvements

The range improvements planned for the allotment include:

Construct four waterlot fences, one at Northwest Tank, one at Dalton tank, one at Winter tank and one at the proposed new tank. The purpose of the waterlots is for better distribution. Estimated ¼ mile fence needed for each tank. Forest Service will supply materials (estimate at \$500) and permittees will construct.

Rebuild a west allotment boundary fence from Winter tank to the 139 road, near the junction with FR 161. Estimated cost is \$33,000, including FS materials, FS administration and layout salaries and cultural clearances. Estimated length is 5 ½ miles. Permittee provide labor to construct fence: all permittees share in construction.

Build one stock tank, west of Cottonwood Wash, in the Town Pasture. FS and the Permittee cost share 50/50, permittee deposit with FS into an account for their share to pay for contract or FS equipment to construct tank. FS pays the cost of the Cultural surveys and design. Estimated cost is \$3,000. The purpose is to provide a water source west of Cottonwood Wash, which will help distribute grazing animals.

Three watershed improvement projects in severely eroded drainages shall be completed (refer to attached map for location). In addition, construct four additional sediment traps in a portion of Cottonwood Wash or side drainages, to act as seedbeds for the establishment of riparian species. Estimated cost for each structure and sediment trap is \$3,000. The Forest Service will complete these structures. The sediment traps should not exceed 3-foot height and may be constructed of native rock, logs, and/or non-porous fiber fabric material.

Build one division fence in the Summer pasture, about 3 miles, estimated cost, \$11,000, which includes one cattleguard across FS system road. FS will provide materials and the permittee will provide labor. FS will install cattleguard, for an estimated cost of \$3,000. This fence will provide deferment to the Summer Pasture.

Thin 2,068 acres of pinyon-juniper woodland through individual tree pushing or fuelwood harvest. Strive to achieve a minimum of 100 acres of Pushing/ Fuelwooding per year or 500 acres in 5 years after this AMP is signed. Forest Service will be responsible for all the fuelwooding, heritage clearances, block layout and ½ the acres of pushing. The first priority for treatment areas will be the stands that will become "A canopy closure" stands.

Maintain 4,258 acres of grasslands, to prevent pinyon-juniper reinvasion. Strive to achieve a minimum of 300 acres per year. Forest Service will be responsible for the block layout, heritage surveys (if necessary) and ½ of the maintenance. The permittee will be responsible for the other half of the maintenance.

Specific locations of the PJ thinning and grasslands maintenance are on the attached maps.

Pasture	Compartment	Stand	Current VSS	Desired VSS	Acres	Treatment
+IL	8048	1	5C	3B	36	Fuelwood
+IL	8048	87	5C	3B	164	Fuelwood
+IL	8048	89	5C	3A	52	Fuelwood
+IL	8048	17	5C	3B	113	Fuelwood
+IL	8048	88	5C	5A	59	Fuelwood
+IL	8048	101	5C	5A	73	Push
+IL	8048	83	4B	4A	151	Push
+IL	8048	86	4B	4A	45	Push
+IL	8048	96	5C	5A	35	Fuelwood
+IL	8048	95	5C	5A	106	Fuelwood
+IL & Town	8048	97	5C	5A	77	Fuelwood
Town	8048	93	5C	5A	187	Fuelwood
Town	8048	22	5C	5A	271	Fuelwood
Town	8048	92	5C	5A	71	Fuelwood
Town	8048	98	5C	5A	32	Fuelwood
Summer	8046	5	4C	3A	130	Fuelwood
Summer	8047	8	4C	4A	242	Fuelwood
Summer	8047	10	5C	3A	60	Fuelwood
Summer	8035	12	4B	3A	112	Fuelwood
Summer	8035	16	4B	3A	52	Fuelwood

The following grassland stands are to be maintained:

Pasture	Compartment	Stand	Acres
+IL	8048	15	132
+IL	8048	13	16
+IL	8048	8	139
+IL	8048	7	279
Town	8048	23	321
Town	8048	27	284
Town	8048	77	110
Town/Powerline/HP	8048	65	2011
Powerline	8048	55	726
Powerline	8048	60	127
Powerline	8048	61	25
Powerline	8048	41	48
Powerline	8048	79	24
Powerline	8048	48	16

Range Improvement Standards

All assigned range improvements will be maintained by the permittee. When the annual grazing application is approved, in whole or in part, livestock will not be placed on an allotment or moved into pastures if permit requirements concerning range improvement maintenance are not met. Proper maintenance of the range improvements will insure that the condition of the improvements is adequate to hold livestock in a pasture and will extend the useful life of the improvements. Forest officers periodically will inspect assigned improvements for compliance with maintenance standards prior to livestock entry or movement dates. All range improvements are the property of the U.S. Government.

A permit modification will be prepared for approved projects each year. Permittees will sign a permit modification form for the project and will sign for materials furnished by the Forest. Ground disturbing activities will not be initiated by the permittee until proper clearances have been approved. Annual fence maintenance does not require approval.

A. Fences. Standards for maintenance and construction are:

1. All allotment boundary fences are to be maintained prior to livestock entering National Forest lands. Livestock will not be permitted to enter the Forest until fences have been properly maintained to keep livestock where they are placed.
2. Each permittee is responsible for the maintenance of all or a portion of an allotment boundary fence. A permittee will not be allowed to place livestock on the allotment if the neighboring permittee does not maintain their assigned allotment boundary fence.
3. Pasture fences will be maintained before moving livestock to a new pasture.

4. Old wire and steel fence posts will be removed from the Forest.
5. Broken wire will be spliced with good quality double strand, 12-1/2 gauge barbed or smooth wire.
6. Wire spacing will be similar to original spacing. The top wire height will not exceed 42 inches. The bottom wire will be smooth wire. The bottom wire will be 18 inches from the ground. The remaining wire strands will be spaced as follow, counting from the bottom wire: 18 inches, 24 inches, 32 inches, and 42 inches.
7. Wire will not be over tightened and will be stretched to remove slack.
8. Broken posts or rotten wood posts will be replaced with a steel post or a juniper or treated wood post greater than 5 inches in diameter.
9. Brace posts will be maintained in tight and serviceable condition.
10. Steel posts that have settled may need to be jacked up and possibly moved. Leaning steel posts will be straightened.
11. Gates will be maintained so they can be opened easily. Gate sticks will be 2-3 inches in diameter. Smooth wire will be used for gate loops.
12. At least 90 percent of fence stays will be sound. Replacement stays will be good quality wood, 1-1/2-inch by 3 inches in diameter. The bottom of each stay will rest on the ground. Galvanized stay wire will be used for tying stays. For 20-foot spacing between posts, three stays shall be used.
13. Missing staples and fence clips will be replaced.
14. All trees, which have fallen across the fence line will be cut and removed from the fence right-of-way.

B. Water. Issuance of this grazing permit and the permittee's acceptance of the permit does not convey ownership of a water right to the permittee(s) but allows the use of a portion of it within the terms of the appropriation. The Forest has filed for water rights on these waters with the State of Arizona. Grazing domestic livestock may not be possible without these water rights. The Forest will retain ownership of the water rights as appropriated to the United States Forest Service (USFS) for current and future grazing permittees as well as for wildlife and recreation consumptive needs. Ownership of the water rights belonging to the USFS will assure that the use of the water will be appurtenant to the land and will be available for both current and future grazing permittees.

Stock water is important for proper livestock distribution. Water must be used to demonstrate beneficial use in order to maintain water rights. If natural water is not available, the permittee may haul water to obtain proper livestock distribution. The following will be done:

1. Trick Tanks, Windmills and Water Wells.

- a. Fences around water sources and equipment shall be maintained annually to FS standards.
- b. Collection boxes, inlet pipes, and water troughs will be clean of sediment and debris before the improvement is used and during the grazing season as needed.
- c. Broken pipe will be repaired or replaced. Material not usable will be removed from the Forest and disposed of properly.
- d. Troughs that leak will be repaired. Troughs should be level. Overflow pipes should be placed to avoid creating a boggy area at the trough. Rusted out troughs need to be replaced through a permit modification.
- e. Float valves will be cleaned and set to prevent overflow. They shall be checked regularly when pasture is in use and shall contain a protective cover to prevent damage from livestock.
- f. Troughs shall have escape ramps for small mammals and birds. Escape ramps shall also be maintained.

g. Trick tank support structure and tin shall be inspected annually to insure that the improvement is sound. All damages need to be repaired.

2. Stock Tanks.

- a. Check stock tanks for seepage.
- b. As a general rule, spillways need to be free of debris and obstructions. Eroded portions need to be repaired when they exist.
- c. Tanks need to be cleaned to their original capacity whenever drought or other circumstances occur that result in the tanks being dry. Special care will be taken during cleaning to prevent future water loss. The work will be coordinated with the District Ranger prior to initiating repairs.

V. Monitoring and Evaluation

It should be recognized that monitoring is not an in depth analysis but a measure of indicators that may trigger further detailed analysis of a particular resource. Either monitoring or detailed analysis may trigger immediate corrective action on the allotment on a seasonal basis or as a change in the AMP and permit.

The following techniques to monitor grazing management:

A. UTILIZATION

Utilization should be determined according to a methodology described in "Utilization Studies and Residual Measurements". Compare actual utilization with allowable standards to determine compliance. Validation of grazing dates and stocking rates can be determined based on actual livestock use in comparison to utilization data.

Three to four places in each pasture were selected for utilization monitoring. These areas are identified on the enclosed map, and will be referred to as Key Areas.

Utilization Data will be collected from key areas in each pasture, which are identified on the enclosed key area map. Key species will be monitored in each key area for actual use. Key species for the respective key areas are:

Powerline Pasture

- Key Area #1: blue grama (*Bouteloua gracilis*), fourwing saltbush (*Atriplex canescens*)
- Key Area #2: blue grama and needleandthread (*Stipa comata*)
- Key Area #3: Narrowleaf/Fremont cottonwood, blue grama and alkali sacaton (*Sporobolus airoides*)
- Key Area #4: blue grama

Town Pasture

- Key Area #1: blue grama
- Key Area #2: blue grama, spike muhly and western wheatgrass (*Agropyron smithii*)
- Key Area #3: blue grama and sideoats grama

+IL Pasture

Key Area #1: blue grama

Key Area #2: blue grama and cottonwood

Key Area #3: blue grama, and western wheatgrass

Summer Pasture

Key Area #1: blue grama, western wheatgrass and narrowleaf cottonwood

Key Area #2: blue grama, western wheatgrass and narrowleaf cottonwood

Key Area #3: blue grama, western wheatgrass and narrowleaf cottonwood

Key Area #4: blue grama and narrowleaf cottonwood

Key areas and key species may need adjusting, based on better information, additional improvements, etc.

The combined desired utilization level, by both wildlife and livestock, of these key species in key areas is 30%. Utilization could not be expected to exactly meet 30% each year, therefore in the long-term a 25 to 35% use would be considered within the acceptable range for this analysis. If annual utilization is above 35% or trends of annual utilization are above 30%, district personnel and the permittee need to re-evaluate the annual stocking. The above ranges apply both to the key species and key areas. If utilization falls outside of these ranges, either high or low, the stocking levels and/or management will be reevaluated. If utilization of one key area or key species is above 35%, then management of that key area should be reassessed, such as salt placement, water locations, etc. The desired utilization levels of browse species is set at 45% and riparian species is set at 20% of terminal buds.

Utilization monitoring is the responsibility of the Permittee. The measurements should be taken within 10 days after the scheduled pasture move date specified in the Annual Operating Plan. The data sheets should to be turned into the District Ranger within 2 weeks of the scheduled move date. Pasture use monitoring should be documented and filed in the 2210 files. Successive monitoring data will be used in validating pasture and allotment capacities. Current information on precipitation, forage production, and/or use levels may be used to adjust annual grazing use. The permittee should also keep a copy for their records.

B. COMPOSITION AND DENSITY

To determine changes in composition and density, long-term validation will be accomplished through re-reading Parker 3 Step clusters and/or establishing Daubenmire (cover/frequency) transects as per R3 Rangeland Guide. These range clusters are suitable for determining long-term trend in vegetation and should be read before the 5th year and again the ninth or tenth year after the signature of the decision. Great changes may not occur during the 10-year period but trend indications should be detected. The trend indications gathered from transects, should be measured against the desired condition/objectives.

New clusters may need to be located within each pasture and should be established and read before the 5th year and read again the ninth or tenth year after the signature of the decision.

C. GROUND COVER

Determination of ground cover can be replicated at range clusters. In most cases, an increase in vegetation cover from baseline measures is considered as moving toward Desired Conditions (DC), a decrease is considered as not accomplishing DC. The intent is to measure the effectiveness and validate the projected changes anticipated of the chosen alternative. Data will be collected on transects during the ninth or tenth year (same as vegetation monitoring).

D. CAPACITY ESTIMATES

Objective is to determine if original capacity estimates based on desired use levels are correct for individual pastures, considering vegetation, landscape, resource conditions, and forage preference. A combination of utilization monitoring, composition and density and ground cover will be used to validate capacity estimates. The utilization monitoring, composition, density and ground cover data, yearly precipitation data from local stations and any other pertinent information should be reviewed by the District Ranger, Range and Wildlife personnel from the Forest Service, along with the permittee, between the 5th and 6th years. Due to the unpredictability of the results of the data collected, evaluations of stocking will need to be made at this time. Validation of capacity estimates may result in further adjustments in stocking rates, season of use, or both, either up or down.

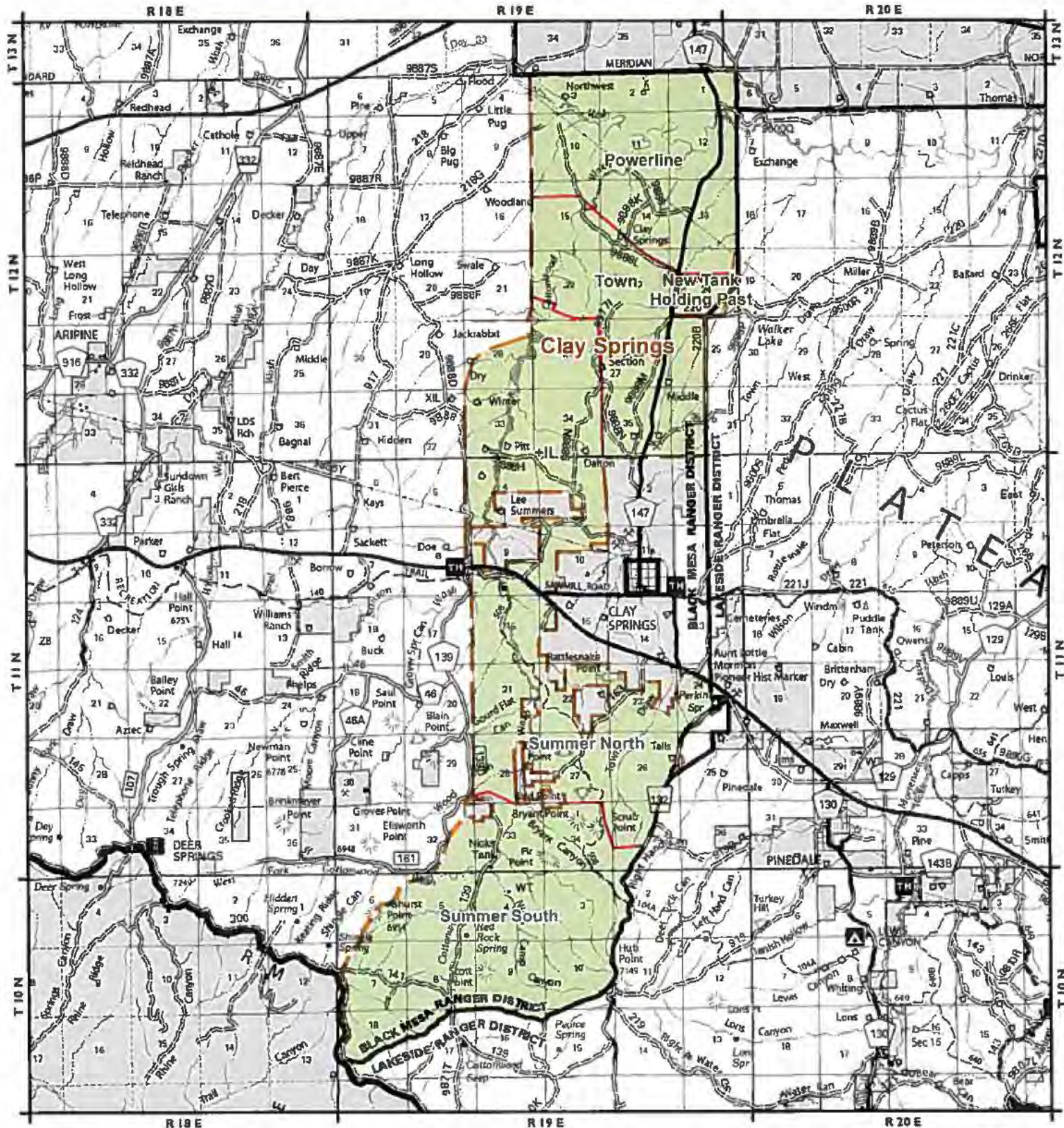
E. ACTIONS

Monitoring will be used to adjust or amend previously described actions in the decision document or AMP. Information on validation monitoring should be shared with the permittee and others concerned with the decision. If the monitoring data is not achieving or moving toward the Desired Conditions, Forest Service personnel must analyze the problem and decide on a course of action. If necessary, an ID Team may be instituted to determine the corrective action needed. Re-initiation of NEPA may not be necessary if the action is still within the scope of the original decision.



Clay Springs Allotment - General Area

Apache-Sitgreaves National Forests - Black Mesa Ranger District



0 1 2 4 Miles

Disclaimer

The USDA Forest Service uses the most current and complete data available. GIS data and product accuracy may vary. Using GIS products for purposes other than those for which they were intended may yield inaccurate or misleading results. The USDA Forest Service reserves the right to correct, update, modify, or replace GIS products without notification. This map is not a legal land line or ownership document. Public lands are subject to change and leasing, and may have access restrictions; check with local offices. Obtain permission before entering private land.

-  Non-FS Lands
-  PASTURE
-  ALLOTMENT
-  ENCLOSURE



Powerline Pasture

Key Area 1
blue grama
Atriplex canescens (Atca) four wing saltbush

Key Area 2
blue grama
Stipa comata (Stco) needle and thread

Key Area 2

Key Area 1

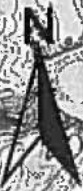
Key Area 3

Key Area 3
blue grama
Populus angustifolia (Poan) narrowleaf cottonwood
Populus fremontii (Pofr) Fremont cottonwood
Sporobolus airoides (Spai) alkali sacaton

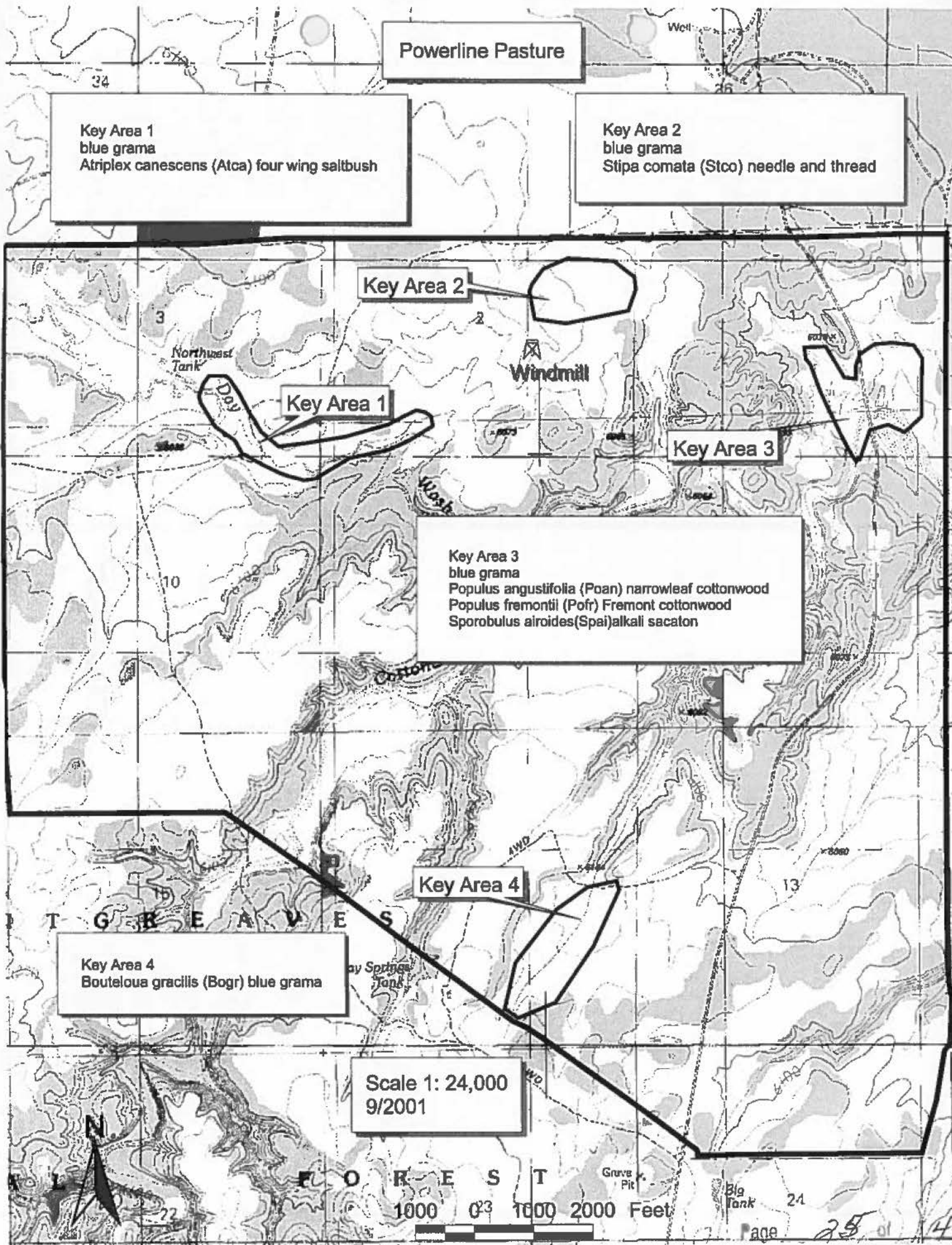
Key Area 4

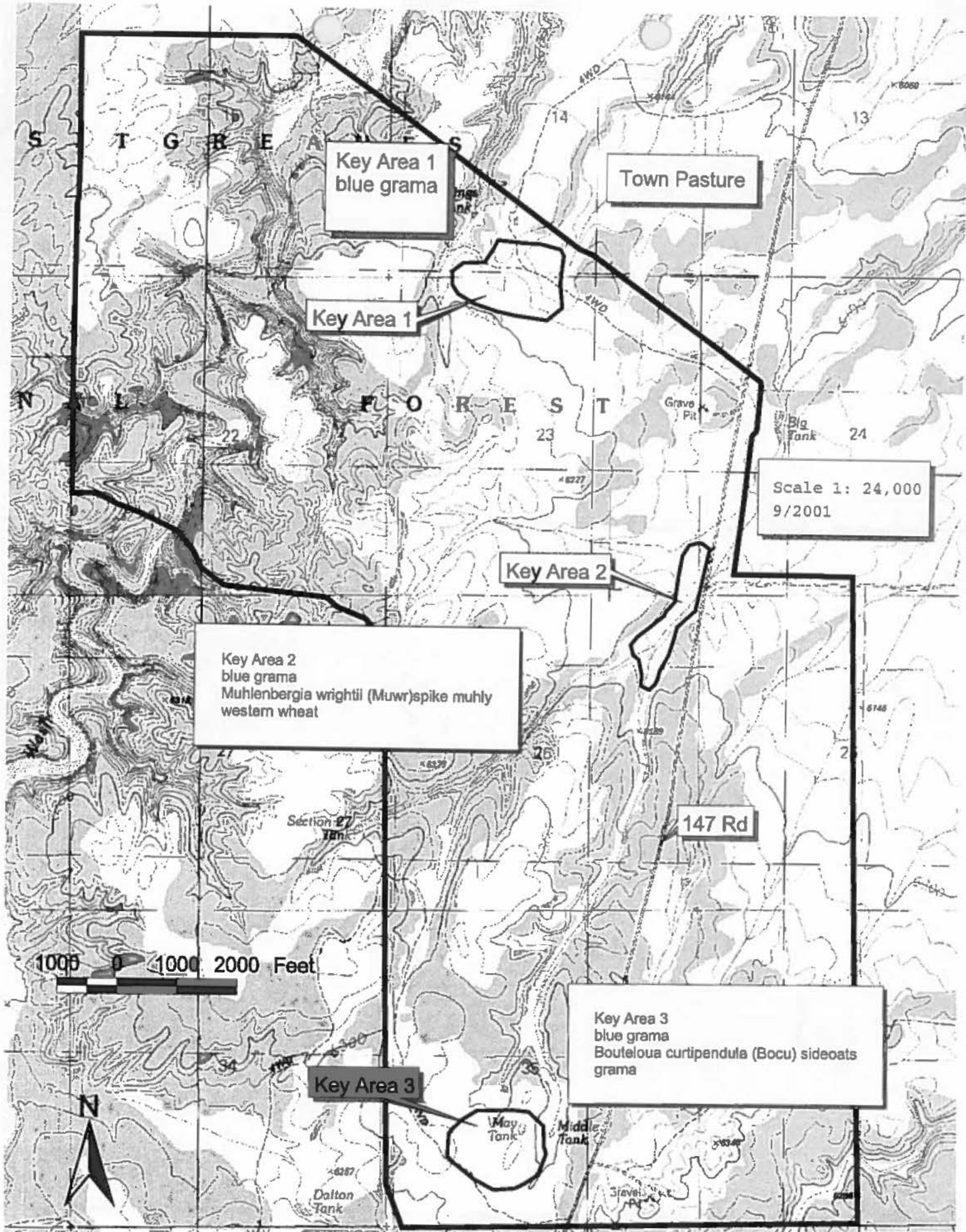
Key Area 4
Bouteloua gracilis (Bogr) blue grama

Scale 1: 24,000
9/2001



1000 0 1000 2000 Feet





Key Area 1
blue grama

Town Pasture

Key Area 1

Scale 1: 24,000
9/2001

Key Area 2

Key Area 2
blue grama
Muhlenbergia wrightii (Muwr) spike muhly
western wheat

147 Rd

1000 0 1000 2000 Feet

Key Area 3
blue grama
Bouteloua curtipendula (Bocu) sideoats
grama

Key Area 3



Scale 1: 24,000
9/2001

+ IL Pasture

Key Area 1
Bouteloua gracilis (Bogr) blue grama

Key Area 1

Key Area 2
blue grama
Fremont cottonwood
narrowleaf cottonwood

Key Area 2

Key Area 3

Key Area 3
blue grama

Key Area 4

Key Area 4
blue grama
Agropyron smithii (agsm) western wheat

29

28

27

32

33

34

35

5

9

Dry Tank

XIL Tank

Winter Tank

Cottonwood

Cottonwood No 2 Tank

Section 27 Tank

May Tank

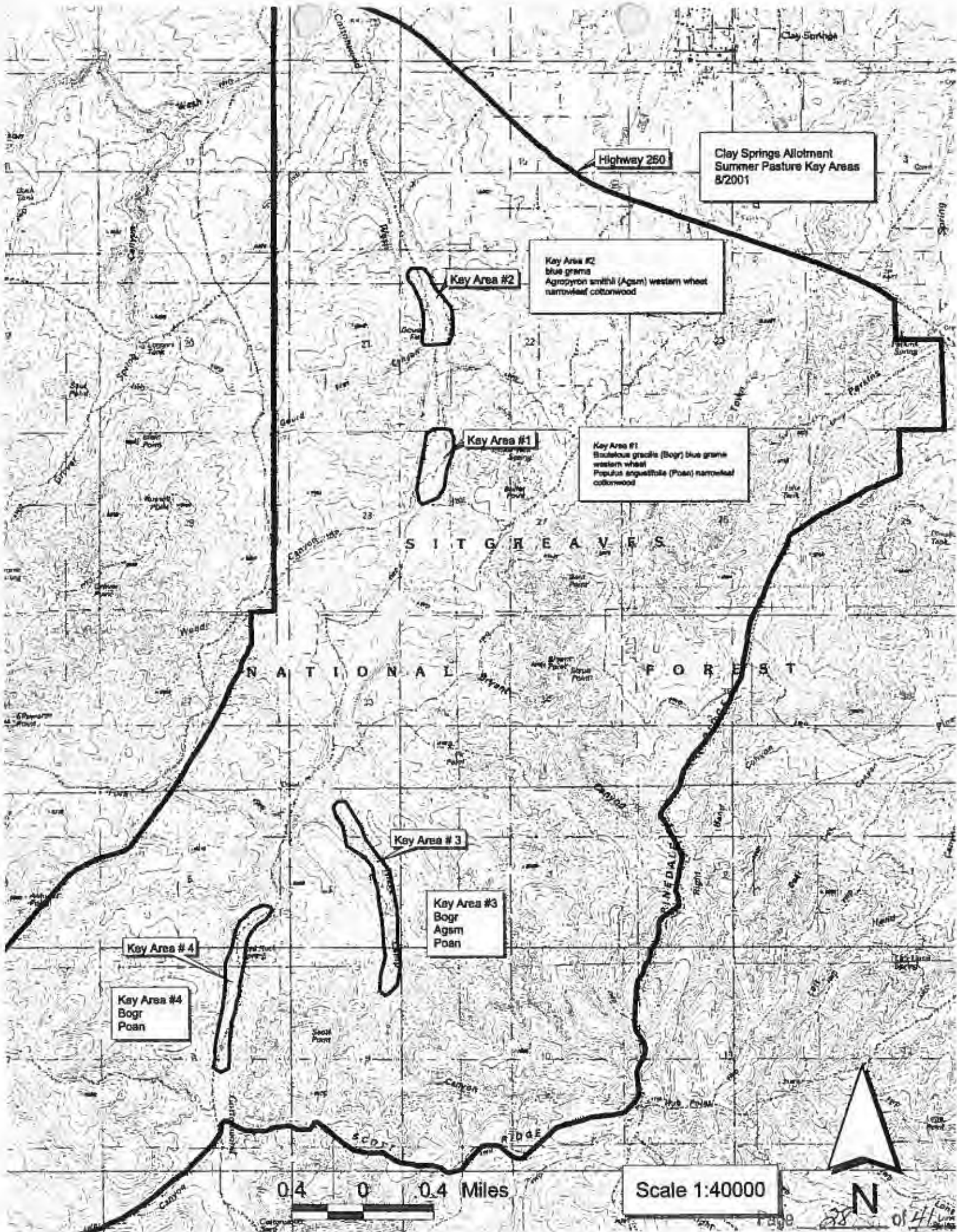
D Tank

Gravel Pits



1000 0 1000 2000 Feet

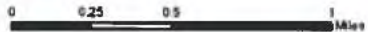
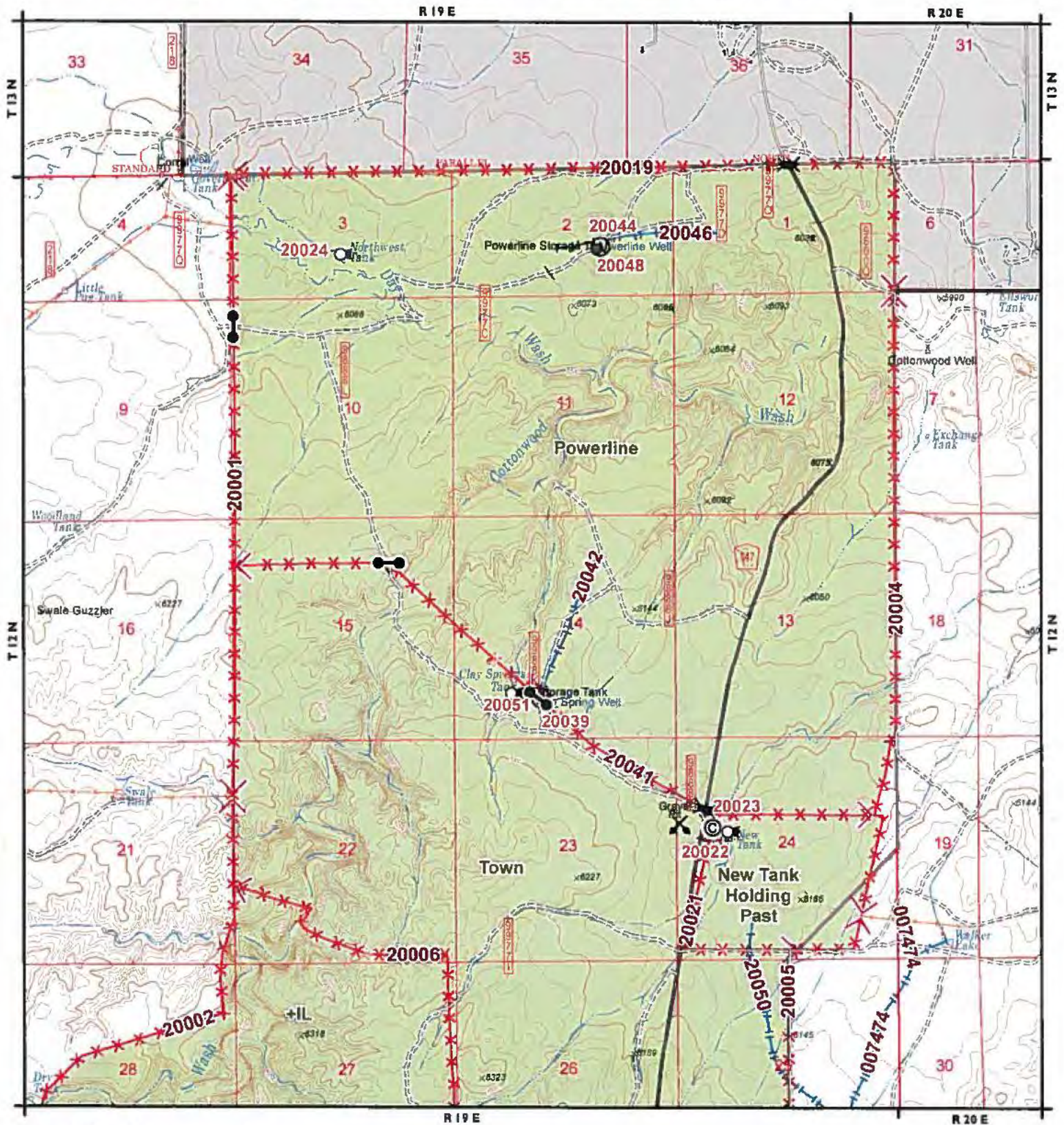






Clay Springs Allotment - Powerline Pasture

Apache-Sitgreaves National Forests - Black Mesa Ranger District



Disclaimer

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Map Author: srichardson01 12/12/2019

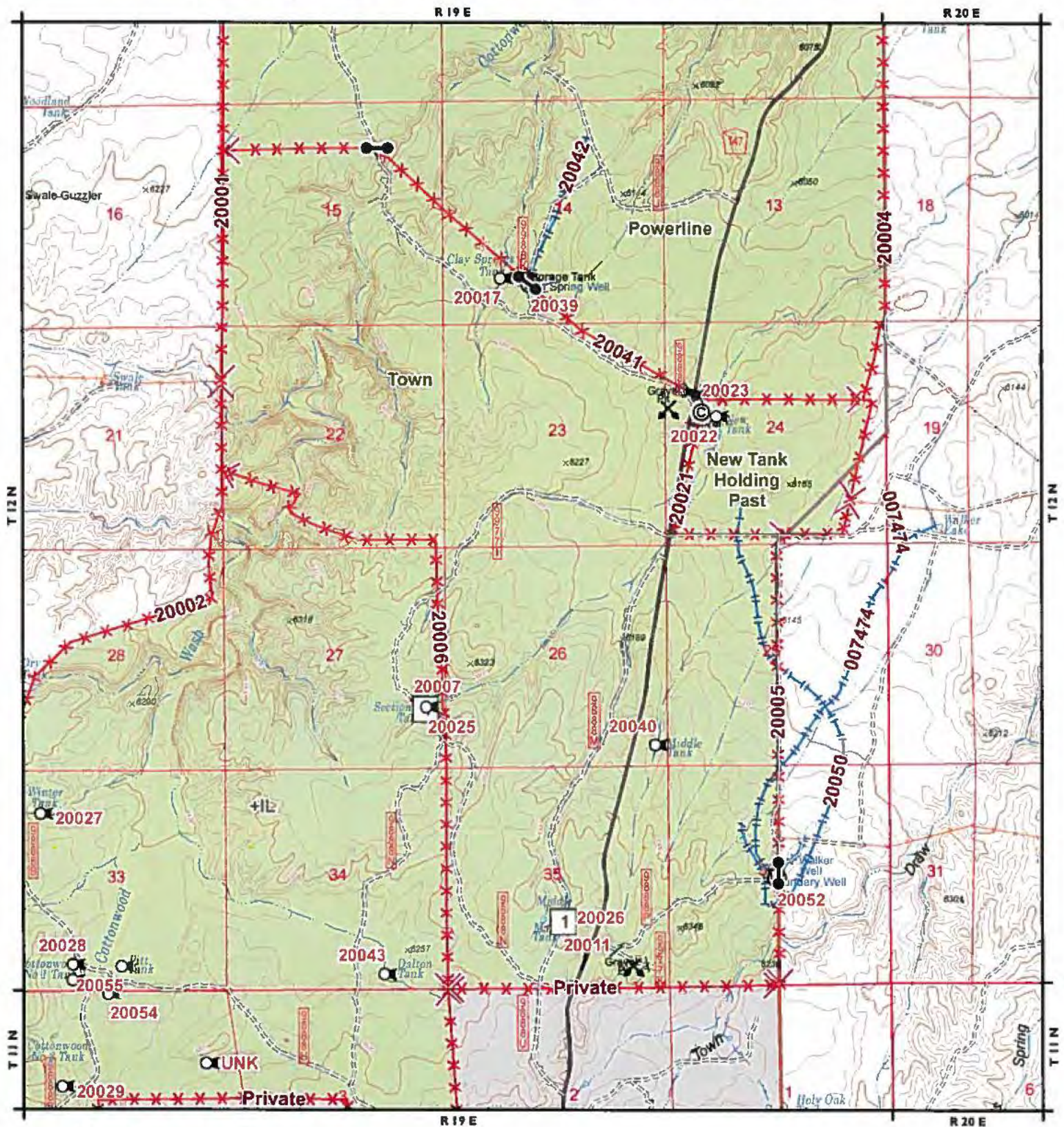
- | | | |
|-------------------|-------------|--------------------|
| Non-FS Lands | Cattleguard | Pit Tank |
| Pasture | Corral | Water Storage Tank |
| FENCE | Gate, Wire | WATERLOT |
| HANDLING_FACILITY | Gravel Pit | WELL |
| WATER_SYSTEM | | |





Clay Springs Allotment - Town & New Tank Holding Pasture

Apache-Sitgreaves National Forests - Black Mesa Ranger District



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Map Author: richardson01 12/12/2019

Non-FS Lands

Pasture

FENCE

HANDLING_FACILITY

WATER_SYSTEM

Cattleguard

Corral

Gate Wire

Gravel Pit

Pit Tank

Water Storage Tank

WATERLOT

WELL

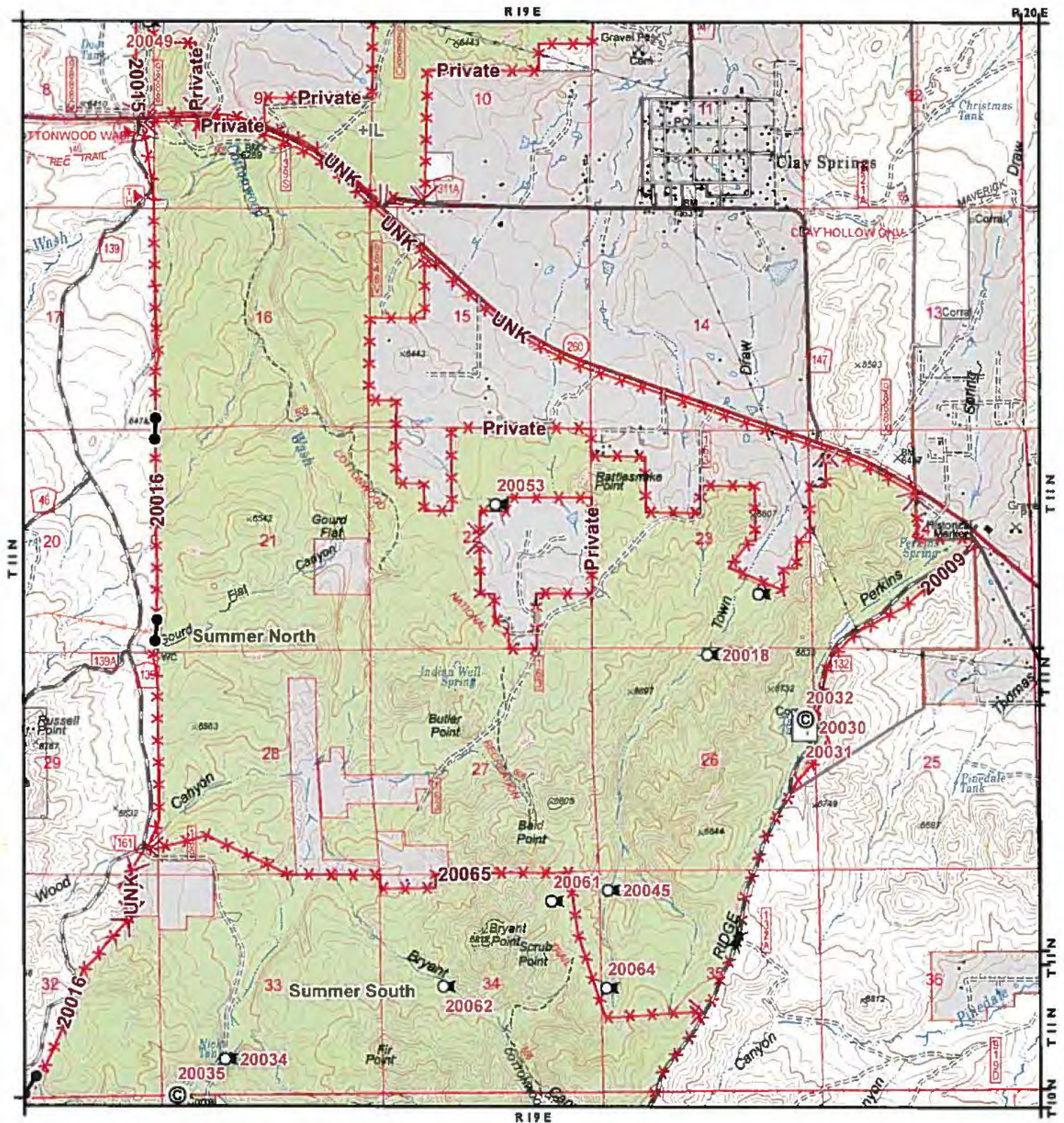
ARIZONA
Apache County





Clay Springs Allotment - Summer North Pasture

Apache-Sitgreaves National Forests - Black Mesa Ranger District



0 0.25 0.5 1 Miles

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Map Author: srichardson01 12/12/2019

Non-FS Lands

Pasture

FENCE

HANDLING_FACILITY

WATER_SYSTEM

Cattleguard

Corral

Gate, Wire

Gravel Pit

Pit Tank

Water Storage Tank

WATERLOT

WELL



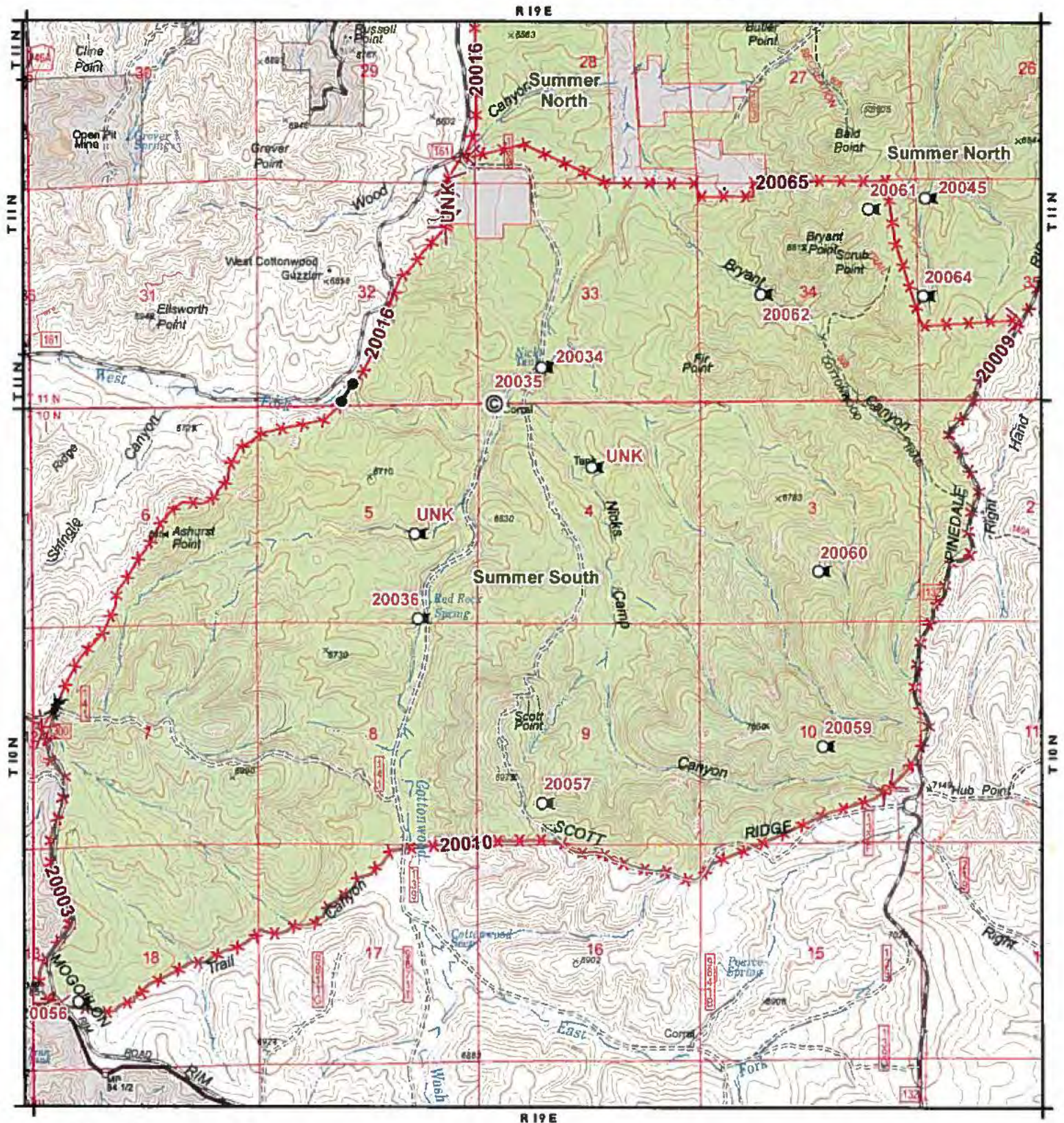
ARIZONA
Apache County





Clay Springs Allotment - Summer South Pasture

Apache-Sitgreaves National Forests - Black Mesa Ranger District



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Map Author: srichardson01 12/12/2019

- | | | | | | |
|--|-------------------|--|-------------|--|--------------------|
| | Non-FS Lands | | Cattleguard | | Pit Tank |
| | Pasture | | Corral | | Water Storage Tank |
| | FENCE | | Gate, Wire | | WATERLOT |
| | HANDLING FACILITY | | Gravel Pit | | WELL |
| | WATER_SYSTEM | | | | |

ARIZONA

Apache County

