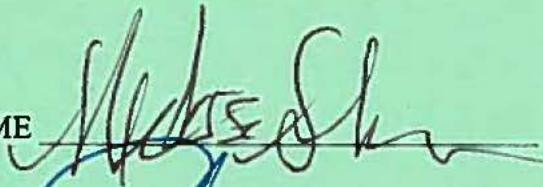


**ALLOTMENT MANAGEMENT PLAN  
FOR THE  
CHEVELON CANYON ALLOTMENT  
BLACK MESA RANGER DISTRICT  
APACHE - SITGREAVES NATIONAL FORESTS**

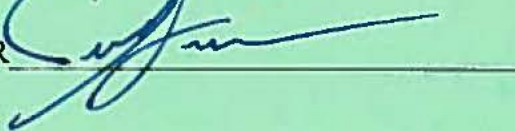
PERMITTEE NAME



DATE:

6/24/24

DISTRICT RANGER



DATE:

6/24/24

## **I. INTRODUCTION**

The Chevelon Canyon Allotment consists of 43,303 acres and is located approximately 35 miles south of Winslow, Arizona, within portions of Townships 12 through 14 N and Ranges 14 and 15E, Gila and Salt River Meridian (G&SRM), Arizona. Elevations range from 6,200 to 7,700 feet. The topography is generally characterized by flat to moderate ridges that run north to south. Steep slopes do occur, associated with Alder and Chevelon Canyons, and Circle Bar Draw. The area is generally covered with trees, with the dominant overstory species being ponderosa pine, pinyon and juniper.

This allotment management plan (AMP) shall set forth the objectives, management requirements, improvements needed and monitoring and evaluation standards for the Chevelon Canyon Allotment as outlined in the Forest Plan and the Decision Notice signed by the District Ranger on January 13, 2000.

## **II. OBJECTIVES**

### **A. Range/Vegetation**

- On full capacity range, the ponderosa pine and mixed conifer habitats are in fair or better range condition, riparian habitat is in good or better range condition, and the pinyon/juniper woodland are in fair or better range condition.
- Ponderosa pine, mixed conifer, and pinyon/juniper Vegetative Structural Stages have an even distribution across the landscape.
- Cool season grass and forb plants on full capacity range make up at least 50% of the herbaceous ground cover (given appropriate soil and climatic conditions). Cool season grass species are diverse within each habitat type.

### **B. Browse**

- Browse stands are well distributed and are healthy. Browse stands contain the more desirable shrub species, such as cliffrose, ceanothus, fourwing saltbush, winterfat and mountain mahogany. Browse growth forms not "clubbed" in appearance, and trees do not exhibit shrub form. Browse utilization is not more than 40% of the terminal ends. Objective is to achieve in 10 years after full implementation.

**C. Watershed and Soils**

- Satisfactory soil conditions are maintained. Impaired soil conditions are in an upward trend within one decade on all areas where the potential exists to restore soil productivity and hydrologic functions. Soils have the ability to accept, hold, and release water and nutrients. Soils have the ability to resist erosion and degradation because of adequate effective ground cover.
- Water Quality meets or exceeds Arizona Department of Environmental Quality requirement. Upland and riparian areas do not contribute to degraded water quality.
- Floodplain and channel characteristics are adequate to dissipate energy during high stream-flow events. Streambanks and channels are stable, with few headcuts.
- Watershed conditions on the fifth-code watershed are in satisfactory condition by 2020.

**D. Riparian**

- Riparian areas are in a Proper Functioning Condition and meet Forest Plan guidelines.
- Multi-Storied woody species composition is diverse with at least two deciduous, broadleaf species present in the plant community.
- Grasses and sedges have at least a four-inch stubble height in riparian areas, and exhibit high vigor and diverse composition. Streambank vegetation is comprised of plants able to withstand high stream-flow events. Ponds, springs, seeps and wet meadows exhibit healthy, vigorous plant communities.

**E. Wildlife**

- Have 40% of the available forage on this allotment available for wild ungulates. 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).
- Wildlife populations are consistent with the land's capability. A diverse mosaic of habitats for healthy and balanced wildlife populations is present. Threatened, endangered and sensitive wildlife species have an abundant, widely spread prey base. Prey species have habitats with good hiding cover and forage availability.

### III. MANAGEMENT

There are two sections for the management of this allotment, a short-term plan and long-term plan.

In the short term, the Term Grazing permit will authorize 109 cow/calf pairs grazing from June 15 to October 15, for a total of 436 animal unit months (AUMS). Sand Point (167 AUMS), Circle Bar (161 AUMS), and Breed (108 AUMS) pastures will be grazed with a three pasture, deferred grazing system, and an allowable grazing utilization of 25%. Vigil-Durfee Pasture will not be grazed due to a lack of water.

When water is furnished into the Vigil-Durfee as or near what was planned, the Term Grazing Permit will be modified to permit 171 cow/calf pairs for the same season of use (June 15 to October 15). A four pasture, deferred grazing system and a grazing utilization standard of 25% in key areas will be implemented.

The desired utilization levels by both wildlife and livestock will be as follows: 25% of herbaceous forage species and 40% 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 AOI 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 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:

Extend the Dye Well pipeline approximately 16.8 miles into the Vigil-Durfee Pasture. This will include 40,000 gallons of storage and 16 water troughs.

Implement thinning and individual tree pushing on 2,516 acres of pinyon-juniper woodland. Forest Service will be responsible for all the fuelwooding, heritage clearances, block layout and ½ of the acres of pushing. The permittee will be responsible for the other half of the pushing.

Maintain 496 acres of existing openings, to prevent pinyon –juniper reinvasion. Forest Service will be responsible for the block layout and heritage surveys (if necessary) and ½ of the maintenance.

Compartment	Stand	Current VSS	Desired VSS	Acres	Treatment
4008	15	5C	4A	412	Push or Fuelwood
4008	17	5C	2A	65	Push or Fuelwood
4009	9	5B	4A	243	Push or Fuelwood
4010	2	5C	3A	38	Push or Fuelwood
4010	4	5C	3A	152	Push or Fuelwood
4011	4	5B	2A	136	Push or Fuelwood
4011	8	5C	4A	437	Push or Fuelwood
4014	3	5B	4A	81	Push or Fuelwood
4014	7	5C	4A	38	Push or Fuelwood
4015	1	5C	4A	674	Push or Fuelwood
4015	5	5C	2A	110	Push or Fuelwood
4016	3	5B	2B	45	Push or Fuelwood
4016	4	5C	2A	43	Push or Fuelwood
4016	7	5C	4A	42	Push or Fuelwood
4008	16	grassland	grassland	69	Maintain
4009	1	grassland	grassland	42	Maintain
4009	2	grassland	grassland	44	Maintain
4009	6	grassland	grassland	219	Maintain
4010	1	grassland	grassland	122	Maintain

**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.
  - 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 will be used 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.

Several places in each pasture will be selected for utilization monitoring. These areas will be referred to as Key Areas. Utilization data will be collected from key areas in each pasture. Key species will be monitored in each key area for actual use. Key area maps may be obtained from the district Range Staff.

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

The desired combined (wildlife and livestock) utilization of these key species (herbaceous) in key areas is 25%. Utilization could not be expected to exactly meet 30% each year, therefore in the long-term a 20% to 30% use would be considered within the acceptable range for this analysis. If annual utilization is above 30% or trends of annual utilization are above 25%, 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 30%, 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 40% of the terminal ends.

The permittee is encouraged to conduct utilization monitoring, whether it be done by themselves or with the Forest Service. The measurements should be taken within 2 weeks after the scheduled pasture move date specified in the Annual Operating Plan. Pasture use monitoring should be documented and filed in 2210/2230. 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 approximately every 5 years. Great changes may not occur during the 5-year period but trend indications should be detected. The trend indications gathered from transects, should be measured against the desired condition/objectives.

New clusters or transects may be located within each pasture using various methods that may be scientifically acceptable at the time.

#### **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. Ground cover data will be recorded with the composition and density data approximately every five years.

#### **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, periodically to validate existing stocking and conditions. 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.

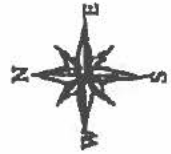
**E. ACTIONS**

Monitoring will be used to adjust or amend previously described actions in the decision document or AMP. Information on 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.

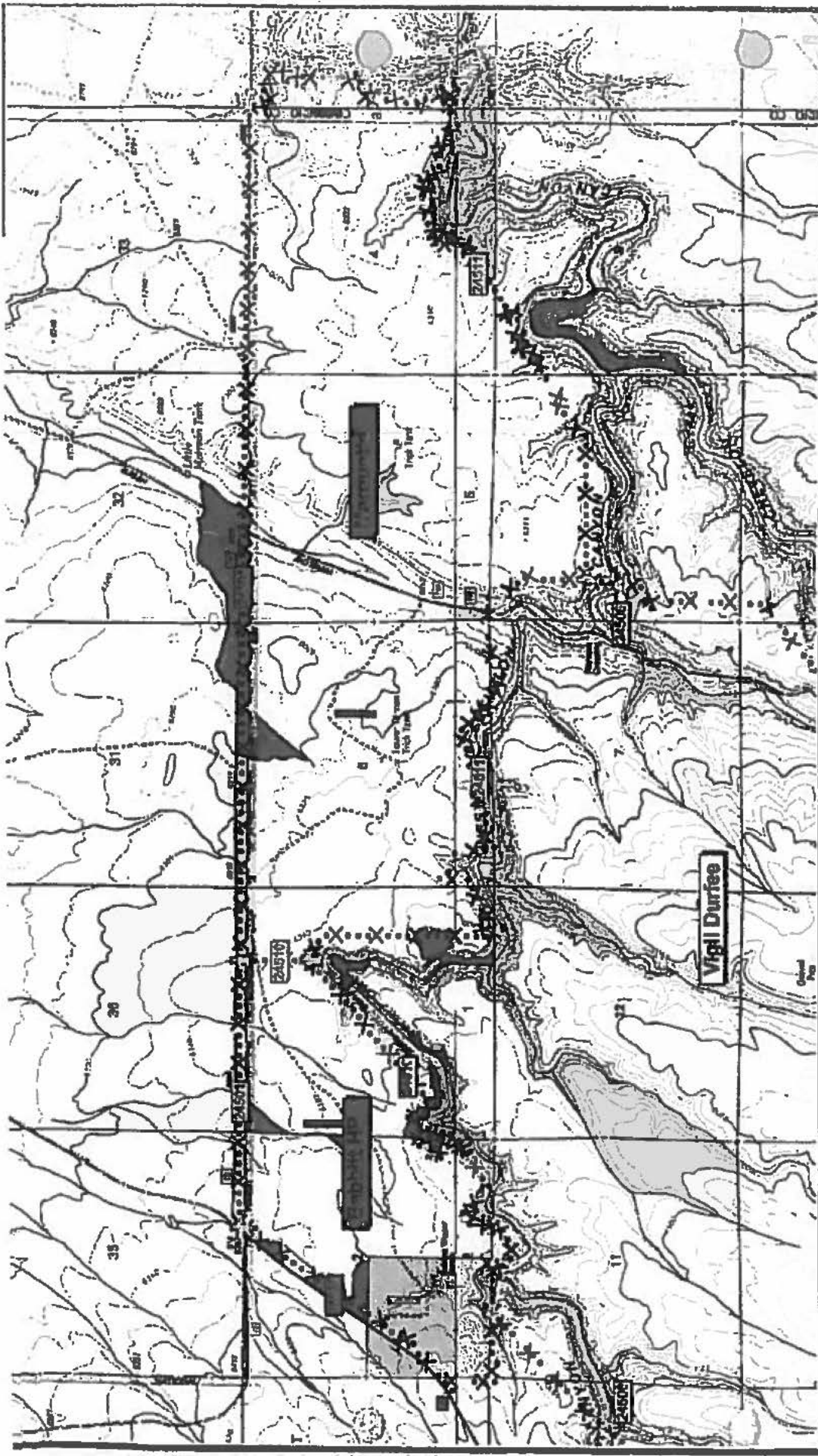
Failure to comply, by the permittee, with the requirements of this Allotment Management Plan may result in suspension or cancellation of their Term Grazing Permit.

INFRA Number	Structure Name	miles	UTM Easting	UTM Northing	Responsibility
24501	North Forest Boundary Fence	4.54			CHEV Canyon permittee
24503	Alder Holding Pasture Fence	1.75			CHEV Canyon permittee
24504	East Vigil-Durfee Fence	8.11			CHEV Canyon permittee
24505	Mormon Crossing water gap				CHEV Canyon permittee
24507	Vigil-Durfee West Allotment Fence	5.02			CHEV Canyon permittee
24508	West Chev water gap				CHEV Canyon permittee
24509	Vigil Durfee - Sand Point Division Fence	2.98			CHEV Canyon permittee
24510	Babbitt HP Fence	3.77			CHEV Canyon permittee
24511	Vigil Durfee- Marquette Division Fence	5.92			CHEV Canyon permittee
24512	Breed&Sand Point West Allot Boundary	8.18			CHEV Canyon permittee
24513	Breed- Circle Bar Division Fence	3.37			CHEV Canyon permittee
24514	Sand Point- Breed East Allot Boundary	7.67			CHEV Canyon permittee
24515	Alder Corrals				CHEV Canyon permittee
24518	Breed Spring		511748	3814217	CHEV Canyon permittee
24517	Noisy Tank		512337	3818868	CHEV Canyon permittee
24518	Least Minute Tank		513927	3827933	CHEV Canyon permittee
24519	Durfee Tank		518243	3826574	CHEV Canyon permittee
24520	Mistake Tank		513128	3823871	CHEV Canyon permittee
24521	Outlet Tank		512717	3821164	CHEV Canyon permittee
24522	Sand Point Tank #1		510038	3817659	CHEV Canyon permittee
24523	Sand Point Tank #2		509953	3818713	CHEV Canyon permittee
24524	Pit Tank #1 117 rd		505043	3807287	CHEV Canyon permittee
24525	Pit Tank #2 117 rd		505088	3807451	CHEV Canyon permittee
24528	Pit Tank #3 117 rd		505578	3809050	CHEV Canyon permittee
24527	Pit Tank #4 117 rd		508284	3809994	CHEV Canyon permittee
24528	Pit Tank #5 117 rd		506564	3811074	CHEV Canyon permittee
24529	Pit Tank #6 117 rd		507106	3812077	CHEV Canyon permittee
24530	Pit Tank #7 117 rd		507436	3812426	CHEV Canyon permittee
24531	Pit Tank #8 117 rd		507440	3812947	CHEV Canyon permittee
24532	Pit Tank #1 169 rd		508150	3806910	CHEV Canyon permittee
24533	Pit Tank #2 169 rd		507635	3806483	CHEV Canyon permittee
24534	Pit Tank #3 169 rd		509534	3808752	CHEV Canyon permittee
24535	Pit Tank #4 169 rd		509734	3809070	CHEV Canyon permittee
24536	Pit Tank #5 169 rd		509690	3810148	CHEV Canyon permittee
24537	Pit Tank #6 169 rd		510263	3810782	CHEV Canyon permittee
24538	Pit Tank #7 169 rd		511588	3814899	CHEV Canyon permittee
24539	Pit Tank #1 180 rd		508021	3805818	CHEV Canyon permittee
24540	Pit Tank #2 180 rd		508967	3806761	CHEV Canyon permittee
24541	Pit Tank #3 180 rd		509570	3806642	CHEV Canyon permittee
24542	Pit Tank #4 180 rd		509672	3806503	CHEV Canyon permittee
24543	Pit Tank #5 180 rd		510368	3806825	CHEV Canyon permittee
24544	Pit Tank #6 180 rd		510918	3807543	CHEV Canyon permittee
24545	Pit Tank #7 180 rd		511049	3807921	CHEV Canyon permittee
24546	Breed - Sandpoint Pasture Division Fence	3.97			CHEV Canyon permittee
24547	Nagel Corral		508431	3812977	CHEV Canyon permittee
24548	Nagel Holding Pasture Fence	2.64			CHEV Canyon permittee

24549	Circle Bar West Allotment Fence	5.88			CHEV Canyon permittee
24550	Circle Bar South Allotment Fence	3.9			CHEV Canyon permittee
24551	Circle Bar East Allotment Fence	4.63			CHEV Canyon permittee
24552	Dye Ranch Well		508170	3813015	AZ G&F Department
24557	Pipeline trough #1		508369	3813848	CHEV Canyon permittee
24558	Pipeline trough #2		508319	3815811	CHEV Canyon permittee
24559	Pipeline trough #3		509465	3815012	CHEV Canyon permittee
24560	Pipeline trough #4		508092	3817087	CHEV Canyon permittee
24561	Pipeline trough #5		509291	3818533	CHEV Canyon permittee
24562	Pipeline trough #6		509258	3818577	CHEV Canyon permittee
24563	Pipeline trough #7		509242	3821354	CHEV Canyon permittee
24564	Pipeline trough #8		509603	3822204	CHEV Canyon permittee
24565	Pipeline trough #9		509838	3819094	CHEV Canyon permittee
24566	Pipeline trough #10		510312	3818708	CHEV Canyon permittee
24567	Pipeline trough #11		509955	3817051	CHEV Canyon permittee
24568	Pipeline trough #12		509185	3812279	CHEV Canyon permittee
24569	Pipeline trough #13		509198	3812485	CHEV Canyon permittee
24570	Pipeline trough #14		513740	3820140	CHEV Canyon permittee
24571	Dye Storage Tank		507618	3813301	CHEV Canyon permittee
24575	Pit Tank # 8 180 rd		510973	3808507	CHEV Canyon permittee
24576	Pit Tank # 9 180 rd		512052	3809788	CHEV Canyon permittee
24577	Pit Tank # 1 119 rd		512222	3810367	CHEV Canyon permittee
24578	Pit Tank # 1 100 rd		506662	3811237	CHEV Canyon permittee
24579	Pit Tank # 2 100 rd		509652	3811844	CHEV Canyon permittee
24580	Pit Tank # 8 169 rd		514019	3822495	CHEV Canyon permittee
24581	Pit Tank # 1 213 rd		512285	3816099	CHEV Canyon permittee
24582	Pit Tank # 2 213 rd		511828	3816482	CHEV Canyon permittee
24583	Pit Tank # 3 213 rd		511848	3817931	CHEV Canyon permittee
24584	Pit Tank # 4 213 rd		511859	3818172	CHEV Canyon permittee
24585	Pit Tank # 5 213rd		512020	3818589	CHEV Canyon permittee
24586	Pit Tank # 6 213 rd		512012	3818372	CHEV Canyon permittee
24587	Pit Tank # 7 213 rd		512077	3820424	CHEV Canyon permittee
24588	Pit Tank # 8 213 rd		512092	3820763	CHEV Canyon permittee
24589	Pit Tank # 9 213 rd		512320	3821389	CHEV Canyon permittee
24590	Pit Tank # 1 116 rd		508412	3814625	CHEV Canyon permittee
24591	Pit Tank # 2 116 rd		508458	3814646	CHEV Canyon permittee
24592	Pit Tank Alder		509287	3818010	CHEV Canyon permittee
24593	Pit Tank Powerline		509838	3818895	CHEV Canyon permittee
24595	Wheat Flat Dam		514490	3827430	CHEV Canyon permittee
24596	Dye Ranch Spring		508284	3812917	CHEV Canyon permittee
24597	Chill Spring		504553	3808494	CHEV Canyon permittee
24598	Dye Pipeline - Well to Storage	0.43			CHEV Canyon permittee
24599	Dye Pipeline - East Leg	7.33			CHEV Canyon permittee
24600	Dye Pipeline - West Leg	6.96			CHEV Canyon permittee
24601	Dye Pipeline Lateral A	0.56			CHEV Canyon permittee
24602	Dye Pipeline Lateral B	1.12			CHEV Canyon permittee



Map Scale = 1: 35,000



**Disclaimer Statement**  
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 prepared may yield inaccurate or misleading results. The USDA Forest Service reserves the right to amend, update, modify, or replace GIS products without notification. This map is not a legal land title or ownership document. Public lands are subject to change and leasing, and may have access restrictions; check with local offices. Check publications before entering private land.

Map Prepared By: S. Richardson Date: 03/05/2003  
 Digitized by: *april@montana.gov*  
 Approved by: Babbitt Improvements Unit  
 Approved by: Marquette Improvements Unit

## Chevelon Canyon Allotment Black Mesa R. D. Apache-Sitgreaves N.F.'s Range Improvements - Marquette & Babbitt Pastures Vigil Durfee

**Map Legend:**  
Improvements (shaded in legend not to scale with symbols on map)

X--- Fence	▲ Well
----- Improved District	○ Spring
▨ Pasture	⊖ Stock Tank
* Contour	⊕ Vehicle District
--- Old	⊖ Trail Tank
○ Core	△ Trough
▭ Watered	⊕ Water Storage Tank
■ Water Storage Tank	⊖ Water Cist
+	Change in Range Improvement & Range Perimeter
▨	Range Improvement # 2555
▨	Perimeter
▨	Other Improvements





Map Scale = 1: 35,000

The USDA Forest Service and the land owner and contractor are not responsible for any errors or omissions in this map. The USDA Forest Service reserves the right to amend, modify, or change this product without notification. This map is not a legal document and should not be used for any legal purposes. Check points before any other points.

Map Prepared by: J. Robertson, Date: 03/09/02  
 Title: Vigil Durfee Improvements  
 Project: Vigil Durfee Improvements 11 a & B layout

### Chevelon Canyon Allotment Black Mesa R. D. Apache-Sitgreaves N.F.'s Range Improvements - Vigil-Durfee Pasture Map 2 of 2

**Map Legend:**  
 Improvements (Points to be improved are in circles with symbols on map)

X... Fence	Wet
..... Annual Shrub	Spring
..... Pinyon	Shrub Tree
X... Callery	Woods Clear
... Oak	Thick Tree
○... Cedar	Tree
□... Walnut	Water Storage Tank
■... Pinyon Storage Tank	Water Cist

+ Change in Range Improvements  
 ○ Range Improvement 1  
 ○ Range Improvement 2  
 ○ Other Improvements



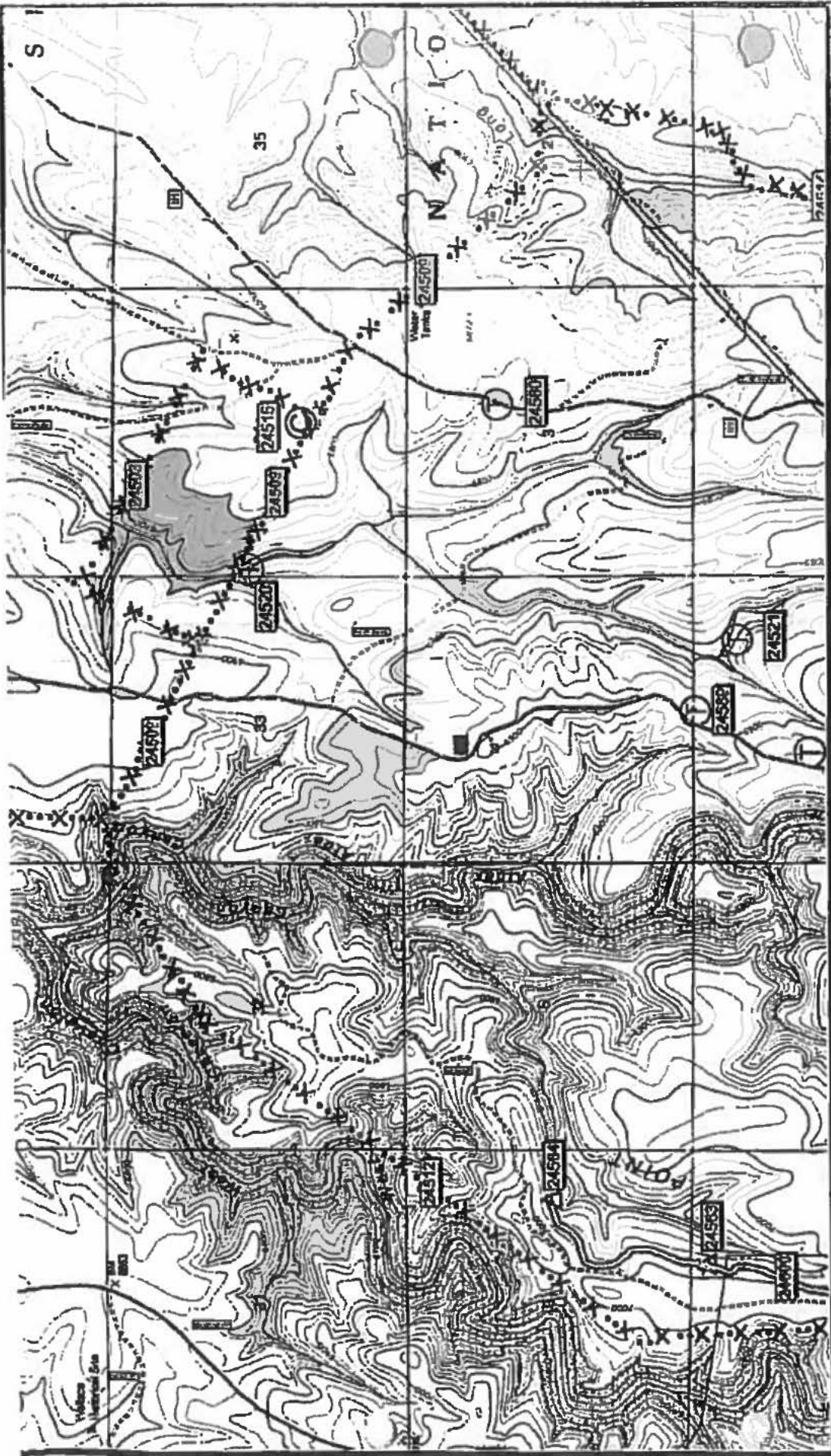
Map Scale = 1: 30,000

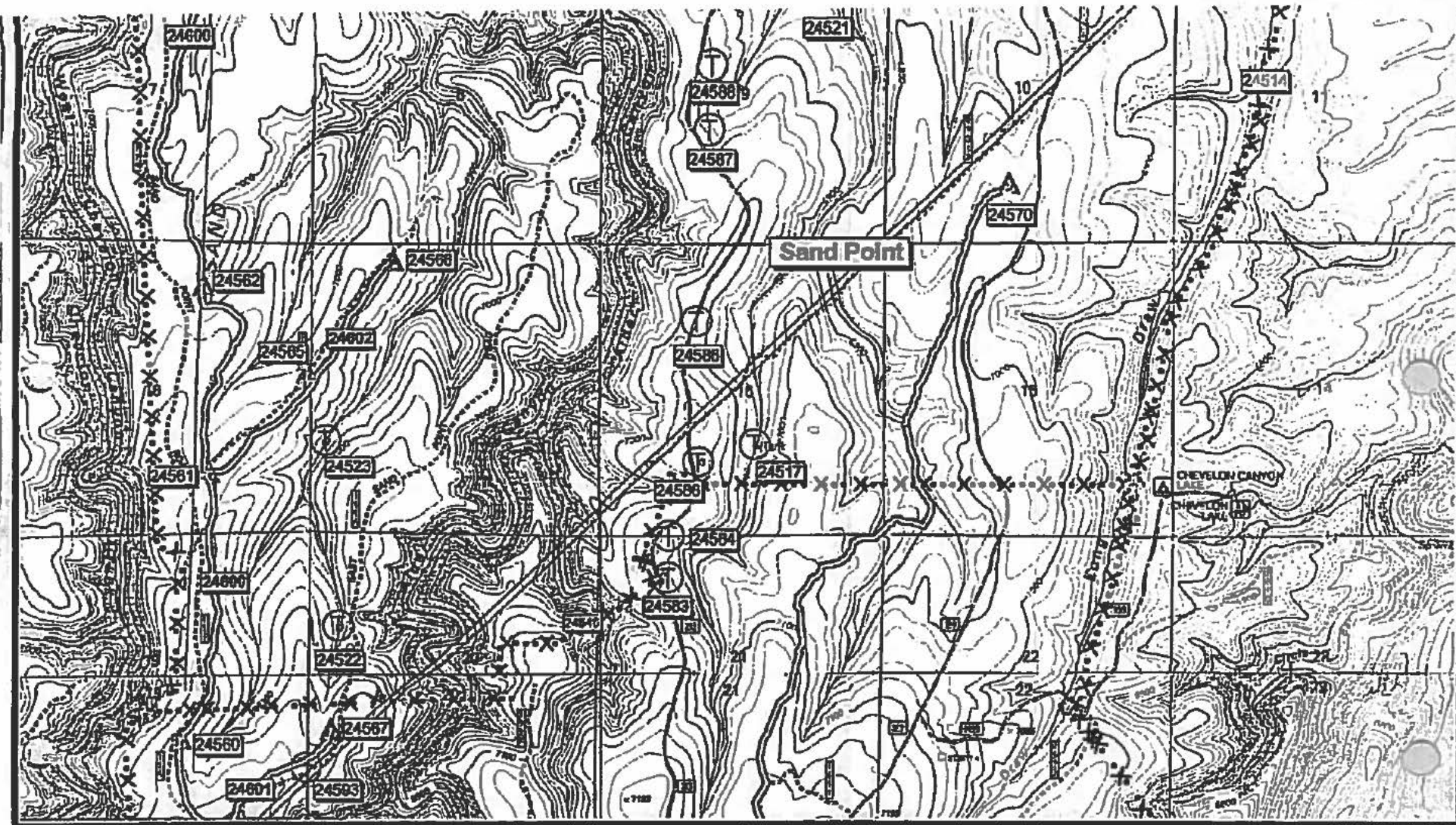
**Disclaimer:**  
The USDA Forest Service uses the most current and complete data available. Our data and products are not intended to be used for purposes other than those for which they were prepared. Forest Service products are not intended to be used for liability or insurance purposes without consultation. This map is not a legal land title or easement document. Public lands are subject to change and benefits and may have been established since the last update. Certain portions may be subject to future action.  
Map Prepared By: S. Richardson Date: 03/04/2003  
Approved: [Signature] Date: 03/04/2003  
Supplemental Improvements 11.00 (R) layout

**Chevelon Canyon Allotment  
Black Mesa R. D.  
Apache-Sitgreaves N.F.'s  
Range Improvements -  
Sandpoint Pasture  
Map 1 of 2**

**Map Legend:**

Improvements (symbols to legend not to scale with appropriate on map)	
X... Fence	A... Well
... Bound Stone	... Camp
... Pasture	... Stock Tank
*... Contour	... Wildlife Corridor
... Gate	... Stock Tank
... Well	... Trap
... Water	... Water Storage Tank
... Pasture Storage Tank	... Water Cistern
+	Change in Perimeter
...	Range Improvements
...	Range Improvements
...	Other Improvements





**Map Legend:**  
(Symbols in legend not to scale with symbols on map)

X--- Fence	⊙ Well
==== Natural Barrier	⊖ Spring
==== Pipeline	⊕ Check Tank
* Collapsant	⊗ Wellbore Quarter
⊙ Gate	⊖ Trough Tank
⊙ Canal	⊕ Trough
□ Waterlot	⊕ Water Storage Tank
■ Future Storage Tank	⊗ Water Stop

⊕ Change in Range Improvement # along Perimeter

Range Improvement # Perimeter      Range Improvement # Other Improvements

**Chevelon Canyon Allotment  
Black Mesa R. D.  
Apache-Sitgreaves N.F.'s  
Range Improvements -  
Sandpoint Pasture  
Map 2 of 2**

**Disclaimer Statement:**  
The USGS 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 USGS Forest Service reserves the right to correct, update, modify, or replace GIS products without notification. This map is not a legal land title 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.

Map Prepared By: J. Richardson Date: 03/26/2003  
[webdtd.usgs.gov/imap/improvements.asp](http://webdtd.usgs.gov/imap/improvements.asp)  
 National Improvement 11 x 8 (2) layout



Map Scale = 1: 30,000



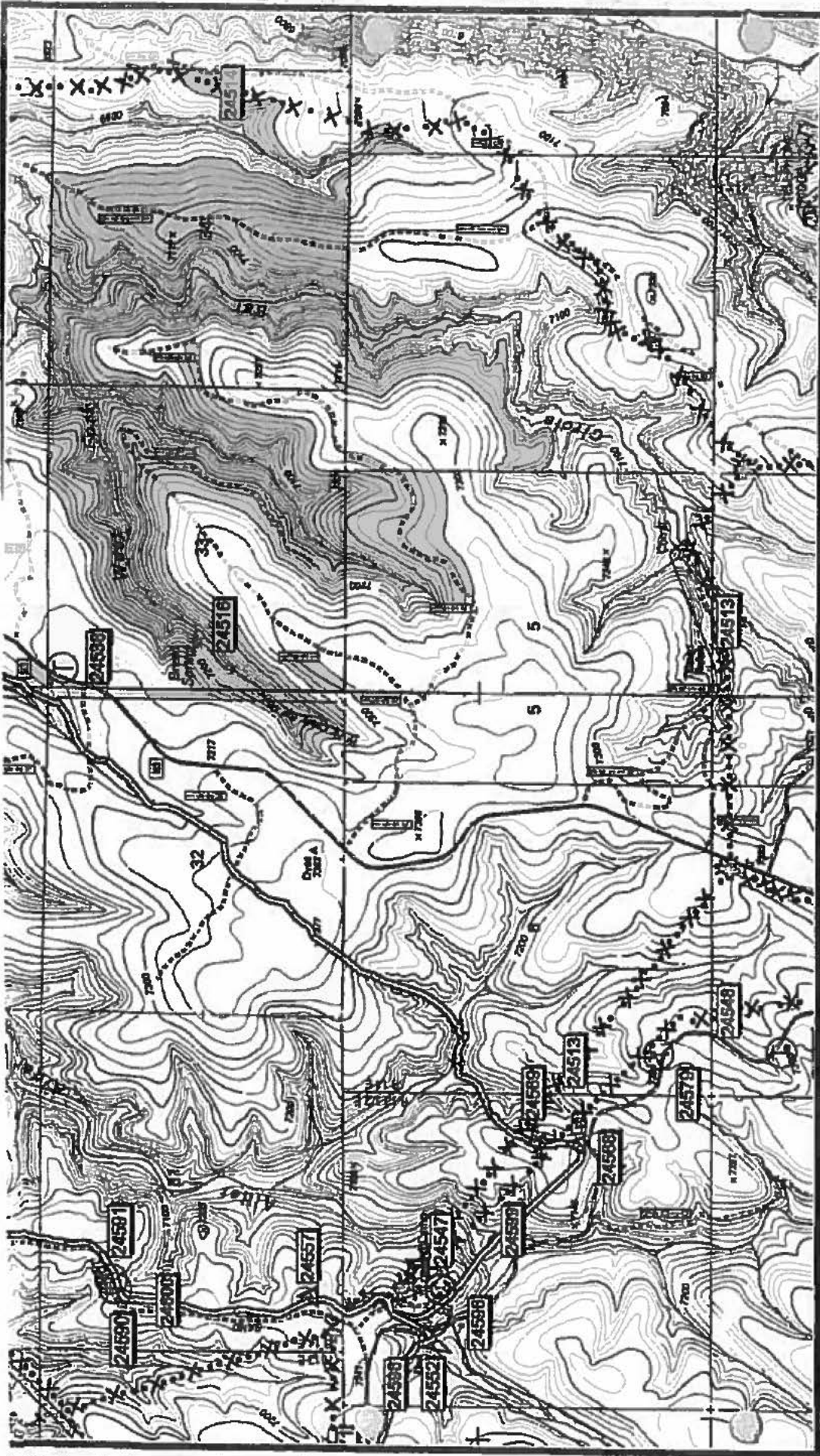


Map Scale = 1: 27,500

**Disclaimer Statement:**  
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 title 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.

Map Prepared By: S. Richardson Date: 02/07/2000  
Copyright, Environmental Systems  
Breed Improvements view  
Breed Improvements 11 x 8 (2) layout

# Chevelon Canyon Allotment Black Mesa R. D. Apache-Sitgreaves N.F.'s Range Improvements - Breed Pasture Map 2 of 2



**Map Legend:**  
(Symbols in legend not to scale with symbols on map)

Improvements	(Symbol)	Notes
X	Forest	
	Recent Burn	
	Private	
*	Contour	
○	City	
△	Cad	
▽	Vertical	
□	Flume Storage Tank	
+	Change in Range Improvements if using Positioning	
+	Range Improvement #	
+	Facilities	
+	Other Improvements	

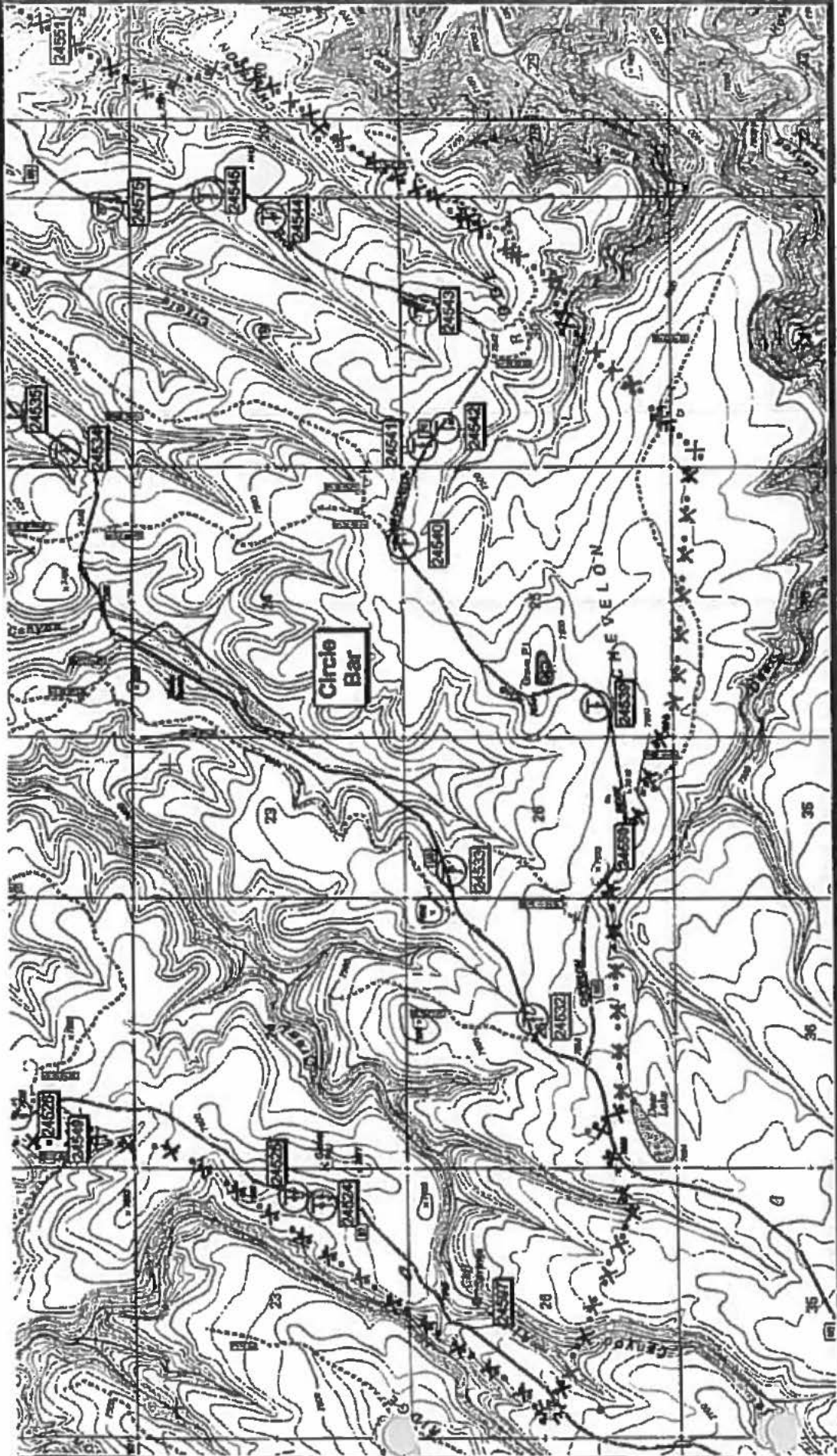




The USDA Forest Service uses the most current and available data available. GIS data and product accuracy may vary. Using GIS products for field work may cause misleading results. The USDA Forest Service reserves the right to correct, modify, clarify, or replace GIS products without notification. This map is not a legal survey or boundary document. Public lands are subject to change and leasing, and may have access restrictions, check with local offices. Check permissions before entering private land.

Map Prepared By: J. Robinson Date: 02/06/2003  
 Digitized by: J. Robinson  
 Check for Improvements at: [www.fs.fed.us/improvements/](http://www.fs.fed.us/improvements/)  
 Check for Improvements at: [www.fs.fed.us/improvements/](http://www.fs.fed.us/improvements/)

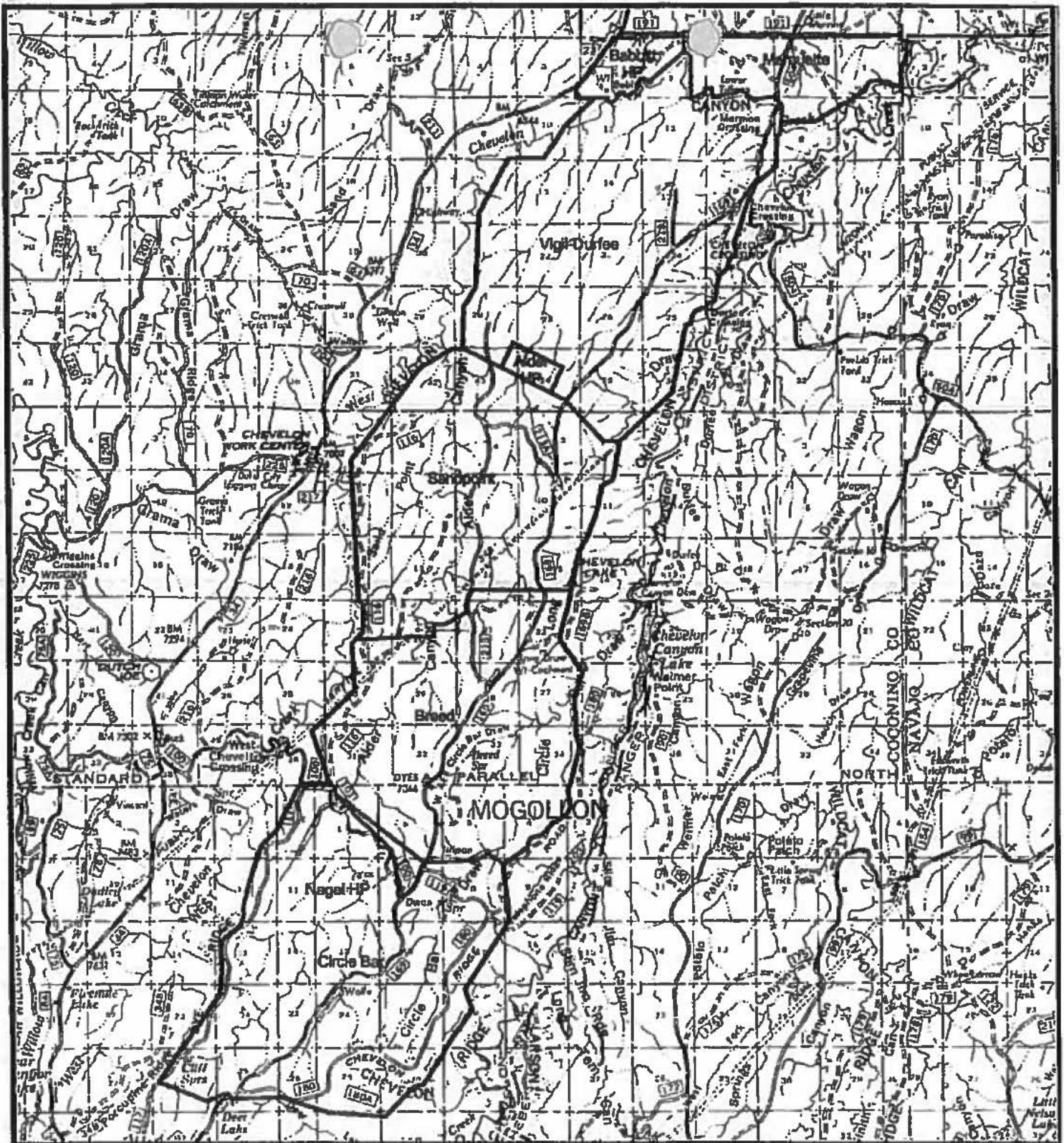
**Chevelon Canyon Allotment  
 Black Mesa R. D.  
 Apache-Sitgreaves N.F.'s  
 Range Improvements -  
 Circle Bar Pasture  
 Map 2 of 2**



**Map Legend:**  
 Improvements (Symbols in legend not to scale with symbols on map)



X*** Fences	A Well
Riparian Buffer	o- Spring
Pasture	① Blank Tank
XK Contingent	② Wildlife Quota
o- Old	③ Tree Tank
○ Calf	△ Temp
□ Water	④ Water Storage Tank
■ Point Storage Tank	⑤ Water Stop

+ Change in Range Improvement of 100%  
 Range Improvement of 50%  
 Range Improvement of 25%  
 - Other Improvements



**Chevelon Canyon Allotment  
Black Mesa R. D.  
Apache-Sitgreaves N. F.s**

**Map Legend:**

-  Chv\_allot\_bdy.shp
-  Chv\_pst.shp

Page 28 of 28  
Permit #02063

**Disclaimer Statement:**  
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.

Map Prepared By: S.Richardson Date: 09/30/2002  
c:\gis\chv\_canyon\locstor.spr  
allotment locator view  
Chevelon Canyon Allotment layout



Map Scale = 1:130,000

