

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
SURPRISE RESOURCE AREA
P.O. BOX 460
CEDARVILLE, CALIFORNIA 96104-0460



IN REPLY REFER TO:

4130(CA-028)

March 14, 1996

Tuledad Allotment: **Annual Grazing Plan for 1996 Season** **Environmental Assessment** **CA-028-96-09**

BACKGROUND

The Tuledad Allotment Management Plan was implemented in 1980 following completion of the Tuledad/Home Camp Grazing Environmental Impact Statement. An evaluation of the plan was completed in 1991 following extensive consultation with the grazing permittees, the Modoc/Washoe Experimental Stewardship Program, the California Department of Fish and Game, the Nevada Division of Wildlife, and other interested parties. The key results of the evaluation were that upland perennial grasses were generally improving, changes to riparian zones were mixed with many remaining in less than desirable vegetation condition, and bitterbrush stands were for the most part being replaced by grasses and other shrubs. The causes of unsatisfactory riparian conditions and the loss of bitterbrush was not clear for all areas of the allotment.

In 1992 the Susanville District initiated a planning process for an area known as East Lassen, of which the Tuledad Allotment comprises about 10 percent. The intent of the planning was to develop a vegetation management plan that would meet the needs of the area. This plan has not been completed for a variety of reasons.

In April 1992, an Interim Grazing Decision was issued for Tuledad that modified the Allotment Management Plan to provide additional consideration for riparian and bitterbrush areas. The decision was to remain in effect three grazing seasons, or until the East Lassen planning effort was completed. This decision was appealed by five entities representing wildlife interests. In early 1994, the appeals were dropped when the Bureau agreed to changes to the livestock grazing practices contained in the Interim Grazing Decision that related primarily to riparian and bitterbrush sites. The annual grazing plans developed with the livestock permittees in the Tuledad allotment for the 1994 and 1995 were a combination the original AMP, the Interim Grazing Decision and the 1994 agreement. These annual plans were implemented through informal agreement with the permittees.

The Interim Grazing Decision and the 1994 agreement both had sunset dates following the 1995 grazing season. However both the decision and the agreement contain language that ties the sunset time to the completion of a more comprehensive plan.

PURPOSE AND NEED

Completion of an annual operating plan is needed for a variety of reasons.

- * The Interim Grazing Decision of 1992 and the 1994 agreement covered specific grazing management through 1995. A clear delineation of the grazing for the 1996 season is needed.
- * Three wildfires in the north pasture require protection from grazing to allow the vegetation to recover vigor and planted shrubs to become well rooted.
- * One livestock permit has expired and requires action before it can be issued again.
- * A permittee that has had 1190 AUMs of sheep use (487 active, 703 suspended) in non-use status for the last four years has requested that the permit be converted to cattle use.

CONSISTENCY WITH LAND USE PLAN/POLICY

Land Use Plan

The Tuledad/Home Camp Management Framework Plan, approved in 1976 contains land use objectives and decisions for the entire planning area. It has been reviewed and compared again the two alternatives to be evaluated in this assessment. Both alternatives were consistent with the land use plan.

The applicable land use plan decisions are:

- Range Management 1.1.1 Initiate systematic livestock grazing management plans on the [Tuledad] allotment.
- Range Management 1.1.6 Implement monitoring system capable of providing reliable data to assess achievement of management objectives.
- Watershed 1.1: Implement livestock management plans that restore vegetation to site potential.
- Wildlife 2.1: Provide habitat capable of supporting [negotiated "reasonable" number] deer populations. Where range management proves incapable of providing acceptable habitat, exclusion of livestock must occur.
- Wildlife 2.2: Strive to meet [deer summer/yearlong range to an interspersion of about 50% brush fields, 50% mixed brush/grass types] consistent with site potential.
- Wildlife 2.3: Develop a grazing management plans that will provide for leader growth and reproduction of bitterbrush.

- Wildlife 2.4: Deer habitat on Cottonwood Mountain and near Snake Lake should be managed to provide habitat in satisfactory condition with a stable or upward trend as determined by an acceptable standard of habitat analysis.
- Wildlife 6.1: Management systems should be designed to improve riparian vegetation on streams throughout the unit. Fence streams where management is unable to improve riparian habitat.
- Wildlife 7.1: Maximize vegetative cover according to site potential.
- Wildlife 9.4: Decide upon treatment of a meadow on a site by site basis. Fence where necessary.

Tuledad/Home Camp Grazing EIS Mitigation Measures:

(included as part of the final decision and applicable here)

7. Conversion of sheep licenses to cattle will be allowed for sheep operators in the Tuledad allotment pursuant to application and consideration by the operator and Area Manager.
14. Livestock grazing pressure will be adjusted to insure that no more than "moderate use" is attained in any pasture.

SCOPING PROCESS

The proposed action was developed at a meeting held on January 30, 1996. The meeting was attended by most of the livestock permittees. All interested parties were also invited to attend. An interdisciplinary team within the Surprise Resource Area identified the resources within the allotment that potentially would be affected, the appropriate issues to be resolved, and the alternatives to be considered in this effort.

Since the mid 1980's numerous public meetings and direct contacts with interested parties have occurred. The issues that relate to livestock grazing have not changed since that time and appear below.

Issues Selected for Analysis

The following issues were identified during the scoping process:

Impacts on Bitterbrush Communities

Monitoring and inventory data show that bitterbrush stands are declining. Livestock browse bitterbrush during certain times of the year when grass forage has a lower palatability than bitterbrush.

Impacts on Riparian Communities

Riparian zones are important for a large number of users, including livestock, wild horses, wildlife, and human visitors. Excess grazing lowers the value to all users and prevents or slows improvement in the vegetation.

Impacts on Areas Burned by Wildfire

Several areas within the allotment have been burned by wildfire during the last two years. Recovery of the vegetation on burns requires rest from grazing to allow the plants to recover their vigor. Additionally bitterbrush planted as part of the rehabilitation effort need time to establish roots.

Issues Considered but Dropped from Further Analysis

The following issues were identified in scoping but were not selected for detailed analysis in this document.

Impacts on Wild Horses

Wild horses were gathered from two herd management areas in the Tuledad allotment in the fall of 1995. Populations were reduced from 188 to 65 horses in the Buckhorn area and 184 to 72 horses in the Coppersmith area. This action increased the forage available for the remaining horses by about 2,820 AUMs. The 1995 horse removal was evaluated in an environmental assessment previously mentioned, therefore wild horses will not receive further consideration here.

Impacts on Upland Herbaceous Vegetation

The livestock grazing management practices initiated in 1980 have been successful in increasing the vigor of perennial grasses and other herbaceous vegetation. The healthy herbaceous vegetation allows portions of the allotment to be grazed each year by livestock at use levels well within the moderate use standard set in the decision associated with the Grazing EIS. The future conditions and use of all vegetation in the allotment is currently being developed by the Bureau with the assistance of a Technical Review Team made up of grazing permittees, interested publics and scientific specialists. Therefore this issue will not be considered further.

Alternatives

Two alternatives were selected for consideration through the scoping process:

The **Proposed Action** would change to the grazing management actions for the 1996 grazing season to accomplish the following short term goals: Provide rest for the Boot Lake pasture, protect areas burned by wildfire over the past two years, continue to minimize livestock use of key bitterbrush stands, maintain residual vegetation on riparian zones. The proposed action would also allow the conversion of 487 AUMs from sheep to cattle use at a ratio of 1 cow per 5 sheep and a season of use of April 15 to September 30 each year, and reissue a grazing permit to the Lazy SJ Ranch, one of the seven livestock permittees, for a period of 10 years with using the grazing management actions specified in this alternative as term and conditions.

A **No Action** alternative that would continue implementation of the Interim Grazing Decision using the grazing schedule for the 1995 season. The No Action alternative would not provide for any conversion of sheep use to cattle use and would reissue a grazing permit to one livestock permittee for a period of ten years using the grazing management actions contained in the Interim Grazing Decision as terms and conditions.

After review of the language in the Interim Grazing Decision it was determined that while the language of the IGD states that it expires following the 1995 grazing season, the intent was that it should remain in place until the East Lassen planning effort was completed. At the time that the IGD was issued, the East Lassen planning was scheduled for completion in 1994. It has not been completed for reasons beyond the control of the Surprise Resource Area Manager.

Several comments received since 1986 have requested that cancellation of cattle grazing in the allotment be considered as an alternative. This alternative is in direct conflict with several Management Framework Plan goals and decisions and was therefore not selected for further consideration.

The livestock grazing practices of the two alternatives are delineated in the table below to allow for a side by side comparison. A series of attached maps show the livestock use areas by season of use and class of livestock.

Activity	Alternative	
	Proposed Action	No Action
Livestock Turnout	Sheep: March 26 Cattle: April 15, w/option of no earlier than April 1 if soil and vegetation conditions warrant and the Area Manger Approves	Sheep: March 26 Cattle: April 15
Sheep Grazing	Sheep scattered throughout lower elevations during April for lambing. Bunched into three bands (1000 sheep per band) and slowly trailed toward western part of allotment until mid-summer. Bands come back on the allotment late summer and leave September 30 to October 15. (see attached maps)	Same as Proposed Action, except use in Boot Lake pasture will not be limited to trail through, and fall use would be made in Cottonwood Mtn, Buckhorn Road, and Wire Lakes key bitterbrush areas. (see attached maps)

<p>Cattle Grazing</p>	<p>650 head would be turned out in lower elevations of North Pasture, except in the vicinity of past wildfires. Cattle would be herded to avoid burned areas, and limit concentration. Cattle would be removed from the allotment in first half of July.</p> <p>500 head would be turned out in lower elevations of South pasture and allowed to slowly drift up in elevation and to the west during April and May. When soil and vegetation conditions in the Cottonwood Mtn and Buckhorn Road areas are appropriate for grazing, cattle would be moved into these two areas for June and early July. Cattle would then be herded out of Cottonwood Mountain and Buckhorn Road and into portions of the South Pasture that have not received use at that time. Cattle would stay in the South Pasture until Sept 30 unless utilization levels were anticipated to be exceeded. Cattle would then be moved into portions of the North Pasture outside the burns, the Wire Lakes key bitterbrush area and areas used in the spring by the 650 head. (see attached map)</p>	<p>50 head would graze the Bald Mountain pasture from April 15 through mid-July.</p> <p>1150 head would be turned out in the lower elevations of the South Pasture and allowed to slowly drift up in elevation and to the west until early July. 650 head would be removed from the allotment. 500 head would be moved into the North Pasture and Boot Lake and remain until Sept 30. Cattle would be herded from the Wire Lakes key bitterbrush area. (see attached map)</p>
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Utilization Standards	<p>4" minimum stubble height on riparian areas at the end of the season.</p> <p>45 percent maximum use on willows</p> <p>moderate use (40-60 percent) on upland herbaceous and woody vegetation except bitterbrush</p> <p>45 percent maximum use on bitterbrush except in key bitterbrush areas</p> <p>15 percent maximum use of bitterbrush in key areas by mid-July</p>	<p>2" minimum stubble height at the end of the season.</p> <p>40 percent max on willows</p> <p>same</p> <p>60 percent maximum use on bitterbrush except in key areas</p> <p>10 percent maximum livestock use of bitterbrush by October 15</p>
Other stipulations	<p>Rest Boot Lake pasture</p> <p>No salting or sheep bedding in aspen stands</p> <p>No use in Bud Brown, Bare Creek, or Ant Spring enclosures</p>	Not mentioned

AFFECTED ENVIRONMENT

The affected environment of the Tuledad Allotment has been discussed in the 1978 Tuledad/Home Camp Grazing EIS, the environmental assessment (CA-020-92-07) completed for the Interim Grazing Decision, and the environmental assessment (CA-020-95-08) for the 1995 wild horse removal. Only additional information collected since the above documents that is pertinent to the issues is included here.

The Tuledad allotment has been managed under a complex grazing system since 1980. The system provides periods of growing season deferment or complete rest from livestock grazing for one or more areas within the allotment each grazing season. The result of these management actions and reduced stocking rates for the past 16 years has been a steady increase in the forage production within the vast majority of the allotment. This means that overall utilization of the forage is in the range of 30 to 50 percent of the production by livestock, wild horses and wildlife populations in the areas used by livestock on any given year. Areas receiving livestock rest have even less utilization.

Small portions of the allotment receive substantially higher utilization. Riparian areas grazed by livestock or wild horses during the July, August, and September period are often concentration areas due to the water and green vegetation during the hot summer. Monitoring data collected on riparian areas during the summer in pastures rested from livestock grazing also indicates that wild horses commonly graze the vegetation near their favorite water sources at high utilization levels.

Monitoring data collected in 1995 showed that the stubble height goals on the key riparian sites were generally met. Where the goals were not met one of the factors was summer grazing by wild horses.

A 1995 inventory of the majority of riparian sites indicated that over 90 percent of them were in properly functioning condition. The remainder were in a functional-at-risk category. Therefore riparian areas in the Tuledad allotment are in compliance with the riparian policy.

The production and use of bitterbrush has been a concern in the allotment since the mid 1980s. Bitterbrush stands occur on the upper elevations of the allotment in the deepest soils. These stands are very old and are not being replaced as the individual plants die. Over the past decade the mortality of old bitterbrush plants has increased. A single cause of the accelerated loss of bitterbrush has not been determined. Livestock turn to bitterbrush in July and browse the leader growth of the shrubs because of its high protein levels. Deer in the area browse bitterbrush from July through the early winter for the same reason. As the amount of available bitterbrush declines the overall use levels increase. Specific goals for use on bitterbrush by livestock were set in 1992. Monitoring data indicates that herding practices and limiting summer livestock use to areas with little bitterbrush has allowed the bitterbrush use goals to be met.

In 1994 two wildfires (100 and 40 acres) were started by lightning on the north side of Cottonwood Mountain. Several thousand bitterbrush seedlings were hand planted in these two burns. In 1995 an 600 acre fire burned on the slopes of the North Coppersmith Hills. Approximately half of this fire is on unfenced private lands. Two very small fires burned near Snake Lake and Barber Creek in the North and Bald Mountain pastures respectively.

ENVIRONMENTAL CONSEQUENCES

Impacts on Bitterbrush Communities

Monitoring information collected on a dozen bitterbrush stands since 1979, evaluation of cages on individual bitterbrush plants, evaluation of two "three-way" exclosures, and a fecal analysis study completed in the Tuledad allotment in the late 1970s consistently show that cattle make very little use of bitterbrush prior to the time that the seeds are in the "red juice" stage. This occurs in July (the actual dates depend upon precipitation and elevation) and generally corresponds to the time when the native bunchgrasses are curing. The monitoring data for sheep use is similar, but suggests that sheep may turn to bitterbrush as early as the first week in July. Both types of livestock browse bitterbrush throughout the summer and fall until they are removed or enough rain falls to initiate new growth on grasses and other herbaceous vegetation.

There are three areas in the Tuledad Allotment identified as "key" bitterbrush areas, Cottonwood Mountain, Wire Lakes, and Buckhorn Road. These areas were identified as key areas because they occur along important mule deer summer range and fall transition routes, and because the bitterbrush in these areas is heavily used every year, and not reproducing.

Wire Lakes:

Under both the Proposed Action and the No Action Alternatives, cattle would not use the Wire Lakes area.

Under the Proposed Action, the Wire Lakes key bitterbrush area would be used by one band of sheep in the spring. Under the No Action Alternative, the Wire Lakes key bitterbrush area would be used by one band of sheep in the spring and by one band of sheep in the summer and fall.

Buckhorn Road:

Under both the Proposed Action and the No Action Alternatives, the Buckhorn key bitterbrush area would be used by cattle in the spring.

Under the Proposed Action, the Buckhorn key bitterbrush area would be used by one band of sheep in the spring. Under the No Action Alternative, the Buckhorn key bitterbrush area would be used by one band of sheep in the spring, up to 400 sheep through the summer, and up to two bands of sheep in the fall.

Cottonwood Mountain:

Under the Proposed Action, the Cottonwood Mountain key bitterbrush area would be used by cattle in the spring. Under the No Action Alternative, the Cottonwood Mountain key bitterbrush area would be used by cattle in the summer and fall.

Under the Proposed Action, the Cottonwood Mountain key bitterbrush area would be used by two bands of sheep in the spring. Under the No Action Alternative, the Cottonwood Mountain key bitterbrush area would be used by two bands of sheep in the spring and two bands of sheep in the fall.

Under the Proposed Action, neither cattle nor sheep would use any of the key bitterbrush areas in the fall. Under the No Action Alternative, all three key bitterbrush areas would be used by sheep in the summer and fall and the Cottonwood Mountain key bitterbrush area would be used by cattle in the summer.

Under the Proposed Action, bitterbrush use outside the three key bitterbrush areas is limited to 45% by all users by the end of the season. Under the No Action Alternative, bitterbrush use outside the three key bitterbrush areas is limited to 60% by all users by the end of the season.

Conversion of 487 AUMS of sheep use to cattle would potentially increase the number of cattle grazing the allotment by about 100 head. Since cattle are being herded or excluded from the key bitterbrush areas and are summering in areas of low bitterbrush density, grazing another 100 head would have little impact on bitterbrush.

Therefore, the Proposed Action Alternative would result in less bitterbrush being browsed by livestock and increase the available bitterbrush for wildlife use throughout the Tuledad Allotment.

Impacts on Riparian Communities

Riparian areas are concentration areas for livestock during the summer months because of the availability of water and green vegetation that is more palatable than the dry upland vegetation. Hot season use of riparian areas has a major impact on the amount of residual vegetation left at the end of the season. Spring grazing rangelands with interspersed riparian areas results in significantly less impact to the riparian areas than summer grazing because the upland vegetation is more palatable than the riparian vegetation and there is ample time for regrowth of riparian species. Additionally, sheep generally have less impact on riparian vegetation than do cattle at all times of the year. This is because sheep are smaller animals, are moved by herders every few days to new forage areas, and herded directly from the riparian areas after watering.

There are 14 riparian areas in the Tuledad Allotment identified as "key" areas. These riparian areas were identified as key areas because they are relatively representative of the majority of the publicly owned riparian areas within each of the major "use areas" of the Tuledad Allotment, and because they consistently support riparian vegetation each year.

Under the Proposed Action, cattle would not use seven of these areas in 1996. Under the No Action Alternative, cattle would not use four of these areas in 1996.

Under the Proposed Action, cattle would use three of these areas in the spring only; two in the spring, summer, and fall; and two in the fall only. Under the No Action Alternative, cattle would use four of these areas in the spring only, and six of these areas in the summer and fall. The Proposed Action would allow hot season use on four of the fourteen key riparian areas; the No Action Alternative would allow hot season use on six of the fourteen.

Under the Proposed Action, the total residual herbaceous vegetation height on each of the fourteen key riparian areas will be at least 4" (or 50% of current year's growth on systems which do not grow to 4") by the end of the season. Under the No Action Alternative, the total residual herbaceous vegetation height on each of the fourteen key riparian areas will be at least 2". Use of woody riparian vegetation would be expected to be less for the Proposed Action than the No Action Alternative because most of the riparian sites with substantial amounts of woody vegetation are in the spring use area of the North Pasture, the Boot Lake pasture and the Bald Mountain pasture. All of these areas would either receive rest or spring cattle use in the Proposed Action.

The potential addition of 100 head of cattle from the conversion of sheep use to cattle use would increase the likelihood that cattle would have to be herded from areas with riparian vegetation during the summer and fall period. This would increase the labor costs to the livestock permittees to ensure compliance with the riparian use standards.

The Proposed Action Alternative would result in more of the key riparian areas receiving rest in 1996, fewer riparian areas receiving summer cattle use, and that there would be more residual

in the larger burned areas in Tuledad Canyon and the North Coppersmith Hills, even as livestock operators attempt to herd cattle out of the burned areas. Vegetation would have less chance to establish, and soils would have less time to stabilize.

Regardless of which alternative is implemented, wildhorses in the North Pasture will make continuous, year-round use of the North Coppersmith wildfire area and sporadic, year-round use of the Tuledad Canyon wildfire areas.

Mitigation Measures

The conversion of 487 AUMS of sheep use to cattle grazing would be made with a use period of April 15 to July 15. This would eliminate a potential increase in summer use on riparian areas and would not change to herding needs associated with cattle grazing in the summer and fall.

Unavoidable Adverse Impacts

Implementation of the No Action alternative would continue summer and fall livestock use of riparian and bitterbrush areas. It would also lead to some grazing of several recently burned areas and slow the rate of reestablishment of vegetation on the burns.

Irreversible and Irretrievable Commitments of Resources

Neither alternative commits to long term commitments of resources. Both alternatives address only one grazing system. Therefore there are no irreversible and irretrievable commitments of resources

CONSULTATION

The Proposed Action was developed in consultation with the livestock permittees at a meeting in which all the interested parties were invited to attend. Subsequently a meeting with the Nevada Division of Wildlife and the Nevada Commission for the Protection of Wildhorses was held to explain how the Proposed Action was prepared.

LIST OF PREPARERS

Tara Devalois	Range Conservationist
Roger Farschon	Wildlife Biologist

BIRD MOUNTAIN PC



Exclosures and Burned Areas. Sheep will be herded to avoid these areas.



Key Bitterbrush Areas



Lambing

1000 Ewes
March 26 to April 30

900 Ewes
July 1-15

SHAKE LAKE PC

SHAKE CREEK PC

EAST CORNER

WINE LAKES PC

The "PC's" identified on this map are Planning Compartments. They represent geographical boundaries, such as elevation breaks, rims, canyons, and fencelines. They are provided on this map to define geographical regions within the allotment.

BOOT LAKE PC

POST CANYON PC

900 Ewes
July 15-31

1000 Ewes
March 26 to April 30

DUCK FLAT PC

900 Ewes
August 1-15

COTTONWOOD MOUNTAIN PC

WORLD CANYON PC

RIE PATCH PC

NO ACTION AND PROPOSED ACTION

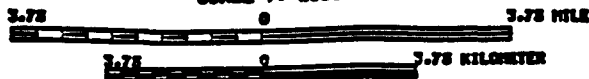
300 Ewes
May 1 to August 1

SPRING SHEEP USE

CEDAR CANYON PC

1000 Ewes
March 26 to April 30

SCALE 1: 200000



BOLD MOUNTAIN PC



Exclosures and Burned Areas. Sheep will be herded to avoid these areas.



Key Bitterbrush Areas

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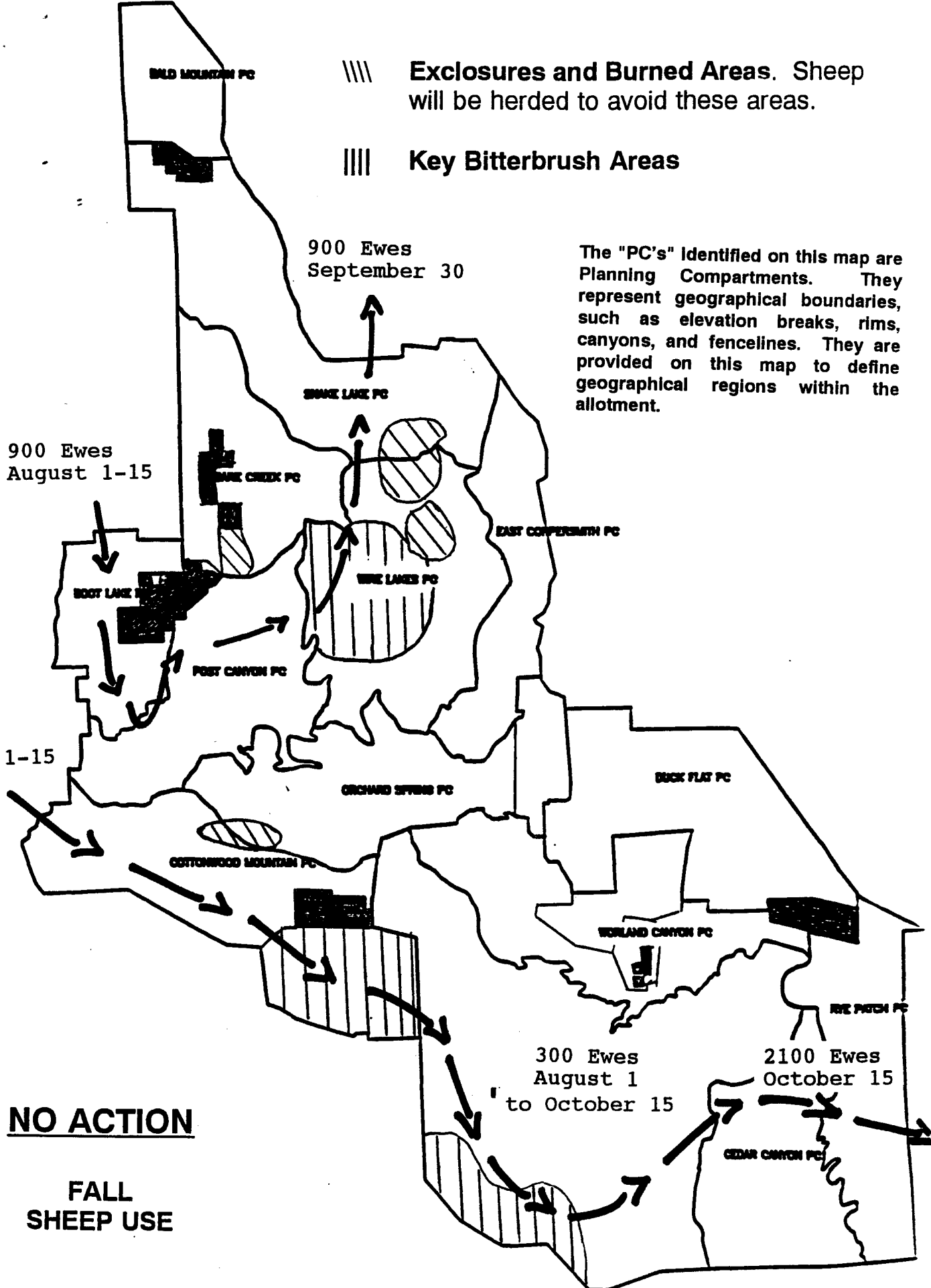
900 Ewes
September 30

900 Ewes
August 1-15

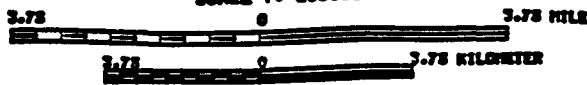
1800 Ewes
September 1-15

NO ACTION

**FALL
SHEEP USE**



SCALE 1: 200000





Exclosures and Burned Areas. Sheep will be herded to avoid these areas.



Key Bitterbrush Areas

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900 Ewes
September 30

900 Ewes
August 1-15

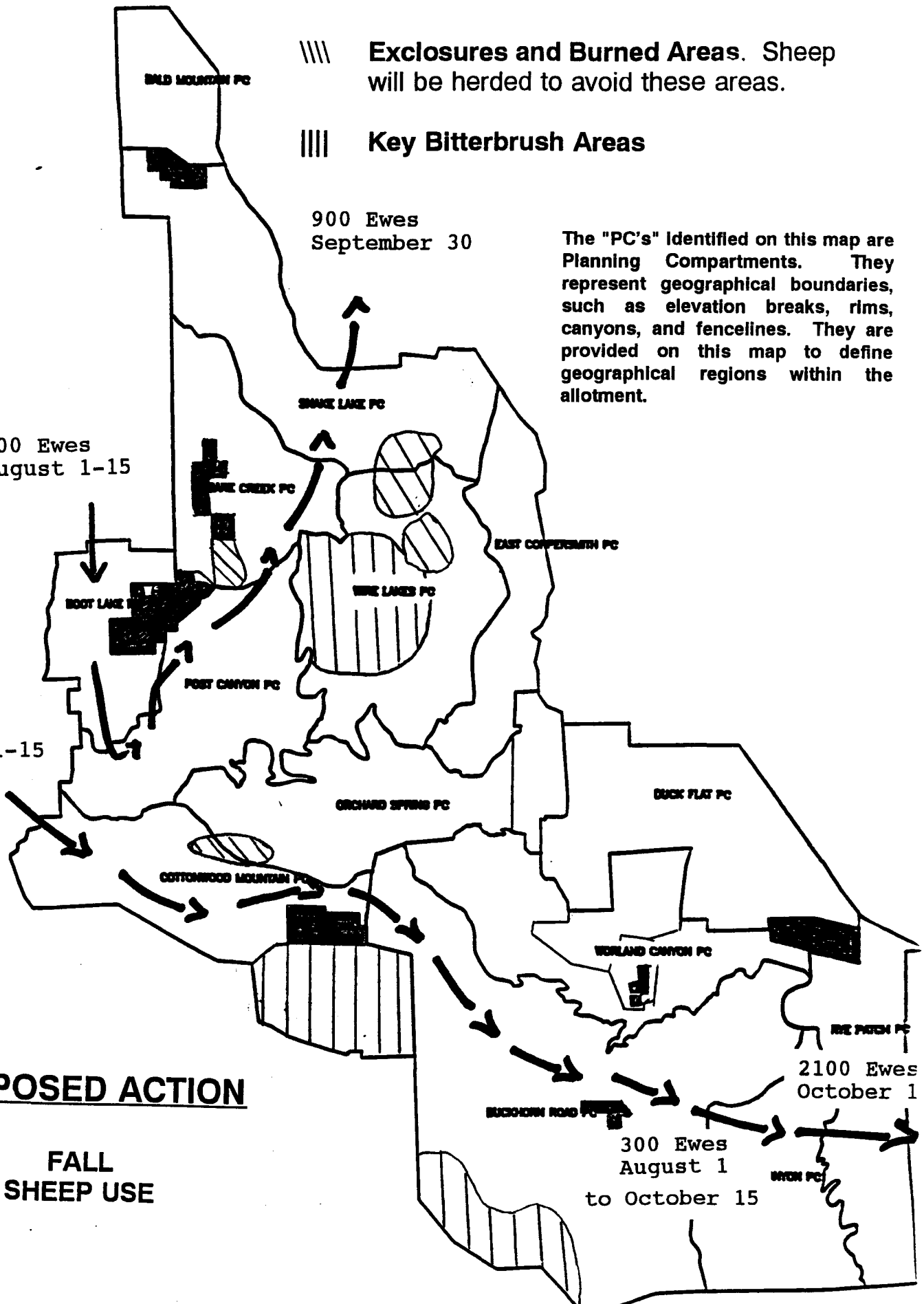
1800 Ewes
September 1-15

2100 Ewes
October 1

300 Ewes
August 1
to October 15

PROPOSED ACTION

FALL SHEEP USE



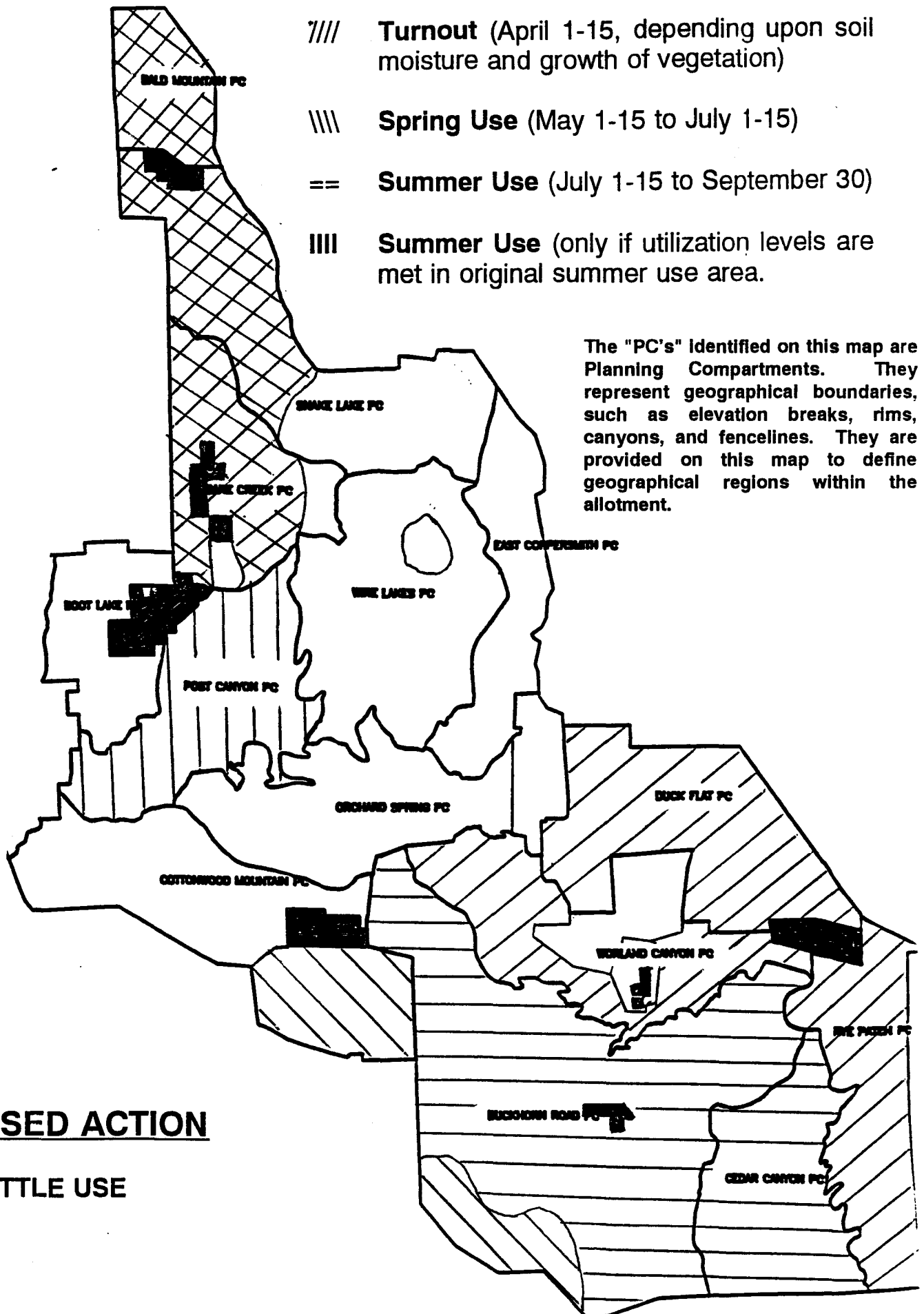
SCALE 1: 200000

0 3.75 MILE

0 3.75 KILOMETER

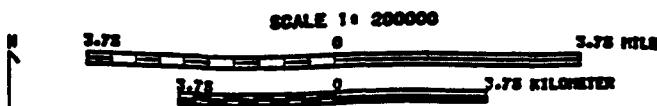
- //// Turnout (April 1-15, depending upon soil moisture and growth of vegetation)
- \\\\ Spring Use (May 1-15 to July 1-15)
- == Summer Use (July 1-15 to September 30)
- |||| Summer Use (only if utilization levels are met in original summer use area.)

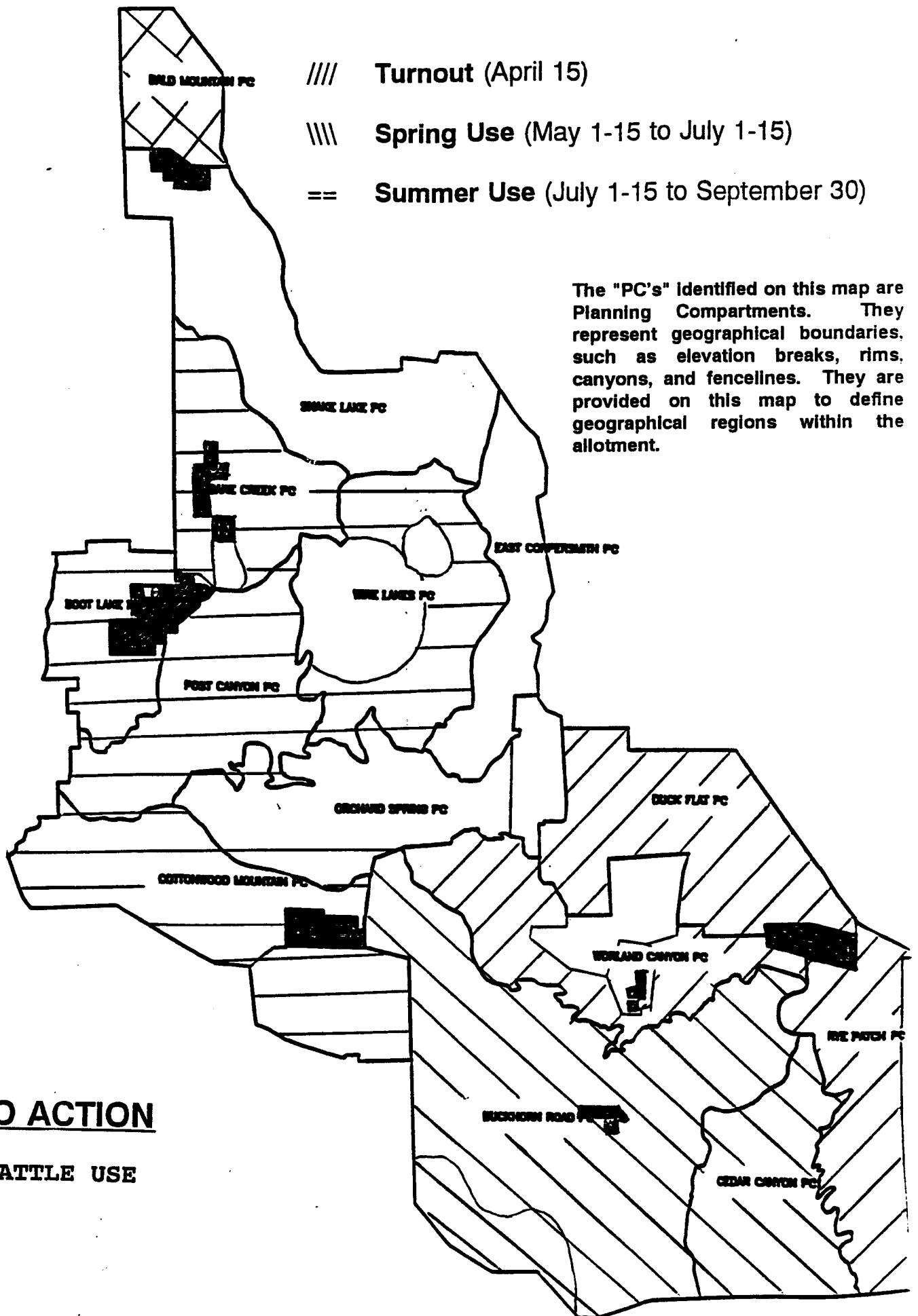
The "PC's" Identified on this map are Planning Compartments. They represent geographical boundaries, such as elevation breaks, rims, canyons, and fencelines. They are provided on this map to define geographical regions within the allotment.



PROPOSED ACTION

CATTLE USE





//// Turnout (April 15)

~~~~ Spring Use (May 1-15 to July 1-15)

== Summer Use (July 1-15 to September 30)

The "PC's" identified on this map are Planning Compartments. They represent geographical boundaries, such as elevation breaks, rims, canyons, and fencelines. They are provided on this map to define geographical regions within the allotment.

**NO ACTION**

**CATTLE USE**

SCALE 1: 200000

3.75 0 3.75 MILE

3.75 0 3.75 KILOMETER