

**Rangeland Health Standards  
Assessment**

**Narrows Allotment #431**

**East Jug Mountain Allotment #433**

## **Standards for Rangeland Health and Guidelines for Livestock Grazing Management (BLM, 1997)**

### **Introduction**

The Range Reform '94 Record of Decision (BLM, 1995a) recently amended current grazing administration and management practices. The ROD required that region-specific standards and guidelines be developed and approved by the Secretary of the Interior. In the State of Oregon, several Resource Advisory Councils (RACs) were established to develop these regional standards and guidelines. The RAC established for the part of the state covering the allotments listed above is the Southeastern Oregon RAC. These standards and guidelines for Oregon and Washington were finalized on August 12, 1997 and include:

#### **Standard 1 - Upland Watershed Function**

Upland soils exhibit infiltration and permeability rates, moisture storage, and stability that are appropriate to soil, climate, and landform.

#### **Standard 2 - Riparian/Wetland Watershed Function**

Riparian-wetland areas are in properly functioning physical condition appropriate to soil, climate, and landform.

#### **Standard 3 - Ecological Processes**

Healthy, productive, and diverse plant and animal populations and communities appropriate to soil, climate, and landform are supported by ecological processes of nutrient cycling, energy flow, and the hydrologic cycle.

#### **Standard 4 - Water Quality**

Surface water and groundwater quality, influenced by agency actions, complies with State water quality standards.

#### **Standard 5 - Native, T&E, and Locally Important Species**

Habitats support healthy, productive, and diverse populations and communities of native plants and animals (including special status species and species of local importance) appropriate to soil, climate, and landform.

## **Allotment Overview**

## **Narrows Allotment #431**

**Location: See Attached Map**

**7.5 Minute Topographic Map: Coglan Buttes NE, Coglan Buttes SE, Tucker Hill**

**AUMs of Authorized Use: 275**

**Permitted Season: Winter**

**Grazing System: Winter 11/1-2/28.**

The Narrows Allotment is located approximately 30 miles north of Lakeview, Oregon. Land status within the allotment is 8,486 acres of public land.

The allotment is categorized as an M= Maintain, based on the **1983** rating form summarized as follows:

- Range condition is satisfactory.
- Forage production potential is moderate to high and present production is near potential.
- Full production is allowed by rest during growing season.
- No serious conflicts or controversy exist.
- Opportunity may exist for positive economic returns.
- Present management is satisfactory.
- A seeding project is possible without the need for water and fencing.

## **Allotment Overview East Jug Mountain #433**

**Location: See Attached Map**

**7.5 Minute Topographic Maps: Alkali Lake, Coleman Hills, Poverty Basin South, Sawed Horn**

**AUMs of Authorized Use: 2,236**

**Permitted Season: Spring**

**Grazing System: Rest rotation 3/1-6/15.**

The East Jug Mountain Allotment is located approximately 60 miles north of Lakeview, Oregon. Land status within the allotment is 12,325 acres of public land.

The allotment is categorized as an I=Improve, based on the **1983** rating sheet summarized as follows:

- Range condition is unsatisfactory due to Sharp Top fire exposing unstable soils.
- Forage production potential is moderate to high and present production is low to moderate.
- Proposed seedings for fire rehabilitation will remedy this production potential.
- No serious conflicts or controversy exist.
- Opportunities exist for positive economic returns.
- Future use of fire rehab seedings depends on the construction of pipelines from Poor Jug and Euchre Butte wells.
- Present management is satisfactory. Allotment is in non-use status for seeding to establish itself.
- It is recommended that this allotment stay in the 'I' category until cross fencing and

initial monitoring can be completed.

**STANDARD 1 - Upland Watershed -Upland soils exhibit infiltration and permeability rates, moisture storage, and stability that are appropriate to soil, climate, and landform.**

**Standard 1 is being met for the upland watersheds in the Narrows #431 and East Jug Mt. #433 Allotments.**

A) Soil Surface Factor (SSF) is an indicator used to evaluate Standard 1 for Narrows #431 and East Jug Mt. Allotments #433. SSF documents erosion class and soil susceptibility to accelerated erosion and was determined during the Ecological Site Inventory (ESI) from 1995 and 1996. Current livestock grazing practices in the #431 and #433 Allotments are not affecting upland watershed functions. See table below for the allotment summary of SSF.

**ESI for SSF from 1995 and 1996**

<b>ESI EROSION CONDITION CLASSES*</b>						
	<b>Stable</b>	<b>Slight</b>	<b>Moderate</b>	<b>Critical</b>	<b>Severe</b>	<b>Unknown**</b>
<b>#431</b> (8,486 Total Acres)	0	1,157	1,664	0	0	5,665
Percent of Allotment	0%	14%	20%	0%	0%	66%
<b>#433</b> (12,325 Total Acres)	0	6,140	3,455	113	0	2,617
Percent of Allotment	0%	50%	28%	<1%	0%	21%

*\*The erosion condition classes are based on numeric scoring system which considers soil movement, surface litter, surface rock, pedestalling, flow patterns, rills and gullies.*

*\*\* The SSF scores are derived from actual transects and an actual transect was not done in every Site Writeup Area (SWA) but only in enough SWAs to represent the different vegetation types. Therefore the unknown acres result from SWAs referred to as "Same As", which are areas with similar vegetation, soils and conditions to a SWA with an actual transect.*

Overall the Narrows (#431) and East Jug Mt. (#433) Allotments are functioning properly as indicated from ESI data. However, vegetative cover is reduced in the lower elevations of the Narrows #431 Allotment due to strong saline and sodic surface layers restricting infiltration and permeability rates of the soil, therefore limiting plant seedling survival. The percentages of unknown acres in the #431 and #433 Allotments include vegetative communities too small to be mapped, crested wheatgrass seedings, transition zones, playas, and/or rock outcrops.

Grazing in the Narrows Allotment occurs primarily in the winter. The grazing system is designed to maintain healthy perennial vegetative communities by grazing the vegetation during the dormant period. Existing upland forage utilization surveys show a ten year average of 43% use in #431. The maximum utilization level allowed for winter grazing is 65% use. Grazing in the East Jug Mtn. Allotment occurs in the spring with one pasture out of five rested each year and the remaining four pastures put into a rotation system. The grazing system is designed to maintain healthy perennial vegetative communities. The root systems of perennial vegetation assist in holding soil in place. Perennial vegetation provides

protective cover to reduce soil movement, decrease compaction and thus increase infiltration. The maximum utilization level allowed for a spring rotation grazing system is 60% use. Existing upland forage utilization surveys show a ten year average of 45% use in #433. Current grazing management is adequate to maintain the existing conditions in these allotments.

**B.)** Another indicator of Upland Watershed condition is plant composition and community structure. Species composition in the Narrows Allotment (#431) includes a variety of native species: basin wildrye, Indian ricegrass, bottlebrush squirreltail, and bluebunch wheatgrass on uplands and steeper slopes, crested wheatgrass with cheatgrass invading, saltgrass, and greasewood on lower elevations in more saline soils. Species composition in the East Jug Mtn. Allotment (#433) includes a large crested wheatgrass seeding created from fire rehabilitation with patches of sagebrush, rabbitbrush, bottlebrush squirreltail, bluebunch wheatgrass, and Thurber’s needlegrass. The patches of shrub/native grass communities represent unburned areas that were not seeded to crested wheatgrass. The variation in the herbaceous understory indicates that native/non-native vegetation communities appear stable. Cheatgrass stands are minimal but demonstrate what the potential result is if the perennial grass and sagebrush cover is lost because of a major disturbance.

The ESI compares the plant composition to a defined Potential Natural Plant Community for the identified soil type and precipitation zone. Using the 1995, 1996 ESI, the percent of public land in the allotment in each seral stage is summarized in the table below. The shrub-perennial grass communities are generally in the mid and late seral stages, appear stable, and are not impacted by current grazing management. The crested wheatgrass seedings are considered to be in the early seral stage.

**Ecological Condition for Narrows #431 Allotment as determined by the Ecological Site Inventory in 1995 and 1996:**

<b>ESI ECOLOGICAL CONDITION CLASSES</b>				
	<b>Early</b>	<b>Mid</b>	<b>Late</b>	<b>Climax</b>
<b>#431--Acres</b>	327	911	1,583	0
Percent of Vegetation (8,486 acres)	4%	11%	19%	0%
<b>#433--Acres</b>	8,442	571	481	214
Percent of Vegetation (9,708 acres)	87%	6%	5%	2%

**STANDARD 2 - Riparian/Wetland-Riparian-wetland areas are in properly functioning physical condition appropriate to soil, climate, and landform.**

**Standard 2 is met.** There are no intermittent or perennial streams or wetland areas within the allotment boundaries. Water sources are from wells.

**STANDARD 3 -Ecological Processes-Healthy, productive, and diverse plant and animal populations and communities appropriate to soil, climate, and landform are supported by**

ecological processes of nutrient cycling, energy flow, and hydrologic cycle.

**Standard 3 is being met for East Jug Mt. #433 Allotment.** The following are observations from ESI and the BLM interdisciplinary team about the current plant communities for the following allotments: **Standard # is not met for Narrows #431 Allotment due to the failed crested wheatgrass seeding project in the Seeding pasture.** Livestock grazing is not a significant factor for the standard not being met. The soils are the most limiting factor.

The Observed Apparent Trend (OAT) for the vegetation communities is an indicators used to evaluate this standard on public land. It was determined using the ESI (1995, 1996) and is summarized in the table below. The unknown acreage includes rock outcroppings and playas.

<b>ESI OBSERVED APPARENT TREND*</b>				
<b>1995 and 1996</b>				
	<b>Downward</b>	<b>Static</b>	<b>Upward</b>	<b>Unknown**</b>
<b>#431</b> (8,486 Total Acres)	959	1,298	564	5,665
Percent of Allotment	11%	15%	8%	66%
<b>#433</b> (12,325 Total Acres)	1,263	3,501	4,944	2,617
Percent of Allotment	10%	28%	40%	21%

\* The Observed Apparent Trend (OAT) is a numerical rating which considers vigor, seedlings, surface litter, pedestals and gullies to estimate the trend of a particular site and SWA..

\*\* The OAT is determined from a transect and in the unknown acres the transect for that vegetation type was run on a different allotment and the OAT would not necessary represent this allotment

**STANDARD 4 - Water Quality Standards- Surface water and groundwater quality, influenced by agency actions, complies with State water quality standards.**

**Standard 4 is met.** There are no perennial or intermittent streams in theses allotments.

**STANDARD 5 -Biological Diversity-Habitats support healthy, productive, and diverse populations and communities of native plants and animals (including special status species and species of local importance) appropriate to soil, climate, and landform.**

**Standard 5 is being met for both plants and wildlife species.**

Special Status Plants: There have been surveys for several specific Bureau sensitive plants in the #431 and #433 allotments and no plants were found.

Special Status Wildlife Species: Special status wildlife species or their habitats that are present within the Narrows #431 and East Jug Mtn.#433 Allotments include the bald eagle (*Haliaeetus leucocephalus*), ferruginous hawk (*Buteo regalis*), peregrine falcon (*Falco peregrinus*), burrowing owl (*Speotyto cunicularia*), and pygmy rabbit (*Brachylagus idahoensis*). There are also four species with high public interest. These are sage-grouse

(*Centrocercus urophasianus*), mule deer (*Odocoileus hemionus*), California bighorn sheep (*Ovis canadensis*) and pronghorn antelope (*Antilocapra americana*).

No nesting habitat exists within these allotments for the bald eagle. It is suspected that they are occasional visitors to the area. Nesting habitat is available for peregrine falcons on the cliff faces of Coglan Buttes in the center of the Narrows Allotment (#431). This site was surveyed for peregrine falcon nests in 1999, but none were located. No incidental sightings of peregrines exist within the vicinity of these allotments. There is good foraging opportunities for peregrine falcons along the Chewaucan marsh to the west of this allotment. Bald eagle foraging does occur within the allotment, however it is probably restricted mostly to road killed deer adjacent to the major roadways and occasional carrion scattered through the allotment. There are no resource conflicts for peregrine falcons or bald eagles.

Habitat is present for ferruginous hawk, burrowing owl and pygmy rabbits, but locations for these species are not known in this allotment. No specific inventories have been conducted to date for these species, however there are sightings within the surrounding area and they are suspected to occur within the allotment. There are no resource conflicts for these species.

The eastern half of the Narrows Allotment (#431) is within mule deer winter range. No conflicts exist between mule deer and cattle grazing within this allotment. Bitterbrush is not very abundant and sagebrush browse use appears to be somewhat stable at this time.

Bighorn sheep also inhabit much of the Narrows Allotment (#431). There is some overlap in range between bighorns and cattle at different times of the year within this allotment, however, this amount of competition is small. No conflicts exist between bighorn sheep and cattle grazing within this allotment.

Pronghorn antelope occur over most of the western half of the East Jug Mtn. Allotment (#433). Use for this species is concentrated on the western half due to the lack of tall shrubs. Much of this area was re-seeded to crested wheatgrass after a wildfire. No major conflicts exist between pronghorn and cattle grazing within this allotment.

There is one known sage-grouse lek site within the Narrows Allotment (#431) and no known lek sites within the East Jug Mtn. Allotment (#433). There are three other lek sites adjacent to these allotments and it is suspected that grouse from these allotments use those leks as well.

Sage-grouse habitats within the Narrows Allotment (#431) contains approximately 8% (730 acres) of suitable nesting habitats. Suitable brood rearing habitats make up 5% (470 acres) and suitable winter habitats 59% (5,272 acres). The other 28% (2460 acres) of the allotment contains areas that are considered non-suitable for sage-grouse. This is primarily due to salt desert shrub communities along the edge of the Chewaucan marsh and natural rock formations like the Coglan Buttes. No major conflicts exist between cattle grazing and sage-grouse within this allotment at this time.

Sage-grouse habitats within the East Jug Mtn. Allotment (#433) contains approximately 1% (155 acres) of suitable nesting habitats. Suitable brood rearing habitats make up 9% (1000 acres) and suitable winter habitats 18% (2128 acres). The other 72% (8531 acres) of the allotment contains areas that are considered non-suitable for sage-grouse. This is primarily due to old wildfires that were re-seeded to crested wheatgrass in the western half of the allotment. Some salt desert shrub communities also exist within the allotment. No major conflicts exist between cattle grazing and sage-grouse within this allotment at this time.

### **Current Management and Recent Management Changes**

Current livestock management has changed from that described in the allotment overviews:

**Narrows Allotment (#431):** A crested wheatgrass seeding project was completed in the Narrows pasture.

**Current Management and Recent Management Changes**

Current livestock management has changed from that described in the allotment overviews:

Narrows Allotment (#431): A crested wheatgrass seeding project was completed in the Narrows pasture. Portions of the seeding have failed. Invasion of cheatgrass is high. The allotment is still grazed in the winter, however, the Perry's Cabin pasture does not seem to be suitable for winter grazing. A few days after livestock have been turned out in the Perry's Cabin pasture, they will travel back to the Narrows Seeding pasture because of harsher weather conditions in the Perry's Cabin pasture and a preference for crested wheatgrass as winter forage. A possible management change would be to authorize grazing in the Perry's Cabin pasture in the spring (3/1-5/15) and build a gap fence to prevent livestock from traveling to the Seeding pasture from Perry's Cabin pasture.

East Jug Mtn. Allotment (#433): A crested wheatgrass seeding was completed in this allotment as a Sharp Top fire rehabilitation project. Pipelines were installed to transport water from Poor Jug and Euchre Butte wells to this allotment. Five pastures have been created with cross fencing. The seeding was successful, water developments and fencing allow for good distribution of livestock and periodic rest from grazing of the vegetation. The allotment is now in the 'M'=maintain category.

**Team Members**

**Title**

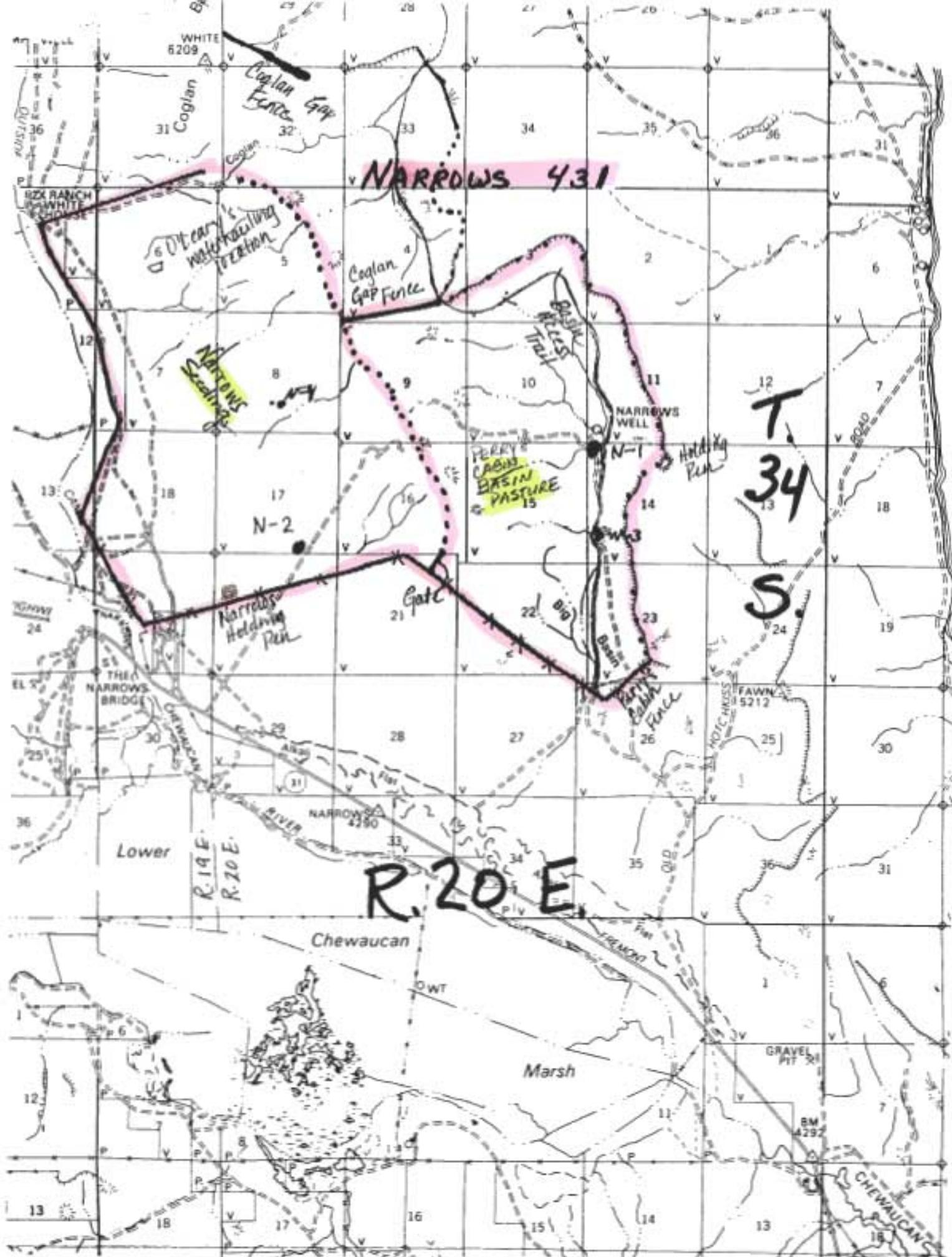
Heidi Albertson	Rangeland Management Specialist
Todd Forbes	Wildlife Biologist
Lucile Housley	Botanist
Erin McConnell	Noxious Weeds
Robert Hopper	Supervisory RMS
Ken Kestner	Supervisory NRS

**Determination**

- (X) Existing grazing management practices or levels of grazing use on the Narrows #431 and East Jug Mt. #433 Allotments promote achievement of significant progress towards the Oregon Standards and Guidelines for Rangeland Health and conform with the Guidelines for Livestock Grazing Management.
- ( ) Existing grazing management practices or levels of grazing use on the Narrows #431 and East Jug Mt. #433 Allotments will require modification or change prior to the next grazing season to promote achievement of the Oregon Standards and Guidelines for Rangeland Health and conform with the Guidelines for Livestock Grazing Management.

  
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Tom Rasmussen, Lakeview Resource Area Manager

09/30/03  
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Date



NARROWS 431

T. 34 S.

R. 20 E.

WHITE 5209  
Coglan

Coglan Gap  
Fence

O'Leary  
water hauling  
location

NARROWS  
SEALING

Coglan  
Gap Fence

PERRY  
CABIN  
BASIN  
PASTURE

Bush  
Access  
Trail

NARROWS  
WELL

Holding  
Pen

Narrows  
Holding  
Pen

Gate

Big  
Basin

Perry  
Cabin  
Fence

NOTICES  
FAWN  
5212

Lower

R. 19 E.  
R. 20 E.

Chewaucan

Marsh

GRAVEL  
PIT

BM  
4292

CHEWAUCAN

EAST JUG ALLOTMENT #0433

ALLOTMENT MAP

