

RANGELAND HEALTH ASSESSMENT

WEST LAKE # 424

Standards for Rangeland Health and Guidelines for Livestock Grazing Management
In the states of Oregon and Washington.
August 12, 1997

West Lake Allotment (# 424) Overview

Permittee: Dennis Flynn

Public Acres: 6,886 **Other Acres:** 320

Category: M

AUMs of Authorized Use: AUMs

Season of Use: 11/15-5/10

Grazing system: Winter/Spring

7.5 Minute Topographic Map: Cogland Buttes SE

Locations: See Attached Map

Special Status Species: Special status species or their habitat occurring within the allotment include: bald eagle, ferruginous hawk, peregrine falcon, burrowing owl, and sage-grouse. Species of high public interest occurring within the allotment are bighorn sheep, mule deer, and antelope.

ESI Data and Vegetation Summaries: See Attached Table

Other: Lake Abert Area of Critical Environmental Concern (ACEC) occurs within the allotment.

Vegetation: Vegetation on the lower elevation portions of the allotment is predominantly cheatgrass and tansy mustard. bluebunch wheatgrass and bluebunch wheatgrass/wyoming big sagebrush occur on areas of higher elevation, and hillsides.
(Weeds: Mediterranean sage occurs on the allotment.)

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WEST LAKE ALLOTMENT # 424

I. BACKGROUND AND GENERAL ALLOTMENT INFORMATION

The West Lake Allotment is located 3 miles north of Valley Falls, Oregon (See Attached Map.), bordering Lake Abert along the southwest shore. There is one grazing permit within this allotment, held by Dennis Flynn.

This allotment contains 6,886 acres of Bureau of Land Management (BLM) administered land and 320 acres of private land. These are encompassed in one pasture.

The vegetation types on this allotment are primarily cheatgrass and Tansy mustard (located mostly on areas of lower elevation). Bluebunch wheatgrass and bluebunch wheatgrass/Wyoming big sagebrush occur mostly on areas of higher elevations and hillsides.

The majority of the West Lake Allotment burnt in the 1986 Abert Wildfire. The Abert Fire burnt approximately 9,854 acres of the West Lake Allotment. Approximately 800 acres, on the east side of the allotment, on the west Lake Abert shoreline, was seeded to crested wheatgrass, and the remaining acres were left to rehabilitate naturally. Portions of the allotment that were in good condition (areas of higher elevations) naturally rehabilitated themselves after the wildfire, and currently have a healthy stand of desirable perennial vegetation. Areas of lower elevations were converted to a cheatgrass dominated communities.

The West Lake Allotment supports a diversity of wildlife species. Special status wildlife species or their habitats present within this allotment include the bald eagle, ferruginous hawk, peregrine falcon, burrowing owl, and sage-grouse. There are also three species with high public interest. These are mule deer, bighorn sheep, and pronghorn antelope.

There has been no Evaluation or Allotment Management Plan completed for the West Lake Allotment to date.

The Abert Lake ACEC occurs along the east side of the West Lake Allotment. An enclosure fence, approximately 6-7 miles in length, was built along the southwest shoreline of Lake Abert. The purpose of this fence was to exclude livestock from the riparian zone. The enclosure fence excludes the majority of the ACEC form. However, there is still a portion of the ACEC outside of the enclosure fence that is being grazed within the West Lake Allotment.

There are no perennial or intermittent streams, riparian or wetland areas within this allotment.

The West Lake Allotment is managed as a single pasture, and the active AUMs are in the following table (1).

Table 1: Permitted Use

Permittee	Active Permitted Use	Suspended Use	Total Use
Dennis Flynn	600	0	600

Dennis Flynn bought the permit in July of 1997, and 1998 was his first year running on the West Lake Allotment.

Prior to 1999, the active preference in the West Lake Allotment was 70 Animal Unit Months (AUMs).

In March 1999, a decision was issued increasing the active preference from 70 AUMs to 600 AUMs (by 2001) and changing the season of use from spring to winter/spring. In 1999, increasing active preference would start at 500 AUMs with and increase (depending on monitoring and utilization data) of 50 AUMs for 2000 and 2001. The basis of the increase was improved livestock distribution through use of three wells. In 2003, 600 AUMs were permanently added to Flynn's permit.

Since 2003, Dennis Flynn has been applying for additional (above 600 AUMs) Temporary Non-Renewable (TNR) AUMs, on an annual basis, to hopefully increase his permitted use to between 800 and 1,000 AUMs. An Environmental Assessment (EA) and a grazing decision would have to be written and signed to implement an increase. The EA and decision would specify criteria and stipulations involving (but not limited to) utilization standards and data, trend monitoring, and grazing season.

Utilization has never exceeded the utilization standard of 50% (defined in the Lakeview Resource Management Plan [RMP] and Record of Decision [ROD], Appendix E3: page A-142) in the West Lake Allotment (as seen in Table 2 below).

Table 2: Percent Utilization, Active AUMs, and TNR by year

Year	*Total # AUMs use in the West Lake Allotment	AUMs TNR	Active Permitted AUMs	Percent Utilization
2006	870	270	600	36
2005	908	308	600	No Data
2004	773	173	600	36
2003	890	290	600	33
2002	970	370	600	50
2001	628	28	600	No Data
2000	474	0	550	No Data
1999	570	70	500	50
1998	345	275	70	35
1997	199	129	70	17
1996	177	107	70	17

* Number of AUMs in the West Lake Allotment are from actual use forms submitted by the permittee.

Two long-term monitoring plots were established in the West Lake Allotment in 2006. There was a trend plot (established in 1985) located approximately one and one half miles north of West Lake Well # 1, and was not found in 2006. The last time this trend plot was read was in 1995. The following table (3) summarizes the 2006 data.

Table 3: Trend Plot Summaries

Plot #	Pasture	Year	Percent Cover				Percent Composition				
			Bare Gr.	Litter	Rock	Veg.	Photo Trend	Grass	Forbs	Shrubs	Data Trend
WL-1	West Lake	2006	28	30	7	33	Stable	44	13	43	Stable

This trend plot was established in 2006. The trend plot is located on the south side of a draw approximately one half mile away from West Lake Well # 1. This trend plot is located in an area of native range, and was established to detect change due to livestock grazing (because of its close proximity to water). The observed apparent trend at this range site was stable. The dominant vegetation at this trend plot is Wyoming Big Sagebrush/bluebunch wheatgrass. Photo analysis indicates a stand of mature sagebrush, with some decadent plant and few new seedling or young plants, therefore lacking age class diversity. Forbs present have a fairly high percent composition at this site, but lack species diversity. Composition of grasses at this trend site was diverse. Grasses included bluebunch wheatgrass, Sandberg's bluegrass, Idaho fescue, squirreltail, and Thurbers needlegrass. Although, establishment of native perennial grass seedling are low at this site, however some seedlings do occur. Cheatgrass and Tansy mustard are present throughout the area. Cheatgrass made up the majority of the non-persistent litter. Biological soil crusts were recorded as bareground, but marked with an asterisk. There were six hits on crusts, thus lowering the hits on bareground to 22. Because comparative trend data is lacking, the determination of apparent trend is based on the 2006 trend data/photos and professional judgment. The overall apparent trend at this range site is stable.

Percent Cover							Percent Composition				
Plot #	Pasture	Year	Bare Gr.	Litter	Rock	Veg.	Photo Trend	Grass	Forbs	Shrubs	Data Trend
WL-2	West Lake	2006	Photo	Only			Down	Photo	Only		

This photo trend plot was established in 2006. This trend plot is located approximately ¼ of a mile from water. This photo plot was established to detect trend of native perennial grasses at the site. The observed apparent trend at this range site was on the lower end of stable. Photo analysis indicates abundant cheatgrass and tansy mustard. There are native perennial grasses located within the photo plot, and surrounding areas. However, cheatgrass and tansy mustard are the dominant vegetation at this trend plot. This trend plot is fairly representative of vegetation on lower elevation portions of the allotment. Because comparative trend data is lacking, the determination of apparent trend is based on the 2006 trend data/photos and professional judgment. The overall apparent trend at this range site is downward.

There are four sources of reliable livestock water, three wells and the Chewaucan River. Two wells are located on the east side of the allotment (along the west shore of Lake Abert), approximately three miles apart. The other well is located on the northwest side of the allotment. Cattle can access a portion of the Chewaucan River on private property on the southwest side of the allotment. Periodic rest, and livestock distribution is controlled by use of the three wells. Each year the permittee (Dennis Flynn) uses two out of the three wells for livestock water, providing periodic rest for portions of the allotment one out of three years.

In the past, livestock distribution on the West Lake Allotment was limited due to lack of water. One well on the west shore of Abert Lake was used, concentrating the livestock use along the west shoreline of Lake Abert. Installation of the additional wells has enabled livestock to better utilize the feed (areas of higher elevations) that was almost unavailable in the past. The Chewaucan River on private ground is not used in conjunction with the West Lake Allotment on a consistent basis. The Chewaucan River was a deterrent (in the past) keeping cattle from dispersing to other areas of the allotment. Past users have turned out near the river and had trouble encouraging their cattle to leave the area. Today, cattle are trailed up past the Hotchkiss Well on the west side of the allotment. Since cattle are not introduced to the Chewaucan water source when they are turned out, they tend to rely on the wells for their water. This increases distribution and use of areas previously underutilized.

II. STANDARDS FOR RANGELAND HEALTH AND GUIDELINES FOR LIVESTOCK MANAGEMENT

STANDARD 1 - Watershed Function -Uplands

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

This standard has been achieved on areas (generally of higher elevation) where native perennial vegetation is dominate.

This standard is not being achieved on areas (generally lower in elevation) dominated by cheatgrass. Current livestock is not a causal factor.

Indicators used to evaluate this standard are Soil Surface Factor (SSF) which documents erosion class and soil susceptibility to accelerated erosion; plant community composition, and existing vegetation monitoring (forage utilization and trend studies) which indicate plant and root health. Ecological Site Inventory (ESI) (used for estimation purposes only). Field surveys to determine ESI were done in 1995 and 2000. Please refer to allotment specific tables and the ESI summary for full vegetative information including plant species, soil surface factor, observed apparent trend and ecological status.

SSF data is available on 99% of the area. The acreage without data represents vegetative areas too small to be mapped, transition zones between vegetative communities and soil types, and rock outcrops. The majority of the area (81%) has an SSF rating of slight, 17% moderate, and 1% stable. Overall SSF data indicates the soils in the assessment area are slightly susceptible to wind or water erosion.

Utilization levels have been at or below the target utilization standard of 50% since 1996.

The only known noxious weed occurring in the West Lake Allotment is Mediterranean Sage. Mediterranean sage occurs in patches in the allotment, and is not a causal factor for not achieving part of this standard.

Plant cover (33%), as recorded at WL-1 trend plot, is helping in promote moisture storage. Plant litter (30% cover) promotes moisture retention, and intercepts raindrop compaction at this site. However, there is a lack of comparative trend data in the West Lake Allotment. Therefore, it is determined by rangeland indicators and professional judgment that this standard has been achieved where native vegetation is dominate.

This standard is not being achieved on areas where cheatgrass is dominant. Cheatgrass lacks the ability to capture and store water adequately throughout the majority of the year. Cheatgrass does provide protection of the soil from raindrop impact to some extent.

However, cheatgrass lacks the ability to protect the soils surface from erosion, and would not capture and store water adequately under normal precipitation events. There is a lack of comparative trend data in the West Lake Allotment. However, it is determined by rangeland indicators and professional judgment that this standard is not being achieved on areas dominated by cheatgrass. Current livestock grazing is not a causal factor.

STANDARD 2 – Watershed Function - Riparian/Wetland areas

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

This standard is not applicable.

There are no perennial or major intermittent streams or associated riparian areas in this allotment; therefore this standard is not applicable.

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.

This standard has been achieved on areas where native perennial vegetation is dominant.

This standard is not being achieved on areas dominated by cheatgrass. Current livestock is not a causal factor.

Indicators used to evaluate this standard include animal populations, trend studies, vegetative composition, presence of weed species, botanical reports, ecological status, Observed

Apparent Trend (OAT), Seral Stage and PNC from the Lake County ESI survey (which is preliminary at this time). Field surveys for ESI were completed in 1995 through 2000. Data is used in this assessment for estimation purposes only. Please refer to the Tables presented in the Allotment Overview for summary of ESI data.

The ESI survey compares the current plant composition to a defined Potential Natural Community for the identified soil type and precipitation zone. The 1995-2000 ESI data indicates that 10% of the native plant communities are in Late Seral, 41% are in Mid Seral, and 49% are in early seral.

Observed Apparent Trend is a one time trend for the area determined in the 1995-2000 ESI survey. Totals for the surveyed acreage, show 12% had an OAT indicating upward trend, 35% had a Static trend and less than 53% had a downward trend.

Utilization levels have been at or below the target utilization standard of 50% since 1996.

The only known noxious weed occurring in the West Lake Allotment is Mediterranean Sage. Mediterranean sage occurs in patches in the allotment, and is not a causal factor for not achieving part of this standard.

Trend Plot WL-1 shows a good diversity of community structure including grasses, forbs, and shrubs. Diversity ensures that the capture and storage of energy occurs throughout most of the season. Nutrient cycling is evidenced by litter accumulation and overall plant productivity. Plants are allowed to cycle with grazing management that provides for periodic rest. There is a lack of comparative trend data in the West Lake Allotment. However, it is determined by rangeland indicators and professional judgment that this standard has been achieved on areas where native perennial vegetation is dominant.

Trend Plot WL-2 shows a lack of diversity of community structure. This site lacks shrubs, and is dominated by tansy mustard and cheatgrass. This site is lacking species diversity; however, there are still some native perennial grasses that would ensure the capture and storage of energy at that site. This trend plot is fairly representative of the lower elevation cheatgrass/tansy mustard dominated sites, which are not meeting this standard. Current livestock grazing management is not a causal factor.

Fauna

The majority of this allotment was burned in a wildfire in 1986. Much of the burned area has been converted to cheatgrass or a combination of cheatgrass with a few other perennial grasses. Ecological processes and species diversity are adequate to make this allotment functional, but this functionality is marginal at best. Standard 3 is being met for wildlife on this allotment.

Weeds

The only known noxious weed to occur in the West Lake Allotment is Mediterranean sage.

Hunting pressure is high in this allotment because of its access and proximity to Valley Falls. This area also sees quite a bit of other recreational activity as well. With the mobility of hunters and the increased use of off highway vehicles (OHVs), the potential for new weed introductions as well as the spread of existing infestations in this area is increasing.

STANDARD 4 – Water Quality

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

This standard is not applicable.

There are no perennial or major intermittent surface waters on BLM administered lands within the West Lake Allotment therefore the water quality standard is not applicable to the assessment area.

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.

This standard is being achieved

Aquatic

There are no listed T&E or sensitive aquatic species known in the area.

Fauna

Special status wildlife species or their habitats that are present within this allotment include the bald eagle (*Haliaeetus leucocephalus*), ferruginous hawk (*Buteo regalis*), peregrine falcon (*Falco peregrinus*), burrowing owl (*Speotyto cunicularia*) and sage-grouse (*Centrocercus urophasianus*). There are also three species with high public interest. These are mule deer (*Odocoileus hemionus*), bighorn sheep (*Ovis canadensis*) and pronghorn antelope (*Antilocapra americana*).

No Surveys have been conducted for bald eagles, ferruginous hawks or peregrine falcons within the allotment. No nesting habitat is available within the allotment for bald eagles, peregrine falcons or ferruginous hawks. It is suspected that bald eagles are occasional visitors to much of the area, foraging on winter killed deer or other carrion scattered through the allotment. No incidental sightings of peregrines exist within the allotment, but occasional sightings occur in the surrounding area. Marginal foraging habitat exists within the allotment for peregrine falcons. There are no resource conflicts for peregrine falcons, ferruginous hawks or bald eagles.

No observations of burrowing owls exist within the vicinity of the allotment. It is assumed that they may occasionally occur within the allotment. There are no resource conflicts for this species.

Pronghorn antelope occur in portions of this allotment. Pronghorn use is concentrated mostly in areas adjacent to private agricultural fields and in burned areas. No major conflicts exist between pronghorn and cattle grazing within this allotment.

Mule deer inhabit most of this allotment year round. Low to moderate concentrations of wintering mule deer also occur in this allotment. There are no major conflicts between livestock and mule deer at this time.

Bighorn sheep inhabit much of this allotment. There is some overlap in range between bighorns and cattle; however bighorn sheep use is concentrated along the ridges and slopes. No major conflicts exist between bighorn sheep and cattle grazing within these allotments.

Habitats for sage-grouse occur throughout much of this allotment. Sage-grouse numbers are low within this allotment compared to other areas in Lake County. There are two sage-grouse lek sites within the allotment. Sage-grouse habitats in the allotment consist of 222 acres (2%) of nesting, 0 acres (0%) of brood, 480 acres (5%) of winter and 9730 acres (93%) of non-habitat. At best, this allotment has the potential to have 8271 acres (79%) of nesting, 1070 acres (10%) of brood, and 1091 acres (10%) of non-habitat. The major limitation for sage-grouse habitats within this allotment is the invasion of much of the area by cheatgrass after the fire in 1986. Major restoration efforts would be needed to rehabilitate this area and restore sage-brush to these areas. No conflicts exist between livestock and sage-grouse within this allotment.

Overall, this standard is being met for wildlife species within this allotment; however habitat quality for wildlife is poor. Efforts to improve this standard should focus on sound management of livestock and restoration efforts that reduce cheatgrass and restore native sagebrush communities.

Flora

There are no known special status plant species found in the allotment. This area has been surveyed and no plants were found.

III. CONFORMANCE TO GUIDELINES FOR LIVESTOCK GRAZING MANAGEMENT

The West Lake Allotment is being provided with adequate growing season rest (with the use of the three wells) and is meeting the requirements of providing adequate cover for infiltration, moisture storage, and maintaining plant communities. Livestock grazing management in the West Lake Allotment is conforming to the guidelines of Livestock Grazing Management (August 12, 1997).


IV. TEAM PARTICIPANTS AND TITLE

Jayna Ferrell	Rangeland Management Specialist
Todd Forbes	Wildlife Biologist
Erin McConnell	Natural Resource Specialist (NRS), Weeds
Alan Munhall	Fisheries Biologist
Lucile Housley	Botanist
Robert Hopper	Supervisory NRS

V. DETERMINATION

Existing grazing management practices or levels of grazing use on the 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 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.



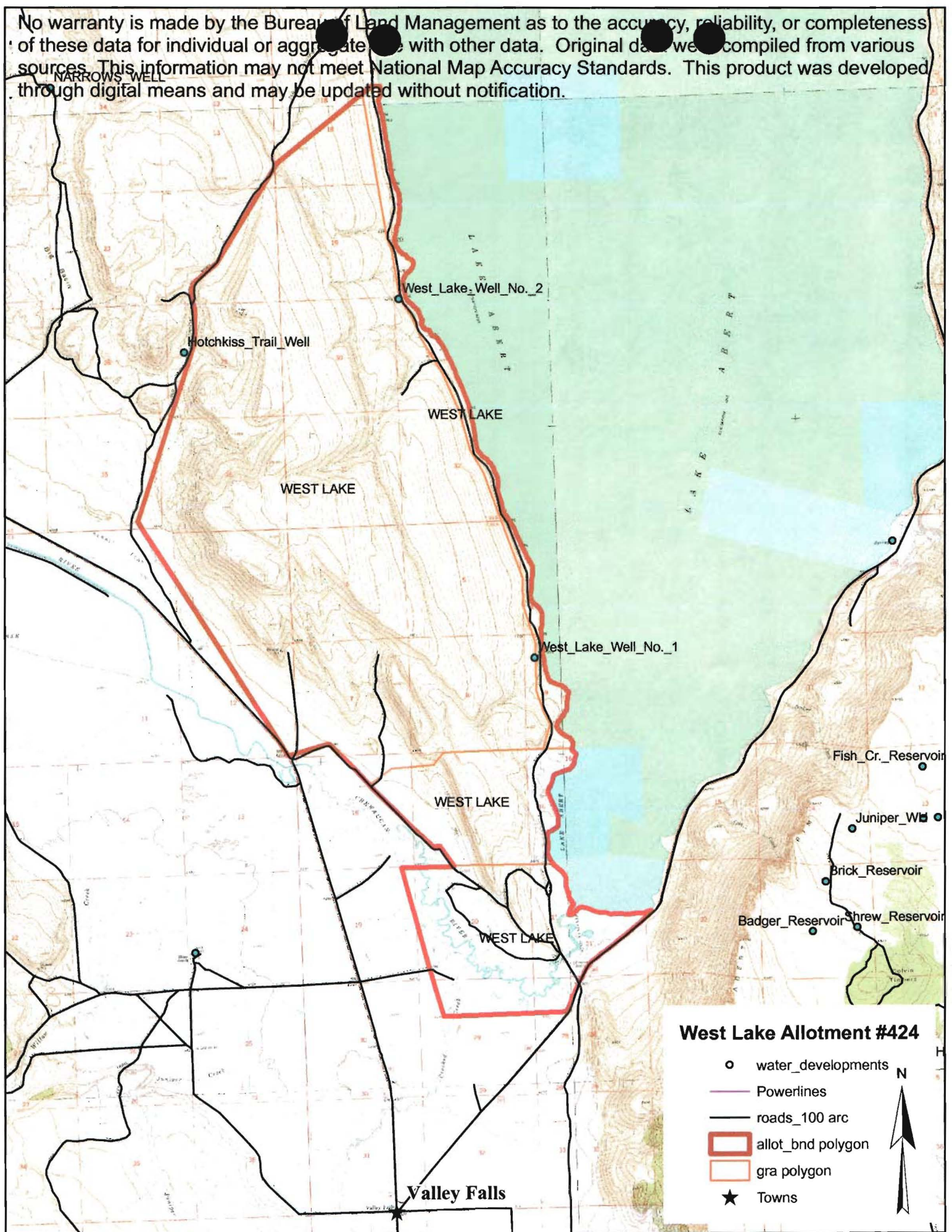
Field Manager, Lakeview Resource Area

3/22/07

Date

Summary of ESI Data – West Lake Allotment # 424														
Vegetation Community	Total Acres	% of total acres	SSF Acres					OAT Acres			Acres of Vegetative Community in Seral Stage			
			Stable	Slight	Moderate	Critical	Severe	Down	Static	Up	PNC	Late	Mid	Early
BRTE Cheatgrass	2,561	42	94	2,467				1,170	1,391			28	1,303	1,230
BRTE/DESCU Cheatgrass/Tansymustard	1,156	19		1,156				1,156						1,156
PSSPS Bluebunch wheatgrass	152	3		152						152		152		
ARTR4/BRTE Tri-tip sagebrush/Cheatgrass	117	3			117			117						117
ARTRW8//BRTE Wyoming big sagebrush/Cheatgrass	229	4		151	78			78	151				229	
ARTRW8/PSSPS Wyoming big sagebrush/Bluebunch wheatgrass	261	4		73	188					261		261		
ATCO/BRTE California ayenia/Bluebunch heatgrass	52	.8			44			44				44		
CHVI8/BRTE Green rabbitbrush/Cheatgrass	763	13		763				2	448	313			761	2
SAVE/BRTE Greasewood/Cheatgrass	572	10		103	469			463	109			103	172	297
CHVI8/BRTE/DESCU Green rabbitbrush/Cheatgrass/Greasewood	137	2			137			137						137
Total	6,000	100	94	4,865	1,033	0	0	3,167	2,099	726	0	588	2,465	2,939

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West Lake Allotment #424

- water_developments
- Powerlines
- roads_100 arc
- ▭ allot_bnd polygon
- ▭ gra polygon
- ★ Towns

