

Drought Conditions Pancake HMA

Drought Summary

Escalating drought conditions within the Pancake Herd Management Area (HMA) is increasing wild horse management concerns for this summer and coming fall/winter period. The Ely District's Pancake HMA has an AML of 240-493 and our current estimated population is 1,206 wild horses.

The major concern at this time is the body condition of wild horses and their habitat that have been declining in the southern portion of the Pancake HMA. An aerial direct count population inventory of the affected area within the Pancake HMA in August 2012 observed 146 wild horses and 120 wild horses were observed in the Sand Springs West HMA. The area of concern is within the southern portion of the Pancake HMA around Big Sand Springs Valley and the Ike Bench (eastside of the Pancake Range). This area has three main water sources (Ike Spring, Martiletti Spring, and Indian Spring). Due to a combination of lack of precipitation and reduced forage growth, which has resulted in heavy to severe use by wild horses, the available water and forage resources are not supporting the number of wild horses in the area. Wild horses are traveling farther out from water to fulfill their forage requirements and this is putting a big strain on their body condition as well as the range.

The Northern portion of the Pancake HMA at this time has adequate forage and water resources.

Vegetation in this area is diverse with desert shrub/sagebrush/grass plant communities dominating the lower elevations while sagebrush/mountain shrub/grass/pinyon-juniper/mountain mahogany plant communities dominate the benches and higher elevations.

Based on the completion of Rangeland Health Standards, the majority of the Pancake HMA is not meeting the uplands standards for vegetation. Due to shrub dominance, lack of native vegetation cover, the risk of invasive species spread, risk of erosion and loss of soil structure, and heavy or severe utilization at times, the soil and vegetation resources lack much resiliency or capability to maintain or improve in this use area.

Cattle grazing in the South Sand Springs Valley Use Area has been closed since 2000 and the Ike Bench Use Area has only been utilized once in 14 years by cattle.

This portion of the Pancake HMA has been monitored beginning in April 2012. Following are the observations made during these field observations.

Monitoring and Discussion

4/18/2012

Water resources were monitored within the Pancake HMA. Portuguese Spring is dry and Martiletti Spring has slowed in water production. Other water sources are still producing adequate water for wild horses. Approximately 15-20 wild horses were found standing around Martiletti Spring. Below are photographs showing the difference in water availability at Martiletti Spring.



Martiletti spring 9/1/2011



Martiletti spring 4/18/2012

5/24/2012

Water resources were monitored at Ike Spring, Indian Spring, Big Louie Spring, Martiletti Spring, McClure Spring, Young Florio Spring, and Young Florio Well. Water has been declining at Martiletti Spring. Water production at the other springs was normal.



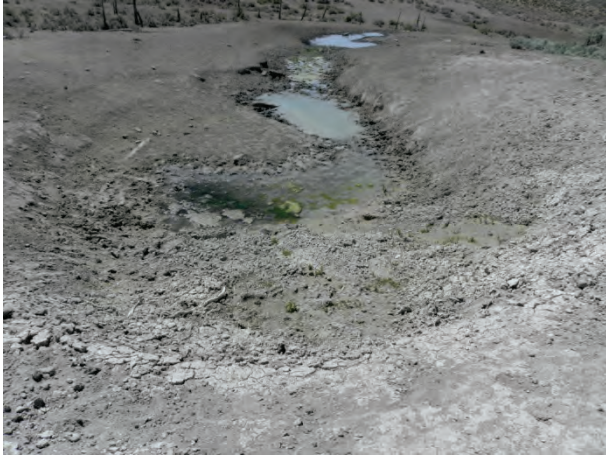
Horses less than a mile south of Ike Spring



Young Florio Spring

5/31/2012

Drought monitoring data and utilization data was collected at Key Area DW-6. Forage vigor and leader growth were found to be below average. The average height for key species was 2 to 3 inches. Soil moisture depth was about 8 inches, but very little was present. Water source availability was below normal. Martiletti spring is the closest water sources and water production continues to decline.



Martiletti Spring



Key Area DW-6 Sand Springs Valley

6/1-4/2012

Game cameras were set up at Martiletti spring, Young Florio spring, and Young Florio Well to monitor wild horse use. Approximately 25 to 30 wild horses were watering at Martiletti Spring, 10 wild horses were watering at Young Florio Well, and 30 to 35 were watering at Young Florio Spring. Young Florio Spring is approximately ½ mile from Young Florio Well and wild horses will utilize either source depending on water availability. Started noticing wild horse body condition declining from body condition score 4 to 3 at Martiletti Spring.



Martiletti Spring 6/3/2012

6/15-18/2012

Game Cameras were set up at Tunnel spring, Young Florio Well, Young Florio Spring, Martiletti Spring and Ike Spring to monitor wild horse use. Approximately 30 wild horses were observed watering at Ike

Spring and approximately 15-20 at Martiletti spring. Drought monitoring data was collected at DW-53 and DW-07. Forage vigor and leader growth were below average at both sites. The average height of current year's growth of key species ranged from 2 to 4 inches. Both sites have limited native perennial bunchgrass (i.e. Indian ricegrass) and DW-53 has galleta grass which has been unproductive due to the lack of moisture. Utilization for the previous year showed heavy use on key species (Indian rice grass). After collecting game cameras, photos showed wild horses coming into Ike spring in body condition scores of 2-4. Martiletti Spring is approximately 4 miles northwest of Ike spring and wild horses do travel between the two water sources.



Ike spring 6/15/2012 wild horse in body condition score 2-3



6/19-23/2012

Game Cameras were placed at Ike Spring. Approximately 40 horses still watering at Ike Spring with 25% of the wild horses coming in at a body condition score of 2. It was noted that wild horses are utilizing greasewood at Ike Spring (below picture) which holds limited nutritional value for wild horses and could be toxic in large quantities. This indicates the lack of forage resources in the area.



6/23/2012 Horses grazing greasewood at Ike Spring



Ike Spring 6/20/2012 wild horse BCS 2-3 Ike Spring source

7/6/2012

An interdisciplinary team (ID) team including (Ruth Thompson WH&B, Mark Lowrie Rangeland Management Specialist, and Marian Lichtler Wildlife Biologist) conducted a drought tour of the Sand Springs Valley portion of the Pancake HMA. The ID team visited Key Area DW-06 which found forage vigor and leader growth of shrubs below average. Average leader length of key species (winter fat) was ½ Inches. Leaves of deciduous shrubs were dead or growth was below average. The phenological stage of key species in plant communities for trees and shrubs found leaves dry, grasses not flowering (limited production this year) and forbs none present. Current utilization at this site was severe use on winterfat. No soil moisture was observed to a depth of 24 inches indicating the current year's rain fall is well below average. Physical condition of wild horses, and wildlife were seen to be normal. Other comments noted indicated very little forage available for wild horses in this area. Twenty-four wild horses were observed approximately 1 mile to the west of site.

Key Area DW-73 found forage vigor and leader growth of shrubs below average. Average current year's growth of the key species (winterfat) was 1 inch and (Indian ricegrass) was 1 to 2 inches. Leaf production of the deciduous shrubs was below average. Few grasses were present in the plant community. The grasses did not reach the seed set phenological stage. Few Forbs: stage varies with forbs but generally dissemination was observed. Current utilization on winterfat is heavy to severe use, and utilization on globemallow was heavy. Soil moisture was present at a depth of 1 to 2 inches at the top then dry below that depth. A recent rain had occurred (thunderstorm the day before (7/5/2012). Rainfall for current year is below average. Wild horses seen today were normal. Water source availability was normal. Other comments: Poor green-up on galleta grass and other native grasses are drought stressed.

Also placed game cameras at Indian, Ike, Martiletti, and Young Florio Springs.



Key Area DW-06 severe use on winter fat



Key Area DW-73 Heavy to severe use on winter fat

7/12/2012

Picked up game cameras at Indian, Ike, Martiletti, and Young Florio Springs. Wild horses at Ike and Indian Spring continue to drop in body condition.



Ike Springs 7/7/2012 Wild horses BCS 2-3



Indian Spring 7/6/2012 Wild Horses BCS 2-3

7/18/2012

An ID team including (Ruth Thompson WH&B and Marian Lichtler Wildlife Biologist) conducted a drought tour of the Ike Bench/Ike Springs portion of the Pancake HMA. Four sites were visited, (DW-54, DW-53, DW-07, and 0615454/4293732UTMs). Observations at all four sites indicated forage vigor, leader growth of shrubs, current rainfall, and leaves of deciduous shrub (absent or dead) were below average. Physical condition of wild horses and wildlife is below average. Wild horses have a body condition score of 2 to 3 with more wild horses falling in the body condition class 2 based on game camera observations. Very little new growth has occurred on key grasses species (Indian ricegrass and bottlebrush squirreltail). Current year's growth on key grasses at these locations is showing signs of drought stress and has not produced seed heads. Utilization ranges from light to heavy on current years grow. Also approximately 20 horses were down in the valley bottom below Indian Spring which is not typical of these wild horses.



DW-53 7/18/2012 Moderate use on current year's growth.



7/18/2012 group of three wild horses out in Valley bottom below Indian spring.

8/7-8/10/2012

Placed and picked up game cameras at Indian, Ike, Blackjack and Martiletti springs. Wild horses continue to decline in body condition at Ike springs. Indian and Martiletti spring had horses coming in at BCS 3-4. No horses came in to Blackjack spring which is the only water source in Sand Springs West.



Ike Springs 8/7/12 Wild Horses BCS 2-3



8/13/2012

A drought tour was conducted with Alan Shepherd Nevada Wild Horse and Burro State Lead. Below are Alan's notes regarding the Tour.

Toured the southwest portion of the Pancake and east side of Sand Springs West on Monday. This covers about a 10 mile radius around Ike Spring which is key water for the horses in area.

The area has very little visible forage outside desert shrub species that they generally don't eat unless required to. There is very few grasses in the interspaces of the shrubs (bare ground or gravel). The horses appear to be traveling into the valleys to find forage. Most of it is last year's cheatgrass. On the west side of the area visited is large areas of winterfat which has been entirely removed and replaced by cheatgrass, rabbitbrush, and tansy mustard. What winterfat remains is less than 3 inches tall and heavily used with very little 2012 growth.

It is estimated that 100-150 horses are in the area. The horses that we saw were in a 3-4 body class but trail cameras are showing 2-3 class horses as well but we didn't observe a 2 class horse up close. I think these horses will continue to decline in condition as we go forward. Water is limited but not severely at the 3 springs we visited. The significant issue is the available forage to finish the summer and fall/winter.

Based on what I saw this area should be managed for minimal wild horse use just based on the habitat (desert shrub) and limited waters. The horses are trailing at least 5-10 miles one way from water to forage. On a good year this alone will keep the body condition low on these horses. I think we need to consider removing horses from the area when we can as a descent winter or further dry conditions will impact these horses.

8/21-8/24/2012

Placed and picked up game cameras at Indian, Ike, and Martiletti springs. Wild horses at Ike Spring continue to drop in body condition.



Ike Springs 8/22/12 wild horse condition 2-3



DW-06

DW-06 was taken 8/24/2012 showing current vegetation within a winter fat site. Isolated thunderstorms have moved through the area but photos still show limited forage availability within the area.

8/28/2012

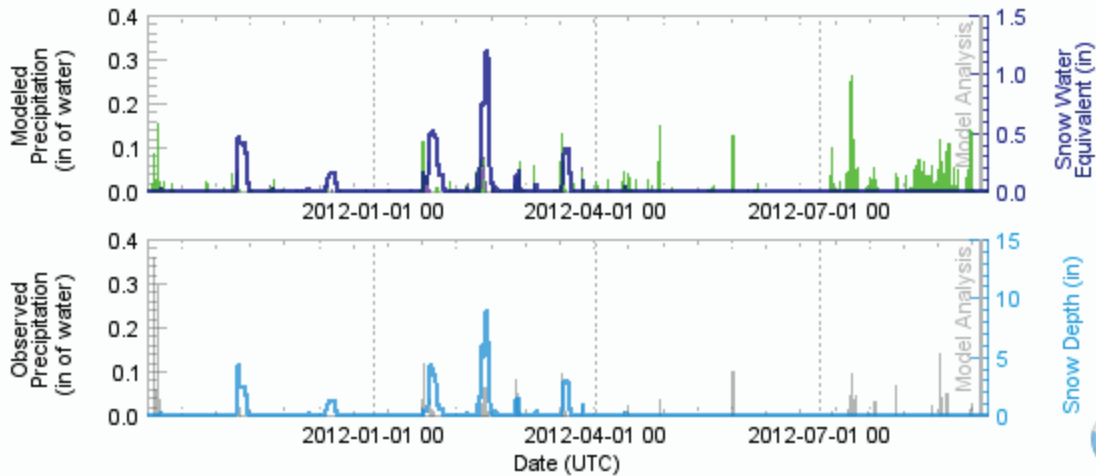
An aerial direct count population inventory of the affected area within the Pancake HMA in August 2012 observed 146 wild horses and 120 wild horses were observed in the Sand Springs West HMA. The flight covered about a 10 mile radius around Ike springs. Horse condition has continued to decline and at least 10% of observed horses are 2 BCS and many others in low 3. The body conditions of wild horses in the southern portion of the HMA overall are between 2 (very thin) and 4 (moderately thin).

Precipitation, Snow Water Equivalent, and Snow Depth

Modeled and Observed

Station: CCRN2 - CURRANT CREEK RAWS
 Latitude: 38.7667 N
 Longitude: 115.4167 W
 Elevation: 5666 Feet
 Start Date: 2011-10-01 06 UTC
 Stop Date: 2012-09-07 06 UTC
 Forest Density: 0%
 Land Use: Semi Desert Sage

Snow Precipitation
 Non-Snow Precipitation
 Unknown Precipitation
 Snow Water Equivalent (Modeled)
 Snow Depth (Modeled)
 Present Weather (Observed)
 No Precipitation
 Rain (Not Freezing)
 Freezing Drizzle/Rain
 Mixed Rain/Snow
 Snow



2

Graph represents precipitation, snow water equivalent, and snow depth between the months of October 1, 2011 thru September 7, 2012. The top graph represents modeled precipitation and the below graph represents observed precipitation. The data was collected at the Current Creek RAWs which is approximately 19.7 miles southeast of Duckwater NV and Graph can be found at National Weather Service National Operational Hydrologic Remote Sensing Center (<http://www.noahrc.nws.gov/interactive/html/graph.html?station=CCRN2&w=600&h=400&o=a&uc=0&by=2011&bm=10&bd=1&bh=6&ey=2012&em=9&ed=7&eh=6&data=0&units=0®ion=us>)

Recommendations:

The Egan Field Office, Ely District would strongly recommend that the affected area of the southern portion of the Pancake HMA be gathered. The gather would need to be conducted prior to winter storms due to deteriorating water and forage availability and wild horse conditions. Due to very little growth of new forage and heavy/severe use in the South Sand Springs Valley and Ike Bench wild horses will continue to decline in body condition throughout the summer and into the winter. These wild horses are currently in body condition class 2-4 and move 5-10 miles for forage to water. The gather would need to remove approximately 100 to 125 wild horses or 68% to 85% of existing population currently utilizing the area affected by drought conditions. A helicopter gather would be needed due to the flighty nature of these horses. Water or bait trapping these horses would be extremely difficult due to road and spring access. If these horses are not removed there is a likelihood of catastrophic death loss due to lack of resources as we enter the winter.

The gather would occur in the affected area and surrounding areas based off horse movement. Please see map below for the area of concern

The gather would be in compliance with the Wild Free-Roaming Horses and Burros Act of 1971 and the Ely District ROD and RMP.

Pertinent Parts of the Wild Free-Roaming Horses and Burros Act of 1971 (WFRHBA), 2008 Ely District Record of Decision (ROD) and Resource Management Plan (RMP), and Code of Federal Regulations

Wild Free-Roaming Horses and Burros Act of 1971 (WFRHBA), which mandates the Bureau to “*prevent the range from deterioration associated with over population*”, and “*remove excess horses in order to preserve and maintain a thriving natural ecological balance and multiple use relationships in that area*”. Additionally, Promulgated Federal Regulations at Title 43 CFR 4700.0-6 (a) state “*wild horses shall be managed as self-sustaining population of healthy animals in balance with other uses and the productive capacity of their habitat*”.

The 2008 Ely District ROD and Approved RMP (August 2008) on page 46, as required by regulation (43 CFR 1610.5-3 (a)) as follows:

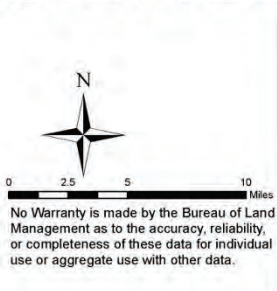
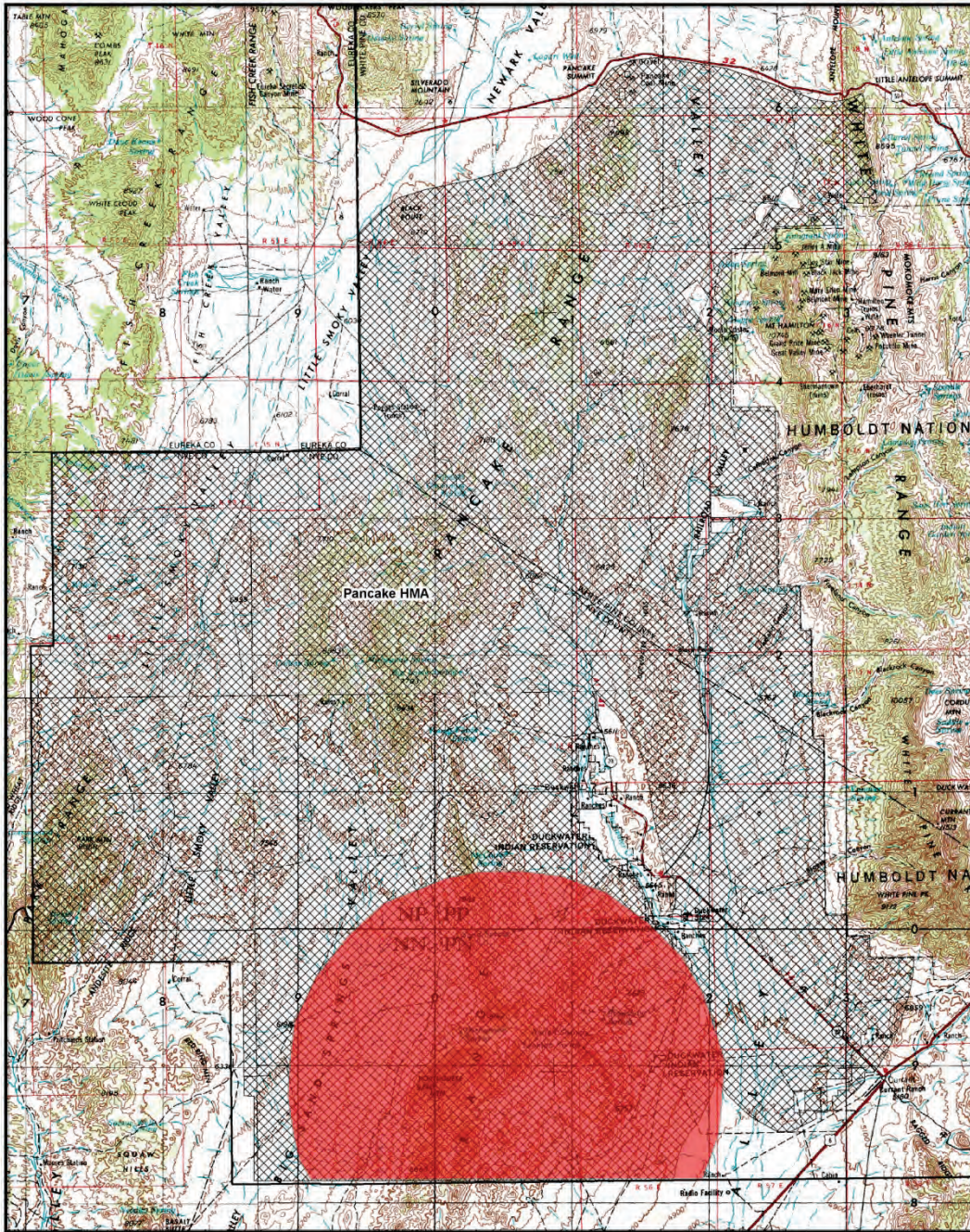
Goal: “Maintain and manage healthy, self-sustaining wild horse herds inside herd management areas within appropriate management levels to ensure a thriving natural ecological balance while preserving a multiple-use relationship with other uses and resources.”

Objective: “To maintain wild horse herds at appropriate management levels within herd management areas where sufficient habitat resources exist to sustain healthy populations at those levels.”



43 CFR 4720.1 Removal of excess animals from public lands.

- “*Upon examination of current information and determination by the authorized officer that an excess of wild horses or burros exists, the authorized officer shall remove the excess animals immediately...*”

Pancake HMA



Legend

-  HMA Pancake
-  Area of Concern

Egan Field Office
2012