

## **Range Monitoring December 2018 New Lands, Nahata Dziil Chapter**

**Livestock management including good land stewardship practices will greatly improve stability of livestock numbers during severe to extreme drought periods. Exceptional drought periods may still affect the need to reduce livestock numbers. Forage and precipitation data was collected by Padres Mesa Ranch personnel.**

**Grazing capabilities and forage show some decline due to extreme to exceptional drought conditions.** Range units have residual vegetation with some new growth evident. Precipitation from December 2017 to December 9, 2018 averaged only 3.75 inches for the entire year. Range units are making New Lands less vulnerable to droughts, which is evident in the forage report during extreme drought conditions.

**Many of the areas of New Lands still need juniper thinning.**

**No one should consider an increase their numbers. There was very little moisture over the winter months and the expected summer monsoons did not start until fall when the grasses were beginning to go dormant. If the drought persists New Lands will experience a rapid decline of the range conditions.**

**In recognition of the concern of range professionals over inappropriate use of utilization concepts, in 1999 the Society for Range Management (SRM) adopted the following position statement:**

Use of Forage Utilization and Residue Measurements The Society for Range Management recognizes and endorses forage utilization and residue measurements as useful tools in rangeland monitoring and acknowledges their value in land management. When used with other monitoring information, utilization can be employed to design and evaluate management decisions. These measurements, when properly timed and conducted using appropriate methods and sampling procedures, can be used as an aid in:

1. Analyzing distribution of animal use on a management unit.
2. Interpreting cause and effect relationships for observed changes in resource attributes such as soil cover, species composition, residual cover, etc.
3. Adjusting stocking rates and/or timing of grazing when used in conjunction with other monitoring information including: long term vegetation or habitat data, current and historical stocking records, precipitation records, etc.

Utilization and residue measurements are not management objectives. They are tools to be used with other information in evaluating whether desired resource conditions are being achieved.

**Definition of AU: is defined as “animal units.” 1 AU is equal to 1 cow or 1 bull, or one cow and calf under the age of 6-7 months. 1 AU is equal to 4 sheep units. 1  $\frac{1}{4}$  AU is equal to one horse.**

**AUM is defined as animal unit month or it means that 1 animal can be grazed for 1 month in a well-defined location.**

**AUYL is defined as animal unit yearlong or it means that 1 animal can be grazed for 1 year in a well-defined location.**

**Maximum stocking rate is the maximum number of livestock that can be grazed using all available forage in every pasture in each range unit. Utilization by grazing below the recommended number decreases vulnerability to drought conditions.**

**Average pound per acre is developed by taking multiple forage samples from different locations in each pasture of a range unit and weighing them. Then the information is used to develop an average for the entire range unit using the latest scientific methodology. 1 AU uses, on the average, 1000 lbs. of dry forage per month.**

**Livestock management practices including the movement of cattle into areas that show little to no grazing in each pasture is recommended. This can be accomplished by placement of water, mineral supplements and salt, or by physically moving livestock on horseback, into these areas.**

**Ground cover percentages are obtained by assessing the entire range unit, not based on individual pastures, because the acreage of each pasture is unknown.**

**It is imperative that we address issues facing permittees who lack the physical or financial resources to manage their permits effectively. Options to sell, lease to qualified New Lands permittees, or pass down their permits within the family in a more expedient manner than is allowed by the current probate method would encourage more young participants, and better financial rewards.**

#### **LITTLE CHAMBERS RANGE UNIT – 12,148 ACRES (as reported in June 2017)**

Grasses and shrubs show improvement. This unit still needs a water development in the northeast corner to ensure complete utilization of all forage available. Recommend 97 AUYL for the remainder of the 2017 grazing period. The permittees have already adjusted the total number to 80 in order to maintain sustainable grazing. Range unit is producing an average of 256 lbs. per acre of forage and has 50% ground cover of desirable forage plants. Precipitation from December 2016 to May 4, 2017 in this range unit averaged 4.8 inches. The following pastures are producing approximate amounts per acre as stated.

**#1 – 175 lbs., #2 - 275lbs., #3 – 220 lbs., #4 – 255 lbs., #5 – 230 lbs., #6 – 380 lbs., #7 – 260 lbs.**

#### **LITTLE CHAMBERS RANGE UNIT – 12,148 ACRES (as reported in June 2018)**

Grasses and shrubs show decline due to exceptional drought conditions. This unit still needs a water development in the northeast corner to ensure complete utilization of all forage available. Recommend 50 AUYL for the remainder of the 2018 grazing period. Range unit has residual vegetation only with no new growth evident. There is an average of 133 lbs. per acre of forage left, and has 50% ground cover of desirable forage plants. Precipitation from December 2017 to May 25, 2018 in this range unit averaged 1/2 inch or less. Residual vegetation per acre at the time of sample collection was as follows.

**#1 – 70lbs., #2 - 185lbs., #3 – 120 lbs., #4 – 115 lbs., #5 – 120 lbs., #6 – 165 lbs., #7 – 135 lbs.**

#### **LITTLE CHAMBERS RANGE UNIT – 12,148 ACRES (as reported in December 2018)**

Grasses and shrubs show some improvement. This unit still needs a water development in the northeast corner to ensure complete utilization of all forage available. Recommend 68 AUYL for the winter/spring 2019 grazing period. Range unit has residual vegetation with new growth evident. There is an average of 180 lbs. per acre of forage, and has 50% ground cover of desirable forage plants. Precipitation from May 25, 2018 to December 9, 2018 in this range unit averaged 2.71 inches. Vegetation per acre at the time of sample

collection was as follows.

**#1 - 145lbs., #2 - 180lbs., #3 - 110 lbs., #4 - 150 lbs., #5 - 205 lbs., #6 - 165 lbs., #7 - 200 lbs.**

**NAVAJO SPRINGS RANGE UNIT - 17,354 ACRES (as reported in June, 2017)**

Grasses and shrubs show improvement. Recommend 165 AUYL for remainder of 2017 grazing period. Range unit is producing an average of 276 lbs. per acre of forage and has 50% ground cover of desirable forage plants. Precipitation from November 15, 2016 to May 4 2017 in this range unit averaged 5.75 inches.

The following pastures are producing approximate amounts per acre as stated.

**#1 - 275 lbs., #2 - 200 lbs., #3 - 420 lbs., #4 - 190 lbs., #5 - 285 lbs., #6 - 295 lbs., #7 - 265 lbs.**

**NAVAJO SPRINGS RANGE UNIT - 17,354 ACRES (as reported in June 2018)**

**Grasses and shrubs show decline due to exceptional drought conditions.** Recommend 103 AU for remainder of the 2018 grazing period. Range unit has residual vegetation only with no new growth evident. There is an average of 190 lbs. per acre of forage left, and has 50% ground cover of desirable forage plants. Precipitation from December 2017 to May 25, 2018 in this range unit averaged 1/2 inch or less which is well below average for the region.

Residual vegetation per acre at the time of sample collection was as follows.

**#1 - 100 lbs., #2 - 145 lbs., #3 - 160 lbs., #4 - 180., #5 - 190 lbs., #6 - 195 lbs., #7 - 180 lbs.**

**NAVAJO SPRINGS RANGE UNIT - 17,354 ACRES (as reported in December 2018)**

Grasses and shrubs show some improvement. Recommend 88 AUYL for the winter/spring 2019 grazing period. Range unit has residual vegetation with new growth evident. There is an average of 162 lbs. per acre of forage, and has 50% ground cover of desirable

forage plants. Precipitation from May 25, 2018 to December 9, 2018 in this range unit averaged 3.04 inches. Vegetation per acre at the time of sample collection was as follows.

Residual vegetation per acre at the time of sample collection was as follows.

**#1 – 145 lbs., #2 - 85 lbs., #3 – 175 lbs., #4 – 80, #5 – 290 lbs., #6 – 180 lbs., #7 – 160 lbs.**

#### **LITTLE SILVERSMITH RANGE UNIT – 14,418 ACRES (as reported in June 2017)**

Grasses and shrubs show improvement. Recommend 130 AUYL for the remainder of 2017 grazing period. Livestock dirt tanks still need to be cleaned out to improve water retention. Range unit is producing an average of 320 lbs. per acre of dry forage and has 50% ground cover of desirable forage plants. Precipitation from November 15, 2016 to May 4, 2017 in this range unit averaged 4.25 inches.

The following pastures are producing approximate amounts per acre as stated.

#1 – 260 lbs., #2 - 320 lbs., #3 – 245 lbs., #4 – 225 lbs., #5 – 310 lbs., #6 – 315 lbs., #7 – 455 lbs. #8 – 375 lbs., #9 – 325 lbs. #10 – 295lbs. Previously a holding trap North of housing near shipping well was not monitored. It is a small area that doesn't receive much use. It is currently producing 400 lbs. This will be referred to as #11.

#### **LITTLE SILVERSMITH RANGE UNIT – 14,418 ACRES (as reported in June 2018)**

**Grasses and shrubs show decline due to exceptional drought conditions.** Recommend 88 AUYL for the remainder of 2018 grazing period. Livestock dirt tanks still need to be cleaned out to improve water retention. Range unit has residual vegetation only with no new growth evident. There is an average of 146 lbs. per acre of forage left, and has 50% ground cover of desirable forage plants. Precipitation from December 2017 to May 25, 2018 in this range unit averaged less than ½ inch.

Residual vegetation per acre at the time of sample collection was as follows.

#1 – 110 lbs., #2 - 120 lbs., #3 – 170 lbs., #4 – 130 lbs., #5 – 150 lbs., #6 – 160 lbs., #7 – 195 lbs. #8 – 100 lbs., #9 – 200 lbs. #10 – 105lbs. Previously a holding trap North of housing near shipping well was not monitored. It is a small area that doesn't receive much use. It is currently producing 160 lbs. This will be referred to as #11.

**LITTLE SILVERSMITH RANGE UNIT – 14,418 ACRES (as reported in December 2018)**

Grasses and shrubs show some improvement. Recommend 118 AUYL for the winter/spring 2019 grazing period. Range unit has residual vegetation with new growth evident. There is an average of 262 lbs. per acre of forage, and has 50% ground cover of desirable forage plants. Precipitation from May 25, 2018 to December 9, 2018 in this range unit averaged 3.46 inches. Vegetation per acre at the time of sample collection was as follows.

#1 – 255 lbs., #2 - 400 lbs., #3 – 280 lbs., #4 – 200 lbs., #5 – 210 lbs., #6 – 205 lbs., #7 – 235 lbs. #8 – 100 lbs., #9 – 85 lbs. #10 – 265lbs. Previously a holding trap North of housing near shipping well was not monitored. It is a small area that doesn't receive much use. It is currently producing 250 lbs. This will be referred to as #11.

**MIDDLE WELL RANGE UNIT – 22,865 ACRES (as reported in June,2017)**

Grasses and shrubs show improvement. Recommend 160 AUYL for the remainder of 2017 grazing period. Range unit is producing an average of 284 lbs. per acre of forage and has 50% ground cover of desirable forage plants. Precipitation from November 15, 2016 to May 4, 2017 in this range unit averaged 3.6 inches. Water development and fence repairs are still needed around the mine and housing development areas. Permittees are now able to use approximately 80% of the range unit.

The following pastures are producing approximate amounts per acre as stated.#1 – 200 lbs., #2 - 150 lbs., #3 – 340 lbs., #4 – 325 lbs., #5 – 245 lbs., #6 – 180 lbs., #7 – 400 lbs. #8 – 355 lbs., #9 – 395 lbs. #10 – 220 lbs., #11 – 355 lbs. Pasture # 11 does not have a water development and is not in use.

**MIDDLE WELL RANGE UNIT – 22,865 ACRES (as reported in June,2018)**

**Grasses and shrubs show decline due to exceptional drought conditions.** Recommend 85 AUYL for the remainder of 2018 grazing period. Range unit has residual vegetation only with no new growth evident. There is an average of 120 lbs. per acre of

forage left, and has 50% ground cover of desirable forage plants. Precipitation from December 2017 to May 25, 2018 in this range unit averaged .42 inches. Water development and fence repairs are still needed around the mine and housing development areas.

Residual vegetation per acre at the time of sample collection was as follows.

#1 – 100 lbs., #2 - 115 lbs., #3 – 150 lbs., #4 – 110 lbs., #5 – 200 lbs., #6 – 115 lbs., #7 – 140 lbs. #8 – 130 lbs., #9 – 115 lbs. #10 – 95 lbs., #11 – 200 lbs. Pasture # 11 does not have a water development and is not in use.

**MIDDLE WELL RANGE UNIT – 22,865 ACRES (as reported in December,2018)**

Grasses and shrubs show some improvement. Recommend 109 AUYL for the winter/spring 2019 grazing period. Range unit has residual vegetation with new growth evident. There is an average of 152 lbs. per acre of forage, and has 50% ground cover of desirable forage plants. Precipitation from May 25, 2018 to December 9, 2018 in this range unit averaged 4.8 inches. Vegetation per acre at the time of sample collection was as follows.

#1 – 150 lbs., #2 - 130 lbs., #3 – 85 lbs., #4 – 100 lbs., #5 – 200 lbs., #6 – 200 lbs., #7 – 130 lbs. #8 – 125 lbs., #9 – 100 lbs. #10 – 180 lbs., #11 – 175 lbs. Pasture # 11 does not have a water development and is not in use.

**PARKER DRAW RANGE UNIT – 14,043 ACRES (as reported in June 2017)**

Grasses and shrubs show improvement. Recommend 120 AUYL for the remainder of 2017 grazing period. Range unit is producing an average of 288 lbs. per acre of forage and has 45% ground cover of desirable forage plants. Precipitation from November 15, 2016 to May 4,2017 in this range unit averaged 4.49 inches. The following pastures are producing approximate amounts per acre as stated. The cool season forage showed improved growth due to increased winter moisture.

#1 – 270 lbs., #2 -405 lbs., #3 – 300 lbs., #4 – 590 lbs., #5 – 335 lbs., #6 – 580 lbs., #7 – 355 lbs. #8 – 390 lbs.,

**PARKER DRAW RANGE UNIT – 14,043 ACRES (as reported in June 2018)**

**Grasses and shrubs show decline due to exceptional drought conditions.** Recommend 68 AUYL for the remainder of 2018 grazing period. Range unit has residual vegetation only with no new growth evident. There is an average of 168 lbs. per acre of forage left, and has 50% ground cover of desirable forage plants. Precipitation from December 2017 to May 25, 2018 in this range unit averaged .42 inches.

Residual vegetation per acre at the time of sample collection was as follows.

#1 – 80 lbs., #2 -230 lbs., #3 – 195 lbs., #4 – 120 lbs., #5 – 200 lbs., #6 – 235 lbs., #7 – 220 lbs. #8 – 135 lbs.,

**PARKER DRAW RANGE UNIT – 14,043 ACRES (as reported in December 2018)**

Grasses and shrubs show some improvement. Recommend 92 AUYL for the winter/spring 2019 grazing period. Range unit has residual vegetation with new growth evident. There is an average of 210 lbs. per acre of forage, and has 50% ground cover of desirable forage plants. Precipitation from May 25, 2018 to December 9, 2018 in this range unit averaged 3.34 inches. Vegetation per acre at the time of sample collection was as follows.

#1 – 200 lbs., #2 -180 lbs., #3 – 245 lbs., #4 – 200 lbs., #5 – 250 lbs., #6 – 170 lbs., #7 – 190 lbs. #8 – 135 lbs.,

**EAST MILL RANGE UNIT – 16,763 ACRES (as reported in June 2017)**

Grasses and shrubs show improvement. Recommend 115 AUYL for 2017 grazing period. Range unit is producing an average of 247 lbs. per acre of forage and has 45% ground cover of desirable forage plants. Precipitation from November 15, 2016 to May 4, 2017 in this range unit averaged 3.95 inches. The following pastures are producing approximate amounts per acre as stated.



#1 – 265 lbs., #2 -185 lbs., #3 – 235 lbs., #4 – 345 lbs., #5 –195 lbs., #6 – 245 lbs., #7 – 190 lbs. #8 – 250 lbs., An area which was previously included in Pasture 8 is now a separate pasture numbered 9 with a new monitoring site. #9 – 315 lbs.

**EAST MILL RANGE UNIT – 16,763 ACRES (as reported in June 2018)**

**Grasses and shrubs show decline due to exceptional drought conditions.** Recommend 59 AUYL for the remainder of 2018 grazing period. Range unit has residual vegetation only with no new growth evident. There is an average of 124 lbs. per acre of forage left, and has 50% ground cover of desirable forage plants. Precipitation from December 2017 to May 25, 2018 in this range unit averaged less than ½ inch.

Residual vegetation per acre at the time of sample collection was as follows.#1 – 155 lbs., #2 - 85 lbs., #3 – 75 lbs., #4 – 90 lbs., #5 –185 lbs., #6 – 100 lbs., #7 – 130 lbs. #8 – 180 lbs., An area which was previously included in Pasture 8 is now a separate pasture numbered 9 with a new monitoring site. #9 – 120 lbs.

**EAST MILL RANGE UNIT – 16,763 ACRES (as reported in December 2018)**

Grasses and shrubs show some improvement. Recommend 158 AUYL for the winter/spring 2019 grazing period. Range unit has residual vegetation with new growth evident. There is an average of 240 lbs. per acre of forage, and has 50% ground cover of desirable forage plants. Precipitation from May 25, 2018 to December 9, 2018 in this range unit averaged 3.35 inches. Vegetation per acre at the time of sample collection was as follows.

#1 – 230 lbs., #2 - 200 lbs., #3 – 235 lbs., #4 – 210 lbs., #5 –170 lbs., #6 – 380 lbs., #7 – 290 lbs. #8 – 255 lbs., An area which was previously included in Pasture 8 is now a separate pasture numbered 9 with a new monitoring site. #9 – 170 lbs.

**HOGAN WELL RANGE UNIT – 21,225 ACRES (as reported in June 2017)**

Grasses and shrubs show improvement. Low stocking rate has encouraged forage growth. Recommend 155 AUYL for the remainder of 2017 grazing period. Range unit is producing an average of 242 lbs. per acre of dry forage and has 50% ground cover of desirable

forage plants. Precipitation from November 15, 2016 to May 4, 2017 in this range unit averaged 4.8 inches.

The following pastures are producing approximate amounts per acre as stated.

#1 – 240 lbs., #2 - 170 lbs., #3 – 325 lbs., #4 –115 lbs., #5 – 280 lbs., #6 – 275 lbs., #7 – 450 lbs. #8 – 175 lbs., #9 – 245 lbs. #10 – 140 lbs. **Note, Pasture numbering has been changed. Please see attached map.**

### **HOGAN WELL RANGE UNIT – 21,225 ACRES (as reported in June 2018)**

**Grasses and shrubs show decline due to exceptional drought conditions.** Recommend 74 AUYL for the remainder of 2018 grazing period. Range unit has residual vegetation only with no new growth evident. There is an average of 115 lbs. per acre of forage left, and has 50% ground cover of desirable forage plants. Precipitation from December 2017 to May 25, 2018 in this range unit averaged less than ½ inch.

Residual vegetation per acre at the time of sample collection was as follows.

Note, Pasture numbering has been changed. #1 – 85 lbs., #2 - 80 lbs., #3 – 130 lbs., #4 –95 lbs., #5 – 105 lbs., #6 – 265 lbs., #7 – 155 lbs. #8 – 135 lbs., #9 – 90 lbs. #10 – 90 lbs..

### **HOGAN WELL RANGE UNIT – 21,225 ACRES (as reported in December 2018)**

Grasses and shrubs show some improvement. Recommend 115 AUYL for the winter/spring 2019 grazing period. Range unit has residual vegetation with new growth evident. There is an average of 135 lbs. per acre of forage, and has 50% ground cover of desirable forage plants. Precipitation from May 25, 2018 to December 9, 2018 in this range unit averaged 2.83 inches. Vegetation per acre at the time of sample collection was as follows.

Note, Pasture numbering has been changed. #1 – 225 lbs., #2 - 45 lbs., #3 – 220 lbs., #4 –100 lbs., #5 – 100 lbs., #6 – 215 lbs., #7 – 145 lbs. #8 – 125 lbs., #9 – 100lbs. #10 – 70 lbs..

### **RIM RANGE UNIT – 17,242 ACRES (as reported in June, 2017)**

Grasses and shrubs show improvement. Recommend 150 AUYL for the remainder of the 2017 grazing period. Low stocking rate has encouraged forage growth. Range unit is producing an average of 351 lbs. per acre of forage and has 50% ground cover of desirable forage plants. Precipitation from November 15, 2016 to May 4, 2017 in this range unit averaged 4.95 inches. Recommend water development, brush pile removal, and juniper thinning to improve utilization and production. Good management practices are evident in this range unit.

The following pastures are producing approximate amounts per acre as stated.

#1 – 395 lbs., #2 - 440 lbs., #3 – 435 lbs., #4 – 360 lbs., #5 – 230 lbs., #6 – 310 lbs., #7 – 345 lbs. #8 – 290 lbs.,

### **RIM RANGE UNIT – 17,242 ACRES (as reported in June, 2018)**

**Grasses and shrubs show decline due to exceptional drought conditions.**

Recommend 105 AUYL for the remainder of 2018 grazing period. Range unit has residual vegetation only with no new growth evident. There is an average of 193 lbs. per acre of forage left, and has 50% ground cover of desirable forage plants. Precipitation from December 2017 to May 25, 2018 in this range unit averaged less than ½ inch.

Residual vegetation per acre at the time of sample collection was as follows.

#1 – 105 lbs., #2 - 205 lbs., #3 – 165 lbs., #4 – 320 lbs., #5 – 180 lbs., #6 – 150 lbs., #7 – 215 lbs. #8 – 180 lbs.,

### **RIM RANGE UNIT – 17,242 ACRES (as reported in December, 2018)**

Grasses and shrubs show some improvement. Recommend 128 AUYL for the winter/spring 2019 grazing period. Range unit has residual vegetation with new growth evident. There is an average of 238 lbs. per acre of forage, and has 50% ground cover of desirable forage plants. Precipitation from May 25, 2018 to December 9, 2018 in this range unit averaged 3.5 inches. Vegetation per acre at the time of sample collection was as follows.

#1 – 190 lbs., #2 - 265 lbs., #3 – 300 lbs., #4 – 260 lbs., #5 – 190 lbs., #6 – 250 lbs., #7 – 220 lbs. #8 – 230 lbs.,

### **HARD SCRABBLE RANGE UNIT – 22,715 ACRES (as reported in June, 2017)**

Grasses and shrubs show improvement. The forage currently available may support 220 AUYL; however, this range unit experienced severe damage when stocked at 160 AU during a dry season. Range unit is producing an average of 310 lbs. per acre of forage and has 50% ground cover of desirable forage plants. Precipitation from November 15, 2016 to May 4, 2017 in this range unit averaged 3.90 inches with the southern half of the range unit receiving less precipitation and showing less forage improvement. Juniper thinning and brush pile removal is still needed on this unit to improve utilization and production. This range unit remains below recommended stocking rate.

There has been a major change in fence lines on this range unit. There are now 12 monitoring sites. Please see attached map.

The following pastures are producing approximate amounts per acre as stated.

#1 – 295 lbs., #2 -390 lbs., #3 – 460 lbs., #4 – 285 lbs., #5 – 395 lbs., #6 – 350 lbs., #7 – 360 lbs. #8 – 315 lbs., #9 – 295 lbs. #10 – 205 lbs., #11 – 250 lbs., #12 – 125 lbs.

### **HARD SCRABBLE RANGE UNIT – 22,715 ACRES (as reported in June, 2018)**

**Grasses and shrubs show decline due to exceptional drought conditions.** Recommend 150 AUYL for the remainder of 2018 grazing period. Range unit has residual vegetation only with no new growth evident. There is an average of 204 lbs. per acre of forage left, and has 50% ground cover of desirable forage plants. Precipitation from December 2017 to May 25, 2018 in this range unit averaged less than 1 inch.

Residual vegetation per acre at the time of sample collection was as follows.

#1 – 160 lbs., #2 -240 lbs., #3 – 310 lbs., #4 – 220 lbs., #5 – 300 lbs., #6 – 240 lbs., #7 – 280 lbs. #8 – 210 lbs., #9 – 160 lbs. #10 – 150 lbs., #11 – 160 lbs., #12 – 20 lbs.

### **HARD SCRABBLE RANGE UNIT – 22,715 ACRES (as reported in December, 2018)**

Grasses and shrubs show some improvement. Recommend 106 AUYL for the winter/spring 2019 grazing period. Range unit has residual vegetation with new growth evident. There is an average of 149 lbs. per acre of forage, and has 50% ground cover of desirable forage plants. Precipitation from May 25, 2018 to December 9, 2018 in this range unit averaged 4.2 inches. Vegetation per acre at the time of sample collection was as follows.

#1 – 160 lbs., #2 -140 lbs., #3 – 110 lbs., #4 – 135 lbs., #5 – 150 lbs., #6 – 150 lbs., #7 – 165 lbs. #8 – 200 lbs., #9 – 225 lbs. #10 – 60 lbs., #11 – 160 lbs., #12 – 20 lbs.

### **NORTH WELL – 19,040 ACRES (as reported in June 2017)**

Grasses and shrubs show improvement. Recommend 143 AUYL for the remainder of the 2017 grazing period. Range unit is producing an average of 239 lbs. per acre of forage and has 50% ground cover of desirable forage plants. Precipitation from November 15, 2016 to May 4, 2017 in this range unit averaged 4.1 inches. The southern portion of the range unit received less precipitation. Low stocking rates have prevented a decline in grazing conditions. Water development is still needed on the south portion of the range unit.

The following pastures are producing approximate amounts per acre as stated.

#1 – 220 lbs., #2 -315 lbs., #3 –210 lbs., #4 –200 lbs., #5 – 295 lbs., #6 – 195 lbs.

### **NORTH WELL – 19,040 ACRES (as reported in June 2018)**

**Grasses and shrubs show decline due to exceptional drought conditions.** Recommend 118 AUYL for the remainder of 2018 grazing period. Range unit has residual vegetation only with no new growth evident. There is an average of 199 lbs. per acre of forage left, and has 50% ground cover of desirable forage plants. Precipitation from December 2017 to May 25, 2018 in this range unit averaged less than 1 inch.

Residual vegetation per acre at the time of sample collection was as follows.

#1 – 175 lbs., #2 -260 lbs., #3 –210 lbs., #4 –150 lbs., #5 – 260 lbs., #6 – 140 lbs.

### **NORTH WELL – 19,040 ACRES (as reported in December 2018)**

Grasses and shrubs show some improvement. Recommend 94 AUYL for the winter/spring 2019 grazing period. Range unit has residual vegetation with new growth evident. There is an average of 157 lbs. per acre of forage, and has 50% ground cover of desirable forage plants. Precipitation from May 25, 2018 to December 9, 2018 in this range unit averaged 4.3 inches. Vegetation per acre at the time of sample collection was as follows.

#1 – 135 lbs., #2 -135 lbs., #3 –135 lbs., #4 –125 lbs., #5 – 150 lbs., #6 – 250 lbs. New monitoring sites #7 – 165lbs, 8 – 170lbs., 9 – 150lbs.

**ANTELOPE WELL – 19,955 ACRES (as reported in June, 2017)**

Grasses and shrubs show improvement. Recommend 170 AUYL for the remainder of the 2017 grazing period. Range unit is producing an average of 331 lbs. per acre of forage and has 50% ground cover of desirable forage plants. Precipitation from November 15, 2016 to May 4, 2017 in this range unit averaged 3.8 inches.

The following pastures are producing approximate amounts per acre as stated. The current stocking rate is well below recommended rate.

#1 – 640 lbs., #2 - 320 lbs., #3 – 325 lbs., #4 –380 lbs., #5 – 235 lbs., #6 – 325 lbs., #7 – 290 lbs. #8 – 260 lbs., #9 – 195 lbs. #10 – 340 lbs.

**ANTELOPE WELL – 19,955 ACRES (as reported in June, 2018)**

**Grasses and shrubs show decline due to exceptional drought conditions.** Recommend 88 AUYL for the remainder of 2018 grazing period. Range unit has residual vegetation only with no new growth evident. There is an average of 141 lbs. per acre of forage left, and has 50% ground cover of desirable forage plants. Precipitation from December 2017 to May 25, 2018 in this range unit averaged less than ½ inch.

Residual vegetation per acre at the time of sample collection was as follows.

#1 – 225 lbs., #2 - 125 lbs., #3 – 130 lbs., #4 –155 lbs., #5 – 150 lbs., #6 – 135 lbs., #7 – 145 lbs. #8 – 125 lbs., #9 – 135 lbs. #10 – 85 lbs.

**ANTELOPE WELL – 19,955 ACRES (as reported in December, 2018)**

Grasses and shrubs show some improvement. Recommend 87 AUYL for the winter/spring 2019 grazing period. Range unit has residual vegetation with new growth evident. There is an average of 140 lbs. per acre of forage, and has 50% ground cover of desirable forage plants. Precipitation from May 25, 2018 to December 9, 2018 in this range unit averaged 3.05 inches. Vegetation per acre at the time of sample collection was as follows.

#1 – 300 lbs., #2 - 135 lbs., #3 – 140 lbs., #4 –115 lbs., #5 – 110 lbs., #6 – 140 lbs., #7 – 125 lbs. #8 – 95 lbs., #9 – 105 lbs. #10 – 110 lbs.

### **KELSEY RANGE UNIT – 15,505 ACRES (as reported in June 2017)**

Grasses and shrubs show improvement. Recommend 95 AUYL for the remainder of the 2017 grazing period. Range unit is producing an average of 279 lbs. per acre of forage and has 35% ground cover of desirable forage plants. Precipitation from November 15, 2016 to May 4, 2017 in this range unit averaged 4.9 inches. **Juniper and dead pile removal is still needed to improve the forage capacity, wildlife habitat and natural resources. It will also reduce fire danger. Dirt tanks are needed in some areas because of wildlife encroachment.**

The following pastures are producing approximate amounts per acre as stated.

#1 – 300 lbs., #2 - 190 lbs., #3 – 245 lbs., #4 – 305 lbs., #5 – 250 lbs., #6 – 245 lbs., #7 – 210 lbs. #8 – 375 lbs., #9 – 390 lbs.

### **KELSEY RANGE UNIT – 15,505 ACRES (as reported in June 2018)**

**Grasses and shrubs show decline due to exceptional drought conditions.** Recommend 55 AUYL for the remainder of 2018 grazing period. Range unit has residual vegetation only with no new growth evident. There is an average of 163 lbs. per acre of forage left, and has 35% ground cover of desirable forage plants. Precipitation from December 2017 to May 25, 2018 in this range unit averaged less than ½ inch.

**Juniper and dead pile removal is still needed to improve the forage capacity, wildlife habitat and natural resources. It will also reduce fire danger. Dirt tanks are needed in some areas because of wildlife encroachment.**

Residual vegetation per acre at the time of sample collection was as follows.

#1 – 120 lbs., #2 - 160 lbs., #3 – 190 lbs., #4 – 160 lbs., #5 – 135 lbs., #6 – 135 lbs., #7 – 190 lbs. #8 – 165 lbs., #9 – 220 lbs.

### **KELSEY RANGE UNIT – 15,505 ACRES (as reported in December 2018)**

Grasses and shrubs show some improvement. Recommend 52 AUYL for the winter/spring 2019 grazing period. Range unit has residual vegetation with new growth evident. There is an average of 107 lbs. per acre of forage, and has 35% ground cover of desirable forage plants. Precipitation from May 25, 2018 to December 9, 2018 in this range unit averaged 3.95 inches. Vegetation per acre at the time of sample collection was as follows.

**Juniper and dead pile removal is still needed to improve the forage capacity, wildlife habitat and natural resources. It will also reduce fire danger. Dirt tanks are needed in some areas because of wildlife encroachment.**

#1 – 85 lbs., #2 - 120 lbs., #3 – 90 lbs., #4 – 135 lbs., #5 – 140 lbs., #6 – 130 lbs., #7 – 90 lbs. #8 – 80 lbs., #9 – 125 lbs.

### **BARTH LAKE RANGE UNIT – 28,455 ACRES (as reported in June 2017)**

Grasses and shrubs show improvement. Recommend 122 AUYL for the remainder of the 2017 grazing period. Range unit is producing an average of 171 lbs. per acre of dry forage and has 40% ground cover of desirable forage plants. Precipitation from November 15, 2016 to May 4, 2017 in this range unit averaged 4.2 inches. Recommend juniper tree thinning, and dirt tank enlargement and installation. Movement of cattle on a regular basis is still highly recommended.

The following pastures are producing approximate amounts per acre as stated.

### **BARTH LAKE RANGE UNIT – 28,455 ACRES (as reported in June 2018)**

**Grasses and shrubs show decline due to exceptional drought conditions.** Recommend 78 AUYL for the remainder of 2018 grazing period. Range unit has residual vegetation only with no new growth evident. There is an average of 110 lbs. per acre of forage left, and has 40% ground cover of desirable forage plants. Precipitation from December 2017 to May 25, 2018 in this range unit averaged less than ½ inch.

Residual vegetation per acre at the time of sample collection was as follows.

#1 – 125 lbs., #2 - 100 lbs., #3 – 100 lbs., #4 – 70 lbs., #5 – 130 lbs., #6 – 160 lbs., #7 – 95 lbs. #8 – 70 lbs., #9 – 155 lbs., #10 – 90 lbs.

### **BARTH LAKE RANGE UNIT – 28,455 ACRES (as reported in December 2018)**

Grasses and shrubs show some improvement. Recommend 106 AUYL for the winter/spring 2019 grazing period. Range unit has residual vegetation with new growth evident. There is an average of 149 lbs. per acre of forage, and has 40% ground cover of desirable forage plants. Precipitation from May 25, 2018 to December 9, 2018 in this range unit averaged 3.7 inches. Vegetation per acre at the time of sample collection was as follows.

#1 – 110 lbs., #2 - 200 lbs., #3 – 160 lbs., #4 – 185 lbs., #5 – 125 lbs., #6 – 200 lbs., #7 – 85 lbs. #8 – 105 lbs., #9 – 120 lbs., #10 – 130 lbs.



### **BLUE BIRD RANGE UNIT – 34,830 ACRES (as reported in June 2017)**

Grasses and shrubs have remained about the same. Recommend 190 AUYL for the remainder of the of 2017 grazing period. Range unit is producing an average of 334 lbs. per acre of dry forage and has 35% ground cover of desirable forage plants. Precipitation from November 15, 2016 to May 4, 2017 in this range unit averaged 4.03 inches. They remain below recommended stocking rate which has prevented a decline in grazing conditions. Recommend juniper tree thinning, and dirt tank enlargement and installation.

The following pastures are producing approximate amounts per acre as stated.

#1 – 245 lbs., #2 - 225 lbs., #3 – 500 lbs., #4 – 250 lbs., #5 – 360 lbs., #6 – 520 lbs., #7 – 355 lbs. #8 – 300 lbs., #9 – 325 lbs., #10 – 255 lbs.

### **BLUE BIRD RANGE UNIT – 34,830 ACRES (as reported in June 2018)**

**Grasses and shrubs show decline due to exceptional drought conditions.** Recommend 129 AUYL for the remainder of 2018 grazing period. Range unit has residual vegetation only with no new growth evident. There is an average of 165.5 lbs. per acre of forage left, and has 35% ground cover of desirable forage plants. Precipitation from December 2017 to May 25, 2018 in this range unit averaged less than ½ inch.

Residual vegetation per acre at the time of sample collection was as follows.

#1 – 125 lbs., #2 - 160 lbs., #3 –230 lbs., #4 – 110 lbs., #5 – 275 lbs., #6 – 165 lbs., #7 – 180 lbs. #8 – 215 lbs., #9 – 115 lbs., #10 – 90 lbs.

### **BLUE BIRD RANGE UNIT – 34,830 ACRES (as reported in December 2018)**

Grasses and shrubs show some improvement. Recommend 79 AUYL for the winter/spring 2019 grazing period. Range unit has residual vegetation with new growth evident. There is an average of 101 lbs. per acre of forage, and has 35% ground cover of desirable forage plants. Precipitation from May 25, 2018 to December 9, 2018 in this range unit averaged 3.08 inches. Vegetation per acre at the time of sample collection was as follows.

#1 – 100 lbs., #2 - 105 lbs., #3 –95 lbs., #4 – 55 lbs., #5 – 80 lbs., #6 – 160 lbs., #7 – 130 lbs. #8 – 110 lbs.,

#9 – 95 lbs., #10 – 110 lbs.

**IMPOUND PASTURE – 1000 ACRES (as reported in December, 2018)**

Grasses and shrubs show no further improvement. The only use was to hold shipping calves for 60 days. This pasture should only be used on a temporary basis. Range unit is producing an average of 160 lbs. per acre of forage and has 45% ground cover of desirable forage plants. The capacity is 80 AUMs.

**NAVAJO PASTURE – APPROXIMATELY 1000 ACRES (as reported in June 2018)**

**This area was not used during this growing season. Range unit is producing an average of 300 lbs. per acre of forage and has 55% ground cover of desirable forage plants.**

**NAVAJO PASTURE – APPROXIMATELY 1000 ACRES (as reported in December 2018)**

**This area was used temporarily during this growing season. Range unit is producing an average of 280 lbs. per acre of forage and has 55% ground cover of desirable forage plants.**

**RIGHT OF WAY PASTURE – (SOUTH SIDE OF NORTH PINTA RANGE UNIT) APPROXIMATELY 4450 ACRES - (as reported in December 2018)**

Grasses and shrubs show some improvement. Recommend 42 AUYL for the winter/spring 2019 grazing period. Range unit has residual vegetation with new growth evident. There is an average of 140 lbs. per acre of forage, and has 50% ground cover of desirable forage plants. Precipitation from May 25, 2018 to December 9, 2018 in this range unit averaged 3.5 inches.

**NORTH PINTA – APPROXIMATELY 9920 ACRES - (as reported in June 2018)**

**This area is used as drought relief and grass bank for the Padres Mesa Ranch. Grasses**

**and shrubs show decline due to exceptional drought conditions.** Recommend 70 AUYL for the remainder of 2018 grazing period. Range unit has residual vegetation only with no new growth evident. There is an average of 180 lbs. per acre of forage left, and has 50% ground cover of desirable forage plants. Precipitation from December 2017 to May 25, 2018 in this range unit averaged less than ½ inch. This area should only see seasonal useage.

**NORTH PINTA – APPROXIMATELY 9920 ACRES - (as reported in December 2018)**

**This area is used as drought relief and grass bank for the Padres Mesa Ranch. Grasses and shrubs show decline due to exceptional drought conditions.** Recommend 70 AUYL for the remainder of 2018 grazing period. Range unit has residual vegetation only with no new growth evident. There is an average of 200 lbs. per acre of forage left, and has 50% ground cover of desirable forage plants. Precipitation from May 25, 2018 to December in this range unit averaged less than 3.5 inches. This area should only see seasonal useage.

**SOUTH PINTA – APPROXIMATELY 4480 ACRES - (as reported in June 2018)**

**Grasses and shrubs show decline due to exceptional drought conditions.** Recommend 45 AUYL for the remainder of 2018 grazing period. Range unit has residual vegetation only with no new growth evident. There is an average of 220 lbs. per acre of forage left, and has 50% ground cover of desirable forage plants. Precipitation from December 2017 to May 25, 2018 in this range unit averaged less than ½ inch. This area should only see seasonal useage.

**SOUTH PINTA – APPROXIMATELY 4480 ACRES - (as reported in December 2018)**

**Grasses and shrubs show decline due to exceptional drought conditions.** Recommend 47 AUYL for the remainder of 2018 grazing period. Range unit has residual vegetation only with no new growth evident. There is an average of 300 lbs. per acre of forage left, and has 50% ground cover of desirable forage plants. Precipitation from May 25, 2018 to December in this range unit averaged 3.5 inches. This area should only see seasonal useage.

**LOST WELL PASTURE – APPROXIMATELY 400 ACRES - (as reported in December 2018)**

**Out of use due to construction on the bridge and fire damage.**

**PADRES MESA RANCH – 41576 ACRES - (as reported in June 2018)**

**Grasses and shrubs show decline due to exceptional drought conditions.** Range unit has residual vegetation only with no new growth evident. Precipitation from December 2017 to May 25, 2018 in this range unit averaged less than ½ inch.

#1 – closed #2 – receiving temporary use #3 – receiving temporary use #4 – closed #5 – closed #6 – closed #7 – closed #8 – closed #9 – receiving temporary use #10 – closed #11 – closed #12 – receiving temporary use #13 – receiving temporary use #14 – closed #15 – closed

**PADRES MESA RANCH – 41576 ACRES - (as reported in December 2018)**

**Grasses and shrubs show slight improvement.** Range unit has residual vegetation with very little new growth. Recommend 209 AUYL for the winter/spring 2019 grazing

period. Precipitation from May 25, 2018 to December in this range unit averaged 3.75 inches. There is an average of 179 lbs. per acre of forage, and has 45% ground cover of desirable forage plants. Precipitation from May 25, 2018 to December 9, 2018 in this range unit averaged 3.75 inches. Vegetation per acre at the time of sample collection was as follows.

#1 - 155lbs. #2 - 170 lbs. #3 - 175 lbs. #4 - 170 lbs #5 - 210lbs #6 - 190 lbs. #7 - 170 lbs #8 - 195 lbs. #9 - 280 lbs. #10 - 240 lbs. #11 - 150 lbs. #12 - 230 lbs. #13 - 85 lbs. #14 - 170 lbs. #15 -100 lbs.