

Range Monitoring June 2016
New Lands, Nahata Dziil Chapter
Range monitoring using Forage production analysis.

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.

The overall forage condition of the-range units is good.

Definition of AU: is defined as "animal units." 1 AU is equal to 1 cow or 1bull, or one cow and calf under the age of 6-7months. 1AU is equal to 4 sheep units. 1 ½ 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.

Because we do mid-season readings, we will be changing AUYL to AU. This was causing confusion when we changed recommended stocking rates midway in the year.

Maximum stocking rate is the maximum number of livestock that can be grazed using all available forage in every pasture in each range unit. Forage is improving this year (2016), it is recommend permittees use available forage with caution so that they can sustain their range units.

To provide flexibility, from 2016 on, we will provide a stocking AU range rather than a set number. This is so that the permittees can adjust their numbers has needed for weather variances and forage growth.

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. 1AU 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.

ANTELOPE WELL – 19,955 ACRES (as reported in June 2015)

Grasses and shrubs show improvement due to early spring moisture. Recommend 137 AUYL for 2015 grazing period. Range unit is producing an average of 220 lbs. per acre of forage and has 50% groundcover of desirable forage plants. Precipitation from December 2014 to May 1 2015 in this range unit averaged 3.6 inches. It has rained approximately 1 inch in addition during the month of May.

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

#1 – 200 lbs., #2 - 195 lbs., #3 – 295 lbs., #4 – 245 lbs., #5 – 170 lbs., #6 – 255 lbs., #7 – 250 lbs. #8 – 165 lbs., #9 – 240 lbs. #10 – 180 lbs.

ANTELOPE WELL – 19,955 ACRES (as reported in December 2015)

Grasses and shrubs show no further improvement due to lack of moisture during summer monsoon growing season. Recommend 96 AUYL for remainder of 2015 grazing period into spring of 2016. Range unit is producing an average of

154.5 lbs. per acre of forage and has 50% groundcover of desirable forage plants. Precipitation from December 2014 to November 15, 2015 in this range unit averaged 7.44 inches.

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

#1 – 350 lbs., #2 - 205 lbs., #3 – 210 lbs., #4 – 130 lbs., #5 – 165 lbs., #6 – 130 lbs., #7 – 110 lbs. #8 – 225 lbs., #9 – 130 lbs. #10 – 185 lbs.

ANTELOPE WELL – 19,955 ACRES (as reported in June 2016)

Grasses and shrubs show improvement due to winter and spring moisture. Recommend 131 - 151 AU for remainder of 2016 grazing period. Range unit is producing an average of 226 lbs. per acre of forage and has 50% groundcover of desirable forage plants. Precipitation from December 2015 to June 2016 in this range unit averaged 3.5 inches.

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

#1 – 220 lbs., #2 - 220 lbs., #3 – 155 lbs., #4 – 235 lbs., #5 – 170 lbs., #6 – 335 lbs., #7 – 235 lbs. #8 – 255 lbs., #9 – 180 lbs. #10A – 250 lbs., #10B – 230 lbs.

BARTH LAKE RANGE UNIT – 28,455 ACRES (as reported in June 2015)

Grasses and shrubs show no improvement due to early spring moisture. Recommend 78 AUYL for 2015 grazing period. Range unit is producing an average of 110 lbs. per acre of dry forage and has 35% groundcover of desirable forage plants. Precipitation from December 2014 to May 1 2015 in this range unit averaged 2.9 inches. Recommend juniper tree thinning, and dirt tank enlargement and installation. Movement of cattle on a regular basis is still highly recommended. Range unit is showing a decline in forage production.

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

#1 – 65 lbs., #2 - 105 lbs., #3 – 75 lbs., #4 – 90 lbs., #5 – 245 lbs., #6 – 125 lbs., #7 – 100 lbs. #8 – 60 lbs., #9 – 130 lbs., #10 – 105 lbs.

BARTH LAKE RANGE UNIT – 28,455 ACRES (as reported in December 2015)

Grasses and shrubs show no further improvement due to lack of moisture during summer monsoon growing season. Recommend 79 AUYL for remainder of 2015 grazing period into spring of 2016. Range unit is producing an average of 126 lbs. per acre of dry forage and has 35% groundcover of desirable forage plants. Precipitation from December 2014 to November 15, 2015 in this range unit averaged 8.8 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.

#1 – 130 lbs., #2 - 125 lbs., #3 – 180 lbs., #4 – 100 lbs., #5 – 110 lbs., #6 – 220 lbs., #7 – 105 lbs. #8 – 60 lbs., #9 – 135 lbs., #10 – 95 lbs.

BARTH LAKE RANGE UNIT – 28,455 ACRES (as reported in June 2016)

Grasses and shrubs show improvement due to winter and spring moisture. Recommend 94 - 114 AU for remainder of 2016 grazing period. Range unit is producing an average of 146 lbs. per acre of dry forage and has 35% groundcover of desirable forage plants. Precipitation from December 2015 to June 2015 in this range unit averaged 2.88 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.

#1 – 155 lbs., #2 - 195 lbs., #3 – 170 lbs., #4 – 130 lbs., #5 – 85 lbs., #6 – 70 lbs., #7 – 125 lbs. #8 – 160 lbs., #9 – 155 lbs., #10 – 215 lbs.

BLUE BIRD RANGE UNIT – 34,830 ACRES (as reported in June 2015)

Grasses and shrubs show improvement due to early spring moisture. Recommend 179 AUYL for 2015 grazing period. Range unit is producing an average of 235 lbs. per acre of dry forage and has 35% groundcover of desirable forage plants. Precipitation from December 2014 to May 1 2015 in this range unit averaged 3.27 inches. It has rained

approximately 1 inch in addition during the month of May. Recommend juniper tree thinning, and dirt tank enlargement and installation.

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

#1 – 195 lbs., #2 - 200 lbs., #3 – 330 lbs., #4 – 200 lbs., #5 – 255 lbs., #6 – 190 lbs., #7 – 235 lbs. #8 – 235 lbs., #9 – 270 lbs., #10 – 110 lbs.

BLUE BIRD RANGE UNIT – 34,830 ACRES (as reported in December, 2015)

Grasses and shrubs show no further improvement due to lack of moisture during summer monsoon growing season. Recommend 162 AUYL for remainder of 2015 grazing period into spring of 2016. Range unit is producing an average of 212.5 lbs. per acre of dry forage and has 35% groundcover of desirable forage plants. Precipitation from December 2014 to November 15, 2015 in this range unit averaged 9.09 inches. Recommend juniper tree thinning, and dirt tank enlargement and installation.

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

#1 – 145 lbs., #2 - 160 lbs., #3 – 260 lbs., #4 – 115 lbs., #5 – 150 lbs., #6 – 245 lbs., #7 – 375 lbs. #8 – 200 lbs., #9 – 245 lbs., #10 – 230 lbs.

BLUE BIRD RANGE UNIT – 34,830 ACRES (as reported in June 2016)

Grasses and shrubs show improvement due to winter and spring moisture. Recommend 185 - 205 AU for remainder of 2016 grazing period. Range unit is producing an average of 256 lbs. per acre of dry forage and has 35% groundcover of desirable forage plants. Precipitation from December 2015 to June 2016 in this range unit averaged 3.17 inches. Recommend juniper tree thinning, and dirt tank enlargement and installation.

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

#1 – 290 lbs., #2 - 215 lbs., #3 – 275 lbs., #4 – 170 lbs., #5 – 295 lbs., #6 – 240 lbs., #7 – 240 lbs. #8 – 185 lbs., #9 – 295 lbs., #10 – 330 lbs.

EAST MILL RANGE UNIT – 16,763 ACRES (as reported in June 2015) Grasses and shrubs show improvement due to early spring moisture. Recommend 104 AUYL for 2015 grazing period. It is recommended that grazing is withheld until the end of August to enhance maximum forage production. Range unit is producing an average of 199.5 lbs. per acre of forage and has 45% groundcover of desirable forage plants. Precipitation from December 2014 to May 1 2015 in this range unit averaged 3.12 inches. It has rained approximately 1 inch in addition during the month of May.

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

#1 – 210 lbs., #2 - 180 lbs., #3 – 205 lbs., #4 – 206 lbs., #5 –215 lbs., #6 – 200 lbs., #7 – 175 lbs. #8 – 205 lbs.,

EAST MILL RANGE UNIT – 16,763 ACRES (as reported in December 2015)

Grasses and shrubs show no further improvement due to lack of moisture during summer monsoon growing season. Recommend 74 AUYL for remainder of 2015 grazing period into spring of 2016. Range unit is producing an average of 158.3 lbs. per acre of forage and has 45% groundcover of desirable forage plants. Precipitation from December 2014 to November 15, 2015 in this range unit averaged 6.2 inches.

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

#1 – 185 lbs., #2 - 150 lbs., #3 – 145 lbs., #4 – 245 lbs., #5 –120 lbs., #6 – 130 lbs., #7 – 140 lbs. #8 – 165 lbs.,

EAST MILL RANGE UNIT – 16,763 ACRES (as reported in December 2016)

Grasses and shrubs show improvement due to winter and spring moisture. Recommend 82 - 102 AU for remainder of 2016 grazing period. Range unit is producing an average of 195 lbs. per acre of forage and has 45% groundcover of desirable forage plants. Precipitation from December 2015 to June 2016 in this range unit averaged 3.07 inches.

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

#1 – 230 lbs., #2 - 135 lbs., #3 – 185 lbs., #4 – 275 lbs., #5 – 145 lbs., #6 – 240 lbs., #7 – 210 lbs. #8 – 175 lbs., #9 – 160 lbs.

HARD SCRABBLE RANGE UNIT – 22,715 ACRES (as reported in June 2015)

The forage improvement in this unit reflects early spring moisture and early growth of cool season forage species. Recommend 140 for 2015 grazing period. Range unit is producing an average of 196 lbs. per acre of forage and has 50% groundcover of desirable forage plants. Precipitation from December 2014 to May 1 2015 in this range unit averaged 2.98 inches. Juniper thinning and brush pile removal is needed on this unit to improve utilization and production.

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

#1 – 300 lbs., #2 - 245 lbs., #3 – 165 lbs., #4 – 140 lbs., #5 – 150 lbs., #6 – 255 lbs., #7 – 260 lbs. #8 – 180 lbs., #9 – 155 lbs. #10 – 105 lbs.

HARD SCRABBLE RANGE UNIT – 22,715 ACRES (as reported in December, 2015)

Grasses and shrubs show no further improvement due to lack of moisture during summer monsoon growing season. Recommend 143 AUYL for remainder of 2015 grazing period into spring of 2016. Range unit is producing an average of 201.5 lbs. per acre of forage and has 50% groundcover of desirable forage plants. Precipitation from December 2014 to November 15, 2015 in this range unit averaged 7.37 inches. Juniper thinning and brush pile removal is needed on this unit to improve utilization and production.

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

#1 – 190 lbs., #2 - 260 lbs., #3 – 175 lbs., #4 – 270 lbs., #5 – 160 lbs., #6 – 165 lbs., #7 – 220 lbs. #8 – 195 lbs., #9 – 275 lbs. #10 – 105 lbs.

HARD SCRABBLE RANGE UNIT – 22,715 ACRES (as reported in December 2016)

Grasses and shrubs show improvement due to winter and spring moisture. Recommend 157 - 177 AU for remainder of 2016 grazing period. Range unit is producing an average of 235 lbs. per acre of forage and has 50% groundcover of desirable forage plants. Precipitation from December 2015 to June 2016 in this range unit averaged 2.98 inches. Juniper thinning and brush pile removal is needed on this unit to improve utilization and production.

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

#1 – 140 lbs., #2 - 290 lbs., #3 – 215 lbs., #4 – 415 lbs., #5 – 90 lbs., #6 – 250 lbs., #7A – 215 lbs., #7B – 195 lbs., #8 – 290 lbs., #9 – 155 lbs. #10 – 95 lbs.

HOGAN WELL RANGE UNIT – 21,225 ACRES (as reported in June 2015)

Grasses and shrubs show improvement due to early spring moisture. Recommend 138 AUYL for 2015 grazing period. Range unit is producing an average of 223 lbs. per acre of dry forage and has 50% groundcover of desirable forage plants. Precipitation from December 2014 to May 1 2015 in this range unit averaged 4.07 inches. It has rained approximately 1 inch in addition during the month of May. Cattle movement between pastures has not been consistent with good range management practices. Pasture #8 has been extremely overgrazed. This issue has not been addressed as of the June 2014 report. Movement of ALL livestock on a regular basis is highly recommended.

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

#1 – 195 lbs., #2 - 135 lbs., #3 – 220 lbs., #4 – 165 lbs., #5 – 310 lbs., #6 – 115 lbs., #7 – 300 lbs. #8 – 40 lbs., #9 – 300 lbs.

HOGAN WELL RANGE UNIT – 21,225 ACRES (as reported in December 2015)

Grasses and shrubs show no further improvement due to lack of moisture during summer monsoon growing season. Recommend 132 AUYL for remainder of 2015 grazing period into spring of 2016. Range unit is producing an average of 199.5 lbs. per acre of dry forage and has 50% groundcover of desirable forage plants. Precipitation from December 2014 November 15, 2015 in this range unit averaged 8.87 inches.

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

#1 – 120 lbs., #2 - 265 lbs., #3 – 190 lbs., #4 – 170 lbs., #5 – 230 lbs., #6 – 100 lbs., #7 – 175 lbs. #8 – 305 lbs., #9 – 245 lbs.

HOGAN WELL RANGE UNIT – 21,225 ACRES (as reported in June 2016)

Grasses and shrubs show improvement due to winter and spring moisture. Recommend 178 - 198 AU for remainder of 2016 grazing period. Range unit is producing an average of 283 lbs. per acre of dry forage and has 50% groundcover of desirable forage plants. Precipitation from December 2015 to June 2016 in this range unit averaged 3.27 inches.

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

#1 – 225 lbs., #2 - 205 lbs., #3 – 290 lbs., #4 – 200 lbs., #5 – 245 lbs., #6 – 395 lbs., #7 – 325 lbs. #8 – 330 lbs., #9 – 360 lbs., #10 - 260

KELSEY RANGE UNIT – 15,505 ACRES (as reported in June 2015)

Grasses and shrubs show minimal improvement due to early spring moisture. Recommend 64 AUYL for 2015 grazing period. Range unit is producing an average of 188 lbs. per acre of forage and has 35% groundcover of desirable forage plants. Precipitation from December 2014 to May 1 2015 in this range unit averaged 3.8 inches. It has rained approximately 1 inch in addition during the month of May. 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. Movement of cattle on a regular basis is still highly recommended.

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

#1 – 245 lbs., #2 - 160 lbs., #3 – 260 lbs., #4 – 230 lbs., #5 – 150 lbs., #6 – 115 lbs., #7 – 120 lbs. #8 – 165 lbs., #9 – 255 lbs.

KELSEY RANGE UNIT – 15,505 ACRES (as reported in December, 2015)

Grasses and shrubs show no further improvement due to lack of moisture during summer monsoon growing season. Recommend 54 AUYL for remainder of 2015 grazing period into spring of 2016. Range unit is producing an average of 159.44 lbs. per acre of forage and has 35% groundcover of desirable forage plants. Precipitation from December 2014 to November 15, 2015 in this range unit averaged 9.51 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 – 130 lbs., #2 - 160 lbs., #3 – 120 lbs., #4 – 180 lbs., #5 – 140 lbs., #6 – 135 lbs., #7 – 140 lbs. #8 – 185 lbs., #9 – 245 lbs.

KELSEY RANGE UNIT – 15,505 ACRES (as reported in June 2016)

Grasses and shrubs show improvement due to winter and spring moisture. Recommend 49 - 69 AU for remainder of 2016 grazing period. Range unit is producing an average of 174 lbs. per acre of forage and has 35% groundcover of desirable forage plants. Precipitation from December 2015 to June 2016 in this range unit averaged 3.3 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 – 145 lbs., #2 - 90 lbs., #3 – 110 lbs., #4 – 195 lbs., #5 – 185 lbs., #6 – 170 lbs., #7 – 195 lbs. #8 – 215 lbs., #9 – 265 lbs.

LITTLE CHAMBERS RANGE UNIT – 12,148 ACRES (as reported in June 2015)

Grasses and shrubs show improvement due to early spring moisture. This unit needs a water development in the northeast corner to ensure complete utilization of all forage available. Recommend 98 AUYL for 2015 grazing period. Range unit is producing an average of 257 lbs. per acre of forage and has 50% groundcover of desirable forage plants. Precipitation from December 2014 to May 1 2015 in this range unit averaged 5.0 inches. It has rained approximately 1 inch in addition during the month of May.

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

#1 – 280 lbs., #2 - 260 lbs., #3 – 120 lbs., #4 – 210 lbs., #5 – 260 lbs., #6 – 420 lbs., #7 – 235 lbs.

The forage improvement in this unit reflects early spring moisture and early growth of cool season forage species.

LITTLE CHAMBERS RANGE UNIT – 12,148 ACRES (as reported in December 2015)

Grasses and shrubs show no further improvement due to lack of moisture during summer monsoon growing season. This unit needs a water development in the northeast corner to ensure complete utilization of all forage available. Recommend 68 AUYL for remainder of 2015 grazing period into spring of 2016. Range unit is producing an average of 180.7 lbs. per acre of forage and has 50% groundcover of desirable forage plants. Precipitation from December 2014 to November 15, 2015 in this range unit averaged 11.56 inches.

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

#1 – 160 lbs., #2 - 170 lbs., #3 – 160 lbs., #4 – 230 lbs., #5 – 150 lbs., #6 – 225 lbs., #7 – 170 lbs.

The moisture in the area met the normal average however; the timing was not suitable to summer growing season of forage.

LITTLE CHAMBERS RANGE UNIT – 12,148 ACRES (as reported in June 2016)

Grasses and shrubs have shown improvement due to Spring rains. This unit needs a water development in the northeast corner to ensure complete utilization of all forage available. Recommend 120 - 140 AU for the 2016 grazing period. Range unit is producing an average of 392 lbs. per acre of forage and has 50% groundcover of desirable forage plants. Precipitation from December 2015 to June 2016 in this range unit averaged 3.8 inches.

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

#1 – 330 lbs., #2 - 300 lbs., #3 – 430 lbs., #4 – 250 lbs., #5 – 520 lbs., #6 – 530 lbs., #7 – 400 lbs.

LITTLE SILVERSMITH RANGE UNIT – 14,418 ACRES (as reported in June 2015)

Grasses and shrubs show improvement due to early spring moisture. Recommend a maximum of 99 AUYL for 2015 grazing period. Eastern portion of the range unit shows less precipitation and growth. Livestock dirt tanks still need to be cleaned out to improve water retention. Rabbit Brush reduction is was implemented using controlled burn. Recommend follow up treatment with herbicide. Range unit is producing an average of 187 lbs. per acre of dry forage and has 50% groundcover of desirable forage plants. Precipitation from December 2014 to May 1 2015 in this range unit averaged 2.95 inches. It has rained approximately 1 inch in addition during the month of May.

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

#1 – 180 lbs., #2 - 150 lbs., #3 – 160 lbs., #4 – 162 lbs., #5 – 220 lbs., #6 – 210 lbs., #7 – 220 lbs. #8 – 225 lbs., #9 – 165 lbs. #10 – 180lbs.

LITTLE SILVERSMITH RANGE UNIT – 14,418 ACRES (as reported in December 2015)

Grasses and shrubs show no further improvement due to lack of moisture during summer monsoon growing season. Recommend 79 AUYL for remainder of 2015 grazing period into spring of 2016. Eastern portion of the range unit shows less precipitation and growth. Livestock dirt tanks still need to be cleaned out to improve water retention. Rabbit Brush reduction is was implemented using controlled burn. Recommend follow up treatment with herbicide. Range unit is producing an average of 175.45 lbs. per acre of dry forage and has 50% groundcover of desirable forage plants. Precipitation from December 2014 to November 15, 2015 in this range unit averaged 6.57 inches.

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

#1 – 230 lbs., #2 - 95 lbs., #3 – 165 lbs., #4 – 55 lbs., #5 – 240 lbs., #6 – 160 lbs., #7 – 255 lbs. #8 – 115 lbs., #9 – 185 lbs. #10 – 220lbs.

LITTLE SILVERSMITH RANGE UNIT – 14,418 ACRES (as reported in June 2016)

Grasses and shrubs show improvement due to winter and spring moisture. Recommend 121 - 141 AU for the remainder of the 2016 grazing period. Range unit is producing an average of 291 lbs. per acre of dry forage and has 50% groundcover of desirable forage plants. Precipitation from December 2015 to June 2016 in this range unit averaged 3.29 inches.

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

#1 – 270 lbs., #2 - 165 lbs., #3 – 270 lbs., #4 – 430 lbs., #5 – 215 lbs., #6 – 185 lbs., #7 – 315 lbs. #8 – 295 lbs., #9 – 470 lbs. #10 – 330 lbs. #11 – 245 lbs.

MIDDLE WELL RANGE UNIT – 22,865 ACRES (as reported in June 2015)

Grasses and shrubs show improvement due to early spring moisture. Recommend 155 AUYL for 2015 grazing period. Range unit is producing an average of 216 lbs. per acre of forage and has 50% groundcover of desirable forage plants. Precipitation from December 2014 to May 1 2015 in this range unit averaged 4.0 inches. It has rained approximately 1 inch in addition during the month of May. Water development and fence repairs are needed around the mine and housing development areas. Permittees are only able to use 50% of the range unit because of water placement and fence repair issues. Brush reduction is needed primarily in pasture 6.

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

#1 – 200 lbs., #2 - 370 lbs., #3 – 145 lbs., #4 – 185 lbs., #5 – 195 lbs., #6 – 215 lbs., #7 – 250 lbs. #8 – 255 lbs., #9 – 125 lbs. #10 – 195 lbs., #11 – 250 lbs.

MIDDLE WELL RANGE UNIT – 22,865 ACRES (as reported in December 2015)

Grasses and shrubs show no further improvement due to lack of moisture during summer monsoon growing season. Recommend 97 AUYL for remainder of 2015 grazing period into spring of 2016. Range unit is producing an average of 135.9 lbs. per acre of forage and has 50% groundcover of desirable forage plants. Precipitation from December 2014 to November 15, 2015 in this range unit averaged 7.61 inches. Water development and fence repairs are needed around the mine and housing development areas. Permittees are only able to use 50% of the range unit because of water placement and fence repair issues. Brush reduction is needed primarily in pasture 6.

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

#1 – 210 lbs., #2 - 160 lbs., #3 – 75 lbs., #4 – 95 lbs., #5 – 105 lbs., #6 – 125 lbs., #7 – 175 lbs. #8 – 210 lbs., #9 – 110 lbs. #10 – 60 lbs., #11 – 170 lbs.

Pastures 2, 4, and 10 should not be grazed until they show improvement.

MIDDLE WELL RANGE UNIT – 22,865 ACRES (as reported in June 2016)

Grasses and shrubs show improvement due to winter and spring moisture. Recommend 139 - 159 AU for remainder of 2016 grazing period. Range unit is producing an average of 209 lbs. per acre of forage and has 50% groundcover of desirable forage plants. Precipitation from December 2015 to June 2016 in this range unit averaged 3.0 inches. Water development and fence repairs are needed around the mine and housing development areas. Permittees are only able to use 50% of the range unit because of water placement and fence repair issues. Brush reduction is needed primarily in pasture 6.

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

#1 – 210 lbs., #2 - 245 lbs., #3 – 120 lbs., #4 – 145 lbs., #5 – 290 lbs., #6 – 125 lbs., #7 – 210 lbs. #8 – 365 lbs., #9 – 145 lbs. #10 – 140 lbs., #11 – 305 lbs.

NAVAJO SPRINGS RANGE UNIT – 17,354 ACRES (as reported in June 2015)

Grasses and shrubs show improvement due to early spring moisture. Recommend 124 AUYL for 2015 grazing period. Range unit is producing an average of 231 lbs. per acre of forage and has 50% groundcover of desirable forage plants. Precipitation from December 2014 to May 1 2015 in this range unit averaged 4.04 inches. It has rained approximately 1 inch in addition during the month of May.

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

#1 – 205 lbs., #2 - 240 lbs., #3 – 170 lbs., #4 – 200 lbs., #5 – 160 lbs., #6 – 410 lbs., #7 – 305 lbs. #8 – 160 lbs.

NAVAJO SPRINGS RANGE UNIT – 17,354 ACRES (as reported in December 2015)

Grasses and shrubs show no further improvement due to lack of moisture during summer monsoon growing season. Recommend 93 AUYL for remainder of 2015 grazing period into spring of 2016. Range unit is producing an average of

172.14 lbs. per acre of forage and has 50% groundcover of desirable forage plants. Precipitation from December 2014 to November 15, 2015 in this range unit averaged 8.37 inches which is below average for the region.

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

#1 – 45 lbs., #2 - 70 lbs., #3 – 285 lbs., #4 – 230 lbs., #5 – 180 lbs., #6 – 270 lbs., #7 – 125 lbs. #8 not collected.

The decline in pastures 1,2,6,&7 indicate the cattle were not moved. Pastures 1 and 2 should not be grazed at all until after next growing season.

NAVAJO SPRINGS RANGE UNIT – 17,354 ACRES (as reported in June 2016)

Grasses and shrubs show improvement due to winter and spring moisture. Recommend 145 - 165 AU for remainder of the 2016 grazing period. Range unit is producing an average of 286 lbs. per acre of forage and has 50% groundcover of desirable forage plants. Precipitation from December 2015 to June 2016 in this range unit averaged 3.6 inches which is below average for the region.

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

#1 – 200 lbs., #2 - 210 lbs., #3 – 300 lbs., #4 – 315 lbs., #5 – 340 lbs., #6 – 305 lbs., #7 – 330 lbs. #8 not collected.

NORTH WELL – 19,040 ACRES (as reported in June 2015)

The forage improvement in this unit reflects early spring moisture and early growth of cool season forage species. Reduction of livestock numbers has decreased forage usage. Recommend 184 AUYL for 2015 grazing period. Range unit is producing an average of 310 lbs. per acre of forage and has 50% groundcover of desirable forage plants. Precipitation from December 2014 to May 1 2015 in this range unit averaged 3.5 inches. It has rained approximately 1 inch in addition during the month of May. Water development is needed on the south portion of the range unit.

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

#1 – 235 lbs., #2 - 350 lbs., #3 – 400 lbs., #4 – 475 lbs., #5 – 210 lbs., #6 – 195 lbs.

NORTH WELL – 19,040 ACRES (as reported in December 2015)

Grasses and shrubs show no further improvement due to lack of moisture during summer monsoon growing season. Recommend 127 AUYL for remainder of 2015 grazing period into spring of 2016. Range unit is producing an average of 214.16 lbs. per acre of forage and has 50% groundcover of desirable forage plants. Precipitation from December 2014 to November 15, 2015 in this range unit averaged 8.62 inches. Water development is needed on the south portion of the range unit.

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

#1 – 165 lbs., #2 - 305 lbs., #3 – 155 lbs., #4 – 180 lbs., #5 – 350 lbs., #6 – 130 lbs.

NORTH WELL – 19,040 ACRES (as reported in June 2016)

Grasses and shrubs show improvement due to winter and spring moisture. Recommend 142 - 162 AU for remainder of 2016 grazing period. Range unit is producing an average of 255 lbs. per acre of forage and has 50% groundcover of desirable forage plants. Precipitation from December 2015 to June 2016 in this range unit averaged 2.99 inches. Water development is needed on the south portion of the range unit.

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

#1 – 210 lbs., #2 - 345 lbs., #3 – 250 lbs., #4 – 230 lbs., #5 – 190 lbs., #6 – 310s lbs.

PARKER DRAW RANGE UNIT – 14,043 ACRES (as reported in June 2015)

Grasses and shrubs show improvement due to early spring moisture. Western portions of the range unit have improved. Recommend 88 AUYL for 2015 grazing period. It is recommended that grazing is withheld until the end of August to enhance maximum forage production. Range unit is producing an average of 225 lbs. per acre of forage and has 45% groundcover of desirable forage plants. Precipitation from December 2014 to May 1 2015 in this range unit averaged 3.75 inches. It has rained approximately 1 inch in addition during the month of May.

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

#1 – 195 lbs., #2 - 255 lbs., #3 – 260 lbs., #4 – 180 lbs., #5 – 170 lbs., #6 – 115 lbs., #7 – 310 lbs. #8 – 310 lbs.

PARKER DRAW RANGE UNIT – 14,043 ACRES (as reported in December 2015)

Grasses and shrubs show no further improvement due to lack of moisture during summer monsoon growing season. Recommend 64 AUYL for remainder of 2015 grazing period into spring of 2016. Range unit is producing an average of 162.18 lbs. per acre of forage and has 45% groundcover of desirable forage plants. Precipitation from December 2014 to November 15, 2015 in this range unit averaged 8.54 inches.

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

#1 – 155 lbs., #2 - 210 lbs., #3 – 155 lbs., #4 – 190 lbs., #5 – 205 lbs., #6 – 125 lbs., #7 – 145 lbs. #8 – 112.5 lbs.

PARKER DRAW RANGE UNIT – 14,043 ACRES (as reported in June 2016)

Grasses and shrubs show improvement due to winter and spring moisture. Recommend 116 - 136 AU for remainder of 2016 grazing period. Range unit is producing an average of 319 lbs. per acre of forage and has 45% groundcover of desirable forage plants. Precipitation from December 2015 to June 2016 in this range unit averaged 2.99 inches.

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

#1 – 130 lbs., #2 - 335 lbs., #3 – 505 lbs., #4 – 395 lbs., #5 – 320 lbs., #6 – 310 lbs., #7 – 325 lbs. #8 – 235 lbs.

RIM RANGE UNIT – 17,242 ACRES (as reported in June 2015)

Grasses and shrubs show improvement due to early spring moisture. Recommend 125 AUYL for 2015 grazing period. Range unit is producing an average of 236.8 lbs. per acre of forage and has 50% groundcover of desirable forage plants. Precipitation from December 2014 to May 1 2015 in this range unit averaged 4.04 inches. It has rained approximately 1 inch in addition during the month of May. 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 – 235 lbs., #2 - 260 lbs., #3 – 165 lbs., #4 – 240 lbs., #5 – 305 lbs., #6 – 275 lbs., #7 – 145 lbs. #8 – 270 lbs.,

RIM RANGE UNIT – 17,242 ACRES (as reported in December 2015)

Grasses and shrubs show no further improvement due to lack of moisture during summer monsoon growing season. Recommend 96 AUYL for remainder of 2015 grazing period into spring of 2016. Range unit is producing an average of 178.12 lbs. per acre of forage and has 50% groundcover of desirable forage plants. Precipitation from December 2014 to November 15, 2015 in this range unit averaged 8.58 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 – 220 lbs., #2 - 225 lbs., #3 – 135 lbs., #4 – 125 lbs., #5 – 250 lbs., #6 – 150 lbs., #7 – 145 lbs. #8 – 175 lbs.,

RIM RANGE UNIT – 17,242 ACRES (as reported in June 2016)

Grasses and shrubs show improvement due to winter and spring moisture. Recommend 145 - 165 AU for remainder of 2016 grazing period. Range unit is producing an average of 299 lbs. per acre of forage and has 50% groundcover of desirable forage plants. Precipitation from December 2015 to June 2016 in this range unit averaged 3.22 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 – 285 lbs., #2 - 460 lbs., #3 – 200 lbs., #4 – 225 lbs., #5 – 300 lbs., #6 – 235 lbs., #7 – 380 lbs. #8 – 380 lbs.

IMPOUND PASTURE – 875 ACRES (as reported in June 2015)

Grasses and shrubs show improvement due to early spring moisture. This unit is no longer being used as a staging area for weaned calves from the Padres Mesa Ranch prior to shipping. It should only be used on a temporary basis. Range unit is

producing an average of 100 lbs. per acre of forage and has 45% groundcover of desirable forage plants. Precipitation from December 2014 to May 1 2015 in this range unit averaged 3.98 inches. It has rained approximately 1 inch in addition during the month of May. The capacity is 40 AUMs.

IMPOUND PASTURE – 875 ACRES (as reported in December, 2015)

Grasses and shrubs show no further improvement due to lack of moisture during summer monsoon growing season. This unit was used as a staging area for weaned calves from the 14R Ranch prior to shipping. It should only be used on a temporary basis. Range unit is producing an average of 130 lbs. per acre of forage and has 45% groundcover of desirable forage plants. Precipitation from December 2014 to November 15, 2015 in this range unit averaged 9 inches. The capacity is 40 AUMs.

IMPOUND PASTURE – 875 ACRES (as reported in June 2016)

Grasses and shrubs show improvement due to winter and spring moisture. This unit is used as a staging area for weaned calves from the 14R Ranch prior to shipping. It should only be used on a temporary basis. Range unit is producing an average of 364 lbs. per acre of forage and has 45% groundcover of desirable forage plants. Precipitation in this range unit will not be measured any longer as it is too small. The capacity is 162 AUMs.

NAVAJO PASTURE – APPROXIMATELY 1000 ACRES (as reported in June 2015)

This area has never been used due to lack of water development. Range unit is producing an average of 280 lbs. per acre of forage and has 55% groundcover of desirable forage plants. Precipitation from December 2014 to May 1 2015 in this range unit averaged 3.98 inches. It has rained approximately 1 inch in addition during the month of May. The capacity is 170 AUMs. Possible staging area or grass bank.

NAVAJO PASTURE – APPROXIMATELY 1000 ACRES (as reported in December, 2015)

This area was used as a staging area for 14R calves. Range unit is producing an average of 350 lbs. per acre of forage and has 55% groundcover of desirable forage plants. Precipitation from December 2014 to November 15, 2015 in this range unit averaged 9 inches. The capacity is 170 AUMs. (Dogs in the area attacked at least 2 calves rendering them unsellable)

NAVAJO PASTURE – APPROXIMATELY 1000 ACRES (as reported in June 2016)

This area is used as a staging area for 14R calves. Range unit is producing an average of 345 lbs. per acre of forage and has 55% groundcover of desirable forage plants. Precipitation in this range unit will not be measured any longer as it is too small. The capacity is 170 AUMs.

RIGHT OF WAY PASTURE – (SOUTH SIDE OF NORTH PINTA RANGE UNIT) APPROXIMATELY 4450 ACRES - (as reported in June 2015)

This area is currently being developed as a grass bank and staging or emergency relief area. Range unit is producing an average of 500 lbs. per acre of forage and has 60% groundcover of desirable forage plants. Precipitation from December 2014 to May 1 2015 in this range unit averaged 4.25 inches. It has rained approximately 1 inch in addition during the month of May. The capacity is 2271 AUMs. (Numbers reflect maximum capacity for one month's usage) If the need for a 6 month usage arose the maximum would be 378 AUM. This area will hold 189 AUYL maximum.

RIGHT OF WAY PASTURE – (SOUTH SIDE OF NORTH PINTA RANGE UNIT) APPROXIMATELY 4450 ACRES - (as reported in December 2015)

This area is currently being developed as a grass bank and staging or emergency relief area. Range unit is producing an average of 535 lbs. per acre of forage and has 60% groundcover of desirable forage plants. Precipitation from December 2014 to November 15, 2015 in this range unit is being calculated. The capacity is 2271 AUMs. (Numbers reflect maximum capacity for one month's usage) If the need for a 6 month usage arose the maximum would be 378 AUM. This area will hold 189 AUYL maximum.

RIGHT OF WAY PASTURE – (SOUTH SIDE OF NORTH PINTA RANGE UNIT) APPROXIMATELY 4450 ACRES - (as reported in June 2016)

This area is currently being developed as a grass bank and staging or emergency relief area. Range unit is producing an average of 500 lbs. per acre of forage and has 60% groundcover of desirable forage plants. Precipitation in this range unit will not be measured any longer as it is too small. The capacity is 875 AUMs.

NORTH PINTA – APPROXIMATELY 9920 ACRES - (as reported in June 2015)

This area is used as drought relief and grass bank for the Padres Mesa Ranch. Range unit is producing an average of 200 lbs. per acre of forage and has 50% groundcover of desirable forage plants. Precipitation from December 2014 to May 1 2015 in this range unit averaged 4.2 inches. It has rained approximately 1 inch in addition during the month of May. The capacity is 83 AUYL.

NORTH PINTA – APPROXIMATELY 9920 ACRES - (as reported in December 2015)

This area is used as drought relief and grass bank for the Padres Mesa Ranch. Range unit is producing an average of 235 lbs. per acre of forage and has 50% groundcover of desirable forage plants. Precipitation from December 2014 to November 15, 2015 in this range unit is being calculated. The capacity is 875 AUM. The capacity for a 6 month period is 145 AUM.

NORTH PINTA – APPROXIMATELY 9920 ACRES - (as reported in June 2016)

This area is used as drought relief and grass bank for the Padres Mesa Ranch. Range unit is producing an average of 250 lbs. per acre of forage and has 50% groundcover of desirable forage plants. Precipitation in this range unit will not be measured any longer as it is too small. The capacity is 1065 AUM.

SOUTH PINTA – APPROXIMATELY 4480 ACRES - (as reported in June 2015)

This unit is used on a temporary basis in the fall as a staging area for weaned calves prior to shipping, and as temporary emergency relief. Range unit is producing an average of 300 lbs. per acre of forage and has 60% groundcover of desirable forage plants. Precipitation from December 2014 to May 1 2015 in this range unit averaged 4.35 inches. It has rained approximately 1 inch in addition during the month of May. The capacity is 806 AUMs. Dirt tank cleanout and a permanent water development are in progress.

SOUTH PINTA – APPROXIMATELY 4480 ACRES - (as reported in December 2015)

This unit was used during the fall as a temporary emergency relief for Parker Draw and East Mill. Range unit is producing an average of 345 lbs. per acre of forage and has 60% groundcover of desirable forage plants. Precipitation from December 2014 to November 15, 2015 in this range unit is being calculated. The capacity is 806 AUMs. Dirt tank cleanout and a permanent water development are in progress.

SOUTH PINTA – APPROXIMATELY 4480 ACRES - (as reported in June 2016)

This area is used as staging area and grass bank. Range unit is producing an average of 400 lbs. per acre of forage and has 60% groundcover of desirable forage plants. Precipitation in this range unit will not be measured any longer as it is too small. The capacity is 876 AUMs. Dirt tank cleanout and a permanent water development completed by Padres Mesa crew.

LOST WELL PASTURE – APPROXIMATELY 400 ACRES - (as reported in June 2015)

This area is being used as temporary pasture. Range unit is producing an average of 110 lbs. per acre of forage and has 50% groundcover of desirable forage plants. Precipitation from December 2014 to May 1 2015 in this range unit averaged 3.99 inches. It has rained approximately 1 inch in addition during the month of May. The capacity is 22 AUMs.

LOST WELL PASTURE – APPROXIMATELY 400 ACRES - (as reported in December 2015)

This area was used as temporary pasture for Parker Draw and East Mill bulls. Range unit is producing an average of 165 lbs. per acre of forage and has 50% groundcover of desirable forage plants. The capacity is 25 AUMs.

LOST WELL PASTURE – APPROXIMATELY 400 ACRES - (as reported in June 2016)

This area is used as staging area and grass bank. Range unit is producing an average of 285 lbs. per acre of forage and has 50% groundcover of desirable forage plants. The capacity is 142 AUMs.

PADRES MESA RANCH – 41576 ACRES - (as reported in December 2015)

Our plant community is showing stress due to ongoing drought. The ranch is producing an average of 204.3 lbs. per acre of dry forage and has 45% groundcover of desirable forage plants. Precipitation for the year in this range unit averaged 6.2 inches. Maximum AUYL is 604 with a recommended limit of 450 in order to preserve the range. With low precipitation rates during the monsoon season the capacity is 239 AUYL.

#1 – 160 lbs., #2 - 195 lbs., #3 – 300 lbs., #4 – 190 lbs., #5 – 120 lbs., #6 – 155 lbs., #7 – 85 lbs. #8 – 215 lbs., #9 – 225 lbs., #10 – 235 lbs. #11 – 300 lbs. #12 – 130 lbs. #13 – 285 lbs. #14 – 285 #15 – 160 lbs.

Padres Mesa will be utilizing North Pinta to minimize grazing impact until range conditions improve.

PADRES MESA RANCH – 41576 ACRES - (as reported in June 2016)

Grasses and shrubs show improvement due to winter and spring moisture. The ranch is producing an average of 300 lbs. per acre of dry forage and has 45% groundcover of desirable forage plants. Precipitation from December 2015 to June 2016 in this range unit averaged 3.2 inches. Maximum AU is 346 – 366.

#1 – 240 lbs., #2 - 290 lbs., #3 – 385 lbs., #4 – 385 lbs., #5 – 295 lbs., #6 – 265 lbs., #7 – 325 lbs. #8 – 295 lbs., #9 – 170 lbs., #10 – 340 lbs. #11 – 234 lbs. #12 – 330 lbs. #13 – 400 lbs. #14 – 350 #15 – 300 lbs. Padres Mesa utilizes North Pinta when faced with challenging grazing conditions.