

## **Range Monitoring December 2019**

### **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.**

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

**Our summer monsoon season this year was inadequate for warm season forage growth. Drought conditions began to creep in again. There has been some moisture in the fall and winter to date, but we still need to use caution when considering stocking rate increases.**

**We are beginning to incorporate the use of drone footage to further display range conditions. The pictures will be available sometime in January 2020 at the Range Office, Nahata Dziil chapter, Padres Mesa Ranch, and ONHIR offices in Flagstaff.**

**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 ¼ 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. 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.**

**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 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.**

**LITTLE CHAMBERS RANGE UNIT – 12,148 ACRES (as reported in June 2019)**

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 139 AUYL for the remainder of 2019 grazing period. Range unit has residual vegetation with new growth evident. There is an average of 368 lbs. per acre of forage, and has 50% ground cover of desirable forage plants. Precipitation from December 9, 2018 to May 30 in this range unit averaged 5.26 inches. Vegetation per acre at the time of sample collection was as follows.

**#1 – 320lbs., #2 - 245lbs., #3 – 405 lbs., #4 – 430 lbs., #5 – 410 lbs., #6 – 405 lbs., #7 – 360 lbs.**

**LITTLE CHAMBERS RANGE UNIT – 12,148 ACRES (as reported in December 2019)**

Grasses and shrubs show little growth this season. This unit still needs a water development in the northeast corner to ensure complete utilization of all forage available. Recommend 90 AUYL for the grazing period from December 2019 to June 2020. Range unit has residual vegetation with little new growth evident. There is an average of 222 lbs. per acre of forage, and has 50% ground cover of desirable forage plants. Precipitation from December 9, 2018 to December 2019 in this range unit averaged 9.21 inches with most of the precipitation occurring during the winter. Vegetation per acre at the time of sample collection was as follows.

**#1 – 250lbs., #2 - 205lbs., #3 – 215 lbs., #4 – 220 lbs., #5 – 295 lbs., #6 – 190 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.**

**NAVAJO SPRINGS RANGE UNIT – 17,354 ACRES (as reported in June 9, 2019)**

Grasses and shrubs show some improvement. Recommend 167 AUYL for the remainder of 2019 grazing period. Range unit has residual vegetation with new growth evident. There is an average of 291 lbs. per acre of forage, and has 50% ground cover of desirable forage plants. Precipitation from December 9, 2018 to May 30, 2019 in this range unit averaged 5.4 inches. Vegetation per acre at the time of sample collection was as follows.

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

**#1 – 290 lbs., #2 - 230 lbs., #3 – 310 lbs., #4 – 280, #5 – 350 lbs., #6 – 325 lbs., #7 – 250 lbs.**

**NAVAJO SPRINGS RANGE UNIT – 17,354 ACRES (as reported in December 2019)**

Grasses and shrubs show little growth this season. Recommend 130 AUYL for the grazing period from December 2019 to June 2020. Range unit has residual vegetation with little new growth evident. There is an average of 239 lbs. per acre of forage, and has 50% ground cover of desirable forage plants. Precipitation from December 9, 2018 to December 2019 in this range unit averaged 9.09 inches with most of the precipitation occurring during the winter. Vegetation per acre at the time of sample collection was as follows.

**#1 – 240lbs., #2 - 220lbs., #3 – 255 lbs., #4 – 165 lbs., #5 – 335 lbs., #6 – 215 lbs., #7 – 245 lbs.**

**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.

**LITTLE SILVERSMITH RANGE UNIT – 14,418 ACRES (as reported in June 2019)**

Grasses and shrubs show some improvement. Recommend 149 AUYL for the remainder of 2019 grazing period. Range unit has residual vegetation with new growth evident. There is an average of 331 lbs. per acre of forage, and has 50% ground cover of desirable forage plants. Precipitation from December 9, 2018 to May 31, 2019 in this range unit averaged 5.31 inches. Vegetation per acre at the time of sample collection was as follows.

#1 – 320 lbs., #2 - 440 lbs., #3 – 450 lbs., #4 – 285 lbs., #5 – 310 lbs., #6 – 315 lbs., #7 – 290 lbs. #8 – 235 lbs., #9 – 190 lbs. #10 – 390lbs. 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 420 lbs. This will be referred to as #11.

**LITTLE SILVERSMITH RANGE UNIT – 14,418 ACRES (as reported in December 2019)**

Grasses and shrubs show little growth this season. Recommend 117 AUYL for the grazing period from December 2019 to June 2020. Range unit has residual vegetation with little new growth evident. There is an average of 234 lbs. per acre of forage, and has 50% ground cover of desirable forage plants. Precipitation from December 9, 2018 to December 2019 in this range unit averaged 8.56 inches with most of the precipitation occurring during the winter. Vegetation per acre at the time of sample collection was as follows.

#1 – 185 lbs., #2 - 195 lbs., #3 – 180 lbs., #4 – 200 lbs., #5 – 300 lbs., #6 – 295 lbs., #7 – 215 lbs. #8 – 225 lbs., #9 – 185 lbs. #10 – 355lbs. Previously a holding trap North of housing near shipping well was not monitored. It is a small area that doesn't receive much 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.

**MIDDLE WELL RANGE UNIT – 22,865 ACRES (as reported in June, 2019)**

Grasses and shrubs show some improvement. Recommend 186 AUYL for the remainder of 2019 grazing period. Range unit has residual vegetation with new growth evident. There is an average of 282 lbs. per acre of forage, and has 50% ground cover of desirable forage plants. Precipitation from December 9, 2018 to May 31, 2019 in this range unit averaged 5.65 inches. Vegetation per acre at the time of sample collection was as follows.

#1 – 365 lbs., #2 - 360 lbs., #3 – 250 lbs., #4 – 195 lbs., #5 – 290 lbs., #6 – 320 lbs., #7 – 230 lbs. #8 – 225 lbs., #9 – 240 lbs. #10 – 250 lbs., #11 – 190 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, 2019)**

Grasses and shrubs show little growth this season. Recommend 164 AUYL for the grazing period from December 2019 to June 2020. Range unit has residual vegetation with little new growth evident. There is an average of 230 lbs. per acre of forage, and has 50% ground cover of desirable forage plants. Precipitation from December 9, 2018 to December 2019 in this range unit averaged 8.55 inches with most of the precipitation occurring during the winter. Vegetation per acre at the time of sample collection was as follows.

#1 – 330 lbs., #2 - 160 lbs., #3 – 230 lbs., #4 – 190 lbs., #5 – 205 lbs., #6 – 310 lbs., #7 – 225 lbs. #8 – 220 lbs., #9 – 230 lbs. #10 – 240 lbs., #11 – 185 lbs. Pasture # 11 does not have a water development and is not in use.

**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.,

**PARKER DRAW RANGE UNIT – 14,043 ACRES (as reported in June 2019)**

Grasses and shrubs show some improvement. Recommend 167 AUYL for the remainder of 2019 grazing period. Range unit has residual vegetation with new growth evident. There is an average of 381 lbs. per acre of forage, and has 50% ground cover of desirable forage plants. Precipitation from December 9, 2018 to May 31, 2019 in this range unit averaged 5.23 inches. Vegetation per acre at the time of sample collection was as follows.

#1 – 310 lbs., #2 -340 lbs., #3 – 360 lbs., #4 – 420 lbs., #5 – 415 lbs., #6 – 410 lbs., #7 – 400 lbs. #8 – 390 lbs.,

**PARKER DRAW RANGE UNIT – 14,043 ACRES (as reported in December 2019)**

Grasses and shrubs show little growth this season. Recommend 136 AUYL for the grazing period from December 2019 to June 2020. Range unit has residual vegetation with little new growth evident. There is an average of 290 lbs. per acre of forage, and has 50% ground cover of desirable forage plants. Precipitation from December 9, 2018 to December 2019 in this range unit averaged 9.23 inches with most of the precipitation occurring during the winter. Vegetation per acre at the time of sample collection was as follows.

#1 – 205 lbs., #2 -330 lbs., #3 – 210 lbs., #4 – 245 lbs., #5 – 400 lbs., #6 – 265 lbs., #7 – 305 lbs. #8 – 360 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.

**EAST MILL RANGE UNIT – 16,763 ACRES (as reported in June 2019)**

Grasses and shrubs show some improvement. Recommend 166 AUYL for the remainder of 2019 grazing period. Range unit has residual vegetation with new growth evident. There is an average of 251 lbs. per acre of forage, and has 50% ground cover of desirable forage plants. Precipitation from December 9, 2018 to May 31, 2019 in this range unit averaged 5.37 inches. Vegetation per acre at the time of sample collection was as follows.

#1 – 179 lbs., #2 - 223 lbs., #3 – 250 lbs., #4 – 260 lbs., #5 –245 lbs., #6 – 260 lbs., #7 – 275 lbs. #8 – 125 lbs., An area which was previously included in Pasture 8 is now a separate pasture numbered 9 with a new monitoring site. #9 – 260 lbs.

**EAST MILL RANGE UNIT – 16,763 ACRES (as reported in December 2019)**

Grasses and shrubs show little growth this season. Recommend 121 AUYL for the grazing period from December 2019 to June 2020. Range unit has residual vegetation with little new growth evident. There is an average of 215 lbs. per acre of forage, and has 50% ground cover of desirable forage plants. Precipitation from December 9, 2018 to December 2019 in this range unit averaged 8.85 inches with most of the precipitation occurring during the winter. Vegetation per acre at the time of sample collection was as follows.

#1 – 175 lbs., #2 - 220 lbs., #3 – 205 lbs., #4 – 205 lbs., #5 –225 lbs., #6 – 250 lbs., #7 – 265 lbs. #8 – 150 lbs., An area which was previously included in Pasture 8 is now a separate pasture numbered 9 with a new monitoring site. #9 – 240 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..

**HOGAN WELL RANGE UNIT – 21,225 ACRES (as reported in June 2019)**

Grasses and shrubs show some improvement. Recommend 240 AUYL for the remainder of 2019 grazing period. Range unit has residual vegetation with new growth evident. There is an average of 365 lbs. per acre of forage, and has 50% ground cover of desirable forage plants. Precipitation from December 9, 2018 to May 31, 2019 in this range unit averaged 4.89 inches. Vegetation per acre at the time of sample collection was as follows.

Note, Pasture numbering has been changed. #1 – 260 lbs., #2 - 155 lbs., #3 – 320 lbs., #4 –215 lbs., #5 – 400 lbs., #6 – 520 lbs., #7 – 480 lbs. #8 – 520 lbs., #9 – 540lbs. #10 – 230 lbs..

**HOGAN WELL RANGE UNIT – 21,225 ACRES (as reported in December 2019)**

Grasses and shrubs show little growth this season. Recommend 120 AUYL for the grazing period from December 2019 to June 2020. Range unit has residual vegetation with little new growth evident. There is an average of 168 lbs. per acre of forage, and has 50% ground cover of desirable forage plants. Precipitation from December 9, 2018 to December 2019 in this range unit averaged 7.69 inches with most of the precipitation occurring during the winter. Vegetation per acre at the time of sample collection was as follows.

Note, Pasture numbering has been changed. #1 – 180 lbs., #2 - 85 lbs., #3 – 140 lbs., #4 –205 lbs., #5 – 210 lbs., #6 – 200 lbs., #7 – 185 lbs. #8 – 120 lbs., #9 – 180lbs. #10 – 175 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.,

**RIM RANGE UNIT – 17,242 ACRES (as reported in June 2019)**

Grasses and shrubs show some improvement. Recommend 161 AUYL for the remainder of 2019 grazing period. Range unit has residual vegetation with new growth evident. There is an average of 353 lbs. per acre of forage, and has 50% ground cover of desirable forage plants. Precipitation from December 9, 2018 to May 31, 2019 in this range unit averaged 5.5 inches. Vegetation per acre at the time of sample collection was as follows.

#1 – 290 lbs., #2 - 295 lbs., #3 – 310 lbs., #4 – 400 lbs., #5 – 280 lbs., #6 – 420 lbs., #7 – 410 lbs. #8 – 415 lbs.,

**RIM RANGE UNIT – 17,242 ACRES (as reported in December 2019)**

Grasses and shrubs show little growth this season. Recommend 126 AUYL for the grazing period from December 2019 to June 2020. Range unit has residual vegetation with little new growth evident. There is an average of 236 lbs. per acre of forage, and has 50% ground cover of desirable forage plants. Precipitation from December 9, 2018 to December 2019 in this range unit averaged 9.0 inches with most of the precipitation occurring during the winter. Vegetation per acre at the time of sample collection was as follows.

#1 – 170 lbs., #2 - 245 lbs., #3 – 245 lbs., #4 – 315 lbs., #5 – 265 lbs., #6 – 210 lbs., #7 – 245 lbs. #8 – 190 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.

**HARD SCRABBLE RANGE UNIT – 22,715 ACRES (as reported in June, 2019)**

Grasses and shrubs show some improvement. Recommend 217 AUYL for the remainder of 2019 grazing period. Range unit has residual vegetation with new growth evident. There is an average of 305 lbs. per acre of forage, and has 50% ground cover of desirable forage plants. Precipitation from December 9, 2018 to May, 2019 in this range unit averaged 5.1 inches. Vegetation per acre at the time of sample collection was as follows.

#1 – 280 lbs., #2 -275 lbs., #3 – 450 lbs., #4 – 420 lbs., #5 – 160 lbs., #6 – 320 lbs., #7 – 195 lbs. #8 – 460 lbs., #9 – 245 lbs. #10 – 250 lbs., #11 – 460 lbs., #12 – 55 lbs.

**HARD SCRABBLE RANGE UNIT – 22,715 ACRES (as reported in December, 2019)**

Grasses and shrubs show little growth this season. Recommend 177 AUYL for the grazing period from December 2019 to June 2020. Range unit has residual vegetation with little new growth evident. There is an average of 250 lbs. per acre of forage, and has 50% ground cover of desirable forage plants. Precipitation from December 9, 2018 to December 2019 in this range unit averaged 8.8 inches with most of the precipitation occurring during the winter. Vegetation per acre at the time of sample collection was as follows.

#1 – 245 lbs., #2 -245 lbs., #3 – 205 lbs., #4 – 320 lbs., #5 – 180 lbs., #6 – 300 lbs., #7 – 240 lbs. #8 – 415 lbs., #9 – 185 lbs. #10 – 195 lbs., #11 – 400 lbs., #12 – 75 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.

**NORTH WELL – 19,040 ACRES (as reported in June 2019)**

Grasses and shrubs show some improvement. Recommend 181 AUYL for the remainder of 2019 grazing period. Range unit has residual vegetation with new growth evident. There is an average of 304 lbs. per acre of forage, and has 50% ground cover of desirable forage plants. Precipitation from December 9, 2018 to May 31, 2019 in this range unit averaged 5.45 inches. Vegetation per acre at the time of sample collection was as follows.

#1 – 285 lbs., #2 -290 lbs., #3 –300 lbs., #4 –270 lbs., #5 – 290 lbs., #6 – 340 lbs. New monitoring sites #7 – 350 lbs, 8 – 260lbs., 9 – 270lbs.

**NORTH WELL – 19,040 ACRES (as reported in December, 2019)**

Grasses and shrubs show little growth this season. Recommend 166 AUYL for the grazing period from December 2019 to June 2020. Range unit has residual vegetation with little new growth evident. There is an average of 279 lbs. per acre of forage, and has 50% ground cover of desirable forage plants. Precipitation from December 9, 2018 to December 2019 in this range unit averaged 9.4 inches with most of the precipitation occurring during the winter. Vegetation per acre at the time of sample collection was as follows.

#1 – 275 lbs., #2 -290 lbs., #3 –305 lbs., #4 –240 lbs., #5 – 275 lbs., #6A – 310 lbs. #6B-300 lbs., New monitoring sites #7 – 290 lbs, 8 – 255lbs., 9 – 220lbs. A fence was installed in pasture 6 resulting in a division into two monitoring sites.

**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.

**ANTELOPE WELL – 19,955 ACRES (as reported in June 2019)**

Grasses and shrubs show some improvement. Recommend 154 AUYL for the remainder of 2019 grazing period. Range unit has residual vegetation with new growth evident. There is an average of 246 lbs. per acre of forage, and has 50% ground cover of desirable forage plants. Precipitation from December 9, 2018 to May 31, 2019 in this range unit averaged 4.28 inches. Vegetation per acre at the time of sample collection was as follows.

#1 – 410 lbs., #2 - 340 lbs., #3 – 260 lbs., #4 –245 lbs., #5 – 225 lbs., #6 – 230 lbs., #7 – 180 lbs. #8 – 175 lbs., #9 – 245 lbs. #10 – 150 lbs.

**ANTELOPE WELL – 19,955 ACRES (as reported in December 2019)**

Grasses and shrubs show little growth this season. Recommend 148 AUYL for the grazing period from December 2019 to June 2020. Range unit has residual vegetation with little 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 December 9, 2018 to December 2019 in this range unit averaged 8.06 inches with most of the precipitation occurring during the winter. Vegetation per acre at the time of sample collection was as follows.

#1 – 350 lbs., #2 - 320 lbs., #3 – 240 lbs., #4 –230 lbs., #5 – 160 lbs., #6 – 220 lbs., #7 – 180 lbs. #8 – 240 lbs., #9 – 230 lbs. #10 – 210 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.

**KELSEY RANGE UNIT – 15,505 ACRES (as reported in June 2019)**

Grasses and shrubs show some improvement. Recommend 67 AUYL for the remainder of 2019 grazing period. Range unit has residual vegetation with new growth evident. There is an average of 192 lbs. per acre of forage, and has 35% ground cover of desirable forage plants. Precipitation from December 9, 2018 to May 31, 2019 in this range unit averaged 5.58 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 – 180 lbs., #2 - 165 lbs., #3 – 180 lbs., #4 – 180 lbs., #5 – 175 lbs., #6 – 180 lbs., #7 – 200 lbs. #8 – 230 lbs., #9 – 240 lbs.

**KELSEY RANGE UNIT – 15,505 ACRES (as reported in December 2019)**

Grasses and shrubs show little growth this season. Recommend 61 AUYL for the grazing period from December 2019 to June 2020. Range unit has residual vegetation with little new growth evident. There is an average of 181 lbs. per acre of forage, and has 35% ground cover of desirable forage plants. Precipitation from December 9, 2018 to December 2019 in this range unit averaged 9.2 inches with most of the precipitation occurring during the winter. 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 – 175 lbs., #2 - 160 lbs., #3 – 200 lbs., #4 – 210 lbs., #5 – 175 lbs., #6 – 190 lbs., #7 – 150 lbs. #8 – 215 lbs., #9 – 155 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.

**BARTH LAKE RANGE UNIT – 28,455 ACRES (as reported in June 2019)**

Grasses and shrubs show some improvement. Recommend 239 AUYL for the remainder of 2019 grazing period. Range unit has residual vegetation with new growth evident. There is an average of 335 lbs. per acre of forage, and has 40% ground cover of desirable forage plants. Precipitation from December 9, 2018 to May 31, 2019 in this range unit averaged 5 inches. Vegetation per acre at the time of sample collection was as follows.

#1 – 380 lbs., #2 - 420 lbs., #3 – 410 lbs., #4 – 400 lbs., #5 – 235 lbs., #6 – 410 lbs., #7 – 125 lbs. #8 – 320 lbs., #9 – 230 lbs., #10 – 420 lbs.

**BARTH LAKE RANGE UNIT – 28,455 ACRES (as reported in December 2019)**

Grasses and shrubs show little growth this season. Recommend 186 AUYL for the grazing period from December 2019 to June 2020. Range unit has residual vegetation with little new growth evident. There is an average of 222 lbs. per acre of forage, and has 40% ground cover of desirable forage plants. Precipitation from December 9, 2018 to December 2019 in this range unit averaged 8.45 inches with most of the precipitation occurring during the winter. Vegetation per acre at the time of sample collection was as follows.

#1 – 265 lbs., #2 - 180 lbs., #3A – 156 lbs., 3B – 315 lbs., #4 – 305 lbs., #5 – 210 lbs., #6 – 245 lbs., #7 – 125 lbs. #8 – 205 lbs., #9 – 220 lbs., #10 – 220 lbs.

A fence was installed in pasture 3 resulting in a division into two monitoring sites.

**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.

**BLUE BIRD RANGE UNIT – 34,830 ACRES (as reported in June 2019)**

Grasses and shrubs show some improvement. Recommend 158 AUYL for the remainder of 2019 grazing period. Range unit has residual vegetation with new growth evident. There is an average of 197.5 lbs. per acre of forage, and has 35% ground cover of desirable forage plants. Precipitation from December 9, 2018 to May 31, 2019 in this range unit averaged 5.25 inches. Vegetation per acre at the time of sample collection was as follows.

#1 – 195 lbs., #2 - 155 lbs., #3 –240 lbs., #4 – 145 lbs., #5 – 145 lbs., #6 – 275 lbs., #7 – 215 lbs. #8 – 280 lbs.,  
#9 – 325 lbs., #10 – 215 lbs.

**BLUE BIRD RANGE UNIT – 34,830 ACRES (as reported in December 2019)**

Grasses and shrubs show little growth this season. Recommend 156 AUYL for the grazing period from December 2019 to June 2020. Range unit has residual vegetation with little new growth evident. There is an average of 195 lbs. per acre of forage, and has 35% ground cover of desirable forage plants. Precipitation from December 9, 2018 to December 2019 in this range unit averaged 9.1 inches with most of the precipitation occurring during the winter. Vegetation per acre at the time of sample collection was as follows.

#1 – 130 lbs., #2 - 205 lbs., #3 –235 lbs., #4 – 130 lbs., #5 – 150 lbs., #6 – 260 lbs., #7 – 215 lbs. #8 – 160 lbs.,  
#9 – 300 lbs., #10 – 160 lbs.

**IMPOUND PASTURE – 1000 ACRES (as reported in June 2019)**

Grasses and shrubs show 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 230 lbs. per acre of forage and has 45% ground cover of desirable forage plants. The capacity is 90 AUMs.

**IMPOUND PASTURE – 1000 ACRES (as reported in December 2019)**

Grasses and shrubs little improvement. This pasture should only be used on a temporary basis. Range unit is

producing an average of 140 lbs. per acre of forage and has 45% ground cover of desirable forage plants. The capacity is 48 AUMs.

**NAVAJO PASTURE – APPROXIMATELY 1000 ACRES (as reported in June 2019)**

This area was not used during this growing season. Range unit is producing an average of 310 lbs. per acre of forage and has 55% ground cover of desirable forage plants. Recommend 110 AUM.

**NAVAJO PASTURE – APPROXIMATELY 1000 ACRES (as reported in December 2019)**

This area was used 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. Recommend 108 AUM.

**RIGHT OF WAY PASTURE – (SOUTH SIDE OF NORTH PINTA RANGE UNIT) APPROXIMATELY 4450 ACRES - (as reported in June 2019)**

Grasses and shrubs show some improvement. Recommend 45 AUYL for the remainder of 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.

**RIGHT OF WAY PASTURE – (SOUTH SIDE OF NORTH PINTA RANGE UNIT) APPROXIMATELY 4450 ACRES - (as reported in December 2019)**

Grasses and shrubs show little improvement. Recommend 43 AUYL for the remainder of 2019 grazing period. Range unit has residual vegetation with new growth evident. There is an average of 205 lbs. per acre of forage, and has 50% ground cover of desirable forage plants.

**NORTH PINTA – APPROXIMATELY 9920 ACRES - (as reported in June 2019)**

This area is used only during winter for the Padres Mesa Ranch. **Grasses and shrubs show improvement.** Recommend 75 AUYL for the remainder of 2019 grazing period. There is an average of 220 lbs. per acre of forage and has 50% ground cover of desirable forage plants. Precipitation from December 9, 2018 to May 31, 2019 in this range unit averaged 5.1 inches. This area should only see seasonal usage.

**NORTH PINTA – APPROXIMATELY 9920 ACRES - (as reported in December 2019)**

**This area is used only during winter for the Padres Mesa Ranch.** Grasses and shrubs show little improvement. Recommend 72 AUYL for the remainder of 2019 grazing period. There is an average of 210 lbs. per acre of forage and has 50% ground cover of desirable forage plants. This area should only see seasonal usage.

**SOUTH PINTA – APPROXIMATELY 4480 ACRES - (as reported in June 2019)**

Grasses and shrubs show improvement. Recommend 65 AUYL for the remainder of 2019 grazing period. There is an average of 260 lbs. per acre of forage and has 60% ground cover of desirable forage plants. Precipitation from December to May 31, 2019 in this range unit averaged 5 inches. This area should only see seasonal usage.

**SOUTH PINTA – APPROXIMATELY 4480 ACRES - (as reported in December 2019)**

Grasses and shrubs show little improvement. Recommend 62 AUYL for the remainder of 2019 grazing period. There is an average of 230 lbs. per acre of forage and has 60% ground cover of desirable forage plants. This area should only see seasonal usage.

**LOST WELL PASTURE – APPROXIMATELY 400 ACRES - (as reported in December 2019)**

Lost well is only being used as a temporary bull pasture.

**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.

**PADRES MESA RANCH – 41576 ACRES - (as reported in June 2019)**

**Grasses and shrubs show improvement.** Recommend 319 AUYL for the remainder of 2019 grazing period. Precipitation from December to May 31, 2019 in this range unit averaged 5.37 inches. There is an average of 273 lbs. per acre of forage, and has 45% ground cover of desirable forage plants. Vegetation per acre at the time of sample collection was as follows.

#1 – 285lbs. #2 – 295 lbs. #3 – 355 lbs. #4 – 290 lbs #5 – 305lbs #6 – 320 lbs. #7 – 255lbs #8 – 295 lbs. #9 – 315 lbs. #10 – 320 lbs. #11 – 330 lbs. #12 – 185 lbs. #13 – 160 lbs. #14 – 235 lbs. #15 –155 lbs.

**PADRES MESA RANCH – 41576 ACRES - (as reported in December 2019)**

Grasses and shrubs show little growth this season. Recommend 258 AUYL for the grazing period from December 2019 to June 2020. Range unit has residual vegetation with little new growth evident. There is an average of 221 lbs. per acre of forage, and has 45% ground cover of desirable forage plants. Precipitation from December 9, 2018 to December 2019 in this range unit averaged 9.1 inches with most of the precipitation occurring during the winter. Vegetation per acre at the time of sample collection was as follows.

#1 – 270lbs. #2 – 180 lbs. #3 – 340 lbs. #4 – 220 lbs #5 – 280lbs #6 – 120 lbs. #7 – 230lbs #8 – 240 lbs. #9 – 265 lbs. #10 – 265 lbs. #11 – 240 lbs. #12 – 170 lbs. #13 – 120 lbs. #14 – 225 lbs. #15 –150 lbs.