

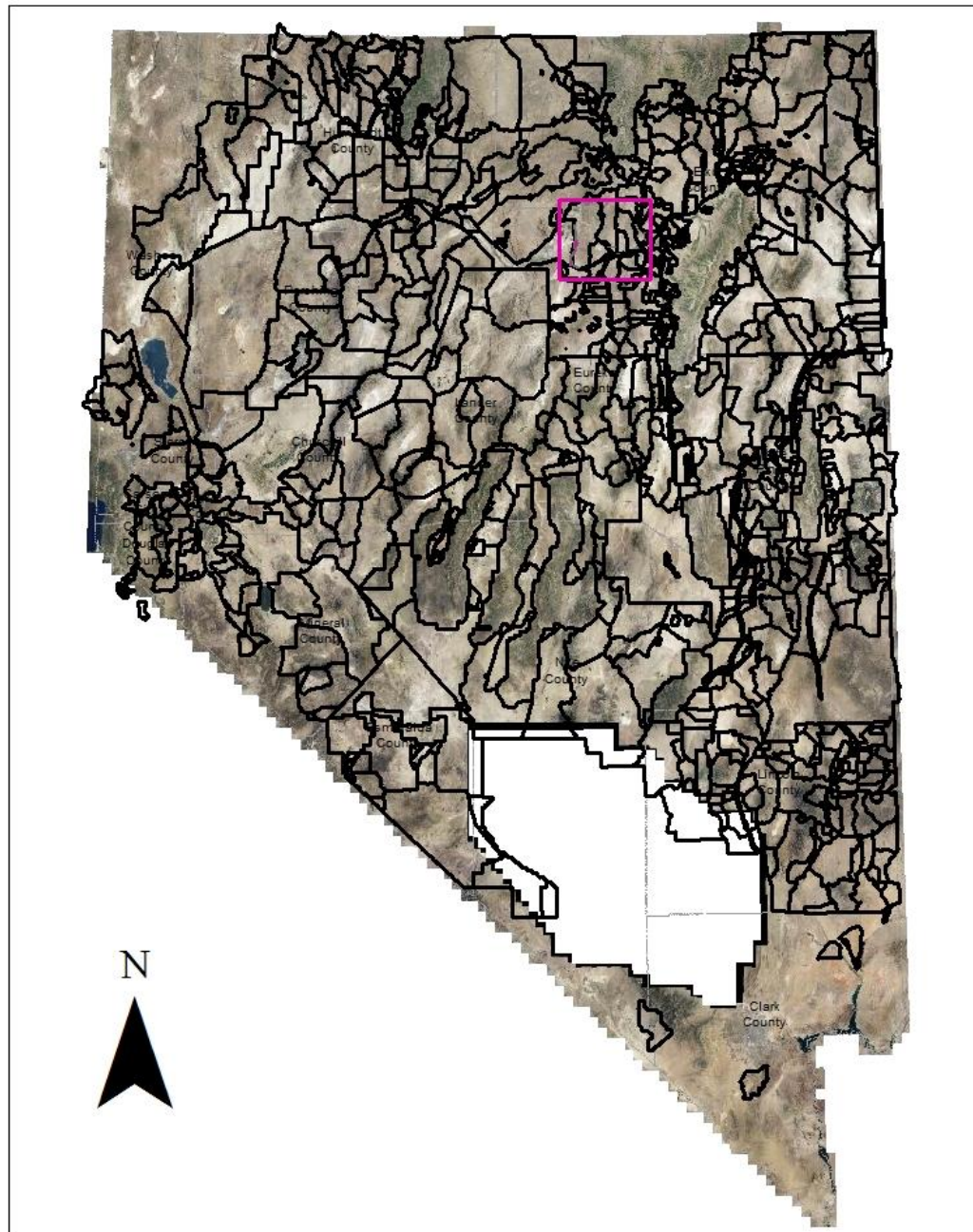
Elko District Targeted Grazing Demonstration Plot(s)

Kathryn Dyer

Nevada BLM Range Program Lead

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Nevada's BLM Grazing Allotments



0 12.5 25 50 75 100 Miles

No Warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data.

How were these chosen?

- The National Team asked for submittals using the 18 'guiding principles' for selection.

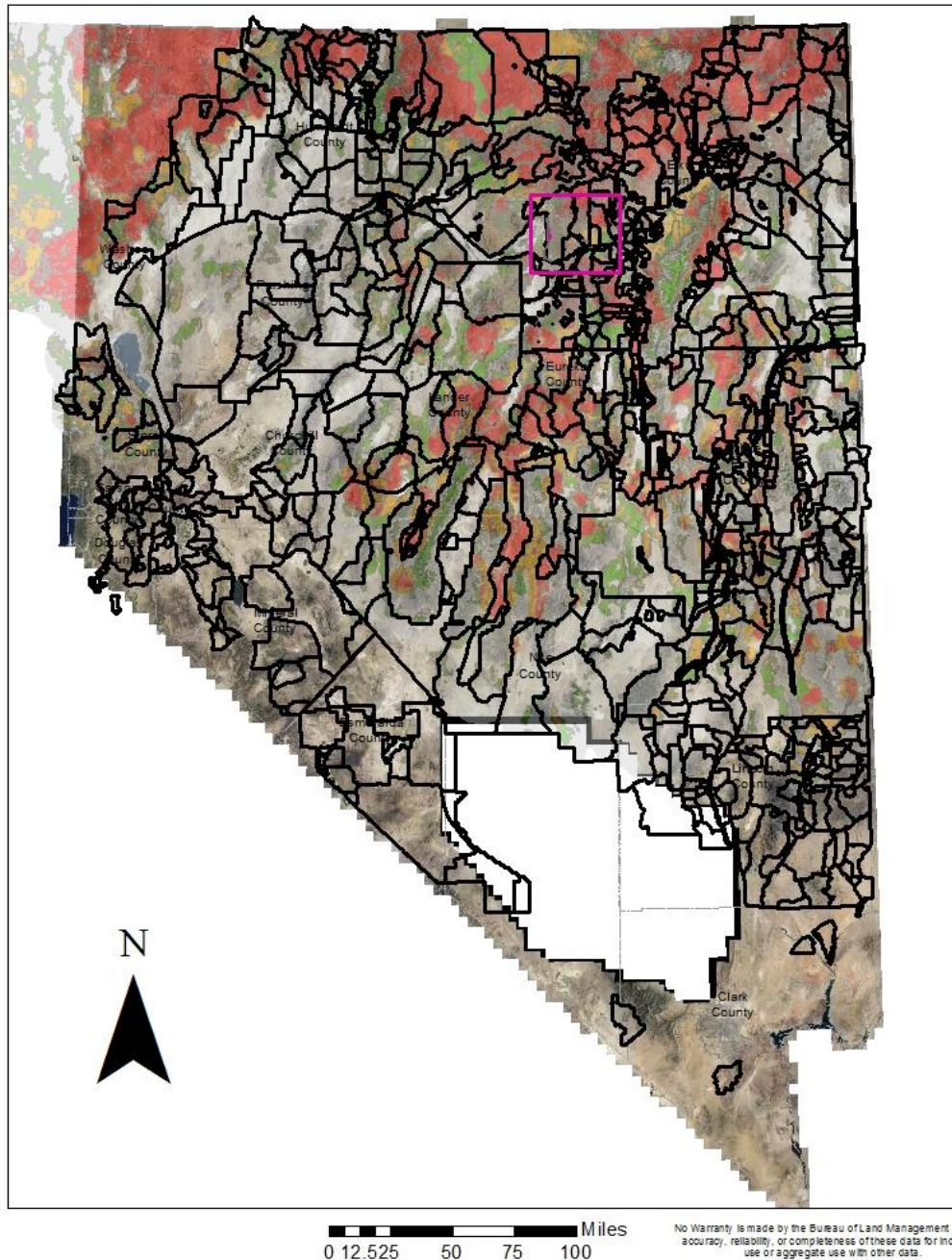
- 1. Strategically reduce fuels to reduce wildfire threat in or near sage-grouse priority habitats
- 2. Limited to areas dominated by invasive annual grasses and other fine fuels.
- 3. Crested Wheatgrass seedlings are considered 'other fine fuels' for this project.
- 4. Must be consistent with s-g plan revision.
- 5. Targeted grazing bands should connect across the landscape, therefore be coordinated across multiple allotment, land ownerships, etc.

- 6. Grazing plan/agreement will be developed cooperatively by livestock managers and agency personnel.
- 7. Stewardship contracting is another option.
- 8. Small pastures, or 'bands' in large pastures, facilitated by fencing, herding, etc.
- 9. Targeted grazing is not meant to create fuel breaks in intact stands of sagebrush.
- 10. Targeted grazing will be at a level/time period to meet fuels management objectives.
- 10(b). Monitoring conducted to ensure that 'unintended consequences' don't occur.

- 11. Targeted grazing may necessitate area being unavailable for grazing during permitted time.
- 12. Winter grazing can be used to reduce carryover fuels (case by case), however spring grazing is ESSENTIAL.
- 13. Targeted grazing for fuels reduction will not occur on years where fine fuels do not create a fire danger.
- 14. Re-visiting an area may be needed as annual grasses regrow.

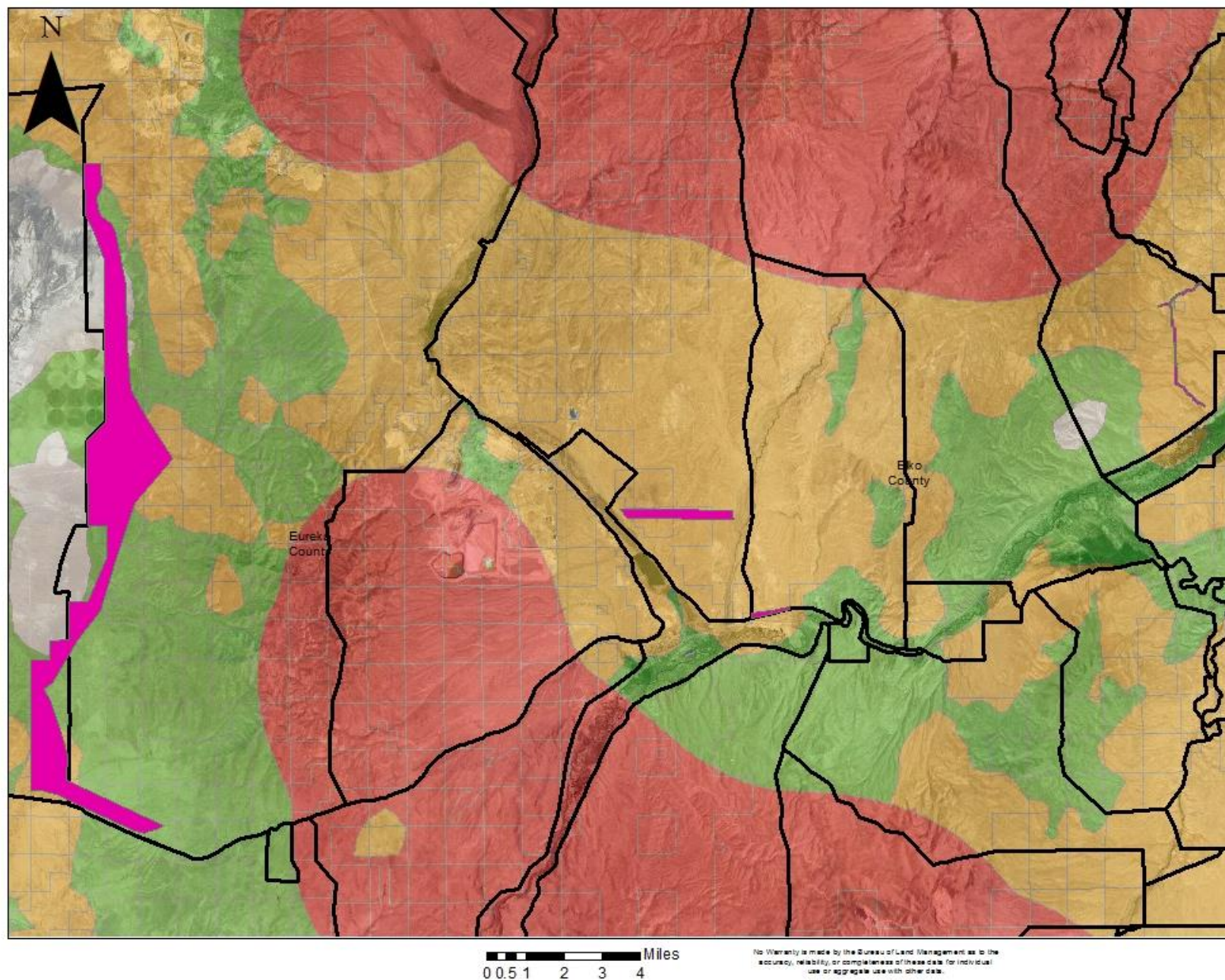
- 15. Objectives will be measured by a standardized monitoring protocol.
- 16. Adjustments will be made based on monitoring results.
- 17. Monitoring results and reports will be shared widely to inform future projects.
- 18. Demonstration Plots will be used to inform decisions on implementation of strategic, targeted grazing to reduce fuels in other areas.

Nevada's BLM Grazing Allotments

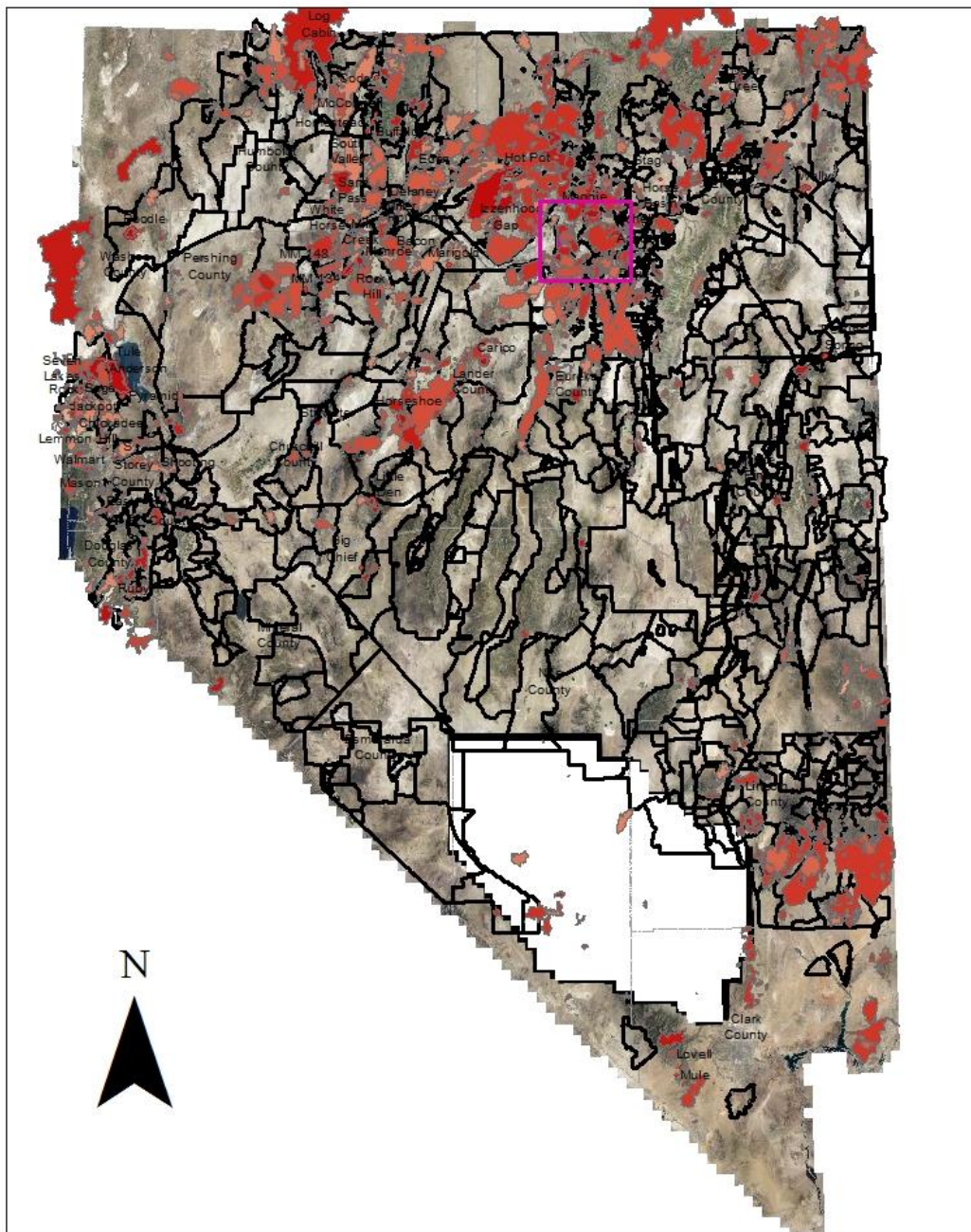


1. Strategically
reduce fuels to
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threat in or near
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priority habitats

Targeted Grazing Demonstration Plots

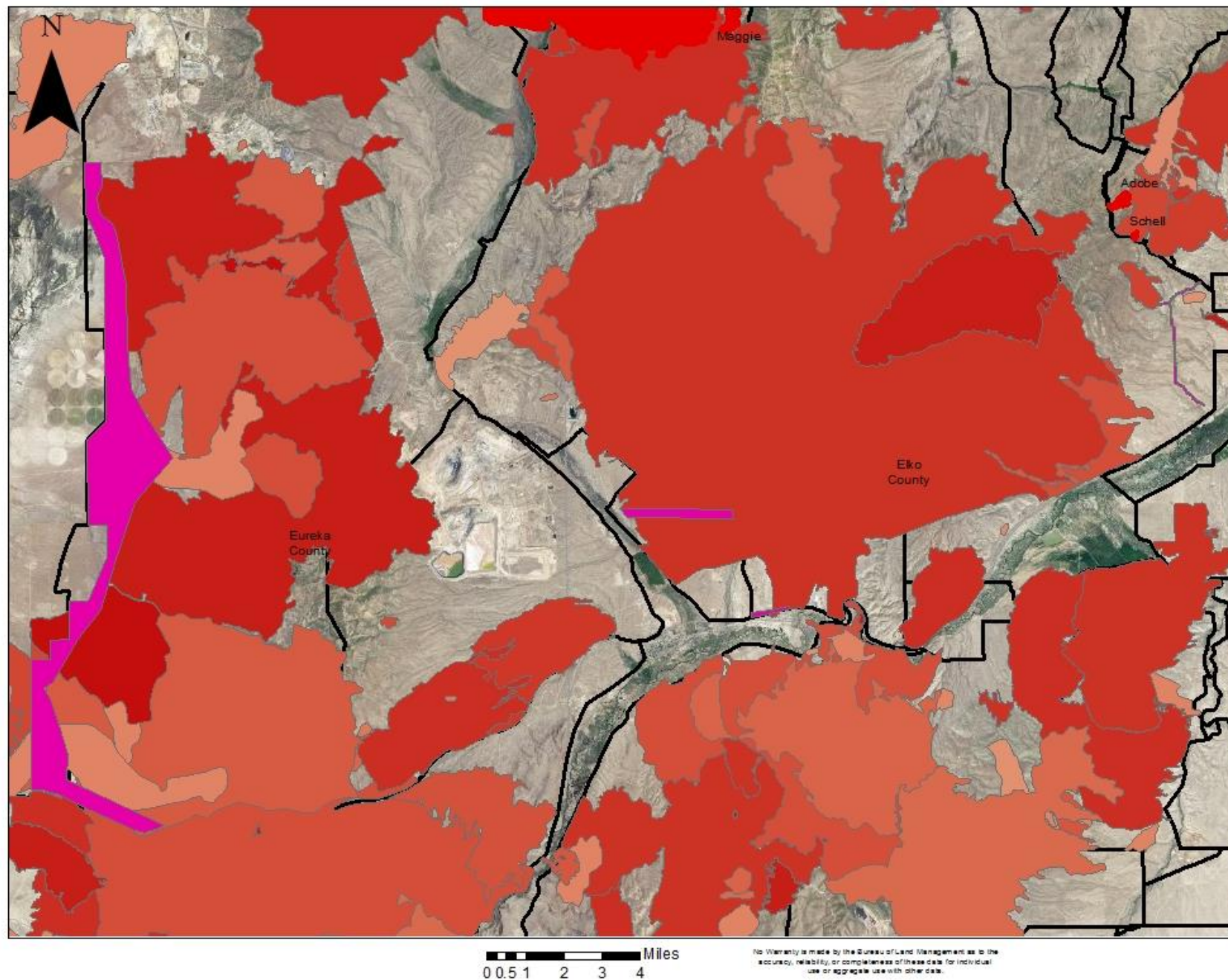


Nevada's BLM Grazing Allotments

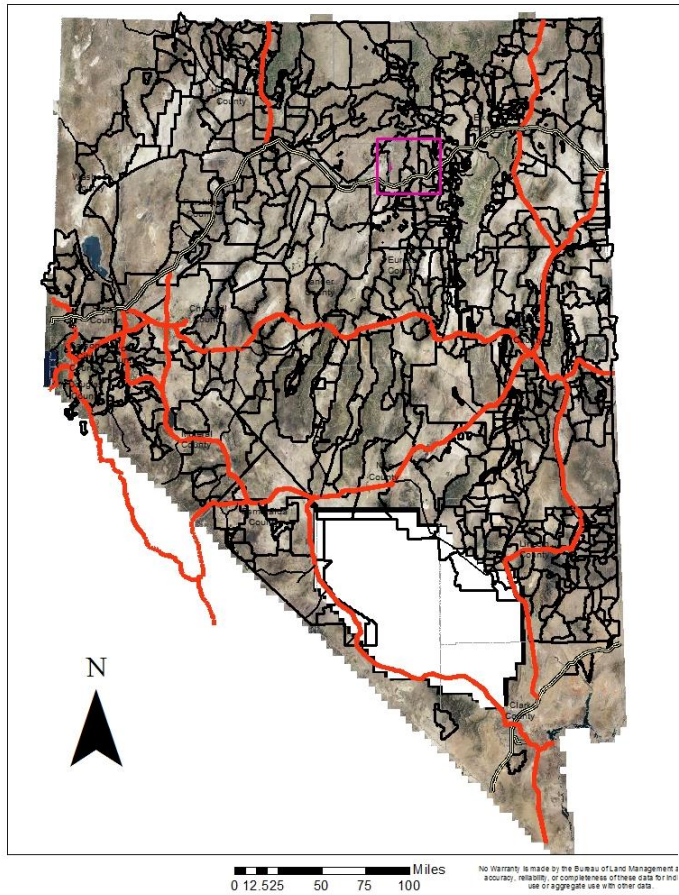


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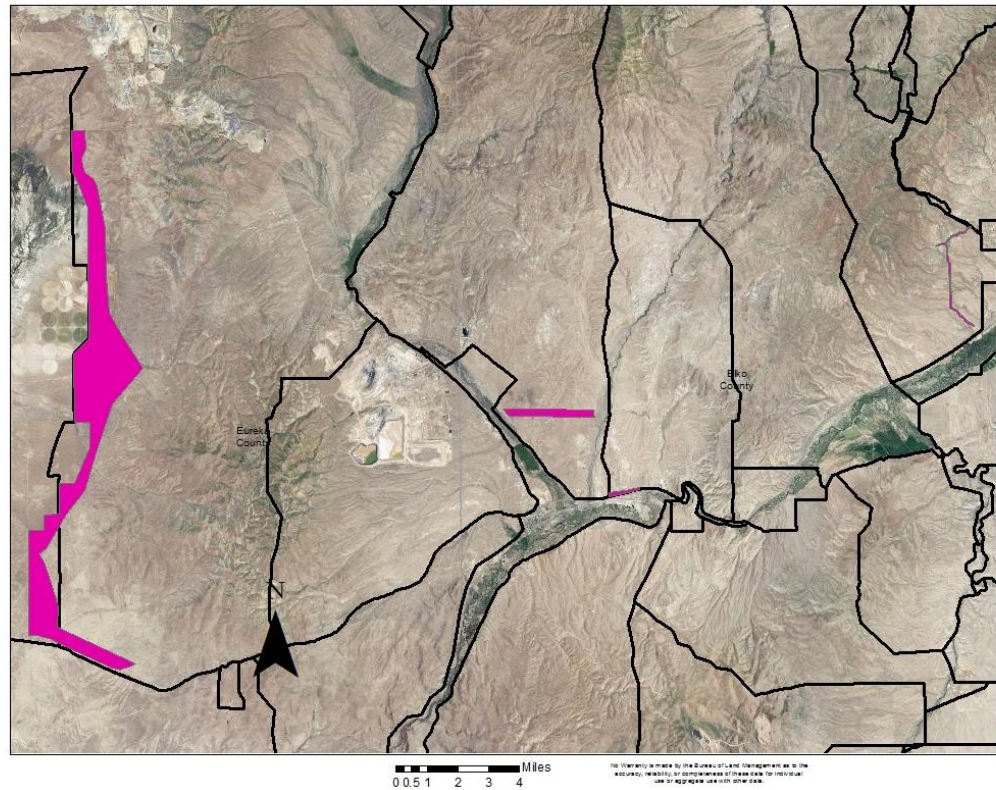
Targeted Grazing Demonstration Plots



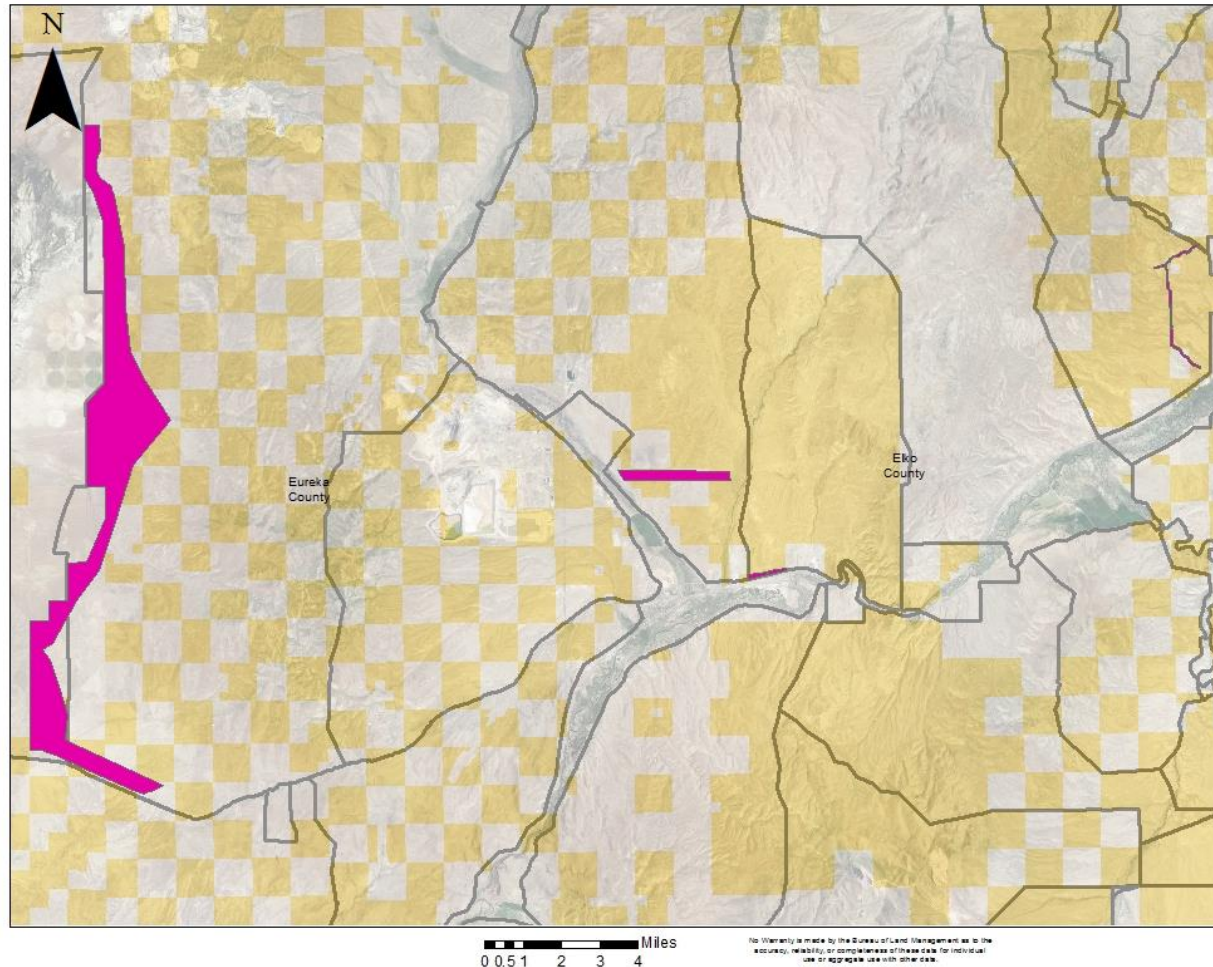
Nevada's BLM Grazing Allotments



Targeted Grazing Demonstration Plots



Targeted Grazing Demonstration Plots



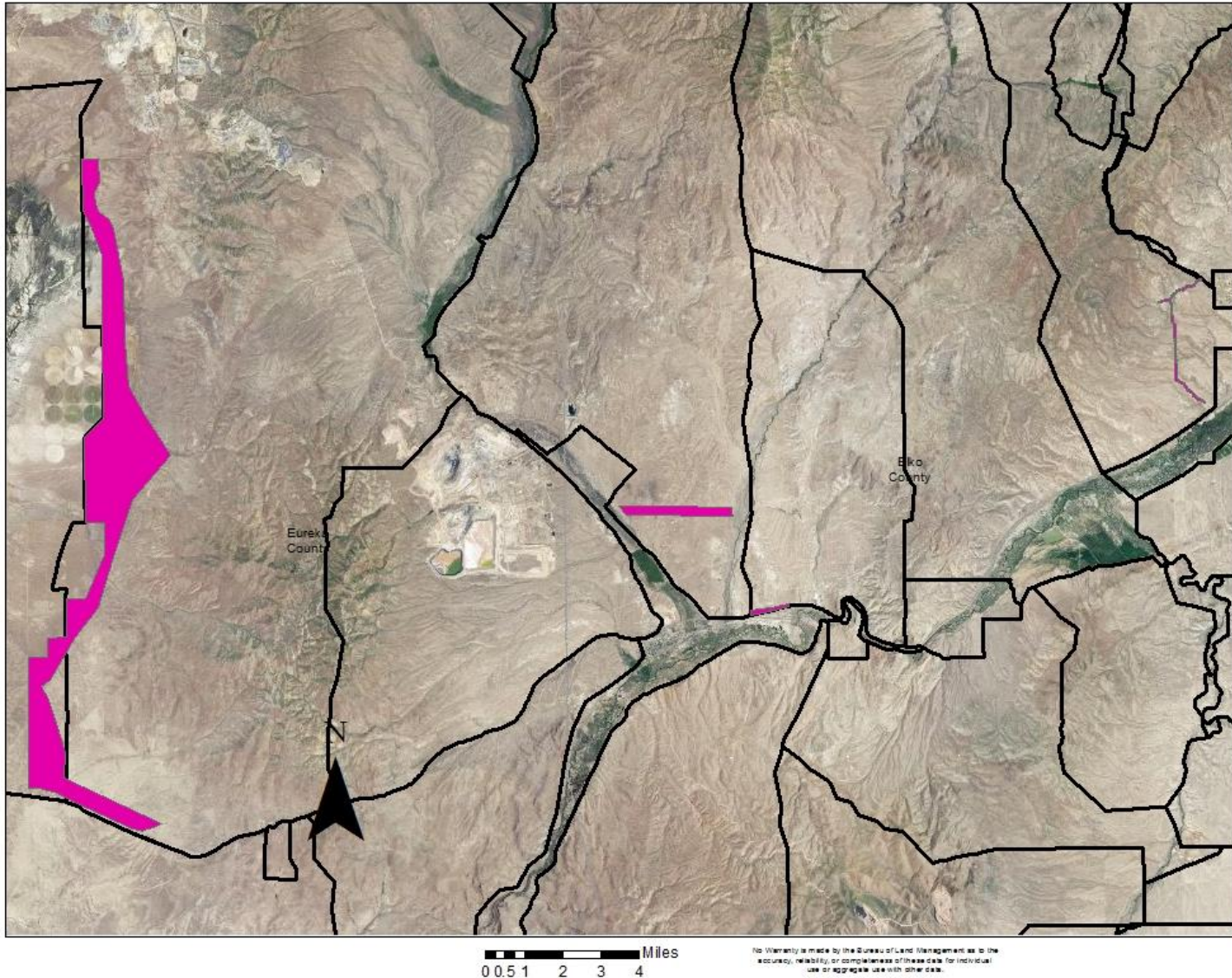
- 5. Targeted grazing bands should connect across the landscape, therefore be coordinated across multiple allotment, land ownerships, etc.

7. Stewardship contracting is another option.

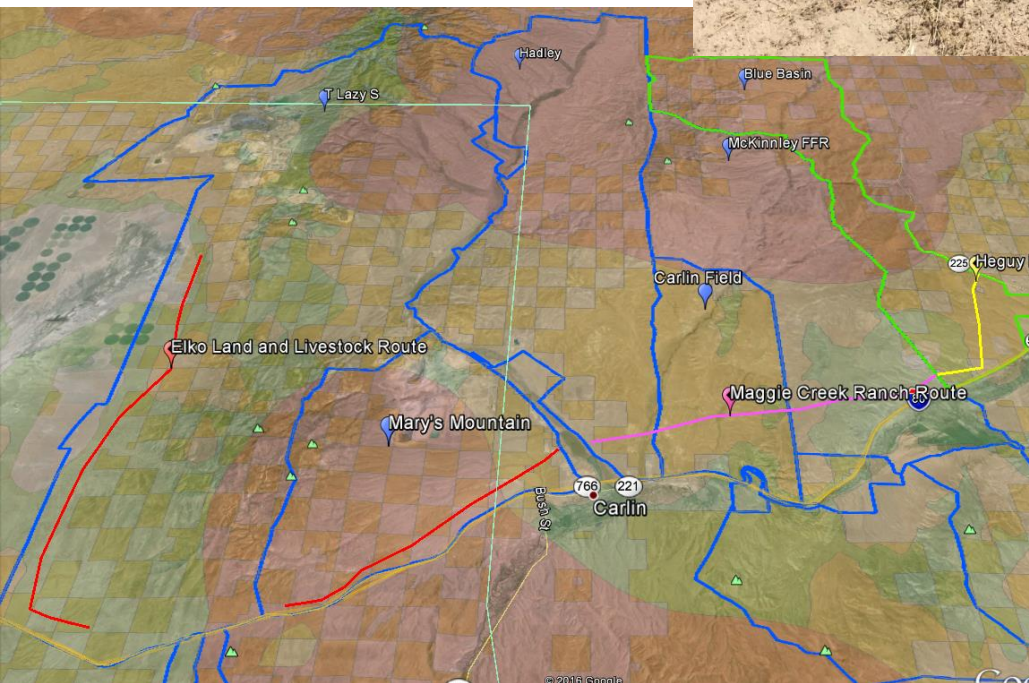
- These Demonstration Plots will be grazed through 'free-use permits' consistent with CFR 4130.5

- 8. Small pastures, or 'bands' in large pastures, facilitated by fencing, herding, etc.

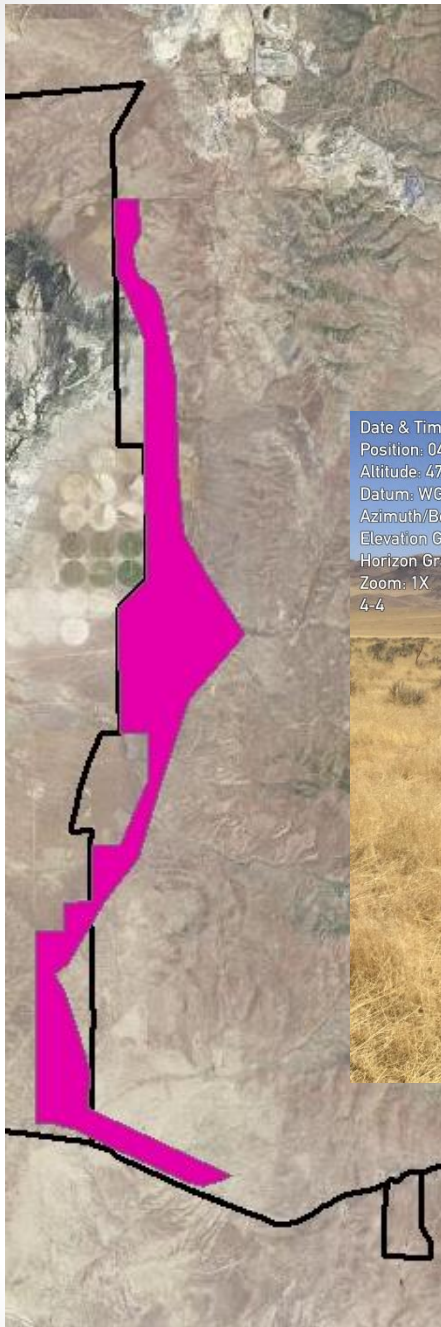
Targeted Grazing Demonstration Plots



- 9. Targeted grazing is not meant to create fuel breaks in intact stands of sagebrush.



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Date & Time: Thu Aug 25 08:34:50 PDT 2016
Position: 040° 42.15' N / 116° 25.07' W
Altitude: 4843ft
Datum: WGS-84
Azimuth/Bearing: 301° N59W 5351mils (Magnetic)
Elevation Grade: -023%
Horizon Grade: -001%
Zoom: 1X
1



Date & Time: Thu Aug 25 10:24:33 PDT 2016
Position: 040° 48.93' N / 116° 22.70' W
Altitude: 4792ft
Datum: WGS-84
Azimuth/Bearing: 046° N46E 0818mils (Magnetic)
Elevation Grade: -017%
Horizon Grade: +002%
Zoom: 1X
4-4



Date & Time: Thu Aug 25 14:29:01 PDT 2016
Position: 040°50.79'N / 115°50.99'W
Altitude: 5661ft
Datum: WGS-84
Azimuth/Bearing: 167° S13E 2969mils (Magnetic)
Elevation Grade: -019%
Horizon Grade: +001%
Zoom: 1X



Azimuth/Bearing: 233° S53W 4142mils (Magnetic)
Elevation Grade: -026%
Horizon Grade: +001%
Zoom: 1X
3



Date & Time: Thu Aug 25 12:43:46 GMT+6 2016
Position: 040°39.73' N / 116°24.44' W
Altitude: 5037ft
Datum: WGS-84
Azimuth/Bearing: 253° S73W 4498mils (Magnetic)
Elevation Grade: -008%
Horizon Grade: +002%
Zoom: 1X
5-6



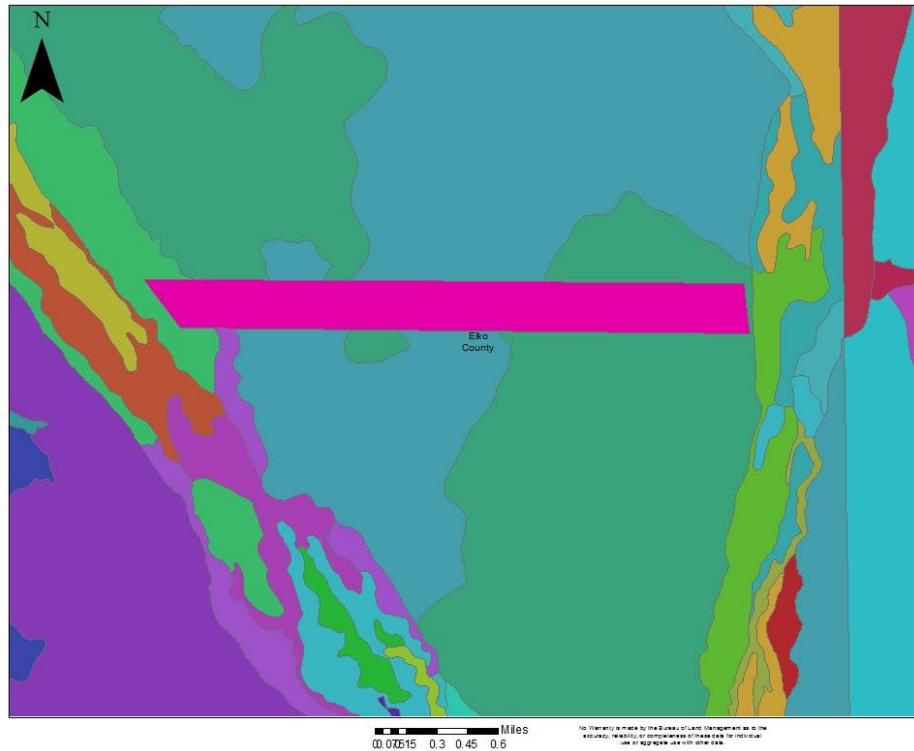
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Altitude: 5039ft
Datum: WGS-84
Azimuth/Bearing: 137° S43E 2436mils (Magnetic)
Elevation Grade: -015%
Horizon Grade: -000%
Zoom: 1X
5-4



Date & Time: Fri Aug 26 07:54:58 PDT 2016
Position: 040° 46.03' N / 116° 4.67' W
Altitude: 5061ft
Datum: WGS-84
Azimuth/Bearing: 197° S17W 3502mils (Magnetic)
Elevation Grade: +090%
Horizon Grade: +004%
Zoom: 1X
8-5



Targeted Grazing Demonstration Plots - Hadley



Date & Time: Fri Aug 26 07:55:46 PDT 2016
Position: 040° 46.03' N / 116° 4.66' W
Altitude: 5054ft
Datum: WGS-84
Azimuth/Bearing: 233° S53W 4142mils (Magnetic)
Elevation Grade: +014%
Horizon Grade: +001%
Zoom: 1X
8-8



Monitoring in Hadley

- Hadley Pasture fuel break. Each transect will be 50-m in length and extend from the basepoint in an easterly direction on a bearing of 91 degrees which thus parallels the long axis of the fuel break.
-
- There were two EDS and 3 principal soils thus I split the fuel break into 3 units:
 - #1 R024XY005NV on Orovada silt loams
 - #2 R024XY005NV on Orovada-Humdun fine sandy loams
 - #3 R025XY019NV on Cherry Spring-Orovada silt loams
-
- Unit #1 while appearing to have a more intact sagebrush overstory occupied only about 9% of the total so, I selection only 1 pair of transect for this unit.
-
- Units #2 and #3 occupied 42% and 48% of the total area of the fuel break. I selected 3 pairs of transects for each of these units attempting to sample among the different geographic locations of like soil polygons and among the heterogeneity of topographic features.

Costs

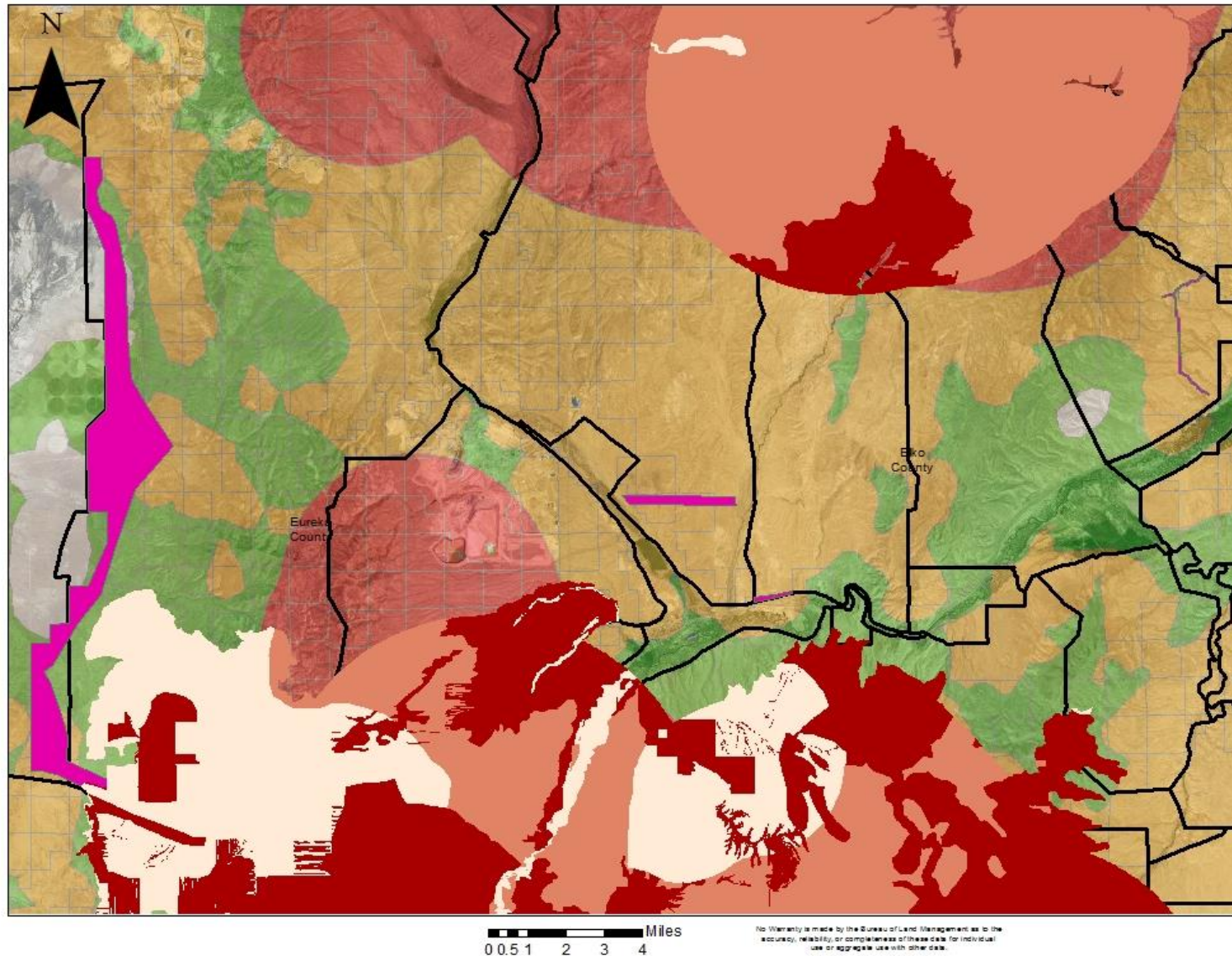
- Fencing
 - TS portion – 26 miles
 - Hadley portion – 3.3 miles
 - Carlin Field – 1.5 miles
 - Total cost of about \$170,000
 - (about \$2,800 per mile for materials, \$2,500 per miles for construction, and an estimated 20% overhead is about \$159,000, plus \$10,000 for 2 cattleguards)
- Archaeological work to implement/construct
 - \$30-40 per acre surveyed
 - 1 linear mile counts as about 12 acres
 - $12 \times 31 \times 40 = \$14,880$
 - Locations of water hauls & supplements – cost not yet calculated

Cost to Permittee

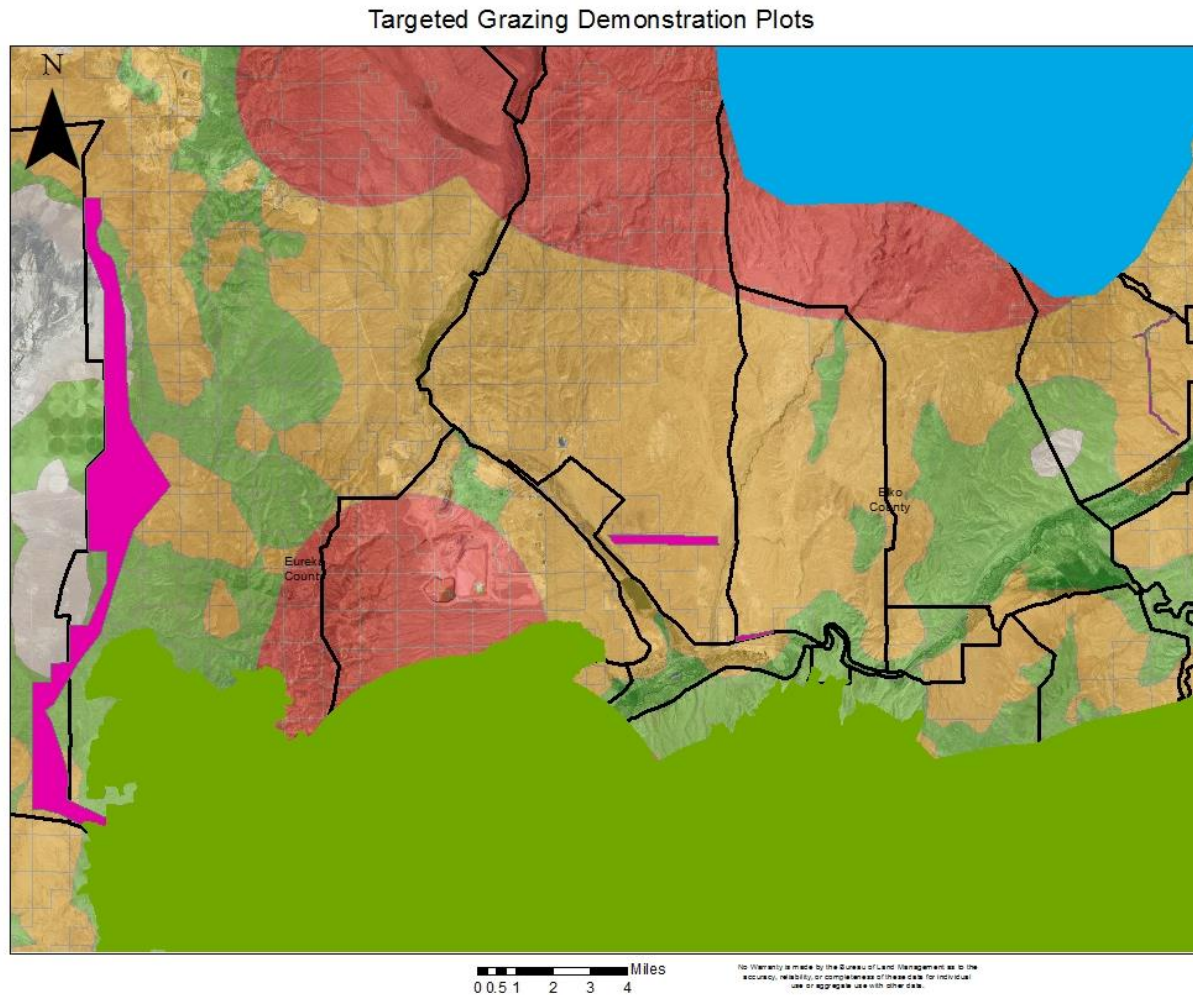
- Free Use Permits
 - Supplement tubs
 - Hauling of water
 - Cost of adjusting operations
 - Cost of multiple extra livestock moves
 - Cost of heightened diligence/monitoring

FIAT Fire Ops Priority Areas

Targeted Grazing Demonstration Plots



FIAT Assessment Areas



Summary

- Linear fuelbreaks using livestock
- Across multiple ownerships and allotments
- In annual grass dominated areas, with proven high fire danger (along I-80 corridor)
- Extensive monitoring to be conducted and shared
- Management modified by monitoring
 - 3 year minimum to see any results
- Upfront implementation costs to agency
- Upfront and ongoing costs to permittee
- Extreme coordination/flexibility of permittee