

Zachary Raslan

Geography 4510: lab5

(Save a Copy: use to save mxds when working)

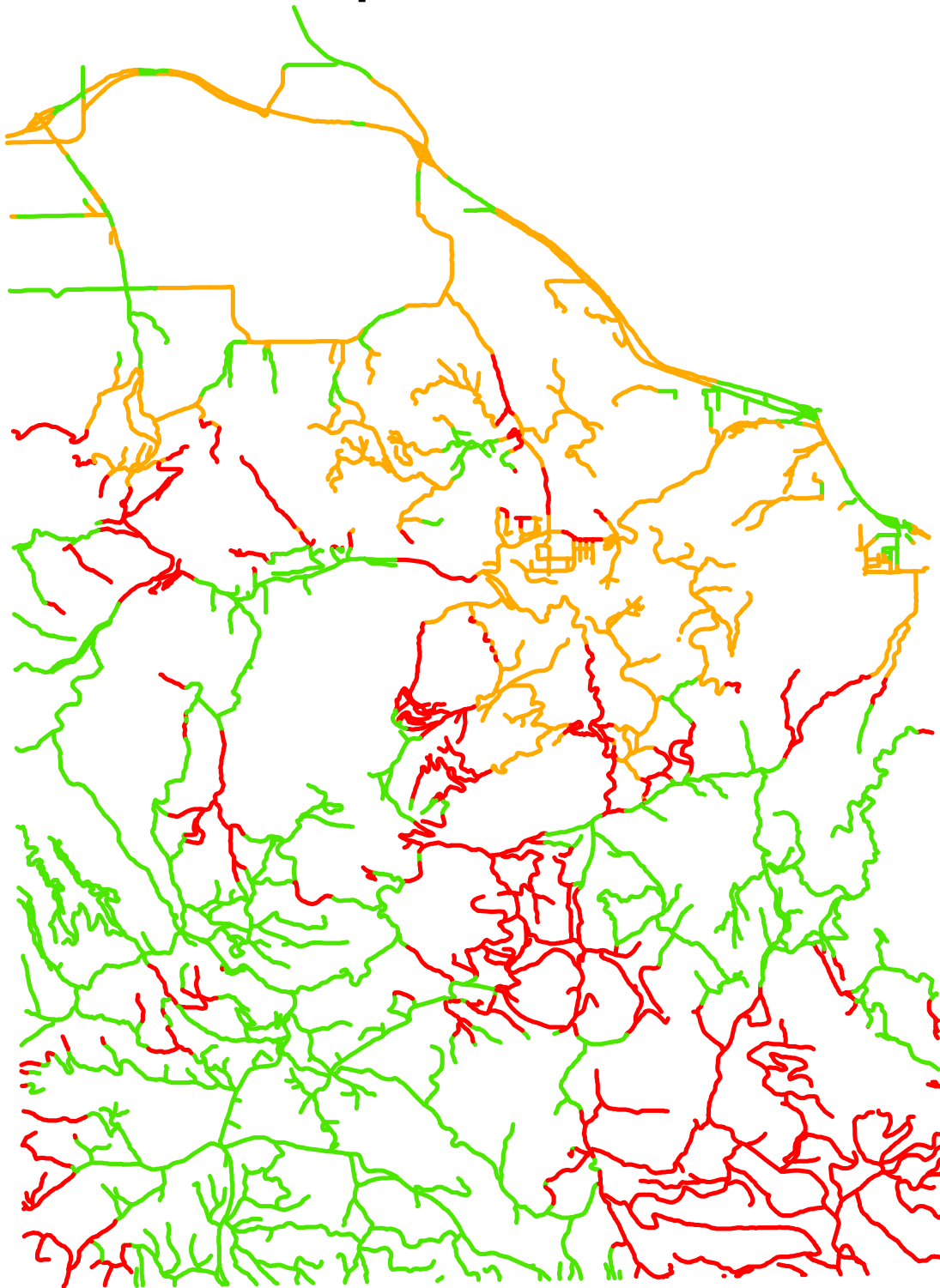
1. There are 113 kilometers of road crossing the Madison Limestone Geology.
2. PDF Attached
3. NA

4. Table of Rangeland intersecting Watersheds. 'AreaRanWatershed' units are acres.

OBJECTID *	SHEDNAME	Count_SHEDNAME	Sum_AreaRanWatershed
3	Whitewood	3	2,237.44
2	False Bottom	3	2,071.76
1	Bear Butte	2	418.94

5. PDF attached
6. PDF Attached
7. PDF Attached
8. PDF Attached
9. The mean crown coverage percent of forested stands within each soil unit is 49.4%. By summarizing soil units to get an average crown cover percentage, MCB supports the highest amount of crown cover and HBE supports the lowest amount of crown coverage. PDF of map symbolized by the average crown coverage by soil unit is attached.
10. PDF Attached – Total off limits area is 34.35 square kilometers.
11. Challenge Problem map PDF Attached.

# Roadways in Blackhills by Geological Substrate Infiltration and Spill Hazard Rate



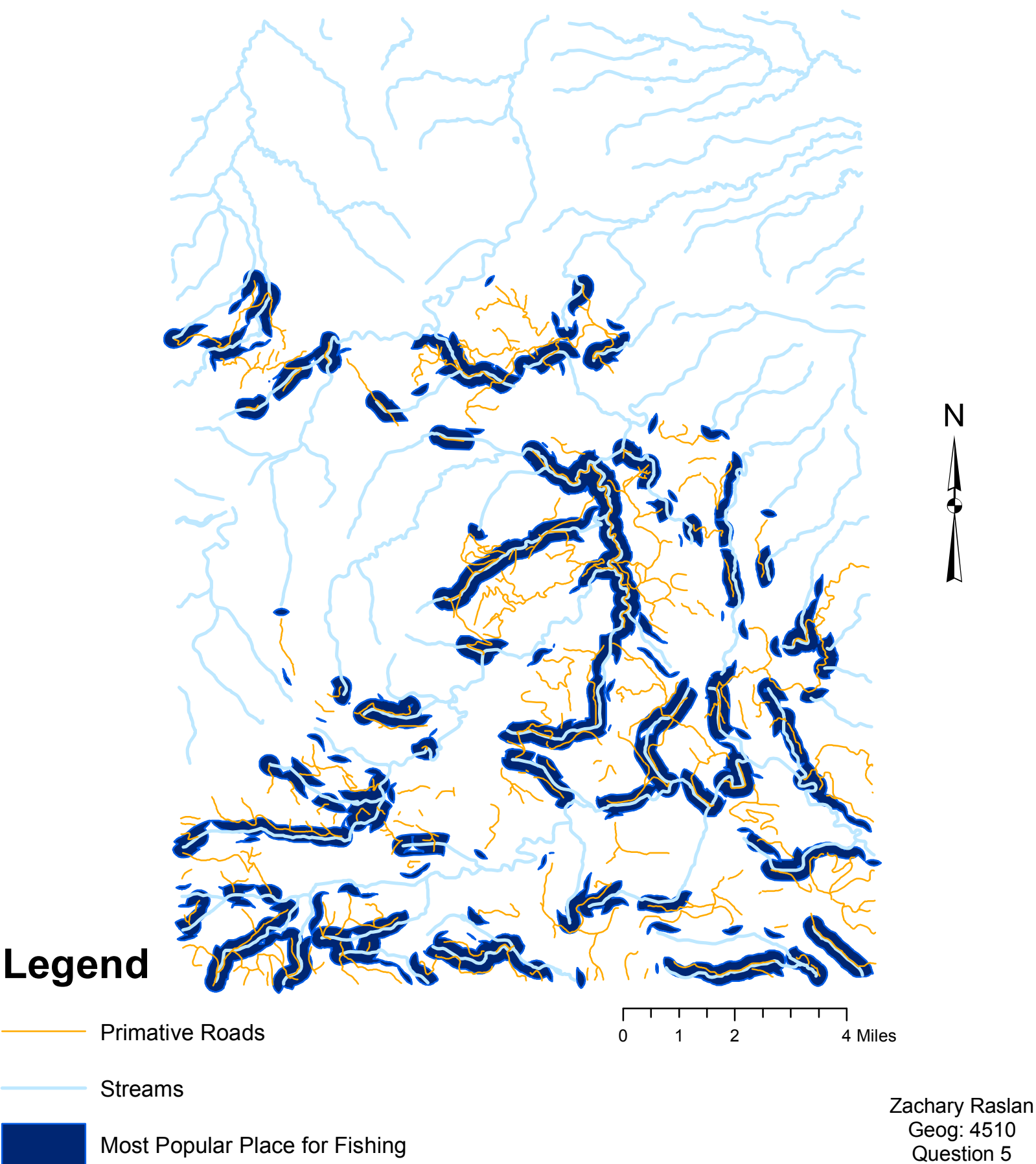
## Legend

### Geological Substrate Infiltration Rate

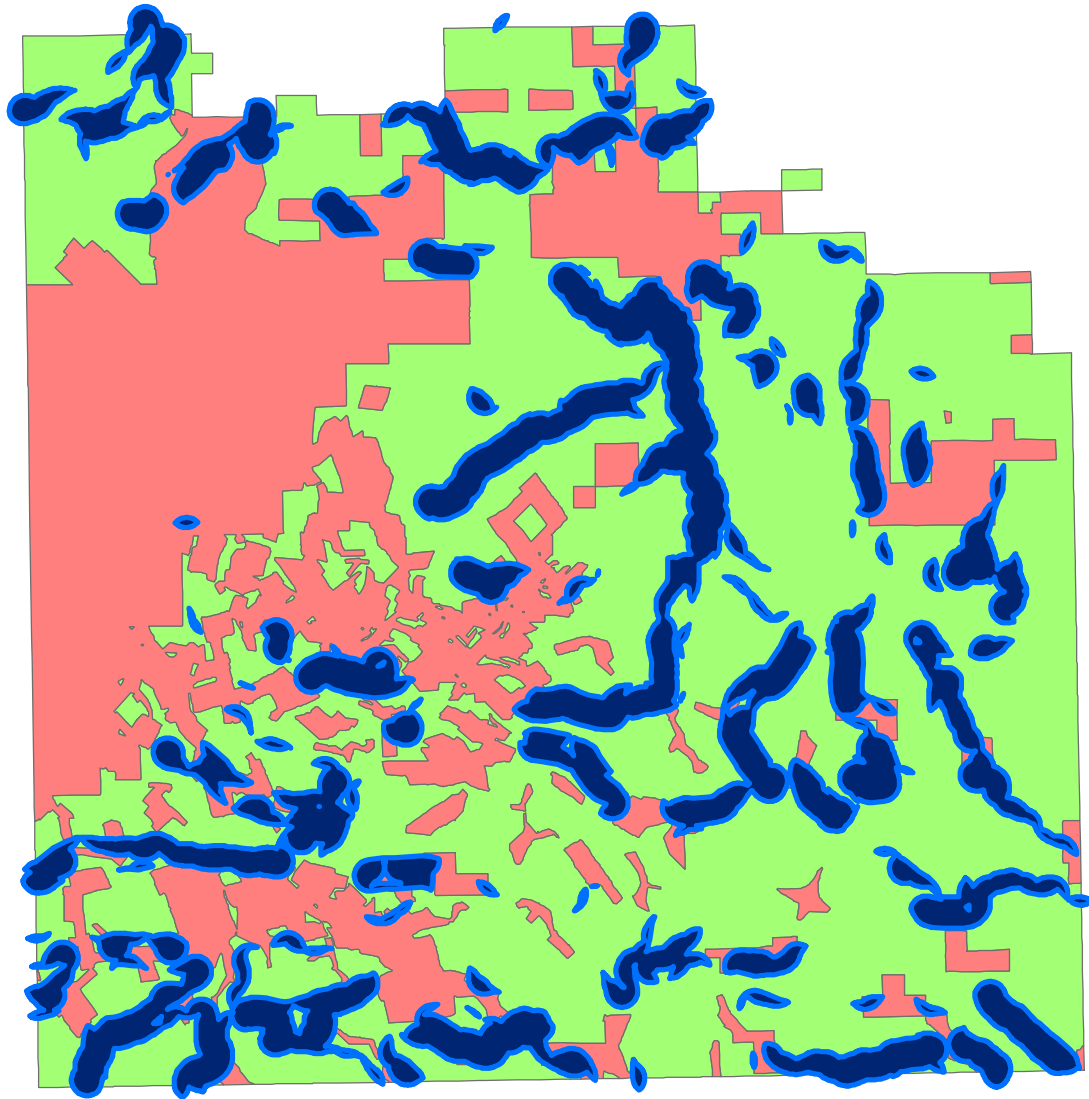
- Low
- Moderate
- High

0 1 2 4 Miles

# Popular Fishing Locations Within 300 Meters of Primitive Roads and Streams



# Popular Fishing Locations Within 300 Meters of Primitive Roads and Streams by Public or Private land




0 1.25 2.5 5 Miles

## Legend

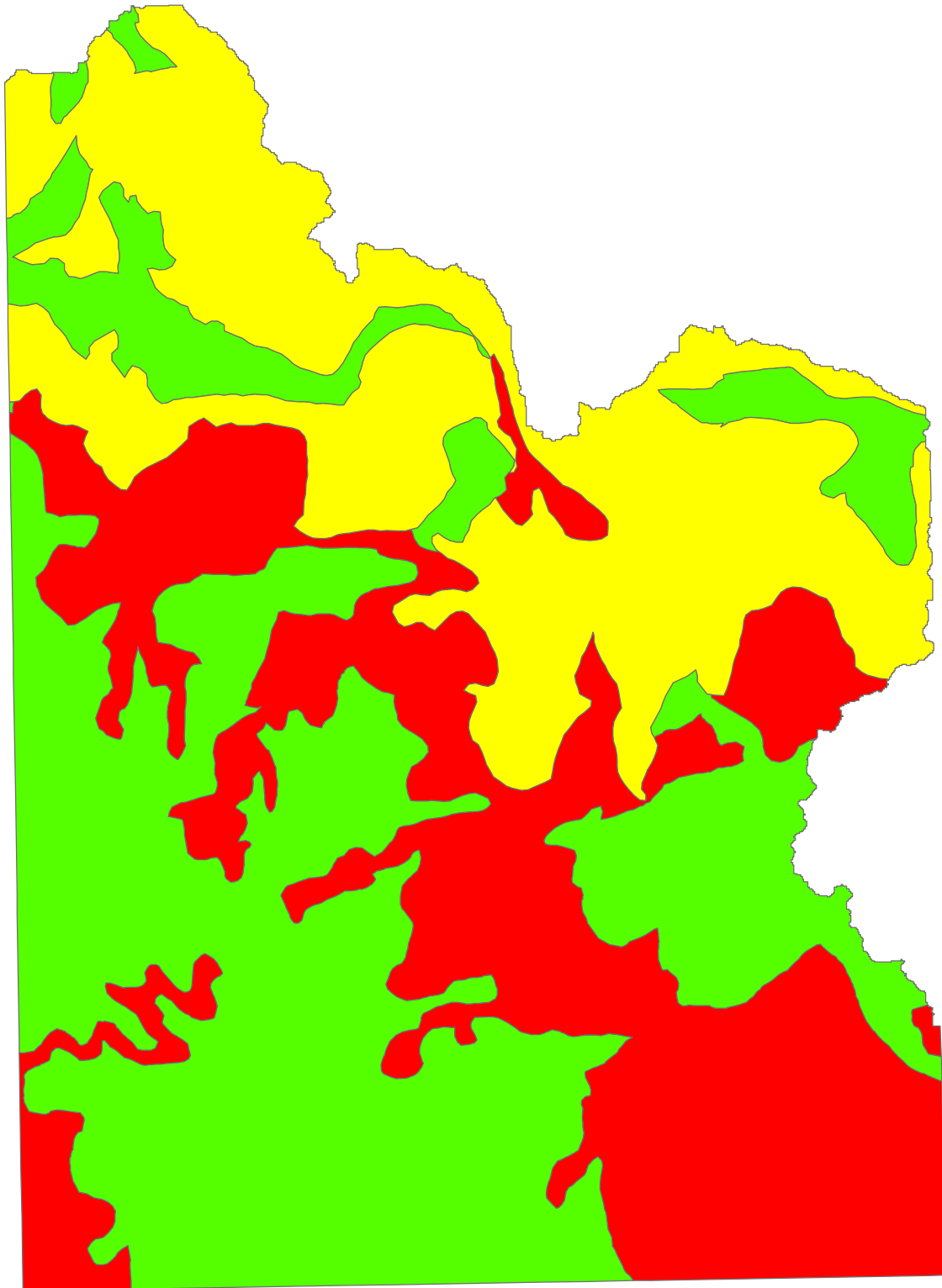
 Most Popular Fishing Places

## Land Owner

 National Forest - Public

 Privately Owned

# Geological Substrate Infiltration Rate Within Total Watershed Area



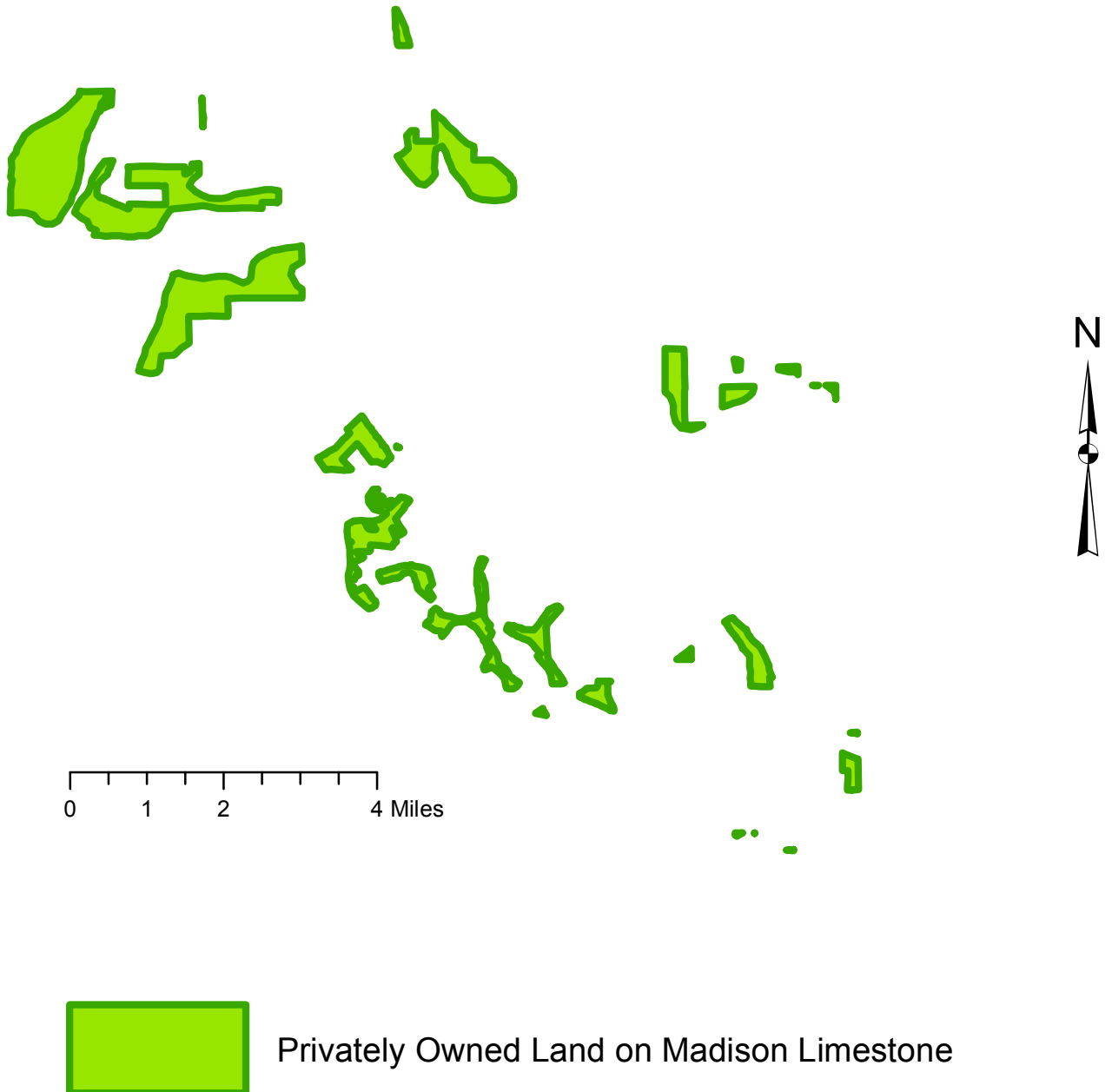
Infiltration Rate



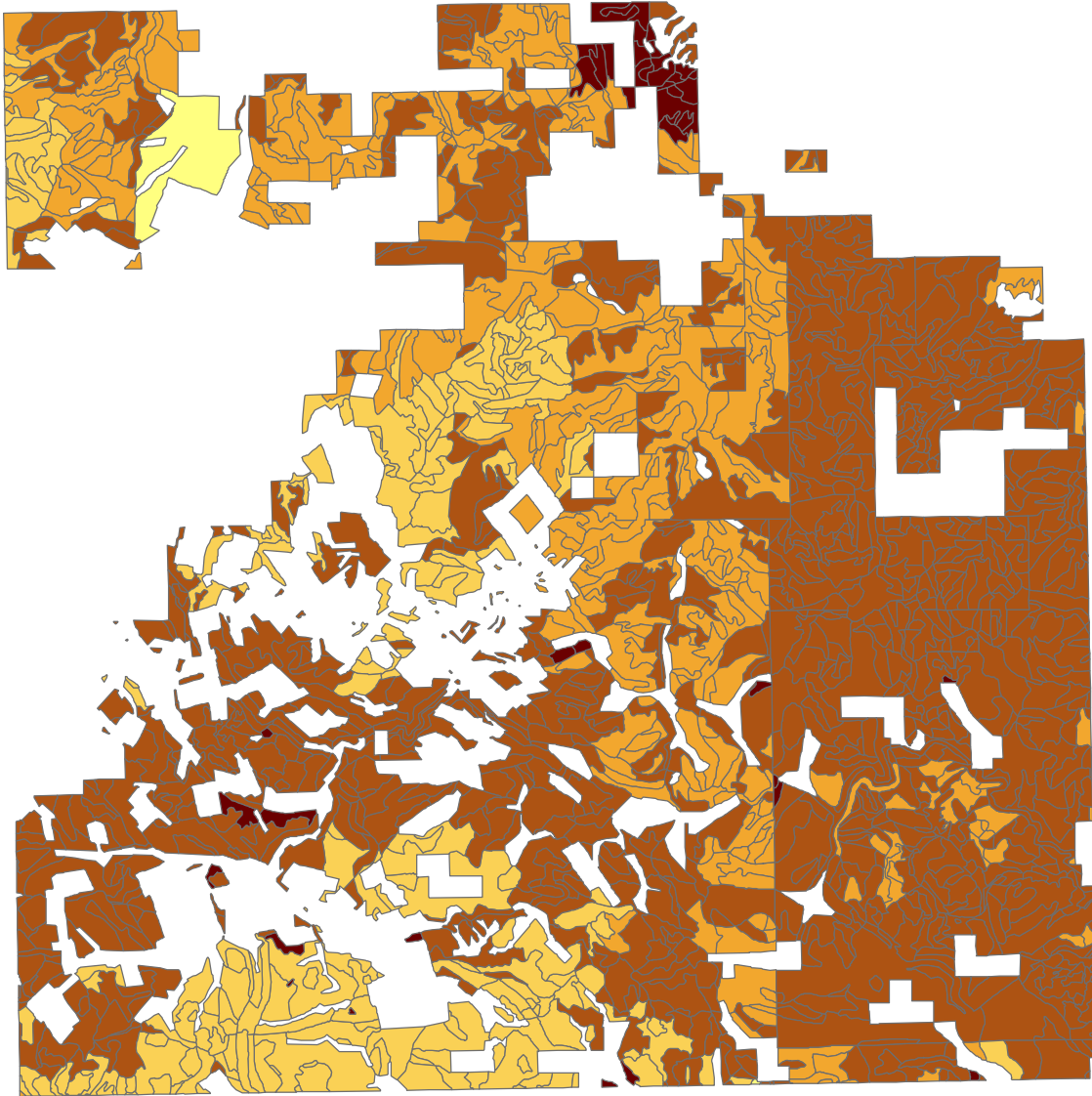
High  
Moderate  
Low

0 1 2 4 Miles

# Map of Privately Owned Land Located Madison Limestone Geology



# Map of Average Crown Coverage in Forested Stands by Soil Unit

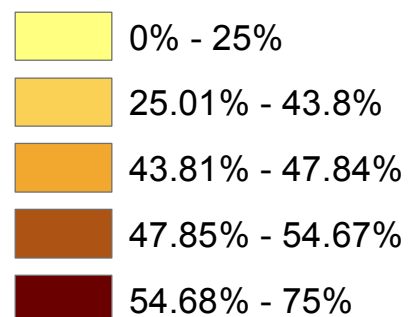


0 1 2 4 Miles

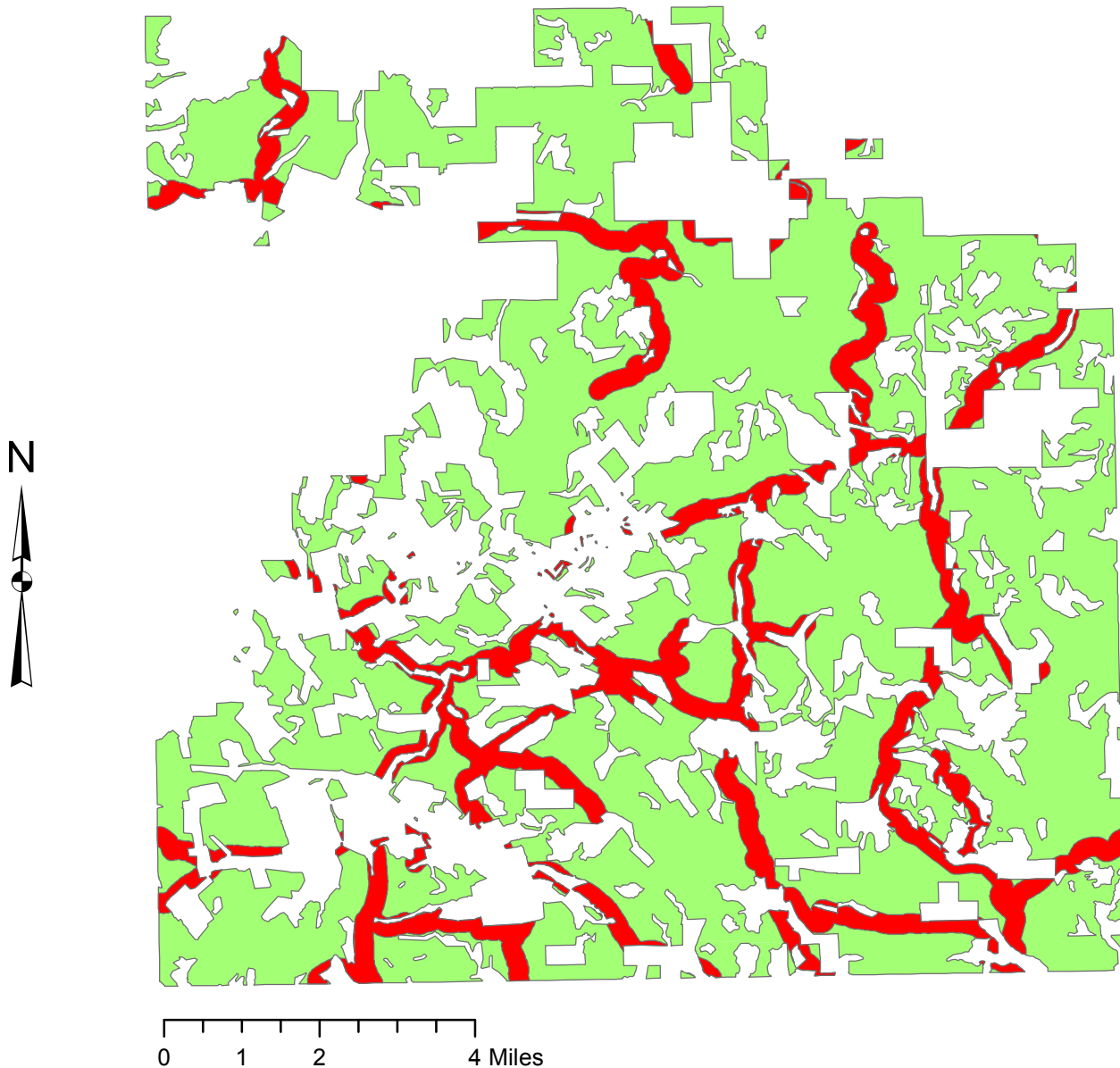
This map indicates higher density  
of crown coverage in the  
eastern portion of the Veg feature class.

## Legend

### Average Crown Coverage by Soil Unit





# Map of Off Limits Timber Harvesting Areas



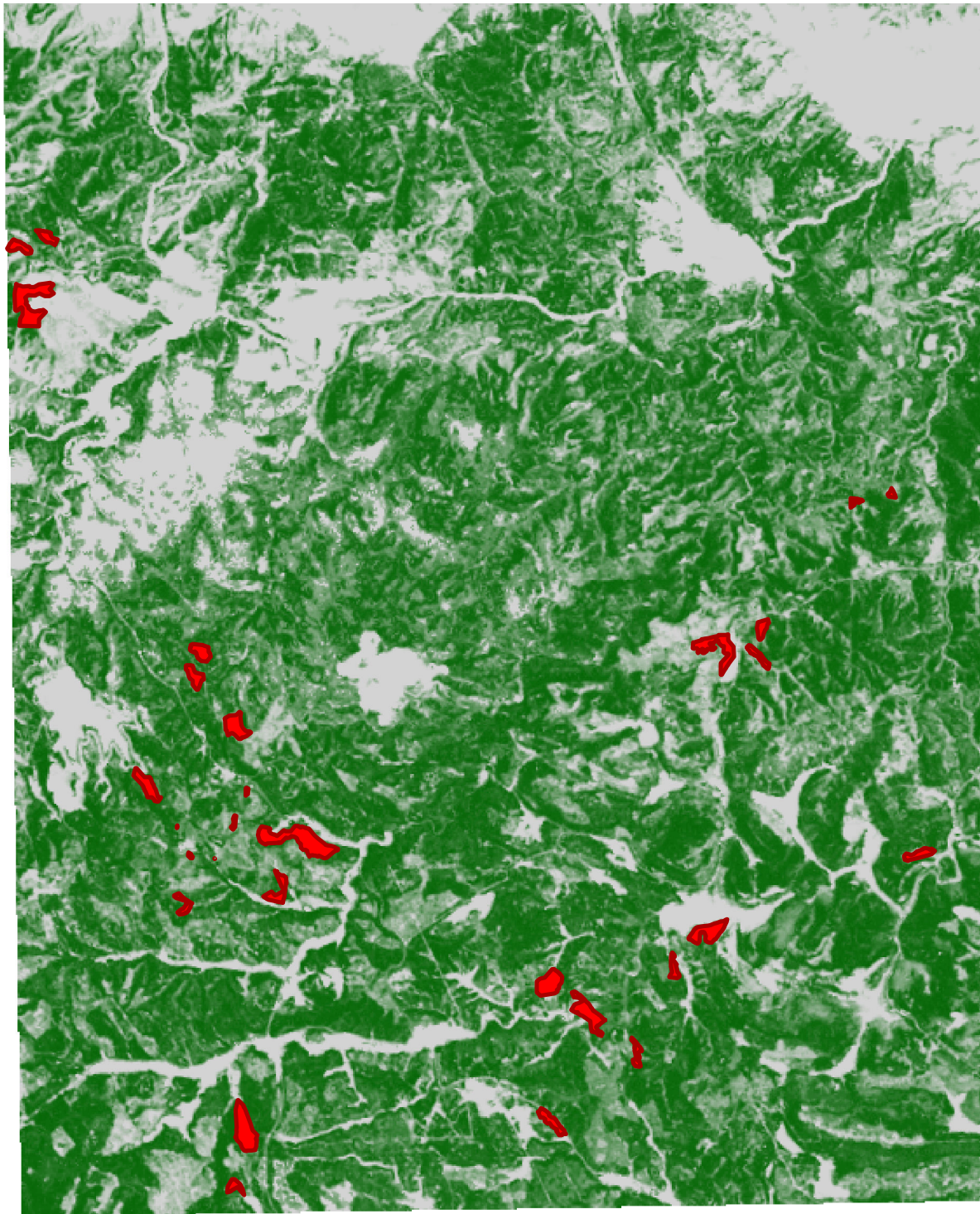
**Total Area Off-Limits:  
34.35 Square Kilometers**

## Legend

-  Off Limits Timber Harvest Zones
-  Total Timber Harvesting Zone



# Map of Suitable Home Locations on Canopy Raster of Blackhills



0 1 2 4 Miles

Suitable areas are determined by intersecting locations:  
Aspen Stands  
Low Infiltration Geological Substrates  
Within 500 Meters of a Primary or Secondary Road

## Legend

 Suitable Home Locations

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Geog: 4510  
Question Challenge