

MU_SYM	VVA_DESC	ENF_DESC	NFK_DESC	MU_SYM_DES
533	5 - ande basa latite	3 - junipers	3 - 80.01 - 250	5 - ande basa latite 3 - junipers 3 - 80.01 - 250
543	5 - ande basa latite	4 - PIED	3 - 80.01 - 250	5 - ande basa latite 4 - PIED 3 - 80.01 - 250
552	5 - ande basa latite	5 - PIPOS	2 - 15.01 - 40	5 - ande basa latite 5 - PIPOS 2 - 15.01 - 40
662	6 - rhyo tuff ignim	6 - PSMEG/ABCO/POT	2 - 15.01 - 40	6 - rhyo tuff ignim 6 - PSMEG/ABCO/POTR5 2 - 15.01 - 40

Records (0 out of 2715 Selected) Options ▾

- | MU_SYM | VVA_DESC             | ENF_DESC           | NFK_DESC        | MU_SYM_DES  |
|--------|----------------------|--------------------|-----------------|---|
| 533    | 5 - ande basa latite | 3 - junipers       | 3 - 80.01 - 250 | 5 - ande basa latite 3 - junipers 3 - 80.01 - 250       |
| 543    | 5 - ande basa latite | 4 - PIED           | 3 - 80.01 - 250 | 5 - ande basa latite 4 - PIED 3 - 80.01 - 250           |
| 552    | 5 - ande basa latite | 5 - PIPOS          | 2 - 15.01 - 40  | 5 - ande basa latite 5 - PIPOS 2 - 15.01 - 40           |
| 662    | 6 - rhyo tuff ignim  | 6 - PSMEG/ABCO/POT | 2 - 15.01 - 40  | 6 - rhyo tuff ignim 6 - PSMEG/ABCO/POTR5 2 - 15.01 - 40 |
- Records (0 out of 2715 Selected)

Options

# Gila National Forest TEUI Map Unit Numbering System

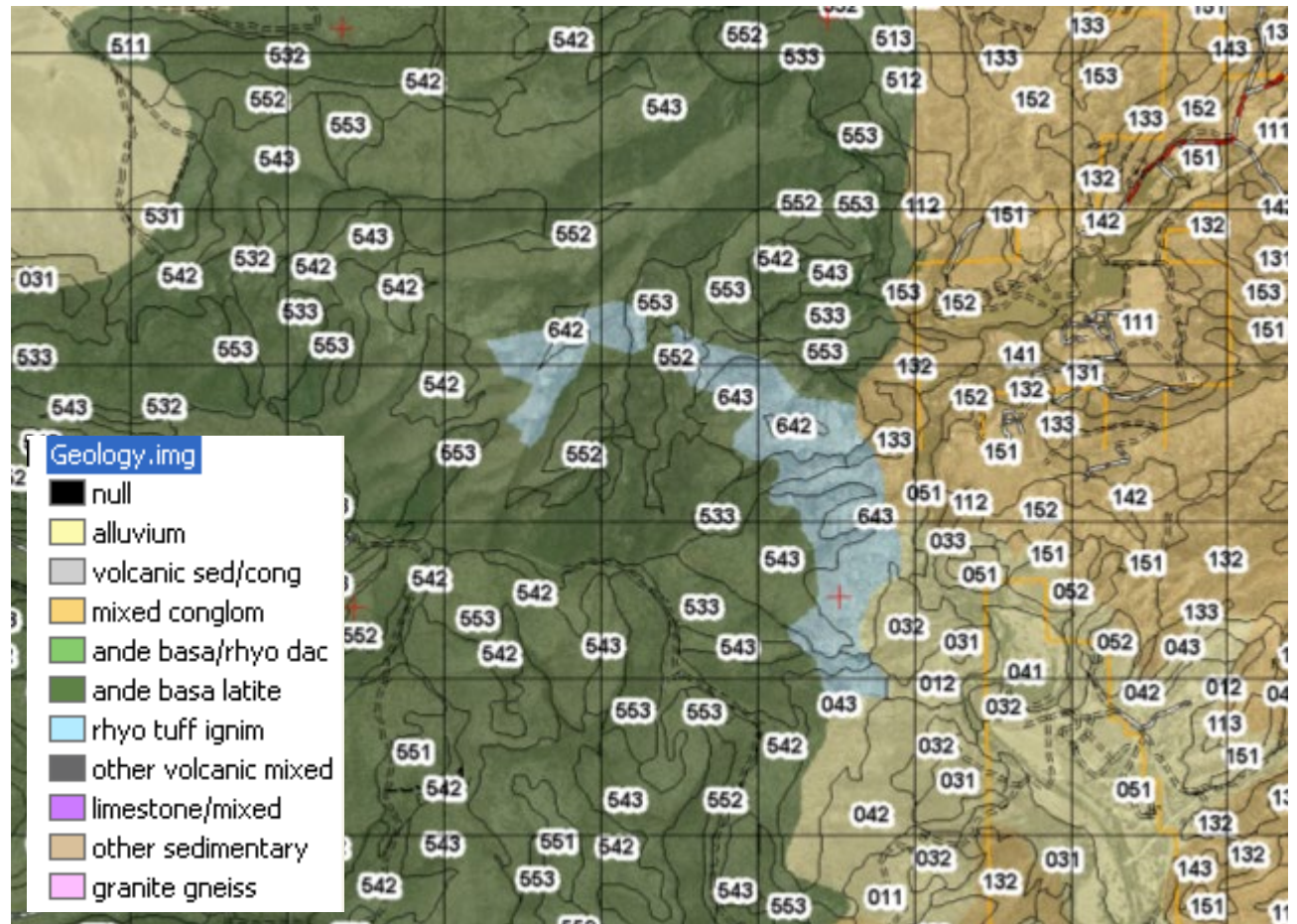
Map Unit #s	Parent Material
1-49	Recent Alluvium
50-99	Old Alluvium
100-149	Fanglomerate, Gila Conglomerate
150-199	Volcanic Sediment
200-239	Sandstone
240-279	Limestone
280-299	Other Sedimentary Bedrock
300-399	Granite, Gneiss
400-499	Other Metamorphic Bedrock
500-599	Andesite, Basalt, Latite
600-699	Rhyolite, Tuff, Ignimbrite
700-710	Miscellaneous Land (Dunes, Talus, Mined Land, etc.)

## Gila Connotative Legend: Geology Input

- Geology layers input:

- *Geologic Map of New Mexico*, New Mexico Bureau of Geology and Mineral Resources, 2003, Scale 1:500,000.
- *Ratté, J.C., 2001, Geologic Map of Tularosa Mountains, 30' x 60' Quadrangle, Catron County, New Mexico: U.S. Geological Survey Miscellaneous Geologic Investigations Series I-2619, Scale 1:100,000*

- Currently there are no digital geology layers that at the 1:24,000 scale. The available geology layers are merged into one continuous raster coverage and reclassified.





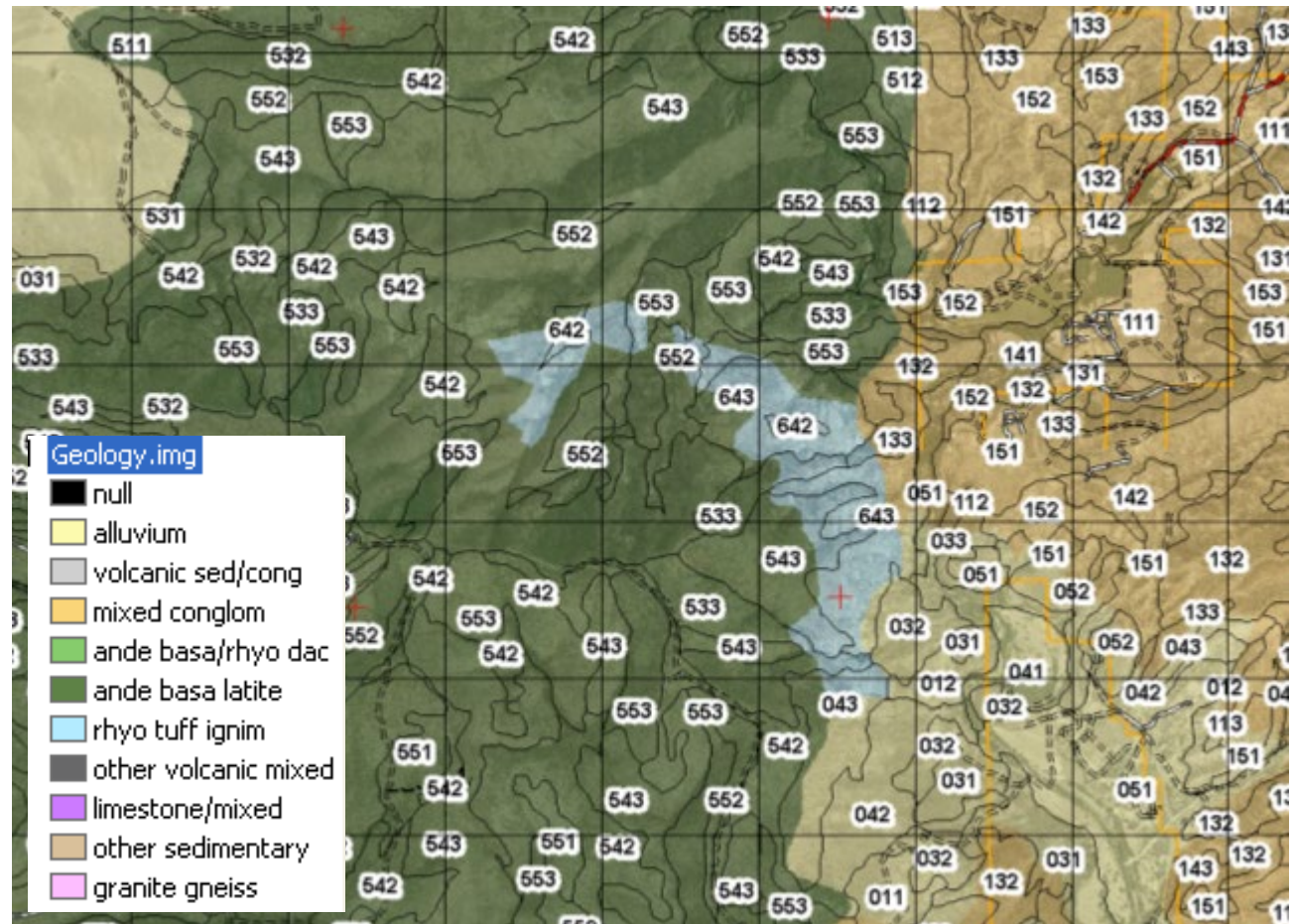
## Gila Connotative Legend: Geology Input

- Geology layer classification:

- 9 – Null (no value)
- 0 – Alluvium
- 1 – Volcanic Sediment/Conglomerate, Mixed Conglomerate
- 2 – Limestone/Mixed, Other Sedimentary
- 3 – Granite, Gneiss
- 5 – Andesite, Basaltic Andesite, Basalt, Latite
- 6 – Rhyolite, Tuff, Ignimbrite

- Some of the units in both the original Ratte (2001) and the original Geologic Map of NM (2003) are mixed units. A unit may be mostly andesitic basalt, but may also have volcanic tuff and ignimbrite associated with it. These were originally assigned a dominant class.

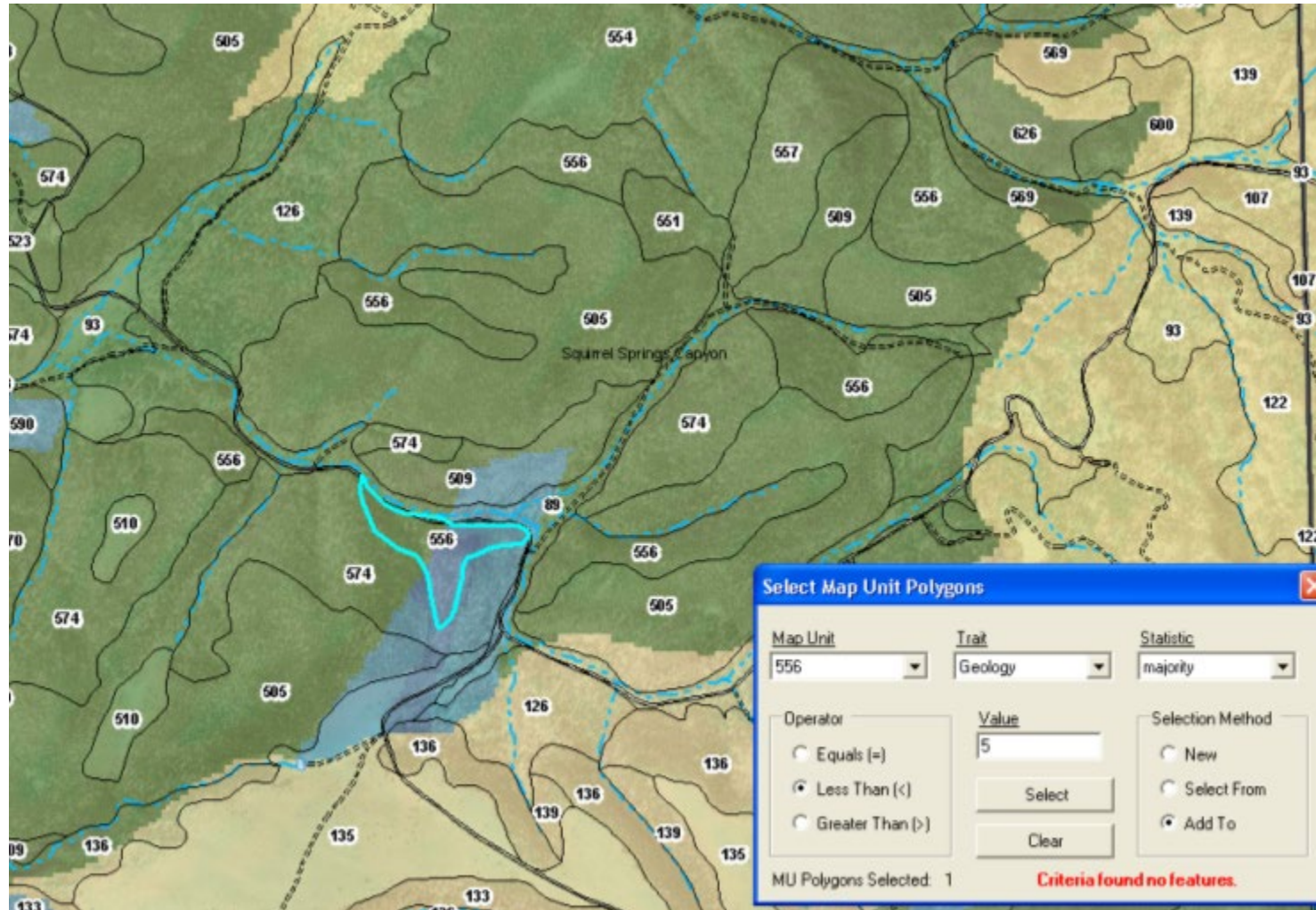
- Revision will include a class of mostly “mixed” units. These will be assigned an “8”. This should help identify areas that need special attention and more ground verification.



# Gila National Forest

## Statistics using Geology Layer

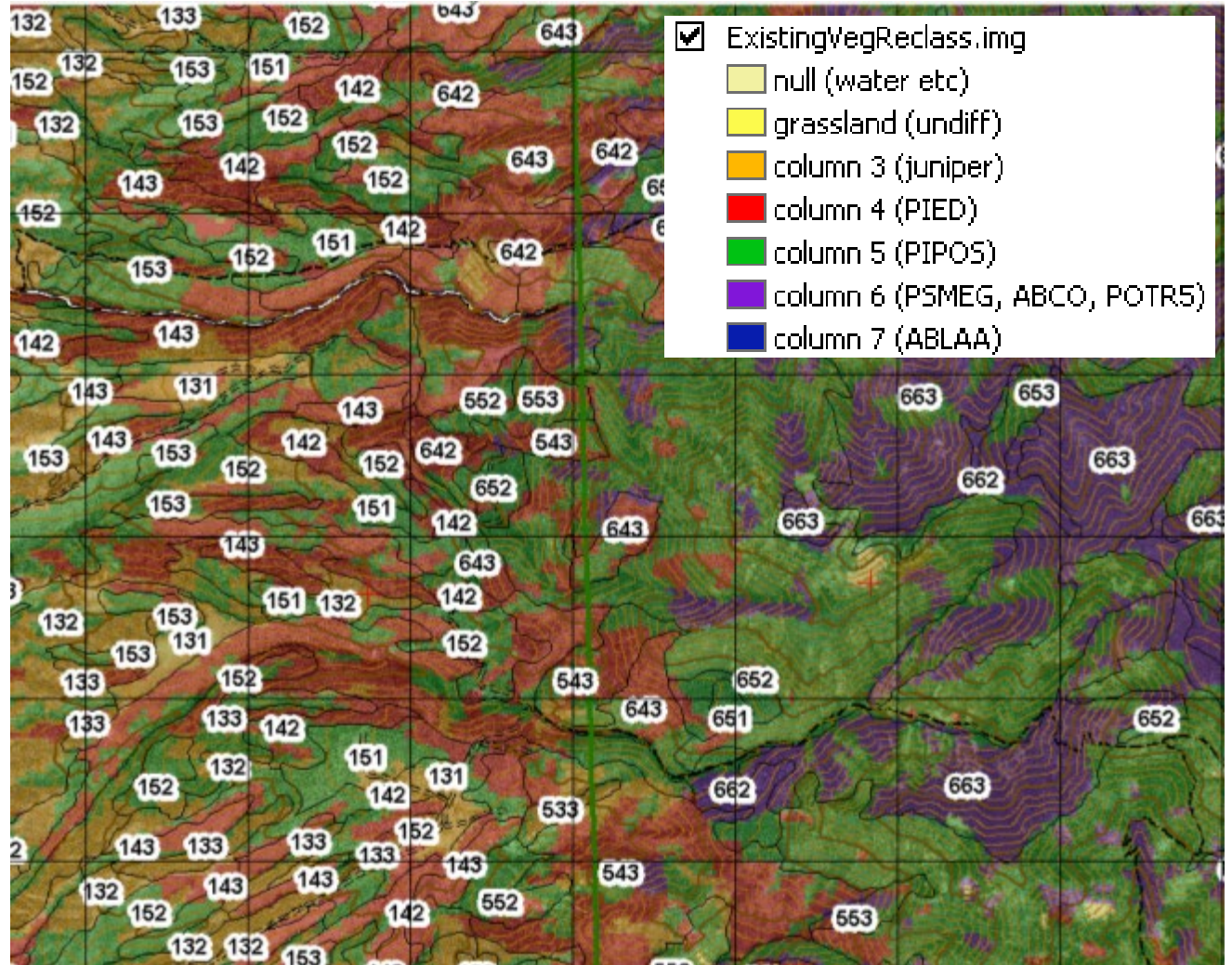
○The resulting geology layer is very general and is mainly used for premapping, or for quickly checking for “outlier” polygons when running statistics. Most of the polygons that get flagged during statistics are due to differences in scale of mapping and are ignored, especially in alluvial areas. In the example to the right, you can see where the geology map called some areas basalt (green), where at 1:24,000 scale it is really alluvial or conglomerate. The majority of the selected polygon to the right was rhyolite, so it was flagged in the statistics. I can now double check that area and see if I want to change anything.





## Gila Connotative Legend: Generalized Climate Class

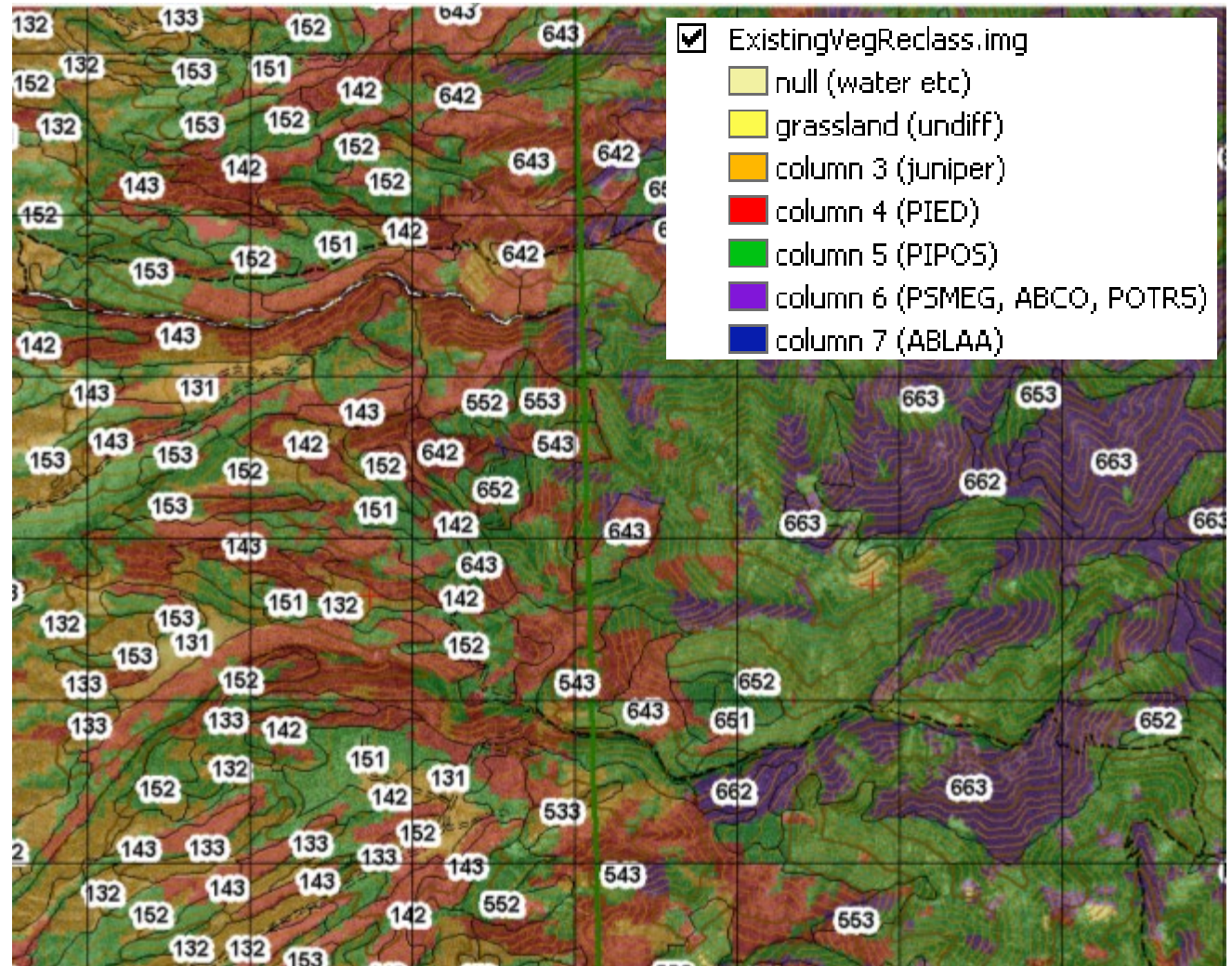
- The Existing Vegetation Classification for the southwestern region was used and reclassified according to the climate class of the dominant species
- The current classes include:
  - 9 – Null (Water, No data)
  - 1 – Undifferentiated climate class; Grassland
  - 3 – Undifferentiated climate class; Juniper dominated
  - 4 – Pinon Pine dominated
  - 5 – Ponderosa Pine dominated
  - 6 – Doug -fir, White Fir, or Aspen dominated
  - 7 – Corkbark Fir dominated
- This is a general map of existing vegetation classes, and does not reflect potential vegetation. It is simply a proxy to get a general idea of the climate class during premapping. We have not used this layer when running statistics. I only use the aspect and elevation layers when running statistics to find any major outliers in the climate class.





## Gila Connotative Legend: Generalized Climate Class

- The column 1 and column 3 do not correspond to a particular climate class. These are place markers for areas dominated by grass or juniper, respectively, and can be in any climate class.
- The current classification needs to be revised. There needs to be another mixed or undifferentiated class for areas dominated by “shade intolerant” and “shade tolerant evergreen” trees. These will be given an “8” and will not have a climate class associated with them. Areas dominated by *Quercus sp.* or by Aspen will be classified as an “2”. There will be no climate class associated with these units. The later could indicate edaphic-fire areas.

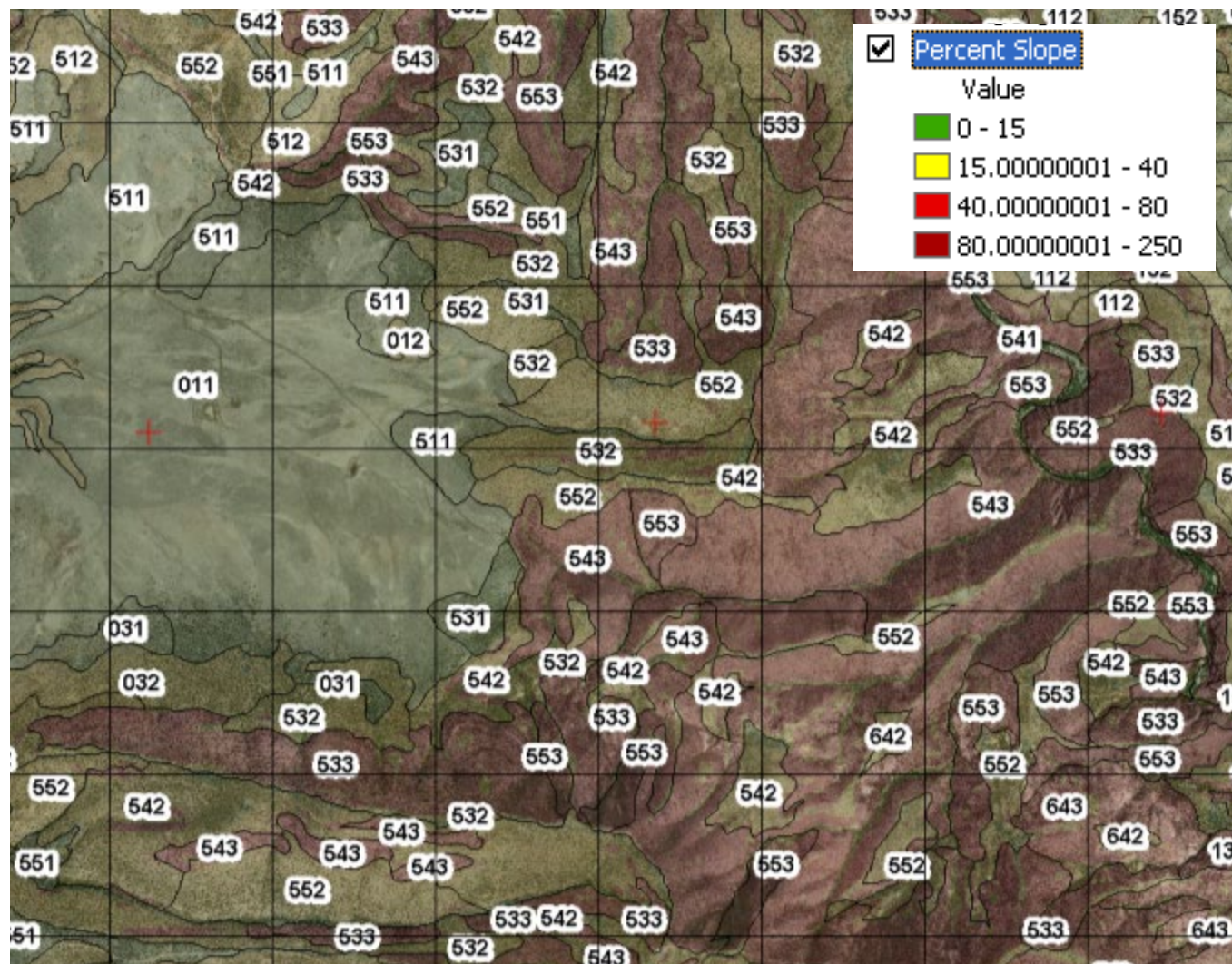




## Gila Connotative Legend: Percent Slope

•Continuous 10 meter percent slope was reclassified in the connotative legend into the following categories:

- 9 – No value
- 1 – 0-15 percent slope
- 2 – 15.01-40 percent slope
- 3 – 40.01-250 percent slope





## Gila Connotative Legend: Connotative Legend to Map Unit Legend Crosswalk

- A query was created in Access that allows us to crosswalk the connotative map unit number to a current map unit component being used on the Gila National Forest.
- Example - Connotative Legend Map Unit # 562
  - "5" - Basalt, Andesite, Latite. Query brings up all Gila components in the 500's.
  - "6" - Column 6. Query narrows down all 500 components that are in column 6.
  - "2" - 15-40% slopes. Query then selects those components with 15-40% slopes.
- You now have a list of existing map unit components that share the same geology, climate class and slope class as the polygon developed from the connotative legend. You can then narrow down your options when you field check the area.
- The query brings up all climate steps within a climate class. In the example to the right, 533 0.5 is a HSC 6,0; where 562 0.1 is a HSC 6,-1. If you know the area is a HSC 6-1, you can ignore all other 6,0 or 6,+1 components.

Connotative Legend Map Unit Number	Gila NF Associated Map Unit Component
562	533 0.1
	533 0.5
	558 0.1
	560 0.1
	562 0.1

Table 1 Mapping Legend for the Gila Terrestrial Ecosystem Survey USDA-FS, R-3 11/7/2011 Page 43

Map No.	Unit Comp.	Soil Name or Miscellaneous Area	Phase	Climate Class	Veg. Symbol	Slope/Composition Climax/MU Kind
533 *	0.5	Mollic Hapludalfs loamy-skeletal mixed — — frigid	deep very stony loam —	HSC 6 0	ABCO PSMEG PIPOS QUGA	15-40 % — % Edaphic Consociation
562 *	0.1	Typic Argiudolls loamy-skeletal — — — —	moderately deep — — —	HSC 6 -1?	QUGA RONE? — —	15-40 % — % Edaphic-fire —

\* Indicates new or tentative map unit that requires more documentation.