

Vegetation Representations in Grazed and Ungrazed Lands within Grand Staircase-Escalante National Monument

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Calf Creek corridor, ungrazed

I. Grazed and Ungrazed Allotments within the Monument

As of 2013, Grand Staircase-Escalante National Monument (“Monument” or GSENM) has ten allotments that are officially not grazed by livestock and pastures in ten other allotments that are not grazed. Fifteen of the twenty allotments that are either ungrazed or include pastures that are ungrazed are in the northern portion of the Monument (Fig. 1). The entire Escalante River corridor is officially closed to livestock grazing within the Monument, due to a 1999 land use decision that included buyouts negotiated by the Grand Canyon Trust with permittees who requested buyouts. The decision closed Escalante River, McGath Point, Saltwater and Steep Creek Allotments. It also closed the Escalante River portions of Big Bowns Bench, Deer Creek, and Phipps Allotments while also closing Cottonwood Pasture of Deer Creek Allotment.¹ The

¹ USDI, Bureau of Land Management. Escalante Management Framework Plan and Approved Amendment. (1999 at p. 3).

1999 land use plan decision also created three grass banks: Little Bowns, Bench Allotment; Phipps Pasture of Phipps Allotment; and Wolverine Bench Pasture of Deer Creek Allotment. Thus, approximately 64,500 acres of land (3.6%) of the 1.8 million acre Monument currently are not allocated to livestock grazing; 96.4% of the Monument is allocated to livestock grazing.²

² This assessment omits No Man's Mesa and South Pasture on Upper Paria Allotment as both ungrazed pastures are within active grazing allotments. No Man's Mesa has not been grazed by cattle, but was grazed by goats in 1927 and 1928.

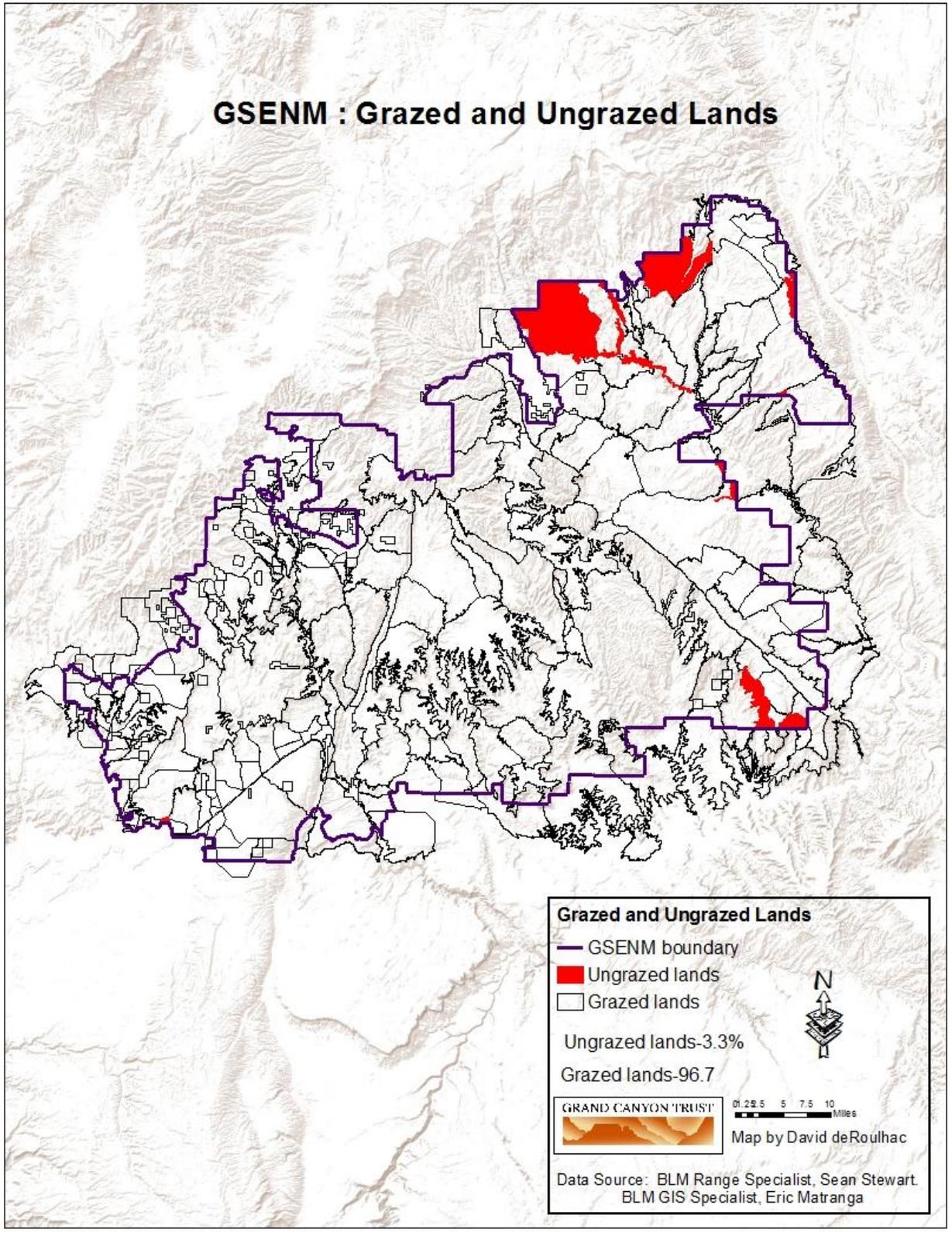


Fig. 1: Ungrazed and grazed lands within the Monument.

Allotment	Pasture (if part of allotment is grazed)	Year Closed	Acres Not Grazed within GSENM³	Closure Process
Antone Flat		Unknown	15,048	Unknown
Willow Gulch	Lower Calf Creek	1964	674	Closed due to development of Calf Creek Campground
Harvey's Fear		1981	1,920	MFP ⁴ /Grazing EIS
Muley Twist		1981	2,258	MFP/Grazing EIS
Navajo Bench		1981	162	MFP/Grazing EIS
Spencer Bench		1981	5,241	MFP/Grazing EIS
Rock Creek	Dry Rock Creek, Middle Rock Creek	1981	378	MFP/Grazing EIS
Rattlesnake Bench		1999	3,564	NEPA Decision
Escalante River	Silver Falls	1999	1,404	NEPA Decision
McGath Point		1999	3,138	NEPA Decision
Saltwater Creek		1999	12,063	NEPA Decision
Deer Creek	Cottonwood, River	1999	5,177	NEPA Decision
Big Bowns Bench	River	1999	631	NEPA Decision
Big Bowns Bench	Horse Canyon	1999	292	NEPA Decision
Phipps	Upper River	1999	1,801	NEPA Decision
Phipps	Lower River	1999	1,267	NEPA Decision

³ Allotment acreage calculations were extracted from data provided by Eric Matranga (GSENM GIS Specialist) and refined by Stephanie Smith (Grand Canyon Trust GIS Program Manager)

⁴ Management Framework Plan

Steep Creek		1999	7,550	NEPA Decision
Long Canyon		Unknown	1,043	Unknown
Flag Point			322	Unknown
Total GSENM acres			1,880,629	
Total acres open to livestock grazing			1,816,693	
Total acres closed to livestock grazing			63,936	

II. Vegetation Type Land Cover in Grazed and Ungrazed Allotments within the Monument

Approximately 64,000 acres of land are officially ungrazed within Grand Staircase-Escalante National Monument. Of those 64,000 acres, approximately 52% (32,641 acres) are mixed bedrock and table land (aka “slickrock”; Fig. 7), largely incapable of producing any livestock forage. Pinyon-juniper woodland and pinyon-juniper shrubland, which generally support little livestock forage, compose another 38% of allotment areas officially ungrazed. Thus, the three top vegetation types in ungrazed areas (mixed bedrock and table land, pinyon-juniper woodland and pinyon-juniper shrubland), each of them supporting minimal understory vegetation, constitute 90% of ungrazed lands.⁵ This leaves only 6,400 Monument acres (0.3%) of ungrazed land (mostly riparian vegetation in the closed allotments along the Escalante River) that contain understory vegetation, despite a broad suite of vegetation types distributed throughout the Monument. Many of these grazed vegetation types host plant species endemic to the Monument and are identified by the Proclamation and researchers as being ecologically significant. Eight vegetation types exist only (i.e., 100% of their acreage) in grazed allotments (Table 2) and over 99% of the acreage of another six vegetation types are in grazed allotments.

Riparian woodland and shrubland ranks as the highest for vegetation type within ungrazed lands at 29 percent, due to the voluntary permit buyouts and subsequent NEPA decisions to close allotments in the Escalante River corridor. Pinyon-juniper shrubland and sagebrush steppe rank second and third for vegetation representation on ungrazed lands at 3.4 percent and 2.6 percent,

⁵ This is analogous to those areas where wilderness is limited to “rock and ice.”

respectively. Only four vegetation types other than riparian woodland and shrubland have more than 1% of their range in ungrazed lands: pinyon-juniper shrubland (3.4%); sagebrush steppe (2.6%); pinyon-juniper woodland (2.3%); and big sagebrush shrubland (1.3%).

Table 2. Percent Vegetation Type in Ungrazed and Grazed Allotments				
Vegetation Type^a	Total Acres of Vegetation Types in GSENM	Acres of Vegetation Types in Ungrazed Allotments	Percent (%) Vegetation Types in Ungrazed Allotments	Percent (%) of Veg. Types in Grazed Allotments
Pinyon-Juniper Woodland	546,804	12,548	2.3	97.7
Pinyon-Juniper Shrubland	331,363	11,415	3.4	96.6
Big Sagebrush Shrubland	173,482	2,253	1.3	98.7
Blackbrush-Mormon-tea Shrubland	168,811	1,034	0.6	99.4
Inter-Mountain Basins Semi-Desert Shrub Steppe	40,277	104	0.3	99.7
Inter-Mountain Basins Semi-Desert Grassland	37,024	102	0.3	99.7
Inter-Mountain Basins Mat Saltbush Shrubland	20,573	27	0.1	99.9
Rocky Mountain Ponderosa Pine Woodland	12,365	12	0.1	99.9
Southern	5,239	0	0.0	100.0

Colorado Plateau Sand Shrubland				
Riparian Woodland and Shrubland	5,118	1,504	29.4	70.6
Gambel Oak-Mixed Montane Shrubland	3,211	48	1.5	98.5
Montane Sagebrush Steppe	1,539	39	2.6	97.4
Mixed Conifer Forest and Woodland	198	0	0.0	100.0
Mogollon Chaparral	188	0	0.0	100.0
Dry-Mesic Mixed Conifer Forest and Woodland	146	4.2	2.9	97.1
Mixed Low Sagebrush Shrubland	62	0	0.0	100.0
Alpine-Montane Wet Meadow	47	0	0.0	100.0
Mountain Mahogany Woodland and Shrubland	22	0	0.0	100.0
Montane-Subalpine Grassland	11.1	0	0.0	100.0
Aspen Forest and Woodland	3.2	0	0.0	100.0
Subalpine-Montane Riparian Shrubland	1.3	0	0.0	100.0

^aThe vegetation types are selected from Southwest ReGAP 2003 based on the potential for “forage” vegetation and therefore capable of being significantly impacted by livestock grazing.

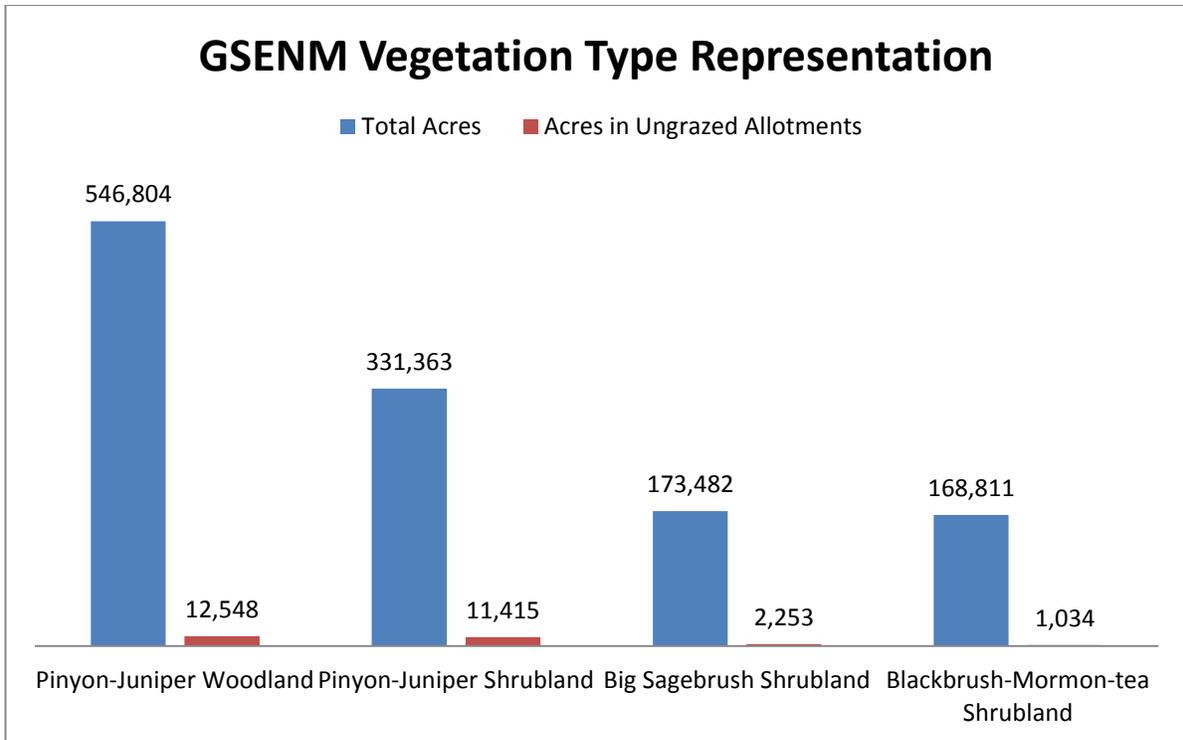


Fig. 2: Vegetation types with greater than 100,000 acres of cover in the Monument.

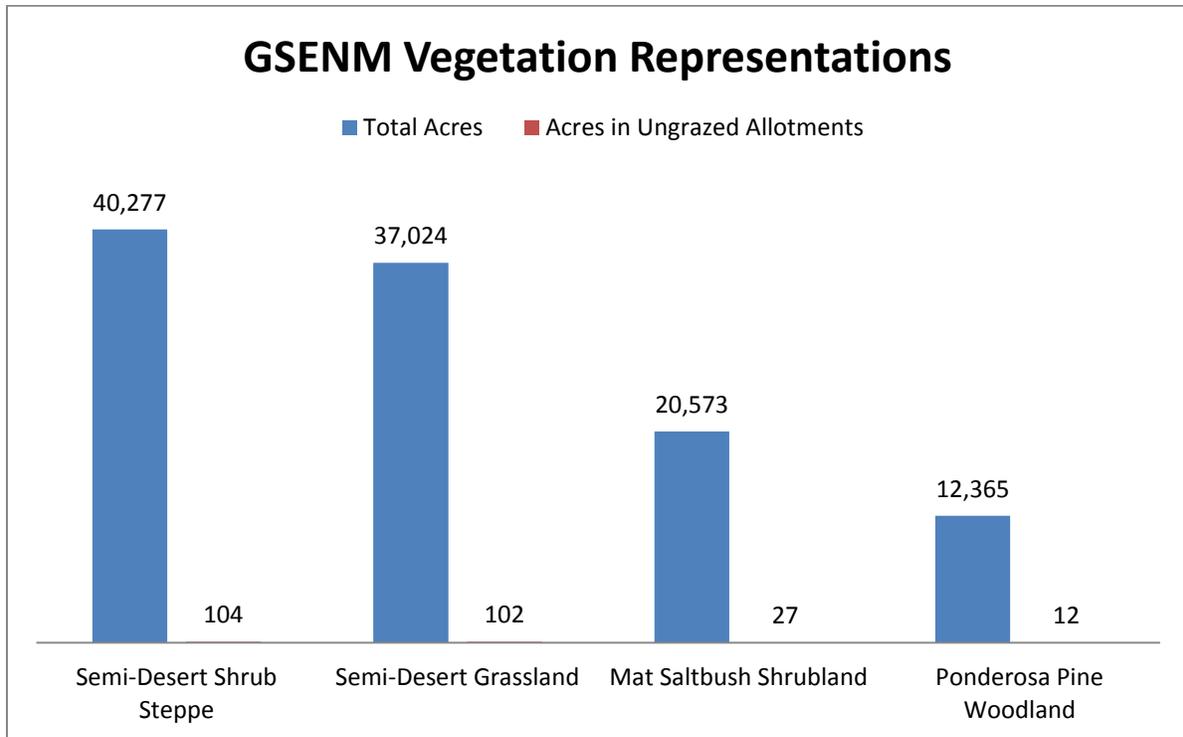


Fig. 3: Vegetation types between 10,000 and 100,000 acres of cover in the Monument.

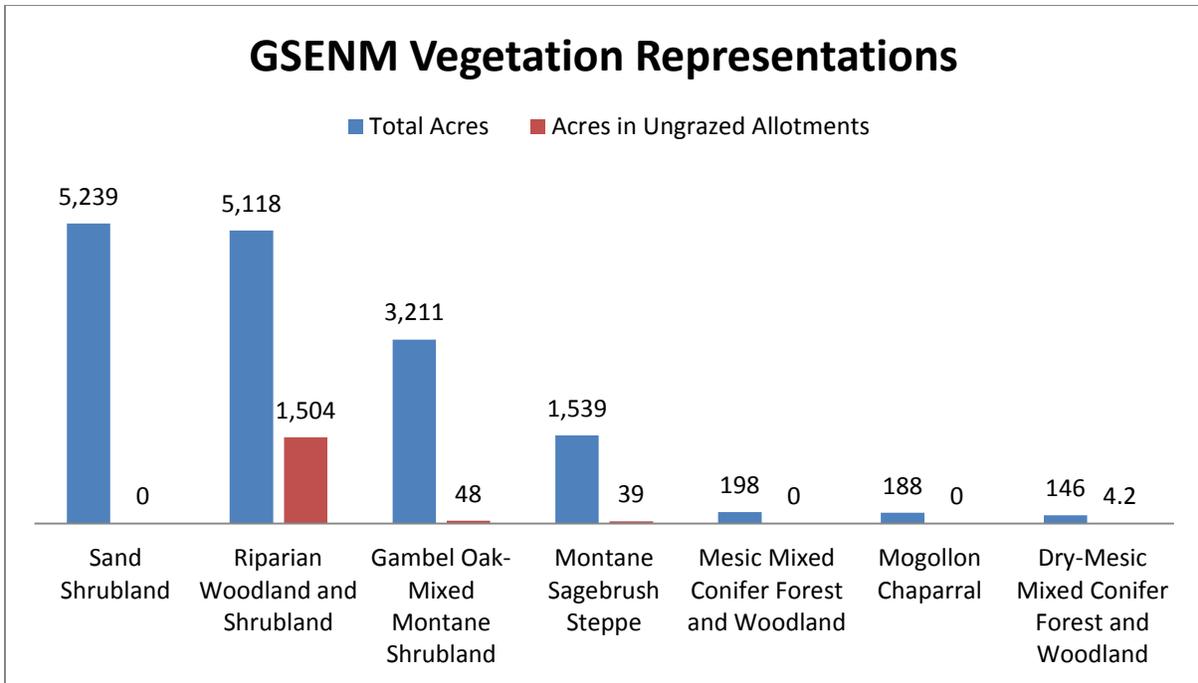


Fig. 4: Vegetation types between 100 and 9,999 acres of cover in the Monument.

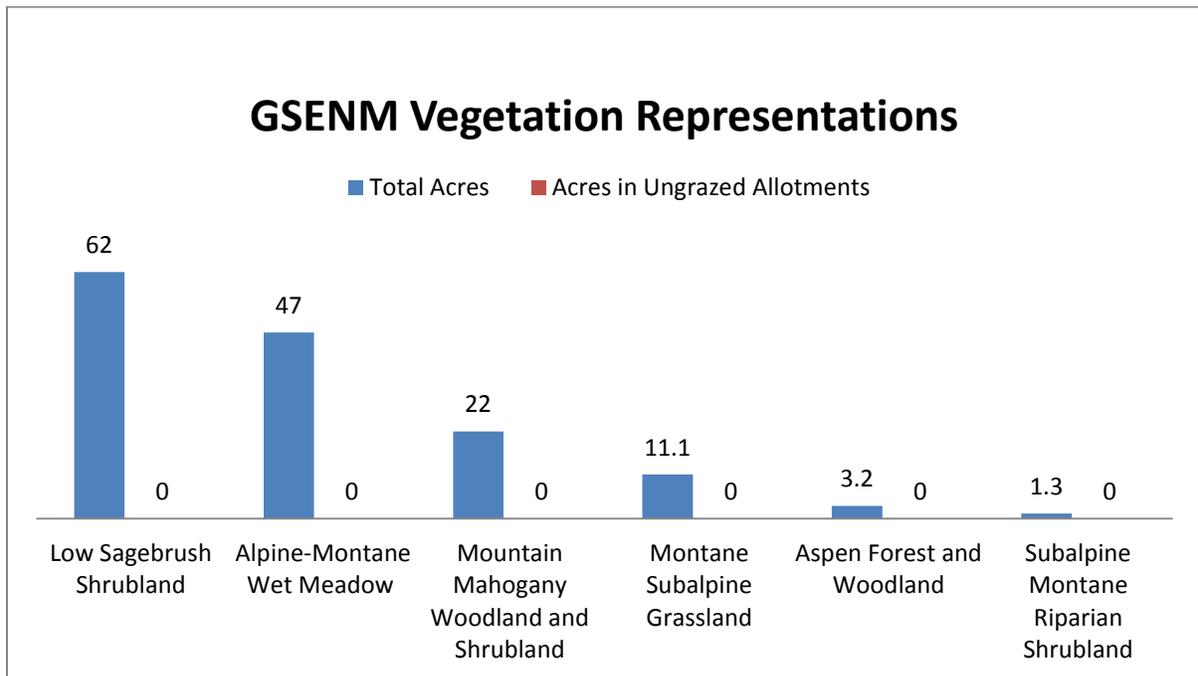


Fig. 5: Vegetation types with less than 100 acres of cover in the Monument.

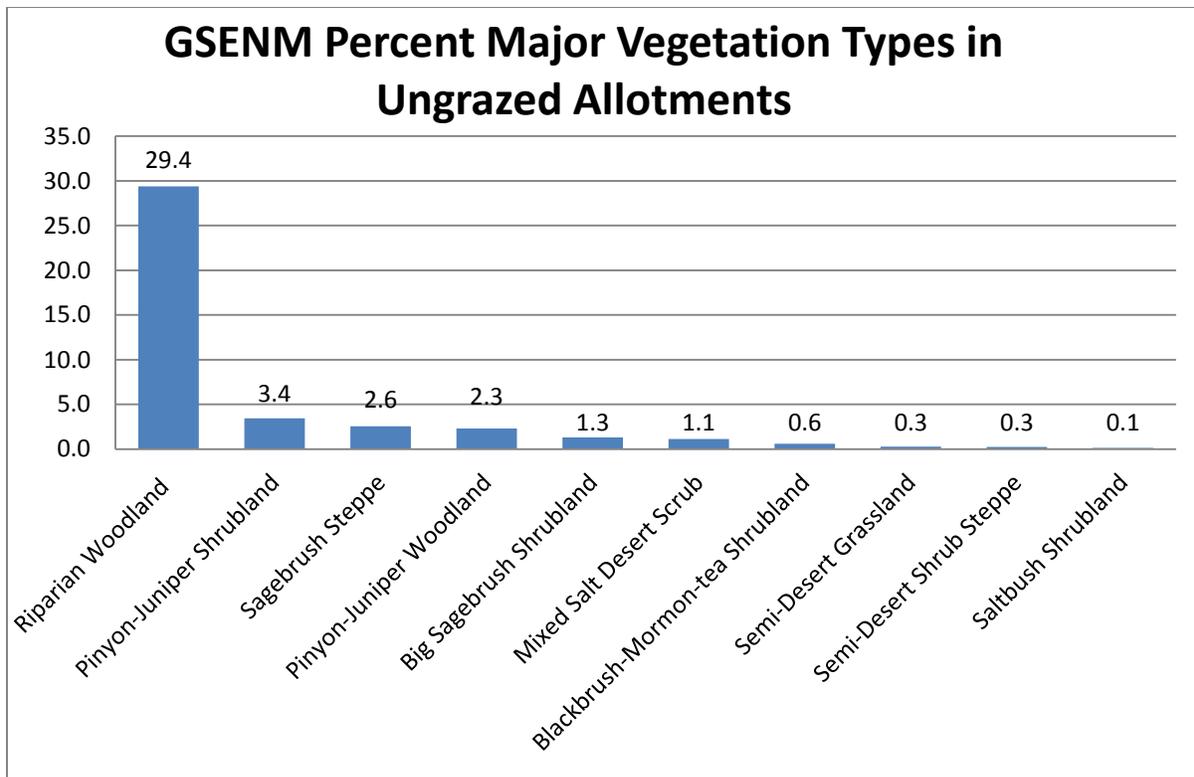


Fig. 6: Percent of acreage of major vegetation types in ungrazed allotments in the Monument.

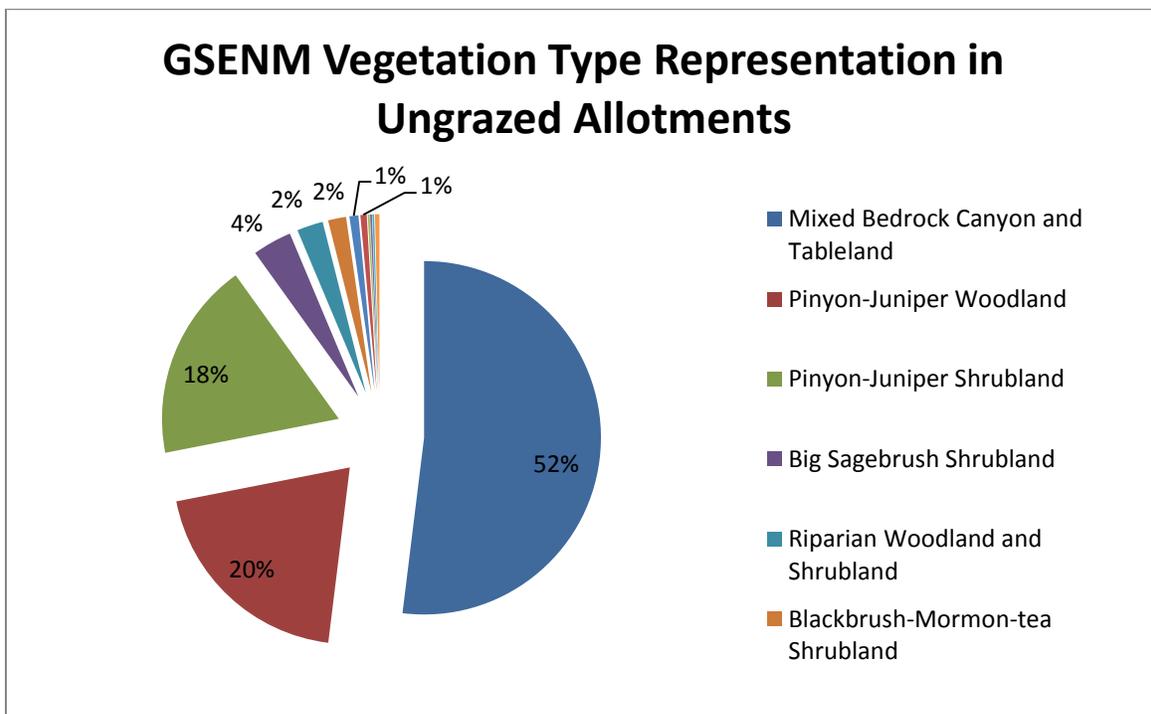


Fig. 7: Percent of acreage of vegetation types in ungrazed allotments within the Monument.

III. Maps of Vegetation Types Ungrazed and Grazed within the Monument

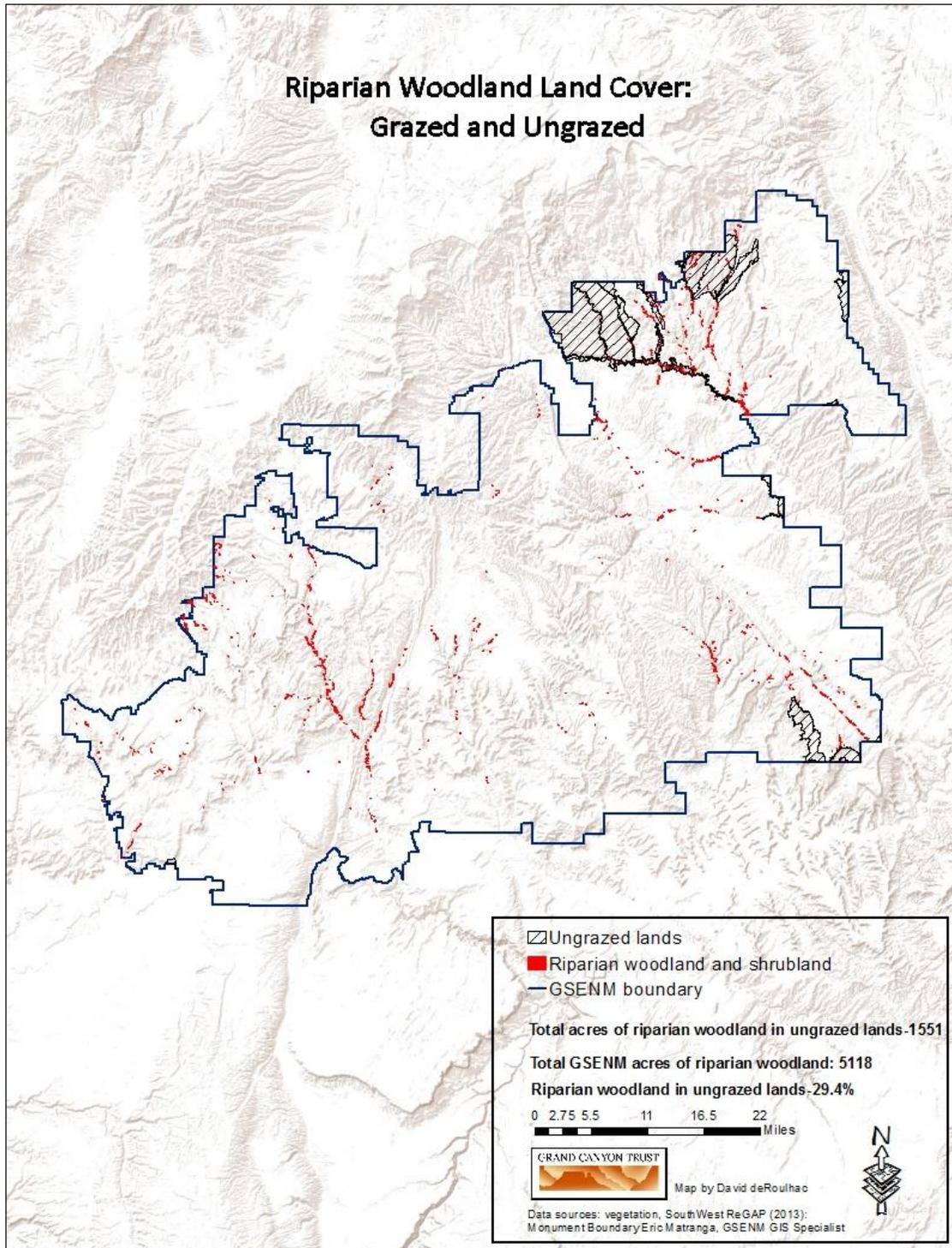


Fig. 8: Riparian woodland representation in grazed and ungrazed lands within the Monument.

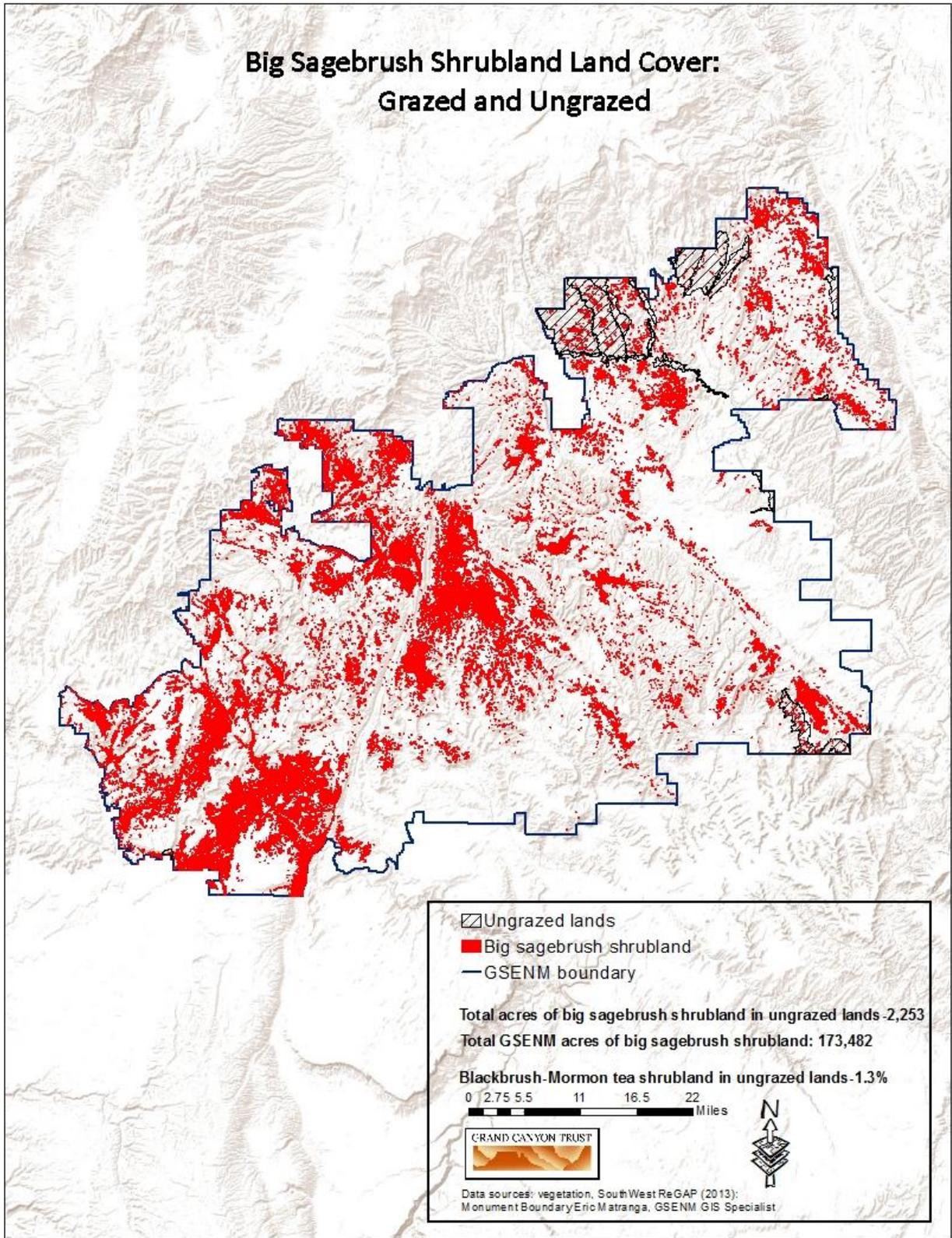


Fig. 9: Big sagebrush representation in grazed and ungrazed lands within the Monument.

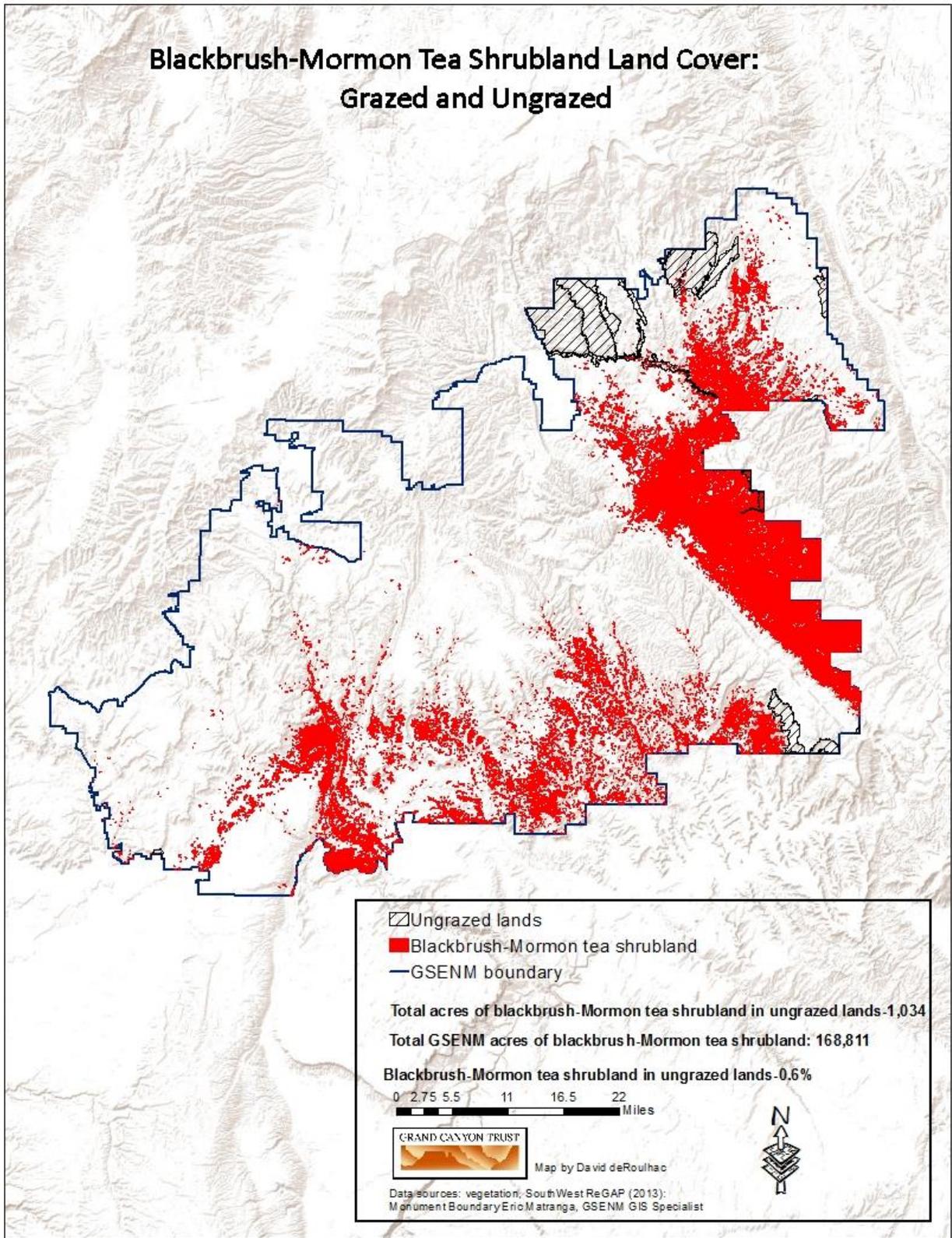


Fig. 10: Blackbrush-Mormon tea shrubland in grazed and ungrazed lands within the Monument.

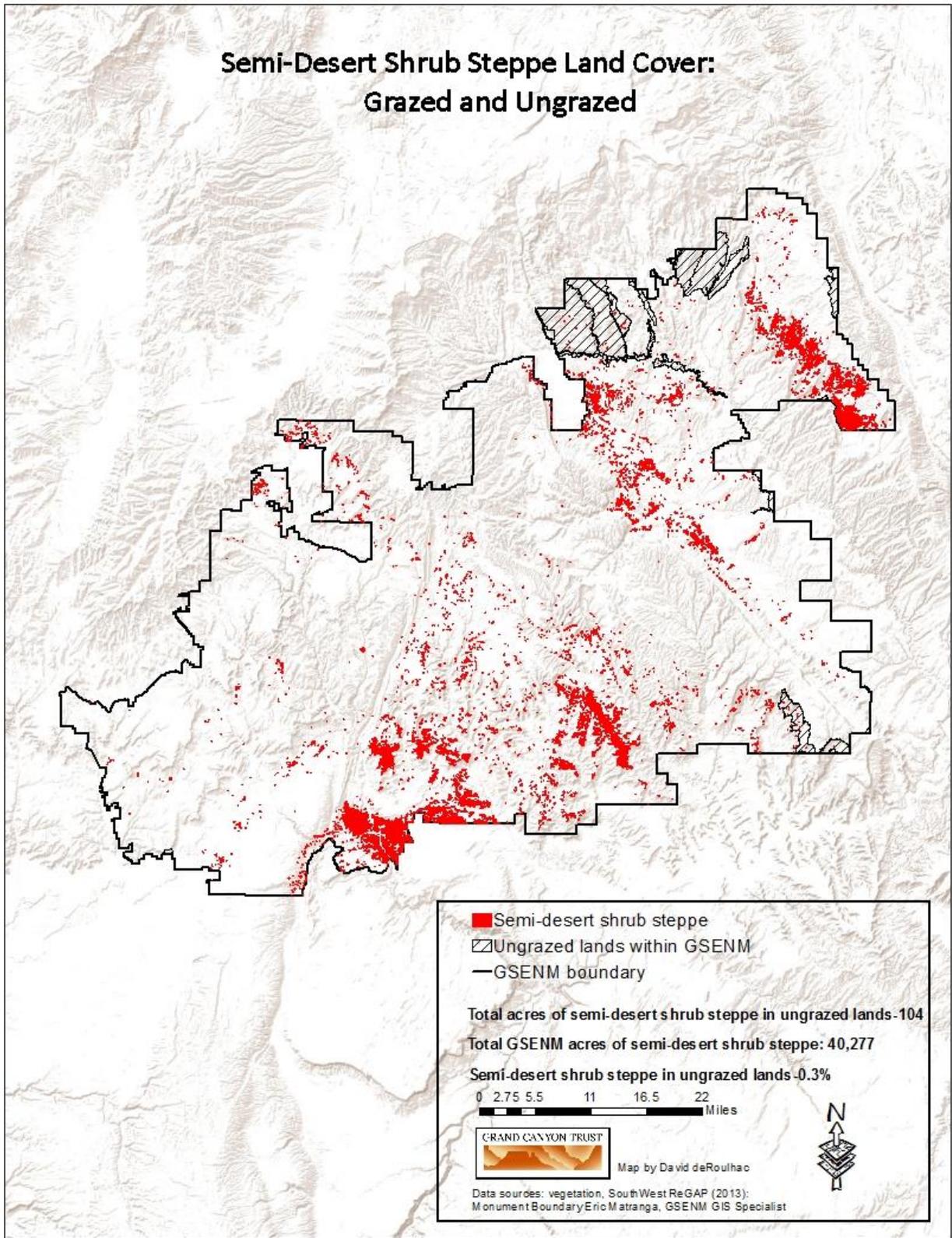


Fig. 11: Semi-desert shrub steppe representation in grazed and ungrazed lands within the Monument.

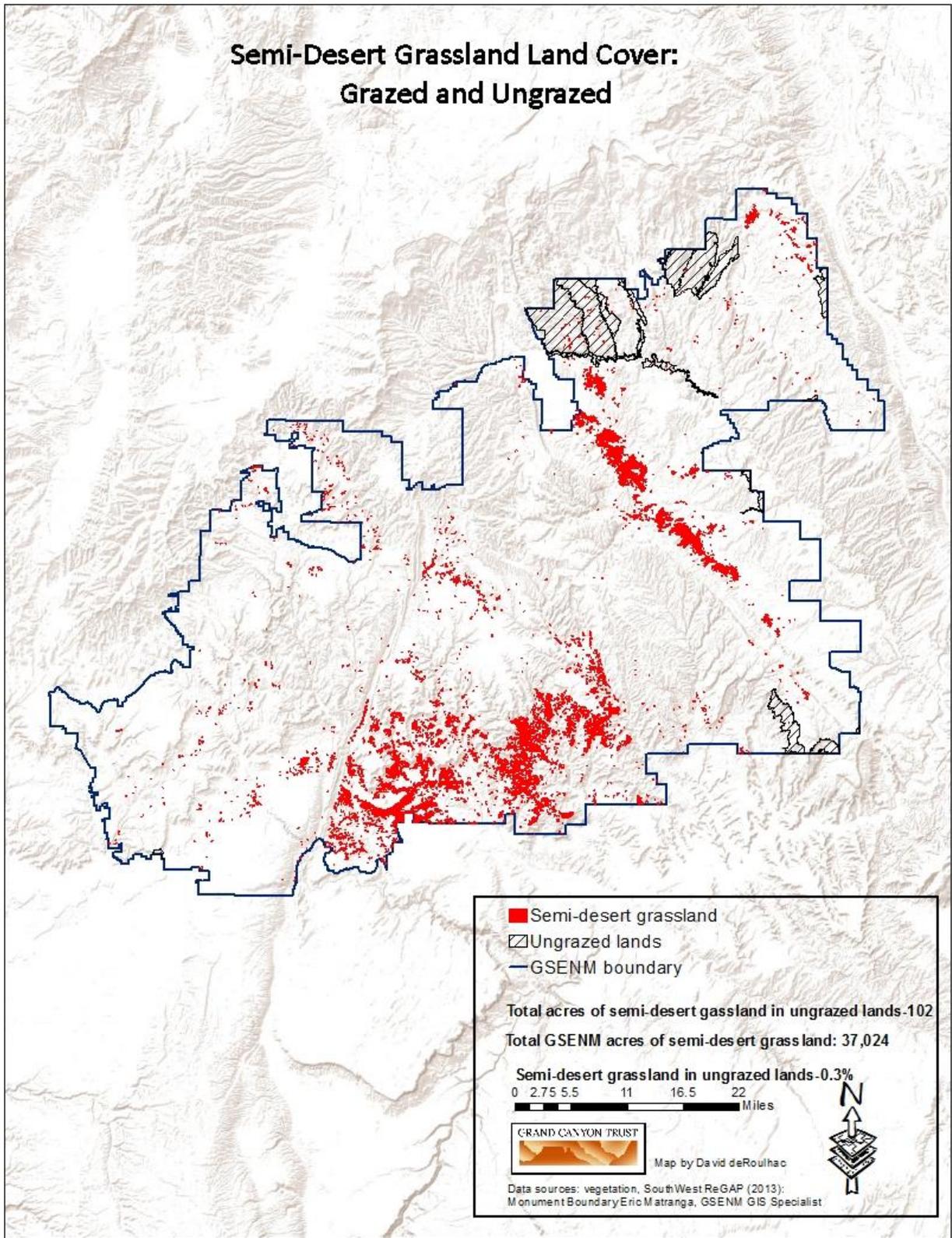


Fig. 12: Semi-desert grassland representation in grazed and ungrazed lands within the Monument.

Literature Cited

Grand Staircase Escalante National Monument, Utah, 1996. [Proclamation No. 6920](#). Federal Register Vol. 61. No 186.

[USGS] U.S. Geological Survey National Gap Analysis Program. 2004. Provisional Digital Land Cover Map for the Southwestern United States. Version 1.0. RS/GIS Laboratory, College of Natural Resources, Utah State University.

[USDI] U.S. Department of Interior, Bureau of Land Management. 1999. Escalante Management Framework Plan and Approved Amendment.