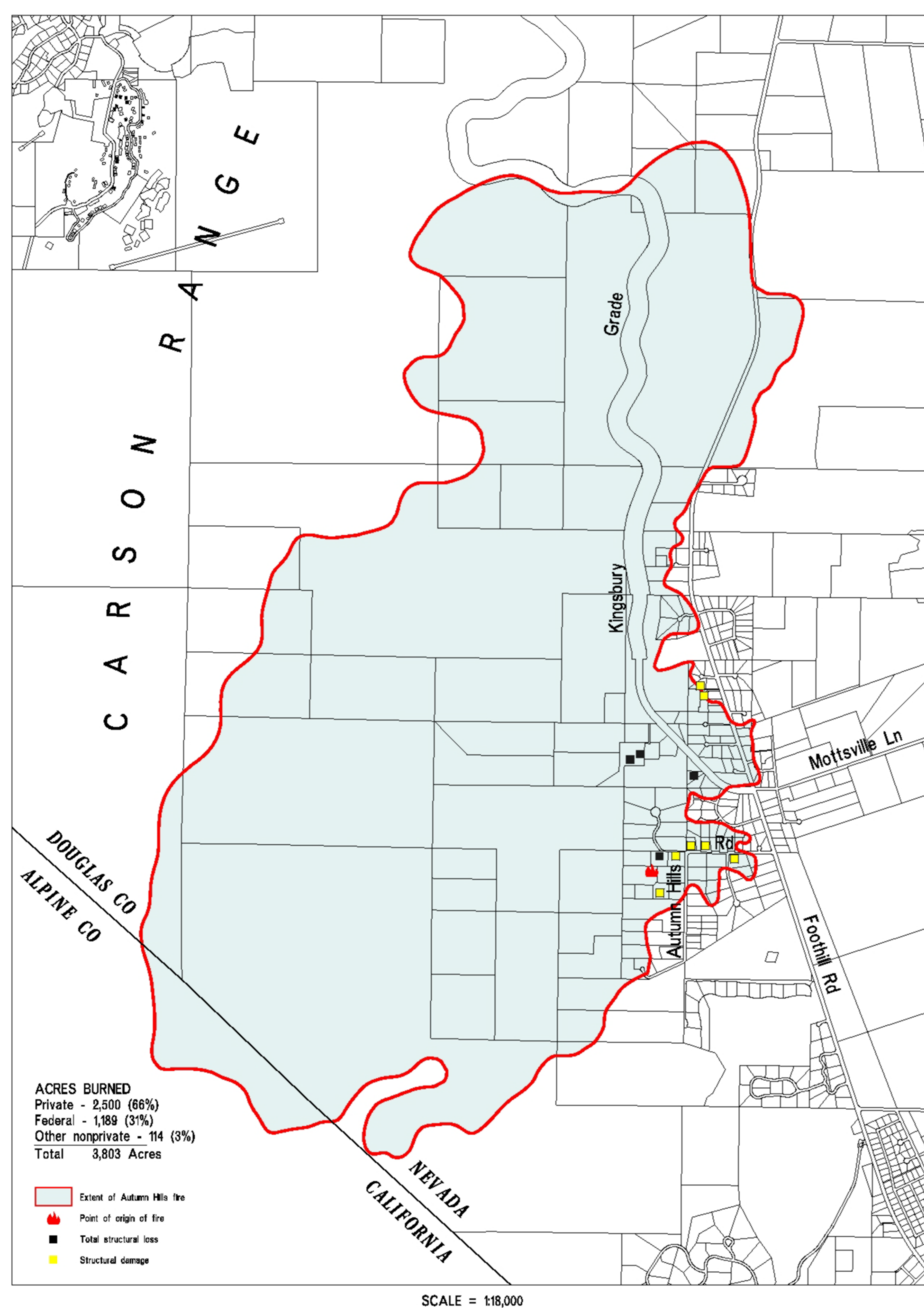
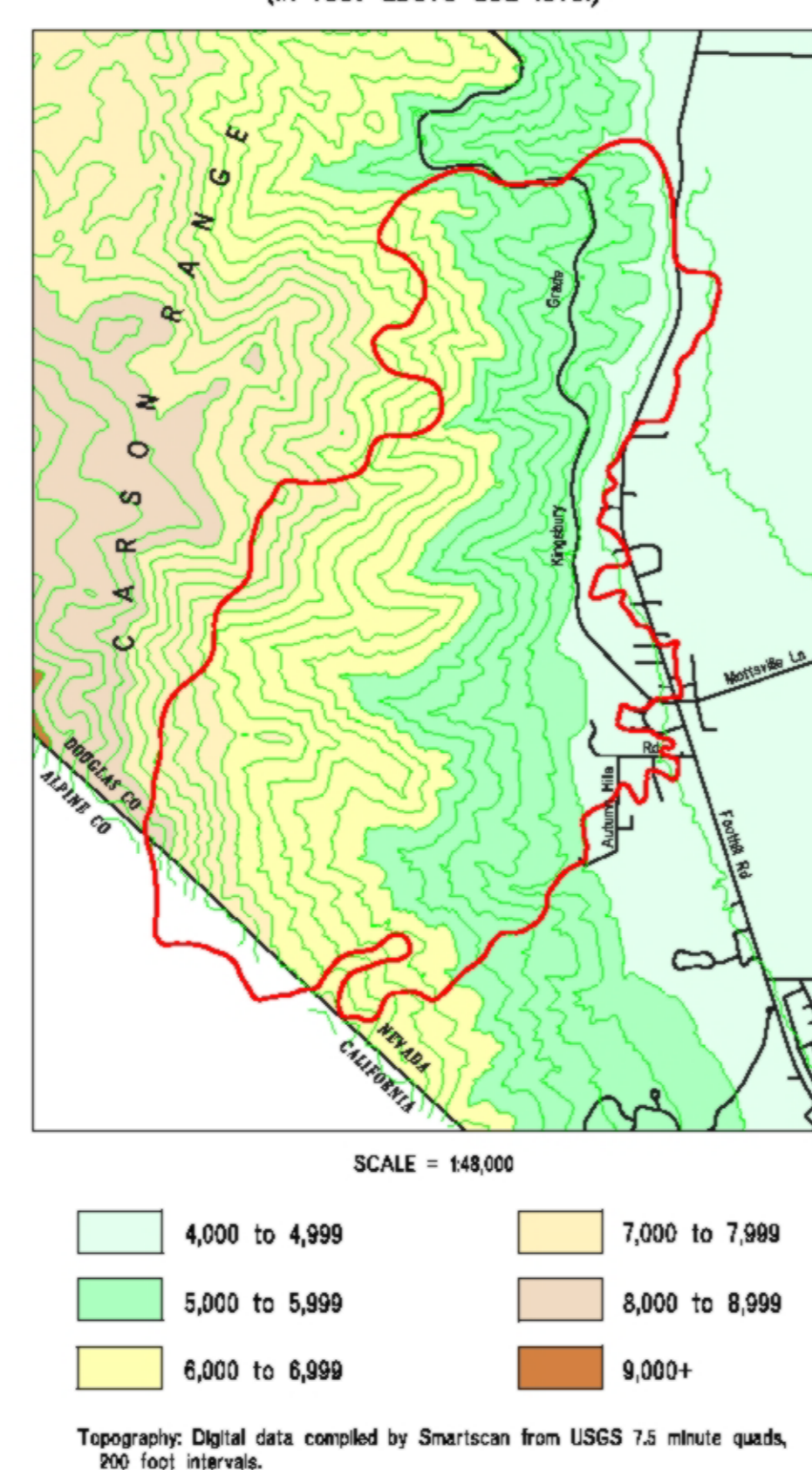


AUTUMN HILLS FIRE - JUNE 23, 1996

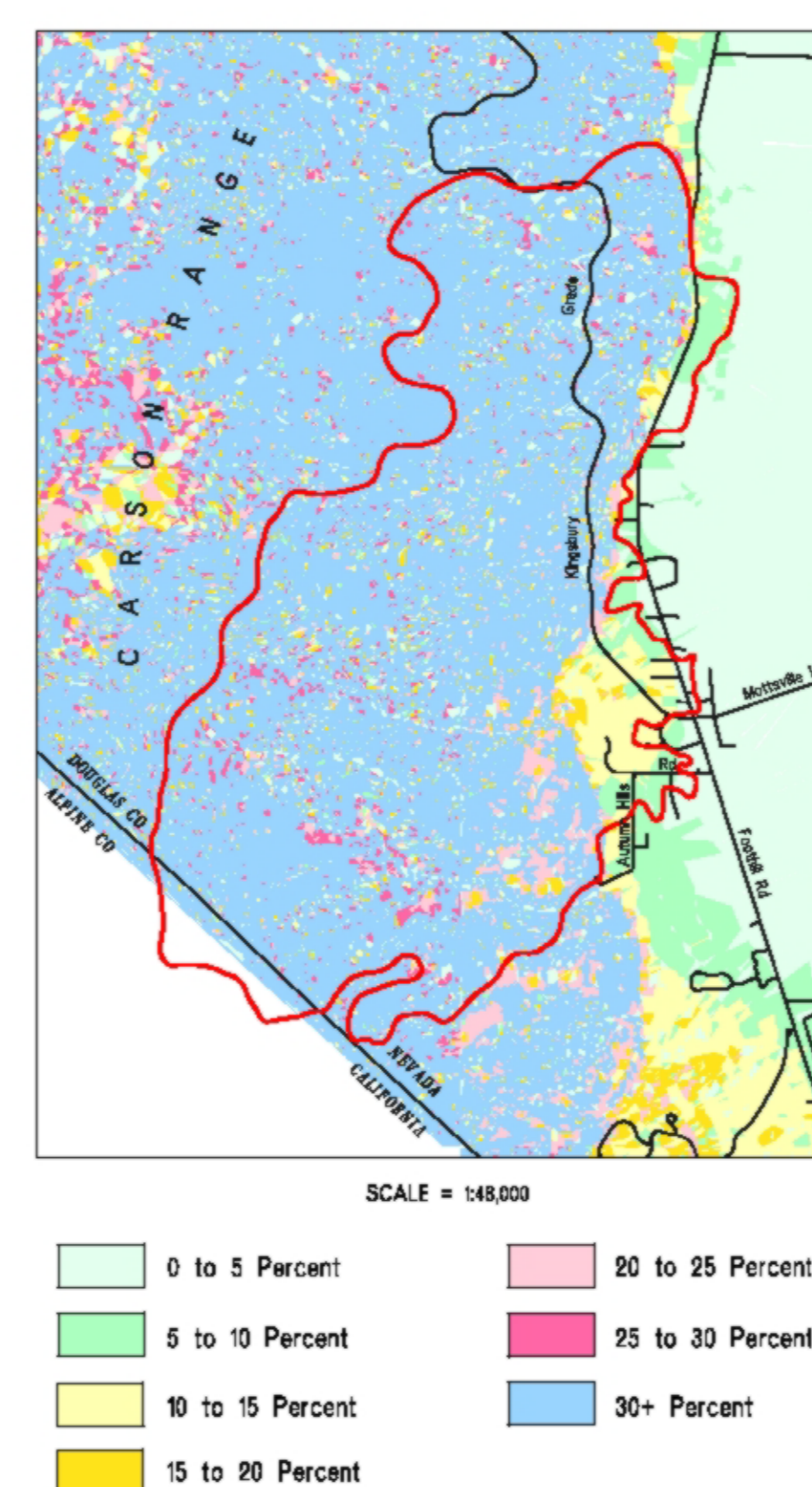
DOUGLAS COUNTY, NEVADA



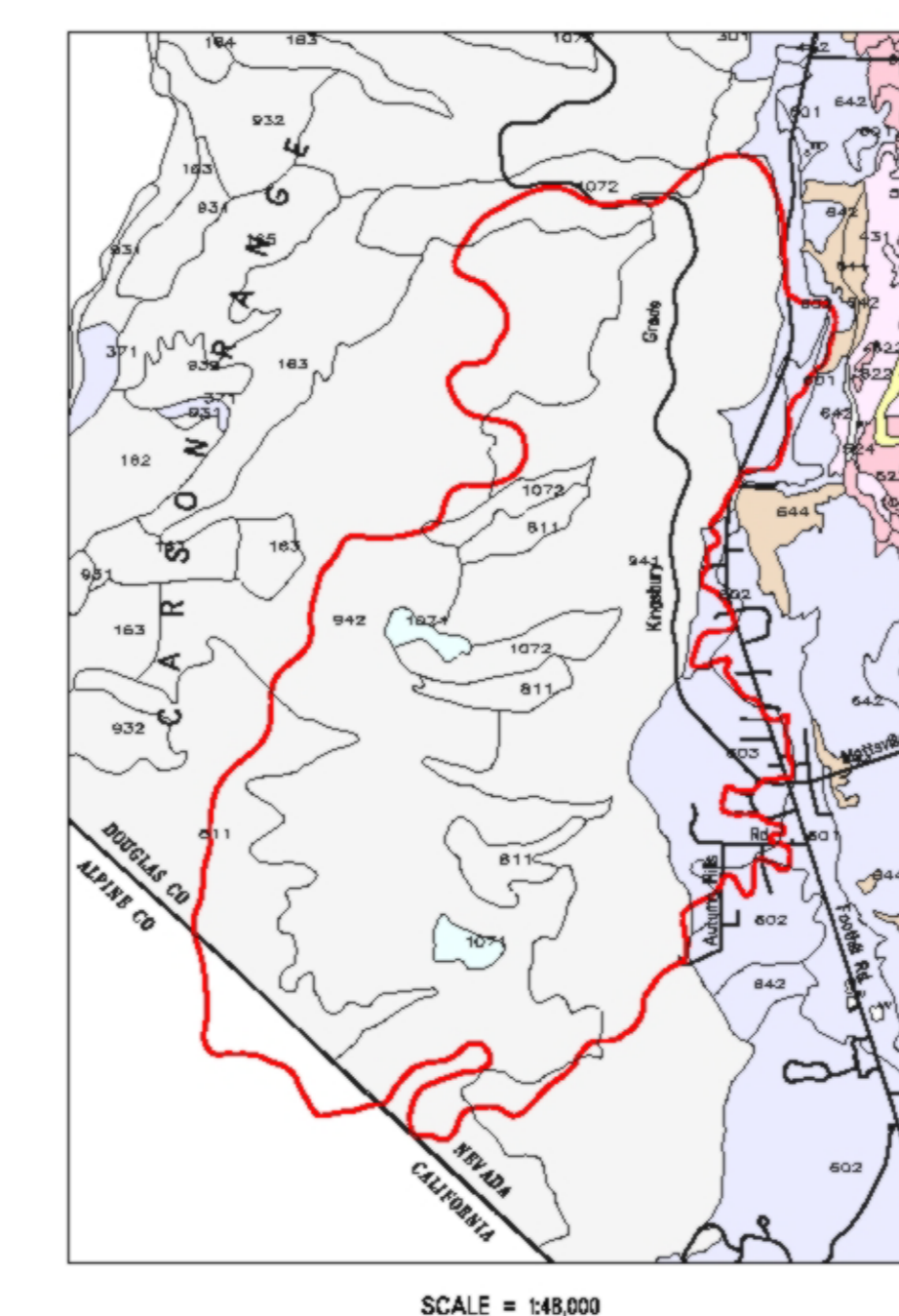
1. Elevation
(in feet above sea level)



2. Slope



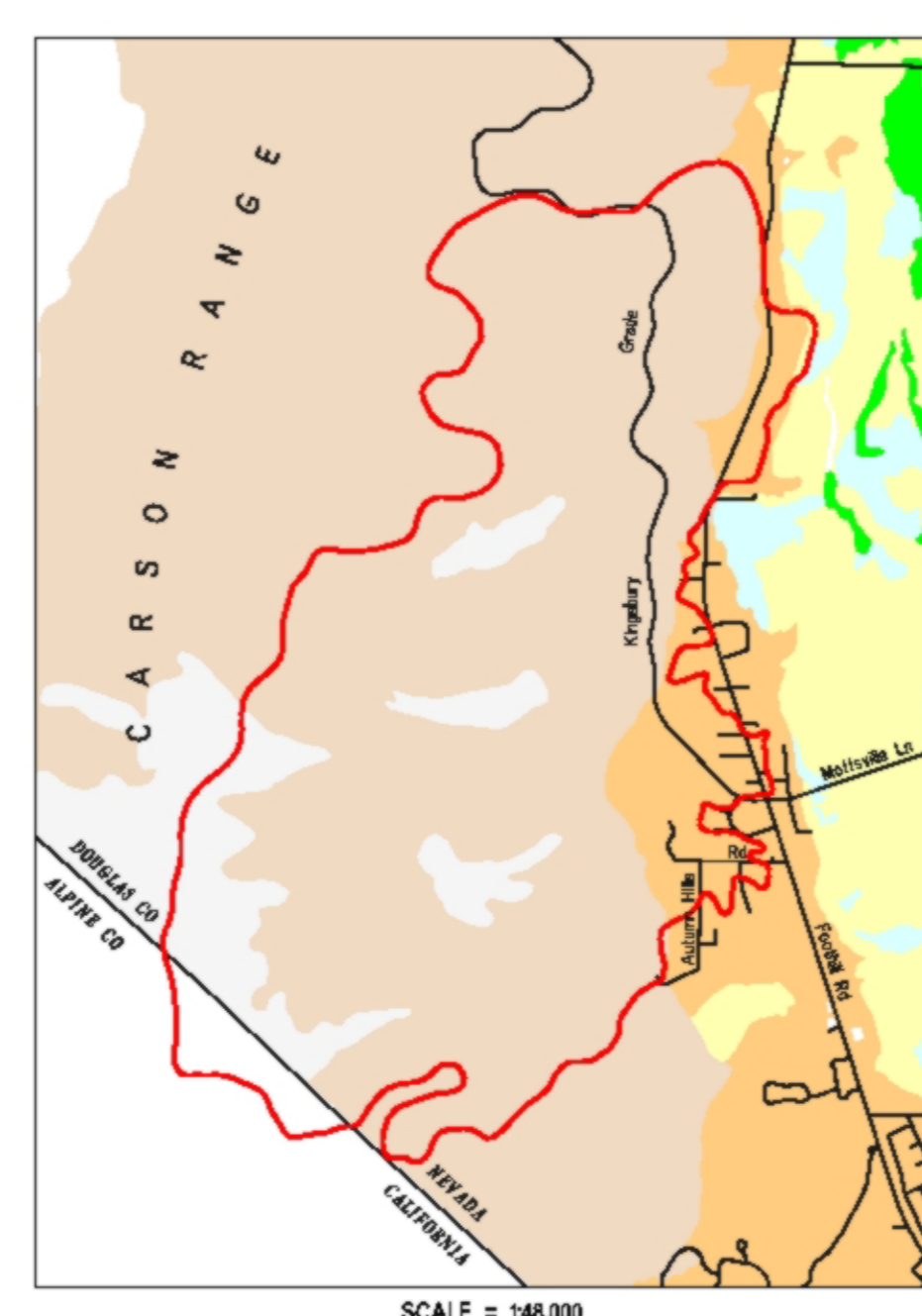
3. Soil



Soil Units

- CLAY**
 - 102 Volture silty clay
 - 104 Volture clay
 - CLAY/LOAM**
 - 180 Cradknigh clay loam, slightly saline-saline
 - 184 Cradknigh clay loam, strongly saline-saline
 - 185 Holman clay loam
 - 183 Kennellog clay loam
 - 186 Kennellog clay loam, clay substratum
 - 622 Navel clay loam, clay substratum
 - 621 Navel clay loam
 - 1041 Volture clay loam, wet, strongly saline-saline
 - SAND**
 - 1071 Corbett gravelly sand, 0 to 30% slopes
 - SAND/LOAM**
 - 211 Graylock extremely stony loamy coarse sand, 80 to 95% slopes
 - 412 Redbrook gravelly fine sandy loam, 7 to 8% slopes
 - 448 Redbrook very stony sandy loam, 2 to 4% slopes
 - 601 Wetmore loamy coarse sand, 7 to 4% slopes
 - 602 Wetmore gravelly loamy coarse sand, 4 to 15% slopes
 - 603 Wetmore very loamy loamy coarse sand, 2 to 4% slopes
 - 644 Opta gravelly sandy loam, 0 to 2% slopes
 - 642 Opta gravelly sandy loam, 2 to 5% slopes
 - LOAM**
 - 223 Joo loam, wet
 - 224 Joo loam, clay substratum
 - 621 Navel loam
 - PEAT**
 - 431 Shacar family peat
 - 644 Opta variant peat, 2 to 4% slopes
 - ROCK COMPLEX**
 - 181 Wintala-Rock outcrop complex, 4 to 8% slopes
 - 182 Wintala-Rock outcrop complex, 10 to 30% slopes
 - 183 Wintala-Rock outcrop complex, 30 to 50% slopes
 - 184 Wintala-Rock outcrop complex, 50 to 75% slopes
 - 185 Wintala-Rock outcrop complex, 75 to 95% slopes
 - 301 Frazarover-Rubla lava-rock complex, 50 to 75% slopes
 - 621 Rock outcrop
 - 622 Frazarover-Rubla lava-rock complex, 30 to 50% slopes
 - 623 Frazarover-Rubla lava-rock complex, 50 to 75% slopes
 - 641 Toyabe-Rock outcrop complex, 30 to 55% slopes
 - 642 Toyabe-Rock outcrop complex, 50 to 75% slopes
 - 1072 Corbett-Toyabe complex, 30 to 50% slopes
- Source: US Department of Agriculture, Soil Survey of Douglas County Area Nevada, 1987. Digital data from USGS, Carson City, NV.

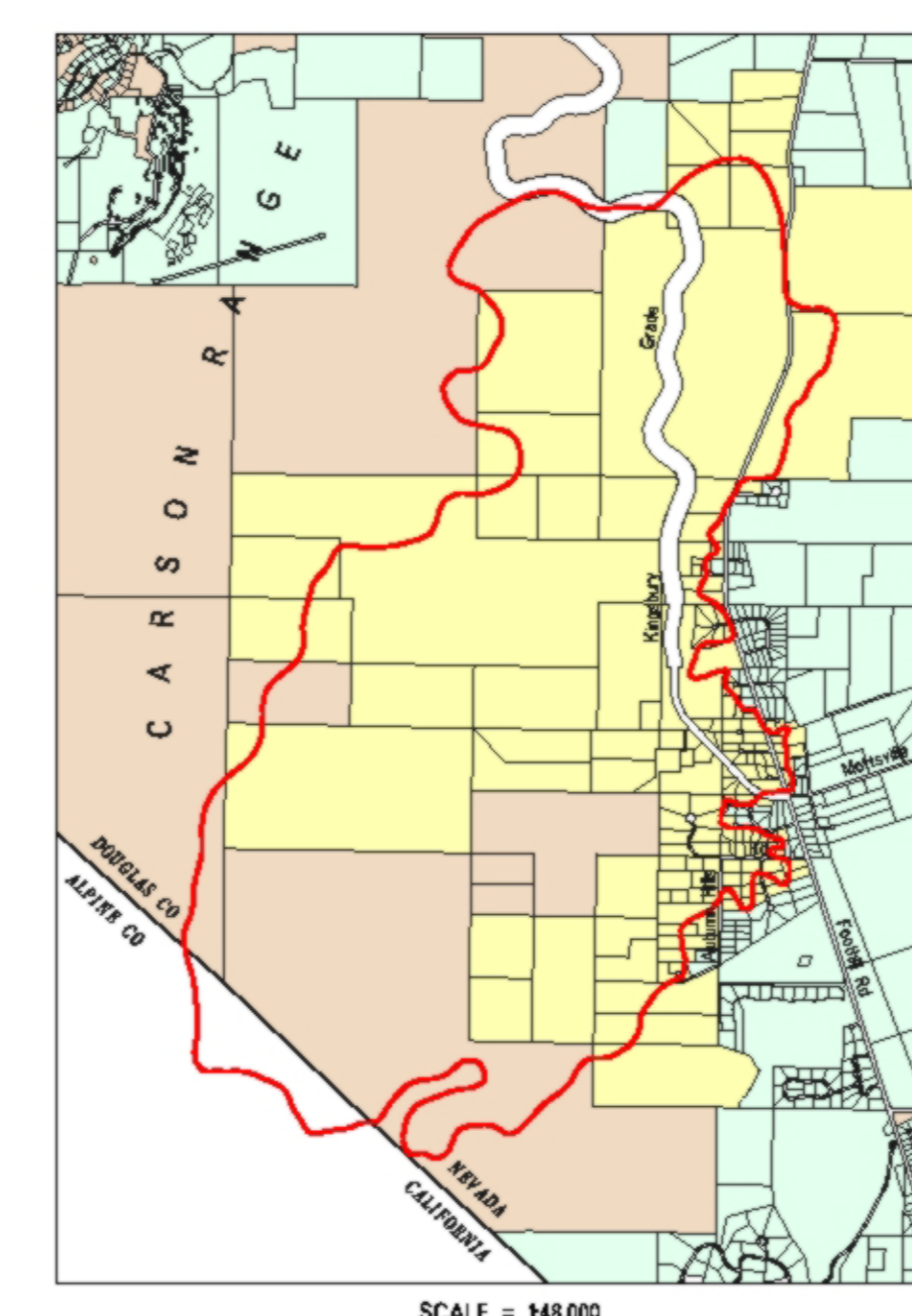
4. Characteristic Vegetation



- Jeffrey Pine, White Pine, California Red Fir
- Sagebrush Bitterbrush, Wildrye, Rice grass, and other wild grasses
- Inland saltgrass, Black greasewood, Akai seepweed
- Pasture and grasslands
- Pasture and wetlands
- Sparse vegetation

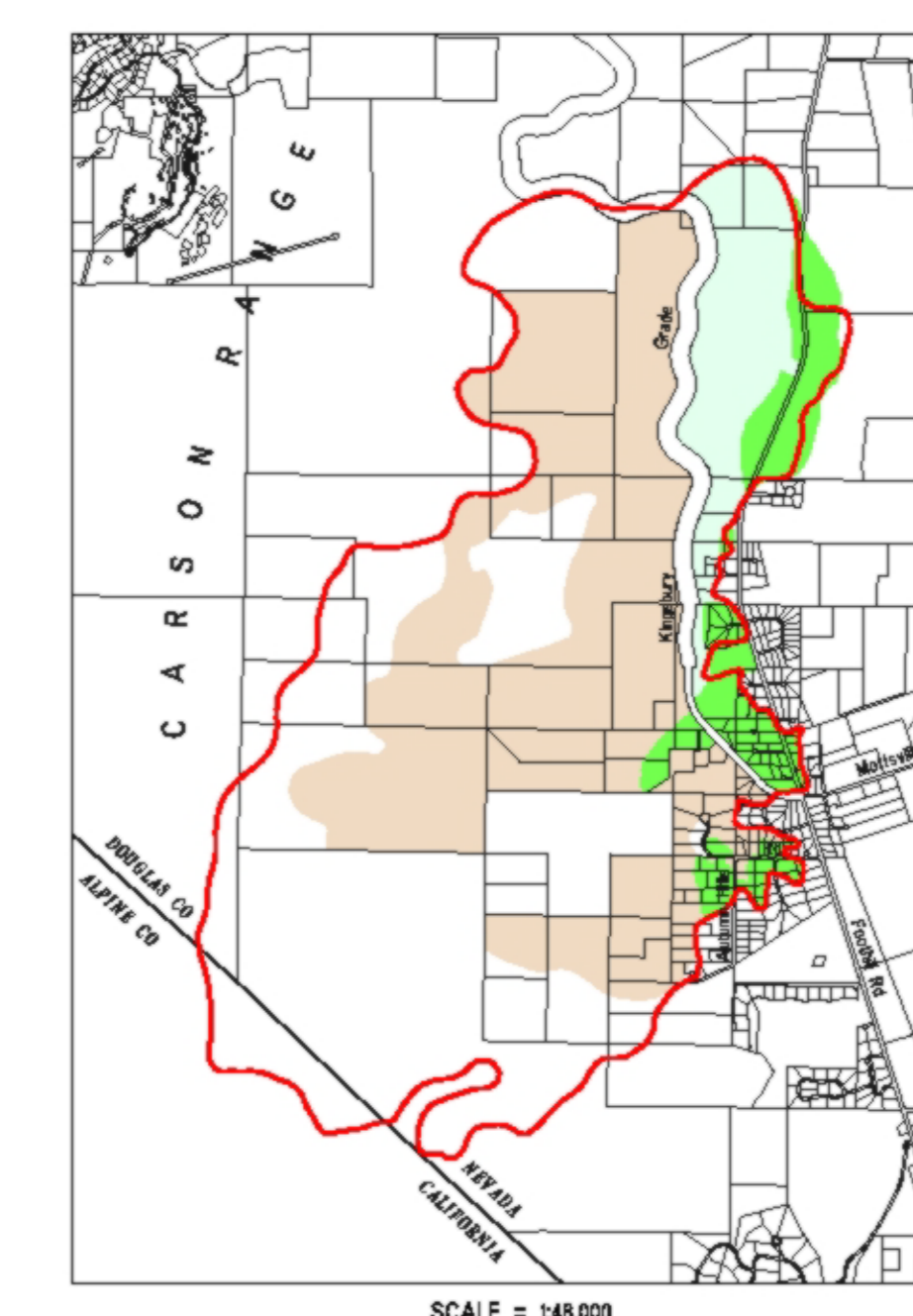
Source: US Department of Agriculture, Soil Survey of Douglas County Area Nevada, 1984.

5. Notification of Reseeding



- Owners notified for permission to reseed burnt areas of privately held land
- Privately held lands outside burnt area
- Public lands not needing notification or outside burnt area

6. Reseeding



- Broadcast seeded with Mix 1
 - Broadcast seeded with Mix 2
 - Rangeland drill seeded with Mix 1
 - Areas not reseeded
- Lower Elevation Seed Mix 1:
 Crested Wheatgrass
 Pubescent Wheatgrass
 Streambank Wheatgrass
 Serotous
 Saltgrass
- Upper Elevation Seed Mix 2:
 Crested Wheatgrass
 Intermediate Wheatgrass
 Mountain Bromegrass
 Serotous

GIS APPLICATIONS BY DOUGLAS COUNTY IN THE AFTERMATH OF THE AUTUMN HILLS FIRE, JUNE 23, 1996

Douglas County's Multi-Agency Geographic Information Center (M.A.G.I.C.) played an important role in the aftermath of the Autumn Hills fire. Immediately after the fire was under control, the area of the burn was determined by a U.S. Forest Service helicopter flying the perimeter of the fire with a Global Positioning System (GPS) unit. The GPS data was downloaded into M.A.G.I.C.'s Genasys GIS software. M.A.G.I.C. then generated the maps used for the reseeded effort and damage assessment.

The extremely steep terrain and rapid rise in elevation of the burn area (maps 1 and 2) made reseeding as soon as possible a top priority in order to minimize soil erosion, mud slides and flash flooding. Soil type and vegetation of the area (maps 3 and 4) were analyzed to create the appropriate seed mixtures for reseeding. The fire area and parcel base were overlaid to create a list of owners of private land affected by the burn. Letters requesting permission to reseed were mailed to owners from the list (map 5).

The data provided by M.A.G.I.C. and other agencies in the reseeded effort played a crucial role in the species composition of the seed mix (map 6) and speed of the reseeded.

Location of Autumn Hills Fire
Douglas County, NV