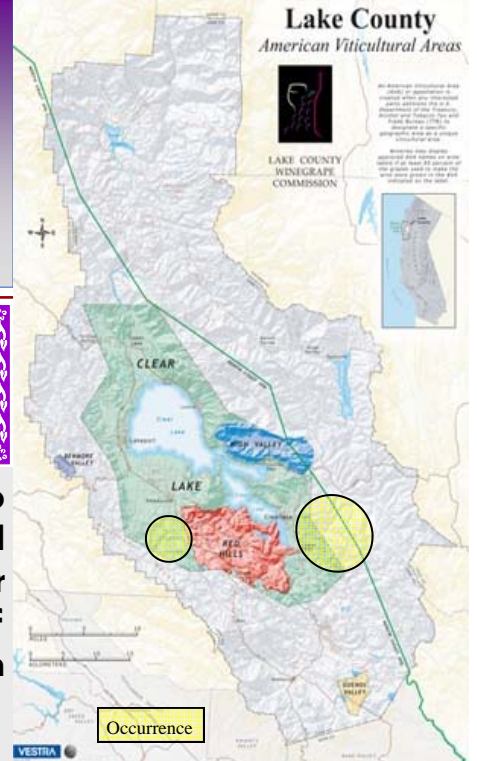




# Lake County, California Soils

# Haploxeralfs



*“...may it be that the land chooses the crop, not otherwise.”*  
- anonymous

**Haploxeralfs are moderately deep to very deep, well to somewhat excessively drained soils formed in mixed parent materials under brush lands. They are of limited fertility, found on steep, dissected hills.**



### Haploxeralfs Profile:

- 0 - 1 ft: dark brown gravelly sandy loam
- 1- 3 ft: brown extremely gravelly sandy loam
- 3 - 4 ft: brown sandy clay loam
- > 4 ft: yellowish brown very gravelly sandy loam



### Fitness for Use in Vineyards:

- **Nutrient Cycling:** Organic amendments and cover crops improve nutrient supply and tilth. Nutrient applications should ensure delivery to the root zone.
- **Water Relations:** A deep, uniform root distribution should be expected. Gravel content limits available water capacity. The onset of plant water deficits may be somewhat rapid in this droughty, coarse-textured soil.
- **Management Considerations:** Slope instability and excessive erosion are concerns with this soil. These soils are also susceptible to organic matter losses.

Haploxeralfs soils, Cache Creek Vineyards, near Clear Lake Oaks, California. The scale is in feet.

### Soil Climate and Geography:

**Mean annual precipitation:** 25 to 35 inches  
**Frost-free days:** 160 to 200 days  
**Elevation Range:** 1,400' to 2,500'  
**Slope Range:** from 30 to 75%  
**Slope Direction:** no dominant slope direction



### Haploxeralfs Properties of Interest:

**Available water-holding capacity:** about 6 inches (0-5 ft)  
**Drainage class:** well drained  
**Permeability class:** moderate permeability

**Clay range in profile:** 10 - 30%, trending more with depth  
**Sand range in profile:** 45 - 70%, variable with depth  
**Coarse fragment range:** 10 - 70%, variable with depth  
**Soil pH range:** pH 6.7 in upper part, pH 6.7 in lower part