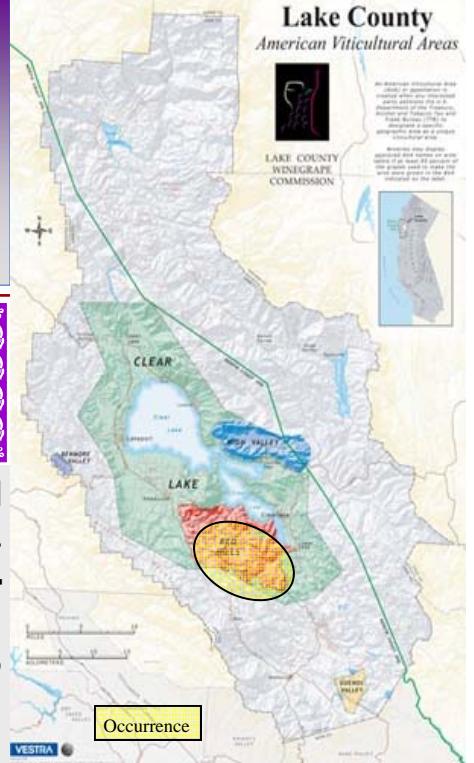


# Lake County Winegrape Growers



## Lake County, California Soils

# Aiken



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

**Aiken soils are very deep soils formed in material weathered from basalt under conifer and hardwood forests. They are mature, somewhat permeable soils of limited fertility on gently to strongly sloping hillsides.**



### Aiken Soil Profile:

- 0 - 1 ft: dark brown loam and clay loam
- 1 - 3 ft: dark reddish brown cobbly clay loam
- 3 - 4 ft: dark reddish brown cobbly clay loam
- > 4 ft: dark reddish brown stony clay loam



### Fitness for Use in Vineyards:

- Nutrient Cycling: Organic amendments and cover crops improve nutrient supply and tilth. These soils will respond to fertilization. Avoid acid fertilizers. Monitoring of acid-sensitive nutrients such as phosphorus and calcium is helpful.
- Water Relations: Uniform root distribution should be expected to 3'. Onset of plant water deficits may be more gradual and readily regulated in this soil.
- Management Considerations: Susceptible to compaction, rutting, and significant soil erosion on sloped ground; soils are also susceptible to organic matter loss.

Wine grapes growing on Aiken soils, Snows Lake Vineyard, Lower Lake, California. The scale is in feet.

### Soil Climate and Geography:

Mean annual precipitation: 30 to 40 inches  
Frost-free days: 150 to 180 days  
Elevation Range: 1,400' to 2,400'  
Slope Range: from 5 to 30%  
Slope Direction: northwest to east-facing



### Aiken Soil Properties of Interest:

Available water-holding capacity: about 9 inches (0-5 ft)  
Drainage class: well drained  
Permeability class: moderately slow permeability  
Clay range in profile: 24 - 36%, greatest in mid-profile  
Sand range in profile: 40 - 30%, decreasing with depth  
Coarse fragment range: 5 - 25%, increasing with depth  
Soil pH range: pH 6.6 in upper part, pH 5.7 in lower part