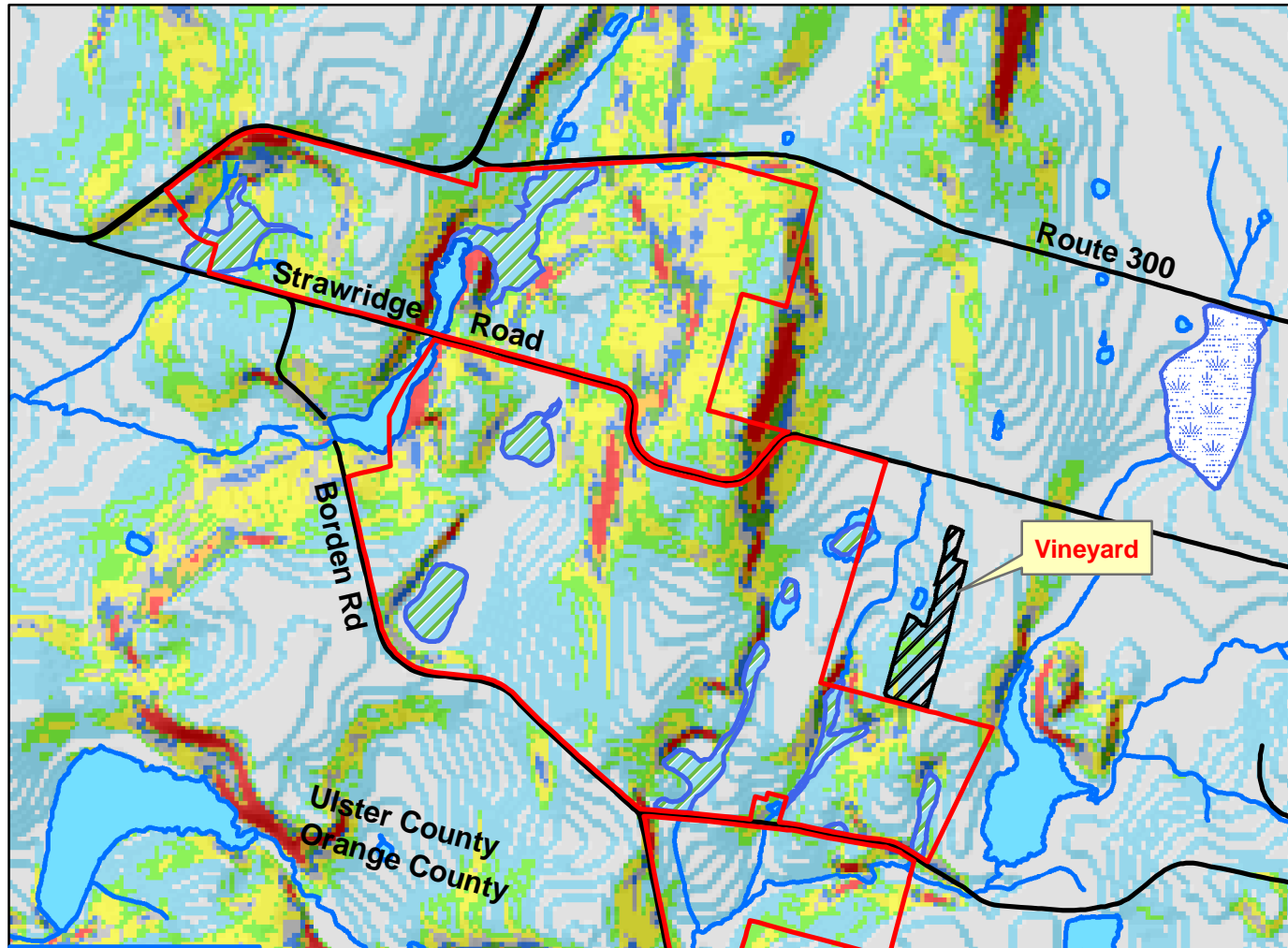
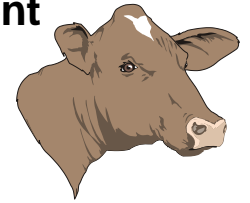


Evaluation of Alternate Land Use Options for the Proposed Donner Development

Slope Analysis for Grape Vineyards: Assessment Based on Digital Elevational Model Data



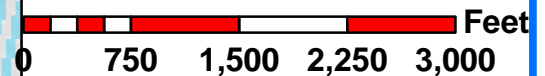
Legend

Percent Slope (Engineering Measure)

- 0 - 3
- 3 - 6
- 6 - 9
- 9 - 12
- 12 - 15
- 15 - 18
- 18 - 21
- 21 - 24
- > 24
- Donner Trust Parcels
- Magnanini Vineyard
- Borden Farm Area Roads
- The Hatch
- Streams
- Ponds

Data Sources:
 Hydrology: HydroQuest
 Project Boundaries:
 Engineering Properties
 Orthoimagery: OCS&CIC
 DEMs: USGS/NYSDEC
 Projection: UTM (meters)
 Datum: NAD27, Zone 18
 Slope Analysis and
 Cartography: HydroQuest
 Prepared For: Friends of
 Borden Home Farm 1-07

Percent slope is an important variable in site selection for grape cultivation. For comparison purposes, a 45 degree slope is equal to a 100 percent slope. Similarly, a 15 percent slope corresponds with an 8.5 degree slope and a 25 percent slope corresponds with a 14.0 degree slope. The Digital Elevation Model (DEM) data used in this analysis was provided by the U.S. Geologic Survey in cooperation with the NYS DEC. DEMs have a cell size of 10 meters by 10 meters. Vertical position accuracy is within 6 to 8 meters. This analysis shows that a large percentage of the Donner Trust lands have slopes of less than 6 percent.



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Slope B