

## Section III

### GENERAL DESCRIPTION OF PLAN AREA

#### **PROJECT LOCATION:**

The project site is located approximately 0.5 to 0.75 miles southeast of the town of Annapolis and five miles east of the Pacific Ocean. The site is located within Sections 17 and 18, T10N, R13W, MDB&M, and is found on the U.S. Geological Survey 7.5 minute *Annapolis* quadrangle.

#### **SOILS AND TOPOGRAPHY:**

The plan area is located on a broad flat ridge (Beatty Ridge) between Grasshopper Creek and the Wheatfield Fork of the Gualala. Slopes on the plan area are generally south and east facing and range from 2 – 35% with an average of 11.7%. Elevation within the plan area ranges from 660 feet to 860 feet above sea level.

U.S. Geological Survey (USGS) Santa Rosa Quadrangle Map 2A indicates that much of the Sonoma coastal area is located within a large-scale block described as the early Tertiary era Coastal Belt Franciscan Formation (TKf), identified by subsurface geology consisting of marine sandstone, shale, and conglomerate typical of adjacent ridge-top uplands. This formation is frequently found on northwest trending major ridges in the interior Coastal Range area in northern Sonoma County. Portions of the area are capped by more recent Pliocene age Ohlson Ranch Formation (Por) subsurface geology consisting of marine sandstone, siltstone, and conglomerate. Based on the presence of marine sandstones and undamaged fossilized seashells commonly found at relatively shallow depth in local profiles, the area is considered to have been uplifted from sea beds as part of the tectonic activity forming this part of California.

Surficial soils in the project area have been mapped by the U.S. Department of Agriculture (USDA) Soil Conservation Service, and are shown on Sheet 16 of the *Soil Survey of Sonoma County, California*. Area soils have been mapped as predominantly Goldridge fine sandy loam with 15 to 30 percent slopes (GdE), which consist of moderately well-drained fine sandy loams that have a sandy clay loam subsoil and are formed from coarse-grained, weakly consolidated sandstone (See THP Soils Map). GdE soils are generally located on uplands inland from the coast, extending from Sebastopol to the Annapolis area, and are found in association with Blucher, Cotati, Sebastopol, and Steinbeck soil types. Other site soils include Goldridge fine sandy loam, 30 to 50 percent slopes (GdF); Hugo very gravelly loam, 30 to 50 percent slopes (HkF); and Hugo very gravelly loam, 50 to 75 percent slopes (HkG). The Goldridge soil is approximately 16 inches deep, light brownish gray in color, strongly acidic, with light gray, pale yellow, and yellow-brown subsoils. Permeability is moderately slow in the subsoil. Runoff is medium to very rapid, with moderate erosion hazard on low slopes and increasing to a high level on elevated slopes. The Hugo very gravelly loam formed in material weathered from fine-grained sandstone or shale. Permeability is moderate and soil depth ranges from 30 – 60 inches. The calculated erosion hazard rating for these soils on the plan area is moderate.

The local soils are believed suitable for vineyard development, based on historical and ongoing agricultural activity in similar upland soils in the region. Soil amendments are typically applied in response to soil testing, in order to moderate acidity. Nutrients are applied to vineyards on an as needed basis through foliar or irrigation methods, based on annual monitoring results. Satisfactory levels of surface drainage and permanent cover crop development will be necessary to prevent formation of sheet and rill erosion.

The *Baseline Soil Analysis* also notes moderate to extensive subsoil rust mottling in the project site soils. Rust mottles form from decomposition of organic matter under anaerobic conditions. Mottles are commonly found in soils that are seasonally very wet (near saturation) for an extended period of time. The finding of mottled soils on the project site is not considered unusual due to the very high annual rainfall in coastal Sonoma County. According to Crop Care Associates, the mottling indicates the need for installation of artificial subsurface drainage in vineyard development.

No unstable areas were observed on the conversion THP area during plan preparation. Erosion observed on the plan area consists of those seven locations identified under Item #18 in Section II of the THP. These erosion sites are identified on the THP Operations Map. Slopes on the plan area are moderate and appear to be stable as very little erosion was observed on the plan area.

The timber site productivity of these soils on the plan area is moderate. The plan area is classified as site III timberland.

Please see Chapter 3.6 of the project THP and the attached Erosion Control and Mitigation Plan and Baseline Soils Analysis for a further description of the soils and geologic setting.

#### **WATERSHED AND STREAM CONDITIONS:**

A majority of the conversion THP area is contained within the Annapolis CAL Watershed (#1113.840303). A small portion of the plan area (approximately 14 acres) lies within the Grasshopper Creek CAL Watershed (#1113.830003) and another very small portion (approximately 2 acres) lies within the Little Creek CAL Watershed (#1113.830004). The watercourses in the northwestern portion of the plan area drain into Grasshopper Creek, and then into Buckeye Creek. Watercourses in the southern portion of the plan area drain into Patchett Creek and then the Wheatfield Fork of the Gualala River. The entire plan area ultimately drains into the South Fork of Gualala River, which drains into the Pacific Ocean.

There are no watercourses contained within the project area. There are however, a number of Class III and Class II watercourses adjacent to the project area. As per 14 CCR 916.4 a field evaluation was conducted of all watercourses within the vicinity of the project area and it was determined that the proposed mitigation measures will minimize impacts to these watercourses. The watercourses on the plan area were walked, classed and checked for erosion, channel stability, canopy cover, LWD and aquatic habitat.

As the plan area is located along the top of a broad flat ridge, the watercourses adjacent to the plan are mainly the headwater portions of larger drainages located further downstream. The watercourses generally have a gentle gradient, have shallow channels, and only seasonally run water. Other than those areas described under Item 18 in Section II the stream channels are stable with varying amounts and types of streamside vegetation. Canopy cover ranges from 0-100% with a large majority of the watercourses containing an average canopy of greater than 70%. The Class III watercourses contain limited amounts of LWD, little to no pool structure and no aquatic habitat. The Class II watercourses contain limited amounts of aquatic habitat with only slightly more pools and LWD. These watercourses are in fair to good condition and will be protected by WLPZs within which no timber operations will occur. Please see the Cumulative Impacts Assessment and Chapter 3.7 of the EIR for a further discussion of Watershed Conditions.

#### **VEGETATION AND STAND CONDITION:**

As described in the Monk & Associates *Biological Resources Analysis* (Chapter 3.4 of the project EIR), the project site contains examples of five plant communities: North Coast Coniferous Forest, Northern Coastal Grassland, Coastal Scrub, Riparian Vegetation, and Seasonal Wetlands. The main components of the plant community within the THP area consist of *Sequoia sempervirens*, *Pseudotsuga menziessii*, *Lithocarpus densiflorous*, *Arbutus menziesii* and *Vaccinium ovatum*.

The plan area has had a long history of resource use. The plan area was converted to agriculture use in the late 1800's to early 1900's. It was used for orchards and sheep grazing until the 50's and remnants of the old orchards still exist on the plan area today. The areas that were managed for sheep grazing currently consist of grassland and hardwoods with intermediate conifers. The forested areas of the plan generally consist of a even aged stand of younger (50-75 year old) conifer timber with a fairly even mix of redwood and Douglas fir. There are areas of these stands where tanoak is a major component and areas where there is a very thick brush understory.

For a complete discussion of the vegetation on site please refer to Chapter 3.4 of the project EIR.

**ELABORATION ON ITEMS IN SECTION II****Item 24 f) and k): Abandonment of Roads and Landings**

**Explanation:** With the exception of the two existing permanent roads shown on the THP Operations Map all truck roads, tractor roads and landings located within the project area used to remove timber from the conversion THP area will be abandoned following completion of timber harvest operations. An abandonment plan will not be drafted for the abandonment of these facilities as they will be eliminated as a part of vineyard development. Soil stabilization measures associated with the grading of these areas are covered in detail in the Erosion Control Plan.

**Justification:** The conversion THP area will be developed for wine grape production, therefore roads and landings used to access the timber on the plan area will no longer be needed. Roads, landings and tractor roads located within the conversion THP area will be ripped, disced and planted to grapes following the completion of timber operations. Vehicle access to the vineyard units will be via encroachments at the existing permanent roads that access the conversion plan area/vineyard units and then along "vineyard avenues" within the vineyard units and new perimeter roads.