Mitigated Negative Declaration

Sonoma County Permit and Resource Management Department
2550 Ventura Avenue, Santa Rosa, CA 95403
(707) 565-1900  FAX (707) 565-1103

Publication Date: August 9, 2010
Adoption Date:
State Clearinghouse:

This statement and attachments constitute the Negative Declaration as proposed for or adopted by the Sonoma County decision-making body for the project described below.

File No.: UPE07-0008
Planner: David Hardy
Project Name: Cornell Winery UPE07-0008

Project Description:

This project is a revision of a winery project at 245 Wappo Road originally applied for in 2007. A prior application at 420 Wappo Road filed in 2003 was withdrawn when the application was made for the site at 245 Wappo. The applicant's Proposal Statement dated May 18, 2010, which was submitted to the County on May 20, 2010, is the basis for this subsequent review, along with the Preliminary Grading Plan dated May 14, 2010, prepared by Atterbury and Associates; the Site Plan, Floor Plan, and Elevations dated April 29, 2010, prepared by Backen Gillam architects; the Summary of the Proposed Water Use and Mitigation prepared by Thomas W. Atterbury, dated June 3, 2010; and the Preliminary Landscape Plan dated June 15, 2010 prepared by Prunuske Chatham Inc. The applicant's request is for a winery with a maximum annual production capacity of 10,000 cases on a 40-acre parcel, one of seven contiguous legal parcels owned by the applicant. The May 18, 2010 proposal includes construction of two single-story buildings totaling approximately 6,700 square feet (SF) and a 10,200 square foot cave for barrel storage. Substantial changes to the project from the Oct. 8, 2009 Mitigated Negative Declaration include relocation of the buildings from a site west of Wappo Road to the current location on the east side of Wappo Road, a reduction in the physical size of the winery and hospitality facilities, and additional water harvesting storage tanks; in most other respects, the project is substantially the same as that previously considered in the Mitigated Negative Declaration dated October 8, 2009.

Wine tasting would occur in a room within the wine cave. Winery production would take place within the 3,500 SF "production building" that would house fermentation tanks and crush facilities, and that abuts the cave portals used for barrel storage. The other "winery support" building would be used for the winemaker's office, laboratory, mechanical equipment, and space for bottling and case good storage. The two buildings would be on either side of a paved delivery apron that would be used for receiving fruit and also for additional parking.

The project would require approximately 13,515 cubic yards of cut and 1,289 yards of onsite fill to terrace the site for the proposed buildings and excavate the cave. The plans indicate space for approximately seven parking spaces surrounded by a driveway and another parking space next to the office/support building, for a total of eight spaces, with ample pad space and driveway size for more. A new water tank would be constructed for fire protection and domestic use on a pad north of the winery buildings, and the
same pad would also be used for winery wastewater processing. The winery production building would be recessed into the hillside, creating an approximately 20-foot high cut to be retained by a soil nail cave portal that would not be part of the building. Retaining walls would also be needed along a portion of Wappo Road and the southeastern side of the winery. The tank pad for water and wastewater treatment may also require retaining walls. The building and caves would contain all winery operations and equipment. Excess soils not re-used at the winery site would be disposed offsite at a location approved to receive them.

Tasting would be by appointment only. According to the proposal statement, a maximum of 15 visitors at a time would be hosted. There would be three full-time employees, with four additional employees to help during harvest and crush. Crushing operations would take place outside on a crush pad under a canopy or indoors under a roof. Normal hours of operation (non-crush) would be 8:00 a.m. to 5:00 p.m., Monday through Friday. The process wastewater would be treated using a small patented aerobic treatment system and stored in a water tank for disposal by means of drip irrigation in the Cornell vineyards. Domestic wastewater from staff and customers would be processed using a conventional septic system with disposal in a leach field located at 560 Wappo Road. Plumbing for the wastewater would be placed in Wappo Road; the line would extend 3,000 feet from the winery treatment site. The preliminary landscape plan shows two rainwater storage tanks with a total 140,000 gallon capacity intended to catch roof run-off water during the rainy season for landscape irrigation throughout the year. These tanks are located approximately 100 feet west of the winery buildings, next to the parking lot on the west side of Wappo Road. The existing wells on the ridge to the northeast would supply the winery with water. The wells are located approximately 1,600 feet east of and 120 feet higher in elevation than the septic leach field. Stems and pomace would be composted and discarded back into the vineyard and not burned.

Since the application was filed in 2007, the applicant/owner acquired the adjacent property at 100 Wappo Road, APN 028-250-007. The 15-acre property has a General Plan designation of Rural Residential, 15-acre density, and a zoning designation of RR (Rural Residential), B6-15 Acre Density, BR (Biotic Resource), and SR (Scenic Resource). Located on the north bank of Mark West Creek, the property abuts St. Helena Road, and formerly had a St. Helena Road address. The property contains a 1,900 square foot, three-bedroom house and a spring-fed pond. The house is currently occupied. To offset winery water use, the applicant proposes to demolish the existing residence at 100 Wappo Road and to relinquish in perpetuity: a) rights to install a vineyard at 100 Wappo Road, b) the right to build any new structure on 100 Wappo Road for which a building permit is required, c) the riparian rights to withdraw water directly from Mark West Creek, and d) the right to use the water from the onsite spring-fed pond for purposes other than fire protection, all of which would be formalized in a deed restriction or easement granted to the County of Sonoma or some other public agency.

The septic system is now located at 560 Wappo Road, the northernmost parcel of the Cornell holdings. The system would be located in a stand of Douglas fir and oak trees, in much the same environment as the original site, but without landslide potential. The site was reviewed by RGH Consultants, who concluded that it is situated "on a relatively stable ridgetop and outside of landslides and steeply sloping terrain. Our stability analysis indicates that the leachfield site is stable under static and seismic conditions both before and after the leachfield is constructed." A percolation test for the system was approved by the PRMD Well and Septic Division staff on June 23, 2009 (Permit #SEV09-0223).

Project Location: 100, 245, and 560 Wappo Road, Santa Rosa
APNs 028-250-007, 028-260-041 and -025

See Location Map - Attached

Environmental Finding:

The proposed project could not have a significant effect on the environment and the adoption of a Mitigated Negative Declaration is appropriate. Based upon the information contained in the Initial Study included in the project file, it has been determined that there will be no significant environmental effect resulting from this project, provided that mitigation measures are incorporated into the project. The
Mitigated Negative Declaration has been completed in compliance with CEQA State and County guidelines and the information contained therein has been reviewed and considered.

There will not be a potential significant impact on biotic habitat of concern to Fish & Game.

**Initial Study:** Attached

**Other Attachments:**

**Decision-making Body:** Sonoma County Board of Zoning Adjustments

**Lead Agency:** Sonoma County Permit and Resource Management Department
COUNTY OF SONOMA
PERMIT AND RESOURCE MANAGEMENT DEPARTMENT
2550 Ventura Avenue, Santa Rosa, CA 95403
(707) 565-1900 FAX (707) 565-1103

ENVIRONMENTAL CHECKLIST FORM

FILE #: UPE07-0008
PROJECT: Henry Cornell Winery
PLANNER: Dave Hardy
DATE: August 9, 2010

LEAD AGENCY: Sonoma County Permit and Resource Management Department
PROJECT LOCATION: 100, 245, and 560 Wappo Road, Santa Rosa
APNs 028-250-007, 028-260-041 and -025

APPLICANT NAME: W. Guy Davis
APPLICANT ADDRESS: 52 Front Street, Healdsburg, CA 95448

GENERAL PLAN DESIGNATION:
Resource and Rural Development, 100 acre density (245 and 560 Wappo Road)
Rural Residential, 15 acre density (100 Wappo Road)

ZONING:
RRD (Resource and Rural Development), B6-100 acre density, BR (Biotic Resources) (245 and 560 Wappo Road)
RR (Rural Residential), B6-15 acre density, BR (Biotic Resource) SR (Scenic Resource) (100 Wappo Road)

DESCRIPTION OF PROJECT:

This project is a revision of a winery project at 245 Wappo Road originally applied for in 2007. A prior application at 420 Wappo Road filed in 2003 was withdrawn when the application was made for the site at 245 Wappo. The applicant’s Proposal Statement dated May 18, 2010, which was submitted to the County on May 20, 2010, is the basis for this subsequent review, along with the Preliminary Grading Plan dated May 14, 2010, prepared by Atterbury and Associates; the Site Plan, Floor Plan, and Elevations dated April 29, 2010, prepared by Backen Gillam architects; the Summary of the Proposed Water Use and Mitigation prepared by Thomas W. Atterbury, dated June 3, 2010; and the Preliminary Landscape Plan dated June 15, 2010 prepared by Prunuske Chatham Inc. The applicant’s request is for a winery with a maximum annual production capacity of 10,000 cases on a 40-acre parcel, one of seven contiguous legal parcels owned by the applicant. The May 18, 2010 proposal includes construction of two single-story buildings totaling approximately 6,700 square feet (SF) and a 10,200 square foot cave for barrel storage. The relocation of the buildings from a site west of Wappo Road to the current location on the east side of Wappo Road, in addition to a substantial reduction in the physical size of the winery and hospitality facilities, is the fundamental change to the project; in all other respects, the project is substantially the same as that previously considered in the Mitigated Negative Declaration dated October 8, 2009.

Wine tasting would occur in a room within the wine cave. Winery production would take place within the 3,500 SF "production building" that would house fermentation tanks and crush facilities, and that abuts the cave portals used for barrel storage. The other "winery support" building would be used for the winemaker’s office, laboratory, mechanical equipment, and space for bottling and case good storage. The two buildings would be on either side of a paved delivery apron that would be used for receiving fruit and also for additional parking.

The project would require a substantial amount of grading (approx. 13,515 cubic yards of cut and 1,289 yards of onsite fill) to terrace the site for the proposed buildings and excavate the cave. The plans indicate space for approximately seven parking spaces surrounded by a driveway and another parking space next to the office/support building, for a total of eight spaces, with ample pad space and driveway...
size for more. A new water tank would be constructed for fire protection and domestic use on a pad north of the winery buildings, and the same pad would also be used for winery wastewater processing. The winery production building would be recessed into the hillside, creating an approximately 20-foot high cut to be retained by a soil nail cave portal that would not be part of the building. Retaining walls would also be needed along a portion of Wappo Road and the southeastern side of the winery. The tank pad for water and wastewater treatment may also require retaining walls. The building and caves would contain all winery operations and equipment. Excess soils not re-used at the winery site would be disposed offsite at a location approved to receive them.

Tasting would be by appointment only a maximum of 15 visitors at a time. There would be three full time employees, with four additional employees to help during harvest and crush. Crushing operations would take place outside on a crush pad under a canopy or indoors under a roof. Normal hours of operation (non-crush) would be 8:00 a.m. to 5:00 p.m., Monday through Friday. The process wastewater would be treated using a small patented aerobic treatment system and stored in a water tank for disposal by means of drip irrigation in the Cornell vineyards. Domestic wastewater from staff and customers would be processed using a conventional septic system with disposal in a leach field located at 560 Wappo Road. Plumbing for the wastewater would be placed in Wappo Road; the line would extend 3,000 feet from the winery treatment site. The preliminary landscape plan shows two rainwater storage tanks with a total 140,000 gallon capacity intended to catch roof run-off water during the rainy season for landscape irrigation throughout the year. These tanks are located approximately 100 feet west of the winery buildings, next to the parking lot on the west side of Wappo Road. The existing wells on the ridge to the northeast would supply the winery with water. The wells are located approximately 1,500 feet east of and 120 feet higher in elevation than the septic leach field. Stems and pomace would be composted and discarded back into the vineyard and not burned.

Since the application was filed in 2007, the applicant/owner acquired the adjacent property at 100 Wappo Road, APN 028-250-007. The 15-acre property has a General Plan designation of Rural Residential, 15-acre density, and a zoning designation of RR (Rural Residential), B6-15 acre density, BR (Biotic Resource), and SR (Scenic Resource). Located on the north bank of Mark West Creek, the property abuts St. Helena Road, and formerly had a St. Helena Road address. The property contains a 1,900 square foot, three-bedroom house and a spring-fed pond. The house is currently occupied. To offset winery water use, the applicant proposes to demolish the existing residence at 100 Wappo Road and to relinquish in perpetuity: a) rights to install a vineyard at 100 Wappo Road, b) the right to build any new structure on 100 Wappo Road for which a building permit is required, c) the riparian rights to withdraw water directly from Mark West Creek, and d) the right to use the water from the onsite spring-fed pond for purposes other than fire protection, all of which would be formalized in a deed restriction or easement granted to the County of Sonoma or some other public agency.

The septic system is now located at 560 Wappo Road, the northernmost parcel of the Cornell holdings. The system would be located in a stand of Douglas fir and oak trees, in much the same environment as the original site, but without landslide potential. The site was reviewed by RGH Consultants, who concluded that it is situated "on a relatively stable ridgetop and outside of landslides and steeply sloping terrain. Our stability analysis indicates that the leachfield site is stable under static and seismic conditions both before and after the leachfield is constructed." A percolation test for the system was approved by the PRMD Well and Septic Division staff on June 23, 2009 (Permit #SEV09-0223).

SURROUNDING LAND USES AND SETTING: Briefly describe the project's surroundings:

The winery site at 245 Wappo Road is largely undeveloped other than the access road and an existing single family residence. The house is several hundred feet southwest of the winery site, which is located on a knoll adjacent to and east of the access road. The trees and shrubs on the knoll have been thinned, but contain fir, oaks, cheminise, ceanothus, and manzanita. The east side of the knoll slopes down into a ravine that drains into the pond at 100 Wappo Road. The only vineyard on the 245 Wappo parcel is a small one associated with the residence. Most of the vineyard that would supply the winery is located on abutting land owned by Cornell. The winery site is not located in a designated scenic resource area, although the southern portion of the property at 100 Wappo Road is located within a County-designated
scenic corridor along St. Helena Road. There is a narrow band of biotic resources/critical habitat areas (reflecting the serpentine soils in the area that support unique plant species) at the southwestern edge of the 245 Wappo Road site, although the property at 100 Wappo Road is almost entirely within the biotic resource/critical habitat area; the property at 560 Wappo Road does not have the BR (Biotic Resource) zoning designation. The new winery buildings would be located approximately 150 feet north of the designated critical habitat for plants in serpentine soils. The geologic report for the project indicates that the knoll is immediately underlain by sandstone of the Franciscan Complex and not by serpentine bedrock.

Land use in the project vicinity is rural. North and west of the Cornell properties is the north fork of Mark West Creek, which forms the boundary with the Bothe-Napa Valley State Park to the north of the creek. An unnamed tributary of the north fork of Mark West Creek originates on the 245 Wappo property, has steep canyon walls, and was the location of a landslide that blocked the creek during the winter of 2005-2006. The main stem of Mark West Creek runs parallel to St. Helena Road at the southerly end of the Cornell holdings. The north side of St. Helena Road is interspersed with forest and chaparral scrub, some of the latter having been cleared for pasture and for vineyards. The area south of St. Helena Road is forest land that has been divided into large acreage residential lots. To the east are the vineyards of the Pride family winery, developed in the mid 1990s, as well as homes fronting on St. Helena Road. The nearest off-site neighboring dwellings are more than 1,100 feet to the south of the winery site. A winery with a maximum annual production capacity of 6,000 cases was approved in August of 2002 on Mattel Road, another private road off of St. Helena Road about two miles west of the site. Parcels in this area range from over 120 acres to less than five acres in size. Zoning is RRD (Resources and Rural Development), with 100 acre density. The entire upper Mark West Creek watershed has been designated a Priority Conservation Area by the Association of Bay Area Governments (ABAG).

Other Public Agencies whose approval is required (e.g. permits, financing approval, or participation agreement):

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact” or “Less than Significant with Mitigation” as indicated by the checklist on the following pages.

- Aesthetics
- Biological Resources
- Greenhouse Gas Emission
- Land Use and Planning
- Population/Housing
- Transportation/Traffic
- Mandatory Findings of Significance
- Agricultural & Forest Resources
- Cultural Resources
- Hazards & Hazardous Materials
- Mineral Resources
- Public Services
- Utilities/Service Systems
- Air Quality
- Geology/Soils
- Hydrology/Soil Quality
- Noise
- Recreation
DETERMINATION

On the basis of this initial evaluation:

- The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

- Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

- The proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

- The proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed by in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

- Although the proposed project could have a significant effect on the environment, all potentially significant effects were previously analyzed in an earlier EIR or Negative Declaration pursuant to applicable standards and potential impacts have been avoided or mitigated pursuant to that earlier EIR or Negative Declaration, including revisions or mitigation measures that are imposed upon the proposed project. There are no changes in the project, no new information related to potential impacts, and no changes in circumstances that would require further analysis pursuant to Section 15162 of CEQA Guidelines, therefore no further environmental review is required.

Incorporated Source Documents

In preparation of the Initial Study checklist, the following documents were referenced/developed, and are hereby incorporated as part of the Initial Study. All documents are available in the project file or for reference at the Permit and Resource Management Department.

- Project Application and Description
- Initial Data Sheet
- Sonoma County General Plan and Associated EIR
- Specific or Area Plan (Franz Valley)
- Sonoma County Zoning Ordinance
- Sonoma County Rare Plant Site Identification Study
- Project Referrals from Responsible Agencies
- State and Local Environmental Quality Acts (CEQA)
- UPE03-0092 File
- Supplemental Groundwater Availability Study, Todd Engineers, August 2006
- Groundwater Letter updates, Todd Engineers, April 27, 2007, and June 12, 2007
- Review of Supplemental Groundwater Studies by Kleinfelder, dated March 8, 2008
- Review of RGH Reports by Kleinfelder, dated July 2, 2008 and October 1, 2009
- Greenhouse Gas Analysis by Rimpo and Associates, July 13, 2010
- Biological Resources Assessment by Prunuske Chatham, Inc. July 2010
- Summary of Proposed Water Use and Mitigation, Thomas W. Atterbury, June 3, 2010
- Geotechnical Study Report, RGH Consultants, June 23, 2010
- Geologic and Geotechnical Peer Review, Cotton, Shires and Associates, July 2, 2010
EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g. the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g. the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section 17 at the end of the checklist, "Earlier Analysis" may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063 (c)(3)(D). In this case, a brief discussion should identify the following:

   a) Earlier Analysis Used. Identify and state where they are available for review.

   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures incorporated", describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:

   a) the significance criteria or threshold, if any, used to evaluate each question; and

   b) the mitigation measure identified, if any, to reduce the impact to less than significance.
1. AESTHETICS Would the project:

<table>
<thead>
<tr>
<th>Potentially Significant Impact</th>
<th>Less than Significant with Mitigation Incorporation</th>
<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
</table>

a) Have a substantial adverse effect on a scenic vista?

Comment: The area to be developed is not visible from any public view sheds or scenic vistas.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Comment: The project is not in a designated scenic resource area, is not visible from public offsite areas, and is not on a state scenic highway.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

Comment: The new building and cave will not substantially degrade the existing visual character or quality of the site and its surroundings. Removal of the residence at 100 Wappo Road could enhance the visual character by removing a man-made feature of no aesthetic significance.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?


1.d. Less than Significant with Mitigation Incorporation. The proposal for a winery will include new exterior lighting. To ensure that new sources of light do not adversely the impact the area, the following mitigation measure has been incorporated into the project:

Mitigation Measure 1.d: Prior to issuance of building permits, an exterior lighting plan shall be submitted for review and approval by PRMD Project Review staff. Exterior lighting shall be low mounted, downward casting and fully shielded to prevent glare. Lighting shall not wash out structures or any portions of the site. Light fixtures shall not be located at the periphery of the property and shall not spill over onto adjacent properties or into the night sky. Flood lights are not permitted. All parking lot shall be full cut-off fixtures and shall not exceed four feet in height. Lighting shall shut off automatically after closing and security lighting shall be motion-sensor activated.

Mitigation Monitoring 1.d: The Permit and Resource Management Department shall not issue the building permit until an exterior night lighting plan has been reviewed and approved by PRMD Project Review staff and is consistent with the approved plans and County Design Standards. The Permit and Resource Management Department shall not sign off the Building Permit for occupancy until a site inspection of the property has been conducted that indicates all lighting improvements have been installed according to the approved plans and conditions. If light and glare complaints are received, the Permit and Resource Management Department shall conduct a site inspection and require the property be brought into compliance or procedures to revoke the permit and terminate the use shall be initiated.

2. AGRICULTURE AND FOREST RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment
Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? [X]

Comment: No. According to the Sonoma County Important Farmlands Map -2000 (database), the site is designated "Grazing and Other Land". The facility will be used for processing of agricultural products. The project would not convert prime land to a non-agricultural use, because the soils are not prime and the use is agricultural.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? [X]

Comment: The proposed project would not conflict with the zoning as agricultural processing is an allowed use in the RRD zoning district with use permit approval. The project site is not under a Williamson Act contract.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? [X]

Comment: The project is consistent with the consistent with the Sonoma County Zoning Ordinance, which allows wineries in a Resource and Rural Development zoning district. The zoning district to protect timber land is the TP-Timber Production district; this project is not in such a district. Comments from Cal-Fire staff about the property, as well as the Prunuske Chatham assessment (see below Sec. 4, have indicated that the land on which the winery is proposed is best characterized as oak woodland, not commercial timber forest. The number of trees to be removed is offset by additional trees to be planted. See 2a above.

d) Result in the loss of forest land or conversion of forest land to non-forest use? [X]

Comment: As noted above, Cal-Fire staff have indicated in prior written and oral comments that the site of the winery is characterized by oak woodland, not commercial timber forest, so no forest land would be converted to non-forest use. See 2a above.
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

Comment: See 2a, 2b, and 2d above.

3. **AIR QUALITY** Would the project:

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

Comment: The project is within the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). The District does not meet federal or state standards for ozone precursors, and has adopted an ozone Attainment Plan and a Clean Air Plan describing steps that will be taken to bring air quality in the district into compliance with federal and state Clean Air Acts’ ozone standards. The plans deal primarily with emissions of ozone precursors (nitrogen oxides and volatile organic compounds (hydrocarbons)). The project will not conflict with the District’s air quality plans to reduce emissions from new uses.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Comment: State and federal standards have been established for “criteria pollutants”: ozone precursors, carbon monoxide, sulfur dioxide, and particulates (PM10 and PM2.5). The pollutants NOx (nitrogen oxides) and hydrocarbons form ozone in the atmosphere in the presence of sunlight. Significance thresholds for ozone precursors, carbon monoxide and particulates have been established by BAAQMD. The principal source of ozone precursors is vehicle emissions, although stationary internal combustion engines must also be considered. BAAQMD generally does not recommend detailed NOx and hydrocarbon air quality analysis for projects generating less than 2,000 vehicle trips per day. Given the low traffic generation of the project (only 15 guests and seven employees are allowed at one time, in addition to some seasonal grape delivery) relative to the screening criteria, ozone precursor emissions would be less than significant.

Detailed air quality analysis for carbon monoxide is generally not recommended unless a project would generate 10,000 or more vehicle trips a day, or contribute more than 100 vehicles per hour to intersections operating at LOS D, E or F with project traffic. Given the low traffic generation of the project relative to the screening criteria, carbon monoxide emissions would be less than significant.

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under
an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Comment: The BAAQMD is a non-attainment area for ozone precursors and particulate matter (PM) See 3b for a discussion of ozone. PM10 is a criteria pollutant that is closely monitored in the BAAQMD. Readings in the district have exceeded state standards on several occasions in the last several years. The high PM10 readings occurred in the winter and are attributed to the seasonal use of wood burning stoves.

The project will not have a significant operational long-term effect on PM10, because all surfaces will be paved or landscaped, and dust generation will be insignificant when the project is completed. However, there could be a significant short-term emission of dust (which would include PM10) during construction. These emissions could be significant at the project level, and would also contribute to a cumulative impact.

The impact could be reduced to less than significant by including dust control as described in the following mitigation measure:

Mitigation Measure AIR-1: The following dust control measures will be included in the project:

A. Water or other dust palliative will be applied to unpaved portions of the construction site, unpaved roads, parking areas, staging areas and stockpiles of soil daily as needed to control dust.

B. Trucks hauling soil, sand and other loose materials over public roads will cover the loads, or will keep the loads at least two feet below the level of the sides of the container, or will wet the load sufficiently to prevent dust emissions.

C. Paved roads will be swept as needed to remove any visible soil that has been carried onto them from the project site.

Mitigation Monitoring: Building/grading permits for ground disturbing activities shall not be approved for issuance by Project Review staff until the above notes are printed on the building, grading and improvement plans. The applicant shall be responsible for notifying construction contractors about the requirement for dust control measures to be implemented during construction. If dust complaints are received, PRMD staff shall conduct an on-site investigation. If it is determined by PRMD staff that complaints are warranted, the permit holder shall implement additional dust control measures as determined by PRMD or PRMD may issue a stop work order. (Ongoing during construction)

d) Expose sensitive receptors to substantial pollutant concentrations?

Comment: Sensitive receptors are facilities or locations where people may be particularly sensitive to air pollutants such as children, the elderly or people with illnesses. These uses include schools, playgrounds, hospitals, convalescent facilities and residential areas. There are no such uses nearby, and the nearest offsite residence from the winery site is more than 1,100 feet away. There will be no significant, long term increase in emissions, but during construction there could be significant dust emissions that would affect nearby residents. Dust emissions can be reduced to less than significant levels by the mitigation measure described in item 3c above.

The California Air Resources Board has determined that diesel emissions contain toxic air contaminants. Exposure of people to these emissions over a long period of time is considered to increase the risk of cancer. The exhaust emissions from trucks associated with this project will increase localized concentrations of toxic air contaminants. The entrance road to the winery passes 75 to 100 feet from two residences, but the winery itself (where most of the diesel emissions will
occur) is over 1,300 feet from the nearest offsite residence. One of the residences, now owned by Mr. Cornell, is proposed to be demolished. Given the low volume of truck traffic, and the distance from the receptors, the emissions of toxic air contaminants would not be substantial.

e) Create objectionable odors affecting a substantial number of people?

Comment: The project includes crushing grapes, which can cause odors. The BAAQMD has no record of complaints related to grape pomace, except when burned. The applicant proposes to spread the crush residue in the vineyard as a soil amendment, and the nearest off site residence is more than 1,100 feet away from the crush area of the winery.

4. BIOLOGICAL RESOURCES
Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Comment: Mark West Creek and the North Fork of Mark West Creek have documented salmonid fisheries that are listed as threatened and endangered. In their letter of November 24, 2008, the California Department of Fish and Game notes that the North Fork has supported a run of Central Coastal steelhead, a federally threatened species, and may support Central Coastal coho salmon, a State and Federal endangered species. However, passage of fish up the North Fork could be thwarted by a road culvert at St. Helena Road, depending upon the time of year. “DFG has documented coho salmon in the main stem Mark West Creek, downstream of the project site. Excessive input of fine sediment from hill slope runoff or from roads in the vicinity of the project site will likely have adverse effects on listed salmonids in the project reach as well as downstream of the project reach” A comment letter dated November 9, 2008, from Stacy K. Li, PhD., salmon and steelhead ecologist, also establishes a concern about the effects of erosion on fish. Dr. Li recommends avoiding activities that would tend to activate landslides, but does not identify any other specific project-related mitigation measures.

The Nov. 25, 2008, North Coast Regional Water Quality Control Board letter does not comment specifically on the winery project but does summarize inspections and observations by staff in recent years. The letter notes that RWQCB staff was called to the site in September 2005 regarding the brush clearing, and staff estimated that approximately five acres had been cleared. However, the work did not require a construction stormwater permit because the site had not been graded. “Upon re-inspection, staff found that all the piles of woody debris had been removed and that sufficient erosion and sediment controls had been placed.”

The letter discusses the relationship of brush clearing and maintaining tree canopy, as well as water use, relative to maintaining the habitat for salmonids in Mark West Creek. It also urged a larger view of the watershed:

“It became evident from public comment during the public hearing that the cumulative impacts of land use changes within the upper Mark West Creek watershed are significantly impacting water quality and beneficial uses of water within this watershed. This reflects the potential need for a full environmental assessment, including an assessment of cumulative impacts, of the Mark West Creek watershed to determine how water quality and all beneficial uses of water are affected,
prior to approval of new developments in this area.

"...Balancing beneficial uses within this upper watershed may be accomplished by reducing water use during critically dry years by a policy of cessation of groundwater pumping at specified dates, providing for additional onsite water storage during periods of high winter flows, and creating overstory again by planting trees to provide canopy and help reduce soil erosion and infiltrate stormwater runoff. Balancing domestic and agricultural water usage while maintaining sufficient flows to sustain viable fish populations is the goal and will require community based solutions."

The project incorporates a number of measures to avoid erosion of fine sediments and other soils. The Erosion control Notes on the Preliminary Grading Plan (Sheet C-2) include fiber rolls, silt fences, concrete washout boxes, hydroseeding, energy dissipaters, and proper storm water drain inlets, as well as a requirement to use most recent Best Management Practices. The Grading and Storm Water Section of the PRMD reviewed the drawings, and submitted conditions of approval that prohibit residue or polluted runoff from the crush pads or winery construction dirt from reaching public storm water systems or structures.

To further reduce the potential for erosion to add fine sediments to Mark West Creek and its tributaries, the following mitigation measures are included in this project. With the incorporation of these mitigation measures, the project will have no potential significant impacts to the watershed either on a project-specific bases or on a cumulative basis.

**Mitigation Measure BIO-1:** The dust control Mitigation Measure from the Air Quality section will serve to reduce fine sediments from the project during construction. In addition, the following measures will provide long-term avoidance of fine sediments from the project reaching the creek.

Proper erosion control and other water quality Best Management Practices (BMPs) shall be implemented to avoid sedimentation and disturbance to downstream aquatic habitats. To the extent that he has legal control over the access road, the applicant shall pave or chip seal or provide an equivalent method of containing dust and dirt on Wappo Road from the winery site down to St. Helena Road. Finish paving or resurfacing may be completed after construction of the winery and wine cave, but preliminary work on the surface that will contain dust shall be completed prior to commencement of construction of the cave and export of excavated material.

**Mitigation Monitoring:** Building/grading permits for ground disturbing activities shall not be approved for issuance by Project Review staff until the above note is printed on the building, grading and improvement plans. The applicant shall be responsible for notifying construction contractors about the requirement for dust control measures to be implemented during construction. If dust or erosion complaints are received, PRMD staff shall conduct an on-site investigation. If it is determined by PRMD staff that complaints are warranted, the permit holder shall implement additional dust and/or erosion control measures as determined by PRMD or PRMD may issue a stop work order. (Ongoing during construction)

**Comment:** The California Department of Fish and Game (DFG), in their Nov.24, 2009, letter, observed that substantial vegetation removal prior to filing of the subject application posed potentially significant impacts to terrestrial wildlife and plants. To offset some of the vegetation removal and to provide better geologic stability and erosion control, the following mitigation measure is included to require use of native plants in the project landscaping and to require a landscape plan that will restore some of the habitat adversely affected by the pre-project grubbing. This condition, coupled with the best management practices for erosion control, are the best ways to avoid sedimentation of the creeks that could adversely affect fish, and should reduce potential impacts to less than significant. Additional landscaping will also provide carbon offsets and sequestration to reduce Greenhouse Gas effects.

**Mitigation Measure BIO-2:** Prior to issuance of a grading permit for the winery building or building or grading permits for the wine cave, the applicant shall submit a landscape plan for review and approval by the County Design Review Committee. The plan shall make abundant use of native plants indigenous to the property and the upper Mark West Creek watershed and shall encourage re-growth
of native shrubs and trees in the area downhill from the winery site, consistent with the fire safety and Vegetation Management Plan requirements of the County Fire Marshal. Invasive exotic species shall be prohibited.

**Mitigation Monitoring:** Building/grading permits for ground disturbing activities shall not be approved for issuance by Project Review staff until the Design Review Committee has approved a landscape plan, and the approved plan is included in the building and/or grading plans. Occupancy of the winery or the wine cave shall not occur until the approved landscaping measures are completed.

**Comment:** The July 2010 project revisions include the re-design, downsizing, and re-location of the winery buildings on the east side of Wappo Road. This area has undergone some brush removal in the past, although not the complete grubbing that the former site experienced. The applicant engaged the firm of Prunuske Chatham, Inc. to prepare a Biological Resources Assessment of the revised project area.

The July 2010 report makes the following observations about the project site. The property supports one rare bulbiferous herb (Narrow-anthered brodiaea), and two other rare species, Clara Hunt’s milk- vetch and Jeppson’s leptosiphon, have moderate potential to occur on the property. Although not listed by state or federal agencies, these plants are listed by the California Native Plant Society as “rare.” The property supports high-quality native chaparral, oak woodland, and grassland habitats as well as habitat for a variety of common wildlife species (e.g., reptiles, amphibians, mammals). The property is adjacent to a freshwater marsh (approximately 250 feet from the winery construction area) that has suitable habitat to support special-status amphibians and reptiles potentially including California red-legged frog and northwestern pond turtle, although there are no documented occurrences of California Red Legged Frog within the watershed or project region. If present, these species may utilize the project site for overland migrations, breeding (turtle), and/or aestivation. The project site and adjacent habitats support breeding habitat for birds protected under the Migratory Bird Treaty Act and California Fish and Game Code, and the property supports potential roosting and foraging habitat for special status and common bat species.

To avoid impacts to rare plant species, the following mitigation measure will be included in the project.

**Mitigation Measure BIO-3(Plants):** Construction plans shall be modified to avoid impacts to narrow-anthered brodiaea. No disturbance should occur within 50 feet of flowered brodiaea plants. Protective measures shall be in place during construction to minimize disturbance (e.g., temporary chain-link construction fencing around existing populations). Where impacts are unavoidable, the following mitigation and monitoring plan shall be developed and implemented by a qualified botanist or vegetation ecologist:

- a) Mark and map locations of existing populations (when plants are in flower).
- b) Install temporary construction fencing around existing populations.
- c) Transplant, as applicable.
- d) Collect seed by hand and store seed until needed.
- e) Reseed in an area on the property, agreed upon with the client and regulatory agencies, that is suitable for the species and outside of the development envelope.
- f) Develop a long-term monitoring plan for the protected and propagated plants. This shall include five (5) years of annual monitoring to determine survivorship of propagated plants.
- g) Mitigation reporting annually to PRMD.

**Comment:** The biological assessment discusses impacts to native trees. The landscape plan for the property identifies several coast live oaks to be transplanted and others to be removed. The County’s Tree Protection Ordinance does not apply to agricultural operations or wineries. Nevertheless, the following mitigation measure is appropriate because native trees are particularly susceptible to disturbance, especially within the root crown (the base of the trunk) and root zone commonly referred to as the Root Protection Zone (RPZ; defined as 1.5 times the dripline radius measured from the
trunk). The Root Protection Zone also extends approximately three feet below the soil surface, and could be impacted by subsurface excavation for the wine storage cave.

**Mitigation Measure BIO-4 (Trees):** When feasible, work within the RPZ should be limited, and all trees greater than 6 inches in diameter at breast height should be retained. If trees are to be removed, they shall be replaced with in-kind species at a ratio of 3:1 for all trees over 6 inches in diameter at breast height. These mitigation ratios shall also be applied to trees that undergo root damage due to installation of the wine cave. An arborist, qualified botanist or vegetation ecologist shall be retained to complete a final tree count for mitigation purposes prior to construction. In those trees to be removed or pruned substantially, a qualified biologist should survey for roosting bats prior to removal or pruning.

**Mitigation Measure BIO-5 (Bats):** To avoid impacts on special-status and common bat species, construction should be limited to daylight hours to prevent interference with foraging abilities. If any trees are removed, a qualified biologist should survey for roosting bats prior to removal. If occupied roosts are identified, the qualified biologist shall prescribe minimum buffers from construction activities, and removal of the roost trees shall not occur until the roost is unoccupied.

**Mitigation Measure BIO-6 (Birds):** To avoid potential losses to breeding birds, construction activities shall occur outside of the critical breeding period (March 15 to August 15). If construction commences (e.g., vegetation removal, grading) prior to the start of the current breeding season, preconstruction surveys will not be necessary. Any vegetation removal should occur during the nonbreeding season (August 15 to March 15). If construction commences after March 15th, the work area should be surveyed by a qualified biologist to determine if active nests are present. If during the breeding season the construction site is left unattended for more than two weeks, a survey should be completed to determine if breeding birds have moved back into the area and are occupying active nests. If active nests or behavior indicative of nesting birds are encountered, those areas plus a 50-foot buffer area for small songbirds and 200 feet for larger species (e.g., raptors, owls, etc.) should be designated by the biologist and avoided until the nests have been vacated.

**Mitigation Measure BIO-7 (Wildlife):**

A. To avoid impacts on wildlife (e.g., reptiles, amphibians, and mammals) within the immediate work area, a preconstruction survey (on the day preceding work and/or ahead of the construction crew) shall be performed prior to the disturbance of the site and removal of vegetation to ensure no special-status species are occupying the area. If special-status species (e.g., California red-legged frog; northwestern pond turtle) are observed within the work area or immediate surroundings, these areas should be avoided until the animal(s) has (have) vacated the area, and/or the animal(s) should be relocated out of the area by a qualified biologist, upon approval by the regulatory agencies.

B. Temporary wildlife exclusionary fencing (e.g., silt fence, which is a piece of synthetic filter fabric (also called geotextile) shall be installed around work areas during construction. Openings will be restricted to areas of construction site access for workers and equipment. This fencing shall be sized and located to preclude wild animals from entering the work area and prevent construction debris and workers from entering adjacent aquatic habitats.

C. Before any construction begins, a qualified biologist shall conduct a training session for all construction crew personnel. The training should include a discussion of the sensitive biological resources within the project site and the potential presence of special-status species. This should include a discussion of special-status species' habitats, protection measures to ensure species are not impacted by project activities, project boundaries, and biological conditions outlined in the project permits.

D. All staging, maintenance, fueling, and storage of construction equipment shall be conducted in a location and manner that will prevent potential runoff of petroleum products into adjacent aquatic habitats. Oil-absorbent and spill-containment materials shall be on site at all times.

E. All trash that may potentially attract predators (e.g., food) shall be properly stored and removed at
the end of the day. Following construction, all trash and construction debris should be removed.

F. To prevent harassment, injury, or mortality to sensitive species or their habitat, no pets shall be permitted within the work area.

**Mitigation Monitoring:** PRMD staff shall not sign off on plans for issuance of permits unless the above biotic mitigation measures are included as notes on the building and grading plans. Construction shall not commence until the qualified biologist informs PRMD staff that the required fencing and training measures have been completed.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?  

Comment: The project does not include any direct disturbance along a riparian habitat or designated sensitive natural community. The project is located approximately 250 feet from (and uphill from) the spring-fed pond on 100 Wappo Road, approximately 1,500 feet from the main fork of Mark West Creek to the south, approximately 2,000 feet from the North Fork of Mark West Creek to the east, and 800 feet from the un-named tributary to the North Fork. The nearest formally designated BR (Biotic Resource) area on the Sonoma County General Plan is located approximately 165 feet south of the development site, and is based upon serpentine soils that support certain plant communities. See Comment 4a above.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?  

Comment: There is a spring-fed wetland and pond on the property at 100 Wappo Road, approximately 250 feet south and downhill from the winery location. The project does not propose to remove, fill, or alter the pond or wetland, although the winery construction site on the east side of Wappo Road drains toward from the pond. Impacts to potential pond wildlife are discussed in 4a above.

**Mitigation:** See 4a.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?  

Comment: The project parcel is developed with an existing house and fencing structures, although they are several hundred feet southwest of the proposed winery. No fencing is proposed that would obstruct wildlife movement in the vicinity of the winery. The project development does not include any work within a creek. The project does not propose construction or structures that could substantially interfere with the movement of migratory fish or wildlife species, although it may affect habitat, as discussed in Comment 4a above.
e) Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance?

   [ ] [ ] [X] [ ]

**Comment:** The winery site is over 165 feet from any critical habitat area or biotic resource designated in the Sonoma County General Plan and the Zoning Ordinance, and the biotic resource designation is related to plant species adapted to serpentine soils. The original site was previously grubbed in 2005, and the new site exhibits signs of brush clearing and chipping. The RGH geologic report says that the winery site topsoils consist mainly of a "loam that exhibits moderate plasticity." The site is not in a Valley Oak Preservation area. While some large trees would be removed as a result of the project, the County Tree Protection Ordinance does not apply to agricultural operations or wineries. Nevertheless, the applicant is required to either transplant or replace trees, as discussed above at item 4a.

**Mitigation:** See Mitigation Measure 4a BIO 2 above.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state Habitat conservation plan?

   [ ] [ ] [ ] [X]

**Comment:** There are no known regional or state habitat conservation plans for this area. The distance of the development from the biotic resource area as a protection measure is consistent with the Franz Valley Specific Plan and the Sonoma County General Plan.

5. **CULTURAL RESOURCES** Would the project:

<table>
<thead>
<tr>
<th>Potentially Significant Impact</th>
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<th>Less than Significant Impact</th>
<th>No Impact</th>
</tr>
</thead>
</table>

a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?

   [ ] [ ] [ ] [X]

**Comment:** A Cultural Resources Survey was done on the site, and no historical resources were found on the site.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

   [ ] [ ] [ ] [X]

**Comment:** No archaeological resources were found on the project site. The following mitigation ensures that should resources be uncovered, they will be appropriately protected.

**Mitigation Measure 5.b** All building and/or grading permits shall have the following note printed on plan sheets:

"In the event that archaeological features such as pottery, arrowheads, midden or culturally modified soil deposits are discovered at any time during grading, scraping or excavation within the property, all work shall be halted in the vicinity of the find and County PRMD Project Review staff shall be notified and a qualified archaeologist shall be contacted immediately to make an evaluation of the find and report to PRMD. PRMD staff may consult and/or notify the appropriate tribal representative from tribes known to PRMD to have interests in the area. Artifacts associated with prehistoric sites include humanly modified stone, shell, bone or other cultural materials such as charcoal, ash and burned rock indicative of food procurement or processing activities. Prehistoric domestic features include hearths, firepits, or house floor depressions whereas typical mortuary features are represented by human skeletal remains. Historic artifacts potentially include all by-products of human land use greater than..."
50 years of age including trash pits older than fifty years of age. When contacted, a member of PRMD Project Review staff and the archaeologist shall visit the site to determine the extent of the resources and to develop and coordinate proper protection/mitigation measures required for the discovery. PRMD may refer the mitigation/protection plan to designated tribal representatives for review and comment. No work shall commence until a protection/mitigation plan is reviewed and approved by PRMD - Project Review staff. Mitigations may include avoidance, removal, preservation and/or recordation in accordance with California law. Archeological evaluation and mitigation shall be at the applicant's sole expense.

"If human remains are encountered, all work must stop in the immediate vicinity of the discovered remains and PRMD staff, County Coroner and a qualified archaeologist must be notified immediately so that an evaluation can be performed. If the remains are deemed to be Native American, the Native American Heritage Commission must be contacted by the Coroner so that a "Most Likely Descendant" can be designated and the appropriate provisions of the California Government Code and California Public Resources Code will be followed."

**Mitigation Monitoring 5.b:** Building/grading permits shall not be approved for issuance by Project Review staff until the above notes are printed on the building, grading and improvement plans.

**c)** Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? [ ] [x] [ ] [ ]

**Comment:** The project includes digging a cave. Paleontological resources may be found during this excavation, although none were observed during the geotechnical investigation of the site for geologic suitability.

**Mitigation Measure 5.c:** If paleontological artifacts are found during site development, all earthwork in the vicinity of the find shall cease, and PRMD staff shall be notified so that the find can be evaluated by a qualified paleontologist. When contacted, a member of PRMD Project Review staff and the paleontologist shall visit the site to determine the extent of the resources and to develop proper mitigation measures required for the discovery. No earthwork in the vicinity of the find shall commence until a mitigation plan is approved and completed subject to the review and approval of the paleontologist and Project Review staff. This condition shall be noted on all grading and construction plans and provided to all contractors and superintendents on the job site regarding the procedures to follow in the event that artifacts are found including contact information for PRMD.

**Mitigation Monitoring 5.c:** Staff shall check plans for notation of the condition, prior to issuance of grading permits and shall conduct site inspections as necessary during construction. This condition shall be noted on all grading and construction plans and provided to all contractors and superintendents on the job site.

**d)** Disturb any human remains, including those interred outside of formal cemeteries? [ ] [x] [ ] [ ]

**Comment:** There was no evidence that the site contains a burial site.

**Mitigation Measure 5.d:** If human remains are encountered, excavation or disturbance of the location shall be halted immediately in the vicinity of the find, and the County Coroner contacted. If the Coroner determines the remains are Native American, the Coroner will contact the Native American Heritage Commission (NAHC). The NAHC will identify the person or persons believed to be most likely descended from the deceased Native American. The NAHC will then work with the applicant on re-interring the remains. The applicant shall be responsible for all costs incurred in the removal, identification and reburial of the remains. This condition shall be noted on all grading and construction plans and provided to all contractors and superintendents on the job site regarding the procedures to follow in the event that human remains are found including contact information for the County Coroner's Office.

**Mitigation Monitoring 5.d:** Staff shall check plans for notation of the condition, prior to issuance of
grading permits and shall conduct site inspections as necessary during construction.

6. GEOLOGY AND SOILS  Would the project:

   Potentially Significant Impact  Less than Significant with Mitigation Incorporation  Less than Significant Impact  No Impact

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

   i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

   [X]

   Comment: A Preliminary Geotechnical Study Report of the 2007 site west of Wappo Road was prepared by RGH consultants, Inc., dated May 31, 2007, and updated April 22, 2008. As a result of comments at the public hearing and further site investigations, the applicant revised the project description to relocate the septic system away from a potential landslide. RGH prepared an additional report dated September 21, 2009, to address slope stability. The 2009 updated RGH report was reviewed on behalf of the County of Sonoma by Kleinfelder in a letter by William McCormick and Terry Craven prepared October 1, 2009. A second peer review was prepared for the County by the firm of Cotton, Shires and Associates, Inc. That report questioned why the winery building was located on a dormant landslide and suggested relocation to the present location. As a result, the applicant modified the project location and reduced the size of the buildings.

   RGH conducted additional testing in April 2010, including drilling, logging and sampling seven core borings to depths ranging from 39 to 119 feet at the new site. In addition, 11 test pits were excavated. RGH prepared a new report dated June 23, 2010, about the new location. This report was also reviewed for the County by Cotton Shires. The RGH report says:

   "We did not observe landforms at the winery site that would indicate the presence of active faults and the site is not within a current Alquist-Priolo (A-P) Earthquake Fault Zone...since the site is not within a current (A-P) Earthquake Fault Zone, we believe the risk of surface fault rupture at the site is low...The soils at the site were generally stiff to very stiff sandy clays with some gravel. Therefore, we judge the potential for liquefaction at the site is low."

   In terms of slope stability, RGH concludes that the winery site is considered stable under both stable and seismic conditions.

   RGH noted that the ground surface is “soft and spongy in the winter months and dry and hard in the summer months. These soil conditions are generally associated with weak, porous surface soils.” RGH observes that “the detrimental effects can be remediated by strengthening the soils during grading. This can be achieved by excavating the weak soils and replacing them as properly compacted (engineered) fill.”

   Cotton Shires responded:

   "In our opinion, site surface mapping and site subsurface exploration has been completed in a manner consistent with prevailing standards of geotechnical practice. We also concur that the winery site is favorable located on an intact, bedrock supported ridge displaying sign of long term stability. In our opinion, comprehensive quantitative slope stability analyses are not necessary to demonstrate the geotechnical suitability of the currently proposed building sites.

   "We do not have remaining geologic or geotechnical objections to the currently indicated site
development layout or general presented project geotechnical design criteria. However, we do recommend that the applicant and RGH give additional consideration to the pier-supported foundation alternative.

"We conclude that the proposed site improvements utilizing RGH recommended geotechnical engineering design measures appear sufficient to result in an "acceptable level" of risk as defined by Publication 117a. We also conclude that the project would not expose people or structures to fault rupture hazards. Utilization of seismic design parameters presented by RGH should be sufficient to address anticipated ground shaking conditions. We accept and concur with RGH that the potential for liquefaction or seismically-induced ground failure to result in substantial adverse impacts to winery buildings is low. As currently depicted, we also concur that the potential for landslides to result in substantial adverse impacts to the winery buildings, or other indicated site improvements is low.

Project grading could result in soil erosion but utilization of relatively standard erosion control methods (hydro seeding, siltation control, overland drainage control, and other best management practices) should be sufficient to prevent substantial soil erosion or topsoil loss. Because proposed buildings are now sited on stable geologic bedrock materials, adverse impacts from landsliding, liquefaction, lateral spreading, or soil collapse are not anticipated. Given implementation of appropriate erosion control methods, the potential for depicted site improvements to result in adverse off-site geotechnical impacts is low."

Mitigation Measure 6a (Geology): The applicant shall adhere to the recommendations by RGH regarding seismic design, grading, foundation support, retaining walls, slab-on-grade, utility trenches, pavements, geotechnical drainage, and maintenance contained on pages 14 through 26 of the June 23, 2010 report.

Mitigation monitoring: PRMD staff shall not sign off on grading or building permits until the geologic mitigation measures contained in the RGH report are shown on and incorporated into the grading and building plans for the project.

i) Strong seismic ground shaking?  

   Comment: See 6a above.

   Mitigation: See 6a above.

ii) Seismic-related ground failure, including liquefaction?  

   Comment: See 6a above.

   Mitigation: See 6a above.

iv) Landslides?  

   Comment: See 6a above.

   Mitigation: See 6a above.

b) Result in substantial soil erosion or the loss of topsoil?  

   Comment: The proposed winery construction would require grading and could result in a minor loss of topsoil. The RGH report observes that "the natural drainages of the site trend westerly into a deep ravine that trends southwesterly through the northwestern portion of the subject parcel (referred to herein as the North Fork of Mark West Creek). The ravine trends off the parcel and into a second
south-westerly-flowing intermittent blue-line stream that empties into Mark West Creek off the property. Mark West Creek is a perennial blue-line stream that flows westerly adjacent to St. Helena Road.”

The revised 2010 project description estimates approximately 13,515 cubic yards of excavation and approximately 1,289 cubic yards of fill on the project site. The net 6,340 cubic yards of excavated soils would be removed off site to an authorized and permitted recipient. Drainage from roof tops will be directed to two holding tanks for re-use on landscaping during the dry months, thereby reducing the amount of water discharge that could cause erosion. Discharge for downspout points, roadway culverts and ditches and storm drain outfalls will need to be protected against erosion and sloughing by installing energy dissipaters and then piping the collected waters downhill to planned discharge facilities.

In addition to these measures, the mitigations identified in the Biological Resources section will help reduce long term fine sediments from erosion that could adversely affect the fishery habitat.

**Mitigation Measure:** See BIO-1 and BIO-2 IN Section 4.a. above and also 6.a. above

**Mitigation Monitoring:** See BIO-1 and BIO-2 IN Section 4.a. above and also 6.a. above

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? __________ X __________

**Comment:** See 6a above.

**Mitigation:** See 6a above.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? __________ X __________

**Comment:** See 6a above.

**Mitigation:** See 6a above.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? __________ __________ X __________

**Comment:** The domestic wastewater is proposed to be disposed in a new leach field approximately 2,000 feet north of the proposed winery on a knoll at 560 Wappo Road. The applicant’s civil engineer conducted percolation tests at the site of the proposed domestic wastewater leach field pursuant to a PRMD site evaluation permit (SEV08-0223). The test results were reviewed by the environmental health specialist for that area, and the proposed location was approved on June 23, 2009, for eventual construction of a system designed by a registered environmental health specialist or civil engineer. The system would be located in a stand of Douglas fir and oak trees, in much the same environment as the original site, but without landslide potential. The site was reviewed by RGH Consultants, who concluded that it is situated “on a relatively stable ridgetop and outside of landslides and steeply sloping terrain. Our stability analysis indicates that the leachfield site is stable under static and seismic conditions both before and after the leachfield is constructed.”
7. **GREENHOUSE GAS EMISSION** Would the project:  

<table>
<thead>
<tr>
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<th>No Impact</th>
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a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?  

**Comment:** An analysis of greenhouse gas (GHG) associated with the project was prepared by Rimpo and Associates in a report dated July 13, 2010. Rimpo estimates the GHG from construction to be 93.7 metric tons per year of carbon dioxide equivalents (CO2e) in the first year of construction (predicted to be 2010) and 81.1 metric tons in 2011 (or the second year of construction). During the first full year of operation, the winery would generate 209.4 metric tons. With mitigations but excluding vineyard carbon sequestration, the winery would generate 181.9 metric tons of CO2e in 2012. Counting vineyard sequestration, the winery would generate only 9.12 metric tons of CO2e in 2012, according to Rimpo. For purposes of this Initial Study analysis, the existing vineyards are considered by PRMD to be part of the project baseline and not a potential new source of sequestration. Nevertheless, the project would fall below the recently adopted threshold of significance of the Bay Area Air Quality Management District (BAAQMD), in whose jurisdiction this project is located, of 1,100 metric tons per year for land use projects.

Rimpo notes that although the BAAQMD has not adopted a threshold of significance for construction-related GHGs, the estimated construction impacts fall well below the 1,100 metric ton threshold for operation impacts.

b) Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?  

**Comment:** Regarding local efforts on GHG reductions, the Sonoma County Board of Supervisors recently adopted the Sonoma County Climate Protection Campaign which sets a target to reduce GHG emissions to 25% below 1990 levels by the year 2015. This is included as Objective OSRC 14.4 in the Open Space and Resource Conservation Element of GP2020. Policy OS-14g requires development of a program with a methodology to measure the baseline in 1990 and to establish the means to achieve the object.

The County has completed the first two of five steps in the campaign. The next step is to complete the Community Climate Action Plan (the blueprint to help Sonoma County achieve this emissions target) and then implement the actions in the Plan and develop an on-going monitoring process to ensure that the County meets its reduction target.

On November 4, 2008 the Sonoma County Board of Supervisors adopted a resolution selecting the Build it Green (BIG) New Home Construction, Home Remodeling and Multifamily Green Building Guidelines for Residential Construction, and Leadership in Energy and Environmental Design (LEED®) Commercial Green Building System for Commercial Construction guidelines, along with their respective Green Points Checklists, set compliance thresholds, and directed staff to develop a green building ordinance based on these guidelines.

The Climate Protection Campaign has provided a list of projects that are effective and under local control that will reduce Greenhouse Gases if they are implemented. The Plan's solutions involve four major categories: 1. Improve efficiency in energy and water use; 2. Shift transportation from fossil fuel vehicles to transit, walking, bicycling, etc.; 3. Invest in local renewable energy sources; and 4. Protect forests and farmlands, sequester carbon, and convert waste into energy.

Project mitigation measures described by Rimpo include solar voltaic panels, carbon sequestration from new tree planting, and emission reductions from two California Air Resources Board (ARB) rules.
The winery will include solar panels that will supply 30 percent of total electricity demand. Not discussed in Rimco report, there should also be reduced impacts to GHG because of re-use of rainwater from the buildings' roofs that will be retained in two 70,000 gallon tanks to irrigate the landscaping. This reduces the need to pump groundwater and the electricity required to run the pump.

**Mitigation Measure 7.b (GHG):** To further reduce greenhouse gas emissions, the applicant shall: include roof-mounted solar panels in the project that will reduce estimated electricity usage by 30 percent; planting 42 or more new hardwood trees and 16 or more new conifers to replace the loss of 17 hardwoods and three conifers, as well as additional landscaping in the area down slope of the original winery site at 245 Wapio (the area of the dormant landslide). In addition, the applicant shall undertake the mitigation in BIO-2 to restore grubbed oak woodland and chaparral, which will increase oxygen production and carbon sequestration.

**Mitigation Monitoring:** The applicant shall include the location of the 42 or more hardwood trees and the 16 or more new conifers on the landscaping plan to be included with the building permits for the project buildings. PRMD staff shall not approve the building permits for issuance unless the trees, and the irrigation system to maintain them in their early years, are shown on the plans. Construction drawings for the winery buildings shall include details that show the location of the solar panels and the calculations of energy usage. PRMD staff shall not approve the building permits for issuance unless the plans show the requisite solar energy system. The buildings shall not be cleared for final occupancy until the staff planner verifies in the field that the trees have been planted and the solar energy system is installed.

8. **HAZARDS AND HAZARDOUS MATERIALS**

Would the project:  

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a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?  

**Comment:** The processing and fermentation of the grapes to wine includes the use and maintenance of machinery and equipment that require the transport, use, and disposal of hazardous materials (e.g. oils, diesel, solvents, lubricates, etc.) The vineyard was approved and installed several years ago, but pesticides and herbicides are still used and stored on the project site. The Sonoma County Agricultural Commissioners Office regulates the storage and use of herbicides and pesticides by requiring an annual issuance of a Pesticide I.D. and classes be taken by person applying such hazardous materials for agricultural uses such as the vineyard operation. A referral describing the project was sent to the Department of Emergency Services which required that the project comply with Fire Safe Standards for commercial development. The project itself (the winery) does not produce or generate hazardous materials. A referral describing the project was also sent to the Environmental Health Specialist-Project Review which required compliance with hazardous waste generator laws and submittal of copies of appropriate permits.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?  

**Comment:** The use of any hazardous materials by the winery and vineyard will not be of sufficient volatility or quantity to cause a hazard to the public. These materials are commonly used in the wine industry and will be handled according to existing regulations and codes.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials,
substances, or waste within one-quarter mile of an existing or proposed school?  

**Comment:** The subject property is not within a one-quarter mile of an existing or proposed school.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?  

**Comment:** The site is not identified as a hazardous materials sites under Government Code Section 65962.5.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?  

**Comment:** The project is not in close proximity to an airport.

f) For a project located within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?  

**Comment:** The project is not located within the vicinity of a known private airstrip.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?  

**Comment:** There will be no impacts on emergency responses or evacuation plans as a result of the project.

h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?  

**Comment:** According to the Safety Element of the General Plan, the project site is located in an area with very high or high potential for large wildland fires. The site is located east of a knoll where substantial brush clearing has occurred that provides a significant buffer around the proposed facility. The project must conform to Fire Safe Standard requirements for commercial uses related to fire sprinklers, emergency vehicle access, and water supply. These standard provisions reduce the potential exposure to people or structures to a less than significant impact.

9. **HYDROLOGY AND WATER QUALITY**

**Would the project:**

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a) Violate any water quality standards or waste discharge requirements?  

**Comment:**
Comment: The proposed facility would generate wastewater from crushing, fermenting, bottling, and barrel washing. Wastewater is proposed to be irrigated into the vineyard. A referral describing the project was sent to the North Coast Regional Water Quality Control Board and the Project Review Environmental Health Specialist, which set conditions for the project's domestic and industrial wastewater disposal requirements. To ensure the project would not violate water quality standards or waste discharge requirements the applicant is required to submit a letter of acceptance of wastewater discharge requirements from the North Coast Regional Water Quality Control Board prior to obtaining building permits for any new construction. The Permit and Resource Management Department will not issue any permits until the Project Review Health Specialist has received a letter of acceptance of an application for wastewater discharge requirement from the North Coast Regional Water Quality Control Board.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted? ___ ___ X ___ ___

Comment: A Geologic Report addressing groundwater availability was prepared by Todd Engineers, dated August 2006, along with subsequent update and clarification letters dated April 27, 2007, and June 12, 2007. According to the original report, "Cornell Farms plans to pump approximately between 3.82 and 3.98 acre feet per year (AFY; equivalent to about 2.5 gallons per minute [gpm] year-round) for groundwater from the two existing water supply wells. This usage includes irrigation for the 20-acre vineyard (2.28 gpm or 3.69 AFY) and for crushing and bottling operations, and light industrial requirements (0.18 gpm or 0.29 AFY)." (Note: The vineyards are part of the project baseline and are NOT a part of this discretionary application. "Project" water usage does not include the 3.69 AFY for the vineyard.) In the April 27, 2007, supplement, Todd concludes:

"There will be no direct and short-term hydraulic impacts to Mark West Creek or its tributaries due to project groundwater pumping. The area of influence of the pumping well could be a radial distance that ranges between 102 and 505 feet from the well after 18 hours of pumping.... The distance between the well and Mark West Creek and its tributaries is greater than 500 feet. Groundwater pumped for the project is derived ultimately from precipitation on the local watershed and percolation of that water through the unsaturated zone to the water table through the pores and fractures of the underlying rock. Groundwater pumped for the project is not derived from surface water of Mark West Creek or its tributaries.

"However, we recognize that long-term and cumulative indirect impacts to Mark West Creek and its tributaries may occur from project groundwater pumpage to surface water courses over tens of decades. This long-term impact results from removing groundwater from the aquifer that would ordinarily and eventually support the base flows of Mark West Creek and its tributaries. The project requires about 4 acre feet per year of water and return flows to the aquifer are about 2 AFY; therefore, the net usage or a loss of base flow contribution is about 2 AFY. Considering that Mark West Creek has an average annual flow of 42,671 AFY and a dry year flow of 17,600 AFY....the net loss of 2 AFY is insignificant."

Todd's June 12, 2007, letter further states: "... the Cornell Farms LLC project will have no significant direct or indirect short- or long-term or cumulative hydrologic or hydraulic impact to groundwater or surface water resources in the Mark West Creek watershed." This conclusion was based upon the assumption that the project included the vineyard, which is does not. Therefore, the impact is even less than that calculated above.

These Todd Engineer reports were reviewed by the County's peer reviewer, Kleinfelder, who, in a letter March 5, 2008, stated: "We believe Todd makes a clear and concise description of the relationship between potential groundwater, groundwater conditions and withdrawals, and their interaction with the
Mark West Creek. Their approaches are sound within what would be considered acceptable practice and standard of care....Our opinion is that the approach, description, calculations, and arguments in the reply Todd makes are well founded. They present a logical argument that the potential quantity of cumulative groundwater usage is a small percentage of the Mark West Creek contribution is a reasonable statement."

In response to these comments and the 2008 Mitigated Negative Declaration for the UPE07-0008 project, Christopher Bonds, Senior Engineering Geologist for the California Department of Water Resources responded in a letter dated December 3, 2008. His letter contains the following comments about the Mitigated Negative Declaration and associated technical reports:

"Based on my review of the MND and associated reports, and my technical experience in fractured rock hydrogeology, it is my opinion that the MND and associated documents do not adequately characterize the fractured bedrock aquifer underlying the proposed project and, therefore, no definitive statements regarding the potential project induced impacts to water resources can be made....The short-term airlift well test data used to evaluate the water supply for this project is not sufficient to accurately evaluate the long-term production rate of the project wells or the drawdown effects in neighboring wells or surface water features located in the vicinity of the proposed project."

He goes on to say that "Evaluation of groundwater resources in fractured bedrock is problematic due to the inherent difficulty in characterization of subsurface aquifer heterogeneity, fracture connectivity, and storativity." Thus, he recommends more in-depth aquifer testing of the project wells in order to more accurately estimate well yields and possible water level impacts to area wells and surface water features. He also recommends continued groundwater monitoring by PRMD in accord with PRMD Policy and Procedure 8-1-3.

Staff of the Regional Water Quality Control Board also expressed concern about water usage in their November 2008 letter, which states:

"It became evident from public comment during the public hearing that the cumulative impacts of land use changes within the upper Mark West Creek watershed are significantly impacting water quality and beneficial uses of water within this watershed. This reflects the potential need for a full environmental assessment, including an assessment of cumulative impacts, of the Mark West Creek watershed to determine how water quality and all beneficial uses of water are affected, prior to approval of new developments in this area...."

"While the Regional Water Board realizes that solution may come out of an environmental assessment, solutions to existing water quantity issues can be employed by all landowners at this time. By carefully monitoring water usage, looking for additional opportunities for storage and using water saving principles, the existing situation will improve. The Board of Zoning Adjustments is aware of the fact that water is being trucked from late spring through early fall to one large landowner in the upper reaches of the water shed....Balancing beneficial uses within this upper watershed may be accomplished by reducing water use during critically dry years by a policy of cessation of groundwater pumping at specified dates, providing for additional onsite water storage during periods of high winter flows, and creating overstory again by planting trees to provide canopy and help reduce soil erosion and infiltrate stormwater runoff. Balancing domestic and agricultural water usage while maintaining sufficient flows to sustain viable fish populations is the goal and will require community based solutions."

As noted in the introduction to this review, the applicant has modified the project in two respects: offering of a conservation easement and inclusion of two 70,000 gallon water tanks to capture rain during the wet season for re-use during the dry season.

The Cornell parcels with 25-acres (in 2009) of irrigated vineyard are served by two wells adjacent to the Cornell residence located at 420 Wappo Road. These wells are approximately 2,700 feet north of Mark West Creek and the well heads are located at an elevation approximately 382 feet above the level of the creek. The house at 100 Wappo Road is located less than 20 feet from the top of the bank.
of Mark West Creek, and the well that serves the property is located on the parcel approximately 650 feet north of the house, near a spring that feeds a pond on the property. The leach field for the house is located just north of the house, within 100 feet of the creek.

Water use for the winery that is the subject of this application was estimated at approximately 0.29 Acre Feet per Year (AFY) by Todd Engineers in their study of groundwater impacts from the project. A more project-specific figure of 0.42 AFY was developed by project civil engineer Tom Atterbury of Atterbury and Associates, as set forth in his letter dated September 14, 2009 and subsequent report dated June 3, 2010. His figures are developed in relation to the size of the wastewater system. Mr. Atterbury calculates the winery’s domestic use for employees, tasting room guests, and dinner guests at 39,550 gallons per year and the winery’s production water use at 96,000 gallons per year, using PRMD methodology for sizing wastewater systems. The total use equates to 135,550 gallons per year or 0.42 AFY. Water usage varies monthly, and Atterbury has characterized the monthly usage in his 2010 analysis of water use.

The June 2010 Atterbury analysis shows that with the additional water storage, no pumping will be required during the months of August, September, or October - the typical dry season for rain when vineyard irrigation may be required, and when a neighboring winery has been importing water by truck.

The property acquired by Cornell at 100 Wappo Road is 15 acres in size (of which two to four acres might be suitable for vineyard development) and has a three-bedroom house that is currently occupied (August 2010). Water use for a three-bedroom house is approximately 150 gallons per day per bedroom, or 450 gallons per day, or 164,250 gallons per year, or approximately 0.5 acre feet per year. This does not count water used for landscape irrigation, so the 0.5 AFY figure is conservative considering the 15-acre size of the parcel. Removing the house and the septic system also remove any potential for sub-surface leachate contaminating the creek, an environmental benefit.

The Conservation Easement as proposed goes further than just household use. It would remove the entire 15 acres from potential vineyard development, thus potentially conserving many more acre feet of water in close proximity to the creek (as well as avoiding the potential erosion issues related to vineyard development.)

So, removing of the house’s water use from the watershed would immediately and fully offset impacts of the projected winery water use on the Mark West Creek watershed. Given the offer of the Conservation Easement by Mr. Cornell, staff did not feel that additional studies were required on the complex hydro-geological relationships of the Cornell wells with those of the neighboring vineyards and Mark West Creek. As Mr. Bond from DWR noted, “Evaluation of groundwater resources in fractured bedrock is problematic due to the inherent difficulty in characterization of subsurface aquifer heterogeneity, fracture connectivity, and storativity.” In a subsequent December 21, 2009, communication, he concludes:

"...Based on my site visit, the conservation easement or deed restriction proposed in the revised MND, implementation of the PRMD’s Additional Conditions of Approval, and the water monitoring/conservation measures currently in use at the Cornell vineyards, I now believe this is a reasonable proposal with respect to winery water use. The latest proposal with additional conditions more than fully offsets the proposed winery’s water use and therefore, is worthy of further consideration by the Sonoma County Board of Zoning Adjustments. I also believe it would be beneficial for the applicant to incorporate some form of rainwater harvesting system into the design of the proposed winery. All of the above mentioned conditions, measures, and my suggestion, taken individually or as a whole, should provide measurable long-term benefits to the Mark West Creek Watershed.”

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site? __ __ __ X __

Comment: Construction of the project will not substantially alter the existing drainage pattern on the
site. The project is located on a knoll and avoids the drainage courses. However, the modified location will shift the run-off from the site. Instead of draining by gravity to the west and the un-named tributary of the North Fork of Mark West Creek, water would instead tend to flow off the knoll on to Wappo Road itself or into the gully that flows into the pond on the adjacent parcel (100 Wappo). Mitigations for impacts to biological resources include dust and erosion control measures. See 4.a. above. In addition, standard measures for erosion control and management of the storm water runoff will reduce the level of impact to a less than significant level. Drainage review improvements are required to be designed by a geotechnical or civil engineer in accordance with the Water Agency Flood Control Design Criteria for approval and must/are to be shown on the improvement drawings. The developer's engineer has included a site preliminary grading plan and an erosion control plan, dated May 14, 2010. The Grading and Storm Water Section of the Permit and Resource Management Department reviewed the preliminary grading plan and determined that the project appears feasible. Final issuance of a grading or building permit cannot occur until evidence is submitted and approved by the Grading and Storm Water Section of PRMD verifies that the improvements have been designed by a civil engineer in accordance with the Water Agency Flood Control Design Criteria for approval and are shown on the improvement drawings.

Drainage impacts will also be reduced because roof-top rain runoff will be collected in two 70,000 gallon tanks for re-use on landscaping during the dry season.

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? ___ ___ X ___

Comment: See 9d above.

e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? ___ ___ X ___

Comment: See 9d above.

f) Otherwise substantially degrade water quality? ___ ___ X ___

Comment: Refer to 9.a. and 9.c. above. The project development requires permits to be approved by the North Coast Regional Water Quality Control Board and the Well and Septic Section of PRMD for all wastewater disposal. Compliance with State and County Standards will insure that potential impacts to water quality will be avoided.

g) Place housing within a 100-year hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? ___ ___ ___ X ___

Comment: No housing is proposed in this project. Rather, removal of housing is proposed.

h) Place within a 100-year flood hazard area structures which would impede or redirect
flood flows?  X

**Comment:** See 9.g above.

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?  X

**Comment:** The winery site is not in a flood area, nor is it downstream from any water body that could empty towards it.

j) Inundation by seiche, tsunami, or mudflow?  X

**Comment:** The winery site is not in a flood area, nor is it downstream from any water body that could empty towards it.

10. **LAND USE AND PLANNING** Would the project:

a) Physically divide an established community?  X

**Comment:** The project is located within an established rural vineyard area. The project would not alter the parcel’s ownership, nor reconfigure existing parcels or roadways. Therefore, the project would not physically divide an established community.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?  X

**Comment:** The request for a winery complies with the Resource and Rural Development General Plan designation and other goals and policies of the County’s General Plan and conforms with the RRD zoning. Agricultural Processing is defined as, "Facilities for the processing of any agricultural product grown or produced primarily on site or in the local area, storage of agricultural products grown or processed on site, and bottling or canning of any agricultural product grown or processed on site." The applicant has stated that grapes grown on-site will be used to make wine. The proposal is also consistent with the General Plan’s Agricultural Element Goals, Objectives and Policies which include the following:

**Goal AR 5:** "Facilitate agricultural production by allowing certain agricultural support services to be conveniently and accessibly located in agricultural production areas when related to the primary agricultural activity in the area."

The location is related to and serves primarily the agricultural activity of vineyards and the adjacent site is planted in vines.

The following Goals, Objectives and Policies of the Sonoma County General Plan apply to other issues of this project, namely geology, hydrology, and safety:
Goal LU-7: Prevent unnecessary exposure of people and property to environmental risks and hazards. Limit development on lands that are especially vulnerable or sensitive to environmental damage.

Objective LU-7.1: Restrict development in areas which are constrained by the natural limitations of the land, including by not limited to, flood, fire, geologic hazards, groundwater availability, and septic suitability.

RC-2b: Include erosion control measures for any discretionary project involving construction or grading near waterways or on lands with slopes over 10 percent.

RC-2d: Require a soil conservation program to reduce soil erosion impacts for discretionary projects which could increase waterway or hillside erosion. Design improvements such as roads and driveways to retain natural vegetation and topography to the extent feasible.

Objective RC-8.1: Identify sources of sediment and erosion and minimize their impact on local water courses.

RC-8c: Design public and private projects to minimize damage to the stream environment and to maintain instream flows.

Goal PS-1: Prevent unnecessary exposure of people and property to risks of damage or injury from earthquakes, landslides and other geologic hazards.

Objective PS-1.2: Regulate new development to reduce the risks of damage and injury from known geologic hazards to acceptable levels.

PS-1f: Require and review geologic reports prior to decisions on any project which would subject property or persons to significant risks from the geologic hazards shown on Figures PS-1a through PS-1i (pages 257 through 273) and related file maps and source documents. Geologic reports shall describe the hazards and include mitigation measures to reduce risks to acceptable levels. Where appropriate, require an engineer’s or geologist’s certification that risks have been mitigated to an acceptable level and, if indicated, obtain indemnification or insurance from the engineer, geologist, or developer to minimize County exposure to liability.

Comment: The issues covered by these policies and objectives are addressed elsewhere in this Initial Study in sections relating to Geology and Hydrology and Water Quality. A geotechnical report and a hydrogeological analysis were submitted and reviewed by consulting geologists retained by the County. The following measure addresses the implementation of said reports.

Mitigation Measure: See Mitigation Measures in 6.a above.

Mitigation Monitoring: See Mitigation Measures 6.a above.

Goal PS-3.1: Prevent unnecessary exposure of people and property and property to risks of damage or injury from wildland and structural fires.

Objective PS3.2: Regulate new development to reduce the risks of damage and injury from known fire hazards to acceptable levels.

PS-3b: Consider the severity of natural fire hazards, potential damage from wildland and structural fires, adequacy of fire protection and mitigation measures consistent with this element in the review of projects.

PS-3d: Require on-site detection and suppression, including automatic sprinkler systems, where available services do not provide acceptable levels of protection.
**Comment:** The site is located on a knoll where substantial brush clearing occurred in 2005, providing a significant fire safe buffer around a portion of the proposed facility. The project must conform to Fire Safe Standard requirements for commercial uses related to fire sprinklers, emergency vehicle access, and water supply. These provisions reduce the potential exposure to people or structures to a less than significant level. No mitigation is required.

**Policy OSRC-11e:** Retain natural vegetation and topography to the extent economically feasible for any discretionary project improvements near waterways or in areas with a high risk of erosion as noted in the Sonoma County Soil Survey.

**Comment:** Retention and restoration of vegetation are discussed above in the section on Biological Resources.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan? ___ ___ X ___

**Comment:** The project site is not within the Valley Oak Habitat Combining District. The project is not located within any other habitat conservation plan or natural community conservation plan area.

11. **MINERAL RESOURCES** Would the project: Potentially Less than Less than No Significant Significant Impact Impact with Impact Mitigation Incorporation

   a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? ___ ___ ___ X

   **Comment:** The project will not result in the loss of a known mineral resource.

b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? ___ ___ ___ X

   **Comment:** The Sonoma County General Plan does not designate the project site as within a known mineral resource deposit area.

12. **NOISE** Would the project result in: Potentially Less than Less than No Significant Significant Impact Impact with Impact Mitigation Incorporation

   a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? ___ ___ X ___
Comment: The Sonoma County Noise Element of the General Plan establishes objectives, policies and performance standards for noise producing land uses that may affect noise sensitive land uses and vice versa. Wineries are recognized as a source of community noise because they are typically located in quiet rural areas. Exterior noise primarily occurs during the crush season and is usually less than 60 dBA at distances greater than 300 feet. The Project Review Health Specialist reviewed the project and determined that no noise study was necessary based on the distance to the off-site nearest residence, which is approximately 1,100 feet from the proposed construction of the winery.

b) Exposure of persons to or generation of excessive groundborne vibration or ground borne noise levels?  

Comment: Construction of the new building and cave may generate ground borne vibration and noise. These levels would not be excessive or significant as they would be limited to the construction period and would occur during normal business hours. In addition, the project site is more than 1,100 feet away from the nearest off site residences. Otherwise there are no other activities or uses associated with the project that would expose persons to or generate any excessive ground borne vibration or ground borne noise levels.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?  

Comment: See 12 a.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?  

Comment: See 12 a.

e) For a project located within an airport land use plan or, where such plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?  

Comment: The project site is not within an adopted airport land use plan.

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?  

Comment: The project is not located within the vicinity of a known private airstrip.

13. POPULATION AND HOUSING Would the project:  

Potentially Less than Less than No
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a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Comment: The project would not directly or indirectly induce substantial population growth in the area because it would not add to local housing and would not provide infrastructure needed to support the development of new housing.

b) Displace substantial numbers of existing housing necessitating the construction of replacement housing elsewhere?

Comment: The project would not displace "substantial numbers" of existing housing but it would remove one house to offset the water demand of the project.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

Comment: See Comment 13.b

14. PUBLIC SERVICES

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

- Fire protection?
  - No
  - No
  - Yes

- Police protection?
  - No
  - No
  - Yes

- Schools?
  - No
  - No
  - Yes

- Parks?
  - No
  - No
  - Yes

- Other public facilities?
  - No
  - No
  - Yes
15. **RECREATION** Would the project: 

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a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? _ _ _ _ X _

**Comment:** The proposed project is considered agricultural processing and is not a residential or recreational use. It would not cause an increase in the use of parks in the area. Although Bothe-Napa State Park abuts the northern boundary of the Cornell holdings, the park entrance is not located on St. Helena Road and is a considerable distance from the proposed winery with access from Napa County and Highway 29.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? _ _ _ _ X

**Comment:** The project does not include recreational facilities.

16. **TRANSPORTATION/TRAFFIC** Would the project: 

<table>
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a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? _ _ _ _ X

**Comment:** Three transportation-related plans have been adopted in Sonoma County: the GP2020
Circulation Element, the Sonoma County Transportation Authority Comprehensive Transportation Plan (2009), and the Sonoma County Bikeways Plan. The project is located in a remote part of the county that is not served by public or mass transit. St. Helena Road has less than 1,000 trips per day. The county does not have a plan, ordinance, or policy that measures the effectiveness of the performance of the circulation system in remote rural areas such as those where the current project is located. The SCTA plans and GP2020 policies are oriented toward urban and suburban development and creating a system that encourages transit oriented development while maintaining adequate road capacity for anticipated vehicle usage. The SCTA Comprehensive Transportation Plan does contain a policy affirming the County's GHG goals (discussed above) and includes a Class III bikeway along 6.47 miles of St. Helena Road, a "low" priority funding project. The project would not conflict with the adopted plans and acknowledges the GHG goals.

b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways? ___ ___ X

Comment: See 16a.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? ___ ___ X

Comment: No. See 16a.

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? ___ ___ X

Comment: The Sonoma County Department of Transportation and Public Works has reviewed the project and determined that its construction will not increase hazards. The project does not propose any changes to the existing road network.

e) Result in inadequate emergency access? ___ ___ X

Comment: With the review by Dept. of Emergency Services personnel on new construction for compliance with Fire Safe Standards, the project will not result in inadequate emergency access.

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities? ___ ___ X

Comment: No. See 16a.
g) Result in inadequate parking capacity?  ____  ____  X  ____

**Comment:** The project provides eight designated parking places. Only 15 guests are allowed at one time, and the eight onsite parking places should be sufficient to handle guests and the staff to serve them in combination with additional pad space and driveways. Sufficient parking exists on the property to accommodate guests and to avoid any impacts onsite, i.e. the need to park on public streets.

17. **UTILITIES AND SERVICE SYSTEMS**

Would the project: 

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<th>Less than Significant Impact</th>
<th>Significant Impact</th>
<th>Mitigation</th>
<th>Incorporation</th>
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a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?  ____  ____  X  ____

**Comment:** The wastewater disposal system must be reviewed and approved (or the need for a permit waived due to the small size of the proposed facility) by the North Coast Regional Water Quality Control Board (NCRWQCB). Through this review and the Well and Septic Section of PRMD permitting process, the project must be designed not to exceed wastewater treatment requirements.

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?  ____  ____  X  ____

**Comment:** See response to 17.a. above in this initial study. The proposed project is not served by public sewer and all process wastewater will be treated onsite and disposed in a sub-surface septic system and irrigated on the vines. Permits are required by the NCRWQCB and clearance by the Well and Septic Section of PRMD prior to issuance of building permits.

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?  ____  ____  X  ____

**Comment:** The project will not require the expansion of any public storm water system or cause significant environmental effects. Drainage improvements will be required, but will be onsite improvements designed to avoid significant environmental effects from sedimentation of nearby creeks. Conditions will require that any drainage improvements be designed by a civil engineer in accordance with the Water Agency Flood Control Design Criteria for approval by the Director of the Permit and Resource Management and be shown on the improvement drawings.
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?  

Comment: The Groundwater Availability Report prepared by Todd Engineers states, “due to the presence of successful existing wells on the property, which have been used to irrigate the vineyards without reported problems, and our groundwater modeling results, we anticipate the availability of water for the planned increase in winery production is good and should not significantly impact groundwater availability on adjacent residential parcels.” There is no indication that there would be insufficient water to serve the project, and no new entitlements are required. As noted in the discussion of hydrology in Section 9 above, the project involves giving up certain water rights to offset that used by the winery, and the project includes a rainwater detention system to avoid peak dry season well pumping.

e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments?  

Comment: The project is not served by a wastewater treatment provider. Any expansion to the existing system must be permitted through the Well and Septic Section of PRMD and the NCRWQCB.

f) Be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?  

Comment: Sonoma County has a solid waste management program that provides solid waste collection and disposal services for the entire County. The program can accommodate the permitted collection and disposal of the waste that would result from the proposed project. Grape pomace from the processing of the grapes into wine will be composted and tilled into the vineyard.

g) Comply with federal, state, and local statutes and regulations related to solid waste?  

Comment: A referral describing the project was sent to the Project Review-Health Specialist, who required as a condition of approval that prior to issuance of any related building permit, the applicant shall submit a design for trash enclosures for review and approval to PRMD-Building as a part of the building permit process. This will ensure the winery facility complies with local regulations for solid waste.
18. MANDATORY FINDINGS OF SIGNIFICANCE

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?  

Comment: The project site is developed with existing structures, an adjacent vineyard, and fencing. The project development does not include any work within a creek. The project would not substantially interfere with the movement of migratory fish or wildlife species. While the project site has some habitat for sensitive species that could be affected by the project, mitigation measures are included to avoid or reduce impacts to the species. Potential impacts from erosion of site sediment into a tributary of Mark West Creek is a concern relative to fish habitat, particularly salmonids. Mitigation measures to reduce erosion and siltation are included in the project to reduce impacts to less than significant.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?  

Comment: Cumulative projects include the past removal of timber, planting of grapes, and construction of structures and other improvements on the site, as well as development of residential, agricultural, and winery uses in the project area. These projects have not resulted in any significant effects to which the project would make a cumulatively considerable contribution. All project impacts would be mitigated to a Less than Significant level on both a project and cumulative level. In particular, the Groundwater Study demonstrates that cumulative impacts would be less than significant, and the applicant has agreed to measures to completely offset his water use in the watershed, and to avoid pumping water for the winery during August, September, or October. Traffic mitigation fees are required to be paid to assist with the overall County roadways maintenance costs. Nevertheless, potential cumulative impacts from erosion of site sediment into a tributary of Mark West Creek is a concern relative to fish habitat, particularly salmonids. Mitigation measures to reduce erosion and siltation are included in the project to reduce impacts to less than significant.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?
Comment: The project would result in only minimal changes to the existing environment. All impacts will be mitigated to less than significant. Mitigation Measure 1.d.1 requires that all new exterior lights be shielded, which would ensure that the project would not intensify any environment effect to the detriment of residents or employees in the area. Geologic issues are mitigated through the implementation of the Geologic Study and the required Geotechnical Study. Biotic issues are mitigated through implementation of recommendations in the Biological Resources Assessment.