

A Tradition of Stewardship A Commitment to Service

file №	
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Napa County

Conservation, Development, and Planning Department

1195 Third Street, Suite 210, Napa, California, 94559 phone (707) 253-4417 web www.countyofnapa.org/cdp/ email cdp@countyofnapa.org

U	se Permit Ap	plication	0.000			
То	be completed by Pla	anning staff				
Application Type:						
Date Submitted: Resubmittal(s)	:		Date	e Complete:		
Request:				REC	EWEL	
				JUN	0 5 2014	
				Napa County	Planning,Buildi nentalServices	ng
*Application Fee Deposit: \$ Receipt No)	Received by: _				
	To be completed by				d on actual time and	
Project Name: Hudson Vineyard Winery						
Assessor's Parcel №: <u>047-070-016</u>		Existir	ig Parcel	Size: <u>+/-166</u>	5.8	ac.
Site Address/Location: 5398 Carneros Highwa	√	Na	pa	CA State	94513 Zip	
		epresentative (attorne			g planner, etc.)	
Property Owner: Hudson Vineyards, LLC					94513	
Mailing Address: $\underline{5398}$ Carneros Highway Telephone Nº($\underline{707}$) 255 - 1455 E-Mail: \underline{k}				State	Zip	
Applicant (if other than property owner):						
Mailing Address:Street			ity	State	Zip	
Telephone Nº()E-Mail:						
Representative (if applicable): George H Monteve	di, Monteverd	li Consulting, LL	<u>C</u>			
Mailing Address: PO Box 6079		N	lapa Lity	CA State	94581 zip	
110.	eorge@Monte	everdiConsulting.	com			

Use Permit Information Sheet				
Use				
Narrative description of the proposed use (please attach additional sheets as necessary):				
What, if any, additional licenses or approvals will be required to allow the	e use?			
District	Regional			
State	Federal			
Improvements				
Narrative description of the proposed on-site and off-site improvements	(please attach additional sheets as necessary):			

Improvements, cont.					
Total on-site parking spaces:	existing	proposed			
Loading areas:	existing	proposed			
Fire Resistivity (check one; if not checked, Fire Marshal will assume Type V – non rated): Type I FR Type II 1 Hr Type II N (non-rated) Type III 1 Hr Type III N Type IV H.T. (Heavy Timber) Type V 1 Hr. Type V (non-rated) (for reference, please see the latest version of the California Building Code)					
Is the project located in an Urban/Wildland Interface	ce area? Yes No				
Total land area to be disturbed by project (include	structures, roads, septic areas, landscaping, etc)	: acres			
Employment and Hours of Opera	ation				
Days of operation:	existing	proposed			
Hours of operation:	existing	proposed			
Anticipated number of employee shifts:	existing	proposed			
Anticipated shift hours:	existing	proposed			
	greater (specify number)				
Alternately, you may identify a specific number of c	nr-site employees.				

other (specify number)

Certification and Indemnification

Applicant certifies that all the information contained in this application, including all information required in the Checklist of Required Application Materials and any supplemental submitted information including, but not limited to, the information sheet, water supply/waste disposal information sheet, site plan, floor plan, building elevations, water supply/waste disposal system site plan and toxic materials list, is complete and accurate to the best of his/her knowledge. Applicant and property owner hereby authorize such investigations including access to County Assessor's Records as are deemed necessary by the County Planning Division for preparation of reports related to this application, *including the right of access to the property involved*.

Pursuant to Chapter 1.30 of the Napa County Code, as part of the application for a discretionary land use project approval for the project identified below, Applicant agrees to defend, indemnify, release and hold harmless Napa County, its agents, officers, attorneys, employees, departments, boards and commissions (hereafter collectively "County") from any claim, action or proceeding (hereafter collectively "proceeding") brought against County, the purpose of which is to attack, set aside, void or annul the discretionary project approval of the County, or an action relating to this project required by any such proceeding to be taken to comply with the California Environmental Quality Act by County, or both. This indemnification shall include, but not be limited to damages awarded against the County, if any, and cost of suit, attorneys' fees, and other liabilities and expenses incurred in connection with such proceeding that relate to this discretionary approval or an action related to this project taken to comply with CEQA whether incurred by the Applicant, the County, and/or the parties initiating or bringing such proceeding. Applicant further agrees to indemnify the County for all of County's costs, attorneys' fees, and damages, which the County incurs in enforcing this indemnification agreement.

Applicant further agrees, as a condition of project approval, to defend, indemnify and hold harmless the County for all costs incurred in additional investigation of or study of, or for supplementing, redrafting, revising, or amending any document (such as an EIR, negative declaration, specific plan, or general plan amendment) if made necessary by said proceeding and if the Applicant desires to pursue securing approvals which are conditioned on the approval of such documents.

In the event any such proceeding is brought, County shall promptly notify the Applicant of the proceeding, and County shall cooperate fully in the defense. If County fails to promptly notify the Applicant of the proceeding, or if County fails to cooperate fully in the defense, the Applicant shall not thereafter be responsible to defend, indemnify, or hold harmless the County. The County shall retain the right to participate in the defense of the proceeding if it bears its own attorneys' fees and costs, and defends the action in good faith. The Applicant shall not be required to pay or perform any settlement unless the settlement is approved by the Applicant.

Lee Hudson			
Print Name of Property Owner		Print Name Signature of Applicant (if different)	
12thus	6.5.14		
Signature of Property Owner	Date	Signature of Applicant	Date

Supplemental Application for Winery Uses

Operations

Please indicate whether the activity or uses below are alread application, whether they are NEWLY PROPOSED as part of			· · ·	
Retail Wine Sales	Existing	Expanded	Newly Proposed	None
Tours and Tasting- Open to the Public	Existing			
Tours and Tasting- By Appointment	Existing	Expanded	Newly Proposed	None
Food at Tours and Tastings	Existing	Expanded	Newly Proposed	None
Marketing Events*	Existing	Expanded	Newly Proposed	None
Food at Marketing Events	Existing	Expanded	Newly Proposed	None
Will food be preparedBoth, depending on e	vent 🔲	On-Site? X_X Cat	ered?	
Public display of art or wine-related items	Existing	Expanded	Newly Proposed	None
* For reference please see definition of "Marketing," at No	ıpa County Code §	§18.08.370 - <u>http://libr</u>	rary.municode.com/index.as	spx?clientId=16513
Production Capacity * Please identify the winery's				
Existing production capacity:	gal/y Per peri	mit №:	Permit date	e:
Current maximum actual production:		gal/y For what yea	r?	
Proposed production capacity:	gal/	/ y		
* For this section, please see "Winery Production Process,	" at page 11.			
Visitation and Hours of Operation				
Please identify the winery's				
Maximum daily tours and tastings visitation:		existing		proposed
Average daily tours and tastings visitation ¹ :		existing		proposed
Visitation hours (e.g. M-Sa, 10am-4pm):		existing		proposed
Non-harvest Production hours ² :		existing		proposed
Maximum 7 day average: 480 persons (120]	persons/day I	Fri-Sun; 30 perso	ns/day Mon-Thurs)	

¹ Average daily visitation is requested primarily for purposes of environmental review and will not, as a general rule, provide a basis for any condition of approval limiting allowed winery visitation.

It is assumed that wineries will operate up to 24 hours per day during crush.

Grape Origin

All new wineries and any existing (pre-WDO) winery expanding beyond its winery development area must comply with the 75% rule and complete the attached "Initial Statement of Grape Source". See Napa County Code §18.104.250 (B) & (C).

Marketing Program

Please describe the winery's proposed marketing program. Include event type, maximum attendance, food service details, etc. Differentiate between existing and proposed activities. (Attach additional sheets as necessary.)

Food Service

Please describe the nature of any proposed food service including type of food, frequency of service, whether prepared on site or not, kitchen equipment, eating facilities, etc. Please differentiate between existing and proposed food service. (Attach additional sheets as necessary.)

Definitions

The below are paraphrased from County Code, please see referenced code sections for full text.

- a. Winery Development Area All aggregate paved or impervious or semi-permeable ground surface areas of the production facility which includes all storage areas (except caves), offices, laboratories, kitchens, tasting rooms and paved parking areas for the exclusive use of winery employees. *See Napa County Code* §18.104.210
- b. Winery Coverage The total square foot area of all winery building footprints, all aggregate paved or impervious ground surface areas of the production facility which includes all outside work, tank and storage areas (except caves); all paved areas including parking and loading areas, walkways, and access driveways to public or private roads or rights-of-way; and all above-ground wastewater and run-off treatment systems. *See Napa County Code §18.104.220*
- c. Production Facility (For the purpose to calculate the maximum allowable accessory use) The total square footage of all winery crushing, fermenting, bottling, bulk and bottle storage, shipping, receiving, laboratory, equipment storage and maintenance facilities, and employee-designated restrooms but does not include wastewater treatment or disposal areas which cannot be used for agricultural purposes. See Napa County Code §18.104.200
- d. Accessory Use The total square footage of area within winery structures used for accessory uses related to a winery that are not defined as "production facility" which would include offices, lobbies/waiting rooms, conference/meeting rooms, non-production access hallways, kitchens, tasting rooms (private and public areas), retail space areas, libraries, non-employee designated restrooms, art display areas, or any area within winery structures not directly related to wine production. See Napa County Code §18.104.200

Conservation Development and Planning Winery Production Process The Napa County Code contains various references to winery production and refers to Inflows Processing Steps Outflows production capacity as "the wine bottled or received" at a winery and refers to (Receiving) (Shipping) bottling and storage of bottled wine and shipping and receiving of bulk and bottled wine "(Code Section 18.16.030(G)(4)).1 Grapes This handout was developed by the County planning staff with the assistance of a Crush number of local industry representatives to assist property owners and other interested parties in interpreting Napa County Code references to winery production. It does not create a new definition or regulation. - ► Juice A winery's total annual production equals either (1) the sum of all wine created through fermentation in a given year, plus the net total of all fermented bulk wine Fermentation received and shipped in the same year, including all bottled wine received on the premises during the same year; or (2) the amount of wine bottled on the premises in Bulk Wine Bulk Wine the same given year, whichever is greater Using the diagram on the right, this means the greater of A+(B-C), or D. If B-C is a Aging & В C negative number, total production is equal to either A or D, whichever is greater Finishing This interpretation holds true for all physical winery facilities regardless of the Bulk Wine Bulk Wine number of business entities (e.g. Alternating Proprietors/Custom Crush) they accommodate or the date that their production capacity was established or recognized. (D Bottling However, wineries occupying multiple facilities are governed by the specific terms of their use permit or Certificate of Legal Non-conformity (CLN), which may vary ► Bottled Wine Quantities represented by items A through D on the diagram can be determined by reviewing a winery's annual submittals to the federal Bureau of Alcohol, Tobacco and Firearms (ATF). The County may periodically request a copy of these submittal Figure 1. Winery Production Process (s) as a way to monitor compliance with previously adopted conditions/requirements. The County recognizes that annual variations can occur due to the grape harvest and the timing of finishing/bottling, and will generally review and average three to five consecutive years of data.

July 2008

¹ The complexity of these statements can be attributed to the authors' desire to avoid "double counting" bulk wine that is both received and bottled at a winery, and the fact that multiple vintages are present within a winery at any given time.

Winery Coverage and Accessory/Production Ratio

indicate your proposed wine	ry development area. If	the facility already ex	xists, please diff	erentiate between ex	disting and proposed.
Existing	sq. ft.				acres
Proposed		sq. ft.			acres
<u>Winery Coverage</u> . Consisten your proposed winery cover				-up site plans include	d in your submittal, please indicate
	sq. ft.			acres	% of parcel
<u>Production Facility</u> . Consiste proposed <i>production</i> square			•	•	n your submittal, please indicate your oposed.
Existing		sq. ft.	Propose	d	sq. ft.
proposed <i>accessory</i> square f production facility)	ootage. If the facility alr	eady exists, please di	fferentiate betv		our submittal, please indicate your posed. (maximum = 40% of the % of production facility
Existing		sq. ft			
Proposed		sq. 1	ft.		% of production facility
Caves and Crushp					
If new or expanded caves are	e proposed please indica	ate which of the follow	wing best descr	ibes the public access	ibility of the cave space:
None – no visitors/tours	s/events (Class I)	Guided 1	Tours Only (Clas	ss II)	Public Access (Class III)
Marketing Events and/o	or Temporary Events (Cla	ass III)			
Please identify the winery's					
Cave area	Existing:		sq. ft.	Proposed:	sq. ft.
Covered crush pad area	Existing:		sq. ft.	Proposed:	sq. ft.
Uncovered crush pad area	Existing:		sq. ft.	Proposed:	sq. ft.

Winery Development Area. Consistent with the definition at "a.," at page 11 and with the marked-up site plans included in your submittal, please

Initial Statement of Grape Source

Pursuant to Napa County Zoning Ordinance Sections 12419(b) and (c), I hereby certify that the current application for establishment or expansion of a winery pursuant to the Napa County Winery Definition Ordinance will employ sources of grapes in accordance with the requirements of Section 12419(b) and/or (c) of that Ordinance.

Owner's Signature

Date

Letters of commitment from grape suppliers and supporting documents may be required prior to issuance of any building permits for the project. Recertification of compliance will be required on a periodic basis. Recertification after initiation of the requested wine production may require the submittal of additional information regarding individual grape sources. Proprietary information will not be disclosed to the public.

Water Supply/ Waste Disposal Information Sheet

Water Supply Please attach completed Phase I Analysis sheet.				
	Domestic		Emergency	
Proposed source of water (e.g., spring, well, mutual water company, city, district, etc.):				_
Name of proposed water supplier (if water company, city, district):				_
s annexation needed?	□Yes □No		□Yes □No	
Current water use:		gallons per day	(gal/d) (Est.per	phas
Current water source:				_
Anticipated future water demand:		gal/d		_gal/d
Water availability (in gallons/minute):		gal/m		_gal/m
Capacity of water storage system:		gal		_gal
Type of emergency water storage facility if applicable (e.g., tank, reservoir, swimming pool, etc.):				_
Liquid Waste Please attach Septic Feasibility Report	Domestic		Other	
Type of waste:	<u>sewage</u>			_
Disposal method (e.g., on-site septic system, on-site ponds, community system, district, etc.):				_
Name of disposal agency (if sewage district, city, community system):				_
s annexation needed?	□Yes □No		□Yes □No	
Current waste flows (peak flow):		gal/d		_gal/d
Anticipated future waste flows (peak flow):		gal/d		_gal/d
Future waste disposal design capacity:		gal/d		_gal/d
Solid Waste and Recycling Storage and Disposal Please include location and size of solid waste and recycling storage area or www.countyofnapa.org/dem.	n site plans in accorda	nce with the guideli	nes available at	
Hazardous and/or Toxic Materials				
If your facility generates hazardous waste or stores hazardous materials abo 200 cubic feet of compressed gas) then a hazardous materials business plan	-			solid or
Grading Spoils Disposal				
Where will grading spoils be disposed of?				

Winery Traffic Information / Trip Generation Sheet

Traffic during a Typical Weekday Number of FT employees: ______ x 3.05 one-way trips per employee daily trips. Number of PT employees: ______ x 1.90 one-way trips per employee Average number of weekday visitors: _____/ 2.6 visitors per vehicle x 2 one-way trips = _daily trips. Gallons of production: / 1,000 x .009 truck trips daily³ x 2 one-way trips daily trips. _daily trips. (No of FT employees) + (No of PT employees/2) + (sum of visitor and truck trips x .38) ____PM peak trips. **Traffic during a Typical Saturday** Number of FT employees (on Saturdays): ______x 3.05 one-way trips per employee = daily trips. Number of PT employees (on Saturdays): x 1.90 one-way trips per employee = Average number of Saturday visitors: ______/ 2. 8 visitors per vehicle x 2 one-way trips = _____ daily trips. daily trips. (No of FT employees) + (No of PT employees/2) + (visitor trips x .57) _____PM peak trips. Traffic during a Crush Saturday Number of FT employees (during crush): _______ x 3.05 one-way trips per employee = _____daily trips. Number of PT employees (during crush): x 1.90 one-way trips per employee = daily trips. Average number of Saturday visitors: /2. 8 visitors per vehicle x 2 one-way trips = Gallons of production: ______/ 1,000 x .009 truck trips daily x 2 one-way trips ____daily trips. Avg. annual tons of grape on-haul: / 144 truck trips daily ⁴x 2 one-way trips Note: On-haul grapes primarily from vineyards owned by Applicant. _____daily trips. **Largest Marketing Event- Additional Traffic** Number of event staff (largest event): ______ x 2 one-way trips per staff person Number of visitors (largest event): ______/ 2.8 visitors per vehicle x 2 one-way trips ___trips. Number of special event truck trips (largest event): ______x 2 one-way trips

³ Assumes 1.47 materials & supplies trips + 0.8 case goods trips per 1,000 gallons of production / 250 days per year (see *Traffic Information Sheet Addendum* for reference).

⁴ Assumes 4 tons per trip / 36 crush days per year (see *Traffic Information Sheet Addendum* for reference).

Traffic Information Sheet Addendum

Information for Caltrans Review

Application should include:

Project Location

- Site Plan showing all driveway location(s)
- Show detail of Caltrans right-of-way
- Aerial photo at a readable scale

Trip Generation Estimate

• Please provide separate **Winery Traffic Information / Trip Generation Sheets** for existing and proposed operations.

Napa County Winery Traffic Generation Characteristics

Employees

Half-hour lunch: All - 2 trips/day (1 during weekday PM peak)

Hour lunch: Permanent Full-Time – 3.2 trips/day (1 during weekday PM peak)

Permanent Part-Time – 2 trips/day (1 during weekday PM peak)

Seasonal: 2 trips/day (0 during weekday PM peak)—crush

see full time above—bottling

Auto Occupancy: 1.05 employees/auto

Visitors

Auto occupancy:

Weekday = 2.6 visitors/auto

Weekend = 2.8 visitors/auto

Peaking Factors:

Peak Month: 1.65 x average month

Average Weekend: 0.22 x average month

Average Saturday: 0.53 x average weekend Peak Saturday: 1.65 x average Saturday Average Sunday: 0.8 x average Saturday

Average Sunday: 0.8 x average Saturday Peak Sunday: 2.0 x average Sunday

Peak Weekend Hour: Winery (3-4 PM) - 0.57 x total for weekend day involved

Average 5-Day Week (Monday-Friday) - 1.3 x average weekend

Average Weekday: 0.2 x average 5-day week

Peak Weekday Hour: Winery (3-4 PM) - 0.57 x total for weekday involved

Roadway PM Peak(4-5 PM?) - 0.38 x total for weekday involved

Service Vehicles

Grapes (36 days (6weeks)/season): 1.52 trips/1000 gals/season (4 ton loads assumed)

Materials/Supplies (250 days/yr): 1.47 trips/1000 gals/yr

Case Goods (250 days/yr): 0.8 trips/1000 gal/yr



Department of Public Works

1195 Third Street, Suite 201 Napa, CA 94559-3092 www.co.napa.ca.us/publicworks

> Main: (707) 253-4351 Fax: (707) 253-4627

Donald G. Ridenhour, P.E. Director

WATER AVAILABILITY ANALYSIS - PHASE ONE STUDY

Introduction: As an applicant for a permit with Napa County, It has been determined that Chapter 13.15 of the Napa County Code is applicable to approval of your permit. One step of the permit process is to adequately evaluate the amount of water your project will use and the potential impact your application might have on the static groundwater levels within your neighborhood. The public works department requires that a Phase 1 Water Availability Analysis (WAA) be included with your application. The purpose of this form is to assist you in the preparation of this analysis. You may present the analysis in an alternative form so long as it substantially includes the information required below. Please include any calculations you may have to support your estimates.

The reason for the WAA is for you, the applicant, to inform us, to the best of your ability, what changes in water use will occur on your property as a result of an approval of your permit application. By examining the attached guidelines and filling in the blanks, you will provide the information we require to evaluate potential impacts to static water levels of neighboring wells.

Step #1:

Provide a map and site plan of your parcel(s). The map should be an 8-1/2"x11" reproduction of a USGS quad sheet (1:24,000 scale) with your parcel outlined on the map. Include on the map the nearest neighboring well. The site plan should be an 8-1/2"x11" site plan of your parcel(s) with the locations of all structures, gardens, vineyards, etc in which well water will be used. If more than one water source is available, indicate the interconnecting piping from the subject well to the areas of use. Attach these two sheets to your application. If multiple parcels are involved, clearly show the parcels from which the fair share calculation will be based and properly identify the assessor's parcel numbers for these parcels. Identify all existing or proposed wells

<u>Step #2:</u> Determine total parcel acreage and water allotment factor. If your project spans multiple parcels, please fill a separate form for each parcel.

Determine the allowable water allotment for your parcels:

Parcel Location Factors

The allowable allotment of water is based on the location of your parcel. There are 3 different location classifications. Valley floor areas include all locations that are within the Napa Valley, Pope Valley and Carneros Region, except for areas specified as groundwater deficient areas. Groundwater deficient areas are areas that have been determined by the public works department as having a history of problems with groundwater. All other areas are classified as Mountain Areas.

Please underline your location classification below (Public Works can assist you in determining your classification if necessary):

Valley Floor Mountain Areas MST Groundwater Deficient Area 1.0 acre feet per acre per year 0.5 acre feet per acre per year 0.3 acre feet per acre per year

Assessor's Parcel Number(s)	Parcel Size	Parcel Location Factor	Allowable Water Allotment
	(A)	(B)	(A) X (B)
047-070-016	166.8± ac	0.5 af/yr	83.4 af/yr

Step #3:

Using the guidelines in Attachment A, tabulate the existing and projected future water usage on the parcel(s) in acre-feet per year (af/yr). Transfer the information from the guidelines to the table below.

EXISTING USE:		PROPOSED USE:	
Residential	.75 af/yr	Residential	.75 af/yr
Farm Labor Dwelling	N/A af/yr	Farm Labor Dwelling	N/A af/yr
Winery	<u>0</u> af/yr	Winery	2.12 af/yr
Commercial	<u>.04</u> af/yr	Commercial	04f/yr
Vineyard*	N/A af/yr	Vineyard*	N/A af/yr
Other Agriculture	4.0 af/yr	Other Agriculture	_4.0 af/yr
Landscaping	4.0 af/yr	Landscaping	_4.0 af/yr
Other Usage (List Separately):		Other Usage (List Separately):	
	af/yr	/	af/yr
	af/yr	S	af/yr
	af/yr		af/yr
TOTAL:	8.79 af/yr	TOTAL: 10	0.91 af/yr TOTAL:
	2.86 M gallons**	TOTAL: $3.$	56 M gallons**
Is the proposed use less than the	existing usage? Yes	No Equal	
Sten #4·			

Provide any other information that may be significant to this analysis. For example, any calculations supporting your estimates, well test information including draw down over time, historical water data, visual observations of water levels, well drilling information, changes in neighboring land uses, the usage if other water sources such as city water or reservoirs, the timing of the development, etc. Use additional sheets if necessary.

Residential: 0.75 ac-ft/yr for one residence (existing and proposed)

Commercial: .01 af/yr per employee x 4 employees at ranch operations building (existing and proposed)

Winery: 80,000 gpy x 2.65 af/yr per 100,000 gal. of wine = 2.12 af/yr (process & domestic)

Other Agriculture: 1 acre garden & orchard x 4 af/yr per ac = 4 af per year

Existing Landscaping: $1.0 + /- a cres \times 4$ af/yr per ac = 4 af per year (conservative estimate)

Proposed Additional Landscaping: 1.0 +/- acres x 4 af/yr per ac = 4 af per year (assumed 1 acre new landscape) All estimates above are conservatively based on Estimated Water Use Guidelines presented in Attachment A below.

According to the property owner all vineyard irrigation is provided by a surface water that is used in accordance with a Water Rights Permit.

Conclusion: Congratulations! Just sign the form and you are done! Public works staff will now compare your projected future water usage with a threshold of use as determined for your parcel(s) size, location, topography, rainfall, soil types, historical water data for your area, and other hydrogeologic information. The No. 67435

Signature: Muhaul Muhaul Exp. 12/31/14 Apate: 5/30/2014 Phone: (707) 320-4968

WATER AVAILABILITY ANALYSIS - PHASE ONE STUDY

Attachment A: Estimated Water Use Guidelines

Typical Water Use Guidelines:

Primary Residence	sidence 0.5 to 0.75 acre-feet per year (includes some landscap	
Secondary Residence	0.20 to 0.30 acre-feet per year	
Farm Labor Dwelling	0.06 to 0.10 acre-feet per person per year	

Non-Residential Guidelines:

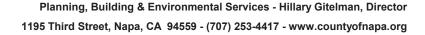
Agricultural:

Agricui	turai.	
	Vineyards	
	Irrigation only	0.2 to 0.5 acre-feet per acre per year
	Heat Protection	0.25 acre feet per acre per year
	Frost Protection	0.25 acre feet per acre per year
	Farm Labor Dwelling	0.06 to 0.10 acre-feet per person per year
	Irrigated Pasture	4.0 acre-feet per acre per year
	Orchards	4.0 acre-feet per acre per year
	Livestock (sheep or cows)	0.01 acre-feet per acre per year
Winery:	<u> </u>	
	Process Water	2.15 acre-feet per 100,000 gal. of wine
	Domestic and Landscaping	0.50 acre-feet per 100,000 gal. of wine
Industri	ial·	

Industrial:

Food Processing	31.0 acre-feet per employee per year
Printing/Publishing	0.60 acre-feet per employee per year
rcial:	

Commercial:		
Office Space	0.01 acre-feet per employee per year	
Warehouse	0.05 acre-feet per employee per year	





A Tradition of Stewardship A Commitment to Service

Project name & APN: Hudson Vineyards Winery 047-070-016
Project number if known:
Contact person: Kristina Muelrath
Contact email & phone number: km@hudsonvineyards.com
Today's date: 5/30/14

Voluntary Best Management Practices Checklist for Development Projects

Napa County General Plan Policy CON-65 (e) and Policy CON-67 (d) requires the consideration of Greenhouse Gas (GHG) emissions in the review of discretionary projects and to promote and encourage "green building" design. The below Best Management Practices (BMPs) reduce GHG emissions through energy and water conservation, waste reduction, efficient transportation, and land conservation. The voluntary checklist included here should be consulted early in the project and be considered for inclusion in new development. It is not intended, and likely not possible for all projects to adhere to all of the BMPs. Rather, these BMPs provide a portfolio of options from which a project could choose, taking into consideration cost, cobenefits, schedule, and project specific requirements. Please check the box for all BMPs that your project proposes to include and include a separate narrative if your project has special circumstances.

Practices with Measurable GHG Reduction Potential

The following measures reduce GHG emissions and if needed can be calculated. They are placed in descending order based on the amount of emission reduction potential. Already Plan Doing To Do **BMP Name** ID# BMP-1 Generation of on-site renewable energy If a project team designs with alternative energy in mind at the conceptual stage it can be integrated into the design. For instance, the roof can be oriented, sized, and engineered to accommodate photovoltaic (PV) panels. If you intend to do this BMP, please indicate the location of the proposed PV panels on the building elevations or the location of the ground mounted PV array on the site plan. Please indicate the total annual energy demand and the total annual kilowatt hours produced or purchased and the potential percentage reduction of electrical consumption. Please contact staff or refer to the handout to calcuate how much electrical energy your project may need. BMP-2 Preservation of developable open space in a conservation easement Please indicate the amount and location of developable land (i.e.: under 30% slope and not in creek setbacks or environmentally sensitive areas for vineyards) conserved in a permanent easement to prohibit future development.

Already Doing	Plan To Do		
✓		BMP-3	Habitat restoration or new vegetation (e.g. planting of additional trees over 1/2 acre) Napa County is famous for its land stewardship and preservation. Restoring areas within the creek setback reduces erosion potential while planting areas that are currently hardscape (such as doing a bioretention swale rather than underground storm drains) reduces storm water and helps the groundwater recharge. Planting trees can also increase the annual uptake of CO2e and add the County's carbon stock.
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		BMP-4	Alternative fuel and electrical vehicles in fleet The magnitude of GHG reductions achieved through implementation of this measure varies depending on the analysis year, equipment, and fuel type replaced. Number of total vehicles
			Typical annual fuel consumption or VMT
			Number of alternative fuel vehicles Type of fuel (vehicles)
			Type of fuel/vehicle(s) Potential annual fuel or VMT savings
		BMP-5	Exceed Title 24 energy efficiency standards: Build to CALGREEN Tier 2 The California Building Code update effective January 1, 2011 has new mandatory green building measures for all new construction and has been labeled CALGREEN. CALGREEN provides two voluntary higher levels labeled CALGREEN Tier I and CALGREEN Tier II. Each tier adds a further set of green building measures that go above and beyond the mandatory measures of the Code. In both tiers, buildings will use less energy than the current Title 24 California Energy Code. Tier I buildings achieve at least a 15% improvement and Tier 2 buildings are to achieve a 30% improvement. Both tiers require additional nonenergy prerequisites, as well as a certain number of elective measures in each green building category (energy efficiency, water efficiency, resource conservation, indoor air quality and community).
		BMP-6	Vehicle Miles Traveled (VMT) reduction plan Selecting this BMP states that the business operations intend to implement a VMT reduction plan reducing annual VMTs by at least 15%. Tick box(es) for what your Transportation Demand Management Plan will/does include: employee incentives employee carpool or vanpool priority parking for efficient transporation (hybrid vehicles, carpools, etc.) bike riding incentives bus transportation for large marketing events Other: Estimated annual VMT
			Potential annual VMT saved % Change

Already Doing	Plan To Do	BMP-7	Exceed Title 24 energy efficiency standards: Build to CALGREEN Tier 1 See description below under BMP-5.
	√	ВМР-8	Solar hot water heating Solar water heating systems include storage tanks and solar collectors. There are two types of solar water heating systems: active, which have circulating pumps and controls, and passive, which don't. Both of them would still require additional heating to bring them to the temperature necessary for domestic purposes. They are commonly used to heat swimming pools.
	V	ВМР-9	Energy conserving lighting Lighting is approximately 25% of typical electrical consumption. This BMP recommends installing or replacing existing light bulbs with energy-efficient compact fluorescent (CF) bulbs or Light Emitting Diode (LED) for your most-used lights. Although they cost more initially, they save money in the long run by using only 1/4 the energy of an ordinary incandescent bulb and lasting 8-12 times longer. Typical payback from the initial purchase is about 18 months.
	✓	BMP-10	Energy Star Roof/Living Roof/Cool Roof Most roofs are dark-colored. In the heat of the full sun, the surface of a black roof can reach temperatures of 158 to 194 °F. Cool roofs, on the other hand, offer both immediate and long-term benefits including reduced building heat-gain and savings of up to 15% the annual air-conditioning energy use of a single-story building. A cool roof and a green roof are different in that the green roof provides living material to act as a both heat sink and thermal mass on the roof which provides both winter warming and summer cooling. A green (living) roof also reduces storm water runoff.
		BMP-11	Bicycle Incentives Napa County Zoning Ordinance requires 1 bicycle rack per 20 parking spaces (§18.110.040). Incentives that go beyond this requirement can include on-site lockers for employees, showers, and for visitor's items such as directional signs and information on biking in Napa. Be creative!
		BMP-12	Bicycle route improvements Refer to the Napa County Bicycle Plan (NCPTA, December 2011) and note on the site plan the nearest bike routes. Please note proximity, access, and connection to existing and proposed bike lanes (Class I: Completely separated right-of-way; Class II: Striped bike lane; Class III: Signed Bike Routes). Indicate bike accessibility to project and any proposed improvements as part of the project on the site plan or describe below.

Already Doing	To Do		
	V	BMP-13	Connection to recycled water Recycled water has been further treated and disinfected to provide a non-potable (non-drinking water) water supply. Using recycled water for irrigation in place of potable or groundwater helps conserve water resources.
	√	BMP-14	Install Water Efficient fixtures WaterSense, a partnership program by the U.S. Environmental Protection Agency administers the review of products and services that have earned the WaterSense label. Products have been certified to be at least 20 percent more efficient without sacrificing performance. By checking this box you intend to install water efficient fixtures or fixtures that conserve water by 20%.
		BMP-15	Low-impact development (LID) LID is an approach to land development (or re-development) that works with nature to manage storm water as close to its source as possible. LID employs principles such as preserving and recreating natural landscape features, minimizing effective imperviousness to create functional and appealing site drainage that treat storm water as a resource rather than a waste product. There are many practices that have been used to adhere to these principles such as bioretention facilities, rain gardens, vegetated rooftops, rain barrels, and permeable pavements. By implementing LID principles and practices, water can be managed in a way that reduces the impact of built areas and promotes the natural movement of water within an ecosystem or watershed. Please indicate on the site or landscape plan how your project is designed in this way.
	V	BMP-16	Water efficient landscape If your project is a residential development proposing in excess of 5,000 sq. ft. or a commercial development proposing in excess of 2,500 sq. ft. The project will be required to comply with the Water Efficient Landscape Ordinance (WELO). Please check the box if you will be complying with WELO or If your project is smaller than the minimum requirement and you are still proposing drought tolerant, zeroscape, native plantings, zoned irrigation or other water efficient landscape.
	V	BMP-17	Recycle 75% of all waste Did you know that the County of Napa will provide recycling collectors for the interior of your business at no additional charge? With single stream recycling it is really easy and convenient to meet this goal. To qualify for this BMP, your business will have to be aggressive, proactive and purchase with this goal in mind.

Already Doing	Plan To Do	BMP-18	Compost 75% food and garden material
			The Napa County food composting program is for any business large or small that generates food scraps and compostable, including restaurants, hotels, wineries, assisted living facilities, grocery stores, schools, manufacturers, cafeterias, coffee shops, etc. All food scraps (including meat & dairy) as well as soiled paper and other compostable - see http://www.naparecycling.com/foodcomposting for more details.
П	П	BMP-19	Implement a sustainable purchasing and shipping programs
			Environmentally Preferable Purchasing (EPP) or Sustainable Purchasing refers to the procurement of products and services that have a reduced effect on human health and the environment when compared with competing products or services that serve the same purpose. By selecting this BMP, you agree to have an EPP on file for your employees to abide by.
V	V		Planting of shade trees within 40 feet of the south side of the building elevation Well-placed trees can help keep your building cool in summer. If you choose a deciduous tree after the leaves drop in autumn, sunlight will warm your building through south and west-facing windows during the colder months. Well-designed landscaping can reduce cooling costs by 20%. Trees deliver more than energy and cost savings; they are important carbon sinks. Select varieties that require minimal care and water, and can withstand local weather extremes. Fruit or nut trees that produce in your area are great choices, providing you with local food as well as shade. Please use the site or landscape plan to indicate where trees are proposed and which species you are using.
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			Electrical Vehicle Charging Station(s) As plug-in hybrid electric vehicles (EV) and battery electric vehicle ownership is expanding, there is a growing need for widely distributed accessible charging stations. Please indicate on the site plan where the station will be.
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			Public Transit Accessibility Refer to http://www.ridethevine.com/vine and indicate on the site plan the closest bus stop/route. Please indicate if the site is accessed by transit or by a local shuttle. Provide an explanation of any incentives for visitors and employees to use public transit. Incentives can include bus passes, informational hand outs, construction of a bus shelter, transportation from bus stop, etc.
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Already Doing	Plan To Do		
		BMP-23	Site Design that is oriented and designed to optimize conditions for natural heating, cooling, and day lighting of interior spaces, and to maximize winter sun exposure; such as a cave. The amount of energy a cave saves is dependent on the type of soil, the microclimate, and the user's request for temperature control. Inherently a cave or a building burned into the ground saves energy because the ground is a consistent temperature and it reduces the amount of heating and cooling required. On the same concept, a building that is oriented to have southern exposure for winter warmth and shading for summer cooling with an east-west cross breeze will naturally heat, cool, and ventilate the structure without using energy. Please check this box if your design includes a cave or exceptional site design that takes into consideration the natural topography and sitting. Be prepared to explain your approach and estimated energy savings.
		BMP-24	Limit the amount of grading and tree removal Limiting the amount of earth disturbance reduces the amount of CO2 released from the soil and mechanical equipment. This BMP is for a project design that either proposes a project within an already disturbed area proposing development that follows the natural contours of the land, and that doesn't require substantial grading or tree removal.
		BMP-25	Will this project be designed and built so that it could qualify for LEED? BMP-25 (a) LEED™ Silver (check box BMP-25 and this one) BMP-25 (b) LEED™ Gold (check box BMP-25, BMP-25 (a), and this box) BMP-25 (c) LEED™ Platinum (check all 4 boxes)
		Pract	tices with Un-Measured GHG Reduction Potential
		BMP-26	Are you, or do you intend to become a Certified Green Business or certified as a"Napa Green Winery"? As part of the Bay Area Green Business Program, the Napa County Green Business Program is a free, voluntary program that allows businesses to demonstrate the care for the environment by going above and beyond business as usual and implementing environmentally friendly business practices. For more information check out the Napa County Green Business and Winery Program at www.countyofnapa.org.
		BMP-27	Are you, or do you intend to become a Certified "Napa Green Land"? Napa Green Land, fish friendly farming, is a voluntary, comprehensive, "best practices" program for vineyards. Napa Valley vintners and growers develop farm-specific plans tailored to protect and enhance the ecological quality of the region, or create production facility programs that reduce energy and water use, waste and pollution. By selecting this measure either you are certified or you are in the process of certification.

Already Doing	Plan To Do	BMP-28	Use of recycled materials There are a lot of materials in the market that are made from recycled content. By ticking this box, you are committing to use post-consumer products in your construction and your ongoing operations.
V		BMP-29	Local food production
			There are many intrinsic benefits of locally grown food, for instance reducing the transportation emissions, employing full time farm workers, and improving local access to fresh fruits and vegetables.
		BMP-30	Education to staff and visitors on sustainable practices This BMP can be performed in many ways. One way is to simply put up signs reminding employees to do simple things such as keeping the thermostat at a consistent temperature or turning the lights off after you leave a room. If the project proposes alternative energy or sustainable winegrowing, this BMP could include explaining those business practices to staff and visitors.
√		BMP-31	Use 70-80% cover crop Cover crops reduce erosion and the amount of tilling which is required, which releases carbon into the environment.
		BMP-32	Retain biomass removed via pruning and thinning by chipping the material and reusing it rather than burning on-site By selecting this BMP, you agree not to burn the material pruned on site.
		BMP-33	Are you participating in any of the above BMPS at a 'Parent' or outside location?
		BMP-34	Are you doing anything that deserves acknowledgement that isn't listed above?
		Commer	nts and Suggestions on this form?

Sources:

- 1. Napa County Bicycle Plan, NCTPA, December 2011
- 2. California Air Pollution Control Officers Associate (CAPCOA). January 2008. CEQA and Climate Change
- 3. Napa County General Plan, June 2008.
- 4. California Office of the Attorney General. 2010. Addressing Climate Change at at the Project Level available at http://ag.ca.gove/global warming/pdf/GW_mitigation_measures.pdf
- 5. U.S. Green Building Council (2009). LEED 2009 for New Construction and Major Renovations Rating System. Washington, DC: United States Green Building Council, Inc.
- 6. California Energy Commission (2008). Title 24, Part 6, of the California Code of Regulations: California's Energy Efficiency Standards for Residential and Nonresidential Buildings. Sacramento, CA: California Energy Commission.
- 7. U.S. Department of Energy (2010). Cool roof fact sheet.
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- 9. Compact Fluorescent Light Bulbs". Energy Star. Retrieved 2013-05-01.
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