

**USA** (●●●)

<p><b>SPECIFICATIONS</b> (What you have to know)</p>	<p><b>DISTRICTS, COMMUNES AND VINEYARDS</b></p> <p><b>USA - CALIFORNIA</b>            Red Napa (or subzone) Cabernet Sauvignon            Premium Pinot Noir (eg Carneros, Russian River, Santa Barbera)            California Zinfandel            Inexpensive generic California            White High quality oaked Chardonnay            High quality oaked Sauvignon Blanc (Fumé Blanc)            Rosé Inexpensive California rosé</p> <p><b>USA - OTHER STATES</b>            Red Oregon Pinot Noir            Washington Merlot, Cabernet Sauvignon or Bordeaux blend</p> <p><b>KEY LIGHT WINES</b></p> <p><b>USA North Coast:</b> Mendocino (Anderson Valley), Sonoma (Alexander Valley, Dry Creek Valley, Russian River Valley, Los Carneros (part), Napa (Napa Valley, Spring Mountain, Howell Mountain, Saint Helena, Rutherford, Oakville, Yountville, Stag's Leap, Mount Veeder, Atlas Peak, Los Carneros (part) )</p> <p><b>North Central Coast:</b> Alameda (Livermore Valley), Santa Clara, Santa Cruz, Monterey</p> <p><b>South Central Coast:</b> San Luis Obispo (Paso Robles), Santa Barbara (Santa Maria Valley, Santa Ynez Valley)</p> <p><b>Central Valley:</b> San Joaquin (Lodi)</p> <p><b>Sierra Foothills:</b> Amador</p> <p><b>USA Oregon:</b> (Willamette Valley)</p> <p><b>Other Wine- Washington:</b> Columbia Valley (Yakima Valley)</p> <p><b>Producing States New York State:</b> Finger Lakes, Hudson River, Long Island</p> <p><b>KEY FACTORS</b></p> <p><b>Grape varieties:</b> Cabernet Sauvignon, Merlot, Pinot Noir, Zinfandel, White Zinfandel, Petite Sirah, Sangiovese, Barbera, Syrah, Chardonnay, Sv Blc, Colombard, Viognier, Pinot Gris, Riesling</p> <p><b>Climate &amp; weather:</b> Winter freeze, cool climate, frost</p> <p><b>Viticulture:</b> American vine species, American hybrids, Labrusca, Concord, Winter protection, lake effect, smudge pot, wind machines, sprinklers, California sprawl, precision viticulture, Pierce's disease, Phylloxera, field budding and grafting</p> <p><b>Vinification:</b> Hang time, consultants, tannins, mouthfeel</p> <p><b>Law:</b> TTB, Monopolies, Prohibition, AVA</p> <p><b>Wine Styles:</b> Blush, Meritage, Generic, Jug Wine</p> <p><b>Trends:</b> California Cult, ABC = 'Anything But Chardonnay (or Cabernet)', estate bottled, direct shipping, Parker Robert, Rhône rangers, organic viticulture, labour</p> <p><b>Producers/Brands:</b> Gallo, Kendall-Jackson, Mondavi, Canandaigua, Constellation Brands</p> <p><b>Research:</b> Cornell University, Davis, Fresno, Virginia Tech</p>
<p><b>HISTORY</b></p>	<p><b>East coast</b></p> <p>16th: arrival of European settlers and first trials at winemaking w local varieties</p> <p>17-18th: uncoordinated &amp; unsuccessful import of vinifera varieties due to extreme climate, local pests &amp; diseases.</p> <p>1806: first successful commercial wine production based on the Labrusca-Vinifera hybrid-based Alexander grape.</p> <p>1800-1850: introduction of Catawba, Delaware, Isabella &amp; Norton American hybrids for production of white wines (excl. Norton). Wine developing predominantly in the east (Pennsylvania, Ohio, Missouri).</p> <p>1830s: Nicholas Longworth famous sparkling Catawba sees the day.</p> <p>Ohio vineyards destroyed by black rot so industry moved to NY's Finger Lakes region.</p> <p>1854: introduction of the hardy &amp; foxy Concord grape.</p> <p>Until 1919: wine growing spread to New Jersey, Virginia &amp; Arkansas. NY specialising in sparklings.</p> <p>1920-33: Prohibition killed the industry. Only sales of grapes for 'home use' allowed.</p> <p>1945-60: decline of wine industry, esp. in Ohio (149 to 47 wineries in that time).</p> <p>1970-00s: great boom following the introduction of French Hybrids (Seyval Blc, Seibel)</p> <p><b>West Coast (mainly California)</b></p> <p>16th: Spanish settlers cultivated vinifera vines in Mexico (Criolla Chica in Baja California)</p> <p>1769: the San Diego Mission planted California's first vineyard and introduced the Mission grape (=Criolla Chica)</p> <p>1823: Sonoma mission station, most northern Californian point reached by the monks, established</p> <p>1833: J-L Vignes from Bdx founded his winery w French vines in California</p> <p>1848: Gold found in Sacramento -&gt; start of Gold rush &amp; massive immigration -&gt; wine industry boom in Sonoma, Napa &amp; the Sierra Foothills</p> <p>1851-61: Agostin Haraszthy introduced 300 grape varieties including Zinfandel</p> <p>1860s: the Prussian Charles Krug establishes a winery at St Helena in the Napa Valley &amp; trains winemakers. Another 140 wineries would follow and the Napa Valley would stand comparison w European fine wines.</p> <p>1894: California Wine Association, union of the region's largest producer, was founded.</p> <p>1920-33: Prohibition killed the industry. Only sales of grapes for 'home use' allowed.</p> <p>1934: Wine Institute of California is founded to promote the wines of the region.</p> <p>1945-60s: market decline -&gt; only 25 wineries in Napa in '60 (140 in 1890s &amp; ~400 now)</p>

1966: **Mondavi** family, who owned Krug, creates its own winery in Napa Valley -> start of industry  
 1967: first commercial wines in Washington state, now #2 biggest US wine producer.  
 1970-00s: boom of new large & small wineries (Calif: 240 to 1,700 in that time) w innovation in technology, introduction of European methods + foreign investment (notably French Champagne houses).  
 Devt of the vineyards in Washington, Oregon & Texas thanks to modern solutions to old viticulture problems

### WINKLER'S CLIMATE REGIONS

Region	degree days	MJT °C	grape varieties	wine regions
<b>Region I</b>	<1390	<19.8	pinot noir, riesling, chardonnay, gewurztraminer, pinot grigio	Chablis, Friuli, Tasmania, Champagne, Marlborough
<b>Region II</b>	1391 to 1670	19.9 to 21.3	sauvignon blanc	Bordeaux, Alsace, Yarra Valley, Frankland River
<b>Region III</b>	1671 to 1940	21.4 to 22.8	cabernet sauvignon, chardonnay, merlot, semillon, syrah	Clare Valley, Lower Hunter, Rioja, Piemonte
<b>Region IV</b>	1941 to 2220	22.9 to 24.3	grenache, barbera, tempranillo, syrah, carignan, cinsault, mourvedre,	McLaren Vale, Upper Hunter, Langhorne Creek, Montpellier
<b>Region V</b>	>2220	>24.3	tempranillo	Greek Islands, Jerez, Sicily, Sardinia
			primitivo, nero d'avola, palomino, fiano	

### 1. CALIFORNIA ('caliente fornalla')

GENERAL	<b>90% of US production</b> ; 1,100km N-S up to 90km wide; 2nd largest American state by area; 100 AVAs AVA = origin/location only. "AOC without all the rules" (Matthew Stubbs MW)
BUSINESS	242 000 ha = size of the Languedoc, <b>world's 4<sup>th</sup> largest producer</b> <b>81% of total US production</b> 3/5 bottles sold in the US are from California Strong cellar door sales and local market with high prices
CLIMATE	<b>Mediterranean</b> moderated by Pacific fogs and cool sea winds that slow the ripening of grapes Dry, low rainfall.
VITICULTURE	Key viticultural risks: spring frost Grape varieties: Chardonnay 17% Cab sv 15% Zinfandel 8.5% Merlot 8% Pinot Noir 7.5%
KEY REGIONS & CHARACTERISTICS	<p><b>COURSE TASTING NOTES: Generic White Zinfandel</b> – Clear medium salmon/orange colour. Clean nose with medium + intense notes of red fruit (pomegranate, redcurrant, strawberry), fruit drop, boiled sweet, floral (rose, violet, orange blossom), citrus (tangerine, orange blossom). <b>Medium dry/sweet</b> palate with medium – acidity, <b>low alcohol</b>, medium – bodied, medium notes of strawberry, fruit drop, tangerine, rose. Creamy texture, shirt finish. Acceptable/good quality, no potential for further ageing.</p> <p><b>COURSE TASTING NOTES: California Sauvignon Blanc 2014</b> – Clear pale lemon. Medium + intense nose of citrus (lemon, grapefruit), verbena, apricot, tropical (pineapple), <b>peas, asparagus</b>. Dry palate, <b>high acidity</b>, medium alcohol, medium body, medium + intensity, tropical, asparagus, herbaceous, lemon. <b>Medium finish</b>. Good quality. No potential for further ageing (already showing asparagus/pea notes).</p> <p><b>I. North Coast (55,000ha)</b> North of San Francisco bay; <b>Warm to cool Mediterranean</b> climate. 3 key areas N to S:</p> <p><b>a. Mendocino County AVA 7,800 ha</b> Northernmost area Mostly agricultural and pasture, 0.8% vine 67% red 33% white Chardonnay 26% Pinot Noir 14% Cab sv 14% Zin 10% Merlot 8% 20% certified organic - <b>Anderson Valley</b>: by the coast &gt; fogs &amp; winds &gt; v cool growing season; great Zinfandel higher up; Pinot Noir, Riesling &amp; Gewurztraminer. <b>Roederer</b> set up a winery there in 82&gt; name on the map - <b>Mendocino</b>: higher area + protected from fog &amp; winds -&gt; warmer climate -&gt; full bodied soft Cabernets, Petite Sirah; <b>Fetzer</b>: largest organic producer there (organic for 20+ years) - <b>Clear Lake</b>: birthplace to <b>Kendall-Jackson</b></p> <p><b>b. Sonoma County AVA - 25,000ha</b> Between Mendocino &amp; Napa Birthplace of California's fine wine production Variety of soils, climates, foggy and windy Elevation 0-700 metres <b>Gallo Sonoma</b> lobbied for the AVA. <b>Chardonnay 26% Pinot Noir 21% Cab sv 20%</b> Zinfandel 8% Merlot 7% Sauv bl 4% 55 wineries &amp; 13 different appellations. Key sub-AVAs: - <b>Russian River Valley</b> forms a wide gap in coastal range -&gt; cooler -&gt; great PN &amp; Chardonnay</p>

- **Dry Creek Valley**: west of Healdsburg; clayey gravelly soils; great SB & Zinfandel

**COURSE TASTING NOTES: Dry Creek Zinfandel Ridge 2016** – Clear deep purple. Medium + intense nose of black fruit (plum, black cherry, blackberry), red fruit (raspberry, strawberry), dried fruit (figs, raisins), coconut, vanilla, liquorice, sweet spice. Dry palate, medium + acidity, medium + ripe tannins, **high alcohol, full bodied, long finish.**

- **Alexander Valley**: further to east; warmer + alluvial soils-> Cab Sauv & reds. Geyserville Zinfandel famous  
- **Small Knights valley**: even further east; great for Cabernet Sauvignon.  
Wineries: De Loach (Russian River pioneer; now Boisset since '04); **Ravenswood** (now Constellations)

**COURSE TASTING NOTES: Sonoma Cabernet Sauvignon 2011** – Clear deep ruby colour, clean nose, medium + intense aromas of vanilla, red **peppercorn**, raspberry, **blackcurrant**, plum, peony, dark chocolate, **pencil shave**. Dry palate, medium + acidity, medium + integrated tannins, medium + alcohol, medium + body, medium + finish. Very good, has potential for further ageing.

**COURSE TASTING NOTES: Sonoma Pinot Noir 2015** – Clear medium ruby colour. Medium intense nose of red fruit (redcurrant, pomegranate, red cherries, raspberry), toast, violet, black pepper, mushroom. Dry palate, medium + acidity, medium – soft tannins, high alcohol, medium + bodied, medium finish. Good quality, has potential for further ageing.

#### c. Napa Valley AVA - 18,000ha (// Côte d'Or)

First AVA in the US (1981). Now 18 AVA in Napa alone

Overtook Sonoma for fine wine US flagship

Only 4% of California's wine production

Small: 50km long x 8km wide but huge climate variation in small place and great concentration of wineries

Elevation 0-800 metres

Mostly young vines, usually replanted after 35/40 years

Top varieties: Cabernet Sauvignon, Chardonnay, Merlot, Pinot Noir

**Climate**: can be 15°C difference from South to North

i. South (Napa>Yountville): cool Region I w cooling fogs rolling down from San Pablo bay

ii. Central (Yountville -> St Helena) Region II w fog coming in the afternoon only

iii. North (towards Calistoga) Region III w far less influence from the bay + more altitude (up to 800m)

**Soils**: 150 different types but all have v good drainage thanks to either aspect or soil structure.

Key sub-AVAs (S-N):

- **Stag's leap district**: south east of Yountville; red soils -> soft tannins Cabernet Sauvignon & Merlot

- **Oakville**: complex soils & slightly cooler climate for hi quality Cab Sauv. **Opus One/Mondavi** home.

- **Rutherford**: gravelly clay soils from Rutherford bench for spiced, dense Cabernet Sauvignons

- **St. Helena**: a little warmer; wine town; rich Cabernet & Chardonnays; some cult wines e.g.

**Grace Family**

- **Calistoga**: surrounded by mountains; warm for powerful Cab Sauv, Zinfandel & creamy Sauv Blc

- **Howell mountains**: north-east mountainous area for Zinfandel but also 1,400m hi Cab Sauv.

- **Atlas Peak**: cooler north-east mountainous area for Zinfandel, Chardonnay, Cab sv but also Italian varieties. Home of Antinori's **Atlas Peak vineyards**.

**COURSE TASTING NOTES: Premium Napa Chardonnay 2015** – Clear pale lemon colour. Clean medium + intense notes of citrus (grapefruit, lemon, lime), floral (elderflower, acacia), stone fruit (nectarine, apricot, yellow peach), yeast, bread, brioche, tropical fruit (mango), vanilla, hazelnut, butter. Dry palate, medium acidity, high alcohol, full bodied with medium intense notes of yeast, apricot, vanilla, butter. Long finish. Outstanding quality / Purity of fruit / Complexity / Has potential for further ageing.

#### d. Los Carneros AVA

Across Napa & Sonoma so wineries can label Napa AVA, Los Carneros AVA or Sonoma AVA.

Mild but dry climate w fog coming off the bay & cool winds from NW

Ideal for **Pinot Noir & Chardonnay** (& **sparkling** w Freixenet's Gloria Ferrer, Taittinger & Codorníu)

## II. North Central Coast

Stretches from San Francisco to San Lucas w 28 sub AVAs

Moderate climate in the valleys (Pacific fog influence) & warmer in the mountains

To differentiate  
Cab Sv & Pinot:  
colour (light for  
PN), structure (less  
body & tannins or  
PN), acidity (higher  
for PN)

**a. Livermore valley AVA (part of Alameda county)**

Mainly famous for whites esp. Sauv Blc; Wente family dominates w 650ha

**b. Santa Cruz Mountains AVA (part of Santa Cruz county)**

One of California's cooler regions (Reg I) w poor soils -> Pinot Noir, Cabernet inland; some Riesling  
Top wineries: Ridge, Mount Eden, David Bruce and Fogarty.

**c. Silicon Valley / Santa Clara valley AVA (par of Santa Clara county)**

Once a region with long vinous history. Now a toy for the Silicon Valley.

**d. Monterey County AVA – 15,000ha**

Picturesque region, cool climate w v low rainfall (-> irrigation mandatory), Chardonnay & Merlot  
Largest Central coast wine area & home to huge vine farms that tarnished the image of area.

Key sub-AVAs (S-N):

- **Arroyo Seco**: sheltered from the winds w interesting Rieslings & Gewurztraminers on pebbly soils
- **Santa Lucia Highlands**
- **Carmel Valley**: facing the bay of Monterey; small wineries w Bernardus leading.
- **Chalone**: reputation made by Chalone winery at 600m on hot limestone hilltops (Chardonnay & Pinot Noir)

**III. South central Coast**

From Paso Robles Mountain range facing west -> better airflow from Pacific

Climate primarily maritime w very mild winters & cooler summers than the rest of California (// Mosel)

**a. San Louis Obispo County**

- o Experimentation with Rhone & Italian varieties

**Paso Robles sub AVA**: 13 500 ha

Hot weather & fertile soils on the east

Interesting soils cooled by marine air on the west (// Santa Clara)

Big diurnal range, altitude, diverse micro-climate > Reds

Cab Sv 39% Merlot 14% Syrah 9% Chardonnay 5%

200-800 metres altitude

Key producer: **Tablas Creek** owned by Perrin from Beaucastel

**b. Santa Barbara County – 11,300ha**

- o Practically rain free and v mild -> long growing season (no worry about late season rain)
- o Where sideways was filmed
- o Chardonnay 28% Pinot Noir 20% Syrah 7%
- o Key producers: **Au bon climat**

- **Santa Maria Valley sub AVA**: closer in climate & geography to SLO county; Pinot Noir and Chardonnay

Top wineries: Byron, Qupé, Au bon climat & recent Kendall-Jackson Tepusquet Vineyard

- **Santa Ynez valley sub AVA**: warm days + cold nights on the eastern side for great Bdx varieties and Roussanne & the western side towards Lompoc w cool fog-beset area the Santa Rita Hills sub AVA for Chardonnay, Rieslings, Gewurztraminer & Pinot Noir. Top wineries: Andrew Murray; Bryan Barbock

**IV. Central Valley**

80% of total production w quantity being focused in this hot area (Reg IV/V).

Divides between Sacramento valley (N) & San Joaquin valley (S)

**San Joaquin Valley- 40,000ha**

- o Produces the majority of **bulk wine** and **70% of California's total wine production**
- o 350x90km valley w hot & dry climate; v intensive agriculture w wide modern irrigation channels
- o V modern wineries; Home to Gallo, Constellations & Mondavi all have big operations there.

**Lodi sub AVA**: 46 000 ha

North of the valley; just south east of Sacramento; cooler than Clarksburg

Flat 2-200 metres altitude

High diurnal range

Rich soils situated on higher land

Old vines Zinfandel

Premium area of the central valley

Zinfandel & Ruby Cabernet and some Viognier.

**COURSE TASTING NOTES: Lodi Zinfandel 2015** – Deep ruby, pronounced notes of black fruit (blackberry, plum), dried fruit, stewed fruit, camphor, coconut, tobacco, leather. Dry / Off dry palate, medium acidity, medium – ripe tannins, **high alcohol, full bodied**. Pronounced intensity, long finish. Very good wine, to drink now.

**V. Sierra Foothills**

Gold rush and county and wine producing since 1850s. Less than 1% of production.

Classic Zinfandel = mix of red/black/dried fruit + medium tannins & acidity + high alcohol / full bodied.

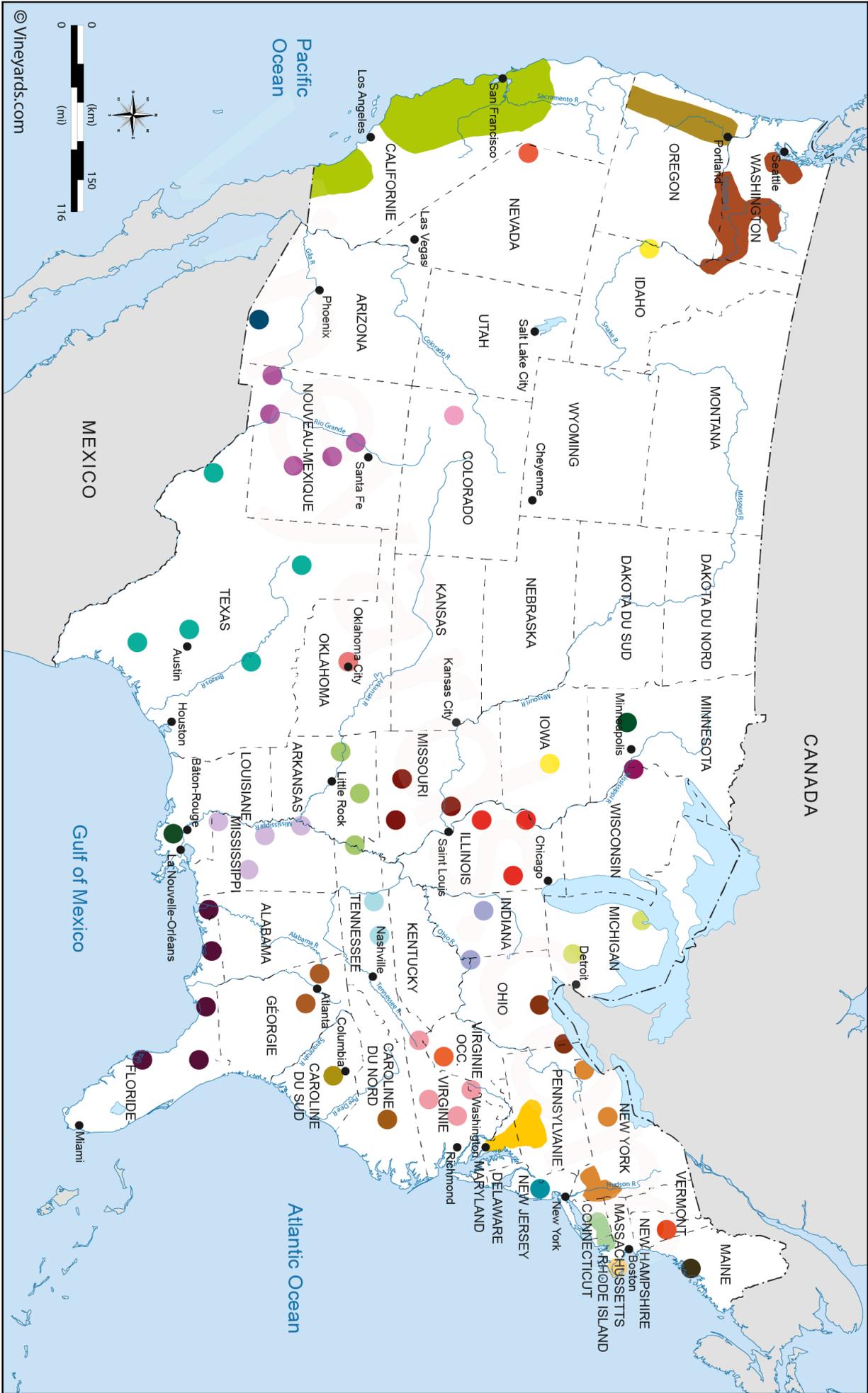
Primitivo more tannins, acidity and less jammy.

To differentiate Zin from Merlot: Merlot would have less cooked red fruit, only black cooked fruit & French oak

	<p>Hot days &amp; cool nights produces fruit-concentrated wines esp. old vine Zinfandel &amp; Italian varieties (Sangiovese)</p> <p><b>Amador county sub AVA</b></p> <ul style="list-style-type: none"> <li>o Warmer climate with less elevation</li> <li>o <b>Shenandoah valley</b>: famous for hearty Zinfandels. Also Sv Blc, Sangiovese, Syrah &amp; Pt Syrah.</li> <li>o <b>Fiddletown</b>: famous for old vine Zinfandel.</li> </ul>
<b>OREGON – 6,000HA</b>	
GEOGRAPHY	Between California & Washington state.
CLIMATE	<b>Maritime</b> climate w Coast range softens the Pacific influence while the Cascade range (3,000m+) on the East holds back the rain clouds -> mild winter but cooler, wetter summers So, although at same latitude as south of France, only in the warmer, sunnier spots do grapes ripen fully.
VITICULTURE	Viticulture affected by <b>Phylloxera</b> in 90s so use of rootstocks since.
VINIFICATION	Winemaking in <b>Burgundy style</b> with Pinot Noir densely planted, handpicked & aged in oak for 12-15mths
GRAPE VARIETIES	<b>Pinot Noir (40%)</b> , crisp & dry Pinot Gris, Chardonnay, the increasingly fashionable Riesling along with Gewurztraminer for Ice wines. Introduction of Dijon clones of Chardonnay & PN have boosted quality.
KEY REGIONS & CHARACTERISTICS	<p>Fragmented industry with predominance of small growers &amp; growing role of independent négociant.</p> <p><b>Willamette Valley AVA</b></p> <ul style="list-style-type: none"> <li>o 250km-long green valley going just south of Portland to Eugene; plantings started in 60s; now 300+ wineries</li> <li>o Cool summers and drier autumns thanks to Coast range protection esp. northwest.</li> <li>o Key sub-AVAs: <ul style="list-style-type: none"> <li>- <b>Red Hills of Dundee</b>: famous red-tinged clay-like Jory loams; best combination of drainage, exposure to rainfall &amp; light</li> <li>- <b>Eola Amity Hills</b>: similar site; rich in deposit from the Missoula floods</li> <li>- <b>Yamhill Carlton</b></li> <li>- <b>Ribbon Ridge</b></li> <li>- <b>Chehalem mountains</b>: sedimentary WillaKenzie soils; earlier ripening season</li> </ul> </li> <li>o Top wineries: Domaine <b>Drouhin</b> (since 88); Adelsheim; Ponzi; Beaux Freres (partly owned by R. Parker)</li> </ul> <p><b>COURSE TASTING NOTES: Oregon Pinot Noir 2014 Drouhin Willamette Valley</b> – Clear medium ruby colour. Clean nose with medium intense notes of red fruit (raspberry, strawberry), floral (violet), vanilla, truffle, earth. Dry palate with medium + acidity, medium ripe tannins, high alcohol, <b>medium bodied</b> with medium + intense aromas of raspberry, violet, truffle, earth. Long finish. Very good quality, has potential for further ageing.</p> <p><b>Umpqua Valley AVA &amp; Rogue Valley</b></p> <ul style="list-style-type: none"> <li>o Warmer regions south of Willamette producing Cabernet Sauvignon &amp; Merlot; predominance of boutique wineries</li> </ul> <p><b>Columbia Valley – 2,000ha</b></p> <ul style="list-style-type: none"> <li>o Shared with Washington State.</li> </ul>
<b>WASHINGTON STATE – 13,000ha</b>	
GENERAL	#2 largest wine producer with 5% of US total. Low farmland cost vs. California
KEY REGIONS & CHARACTERISTICS	<p>- <b>Western Washington</b>: mild and damp all year (around Seattle) -&gt; less than 1% of state's total plantings.</p> <p>- <b>Eastern Washington</b>: Protected from marine air by the 4,000m-high Cascade Range going N to S. Desert-like landscape <b>Extreme continental climate</b> w latitude btw Bordeaux &amp; Burgundy &amp; access to irrigation water Hot, dry, cloudless summers &amp; autumns + hot days/cool nights -&gt; limited diseases + well-defined flavours. Harsh winters (big '96 winter freeze) can be damaged to the vines but also helps to keep phylloxera away Most wineries buy in grapes with winemaking mainly on large-scale of Merlots, Cabernet &amp; Chardonnay. <b>Chateau St Michelle Wine Estates</b> is the dominant force in Washington with Columbia Crest, Northstar and joint venture with Ernst Loosen (Eroica), Antinori (Col Solare). It controls 1/3 of all vineyard land.</p> <p><b>Columbia Valley – 6,750ha</b></p> <ul style="list-style-type: none"> <li>o Winegrowing made possible by the Columbia River and tributaries.</li> <li>o Key sub-AVAs: <ul style="list-style-type: none"> <li>- <b>Yakima Valley</b>: 4,500ha; state's coolest &amp; oldest wine region; Chardonnay most popular but some Syrah</li> <li>- <b>Walla Walla Valley</b>: 450ha; south-east of Columbia valley known for v warm vineyards &amp; Merlot.</li> </ul> </li> </ul> <p><b>COURSE TASTING NOTES: Cab Franc / Cab Sv / Merlot Washington 2012</b> – Clear deep ruby colour, medium intensity, black fruit (plum, blackberry, blueberry), red fruit (raspberry), vanilla, spice (blackpepper, liquorice), camphor, capsicum, dark cocoa. Dry palate, medium + acidity, medium + firm tannins, high alcohol, medium + body, medium + finish. Very good wine, can age.</p>
<b>NEW YORK STATE – 13,000ha w 1,800ha of Vinifera</b>	

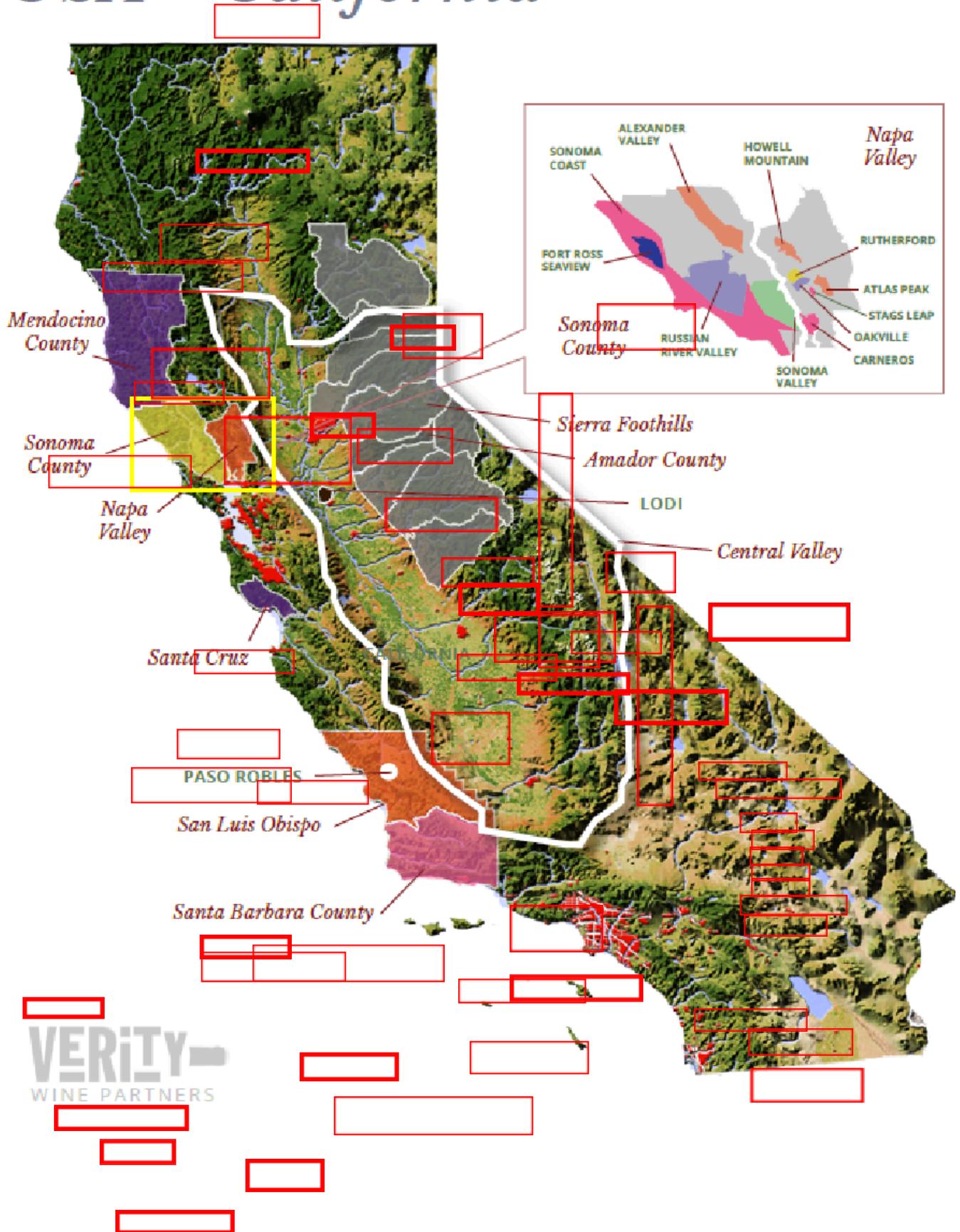
	<p>#3 biggest for grape growing but mainly labrusca for table grape &amp; jelly. Farm Wineries Act '76 increased vinifera.</p> <p>Most of the vines are French hybrids grown on American rootstocks but rise of Vinifera since the 60s. 150 wineries with more than 2/3 of them less than 20 years old.</p> <p>Low winter temperatures but bodies of water + deep, well-drained soils.</p> <p>4 key AVAs:</p> <p><b>a. Finger Lakes -3,000ha</b></p> <ul style="list-style-type: none"> <li>o Oldest &amp; centre of NY wine industry.</li> <li>o South of lake Ontario; by narrow deep lakes &amp; on steep slopes, which provide good air &amp; water drainage and moderate extreme temperatures in winter &amp; summer (continental climate).</li> <li>o Key sub-AVAs: <ul style="list-style-type: none"> <li>- <b>Cayuga Lake</b>: lower altitude + greater lake depth -&gt; mesoclimate suitable for vinifera i.e. Riesling, Pinot Noir &amp; Cabernet Franc. AVA since 88.</li> <li>- <b>Seneca Lake</b></li> </ul> </li> </ul> <p><b>b. Lake Erie – 8,300ha</b></p> <ul style="list-style-type: none"> <li>o Mostly table grape/grape juice production. Otherwise, mainly French hybrids</li> </ul> <p><b>c. Long Island – 1,200ha</b></p> <ul style="list-style-type: none"> <li>o 40km east of New York City.</li> <li>o Influence of Atlantic -&gt; mild maritime climate w long growing season -&gt; Bdx varieties able to ripen.</li> <li>o Key sub-AVAs: <ul style="list-style-type: none"> <li>- <b>North Fork</b>: 700ha; original area.</li> <li>- <b>Hamptons/South Fork</b>: cooler and smaller (70ha)</li> </ul> </li> </ul> <p><b>d. Hudson River</b></p> <ul style="list-style-type: none"> <li>o 300+ years of making wine.</li> <li>o Sea air rises up the river valley to moderate the climate to a certain extent. Seyval Blc &amp; Dowell dominate.</li> </ul>		
<b>OTHERS</b>			
	Virginia (Chardonnay, Bdx varieties); Missouri (Norton); New Jersey; Texas		
GRAPE VARIETIES	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; border: 1px dashed black; padding: 5px;"> <p><b>Reds</b></p> <p><b>1. Zinfandel</b>  Came to California around 1850  10% of California's production (esp. Central valley)  Uneven ripener w thin skinned berries growing in compact clusters  Best in warm (≠hot) well drained areas  Produces red berry flavours, hi alcohol &amp; some residual sugar. Old vines -&gt; rich full bodied wines  Used varietally, for blends (bulk); reds or blush.</p> <p><b>2. Cabernet Sauvignon</b>  11% of California's production  Soft, juicy black cherry w light tannin.  Napa famous for rivalling w Bdx for quality  Hi quality also from Washington</p> <p><b>3. Merlot</b>  8% of California's production  Often cheap w soft tannins &amp; little character.  Monterey&amp;Napa: blackberry &amp; plum + hi alcohol &amp; velvety tannins</p> <p><b>4. Pinot Noir</b>  #1 variety in Oregon (56%). 4% in California.  Hi quality in Russian River, Carneros, Santa Barbara &amp; Willamette Valley.  Varying styles from elegant &amp; gamey to rich &amp; fruit-forward</p> <p><b>5. Syrah</b></p> </td> <td style="width: 50%; border: 1px dashed black; padding: 5px;"> <p><b>Whites</b></p> <p><b>1. Chardonnay</b>  Most widely planted grape in California (16%)  Hardy adaptable grape.  Generally full bodied, hi alcohol, oaked. More restrained styles in cooler regions</p> <p><b>2. Sauvignon blanc</b>  Mostly produced in Bdx style w partial or full fermentation in oak (Fumé Blanc).</p> <p><b>3. Pinot Gris</b>  #2 variety in Oregon &amp; 4% of California's production</p> <p><b>4. Riesling</b>  #1 variety in Washington (21%)</p> <p><b>5. Viognier</b></p> <p><b>6. Marsanne</b></p> </td> </tr> </table>	<p><b>Reds</b></p> <p><b>1. Zinfandel</b>  Came to California around 1850  10% of California's production (esp. Central valley)  Uneven ripener w thin skinned berries growing in compact clusters  Best in warm (≠hot) well drained areas  Produces red berry flavours, hi alcohol &amp; some residual sugar. Old vines -&gt; rich full bodied wines  Used varietally, for blends (bulk); reds or blush.</p> <p><b>2. Cabernet Sauvignon</b>  11% of California's production  Soft, juicy black cherry w light tannin.  Napa famous for rivalling w Bdx for quality  Hi quality also from Washington</p> <p><b>3. Merlot</b>  8% of California's production  Often cheap w soft tannins &amp; little character.  Monterey&amp;Napa: blackberry &amp; plum + hi alcohol &amp; velvety tannins</p> <p><b>4. Pinot Noir</b>  #1 variety in Oregon (56%). 4% in California.  Hi quality in Russian River, Carneros, Santa Barbara &amp; Willamette Valley.  Varying styles from elegant &amp; gamey to rich &amp; fruit-forward</p> <p><b>5. Syrah</b></p>	<p><b>Whites</b></p> <p><b>1. Chardonnay</b>  Most widely planted grape in California (16%)  Hardy adaptable grape.  Generally full bodied, hi alcohol, oaked. More restrained styles in cooler regions</p> <p><b>2. Sauvignon blanc</b>  Mostly produced in Bdx style w partial or full fermentation in oak (Fumé Blanc).</p> <p><b>3. Pinot Gris</b>  #2 variety in Oregon &amp; 4% of California's production</p> <p><b>4. Riesling</b>  #1 variety in Washington (21%)</p> <p><b>5. Viognier</b></p> <p><b>6. Marsanne</b></p>
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VINTAGES	<p><b>California:</b> 2012 set to be outstanding vintage due to moderate weather in growing season</p> <p><b>NY State:</b> 2010 top vintage (long hot summer &amp; dry autumn)</p>		
PRODUCTION	<p>US: largest non-European wine producer</p> <p>#4 worldwide w 441 000 ha &amp; 23.9 million hl</p> <p>Wine consumption: just under 13btl/year/pers</p> <p>California: 4,600 growers, 90% of production, \$20bn sold in the US only</p> <p>Cheap, mass-produced wines e.g. White Zinfandel &amp; bag-in-box = only 30% of market</p> <p>1,500 wineries in '05</p>		
TRADE	<p><b>3-tier system</b> (producers/wholesalers/ distributors) = consumers not allowed to buy direct in most states.</p> <ul style="list-style-type: none"> <li>• Small number of very large producers producing across large areas vs. boutique wineries focusing on their AVA</li> <li>• <b>Wineries with their own vineyards are the exception.</b></li> </ul>		

	<ul style="list-style-type: none"> <li>• Key producers: <ul style="list-style-type: none"> <li>○ <b>Constellation Brands</b> (ex-Canandaigua) – \$4bn Publicly owned; #1 wine business in the world since '04. Established in '45 by Marvin Sands in the Finger lakes. Wine leader in UK, Can, US, AUS, NZ. Famous brands: Paul Masson, <b>Robert Mondavi</b> (since 09), Ravenswood, Mount Veeder, Clos du Bois (Sonoma), Hardy's, Banrock Station, Ruffino. Also owns Canada's Vincor.</li> <li>○ <b>Gallo Winery</b> – 12.5m hl – 900m btl/year Largest family-owned winemaking operation in the world &amp; #2 overall. <b>25% of US wine sales.</b> Ernest &amp; Julio Gallo founded their winery in 33. Ernest built a large national distribution network while Julio was in charge of production. They first sold largest in bulk to bottlers and then created their own label in 1937. Largest wine producer in the US by 1950. Started &amp; famous for inexpensive wines but since '77, Gallo is trying to associate its name wit premium wines: Louis Martini winery bought in Napa, largest vineyard owner in Sonoma w 2,000ha. Turning leaf is the leading product in quantity followed by Gallo Sonoma. Also single-vineyard wines.</li> <li>○ <b>The wine group</b> Founded in 1981 &amp; #3 largest wine producer in the world. Based in San Francisco. Key brands: Franzia, Cupcake vineyards, Concannon, FishEye, FlipFlop.</li> </ul> </li> </ul>
WINE CLASSIFICATION	<ul style="list-style-type: none"> <li>• Federal law i.e. the <b>Alcohol, Tobacco Trade Tax Bureau</b> oversees the allocation of American Viticultural Areas (AVA) since 1978: <ul style="list-style-type: none"> <li>○ An <b>AVA is defined only by geographic &amp; climatic boundaries.</b></li> <li>○ AVA requirements: <ul style="list-style-type: none"> <li>- 85% of the grapes in a wine come from the AVA stated</li> <li>- If wine varietal, 75% of named variety come from AVA stated</li> </ul> </li> <li>NB: no limitation on yields, varieties planted or any other specific requirements vs. PGI/PDO.</li> <li>○ 206 AVAs in the US (Oct 12).</li> </ul> </li> <li>• State law varies from state to state: <ul style="list-style-type: none"> <li>○ Oregon: <b>varietal min 95%</b> of variety &amp; 100% of fruit from AVA</li> <li>○ Washington: <b>85%</b> of stated variety &amp; vintage</li> <li>○ California &amp; all other states: <b>75%</b> of stated variety &amp; vintage</li> <li>○ NY: <b>35%</b> addition of sugar &amp; water allowed</li> </ul> </li> </ul>





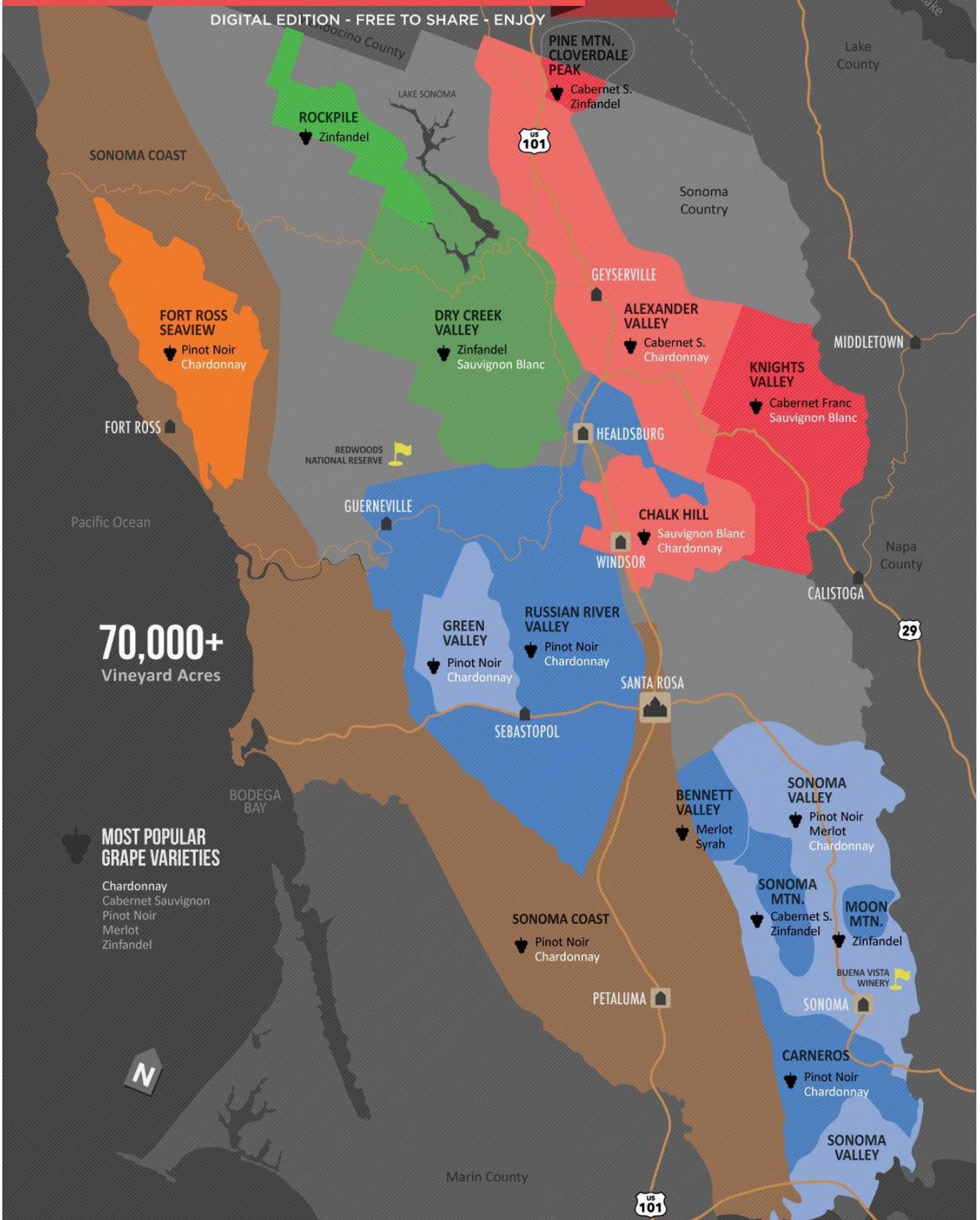
# USA - California





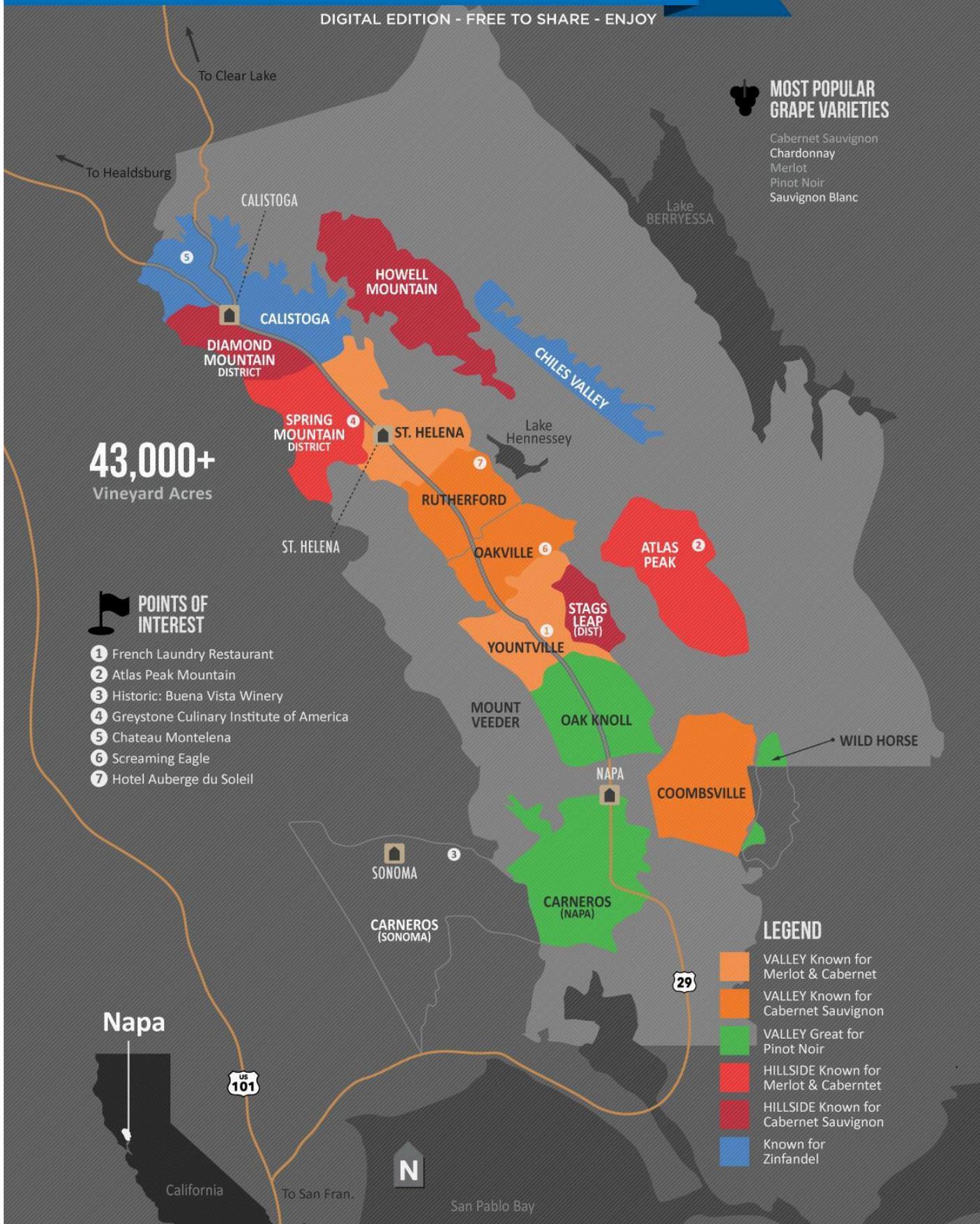
# SONOMA WINE MAP

DIGITAL EDITION - FREE TO SHARE - ENJOY



# NAPA VALLEY WINE MAP

DIGITAL EDITION - FREE TO SHARE - ENJOY



## MOST POPULAR GRAPE VARIETIES

- Cabernet Sauvignon
- Chardonnay
- Merlot
- Pinot Noir
- Sauvignon Blanc

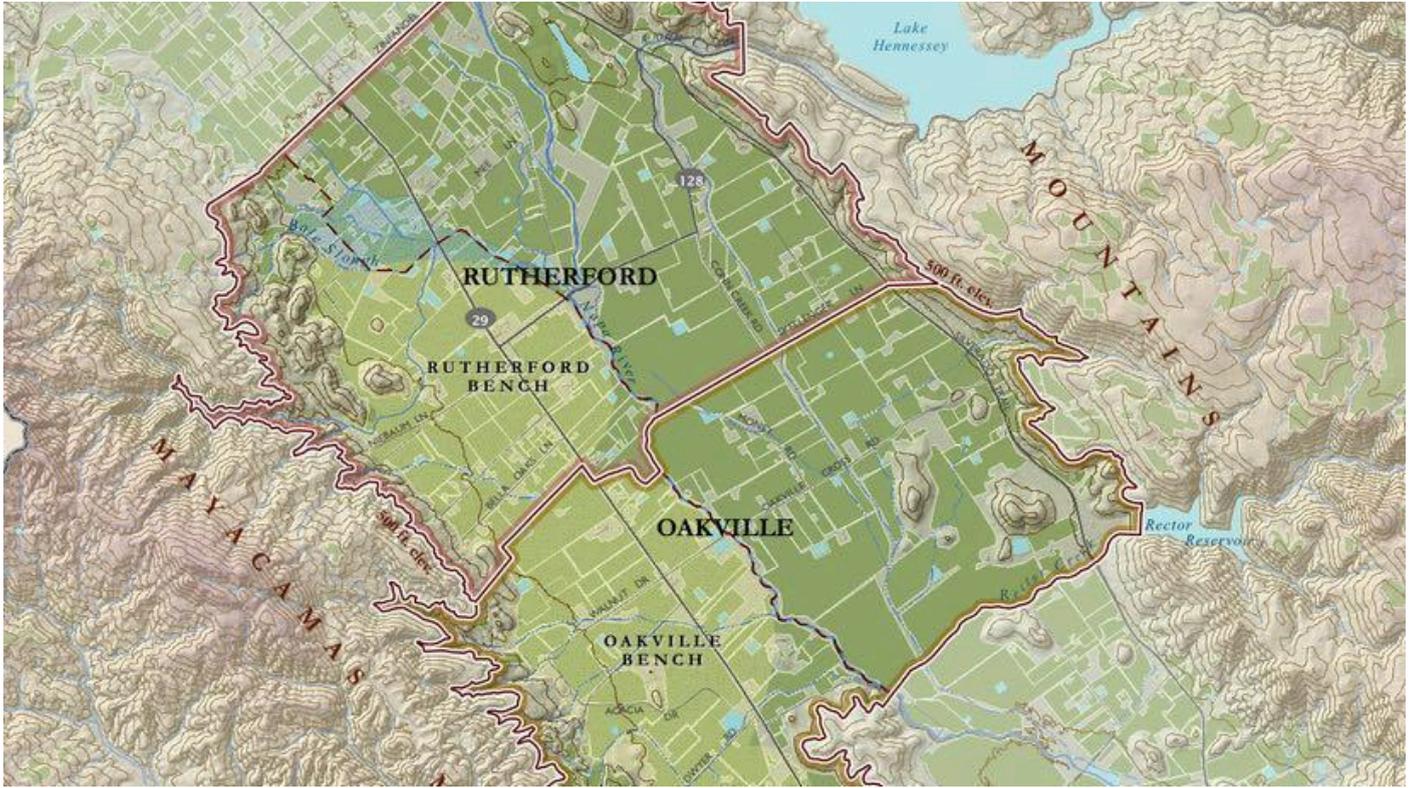
**43,000+**  
Vineyard Acres

## POINTS OF INTEREST

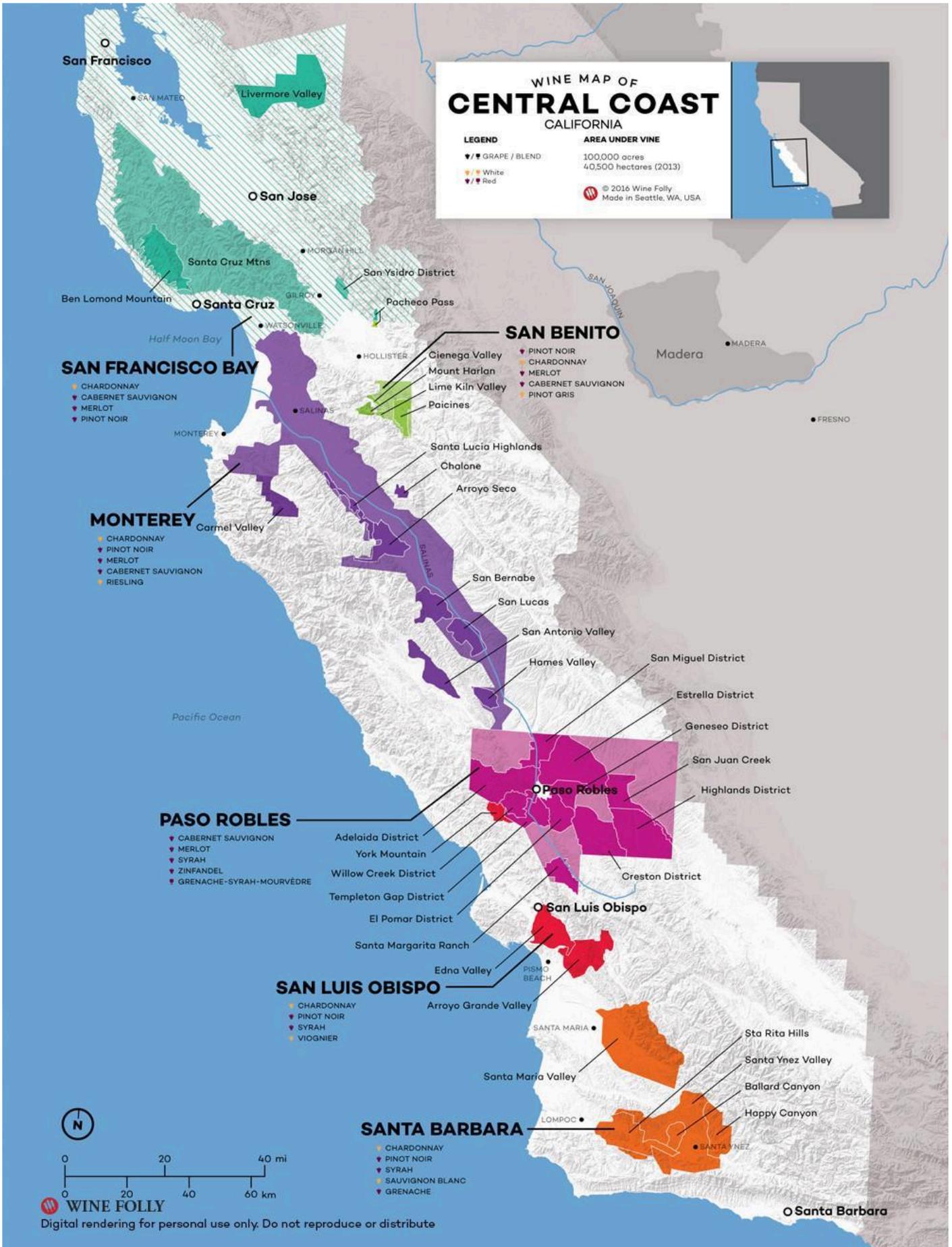
- French Laundry Restaurant
- Atlas Peak Mountain
- Historic: Buena Vista Winery
- Greystone Culinary Institute of America
- Chateau Montelena
- Screaming Eagle
- Hotel Auberge du Soleil

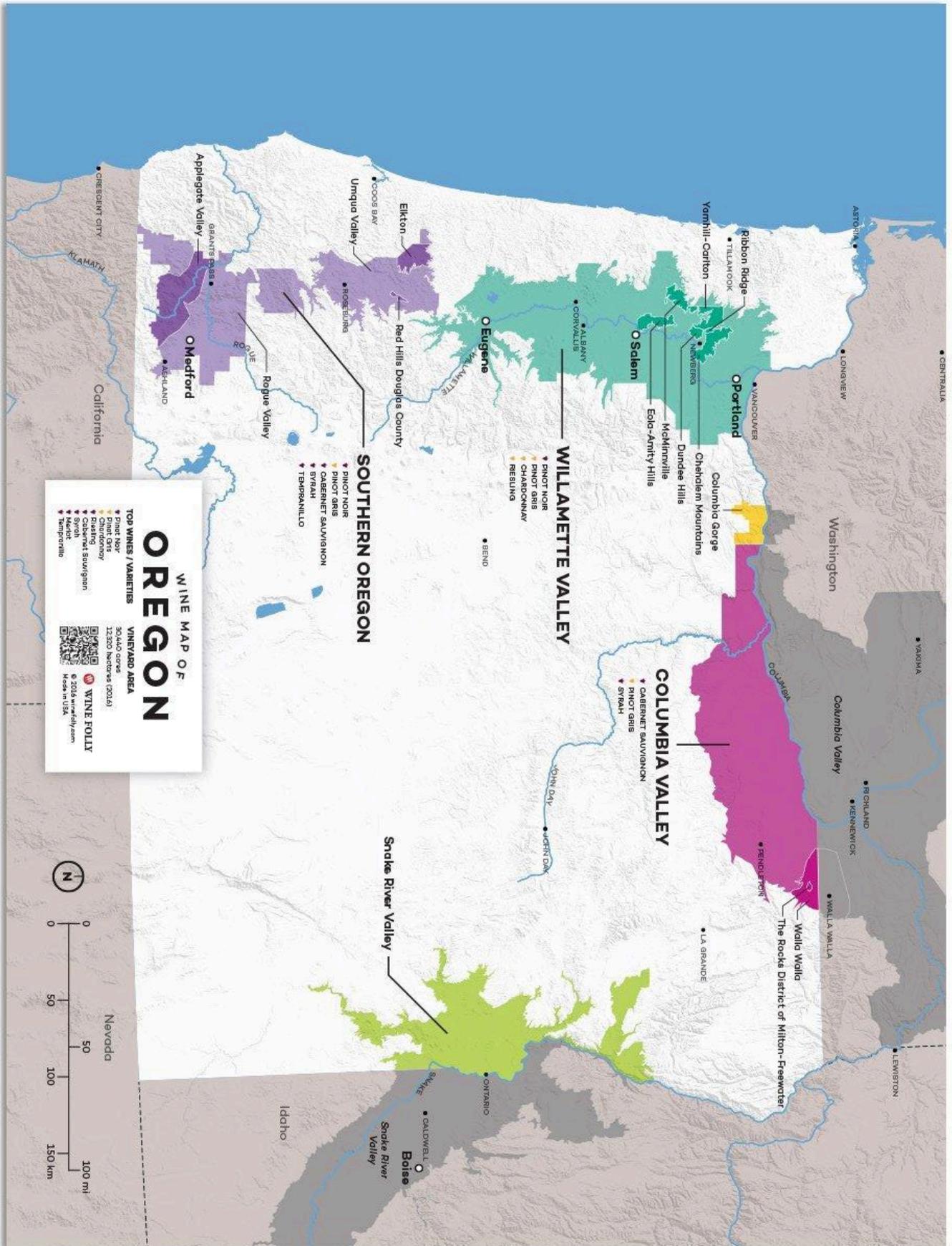
## LEGEND

- VALLEY Known for Merlot & Cabernet
- VALLEY Known for Cabernet Sauvignon
- VALLEY Great for Pinot Noir
- HILLSIDE Known for Merlot & Cabernet
- HILLSIDE Known for Cabernet Sauvignon
- Known for Zinfandel

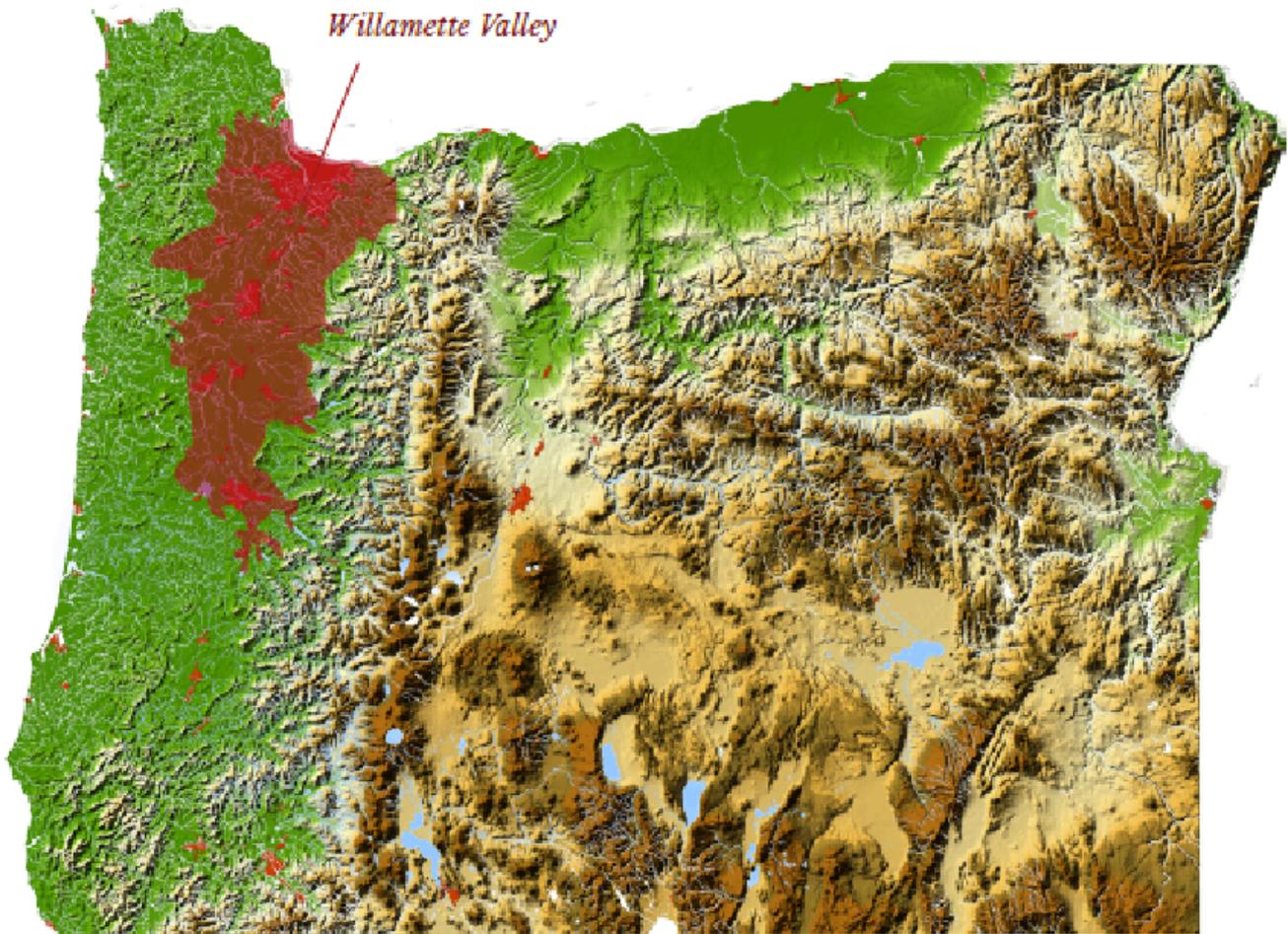








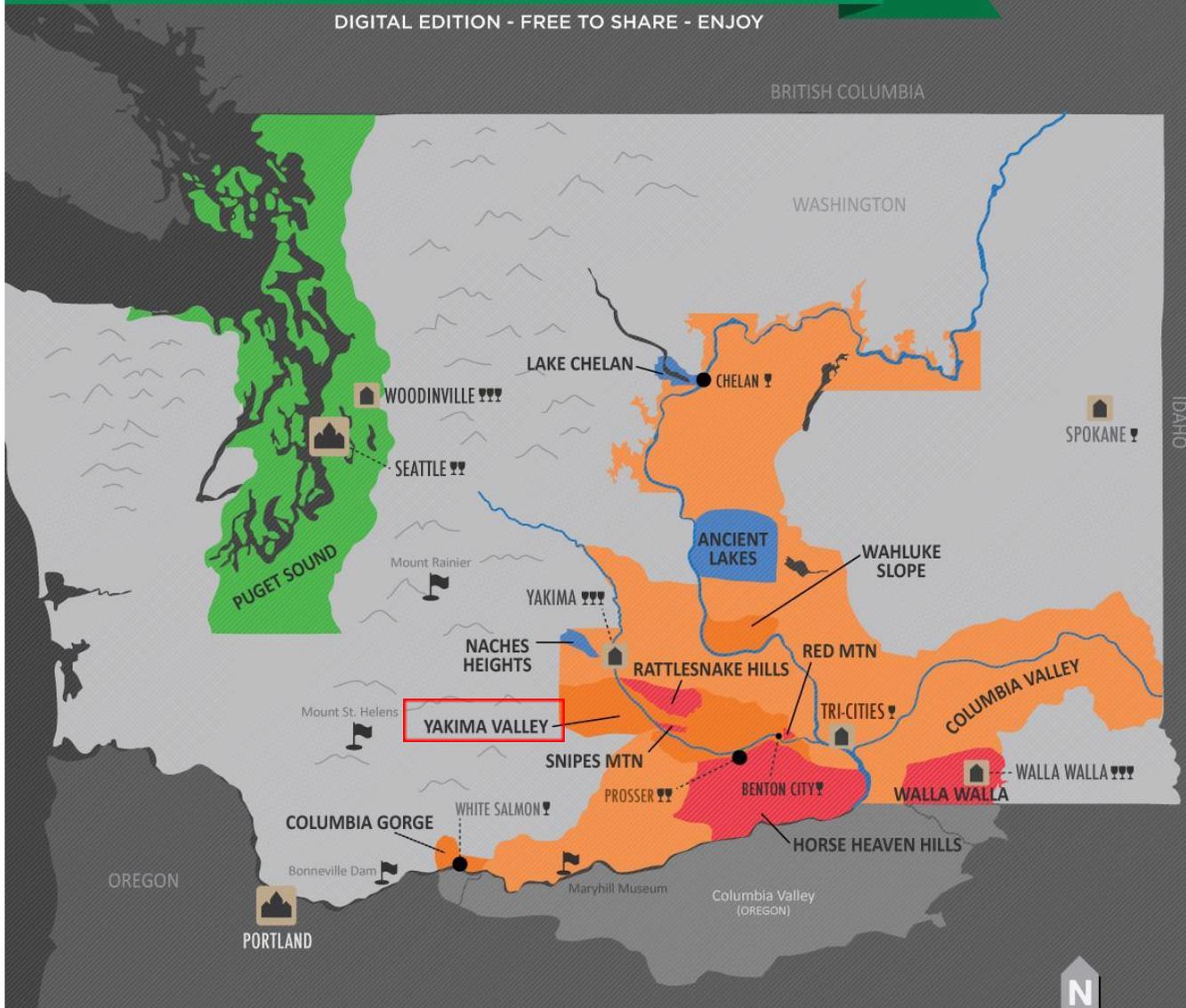
# USA - Oregon



**VERITY**  
WINE PARTNERS

# WASHINGTON WINE MAP

DIGITAL EDITION - FREE TO SHARE - ENJOY



## POINTS OF INTEREST

## TASTING ROOMS

Every 🏠 is equal to 10+ wineries with tasting rooms.

## KEY FACTS

- 13 Appellations
- 750+ wineries in Washington
- Most vineyards planted 1970s+
- 2nd largest wine producer in US
- Only ~70 acres in Puget Sound AVA

## MOST POPULAR GRAPE VARIETIES

Cabernet Sauvignon  
Chardonnay  
Merlot  
Riesling  
Syrah



**43,000+**  
Vineyard Acres

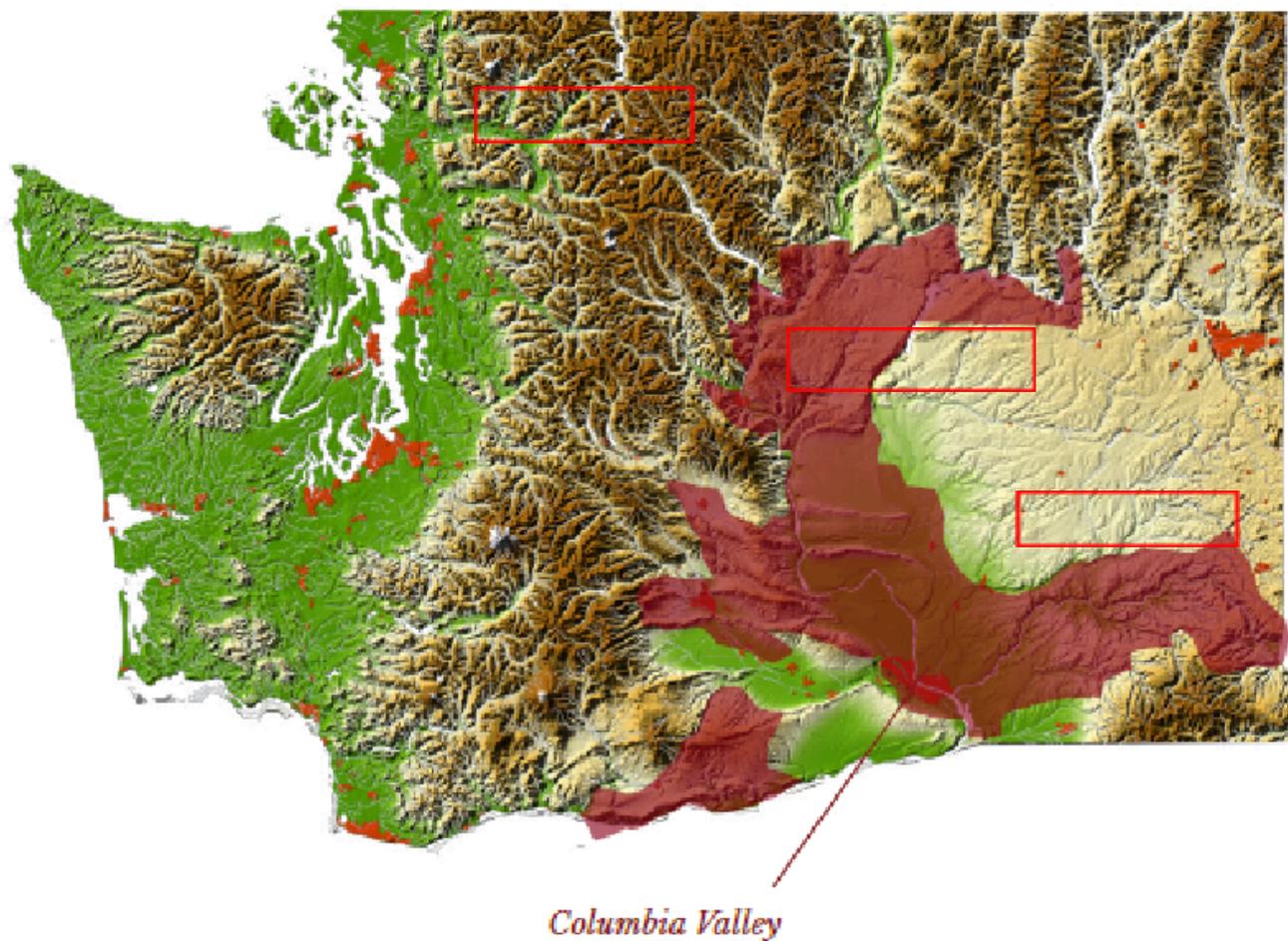
## LEGEND

- Known for Red & White Wines
- Known for Red Blends with Cabernet Sauvignon
- Columbia Valley AVA boundaries
- Known for Riesling & Chardonnay
- Small region known for white wines

## WASHINGTON



# USA - Washington



**VERITY**   
WINE PARTNERS

