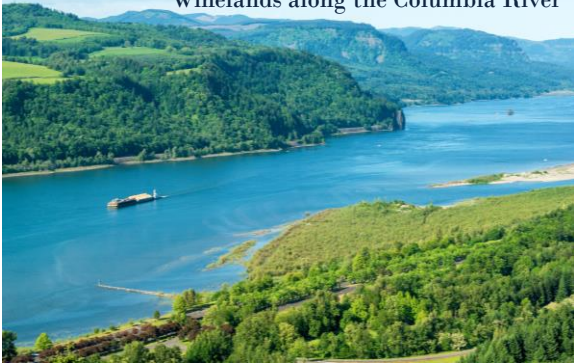
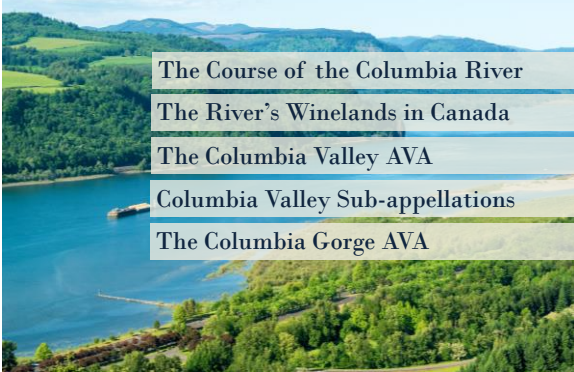


Rolling on the River:
Winelands along the Columbia River



1

Rolling on the River:



2

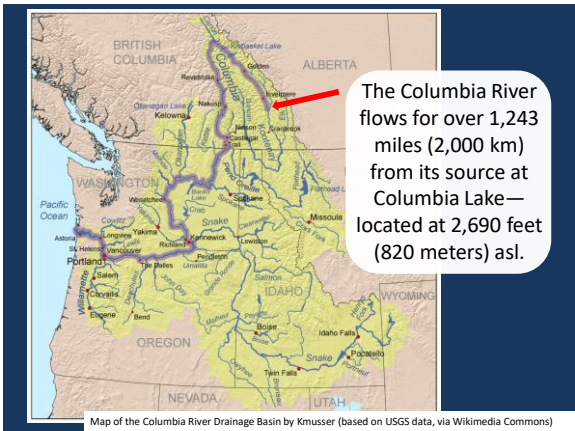
The Course of the Columbia River



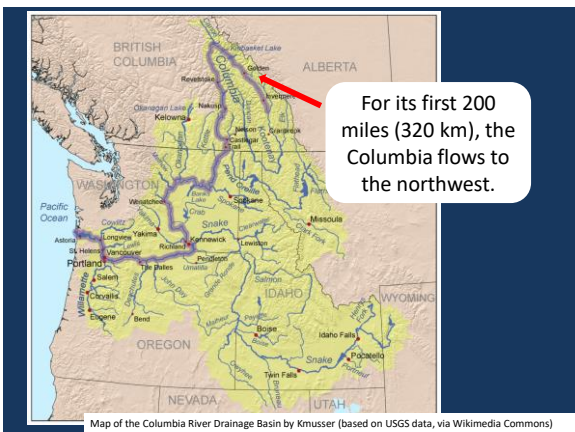
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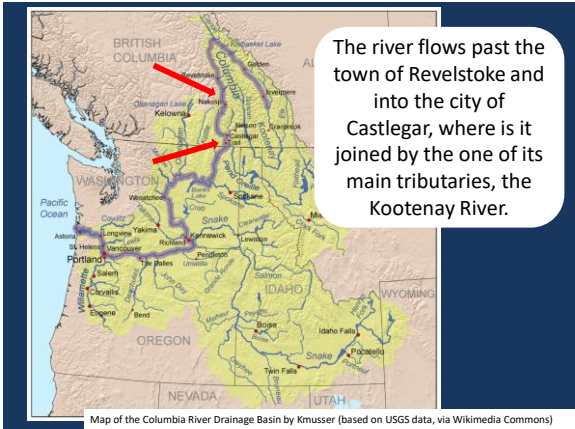


6



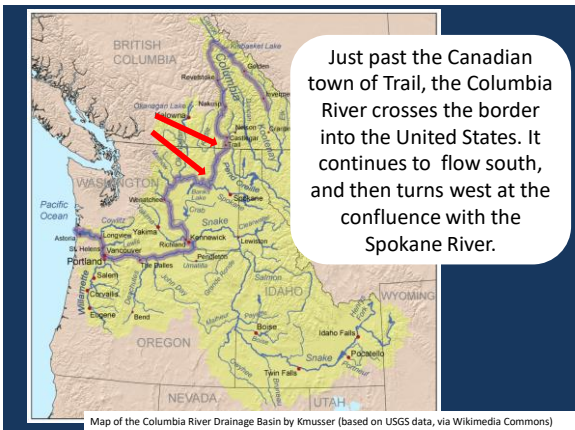
Rounding the northern end of the Selkirk Mountains, the river takes a sharp turn to the south.

7



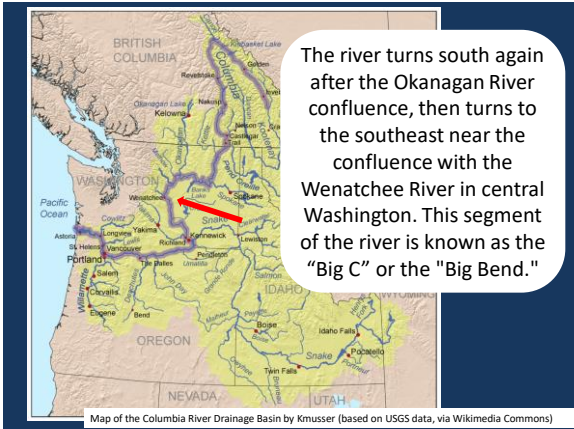
The river flows past the town of Revelstoke and into the city of Castlegar, where it is joined by the one of its main tributaries, the Kootenay River.

8



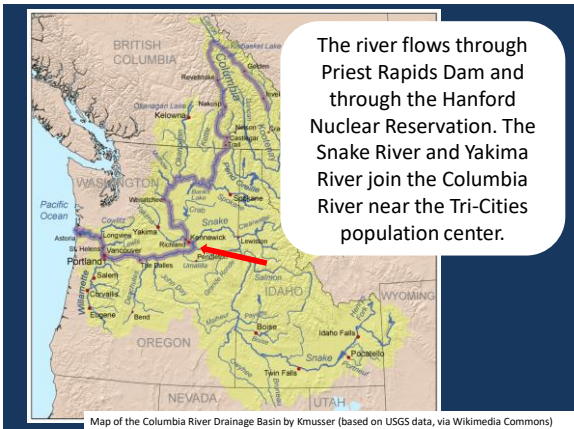
Just past the Canadian town of Trail, the Columbia River crosses the border into the United States. It continues to flow south, and then turns west at the confluence with the Spokane River.

9



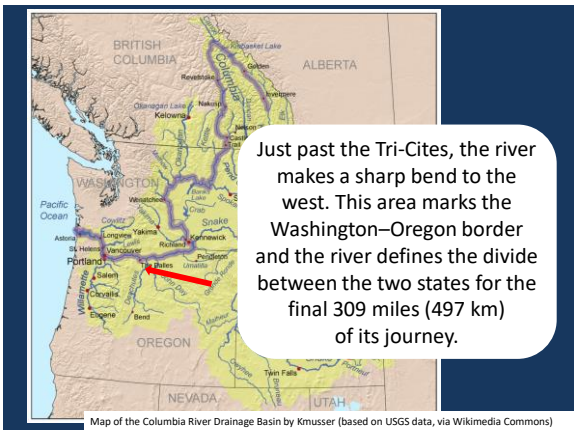
The river turns south again after the Okanagan River confluence, then turns to the southeast near the confluence with the Wenatchee River in central Washington. This segment of the river is known as the "Big C" or the "Big Bend."

10



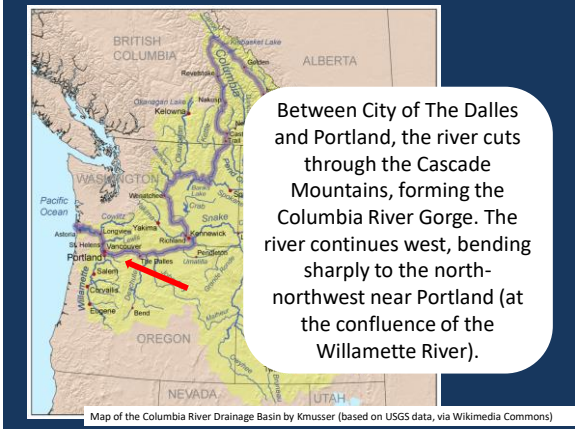
The river flows through Priest Rapids Dam and through the Hanford Nuclear Reservation. The Snake River and Yakima River join the Columbia River near the Tri-Cities population center.

11



Just past the Tri-Cities, the river makes a sharp bend to the west. This area marks the Washington–Oregon border and the river defines the divide between the two states for the final 309 miles (497 km) of its journey.

12



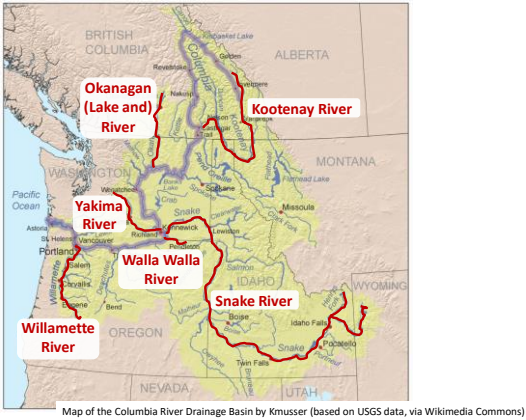
Between City of The Dalles and Portland, the river cuts through the Cascade Mountains, forming the Columbia River Gorge. The river continues west, bending sharply to the north-northwest near Portland (at the confluence of the Willamette River).

13



The Columbia empties into the Pacific Ocean just west of Astoria, Oregon; where it creates a shifting sandbar known as the *Columbia Bar*.

14

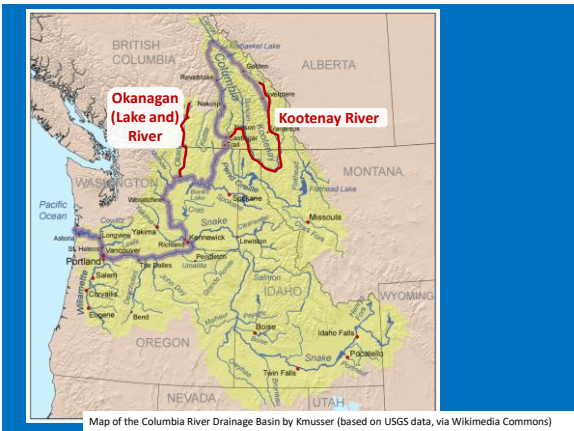


15

The River's Winelands in Canada



16



Map of the Columbia River Drainage Basin by Krusser (based on USGS data, via Wikimedia Commons)

17



18



19

Kootenays GI

Established: 2018

Location: Inland from the Okanagan Valley GI
Adjacent to the US/Canada border
49°N to 50°N

Photo via: <https://www.winebc.com>

20



21

Kootenays GI: Defining Characteristics

Topography: Mountains, ridges, rolling hills, hot springs, and valleys;
criss-crossed by rivers and large lakes

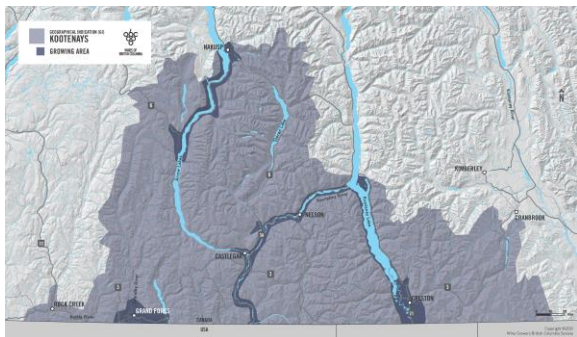
Climate: Cool climate; aspect, slope, and proximity to water define the
finest vineyard sites

Soils: Hard sedimentary sub-soils topped by silt, gravel, and clay

Other: Kootenay Lake—long and narrow—is the fifth largest lake in BC

22

Kootenays GI



23

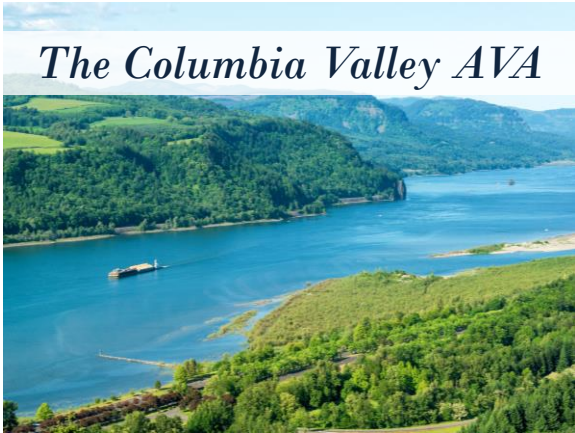
Kootenays GI: Vines and Wines



Currently planted to about 117 acres/47 ha of vines

Pinot Noir is the most-planted variety followed by Pinot Gris,
Chardonnay, Maréchal Foch (red hybrid), Riesling, and Gewürztraminer.

24



25



26

Columbia Valley AVA:

Established: 1984

Location: Inland from the Cascade Mountains

Contains more than 11 million total acres/4.5 million ha and 16 sub-appellations

Home to approx. 99% of Washington State's commercial vineyards

Photo via: <https://www.washingtonwine.org>

27

Columbia Valley AVA: Defining Characteristics

Topography: Rolling hills and shallow valleys in between the Cascade Mountains and the Channeled Scabland (to the east)

Defined by Columbia River as well as the Snake, Yakima, and Walla Walla Rivers

Climate: Semi-arid, continental climate; warm and dry, requires irrigation

Soils: Topsoils—sand, silt, gravel, loess—remnants from the Missoula Floods; most bedrock is basalt

28

Columbia Valley AVA: Vines and Wines



Total vineyard acreage: 60,079 acres/24,313 hectares
In Washington state: 59,234 acres/23,971 hectares

Leading grape varieties: Cabernet Sauvignon, Chardonnay, Merlot, Riesling, Syrah

29



30



31

Lake Chelan AVA:

Established: 2009

Location: Northwest edge of the Columbia Valley AVA, at the edge of the Cascade Mountains, northern end of the lake extends into North Cascades National Park



Photo via: <https://www.washingtonwine.org>

32



33

Lake Chelan AVA: Defining Characteristics

Topography: Surrounds Lake Chelan (a one-mile-wide, very deep, glacier-carved lake)

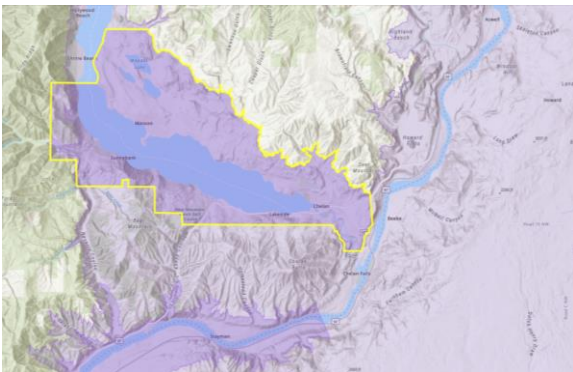
Moderate elevation: 1,100 feet/335 m to 2,000 feet/610 m asl

Climate: *Lake effect* = cooler summer days and warmer summer nights than the surrounding areas

Soils: Glacial sediment, sand, ash, pumice (not affected by Missoula Floods); granite bedrock

34

Lake Chelan AVA



35

Lake Chelan AVA: Vines and Wines



Total vineyard plantings: 269 acres (109 hectares)

Leading grape variety: Syrah, followed by Pinot Noir, Chardonnay, Pinot Gris, and Merlot

36



37

Rocky Reach AVA:

Established: 2022

Location: Tucked between two sets of rolling hills; in the northern part of the Columbia Valley AVA, between the Lake Chelan AVA (to the north) and the Ancient Lakes of Columbia Valley AVA (to the southeast).

 A photograph showing a wide view of a vineyard with rows of grapevines stretching into the distance under a clear sky.

Photo via: <https://www.washingtonwine.org>

38



39

Rocky Reach AVA: Defining Characteristics

Topography: A deep canyon located along both sides of a stretch the Columbia River

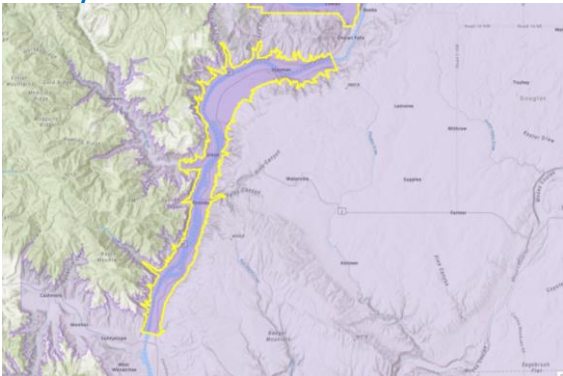
Climate: At a slightly lower elevation, and therefore a bit warmer than the surrounding area

Soils: Silica-rich, crystalline basement bedrock (shared only with Lake Chelan AVA), topsoil includes sand, silt, loess, and cobblestones

Other: The river itself takes up 24% of the total land area

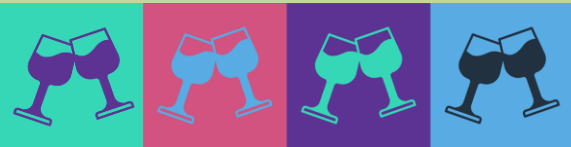
40

Rocky Reach AVA



41

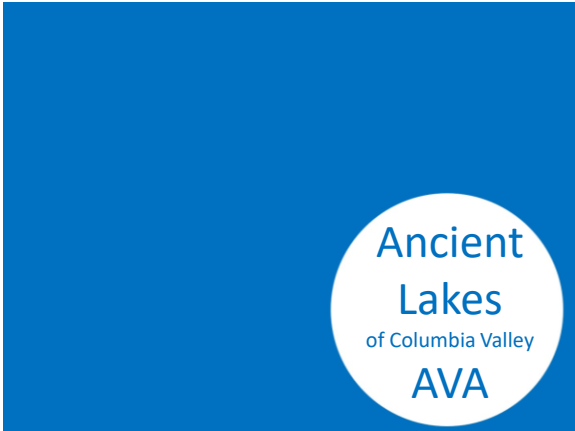
Rocky Reach AVA: Vines and Wines



117 acres/47 ha of vines; several commercial vineyards, just one winery—Rocky Pond Estate Winery—so far.

Leading grape variety: Cabernet Sauvignon, followed by Merlot and Syrah

42



43

Ancient Lakes of Columbia Valley AVA:

Established: 2012

Location: North of the Royal Slope AVA, western edge formed by the Columbia River



Photo via: <https://www.washingtonwine.org>

44



45

Ancient Lakes of Columbia Valley AVA: Defining Characteristics

Topography: Lies in the Quincy Basin, slopes gently to the east (4%)

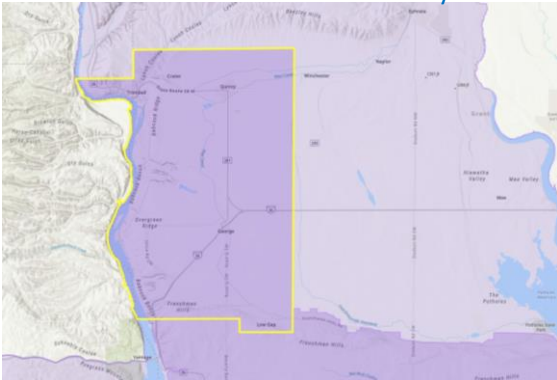
Climate: Cooler than most, large diurnal temperature swings

Soils: Sand, silt, and loam (deposited by the Missoula Floods); some caliche (calcium carbonate) bedrock

Named for the 35+ pothole lakes in the area

46

Ancient Lakes of Columbia Valley AVA



47

Ancient Lakes of Columbia Valley AVA: Vines and Wines



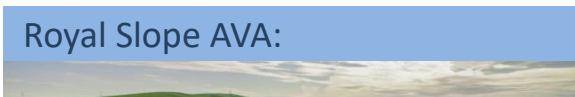
Of the region's total 162,700 acres/65,800 ha, 3,000 acres/1,200 ha are planted to vines.

Dominated by white grapes including Riesling and Chardonnay,

48



49



Established: 2020

Location: Surrounds the town of Royal City; tucked between the Ancient Lakes AVA (to the north) and Wahluke Slope AVA (15 miles to the south)



Photo via: <https://www.washingtonwine.org>

50



51

Royal Slope AVA: Defining Characteristics

Topography: A south-facing slope surrounding the town of Royal City

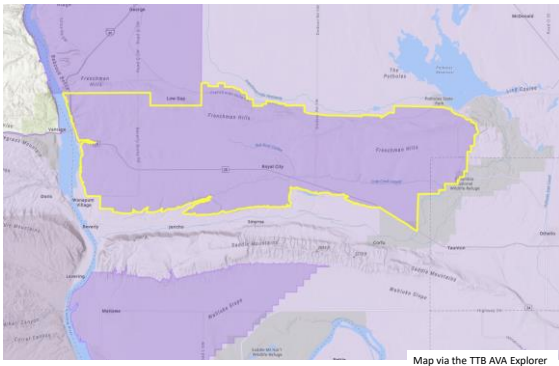
Elevation ranges from 610 feet/186 m (in the southeast corner) to 1,756 feet/535 m

Climate: Somewhat cooler than the Wahluke Slope, but considerably warmer than Ancient Lakes

Soils: Basalt bedrock; topsoils vary (the areas of highest elevation stayed above the Missoula Flood lines)

52

Royal Slope AVA



53

Royal Slope AVA: Vines and Wines



1,900 acres/768 ha planted to vines; leading grapes include Cabernet Sauvignon, Chardonnay, and Syrah*

Home to 13 commercial vineyards and one bonded winery (Foxy Roxy Wines)

54



55

Wahluke Slope AVA:

Established: 2005

Location: 15 miles south of the Royal Slope AVA; tucked into a bend of the Columbia River

An aerial photograph showing a large, rectangular vineyard with rows of grapevines. The vineyard is situated in a valley, with a river visible in the background. The surrounding landscape includes some buildings and other agricultural fields.

Photo via: <https://www.washingtonwine.org>

56



57

Wahluke Slope AVA: Defining Characteristics

Topography: One large, south-facing slope (alluvial fan) with a constant, gentle slope (8%)

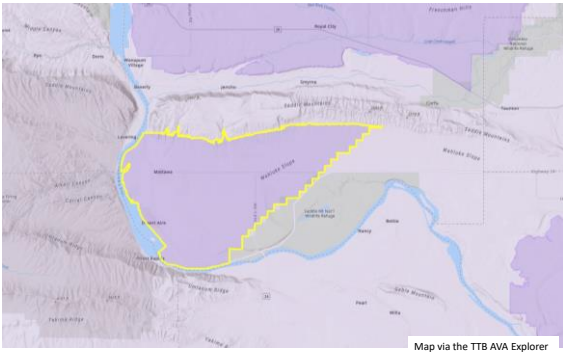
Elevation ranges from 425 feet/130 m (by the river) to 1,480 feet/451 m (most vineyards lie below 1,000 feet/305 m)

Climate: One of the warmest and driest in the state

Soils: Topsoils are deep, wind-blown sand (loess) and flood-deposited sediments topped with gravel and rocks; uniform throughout the appellation

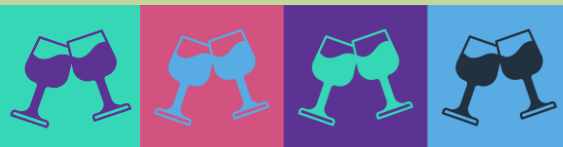
58

Wahluke Slope AVA



59

Wahluke Slope AVA: Vines and Wines



Home to 8,932 acres/3,615 ha of vines

Dominated by red grapes including Merlot, Cabernet Sauvignon, and Syrah (producing concentrated, heat-ripened grapes and wine)

60



61

White Bluffs AVA:

Established: 2021

Location: Southeast of Wahluke Slope, further inland (east) than most other Columbia Valley sub-appellations; north of the Tri-Cities

 An aerial photograph showing terraced vineyard rows on a hillside. The terrain is dry and hilly, with some greenery in the foreground.

Photo via: <https://www.washingtonwine.org>

62



63

White Bluffs AVA: Defining Characteristics

Topography: Located atop a plateau situated about 200 feet/61 m higher than the surrounding areas

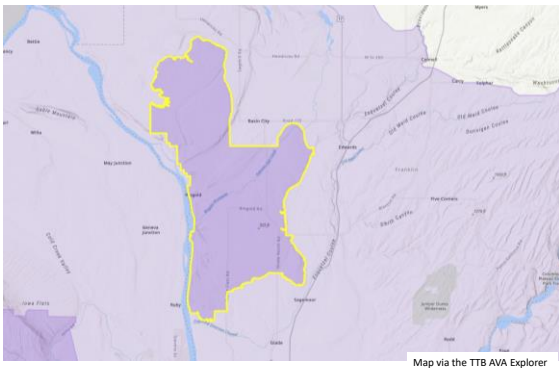
Climate: Added elevation (somewhat) protects from the cold air on the surrounding valley floor

Soils: Topsoils include windblown silt (loess) and alluvial deposits; caliche (calcium carbonate)-and-clay sub-soil (Ringold Formation) is so deep that vine's roots never reach the basalt bedrock

Other: Named for the whitish appearance of the exposed sub-soils found escarpments along the Columbia River

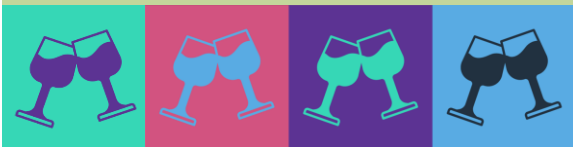
64

White Bluffs AVA



65

White Bluffs AVA: Vines and Wines



Total vineyard area: 1,127 acres/456 hectares; vines have been planted here since 1972 and include some of the oldest in Washington State

Leading varieties include Cabernet Sauvignon, Merlot, Syrah, Riesling, and Sauvignon Blanc

66



67

Horse Heaven Hills AVA:

Established: 2005

Location: South of the Yakima Valley AVA; tucked around a bend of the Columbia River (50 miles of river shoreline)




Photo via: <https://www.washingtonwine.org>

68



69

Horse Heaven Hills AVA: Defining Characteristics

Topography: Situated on a series of (many south-facing) slopes (part of the Yakima Fold Belt); 50-miles of Columbia River shoreline,

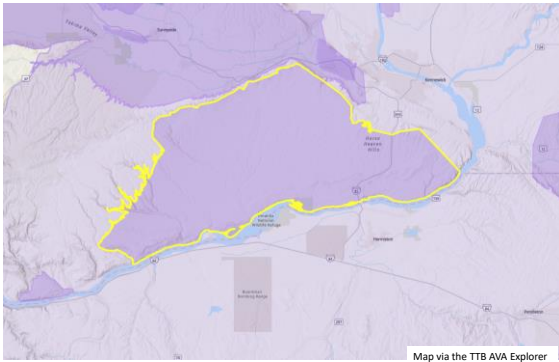
Elevations range from 200 feet/61 m at the river to 1,800 feet/549 m at the northern boundary

Climate: Semi-arid, warm continental climate; persistent winds, mild winters

Soils: Wind-blown sand (loess), sediment from the Missoula Floods, basalt-based gravel; basalt bedrock

70

Horse Heaven Hills AVA



71

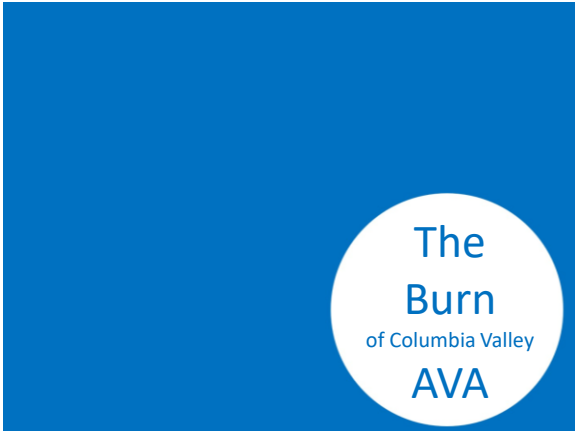
Horse Heaven Hills AVA: Vines and Wines



17,082 acres/6,912 ha of vines; represents 27% of Washington State's total grape production

Best-known for Cabernet Sauvignon, other leading varieties include Merlot, Syrah, and Chardonnay

72



73

The Burn of Columbia Valley AVA:

Established: 2021

Location: Tucked between Horse Heaven Hills and Columbia Gorge, on the border between Washington State and Oregon, just north of the Columbia River



Photo via: <https://www.washingtonwine.org>

74



75

The Burn of Columbia Valley AVA: Defining Characteristics

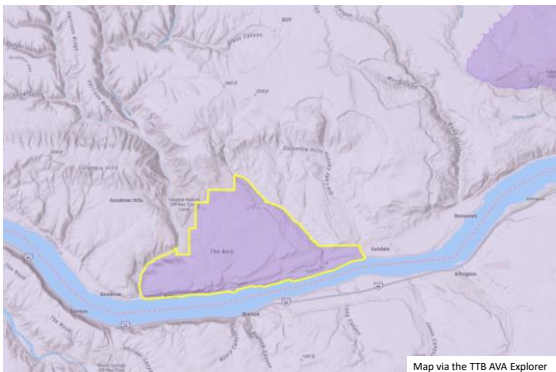
Topography: Benchland above the Columbia River; gentle slope (7%) leading from the north down to the riverbank

Climate: A bit warmer than surrounding areas, but with persistent breezes (leading to a longer growing season)

Soils: Primarily Walla Walla Silt and loam; heavier (more water-holding capacity) than many of the surrounding areas

76

The Burn of Columbia Valley AVA



77

The Burn of Columbia Valley AVA: Vines and Wines



1,500 acres/607 hectares planted to vines

The leading grape variety is Cabernet Sauvignon, this is a younger growing area, with almost of all its vines planted since 2015.

78

The Columbia Gorge AVA



79

The Columbia Gorge AVA:

Established: 2004

Location: At the eastern edge of the Columbia Valley AVA; just west of the Cascade Crest, straddling the Columbia River in both Oregon and Washington State



Photo via: <https://www.washingtonwine.org>

80



81

The Columbia Gorge AVA: Defining Characteristics

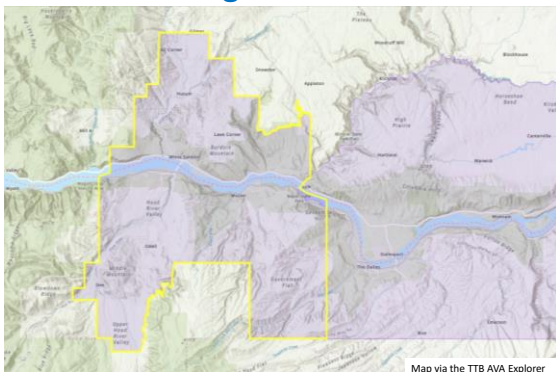
Topography: Situated within the Cascade Mountain Range's only near sea-level passage; higher elevations (up to 2,000 feet/600 m) and south-facing slopes on the Washington side

Climate: Varies greatly west (some maritime influence) to east (continental); heavy rainfall in the west, arid in the east, persistent winds; cooler overall on the Oregon side

Soils: Predominantly silty loam (less gravel than other areas); otherwise, diverse soils derived from a variety of sources (volcanic, landslides, floods)

82

Columbia Gorge AVA



83

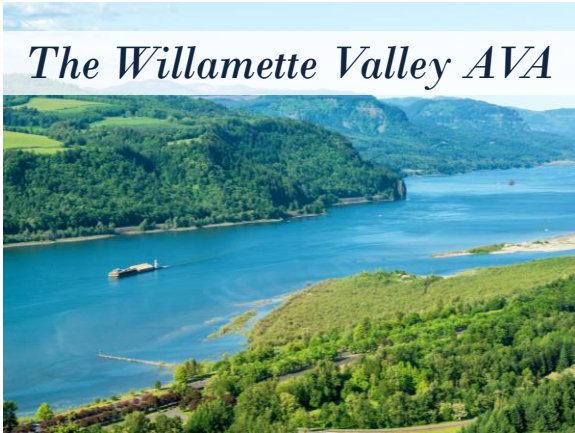
The Columbia Gorge AVA: Vines and Wines



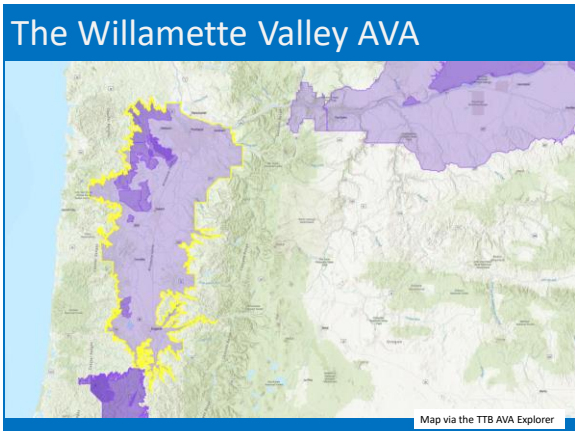
Total vineyard acreage: 950 acres/384 ha
(Vines are approximately 40% in Washington State, 60% in Oregon)

Leading grape varieties include Pinot Noir, Chardonnay, Pinot Gris, and Riesling

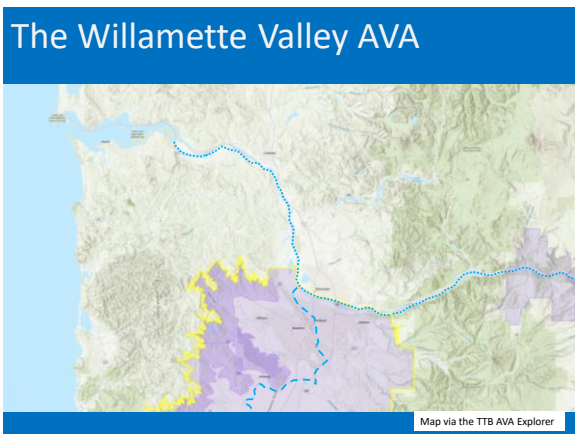
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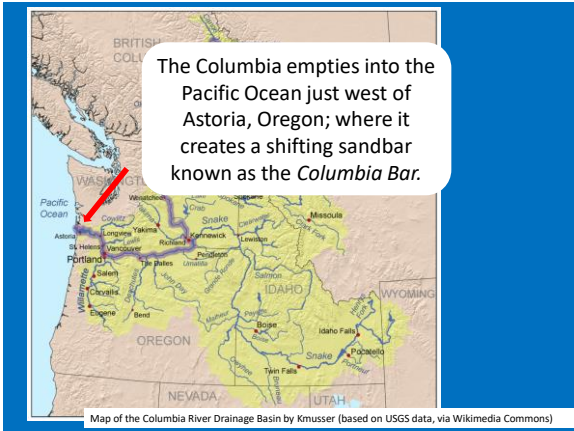
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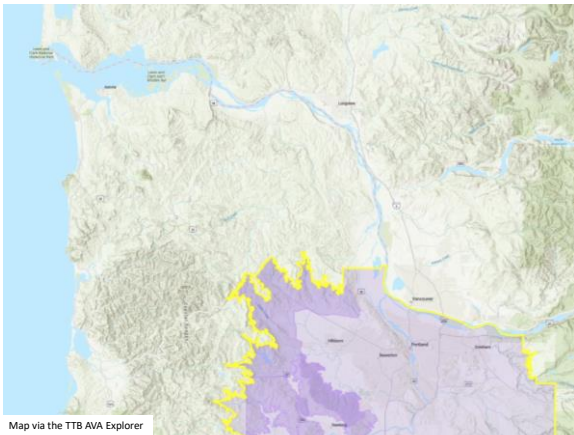
86



87



88



89



90

What three Washington State AVAs are outside of the Columbia Valley AVA?



91

(In the context of BC wine), what are the Columbia River's two main Canadian-sourced tributaries?



92

What is the northernmost sub-AVA of the Columbia River Valley AVA?



93

What two AVAs straddle two sides of the Columbia River?



94

Of the appellations we discussed today, which is the only one dominated by white grapes?



95

The _____ River and _____ River join the Columbia River near the Tri-Cities population center.



96

What is the most common type of bedrock in the Columbia Valley?



97

How long is the Columbia River?

- a. 525 miles/845 km
- b. 1,243 miles/2,000 km
- c. 2,700 miles/4,345 km
- d. 1,624 miles/2,614 km



98

What Oregon AVA is located along the Columbia River?



99

Thank you for joining us!

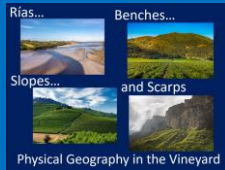


100

Upcoming Members-Only Events:



Friday–Saturday,
October 21–22



Sunday,
November 12

101
