Petition for a New American Viticultural Area

The Burn

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Overview

"The Burn" is an area in south central Washington bordering on the Columbia River. West of Sundale, WA, and perched as a bench above the river, it has a general south southeast aspect and has relatively recently been developed for viticulture. This is a petition to establish The Burn as an American Viticulture Area (AVA) in Washington state.

The total land area of the proposed AVA is 16,870 A. Currently there are 1,261 acres of grapes planted within the AVA, growing 4 different varietals which range in age from 1 - 15 years (Table 1). Currently there are plans for expansion

Table 1: Wine grape acreage, by variety and planting year in the proposed AVA "The Burn".

Variety	Number of acres	Year(s) planted	Vineyard Owner
Malbec	51	2015	Mercer Ranches, Inc.
Cabernet Sauvignon	225	2015	Mercer Ranches, Inc.
Cabernet Sauvignon	432	2016	Mercer Ranches, Inc.
Cabernet Sauvignon	430	2017	Mercer Ranches, Inc.
Syrah	80	2017	Mercer Ranches, Inc.
Chardonnay	40	2017	Mercer Ranches, Inc.
Sangiovese	3	2002, 2013	Aanpama/Peggy Hoag

The current grape acreage is distributed between two commercial vineyards (Fig. 1). There are no bonded wineries in the proposed AVA.

Narrative

Name Evidence

The area between Rock Creek and Chapman Creek in Klickitat County, WA., is known as "The Burn". In the early 1900's, mail delivery to this area was from the SP&S Railway station in Sundale, WA, with the designation "The Burn" (see Appendix 1, "History of Klickitat County"). This designations appears since that time in several forms.

Although the current USGS maps do not designate it, older versions of USGS maps of the Goodnoe Hills (1965) and Sundale (1971) also clearly designate the bench between Rock Creek and Chapman Creek as "The Burn" (see Appendix 1). In addition, the USGS online map continues to designate the area as "The Burn" (Fig. 2).

Thus, historically, since the early 1900s, the geographic area is known as "The Burn".

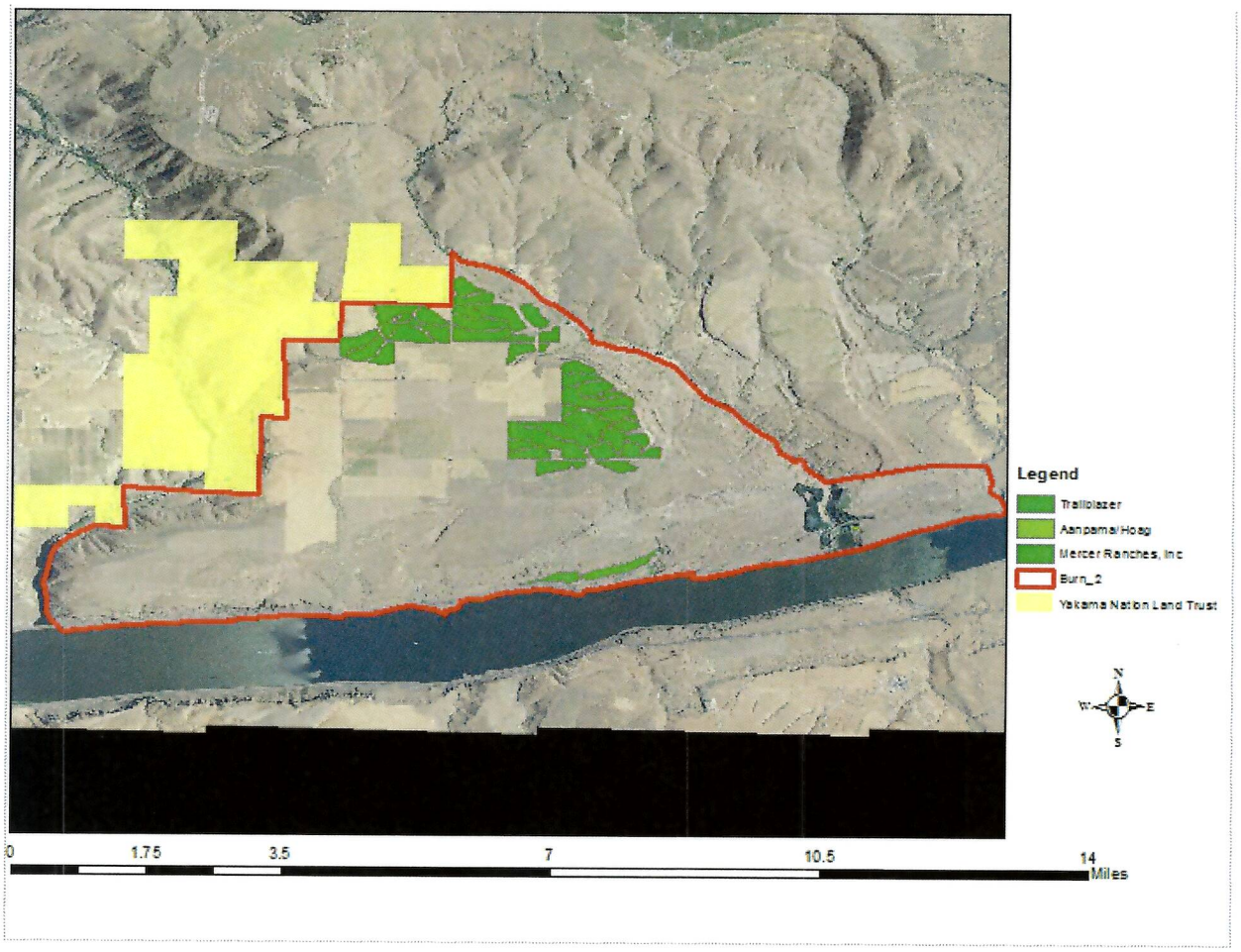
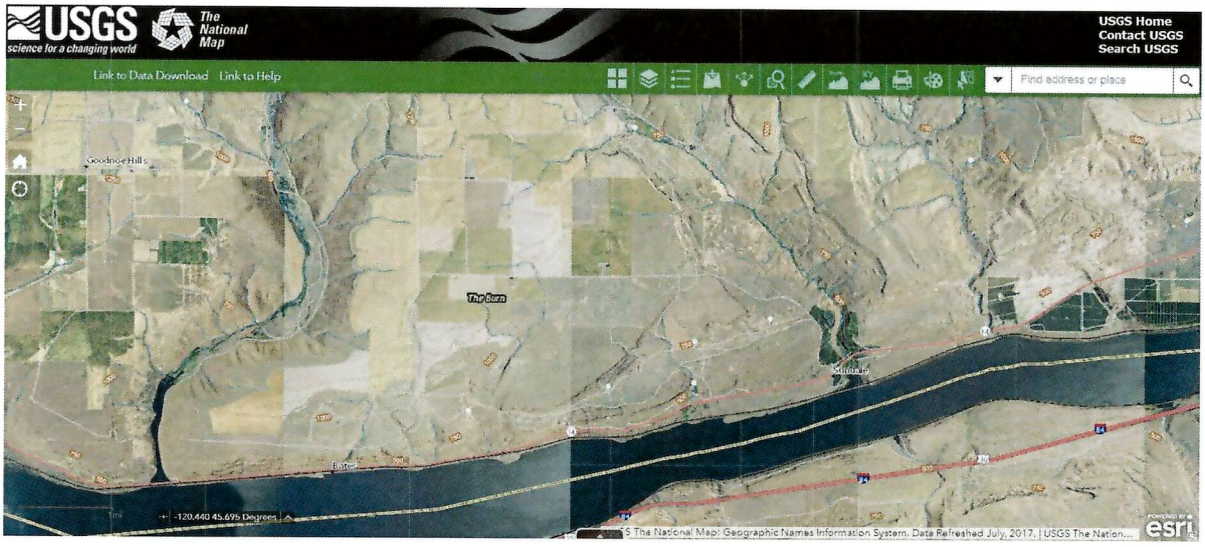


Figure 1. Map of proposed AVA and existing vineyards.

Figure 2. Screen shot taken in July 2017 from the USGS website showing the bench between Rock and Chapman Creeks in Klickitat County, WA, being designated as “The Burn”.



Boundary Evidence

The area as outlined encompasses the land feature "The Burn" as described under name evidence (Fig. 3).

The southern boundary is the border between land and the Columbia River as shown on USGS maps and as a natural break between state lines. It is bounded on the west by water features (Paterson Slough, Rock Creek) until Rock Creek intersects with land held by the Yakima Nation which, as tribal land, is excluded from wine grape production. To the east, the boundary is the Chapman Creek bed, with a deviation to include the bench due east of Sundale where grapes are currently being produced and the land features are similar.

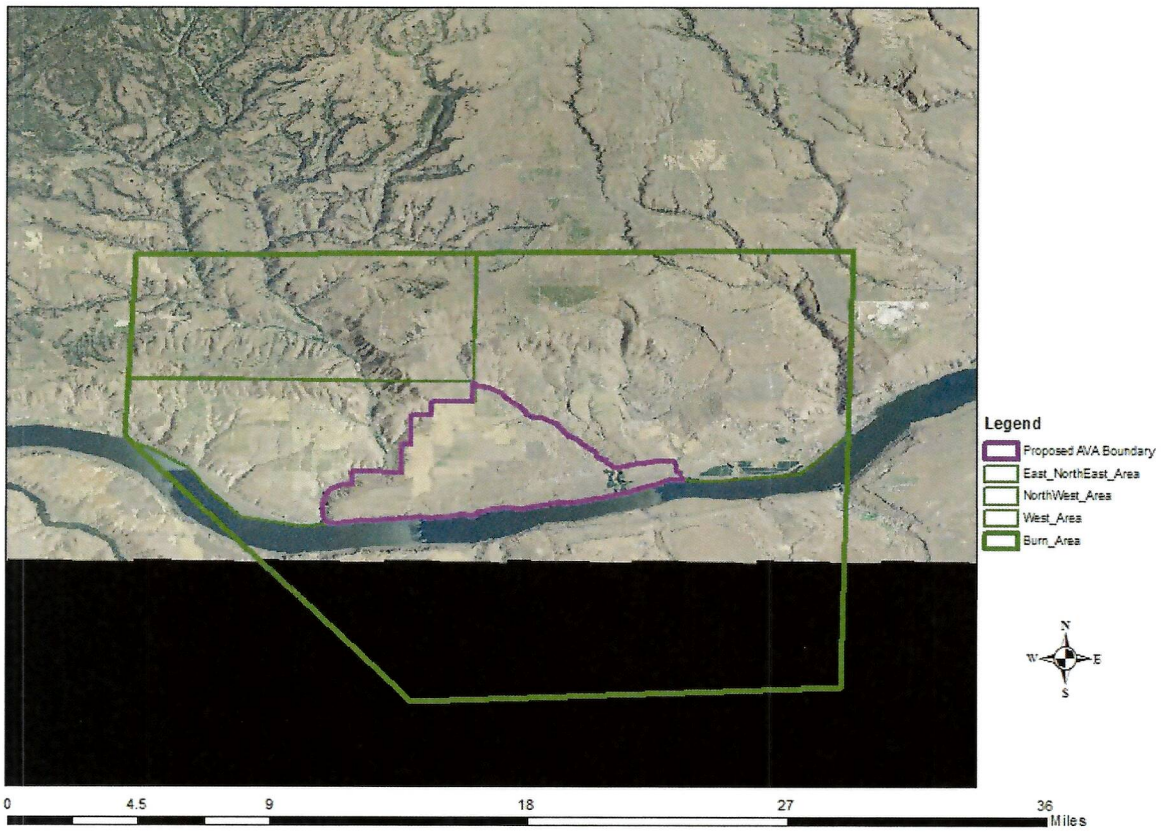


Figure 3. Proposed boundary for "The Burn" AVA overlaid on aerial image map, with the proposed AVA highlighted in purple. The areas outlined in green to the east northeast, south, west, and northwest are used as areas for comparison for distinguishing features.

Distinguishing Features

Features that affect viticulture/winegrape characteristics in the proposed AVA and the areas surrounding it that have been evaluated are soil, the topographic features of slope, aspect, and elevation, and the climatic factors growing degree days, as an indication of heat unit accumulation, and precipitation. Topographic data were acquired using the National Elevation Dataset, 10 m data. Climatological data is from a 20 year average dataset from 1981 - 2010 using data from the Western Region Climate center weather stations and spatially interpolated. Data was parsed using the proposed AVA and areas surrounding it with an area to the east and north east (41,824 acres), south (in Oregon, excluding the Columbia River, 49,730 acres), due west (22,738 acres) and northwest (28,053 acres). The areas used are highlighted with green outline (Fig. 3).

Soils

There are 94 different soil series (including series complexes) in the 159,215 acre area identified for comparative purposes, with 32 of the 94 found in the proposed The Burn AVA (See Figure in Appendix 2). Within the proposed AVA, approximately 80% of the land area is comprised of 9 soil series or complexes (Table 2), however, nearly 20% of this area is a combination of Rock outcrop complexes that would not be suitable for vineyards (Rock outcrop-Rubble and complex, 6.08% and Rock outcrop-Haploxeroll complex 13.57%). The other dominant series are Walla Walla silt loam without and with cemented substratum 30.16% and 4.07%, Endicott silt loam and the Endicott-Moxee complex (3.73 and 2.55%), Wato silt loam (4.85%) and two Haploxeroll complexes (Fluventic Haploxeroll-Riverwash complex and Haploxeroll-Fluvaquent complex, 6.51 and 8.37%). Thus, the area most suited for viticulture is clearly dominated by a few silt loam soils of varying depths.

The area due west of the proposed AVA is the most similar to the proposed AVA, also dominated by Walla Walla silt loam without and with cemented substratum 41.55% and 2.42%, However, 24.27% of the soils to the west are not found in the proposed AVA. The other adjacent regions show even less overlap with the proposed AVA. The large area to the east and northeast overlap in soil series by 40.80% but only 8.39% of the land area contains the 9 series that dominate the proposed AVA. To the south, 33.56% of the the land has overlapping soil series but only 14.60% are the 9 series that dominate the proposed AVA. In the region to the northwest, 31.28% of the the land has overlapping soil series but only 12.54% are the 9 series that dominate the proposed AVA. A complete table of all soils in the proposed AVA and the surrounding areas is provided after the soil map in Appendix 2.

Topographic Features

The average land slope in the proposed AVA is the second to lowest when compared to the surrounding areas, averaging 7.27%, with a range from 0 - 67% (Table 3). The area to the south has a less steep average but a greater range. All of the other surrounding areas have slightly lower ranges of slopes but higher average values. The area to the east-northeast has the closest slope to the proposed AVA, averaging 9.13%, whereas the west and northwest area have much higher average slopes, of 12.83 and 13.89% on average, indicating that there would be a greater percentage of land in these areas that would not be suitable to viticulture due to difficult to manage slopes (Fig. 4).

Table 2: Comparison of percentage of different soil series (including complexes) in the proposed AVA "The Burn" versus those found in the areas surrounding the proposed AVA. Only the soil series found in the proposed AVA are included. A complete list of soil series is in Appendix A.

Soil Series	The Burn (%)	Area to the East/NorthEast (%)	Area to the South (%)	Area to the West (%)	Area to the NorthWest (%)
Bakeoven very cobbly loam	0.08	2.14		0.06	1.52
Weirman fine sandy loam	0.08	0.40			
Quincy fine sand	0.09			3.25	
Lickskillet very stony loam	0.15		0.23		
Cheviot-Ralls-Wipple complex	0.20	9.69			0.03
Borfin cobbly clay loam	0.21	0.08			
Kahlotus silt loam	0.27	4.62			
Broadax-Colockum-Tronsen complex	0.29	2.48		0.22	0.20
Mikkalo-Bakeoven complex	0.32				
Rockly-Lorena complex	0.53	0.30		1.24	7.17
Quinton fine sand	0.53				
Lickskillet cobbly silt loam	0.65	1.81		0.48	0.40
Cheviot very stony silt loam	0.84	0.86			
Mikkalo silt loam	0.93	3.47	2.08		
Umapine silt loam	1.04	0.44			
Kahlotus-Kennewick complex	1.20				
Kahlotus-Rock outcrop complex	1.64	0.47			
Bolicker silt loam	1.65			3.08	0.99
Benwy silt loam	1.84	1.10			
Olex silt loam	1.89	1.92	16.65	1.12	
Rockly-Rock outcrop complex	1.93	0.03		4.68	8.43
Cheviot-Ralls-Rock outcrop complex	2.54	2.59			
Endicott-Moxee complex	2.55	1.20		0.04	
Endicott silt loam	3.73	0.42		1.00	0.04
Walla Walla silt loam, cemented substratum	4.07	0.39		2.42	0.04
Wato silt loam	4.85			1.41	
Rock outcrop-Rubble land complex	6.08	4.15	1.84	5.72	5.24
Fluventic Haploxerolls-Riverwash complex	6.51	0.41		6.21	5.23
Haploxeroll-Fluvaquent complex	8.37	0.66			
Rock outcrop-Haploxeroll complex	13.57				
Walla Walla silt loam	30.16	1.16	12.76	41.55	2.00

Table 3: Comparison of percentage of topographic features in the proposed AVA "The Burn" versus those found in the areas surrounding the proposed AVA (ENE is the area to the east-northeast; S to the south, W is due west, and NW is northwest).

	Slope			Aspect		Elevation (ft)		
	average	minimum	maximum	average	standard deviation	average	minimum	maximum
Burn	7.27	0	67.03	167 SE	88	902	270	1780
ENE	9.13	0	57.61	159 SE	91	1522	266	2614
S	5.36	0	69.26	166 SE	119	928	252	1398
W	12.83	0	56.06	187 S	77	1135	266	2460
NW	13.89	0	53.4	182 S	104	1758	522	2694

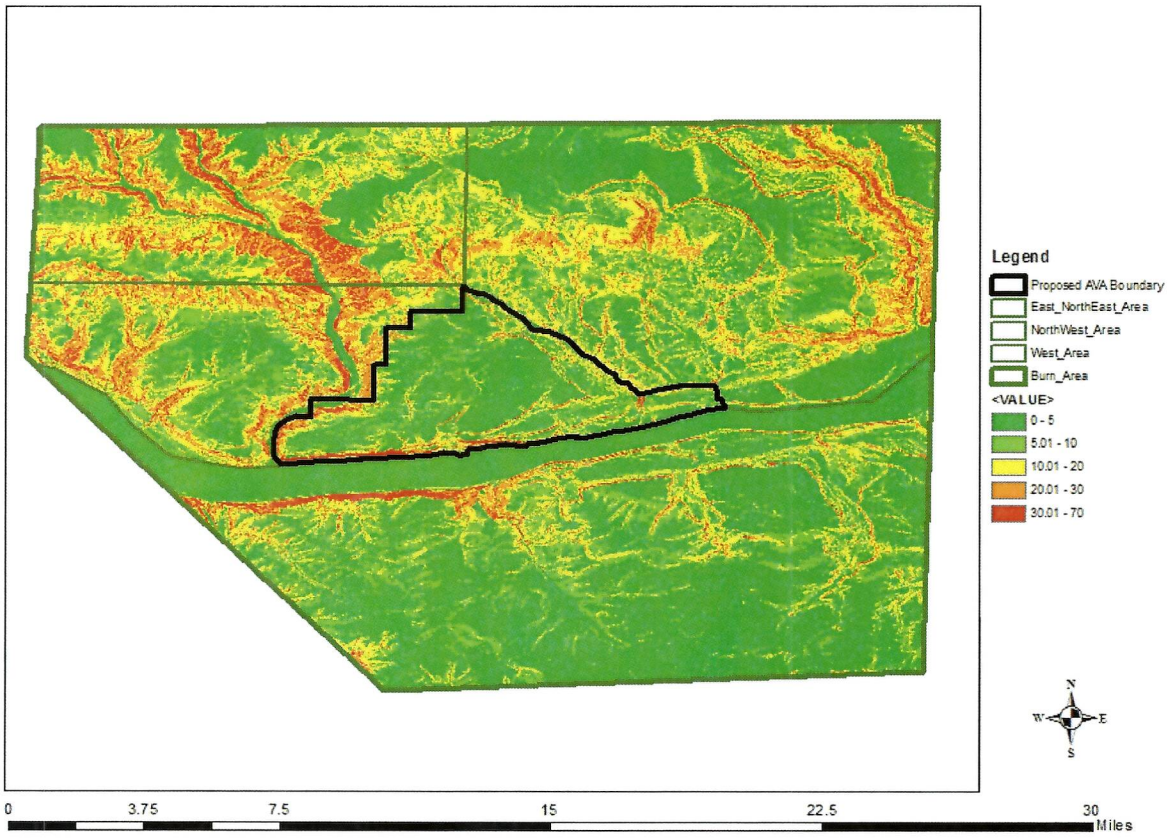


Figure 4. Slopes of the proposed AVA "The Burn" and the surrounding areas. The slopes indicated in green would be suitable for viticulture, yellow might be, and red would not be suitable.

The proposed AVA aspect is generally southeast (Table 3), as are the areas to the south and east-northeast, whereas the areas to the west and northwest average a south aspect. However, the distribution shows that the central area of the proposed AVA shows a large contiguous area with a aspects from east, southeast and south when compared to other areas around the proposed AVA which are more dispersed (Fig. 5).

Elevation of all of the areas identified ranges from 252 - 2694' (Table 3, Fig. 6). Of the areas, the proposed AVA has the lowest average elevation and is most similar to the area to the south, which has a slightly higher average elevation, a lower minimum and a much lower (almost 400') maximum elevation. The areas to the east-northeast, west, and northwest are all higher on average with much higher maximum elevations than "The Burn".

Thus, the proposed AVA is most similar topographically to the area due south, where the soils are not at all similar to "The Burn". The areas north, east and west are steeper and higher and, in the case of aspect, the areas to the west and northwest differ from the proposed AVA.

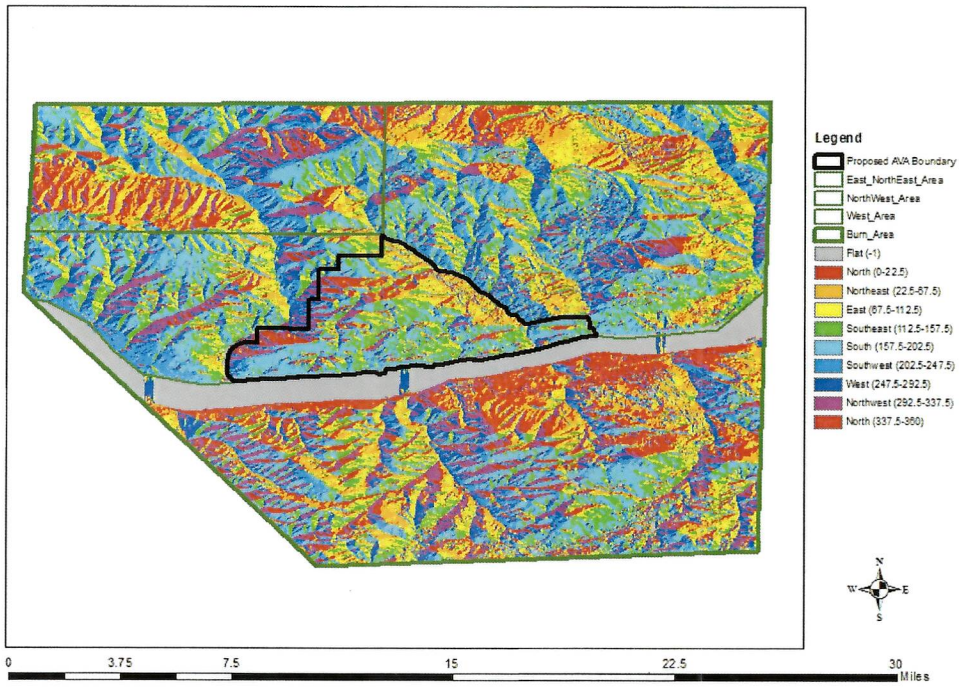


Figure 5. Aspects of the proposed AVA "The Burn" and the surrounding areas.

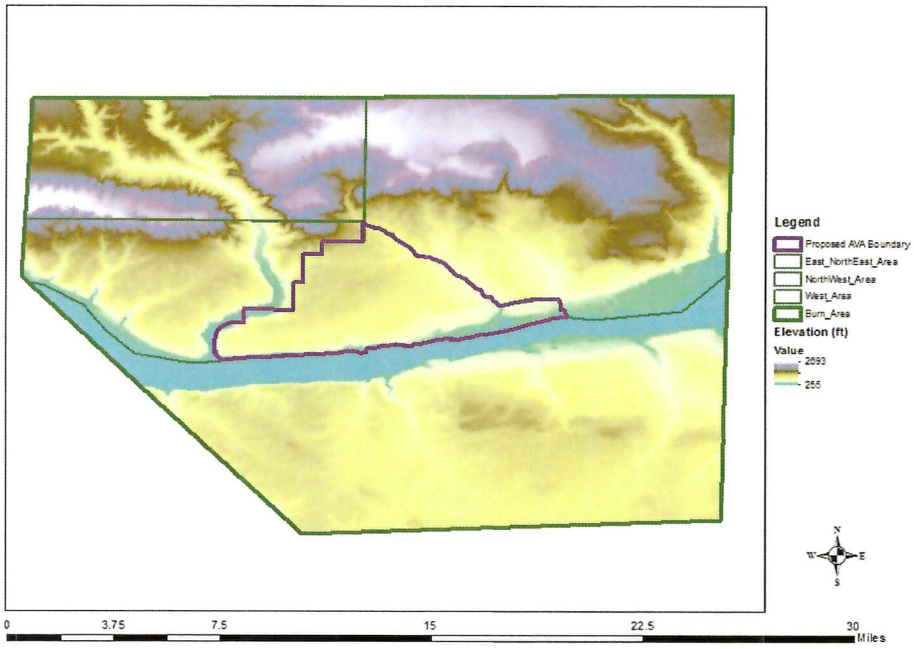


Figure 6. Elevation of the proposed AVA "The Burn" and the surrounding areas.

Climatological Features

The climatological information for comparing the proposed AVA area to those surrounding it was developed from the 30 year weather records from 1981 - 2010 from the Western Region Climate Center. The data have been spatially interpolated using ArcGIS across the region using universal kriging. For this petition, Growing Degree Days (GDD, base 50°F) is used as an indicator of temperature since this is the most commonly used measure of temperature for assessing viticultural suitability and suitability for different grape cultivars.

The GDD in "The Burn" geographic area is more uniform than in the land areas around it, recognizing that in Figure 7, only the Columbia River shows greater uniformity. The average as well as range for GDD in "The Burn" is most similar to the area to the S (Table 3). The other areas average 193 - 585 fewer GDD, and the lowest GDDs are 639 - 835 units lower, indicating that the proposed AVA is warmer than the surrounding areas to the N, E, and W. The one exception to this is the slightly higher maximum GDD in the east-northeast area, which is 49 units higher.

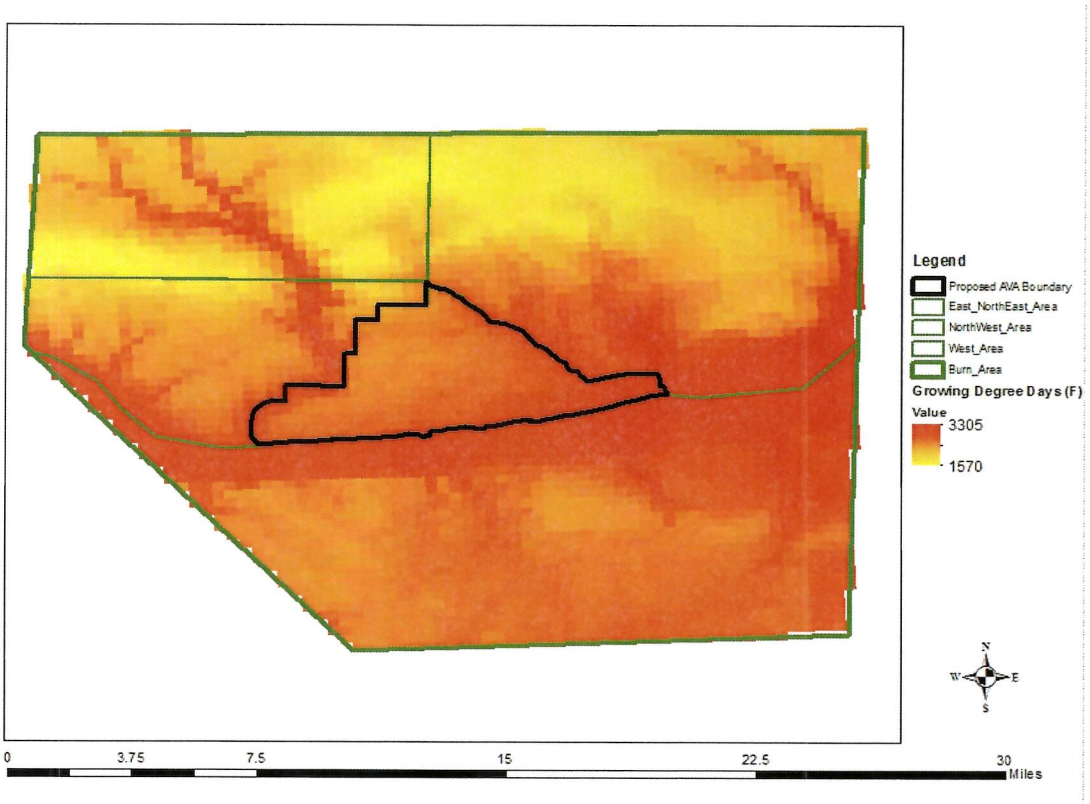


Figure 7. Growing degree days (base 50F) of the proposed AVA "The Burn" and the surrounding areas calculated from 30 years of weather data (1981 - 2010) from the Western Region Climate Center and spatially interpolated.

Table 4: Comparison of the climatic factors Growing Degree Days (base 50 F) and precipitation of the proposed AVA "The Burn" versus those found in the areas surrounding the proposed AVA (ENE is the area to the east-northeast; S to the south, W is due west, and NW is northwest). The data were calculated from spatially interpolated data derived from 30 years of weather data (1981 - 2010) from the Western Region Climate Center.

	Growing Degree Days (base 50F)			Precipitation (in)		
	average	minimum	maximum	average	minimum	maximum
Burn	2763	2405	3249	8.76	6.65	10.44
ENE	2414	1723	3298	10.23	6.8	11.63
S	2768	2464	3305	9.39	6.67	10.38
W	2570	1766	3191	9.81	7.03	12.53
NW	2178	1570	2995	11.58	10.45	12.69

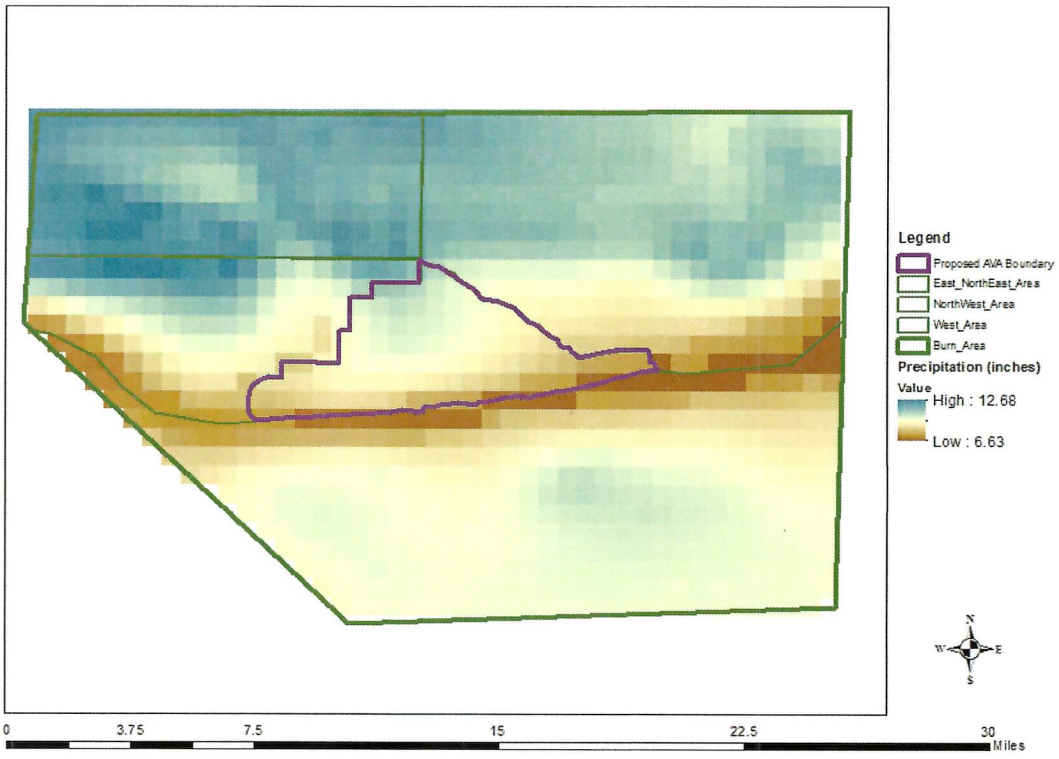


Figure 8. Annual precipitation (inches) of the proposed AVA "The Burn" and the surrounding areas calculated from 30 years of weather data (1981 - 2010) from the Western Region Climate Center and spatially interpolated.

Like GDD, annual precipitation in the proposed AVA is more uniform that the areas around it, with the exception of the area to the south (Fig. 8). However, all of the other areas are wetter (Table 4). The average precipitation for "The Burn" is 8.76" with a range from 6.65 - 10.44". The area to the south is only slightly higher at 9.39, with a slightly narrower range of 3.79". The

areas to the west, northwest, an east-northeast are all higher, with average precipitation of 9.81, 11.58, and 10.23", respectively, and higher minimums and maximums as well.

Overall, the temperatures, reported as GDD, and precipitation show clear climatological differences between the proposed AVA and the areas that surround it.

Comparison to Existing Washington AVAs

To compare the proposed AVA "The Burn" to other AVAs in inland Washington, excluding the large and diverse Columbia Valley AVA, there are several topographic and climatological features that show distinctions for this region (Table 5). The proposed AVA is on the wetter side based on precipitation, with only three AVAs showing higher annual precipitation (the Columbia Gorge, Lake Chelan, and Walla Walla). With 8.7" precipitation, it has over 1" more than most of the other inland AVAs. It is on the warmer side as well, with a higher number of growing degree days than all of the other inland Washington AVAs except Snipes Mountain and the Wahluke Slope. When temperature is evaluated in terms of frost free days, "The Burn" is moderate, with over 200, similar to the Rattlesnake Hills and Walla Walla Valley, but more than Naches Heights, Red Mountain and the Yakima Valley.

Table 5. Mean site characteristics of the proposed AVA "The Burn" and established inland Washington AVAs provided in order of chronological establishment. Climatological information was calculated from 10 years of weather data (Ag Weather Net, weather.wsu.edu) and elevation and slope data taken from NED10 data that was spatially interpolated across the state (I.-H. Yau, MS Thesis, Washington State University, 2011).

AVA	Elevation (ft)	Slope (%)	Growing Degree Days (°F base 50)	Frost Free Days	Preciptiation (in)
Yakima Valley	1086	5.2	2761	187	7.5
Walla Walla Valley	1033	10.6	3020	208	18.4
Red Mountain	745	7.7	3268	184	6.5
Columbia Gorge	1329	22.8	2369	236	10.4
Horse Heaven Hills	1060	6.6	3039	189	5.8
Wahluke Slope	823	3.0	3597	256	6.4
Rattlesnake Hills	1421	11.5	2930	203	5.9
Snipes Mountain	915	17.4	3658	263	6.7
Lake Chelan	1601	24.5	3032	232	10.7
Naches Heights	1778	10.6	2504	164	7.9
Ancient Lakes	1266	4.3	2831	221	7.0
The Burn	902	7.3	3306	202	8.7

The average slope for the proposed AVA (Table 5) is gentle, slightly above 7%, similar to the 6.6% average slope for the Horse Heaven Hills and the 7.7% for Red Mountain. The Wahluke Slope, Ancient Lakes, and Yakima Valley all average over 2% lower average slopes, while Walla Walla Valley, Naches Heights, Rattlesnake Hills, Snipes Mountain, Columbia Gorge, and Lake Chelan average 3.3 - 16.8% greater average slope.

As with slope, the average elevation (Table 5) of the proposed AVA is, at 902 ft, on the lower end, very similar to Snipes Mountain (915 ft) and higher than both Red Mountain the Wahluke Slope. However, all of the other AVAs in inland Washington have average elevations over 1000 feet, ranging from 1033 - 1778, so from 130 - 875 feet higher average elevation than "The Burn" (Table 5).

Boundary Description:

1. The beginning point is on the Sundale NW map along the Columbia River at the south western edge of where land ends, bordered to the south by the Columbia River and to the west by the Paterson Slough, in section 32 of T3N, R 19 E;

2. From the beginning point, proceed north-northwest, then north, then north-northeast along the edge of the water and land, following the Paterson Slough and then Rock Creek until reaching the intersection with the Yakima Nation Trust land at the SW corner of the SE 1/8 of of section 20 T3N, R19 E;

3. Continue along the line to the SE corner of the line of section 20 T3N, R19E then proceed N until the Yakama Nation Trust parcel ends at the E corner of the S 1/2 of section 20 T3N, R 19 E;

4. Continue due east through the section 21 and the SW 1/4 of section 22 of T3N, R19E, using the Yakima Nation Trust land and proceeding along the parcel lines N through the N 1/2 of section 22 and the S 1/2 of section 15, proceeding east between at the parcel boundary in section 15 then proceeding north through the N 1/2 of section 15 and the S 1/2 of section 10 of T3N, R19E (transitioning to Goodnoe Hills Map);

5. Proceed east at the center of section 10 T3N, R19E to the western border of section 11, following N along the section borders to the NW border of section 10/ SW border of section 2 T3N, R19E, then proceed east;

6. Continue along the S border of section 2 T3N, R19E to the eastern edge and border with section 1 T3N, R19W, which is also the S edge of the Yakama Nation Trust land;

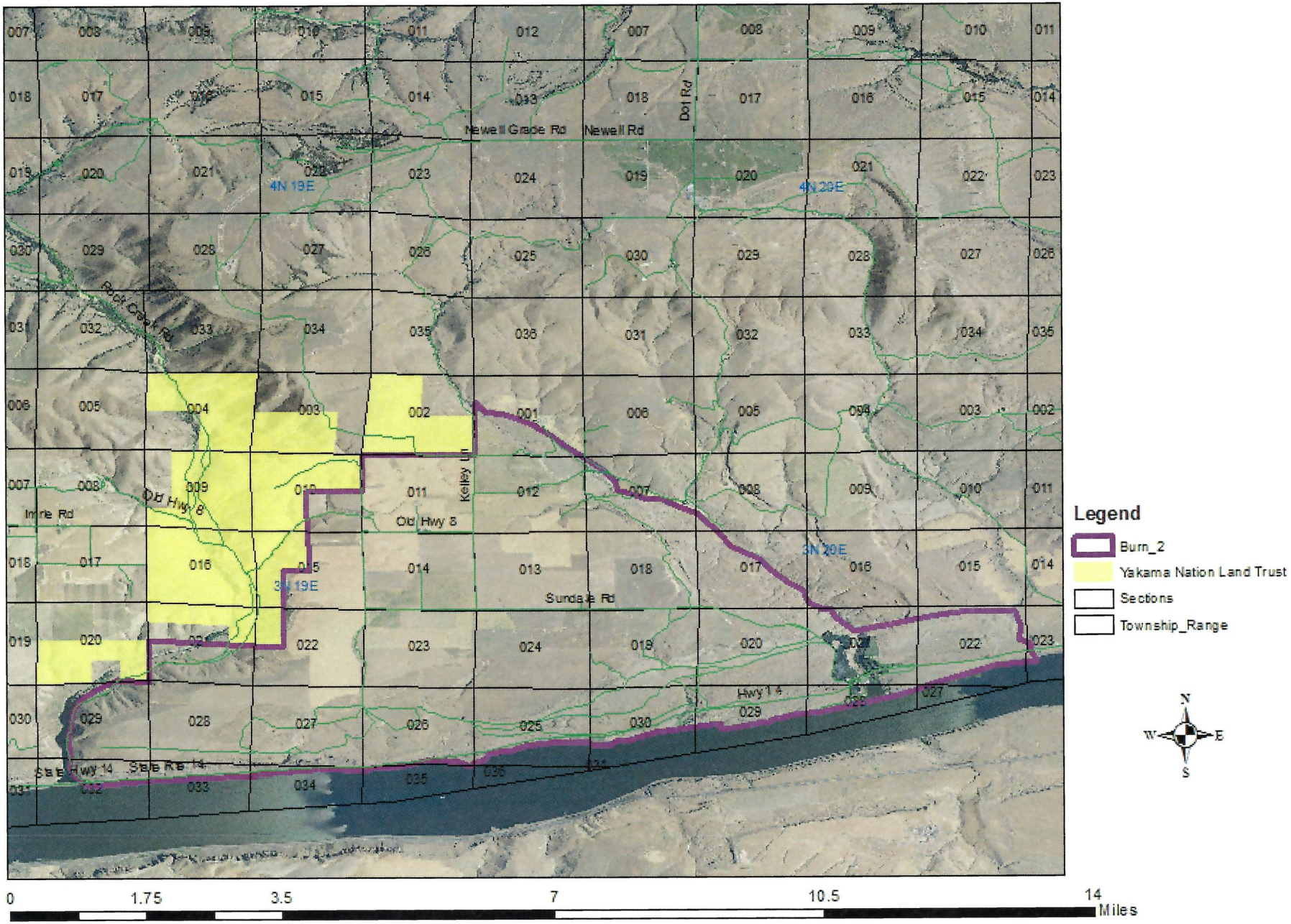
7. Proceed north at the line dividing sections 1 and 2 of T3N, R19E and continue until reaching the junction this section line with Chapman Creek, at 45°46'24" N and 120°23'15" W;

8. Proceed southeast, meandering, to follow Chapman Creek (transitioning to Dot Map then to Sundale Map), until the intersection with the last waterway gully in section 21 of T3N, R20E, at 45°43'50" N and 120°18'58" W;

9. Proceed east-northeast 0.8 mile then due east 0.4 miles to the intersection with the Old Lady Canyon creek at 45°44'4" N and 120°17'13" W;

10. Continue south-southeast from the center of the creek bed, meandering, to the junction of the creek bed and the Columbia River in section 23 T3N, R20W;

11. Proceed west along the border between the Columbia River and land, not deviating from the rivers edge at the entry of Chapman Creek, transition back to the Sundale NW map, until reaching the beginning point.


Newell Grade Rd
Newell Rd
Dot Rd
4N 19E
4N 20E
Rock Creek Rd
Kelley Ln
Old Hwy 8
Imrie Rd
3N 19E
3N 20E
Sundale Rd
Hwy 14
State Hwy 14
State Rte 14
Legend
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Yakama Nation Land Trust
Sections
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0
1.75
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Appendix 1: Historical and Map Documents for Name Evidence

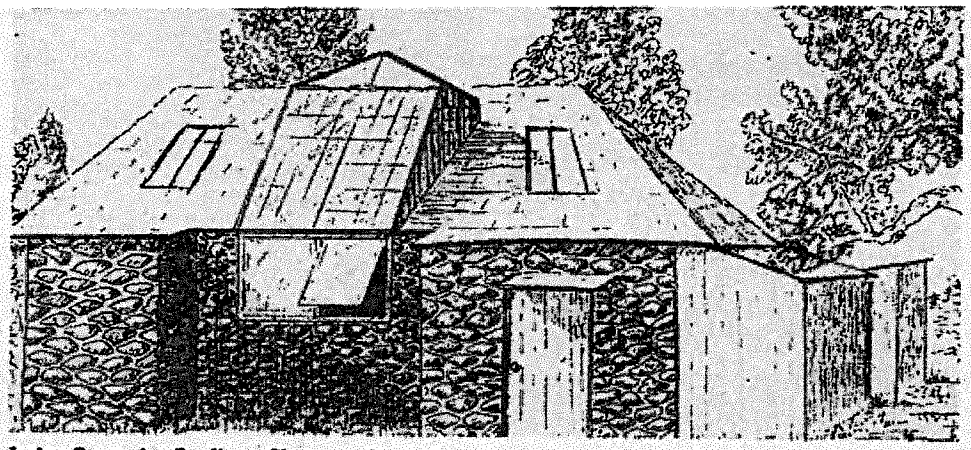
was a community hall where school programs, basket socials, dances and meetings were held. The white building behind the hall was a Methodist church.

Those buildings were in Yakima County, for the road is the county line. On the right is the general store and postoffice. Beyond the store was a building for storage of feeds and machinery, as Lucy remembers. There was also a house on the right side of the road, too close to show in the picture.

Beyond the church on level ground was a baseball field where the local players used to meet and play ball on Sunday afternoons.

According to *Postmarked Washington*, Bluelight postoffice was established in Yakima County (perhaps on the north side of the road) March 1, 1901 with Elbert L. Graves as postmaster. Mrs. Nellie E. Carrell was postmaster Aug. 25, 1904. The office was moved to Klickitat County Oct. 17, 1904. John W. Graves became postmaster Jan. 22, 1906 and the office was discontinued May 14, 1906 with the mail thereafter being sent to Bickleton (probably to a new rural carrier route serving Bluelight).

The Clarence McBride ranch home is all that's left at Bluelight today.



Irving Couse Art Studio at Chapman Creek, location, present Horace Allen White home. Couse was husband of Virginia Walker.

CHAPMAN CREEK AND "THE BURN"

Prior to the year 1904, there were few settlers in the area immediately east of Rock Creek. One of the earliest was Joseph Chapman who took up a homestead in 1861 at the mouth of what is now known as Chapman Creek. He planted an orchard, set up a woodyard and sold wood as fuel to Columbia River boats. Other settlers followed: W.B. Walker, Nelson Purvine, James Moffit, J. Atkinson, and in 1879, R.D. White. From 1879 to 1981, five generations of the White family have been in residence in Chapman Creek.

Up and down Chapman Creek, small orchards were planted by the early settlers. Such a one was planted at the head source of the creek by Richard Lyon and became known as "Lyon's Orchard." Today, some of the remaining trees are still bearing fruit.

Near the mouth of Chapman Creek is a cemetery (Eanger Cemetery). William T. Darch, an early homesteader, in a letter (Feb. 1891) to his father in Goldendale refers to a funeral for a Mr. Wood. The first recorded burial was that of Ada Jane (Purvine) White (May 1894). There may have been earlier ones but a fire many years ago destroyed all the wooden markers. Today, seven tombstones remain on eleven known graves.

"Eanger" also was the name of "Walker's Townsite" according to W.T. Darch. It also was the name of the son-in-law (Eanger Irving Couse) of W.B. Walker. Mr. Couse was an aspiring artist who was Paris trained. Of interest for many years on Chapman Creek was the "Artist's Studio' built for Mr. Couse by his father-in-law. The "Studio" was built of native rock with a sloping front and large skylights. The building is no longer standing. Mr. Couse's paintings of the Indians of this area have received national recognition in many prestigious art galleries and auctions. *(Irving Couse married Virginia Walker 1889.)*

In 1881, a temporary post office was located at the mouth of Chapman Creek at a site known as "Lang's Landing." The mail was supplied by special boat service from Blalock across the river. When the SP&S Railway was built (1905-07) a depot or station named Sundale was established at the Chapman Creek site. Here the mail was dropped off and picked up by track-side crane three times a week and delivered by a local carrier to "The Burn."

There are many stories about how this upland region between Rock Creek and Chapman Creek received its name "The Burn"; the Indians in an effort to discourage and frighten away the settlers, burned over the area; or the Indians burned the area each fall to insure adequate grass for their horses in the spring; or because the dry east wind left the wheat burned and shriveled.

By 1910, there were many 160-acre homesteads dotting The Burn and the bench land between The Burn and the river. Most of them were struggling for existence. The railroad brought many changes, chief of which was the upsurging interest (1911-1914) in orchards. New settlers came replacing the discouraged early homesteaders. What previously had been bunch grass and sagebrush grazing land became orchard land. A Portland real estate company bought up most of the homesteads; divided the properties into small tracts; and resold them planted to apricots and almonds for $125 an acre plus an extra $25 for year-around maintenance and cultivation. Many of the buyers were easterners who never saw their purchased property.

J.R. Sheppard, representing Sundale Orchard Company, established his management headquarters on Chapman Creek in what is now the Dewey Beeks home place. Mr. Sheppard had the area immediately east of the creek platted in one-acre residential tracts. Most of the families living there were employed by the orchard company. Sidewalks were laid and running water was piped to each house. A school house was built. This was a promising community.

Well — the orchards failed; the trees were pulled out; and wheat took their place. Ineptness, poor management, lack of water, and marketing problems relating to perishable fruit contributed to failure of the venture. This left wheat and sheep as the producers of agricultural income.

Nelson Purvine, an early settler in the area, operated a dairy at his ranch on Chapman Creek. The milk was made into butter and cheese because of the distance to a market. The cows were trailed to Cedar Valley, northwest of Goldendale, during the summer months where feed was more available. A portion of the original dairy barn is still in use at the White ranch, but now houses beef cattle exclusively.

During the fruit boom, water was a concern. What few wells existed on The Burn produced an insufficient amount of water for anything but house use and a limited amount for livestock. The Sundale Pipeline was built in 1912 to accommodate the families on The Burn. The water, from several large springs on Chapman Creek, was piped to The Burn through wooden pipes reinforced with heavy wire. The constant need for repairs and the frayed tempers resulting from disputes over individual use provided for much contention. By 1945, the pipeline was no longer in use. Four wells in the community served the few families left on The Burn.

Following the fruit boom, several Finnish families (Makki, Wayne, Pitrainen, Asikinen, Kaahola, Heikkila) settled on The Burn, buying up failed homesteads and orchard property. Sundale (The Burn) became a flourishing community boasting a store, post office, cleaning establishment, and a new school. The school was built on the highest windy point on The Burn.

The first post office on The Burn (March 6, 1915) was quartered in a small store. The first post master was Mrs. H.B. Meyers; the last one Mrs. John Beeks. At this time (1945) the office was transferred to Goodnoe Hills and in 1958, both communities received mail by rural delivery from Roosevelt.

In the early days of settlement (Dec. 3, 1900) The Burn had its spectacular crime — the murder of A.J. Worrell. It is said that while Worrell was plowing in a field just east of Rock Creek (on the Hatch place, now farmed by Ed Morris and R Wheelhouse) he and neighbor, Mr. Ferris, had a heated argument over a team of horses resulting in Ferris shooting Worrell and then plowing him under and taking the horses home with him. Ferris was arrested and placed in the county jail where he committed suicide before his case could come to trial. The crime remained a mystery. Mr. Worrell was presumably a bachelor. His grave is in the Dewey Beeks' river pasture.

Chapman Creek was the winter headquarters for several prominent sheep men: Jim Berney, Horace White, Arthur Vincent, Alec Hamilton and later E.K. Foltz who bought the Hamilton Place. By the 1940s, Foltz had retired from the sheep business and sold to Clarence "Dutch" Kelley. Berney sold his entire sheep operation to Carl Svaverud who in the late '40s sold just the land without the sheep to Dewey Beeks. This left but one sheep operation on Chapman Creek — Horace White and son Horace Allen. Horace Allen gave up the sheep in favor of cattle in the 1950s finding that it was becoming more and more difficult to get experienced herders and to get access to government grazing land. Today, there are no large bands of sheep in the entire area. End of an era.

In 1929, Elam Binns brought the first tractor to The Burn. With the advent of the machine, horses became a liability. In a concerted effort, the local farmers saddled up and drove en masse, starting at Sundale, all their field work horses (and a lot of wild

From History of Klickitat County 1982 Pete Mac editor

unbroken horses) to Roosevelt then on to the ferry and across the river to Arlington where they delivered about 200 horses to buyers.

Today (1981) there are only five ranches (cattle and wheat) operating from Chapman Creek and The Burn. Each has its own roots to an early settler: Dick White, a great grandson of R.D. White; James Beeks, a grandson of James H. Beeks; A.C. "Laddie" Goddard, a grandson of H. Pilrainen; Mike Kelley, a grandson of Arthur Vincent; and Ed Morris and R. Wheelhouse whose spouses, Denise and Beverley, are daughters of Ed Mattson who came to Sundale just following the "fruit boom."

The 10-party farmer-owned telephone line (purchased from the Oregon-Washington Telephone Co. in 1933) is still farmer-owned and maintained. However, the telephone is no longer the hand-cranked wall phone but a direct-dial instrument. This service is made possible by an agreement with the United Telephone Co.

By the early '30s the one-room school house was no more. Sundale children were bused to Roosevelt for all 12 grades. By 1948, there were so few students that it was no longer feasible to maintain a high school at Roosevelt. So, high school students were bused to Arlington, Or. by way of the Flippin ferry. When the ferry ceased operation, high school students had two options — Bickleton or Goldendale. In 1967 as grade school enrollment continued to decline, it became necessary to terminate instruction at Roosevelt beyond the sixth grade. Most Sundale students opted for Goldendale.

In 1952, five Wenatchee fruit men — Grady and David Auvil, Dr. Jack Batjer, Floyd Dahn and Irving Griner — formed a partnership with Dewey Beeks to establish a peach orchard at the mouth of Chapman Creek and call it SUNDALE ORCHARD. The orchard produced wonderful peaches and nectarines but the competition with the earlier California market was too much. So, the peach and nectarine trees were replaced with apple trees. Now the orchard has a large planting of Granny Smith apples in addition to other varieties. Grady Auvil, president of the company, is the only partner of the original six, still living. The other present partners are: Darrell Hannan (manager), Dale Conley, Robert Auvil Jr. Melissa Beeks Holmes, Allen Auvil, and Bert Navonne.

Sundale has had its years of adversity. March 19, 1948, a tragic house fire at the old Berney place claimed the lives of Bill Waring, his son Billy and classmate Larry Crawford. Mrs. Waring (Dora) escaped by jumping from an upstairs window. The old Berney home was completely destroyed.

There was the year of the drought when not a drop of rain fell from February to the following December. Colts born during the interim were terrified by the first rain.

There was the year (1940s) of the grasshoppers followed by the Mormon Crickets. Their armies ate everything in their path.

There was the 1964 Christmas flood which affected the entire county. Chapman Creek became a river fed by torrents of water rushing down every ravine. Roads, bridges, railroad tracks were washed away; hillsides defaced by slides of mud and ice. The damage was awesome.

When Mt. St. Helens errupted on May 18, 1980, Sundale escaped without a trace of ash, although the dark cloud traveling toward Yakima resembled a storm approaching. On May 25, a thin covering of ash did occur, also on July 22. On the latter date, the plume that rose from the mountains fourth eruption was plainly visible on The Burn from over the top of Goodnoe Hills.

Wheat harvest was in full swing and the crews on some of the ranches were able to see the ash cloud rise high into the sky, even though the mountain is not visible from Sundale.

Work continued as usual. The novelty of an errupting volcano had worn off.

Every spring, Chapman Creek goes on a rampage, some years more than others, and threatens to overflow its banks. Some years it does. There is the story that one such year, the creek was very high and swift and that a man on horseback attempted to cross and drowned.

On a brighter note — Highway 14 and the John Day Dam brought changes to Chapman Creek. Most obvious was the bisection of the orchard by the highway. This has proved, in a measure, an asset — placing the orchard very much on view and with easy access to markets. For the rest of Sundale, it was almost like an opening to a new world. Chapman Creek's heritage from the John Day Dam has been a small public park with a lake and a boat ramp (Sundale Park) created by the Army Corps of Engineers.

The formation of a fire district and the acquisition of specially equipped trucks located strategically throughout the district has made a tremendous difference in the farmers' ability to fight the many dry-season grass fires. No longer are they solely dependent on just a shovel. Each farmer has his pick-up truck ever ready with water tank and hose.

Located at Sundale Orchard, because of its central location, is an emergency ambulance vehicle operated by Darrell and Jeanne Hannan who have been specially trained as emergency medical technicians.

The old homesteads that dot this community have retained the names of the pioneers who founded them. Locations such as the Hayes Place or Counts, Dee or Rice; and Darch, Peters or Doughty Places are to name just a few. These place names are an important part of Sundale's heritage. It is hoped they will not be forgotten.

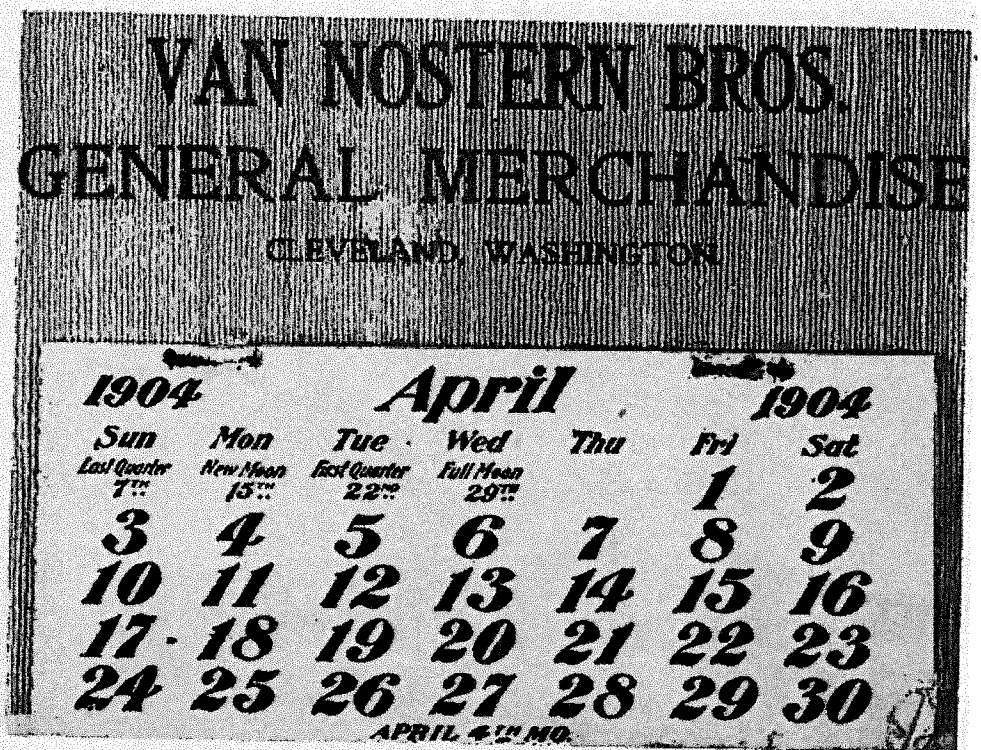
This has been a general view of Sundale's community history from the early 1900s to the present time, 1981, with no attempt to suggest what the future might be. — Beverly Wheelhouse and Jessie K. Beeks

A KID'S EYE VIEW OF CENTERVILLE 1910-1925

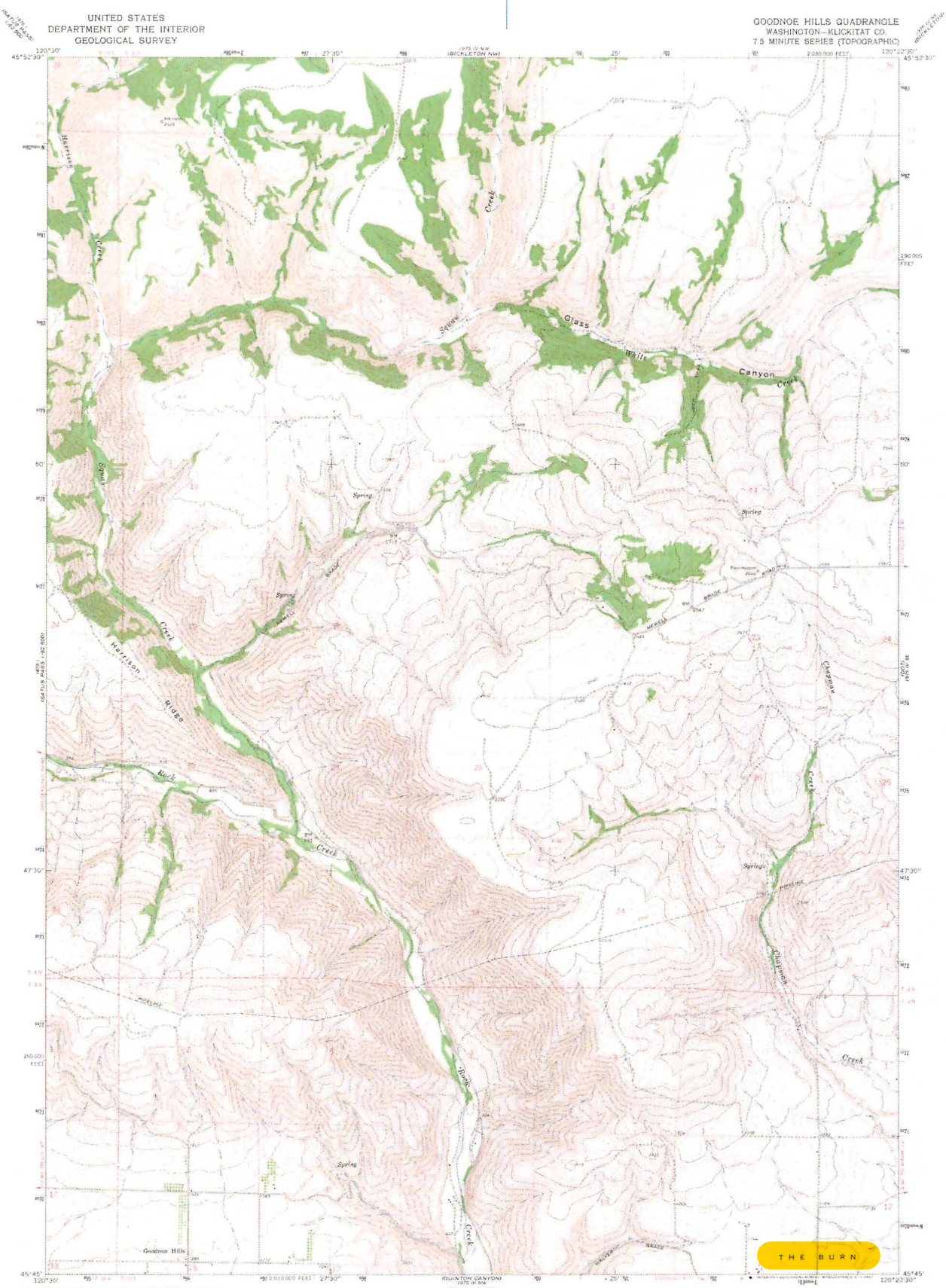
Take a look at the Centerville of the early 1900s! You would be surprised to find three general merchandise stores, two hotels, two hardware stores, four churches, a livery stable, two blacksmith shops, a bank and various smaller businesses.

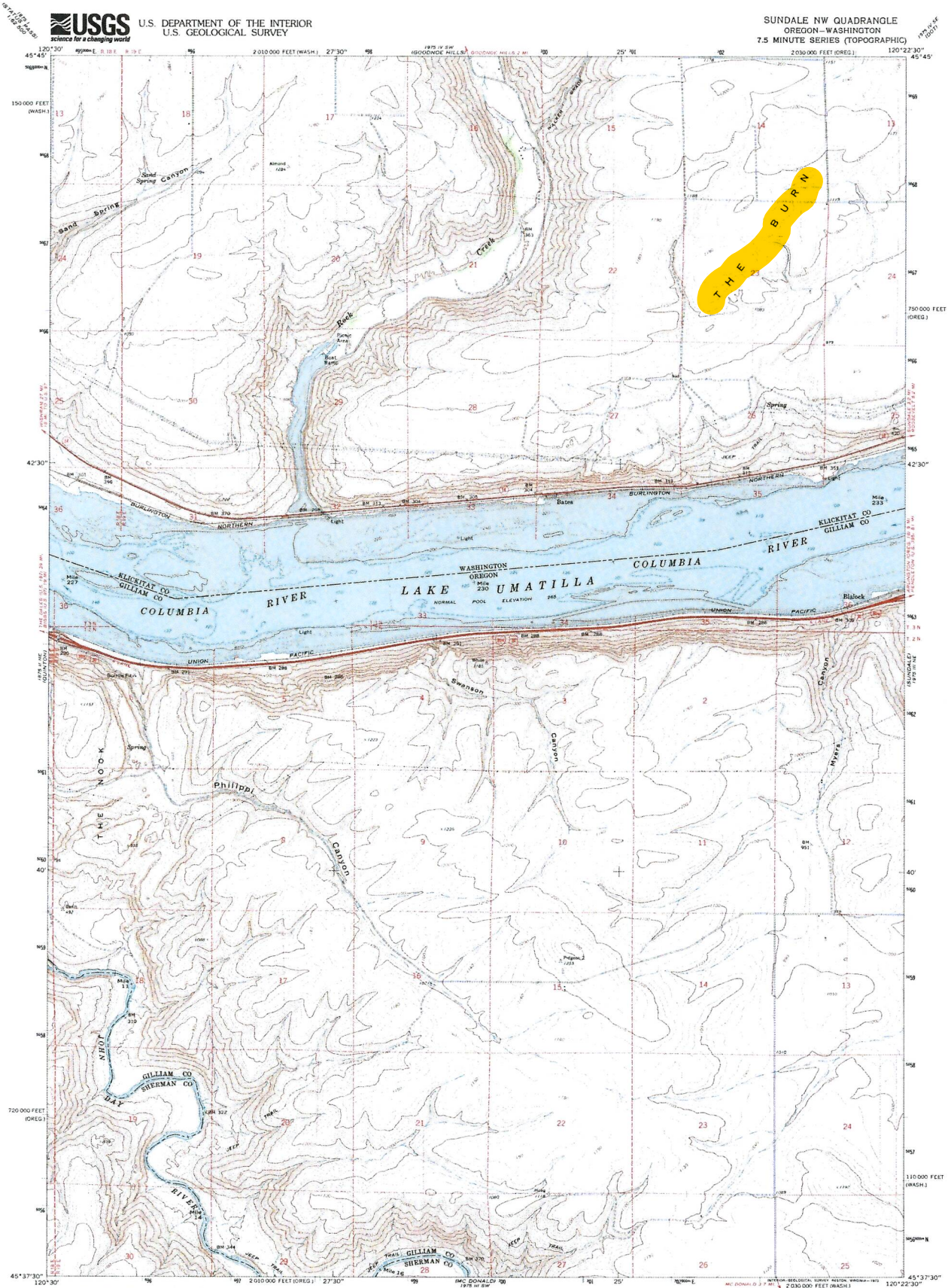
The "Main Street" of Centerville ran east and west. Beginning at the west end of main street and noting the businesses on only the right side of the street we come first to John E. Chappell's General Merchandise Store. A calendar plate tells me that he owned this store in 1910; another calendar plate tells me that by 1915 it was owned by D.O. Lear. These calendar plates were given at Christmas in lieu of the ordinary calendar. Next to this store was the Klondike Hotel, an impressive, three-storied building with a rather ornate front. This was owned and operated at that time by Tom Crofton and his wife "Nannie." Tom had been one of the many who made the trek in search of gold, so came the name Klondike for the hotel. Walking into this hotel one was greeted by the mixed and rather pleasant smells of oiled floors and good food, and the clatter and activity of serving meals. The primary recollection of the interior of any of the business houses in those days was the smell of oiled floors.

Continuing up the street one saw two smaller business buildings with the usual false fronts. By 1915, to my recollection, they were standing vacant, although one was used for a short time as a bakery. The next large building was George Watson's blacksmith shop. This was an intriguing spot for the town kids. The pounding of hammer on the anvil as the blacksmith formed and fitted shoes for his equine customers, the puffing of the bellows, the glow of embers and the excitement of the protest of an occasional flighty horse drew us like a magnet. There was a distinctive smell, a combination of coal smoke, sweat, horses and searing hooves that held us fascinated. However, we were



1904 Calendar, Souvenir of Cleveland, WA


UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
GOODNOE HILLS QUADRANGLE
WASHINGTON—KLICKITAT CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)
Harrison Creek
Spring
Glass
White
Canyon
Creek
Spring
Spring
Harrison Ridge
Rock
Creek
Spring
Chapman
Creek
Rock
Creek
Spring
Goodnoe Hills
THE BURN
Mapped, edited, and published by the Geological Survey
Control by USGS and USC&GS
Topography by photogrammetric methods from aerial photographs taken 1964. Field checked 1965
Polyconic projection. 1927 North American datum
10,000-foot grid based on Washington coordinate system, south zone
1000-meter Universal Transverse Mercator grid ticks, zone 10, shown in blue
Fine red dashed lines indicate selected fence lines
SCALE 1:24,000
CONTOUR INTERVAL 20 FEET
DATUM IS MEAN SEA LEVEL
ROAD CLASSIFICATION
Light duty
Unimproved dirt
WASHINGTON
QUADRANGLE LOCATION
GOODNOE HILLS, WASH.
N4545—W12022.5/7.5
1965
AMS 1975 IV SW—SERIES V891
THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR WASHINGTON, D.C. 20242
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST
USGS
TOPOGRAPHIC DIVISION



SUNDALE NW QUADRANGLE
OREGON—WASHINGTON
7.5 MINUTE SERIES (TOPOGRAPHIC)

U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

Mapped, edited, and published by the Geological Survey

Control by USGS and USC&GS

Topography by photogrammetric methods from aerial photographs taken 1960, 1962, and 1970. Field checked 1971
Selected hydrographic data compiled from USC&GS Chart 6159 (1970)
This information is not intended for navigational purposes

Polyconic projection. 1927 North American datum
10,000-foot grids based on Oregon coordinate system, north zone, and Washington coordinate system, south zone
1000-meter Universal Transverse Mercator grid ticks, zone 10, shown in blue

Fine red dashed lines indicate selected fence lines

SCALE 1:24 000

CONTOUR INTERVAL 20 FEET
DOTTED LINES REPRESENT 10-FOOT CONTOURS
DATUM IS MEAN SEA LEVEL
DEPTH CURVES AND SOUNDINGS IN FEET—DATUM IS NORMAL POOL ELEVATION 265 FEET

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY, PO BOX 25286, DENVER, COLORADO 80225
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ROAD CLASSIFICATION

Primary highway, hard surface — Light duty road, hard or improved surface
Secondary highway, hard surface — Unimproved road
Interstate Route — U.S. Route — State Route

OREGON
QUADRANGLE LOCATION

SUNDALE NW, OREG.—WASH.
N4537.5—W12022.5/7.5

1971

AMS 1975 III NW—SERIES V892

ISBN 0-607-44904-7
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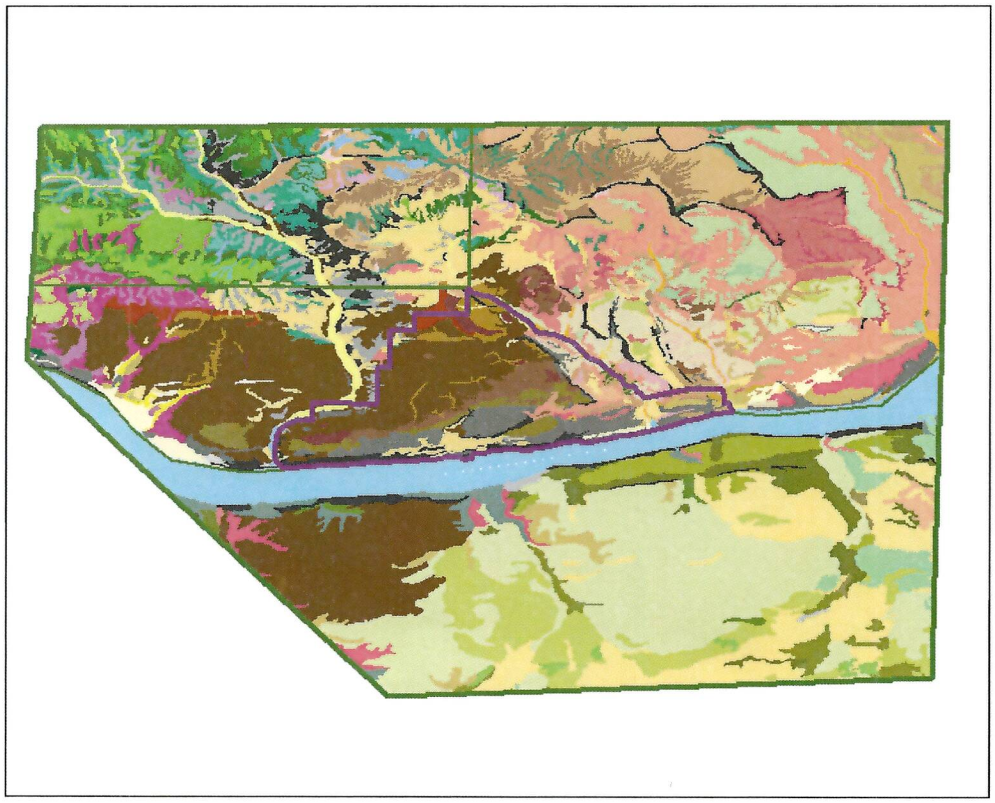
Appendix 2: Soil Distribution and Maps

Complete listing of all soil series in the regions surrounding “The Burn”

Soil Series	The Burn (%)	Area to the East/NorthEast (%)	Area to the South (%)	Area to the West (%)	Area to the NorthWest (%)
Bakeoven very cobbly loam	0.08	2.14		0.06	1.52
Weirman fine sandy loam	0.08	0.40			
Quincy fine sand	0.09			3.25	
Lickskillet very stony loam	0.15		0.23		
Cheviot-Rails-Wipple complex	0.20	9.69			0.03
Bonfin cobbly clay loam	0.21	0.08			
Kahlotus silt loam	0.27	4.62			
Broadax-Colockum-Tronsen complex	0.29	2.48		0.22	0.20
Mikkalo-Bakeoven complex	0.32				
Rockly-Lorena complex	0.53	0.30		1.24	7.17
Quinton fine sand	0.53				
Lickskillet cobbly silt loam	0.65	1.81		0.48	0.40
Cheviot very stony silt loam	0.84	0.86			
Mikkalo silt loam	0.93	3.47	2.08		
Umapine silt loam	1.04	0.44			
Kahlotus-Kennewick complex	1.20				
Kahlotus-Rock outcrop complex	1.64	0.47			
Bolicker silt loam	1.65			3.08	0.99
Eenwy silt loam	1.84	1.10			
Olex silt loam	1.89	1.92	16.65	1.12	
Rockly-Rock outcrop complex	1.93	0.03		4.68	8.43
Cheviot-Rails-Rock outcrop complex	2.54	2.59			
Endicott-Moxee complex	2.55	1.20		0.04	
Endicott silt loam	3.73	0.42		1.00	0.04
Walla Walla silt loam, cemented substratum	4.07	0.39		2.42	0.04
Wato silt loam	4.85			1.41	
Rock outcrop-Rubble land complex	6.08	4.15	1.34	5.72	5.24
Fluventic Haploxerolls-Riverwash complex	6.51	0.41		6.21	5.23
Haploxeroll-Fluvaquent complex	8.37	0.66			
Rock outcrop-Haploxeroll complex	13.57				
Walla Walla silt loam	30.16	1.16	12.76	41.55	2.00
Asotin silt loam				2.12	0.36
Blalock loam			0.78		
Blackhouse-Munset complex					0.05
Broadax silt loam		0.05			0.35
Cheviot-Lickskillet-Rock outcrop complex		3.91			
Cheviot-Tronsen complex		0.50		8.70	0.70
Cheviot-Wipple-Rock outcrop complex		3.04			
Colockum-Cheviot complex		4.10			13.21
Dalesport very cobbly fine sandy loam					0.14
Ewall-Rock outcrop complex				0.25	
Fisherhill silt loam		0.03			
Goldendale silt loam				0.98	5.16
Goldendale-Lorena complex					0.19
Goldendale-Lorena-Rockly complex					1.15
Goldendale-Rockly complex				0.24	0.65
Goldendale-Tekison complex		0.11			0.95
Goodnoe-Swalecreek-Horseflat complex				6.96	3.63
Horseflat cobbly silt loam				0.67	0.17
Kiona stony very fine sandy loam		0.04			
Krebs silt loam			2.16		
Lickskillet-Mikkalo complex		1.76			
Lickskillet-Rock outcrop complex			1.65		
Lorena silt loam				0.08	3.65
Lorena-Rockly complex				0.22	1.55
Meloza clay		0.80			
Morrow silt loam		0.28			
Morrow-Bakeoven complex		2.87			
Munset stony silt loam					0.01
Nasene silt loam		0.11	2.56		
Olex-Roloff complex			0.72		
Oxy silt loam		0.15		0.34	
Oreeke-Colockum complex					1.94
Oreeke-Goldendale-Rock outcrop complex					1.31
Oreeke-Tronsen complex		0.39			0.31
Quincy-Rock outcrop complex				1.04	
Rails stony silt loam		0.63			
Rails-Cheviot-Lickskillett complex		1.60			
Renslow silt loam		0.48			0.06
Renslow-Rails-Wipple complex		11.07			
Ritzville silt loam		3.10	33.39		
Rockly very gravelly loam		0.47		0.13	3.85
Rockly-Tekison-Rock outcrop complex					1.63
Roloff silt loam			4.20		
Roloff-Rock outcrop complex			5.86		
Sagehill fine sandy loam		0.08	2.94		
Selah silt loam		5.45			
Selah-Bakeoven complex		1.63			
Stacker-Horseflat complex				0.10	2.53
Stacker-Swalecreek-Horseflat complex					
Swalecreek silt loam					1.33
Swalecreek-Rockly complex		1.79		0.87	7.98
Tekison silt loam					1.11
Tekison-Goldendale complex					
Tekison-Lorena-Rockly complex					2.19
Tekison-Rock outcrop complex					0.02
Tronsen-Goldendale-Horseflat complex					2.95
Van Nostern silt loam		6.51			4.10
Van Nostern-Bakeoven complex		6.75			4.88
Walla Walla-Goodnoe complex				1.59	0.12
Warden silt loam			0.57		
Willis silt loam		1.50	11.03		
Wrentham-Rock outcrop complex			0.32		
Xeric Torrifluvent			0.25		
Total Acres	16870	41824	49730	22738	28053

The legend below list soils in the south (Oregon) followed by those in Washington. Regardless of the state, soil series are coded with the same color.



0 3.75 7.5 15 22.5 30 Miles

Legend

- Proposed AVA Boundary
- East_NorthEast_Area
- NorthWest_Area
- West_Area
- Burn_Area

OR_Soil_Names

- <all other values>

MUNAME

- Bialock loam
- Krebs silt loam
- Lickskillet very stony loam
- Lickskillet-Rock outcrop complex
- Mikkalo silt loam
- Nasene silt loam
- Olex silt loam
- Olex-Roloff complex
- Ritzville silt loam
- Rock outcrop-Rubble land complex
- Roloff silt loam
- Roloff-Rock outcrop complex
- Sagehill fine sandy loam
- Walla Walla silt loam
- Warden silt loam
- Water
- Willis silt loam
- Wrentham-Rock outcrop complex
- Xeric Torrifluvent
- Asotin silt loam
- Bakeoven very cobbly loam
- Benwy silt loam
- Blockhouse-Munset complex
- Bolicker silt loam
- Borfin cobbly clay loam
- Broadax silt loam
- Broadax-Colockum-Tronsen complex
- Cheviot very stony silt loam
- Cheviot-Lickskilet-Rock outcrop complex
- Cheviot-Ralls-Rock outcrop complex
- Cheviot-Ralls-Wipple complex
- Cheviot-Tronsen complex
- Cheviot-Wipple-Rock outcrop complex
- Colockum-Cheviot complex
- Dallesport very cobbly fine sandy loam
- Endicott silt loam
- Endicott-Moxee complex
- Ewall-Rock outcrop complex
- Fisherhill silt loam
- Fluventic Haploxerolls-Riverwash complex
- Goldendale silt loam
- Goldendale-Lorena complex
- Goldendale-Lorena-Rockly complex
- Goldendale-Rockly complex
- Goldendale-Tekison complex
- Goodnoe-Swalecreek-Horseflat complex
- Haploxeroll-Fluvaquent complex
- Horseflat cobbly silt loam
- Kahlotus silt loam
- Kahlotus-Kennewick complex
- Kahlotus-Rock outcrop complex
- Kiona stony very fine sandy loam
- Lickskillet cobbly silt loam
- Lickskillet-Mikkalo complex
- Lorena silt loam
- Lorena-Rockly complex
- Meloza clay
- Mikkalo silt loam
- Mikkalo-Bakeoven complex
- Morrow Bakeoven complex
- Morrow silt loam
- Munset stony silt loam
- Nasene silt loam
- Olex silt loam
- Onxy silt loam
- Oreoke-Colockum complex
- Oreoke-Goldendale-Rock outcrop compl
- Oreoke-Tronsen complex
- Onxy silt loam
- Quincy fine sand
- Quincy fine sand
- Quincy-Rock outcrop complex
- Quinton fine sand
- Ralls stony silt loam
- Ralls-Cheviot-Lickskilett complex
- Renslow silt loam
- Renslow-Ralls-Wipple complex
- Ritzville silt loam
- Rock outcrop-Haploxeroll complex
- Rock outcrop-Haploxeroll-Haploxeroll complex
- Rock outcrop-Rubble land complex
- Rockly very gravelly loam
- Rockly-Lorena complex
- Rockly-Rock outcrop complex
- Rockly-Tekison-Rock outcrop complex
- Sagehill fine sandy loam
- Selah silt loam
- Selah-Bakeoven complex
- Stacker-Horseflat complex
- Stacker-Swalecreek-Horseflat complex
- Swalecreek silt loam
- Swalecreek-Rockly complex
- Tekison silt loam
- Tekison-Goldendale complex
- Tekison-Lorena-Rockly complex
- Tekison-Rock outcrop complex
- Tronsen-Goldendale-Horseflat complex
- Umapine silt loam
- Van Nostern silt loam
- Van Nostern-Bakeoven complex
- Walla Walla silt loam
- Walla Walla silt loam, cemented substratum
- Walla Walla-Goodnoe complex
- Water
- Wato silt loam
- Weirman fine sandy loam
- Willis silt loam