

VESTA - LITTLE NORTH RIVER WATERSHED ANALYSIS

HISTORICAL RESEARCH

PRE-1900

⇒ Burns

- GLO (General Land Office) land survey notes did not make reference to any burns within the watershed. Lack of reference to burns in these notes and other references leads to the conclusion that the watershed was largely unburned for the prior 300-400 years, given that it was primarily old growth timber at the turn of the century.
- A 1901 letter from Geo. S. Long to F. Weyerhaeuser, has an "attached synopsis of cruising reports ... taken from the Northern Pacific cruising reports that were turned over to us in connection with our original purchase of 900,000 acres of their land in Western Washington." The attachment refers to lands in Chehalis County (now Grays Harbor), Pacific, Lewis, Mason, Pierce, Cowlitz, Thurston, Snohomish, Wahkiakum, and King Counties. The land listed in this synopsis were selected from the bigger report because they were lands "that had been burned over or logged over,..." The lands listed that are in this watershed are:
 1. Sec. 9-15-7W. 600.00 acres - Nearly the whole section burnt over years ago, and very much timber killed.
 2. Sec. 17-16-8W.560.00 acres - Mostly all burned years ago; timber destroyed.
 3. Sec. 19-16-8W.400.10 acres - Big old burn on E1/2.
 4. Sec. 21-16-8W.639.50 acres - Small burn on SE1/4, upland all burned over at one time.

⇒ Harvest

- Harvest along North River for agricultural development and logs were left because of no way to get them to market before the turn of the century.
- See 1910 USDA map that shows harvest around Melbourne and in North River and the rest of the watershed as old growth. Most of the area around Melbourne was logged between 1898 and 1910. (Green book)
- Oxen logging disappeared about the turn of the century.(C H Clemons, 10/12/1933)
- "Dan Gillis will start logging on Little North River. The logs will be hauled over the divide (by capstan), about 400 feet, and dumped in Preacher's Slough." (Vidette Newspaper, 4/7/1899) This is first mention of logging south of the ridge south of the Chehalis in the newspaper that had its first edition in 1883.
- "All logs in North River gone to boom. The river is now open to Brooklyn, about 75 miles from the channel stake in Willapa Bay." (Vidette, 1/18/1901)
- "C H Clemons starts putting logs into the river at Melbourne on Monday." (Vidette, 7/24/1903)

⇒ Railroads

- Rail road logging started about 1900. (C H Clemons, 10/12/1933)
- "...surveyors from Seattle, start survey for logging railroad, south from Melbourne, for C. H. Clemons." (Vidette, 8/1/1902)
- See green book for article about a railroad tunnel built on the front end of the Melbourne mainline in 1922-1923
- See green book and 1914 County map and 1938 Pulp Cruise map for railroad locations and other information as compiled by Dr. Dale Jost

⇒ Beaver dams were prevalent as mentioned in GLO notes

1900 - 1950

⇒ Splash Dams

- Thirty-one dams built in G.H. County (Blaine McGillicuddy, letter, 9/10/95)
- Several dams in V- LNR (maps, anecdotal: Bob Schlessler, Ken Walczak)

⇒ Burns

- Logging slash was burned up through about 1940 when burning was controlled more. Less than 20 small fires in 1940-1950.
- "A big fire broke out at the Clemons logging works, south of Montesano. Fire fighting crews were able to contain the fire to land already logged and keep it out of green timber." (Vidette, 8/3/1906)
- "The record for the year 1917 was remarkably good, considering the fact that the summer months were the driest that the state has had for the past fifteen years. Every year, however, adds to the hazard that surrounds the forests, for there is now being cut annually over 100,000 acres of timber land and the debris that is left behind in the cutting of timber is a continual and increasing menace and nothing but the most careful handling of the situation would prevent disastrous fires." (Report of the President, "Tenth Annual Report of the Washington Forest Fire Association 1917")
- "...slash burning is again proved as a most efficacious preventive measure. ...That this truism is now generally accepted, is shown by the fact that some 40,000 acres were burned for protection purposes in Western Washington." (Report of Chief Fire Warden, "Twenty-third Annual Report of the Washington Forest Fire Association 1930")
- See 1944 Twin Harbors, Ramstad map that shows major burns in 1930's

⇒ Logging

- See 1944 Twin Harbors, Ramstad map that shows logging from 1903 - 1940's
- RR logging started at turn of the century
- Truck logging started in 1940's
- Hobi logged in Salmon Creek with ground-lead and pole roads. They splash-dammed logs to Artic and loaded out of the North River at Artic onto the RR.
- Saginaw logged in North River, starting about 1920, and lower Vesta with downhill Tyler system (full suspension standing skyline) and would typically fully suspend downhill and then yard down the creeks
- Clemons logged from north to southeast, starting in 1903, with skid roads and then mostly railroad logging and by high lead (starting in 1910) and Northbend systems from the ridge tops. Clemons logging Company was organized in 1919 with Weyerhaeuser as principal stockholder (2/3) and C.H. Clemons (1/3). Clemons sold out to Weyerhaeuser in 1921 - 1922.
- Anderson-Middleton Co. logged on the Picco and bought "...a body of timber on North River for a sum of \$500,000." (Vidette, 1/21/1916)
- 1926 field notes of Norman G. Johnson (see green notebook) refer to rail roads, cruises, actual and planned logging, sketches, ownership) Example : "Sec 2 - 16-8 area logged by pole road 15 or more years ago some 60 acres was almost clear logged now covered with hem & spruce some fir. And lots of alder high 20-25 ft. Bal. of sec 2 now residual stand hem & spruce 15-25M per acre 1728 paces on RR grade from end of Pole Road (Buckley Camp) to King Fisher (?falls?) 35-17-8

- See "Saginaw Logging Co." in green book: 1934 Letters reference Hobi logging in 29(16-8), 25,35(16-9), 3(15-9) ... "which can be logged to quite an elaborate system of truck roads which he has already built, and to which truck roads Sections 25 and 35 are most logically accessible." By Minot Davis, 10/4/1934.
- The old-growth was logged and the small second-growth was yarded through and slashed and then burned

⇒ Fish

- Anecdotal accounts tell of fish in North River, Little North River, Tuttle Creek, Salmon Creek, and Vesta Creek (Bob Schlessler, John McMeekin, Ken Walczak)

⇒ Railroads and logging roads

- Forty-four trestles between Melbourne and Fall River (per John McMeekin)
- "Chas. Clemons is preparing to construct 5 miles of logging rail road, an extension to the present line into the thick timber. For this purpose, a depot for supplies is being established and on or before March 1st, a force of 200 men will begin work." (Vidette, 2/5/1909)
- "O W R & N RR have let contracts to re-build their Cosmopolis - North River branch line. It is 14 miles and will open up several logging shows in the North River area." (Vidette, 1/14/1916)
- Clemons Logging Company records - 1932 (in green history notebooks) show details of amount of railroad built and planned to be built, costs, locations and other details on company assets
- In 1936 trucking was just starting in the area and 75-80% of the logs were still on railroads. (Lloyd Metke, "History of Forestry", by Lee Robinette to C.W. Bingham, 9/12/1972, copy of letter in the green book)
- "Bulldozers, developed for the first time in the thirties, made cheap roads possible, and they aided immeasurably in the colossal task of cutting a pattern of roads through the forests. Three hundred miles of trails and road soon spidered the Clemons Farm. Now with the road pattern, motorized units could travel within a half-mile of any spot, a totally new accomplishment in 1941." (Timber&Men, p.504)
- See 1944 Twin Harbors, Ramstad map that shows road status

⇒ Reforestation

- Natural reforestation from seed trees. Many of the areas came back to vine maple, alder, salmonberry, especially the areas that were burned heavily.
- "Many people think that there was more waste in the early days than there is now, but this was not the case. It is true the trees were cut higher up their trunks, but there was no such destruction of young timber as obtains under the modern high lead logging. There was plenty left to grow for future use and to re-seed. There was no such desolation as follows the logging operations of today." (C H Clemons, 10/12/1933)
- In 1939 "there were never any provisions written into the contracts requiring that the land be seeded or planted or anything of that nature. Of course, the specifications got tighter all the time. They were required to take small logs and more defective logs, and that indirectly had a beneficial effect on forestry -- but as far as actually going out and seeding or planting areas, we had nothing to do with that." (Malcolm Dick, "History of Forestry", by Lee Robinette to C.W. Bingham, 9/12/1972, copy of letter in the green book). Mac Dick was the first forester to join the Twin Harbors crew. He was a 1939 grad with a BS in Forestry from UW.

- In the east end of the watershed, "Operation Rehab" or the "16-6" project was undertaken starting in the 40's and continuing through the early 70's with slash and burn alder. The area can be seen on the 1944 Twin Harbors, Ramstad burning and stocking maps. "These were the things I always referred to as our sins of youth. There was a tremendous number of acres that was growing nothing but blackberries and brush and rabbits. You might say it was a hell of a mess."
- See 1944 Twin Harbors, Ramstad map that shows stocking levels
- Between 1940 & 1950: 4,190,000 Douglas-fir seedlings were planted on the Clemons Tree Farm

⇒ Annual Forestry Reports 1937, 38, 39, 40, 41, 42, 43, 45, 50 (in green book):

- 1937
 - "Clemons Operation has never followed the policy of burning slash every year, there is unquestionably a serious fire hazard."
- 1938
 - "considerable railroad maintenance and construction was accomplished"
 - activity was in 15-5, 15-6, and S 1/2 of 16-6
- 1939
 - activity was in 15-5, 15-6, and S 1/2 of 16-6
- 1940
 - activity was mostly in 15-5, 15-6, and S 1/2 of 16-6
 - planting was done in 8,9,10 (16-6) - far east portion of the watershed
- 1941
 - 29 miles of truck roads built on old RR grades, 7 miles of new truck road construction
 - Planting continued on 459 acres
 - Fire protection is key focus of foresters
- 1942
 - minimal tree planting and slash burning
 - 51 miles of road constructed
- 1945
 - 104 acres planted and no fires
- 1950
 - The 1950 report summarizes the following for the years 1940 - 1950 but is not clear on where the activities were on the Clemons tree farm:
 - Acres planted = 7115
 - Acres seeded = 640
 - Miles of protection road constructed = 240
 - Snags felled = 1729
 - Total existing private road miles = 311 (includes the 240 miles above)
 - Total existing semi-private road miles = 73

⇒ Historical References

- "Four Weyerhaeuser timber cruisers came down from Tacoma last week and disappeared in the timber south of Montesano." (Vidette, 2/23/1906)
- "25 soldiers are assigned to work at C C L & T, Camp #5. Over 1500 soldiers are working in logging camps and mills in the county." (Vidette, 3/23/1918)
- "C H Clemons is injured in logging camp accident, suffering a crushed foot." (Vidette, 10/11/1918)

⇒ Rain

- “Five inches of rain falls in Montesano in 4 days.” (Vidette, 11/20/1908)
- “Severe storms, with heavy rainfall and high water, result in great damage throughout the county....Several hundred feet of track was washed out between Montesano and Aberdeen....10 23/100th inches of rain fell between 7 PM Friday and noon Monday. Two feet of water has fallen since Nov. 1st, as reported by Carl Weatherwax.” (Vidette, 11/26/1909)
- “Due to very heavy snow fall, all logging camps in the county are closed down.” (Vidette, 1/24/1913)
- “Heavy rains, 9.5 inches in 5 days, causes river to overflow banks, and at Montesano the water is within 2’ of the N P Depot platform.” (Vidette, 1/9/1914)
- “Weather Observer Geo. M. Wade reports rain fell on 29 days in January; the rainfall was 20” and 1’ of snow.” (Vidette, 2/16/1914)
- “Heavy fall of snow causes closure of Grays Harbor logging camps. Over 1 foot of snow on Sunday & Monday.” (Vidette, 2/2/17)

1950 - PRESENT

⇒ Beaver

- Beaver dams cleared out with powder and trapping started in the 60’s
- Marvin Jones: “beaver activity is about the same as it has always been with some fluctuation with trapping ... 1967 was first year allowed to trap since 30’s”

⇒ Fish

- Adult fish were present to varying degrees in many creeks through the 60’s
- Anecdotal accounts by Bob Watson -retired W Dept. of Game, Marvin Jones - past employee in W. Co. R&D and forestry, Bob Dick - son of Malcolm Dick, Ralph Flowers - animal control officer:
 - Watson: “survival of stocks went down in strength over period of time he was in the watershed ... nice watershed and should be on rebound with limited spawning but enough ... Salmon Creek had some spawning ... Gene Deshamps WDF biologist may have info. ... Jack Ayerst - Regional Biologist ... Ralph Larson before Bob ... geology of area not lent to good spawning gravel ... couldn’t say what caused fish decline, whether habitat or fish harvest.”

⇒ Reforestation

- Chemicals were used between 1950 & 1974 for control of small rodents that would eat Douglas-fir seed and mountain beaver that would eat young seedlings.
- “History of Forestry”, by Lee Robinette to C.W. Bingham, 9/12/1972, copy of letter / article in the green book:
 - Scarification was tried in 1948 and did not gain acceptance until 1956
 - Variety of herbicides tried during late 40’s and early 50’s to kill off the alder and vine maple
 - Fire was suggested as a silvicultural tool in the late 40’s but not popular. It went by the wayside until 1969, when fire was used in the Weikswood area.
 - Helicopters were started in use for seeding and spraying in the mid-50’s
 - This is a good 20-page article to read to get a flavor of the transition of forestry from the late 1930’s into current times. The Clemons Tree Farm is a key focus.

⇒ Roads

- See 1950 road map in the green book

⇒ Annual Forestry Reports 1955, 60, 62, 63, 64, 65, (in green book):

- 1955
 - no new road construction, 17 miles of re-rocking, 6 culverts, 145 miles of grading, 14 miles of road widening with TD-14
 - The 1955 report summarizes the following for the years 1940 - 1955 but is not clear on where the activities were on the Clemons tree farm:
 - Acres planted = 8505
 - Acres seeded = none
 - Miles of protection road constructed = 264
 - Snags felled = 1729
 - Existing Forestry private road miles = 337 (includes the 264 miles above)
 - Other roads = 73
 - Company logging roads = ?
 - This was the last year that the Clemons Tree Farm was operated as a separate branch. It was absorbed as part of the newly created operating branch, namely, Clemons Branch of Weyerhaeuser Timber Company and include the old Willapa Tree Farm, the Clemons Tree Farm, and the Wynoochee Tree Farm.
 - 800 acres of brushland aerial sprayed by helicopter in the Rock Creek area
- 1960 (Clemons, Willapa, Wynoochee)
 - no new road construction (except one mile in Fairchild Creek), 510 miles of grading, 27 miles of road widening
 - 51 miles of logging roads built
 - Total miles of private roads for which the Company is primarily responsible for maintenance including past year's construction:
 - Protection roads = 573
 - Logging roads = 278
 - Other = 140
 - 5 fires on 30 acres total
 - 2293 snags felled to reduce fire hazard and safely spray rehab areas
 - Rehab scarification, seeding and planting in Weikswood area
- 1962 (Clemons, Willapa, Wynoochee)
 - Total miles of private roads for which the Company is primarily responsible for maintenance including past year's construction:
 - Protection roads = 425
 - Logging roads = 370
 - Other = 140
 - 1159 snags felled in old North River burn area averaging 52" dbh
 - Animal and brush problems confined planting in rehab areas to minimal
- 1965 (Clemons, Willapa, Wynoochee)
 - Total miles of private roads for which the Company is primarily responsible for maintenance including past year's construction:
 - Protection roads = 458
 - Logging roads = 545
 - Other = 140

⇒ Tours: 1969 -1971 ---several helicopter tours that covered the east portion of the watershed were done in this period (see Green Notebooks) Rehabilitation & 16-6 Project

- “because of repeated heavy fires is now almost entirely covered with non-merchantable brush....rooting out everything with tractors and piling it for burning ...area will be seeded or planted to conifer”
- “logged during 1923 - 1942 and burned repeatedly ... some of the ridges were planted during 1947 - 1951 ... plantations lost through encroachment of brush and animal damage .
- “... eliminating undesirable species ...chemicals and procedures are being tested and evaluated”
- “mechanically slashing brush with power saws and fire trailing ... Bunker C oil was applied aerially by a helicopter ... fire was ignited using a series of Weyerhaeuser made napalm grenades connected by prima-cord ... instantaneous controlled ignition creates intensive heat over a short period of time ... total fuel consumption with less air pollution ... time lapse between ignition and flame out was 22 minutes on one 162 acre block.”
- “In the Vesta creek drainage there are over 1400 acres (sections 1, 11, 12, 14 of 16-7) of unmerchantable brushland that have been slashed ... All of this drainage has been cut by contractors ... laid out the entire area for burning ... portion of the area sprayed with a desiccant chemical ... get a hot enough fire to consume the alder and dense evergreen brush.”
- 5600 acres were treated from 1967 - 1971

⇒ References

- Saginaw Timber Company by Finley Hayes
- Timber and Men (The Weyerhaeuser Story); 1963; Hidy, Hill, and Nevins
- Hobi Logging Company (also have a video available)
- They Tried to Cut It All

⇒ Special Thanks

- Megan Moholt, Corporate Archives, found many of the reference materials from which this information was compiled
- Dr. Dale Jost, railroad historian, supplied maps and information on old railroad grades and the 1910 USDA map
- Bob Schlessler, Ken Walczak, John McMeekin, and Marvin Jones with anecdotal accounts on the history of fish and logging in Vesta - Little North River Area

Note: all reference to “green book or green notebooks” refer to the two 3-ring, 3-inch green binders assembled by Tim Scherer for the V/LNR WSA in June, 1995 which are labeled “Vesta - Little North River WSA History”

Tim Scherer
Team Leader - V/LNR WSA
June 19, 1995