

HUMAN USE APPENDIX

The following was compiled from the earlier watershed documents superseded by the North Fork Coquille Watershed Analysis:

Logging History

Some of the following information is from the Forest Product sections of the Burnt Mountain and Coos River Unit Resource Analysis (USDI, BLM 1978a and USDI, BLM 1978b).

The turn of the century found most logging systems to be railroad or water oriented. The North Fork Coquille River, as were many other coastal streams, were the scenes of extensive log drives¹. As early as 1902 logs were brought down the river near River Mile 13. The most extensive drives on the creek occurred after 1913. Log drives continued through the 1920's (Farnell 1979). There is documentation of at least one splash dam on Middle Creek in Farnell (1979), and Beckham (1990) shows five, which were used from the early 1900s to the 1930s. General locations of the splash dams shows that they were scattered along the first 12 miles of Middle Creek and possibly one up Cherry Creek². There was also a mill with an impoundment in operation on Middle Creek in the vicinity of Cherry Creek mouth. Railroad logging occurred on Blue Ridge and the valley side slopes west of the North Fork Coquille River³.

The ownership of the Oregon-California railroad grant lands and the Coos Bay Wagon Road grant lands were conveyed and/or reverted to the United States government. The first timber sales in the North Fork Coquille Watershed were made by the General Land Office in Portland as timber patents, with a contract life of up to ten years⁴. Logging under timber patents began in 1924 in the Fairview Subwatershed and 1925 in the Middle Creek Subwatershed. Some of these patent sales resulted in highgrading the highest valued trees, which was not the intent of the sale. As time progressed, the timber supplies nearest to market decreased, utilization standards increased and it became economical to cut most of the trees on timber patents. By 1937 (and the end to timber patents), the lands were beginning to be clear cut. Most timber patents were for 40 to 160 acres at a time. There were a few larger timber patents covering up to 640 acres in the area. The last timber patent in the Fairview Subwatershed was made in 1938 and terminated in 1942. Most of the forest land in the Fairview Subwatershed had been cut by the time the 1943 aerial photos were taken.

The earliest logging in the North Coquille Subwatershed was along the bottom lands of the North Coquille River in the 1930's. The first BLM timber sales in the Subwatershed were in Section 1 of T. 26S, R. 10 W. (1939) and up Hudson Creek (1942). The 1943 aerial photos showed development for logging followed the river systems up from the bottom creating a road network primarily up the draws which had an impact on the riparian area.

The loggers in the 1940s and before used a low density network of truck roads and rail lines, and relied on forwarding logs with a system of swing trees. That combined with very large units meant the miles of road per square mile were far lower than what became common in later years. In some areas considerable number of trees were left standing for a seed source. These trees were likely less economically desirable species, defective trees, trees too small to be

¹ For a history of splash damming in Coos County read Swift Flows the River by Dow Beckham published 1990 by Arago Books, Coos Bay, OR.

<u>Name</u>	<u>Period of Time</u>	<u>Location</u>
Sievert Aason & Brother	1912-ff	East Fork Middle Creek
Dennis McCarthy	1920s	T28S,R11W,Sec.5,NE
Kline	1930s	T28S,R11W,Sec.5,NE
Dennis McCarthy	1920s	T28S,R11W,Sec 4
Walt Lawthorn	1930s	T27S,R11W,Sec.21,NW

³ For the location of the railroad grades see the BLM planimetric maps that are based on the 1959 aerial photos, or the 1971 type maps or 1982 OI maps on file at the Coos Bay - BLM District Office. Also see the 1943 Port Orford Project aerial photos shot for the War Department. Copies can be obtained through National Archives in Washington D.C.

⁴ The following are the recorded timber patents in the Middle Creek Subwatershed:

<u>1925</u>		
Por. Sec. 5, T. 28 S., R. 11 W.,	120 acres	(Now private)
Por. Sec. 31, T. 27 S., R. 11 W.	160 acres	(40 acres now private)
Por. Sec. 35, T. 27 S., R. 11 W.	40 acres	

<u>1926 - 1930</u>		
Most Sec. 21, T. 27 S., R. 11 W.	440 acres	(80 acres now private)

merchantable, inaccessible, or so situated as to be difficult to fall without shattering. The driving reason for large units, low road density, and leaving green trees and snags was economic. Other areas were cleared of nearly all the trees and may have then been grazed.

Superficially, that resulting pattern could meet many of today's objects to reduce fragmentation, reduce road density and leaving biological legacies. On the down side, there was no stream protection, what soil disturbance that did occur was highly concentrated and therefore locally severe. The choice and location of the trees left standing may have had detrimental effects on the genetic quality and growth of the next generation of trees and possibly altered the species composition growing on the sites.

Local informants told the Watershed Analysis Team that yarding logs with oxen was used early on when there were gentle lands adjacent to streams suitable for water transport of logs to the mills. Later, simple steam powered yarders pulled the logs into landing areas at "drum level" with hang-up problems, particularly with the high stumps representative of the cross-cut and axe era. The solution was to get some "lead" from above, which resulted in less hang-ups. "High leading" or high-lead logging was thus born. Steam powered yarders were gradually replaced by gasoline, which was then replaced by diesel. Power saws replaced the "misery whip" and falling axes. High-lead logging became more sophisticated with gas and diesel powered donkey yarders, rigged wooden spar poles, swing poles, mobile log loaders, and log trucks. At first much of the logging was done down-hill towards the streams since this was the primary mode of transporting logs to the mills. When the use of log trucks increased, roads were first built up the streams and onto ground with gentle slopes. Track mounted skidders were also developed during this period for yarding on better ground.

In the late 1950's the telescoping mobile steel spar was invented making cable yarding systems much more versatile and portable. Early yarders had drum capacities limited to 800 feet of cable or less. Capacity was also limited by the strength of the steel used in the cables, which meant cable diameters then had to be larger for a given breaking strength than for cable that can be obtained today. The limited drum capacity restricted the reach. This in turn required a higher density of roads compared to current technology. The high road density at the time was seen as desirable for fire protection and for access to apply intensive forest practices. Short yarding distances were also desirable to keep yarding cost down.

During the late 1960's to early 1970's, more emphasis was placed on the environment, especially soils and water. Blocks of mature timber available for cutting were being accessed in the more remote and steeper headwall areas where topography is severe. Sale layout of cutting units was dictated by topography rather than size. Streamside buffer strips became more common, with the objective of protecting stream banks from erosion which would improve water quality and prevent mass movement of logging debris in the drainway. Tractor or "cat" yarding was curtailed on BLM administered lands because of the soil compaction factor. The contracts for last of the conventional tractor sales on Coos Bay BLM lands required discontinuing yarding when soil moisture was high enough to favor soil compaction. This did not work in practice because when the timber was cut the trees no longer removed water from the soil by evapotranspiration. Without evapotranspiration to remove water from the site, the soils did not dry out enough to be below the optimum moisture level for soil compaction. If the soils did dry out enough it was usually about the time the winter rains would start. The practice of sidecasting during road construction gave way to end hauling on the steeper ground during this period.

In the early 1970's, some timber managers started limiting road construction and relying more on longer cable reaches and skyline yarding. This was done to reduce the miles of road and reduce the impacts of yarding to the soils. The first skyline sale in the Resource Area was in the adjacent Tioga Creek Subwatershed to the east in 1975. Helicopter and balloon logging were also done on fragile sites where skyline systems were not possible due to poor deflection. The first balloon logging on the Coos Bay District was in the Middle Creek Subwatershed to salvage blowdown from the 1975 storm (Fish Ladder Salvage). Other balloon logging followed. This included the Moore Creek and Moore Hot Air sales in Middle Creek and the Bug Alder Aerial sale in the headwaters of North Fork Coquille. Helicopters were used in the Middle Creek Subwatershed for the Alder Creek Skyhook sale, and to log both private and BLM lands in Park Creek. Directional felling was also incorporated in timber sales to help protect streamside buffer strips from damage and to minimize soil disturbance in areas with fragile soils.

In the 1980's there were maximum unit size and spatial guidelines to increase edge effect and reduce distance to cover for deer and maximize the use of this habitat by deer and elk. This contributed to the fragmentation because it did not

take into the account of the needs of the wildlife that benefitted by large contiguous interior habitat. During the same time some managers had concerns over maintaining integrity of streamside buffer strips. Instead of using skyline systems that required yarding through corridors in the buffers, they would use highlead systems on each side the buffer. This also required additional road construction to access each side of the buffers.

History of Land Uses Other than Logging

The first white settlers began to arrive in Oregon during the early to mid-1800's. The settlers cut the trees for use as construction materials and to clear land for farms and villages. In the latter 1860's the United States offered lands for development in the form of homestead claims, timber claims, railroad and wagon-road grants. In 1868, Horace Brewster located a trail across the Coast Range (Dodge 1898). Coos Bay Wagon Road, which generally followed Brewster's trail, was built through to Sumner in 1873 (Dodge 1898). The first land cash entry patent in the Middle Creek Subwatershed (recheck date) was in made 1874. The first attempt at homestead entry was in 1873, and was canceled 1876. The first homestead entry patent granted was in 1878. Cadastral surveyors notes during the 1870's through the 1890's mention that a number of settlers had already occupied the bottomlands of the Middle Creek and Cherry Creek drainages. Various settlers such as W.H. Bunch, L.A. Lawhorn, W.B. Hess, and J. Boone to just name a few were mentioned as having considerable improvements and acres cleared and in cultivation.

During the 1930s, several homestead entries were attempted. Some were successful. Most of these later homestead entries were on land logged under a timber patent during the previous 15 years. Stock raising homestead entries were also attempted in the 1930s.

In 1936, the McKinley-Fairview Fire burned through the west side of the Fairview Subwatershed. The affected area inside the Fairview Subwatershed includes Blue Ridge, Lost Creek, Blair Creek, Steinnon Creek, head waters of Steele, and some Woodward Creek drainage. The fire also burned over land to the south and west of the Fairview Subwatershed, and occurred at the same time as the Bandon Fire, and a fire in the Brewster Rock/ Sitkum area. The fire report provides an indication of the land use in the 1930s:

Break down of Acres Burned in the Mckinley-Fairview Fire by Land Use:

forest land			nonforest land			total
Mech. timber (>12" dbh)	reproduction	unburned slash	grazing land		other	
			grass	brush		
4,929	2,173	1,828	6,749	2,010	4,980	22,660

The Mckinley-Fairview Fire started September 25, was under control October 5, and declared out November 5, 1936. According to the fire report, 8,000 mbf of merchantable timber was killed. However, an estimated 98% of that timber was considered salvageable. 50% of the reproduction was classified as "salvageable."

Grazing leases were let on parts of at least four BLM sections in the Fairview Subwatershed during the 1950s. The full extent of grazing on BLM lands in the Watershed cannot be determined since those records were sent to Archives and later destroyed. During the 1960s, several BLM sections in the Fairview area were fenced⁵ to exclude livestock. Those sections had been nonstocked since they were logged. Some were logged as early as the 1920s, and were not successfully reforested until after the fences were built. Some of those sections burned in 1936 and some were leased for grazing in the 1950s. Based on accounts related by retired BLM employees grazing trespass was a significant factor limiting regeneration success before the fences were built.

References

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 USDI. 1978b. *Unit Resource Analysis Coos River Planning Unit Lands*. On file Coos Bay District Office.

⁵ The location of the fences are shown on the 1971 and 1982 type maps on file at the Coos Bay District - BLM Office. Fence locations are also readily viable on the 1969/70 Brewster Rock aerial photos.