

APPENDIX C

FLOOD HISTORY¹

During November of 1861, there was a significant rain-on-snow event accompanied by strong, warm, southerly winds in southwest Oregon (Wooldridge 1971).

In February of 1890, an intense and prolonged rain and major flood occurred in southwest Oregon. There are various observations of this event on area coastal streams in the historic literature. The flood magnitude and return interval is unknown. Much slide activity was reported.

On November 1, 1924, an estimated peak discharge of approximately 22,400 cfs occurred in the East Fork Coquille watershed. The return period probability for this flood, based on the record is near 14 years.

On December 26, 1955, there was an estimated instantaneous discharge of approximately 20,500 cfs in the East Fork Coquille watershed. The return period probability for this flood, based on the record is near 9 years. However, a six-day period from December 21-26 had similar high flow.

On December 22, 1964, a maximum discharge of 38,800 cfs is estimated for the East Fork Coquille watershed. The return period probability for this flood, based on the record is in excess of 100 years. This equals 289 cfs/mi², which is close to three times higher than the maximum equivalent area runoff for coastal watersheds to the north, but similar to coastal watersheds arising in the Siskiyou to the south. This was a rain-on-snow event.

On January 17, 1971, there was an estimated instantaneous discharge of approximately 22,800 cfs in the East Fork Coquille watershed. The return period probability for this flood, based on the record is near 15 years.

On January 15, 1974, there was an estimated instantaneous discharge of approximately 24,400 cfs in the East Fork Coquille watershed. The return period probability for this flood, based on the record is near 21 years.

On November 18, 1996, there was an estimated instantaneous discharge of approximately 30,500 cfs in the East Fork Coquille watershed. The return period probability for this flood, based on the record is near 70 years.

¹ This discussion on flood history was written by Dan Carpenter, Coss Bay district, BLM, for watershed analysis in the Myrtlewood Resource Area. The largest events in the last century occurred within the indicated time frames. Estimated discharges were derived from a constructed flood frequency curve for USGS station 14325000, on the South Fork Coquille, near Powers, OR. This station was selected because it has a long period of record (80 years), and has similar high elevation areas subject to intermittent snow accumulation and melt. Differences in watershed area were equated by an area adjustment procedure. Estimated peak flow discharges may be higher (10-25%) than actual watershed runoff, because the watershed is further inland from the coast and precipitation patterns are different. Bankfull flow in the watershed is approximately 9900 cfs. These flooding discharges moderately to greatly exceeded the channel capacity and went overbank.