

## **The Effect of Timber Harvest on the Fool Creek Watershed, 49 Years Later**

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**Abstract.** In 1956 the Fool Creek Watershed at the Fraser Experimental Forest in Colorado was harvested using a pattern of alternating clearcut and forested strips. Nearly a half century later (49 years), seasonal streamflow at Fool Creek is still 29% higher than pre-treatment conditions. Annual maximum daily mean flows and instantaneous peak flows are 16% and 18% higher and occurring seven days earlier than pre-treatment conditions. Hydrographs show that daily flows appear to be nearly halfway back to pre-treatment conditions, but have not changed much since 1985. Water equivalent stored in the seasonal snowpack at Fool Creek is no longer affected by the treatment. The cut areas exhibited a significant increase in accumulation from treatment date through 1991. Depending on the near-term future climatology, it is expected that flows could reach pre-treatment conditions within ten years. The total time for return to pre-treatment flows would then be approximately 60 years.