

US Forest Service Experimental Forests and Ranges Network: a continental research platform for catchment-scale research

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Abstract The US Forest Service initiated its catchment research program in 1909 with the first paired catchment study at Wagon Wheel Gap, Colorado, USA. It has since developed the Experimental Forests and Ranges Network, with over 80 long-term research study sites located across the contiguous USA, Alaska, Hawaii, and the Caribbean. This network provides a unique, powerful continental research platform for study of complex environmental and societal problems at the local, regional and landscape scale. The study of water and ecosystems through paired catchment studies has been an integral component of many of these studies since establishment in the early and mid 1900s. The Forest Service continues to maintain and develop a robust programme, emphasizing long-term research on watershed science. This paper gives an overview of US Forest Service catchment research, emphasizing paired-catchment studies, and highlighting important advances in ecosystem science and “lessons learned” over the last century of research.

Key words watersheds; paired catchments; research network; USA