Introduction to special section: Reynolds Creek Experimental Watershed

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To understand how variations in climate, land use, and land cover will impact water supply and water quality, we must have access to long-term hydrologic and climatic databases. The *National Research Council* [1999] recognized the value of experimental watersheds as the setting for the development of our current understanding of physical and biological watershed processes. Specifically, data from watersheds that include significant human activities, such as grazing, farming, irrigation, and urbanization, are critical for determining the signature of human-induced changes on hydrologic processes and the water cycle. One of the primary components of effective watershed research is a sustained, long-term monitoring and measurement program [*National Research Council*, 1997]. Such an effort was undertaken when the Reynolds Creek Experimental Watershed (RCEW) was added to the U.S. Department of Agriculture, Agricultural Research Service watershed program in 1960. The RCEW, a 239 km^2 drainage in the Owyhee Mountains near Boise, Idaho, has been continuously monitored since the early 1960s and continues to be to the present. *Robins et al.* [1965], in the first volume of *Water Resources Research*, described what became the RCEW as an outdoor hydrologic laboratory in which watershed research would be supported by sustained, long-term monitoring of basic hydroclimatic parameters. Research at the RCEW continues to be supported by monitoring at nine weirs, three primary climate stations, 20 precipitation stations, eight snow measurement sites, and five soil temperature and moisture measurement locations. This special section of *Water Resources Research* demonstrates the depth and quality of the effort undertaken by presenting a set of nine papers that introduce and describe the RCEW and then present and describe the geographic, precipitation, snow, climate, soil lysimeter, temperature and moisture, and stream discharge and suspended sediment monitoring data collected in the RCEW from 1962 to 1996. All data described are available via the ftp site ftp.nwrc.ars.usda.gov. The authors invite their colleagues to join them in utilizing these data in an effort to extend the understanding and knowledge of watershed processes and hydrology to meet the challenges of the 21st century.

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