

Building Partnerships to Monitor the Conditions of Streams and Rivers on Public Lands

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The Bureau of Land Management (BLM), in collaboration with the U.S. Environmental Protection Agency (EPA), will conduct its first Western Rivers and Streams Assessment (WRSA), a survey of the condition of BLM streams and rivers throughout the contiguous western U.S. The objective of this effort is to generate unbiased, quantitative baseline conditions from which regional and national aquatic priorities can be established and future conditions can be compared. The BLM is partnering with the EPA's National Rivers and Streams Assessment (NRSA) to intensify the NRSA design on BLM lands, and implement sampling of perennial streams and rivers to accomplish this task. The WRSA will provide the first-ever statistically valid estimates of the chemical, physical and biological condition of streams and rivers managed by the BLM. In this partnership, BLM is using a comparable survey design and the same field methods and indicators as the EPA and State effort. This level of partnership maximizes the use of the generated data and makes best use of the taxpayers resources available for monitoring.

The WRSA is a component of the BLM's Assessment, Inventory and Monitoring (AIM) strategy designed to standardize aquatic data collection and facilitate science-based decision making on public lands. Similar to the EPA's NRSA, the WRSA will answer three central questions: 1. What percentage of BLM's streams and rivers are in good, fair or poor biological condition; 2. What is the linear extent of streams and rivers experiencing stressors such as excessive nutrients, high salinity, excess fine sediments and invasive invertebrates; and 3. What is the risk posed by the observed stressors to biological condition?

To answer these questions, the BLM will sample approximately 300 sites (both wadeable and non-wadeable) between 2013 and 2015, in collaboration with the EPA and western states. Statistically representative sites will be selected to derive condition estimates for at least three different spatial scales: 1. West-wide; 2. Three EPA western climatic regions and 3. Six hybrid Level III Ecoregions that encompass 95% of the linear extent of BLM's rivers and streams in the contiguous western U.S.

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