

Proportion of streams on BLM Lands

In order to inform the Bureau of Land Management of areas where their actions were likely to have the most impact, we included a measure of the length of streams on BLM lands as a constraint in this tool. In this way, the prioritization process favors watersheds with higher proportions of BLM-managed lands

National Hydrography Dataset stream data (US EPA and USGS 2005) was collected for the region, and identified to the 5th-field watershed level planning unit. For each watershed, stream length was calculated across the entire planning unit, as well as on BLM lands within that planning unit. The proportion of the length of streams on BLM lands to all streams within the watershed was calculated as a percentage.

In order to include this value as a cost in the tool, we subtracted this percentage from 100 in order to give watersheds with less streams on BLM land a higher constraint value. This functions to deter the selection algorithm from including it in the scenario output.

Bibliography

U.S. Environmental Protection Agency, and U.S. Geological Survey. 2005. *National Hydrography Dataset Plus - NHDPlus. Regions 16, 17, 18*. Multiple types of spatial digital data. Washington, DC: U.S. Environmental Protection Agency and U.S. Geological Survey. <http://www.horizon-systems.com/nhdplus/data.php>.

