

Idaho Wadeable Stream Survey: 2005–2010

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What is the condition of Idaho's streams? To answer this question, the Idaho Department of Environmental Quality (DEQ) initiated the Idaho Wadeable Stream Survey—a probability based survey of wadeable streams throughout Idaho. Sites were selected to represent all 1st- through 5th-order streams as defined by the National Hydrography Dataset Plus Version 2, or NHDPlusV2, for Idaho (<http://www.horizon-systems.com/nhdplus/>). The total length of the mapped streams in the survey was 148,924 km. Overall, 1,793 sites, representing the 148,924 km of mapped streams, were evaluated for target status. Of this total, 45.3% (standard error [SE] = 1.09), or 67,342 km, were considered to be within the target population, and 54.7% (SE = 1.09), or 81,582 km, were incorrectly mapped by NHDPlusV2 and were non-target. Target stream length was further subdivided as being either sampled or not sampled due to accessibility issues or logistical issues. Similarly, the non-target stream length was subdivided based on why it was excluded from the target population, with the majority of non-target stream length being dry. DEQ field crews sampled at 252 wadeable stream sites throughout Idaho in 2005–2008 and 2010. These sites represent a sampled population of 14,544 km, or 9.8% (SE = 0.68) of the mapped stream length. This 14,544 km of stream length is the portion of Idaho's wadeable streams for which condition can be estimated based on actual sampling results. Statewide, 72.1% (SE = 3.09) of the sampled population, or 10,482 km of Idaho Wadeable Streams, was considered fully supporting cold water aquatic life according to ecological condition, while 27.9% (SE = 3.09), or 4,061 km, was considered not fully supporting.