

PROJECT ABSTRACT

Colorado Plateau Cooperative Ecosystem Studies Unit
(Cooperative Agreement # H1200-09-0005)

Park: Zion National Park

Project Title: Inventory of Aquatic Macroinvertebrates in Park Streams - North and La Verkin Creeks

Funding Amount: \$32,000

CPCESU Partner Institution: Utah State University

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Start Date: September 20, 2009

End Date: October 31, 2012

Abstract: Macroinvertebrate fauna, which are widely recognized as valuable indicators of stream health, have been inventoried in the North and East Forks of the Virgin River in ZION. But several other park waters have no sampling, or only reconnaissance level sampling. Specifically, the significant perennial streams of North Creek and La Verkin Creek and several of the park's springs and hanging Gardens, have not had the aquatic invertebrate fauna inventoried. The overall purpose of the project described herein is for the BLM/USU-BugLab National Aquatic Monitoring Center, Logan, UT (USU- BugLab) to collaborate with ZION to collect, identify and enumerate aquatic macroinvertebrate samples collected as part of an initial inventory and monitoring effort of previously unsampled park waters. The highest priorities for inventory are North and La Verkin Creeks. Sampling will be conducted for three seasons (pre- and post-spring runoff and fall base-flow conditions) in each of two years (2010 and 2011). Samples will be processed at USU for species identification and enumeration. A report will describe methods and results, and interpret these findings.

Keywords: Animals - Surveys / monitoring, Animals – invertebrates, Hydrology – water quality