

RPRS

National Park Service Research Permit and Reporting System

Part of IRMA (RPRS-2.3.0.18099_20200624:23:15:43)

National Park Service
U.S. Department of the Interior

Natural Resource Stewardship and Science



Home ▾ | Search ▾ | Investigators ▾ |

News Help Contact Us

jwalenga Log Out

Permit Profile NERI-2020-SCI-0005

[Renew](#) [View Application](#)

Finalized

Permit Details

Park: New River Gorge

Study#: NERI-00053

Permit#: NERI-2020-SCI-0005

Start Date: Oct 27, 2020

Expiration Date: Dec 31, 2020

Coop Agreement#:

Optional Park Code:

Name of principal investigator:

Name: Dr Jenelle Dowling **Phone:** 4066243320 **Email:** timber@adventurescientists.org

Name of Institution represented:

Adventure Scientists

Additional investigators or key field assistants:

Name	Phone	Email
Jenelle Dowling PhD	406-624-3320	jenelle@adventurescientists.org
Max Littlefield	406-624-3320	max@adventurescientists.org
Michelle Toshack	406-624-3320	michelle@adventurescientists.org

Study Title:

Wild and Scenic Rivers

Purpose of study:

We will conduct a nationwide water quality monitoring study on Wild and Scenic River (WSR) segments across 40 states on federal lands. This project will update the water quality status of the majority of rivers across the National Wild and Scenic River system (NWSRS). Adventure Scientists is prepared to provide advisory data to support federal and state agencies in their efforts to implement the Clean Water Act (CWA), which include TMDLs (total maximum daily loads) as well as 303(b) and 303(d) listings. Adventure Scientists has designed the project to meet the priorities and standards of a variety of stakeholders and to ensure data can improve agencies' decision-making capacity. In addition, state water quality agencies have expressed that regular monitoring of all surface waters improve their management ability, which includes updating assessments of impaired waters and collecting data on waters identified as having a good status but with no data to verify those conditions. The multi-level and inter-agency relationships that develop during the life of the project should allow us to better coordinate across groups in response to water quality issues in the NWSRS.

Several states require repeat monitoring and minimum data points to determine the status of surface waters, including rivers, in order to comply with the CWA. Therefore, Adventure Scientists is planning for four years of data collection (until fall/winter 2022) to enable the collection of sufficient data for river segments with significant data gaps/needs (e.g., unassessed and unknown waters). At full scale, volunteers may be deployed in 40 states.

Subject/Discipline:

Water Quality

Locations authorized:

Research activities will take place in New River Gorge National River and data collection will occur in the Bluestone Wild and Scenic River. Exact points for data collection are to be determined, and will be marked by volunteers when collecting data.

Transportation method to research site(s):

Sampling locations will be accessed via raft, kayak, or potentially on foot if possible.

Collection of the following specimens or materials, quantities, and any limitations on collecting:

Name of repository for specimens or sample materials if applicable:

NPS General Conditions for Scientific Research and Collecting Permit (available at the RPRS HELP page) apply to this permit. The following specific conditions or restrictions, and any attached conditions, also apply to this permit:

Please notify Chief of Natural Resources, Bryan Wender (bryan_wender@nps.gov) when data have been entered in WQX.

Please have volunteers contact Bryan via phone or email prior to beginning field work. His office phone number is 304-465-6542.

Please provide copies of a final report and any publications resulting from this permitted research.

Summary of permitted field methods and activities:

This project empowers Adventure Scientists' volunteer network with the tools, technology, and guidance to collect water quality data across over 13,000 miles of WSRs managed by USFS, BLM, and NPS. Adventure Scientists will leverage its volunteer communities of whitewater rafters and kayakers as well as backpackers, mountain bikers, day-hikers, and trailrunners to collect the necessary data. We will launch the project's first phase as a small-scale nationwide effort, with priority given to the nearly 4000 river miles of unassessed and unknown water quality managed by your agencies. These rivers span 16 of 40 states with WSRs. In the second project phase, Adventure Scientists intends to expand the project scope by prioritizing river segments with significant data gaps as well as those with identified impairments under the CWA. We will also incorporate previously collected data throughout the rivers managed by these three federal agencies.

We will focus on parameters that can be collected via field instruments or observations. Volunteers will deploy Hach probes that monitor dissolved oxygen (DO), pH, temperature, total dissolved solids (TDS), salinity and conductivity. Field equipment will be attended at all times by the volunteer and the volunteer will not be installing or leaving any equipment in the field. While in the field, volunteers will collect both chemical and physical condition data, requiring volunteers to: (1) access pre-selected field sites; (2) mark GPS coordinates and exact time of data collection; (3) deploy a data logger/sensor for the collection of basic parameters (temp, DO, pH, conductivity, TDS, salinity) in situ; and (4) conduct a qualitative habitat assessment and take photos.

Specimen Collection

Handling or Collecting Specimens No

Staff Notes (0)

Attached Documents (1)