

## SCIENTIFIC RESEARCH AND COLLECTING PERMIT



Grants permission in accordance with the attached general and special conditions

United States Department of the Interior  
National Park Service

Obed

Study#: OBRI-00053

Permit#: OBRI-2022-SCI-0001

Start Date: Jun 01, 2022

Expiration Date: Dec 31, 2022

Coop Agreement#:

Optional Park Code:

### Name of principal investigator:

Name: Ms Michelle Toshack

Phone: 4066243320

Email: projects@adventurescientists.org

### Name of institution represented:

Adventure Scientists

### Additional investigators or key field assistants:

Name: Michelle Toshack

Phone: 406-624-3320

Email: michelle@adventurescientists.org

Name: Joshua Theurer

Phone: 406-451-1504

Email: joshua@adventurescientists.org

Name: Cedar Mathers-Winn

Phone: 4069200847

Email: cedar@adventurescientists.org

### Study Title:

Wild and Scenic Rivers (Obed)

### 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:

Ecology (Aquatic, Marine, Terrestrial)

Water / Hydrology

Water Quality

Water Resources

Watershed Management / Assessment

### Locations authorized:

Data collection will occur in the designated Wild and Scenic portions of the Obed 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 by raft/kayak, or 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:

All field activities must be coordinated with NPS Resource Management Specialist Rebecca Schapansky. She can be reached at (423)346-8901, ext. 5027 or via email at rebecca\_schapansky@nps.gov.

Researchers whose studies include sampling of water and associated aquatic and riparian resources within Big South Fork National River and Recreation Area must guard against the transport of non-native species and biological contaminants on personnel, field equipment, vehicles and boats. See attached "Standard Operating Procedure #18: Decontamination Procedures for Aquatic Resource Sampling" developed by the Appalachian Highlands Inventory and Monitoring Network for details. Should the researcher prefer a comparable protocol it must be approved by RM prior to permit issuance.

Hydrilla is currently known in the park throughout Daddys Creek and in the Obed River, downstream of the Daddys Creek/Obed River confluence (Obed Junction). As an alternate to the decontamination protocols mentioned above, and to prevent cross-contamination of hydrilla-free sites, individual volunteers should be assigned to either an infested reach or non-infested reach for water sampling but not both. Permittee should ensure that volunteers are made aware of the hydrilla distribution in the park before any water sampling occurs.

Collection of threatened and endangered species are only allowed under a U.S. Fish and Wildlife Service permit.

Motorized watercraft are not permitted on most portions of the Obed Wild and Scenic River.

Obed Wild and Scenic River will only approve permits for one year at a time. Researchers will need to renew their permits each year if research is longer than one year. Investigators annual report must be completed each year before renewal permit will be issued.

Researchers shall keep a copy of their permit with them while working in the park. Vehicles shall display a copy of the permit on the dashboard of the vehicle so that it can be viewed easily through the windshield.

A study proposal or research summary should be attached to each application.

If collecting, permittee will need to coordinate cataloging and packaging voucher specimens with Big South Fork museum staff prior to field work.

If collecting, permittee will need to acquire an accession number and block of catalog numbers from Big South Fork staff prior to depositing collections at Big South Fork.

NPS reserves the right to approve the naming of species new to science found in the park.

Permittee will need to supply an electronic copy of final report, copies of field notes, and copies of photographs and/or videos to the Resource Management office at Big South Fork National River and Recreation Area. The results of any genetic testing as authorized under this permit should be included in the final report.

Permittee and all co-investigators agree to the following:

I agree to keep confidential any protected information that I may develop or otherwise acquire as part of my work with the National Park Service in the Big South Fork National River and Recreation Area. I understand that with regard to protected information, I am an agent of the National Park Service and must not share or release that information through any means, except as specifically authorized by this scientific research and collecting permit. I understand that protected information concerns the nature and specific location of endangered, threatened, rare, commercially valuable, mineral, paleontological, or cultural patrimony resources such as threatened or endangered species, rare features, archeological sites, museum collections, caves, fossil sites, gemstones, and sacred ceremonial sites. My acquisition or development of any such information does not constitute a release to the public under the Freedom of Information Act (FOIA), and the NPS has not waived any FOIA exemption or other legal protection for this information. I, thereby, acknowledge that release of sensitive park data outside the intent, purpose and scope of this permit is not authorized. I also understand that protected information must not be disclosed through any means including, but not limited to, websites, maps, scientific articles, presentations, speeches, collections (if authorized), collection labels or third-party data requests.

**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.

Recommended by park staff(name and title):

Thomas E. Blount, Chief Res. Mgt.

Reviewed by Collections Manager:

Yes  No

Approved by park official:

[Signature]

Date Approved:

June 17 2022

Title:

Superintendent

I Agree To All Conditions And Restrictions Of this Permit As Specified  
(Not valid unless signed and dated by the principal investigator)

Michelle Toshack

(Principal investigator's signature)

6/17/2022

(Date)

**THIS PERMIT AND ATTACHED CONDITIONS AND RESTRICTIONS MUST BE CARRIED AT ALL TIMES WHILE CONDUCTING RESEARCH ACTIVITIES IN THE DESIGNATED PARK(S)**



## GENERAL CONDITIONS For SCIENTIFIC RESEARCH AND COLLECTING PERMIT

United States Department of the Interior  
National Park Service

1. **Authority** - The permittee is granted privileges covered under this permit subject to the supervision of the superintendent or a designee, and shall comply with all applicable laws and regulations of the National Park System area and other federal and state laws. A National Park Service (NPS) representative may accompany the permittee in the field to ensure compliance with regulations.
2. **Responsibility** - The permittee is responsible for ensuring that all persons working on the project adhere to permit conditions and applicable NPS regulations.
3. **False information** - The permittee is prohibited from giving false information that is used to issue this permit. To do so will be considered a breach of conditions and be grounds for revocation of this permit and other applicable penalties.
4. **Assignment** - This permit may not be transferred or assigned. Additional investigators and field assistants are to be coordinated by the person(s) named in the permit and should carry a copy of the permit while they are working in the park. The principal investigator shall notify the park's Research and Collecting Permit Office when there are desired changes in the approved study protocols or methods, changes in the affiliation or status of the principal investigator, or modification of the name of any project member.
5. **Revocation** - This permit may be terminated for breach of any condition. The permittee may consult with the appropriate NPS Regional Science Advisor to clarify issues resulting in a revoked permit and the potential for reinstatement by the park superintendent or a designee.
6. **Collection of specimens (including materials)** - No specimens (including materials) may be collected unless authorized on the Scientific Research and Collecting permit.

The general conditions for specimen collections are:

- Collection of archeological materials without a valid Federal Archeology Permit is prohibited.
- Collection of federally listed threatened or endangered species without a valid U.S. Fish and Wildlife Service endangered species permit is prohibited.
- Collection methods shall not attract undue attention or cause unapproved damage, depletion, or disturbance to the environment and other park resources, such as historic sites.
- New specimens must be reported to the NPS annually or more frequently if required by the park issuing the permit. Minimum information for annual reporting includes specimen classification, number of specimens collected, location collected, specimen status (e.g., herbarium sheet, preserved in alcohol / formalin, tanned and mounted, dried and boxed, etc.), and current location.
- Collected specimens that are not consumed in analysis or discarded after scientific analysis remain federal property. The NPS reserves the right to designate the repositories of all specimens removed from the park and to approve or restrict reassignment of specimens from one repository to another. Because specimens are Federal property, they shall not be destroyed or discarded without prior NPS authorization.
- Each specimen (or groups of specimens labeled as a group) that is retained permanently must bear NPS labels and must be accessioned and cataloged in the NPS National Catalog. Unless exempted by additional park - specific stipulations, the permittee will complete the labels and catalog records and will provide accession information. It is the permittee's responsibility to contact the park for cataloging instructions and specimen labels as well as instructions on repository designation for the specimens.
- Collected specimens may be used for scientific or educational purposes only, and shall be dedicated to public benefit and be accessible to the public in accordance with NPS policies and procedures.
- Any specimens collected under this permit, any components of any specimens (including but not limited to natural organisms, enzymes or other bioactive molecules, genetic materials, or seeds), and research results derived from collected specimens are to be used for

scientific or educational purposes only, and may not be used for commercial or other revenue - generating purposes unless the permittee has entered into a Cooperative Research And Development Agreement (CRADA) or other approved benefit - sharing agreement with the NPS. The sale of collected research specimens or other unauthorized transfers to third parties is prohibited. Furthermore, if the permittee sells or otherwise transfers collected specimens, any components thereof, or any products or research results developed from such specimens or their components without a CRADA or other approved benefit-sharing agreement with NPS, permittee will pay the NPS a royalty rate of twenty percent (20 %) of gross revenue from such sales or other revenues. In addition to such royalty, the NPS may seek other damages to which the NPS may be entitled including but not limited to injunctive relief against the permittee.

**7. Reports** - - The permittee is required to submit an Investigator's Annual Report and copies of final reports, publications, and other materials resulting from the study. Instructions for how and when to submit an annual report will be provided by NPS staff. Park research coordinators will analyze study proposals to determine whether copies of field notes, databases, maps, photos, and / or other materials may also be requested. The permittee is responsible for the content of reports and data provided to the National Park Service

**8. Confidentiality** - - The permittee agrees to keep the specific location of sensitive park resources confidential. Sensitive resources include threatened species, endangered species, and rare species, archeological sites, caves, fossil sites, minerals, commercially valuable resources, and sacred ceremonial sites.

**9. Methods of travel** - Travel within the park is restricted to only those methods that are available to the general public unless otherwise specified in additional stipulations associated with this permit.

**10. Other permits** - The permittee must obtain all other required permit(s) to conduct the specified project.

**11. Insurance** - If liability insurance is required by the NPS for this project, then documentation must be provided that it has been obtained and is current in all respects before this permit is considered valid.

**12. Mechanized equipment** - No use of mechanized equipment in designated, proposed, or potential wilderness areas is allowed unless authorized by the superintendent or a designee in additional specific conditions associated with this permit.

**13. NPS participation** - The permittee should not anticipate assistance from the NPS unless specific arrangements are made and documented in either an additional stipulation attached to this permit or in other separate written agreements.

**14. Permanent markers and field equipment** - The permittee is required to remove all markers or equipment from the field after the completion of the study or prior to the expiration date of this permit. The superintendent or a designee may modify this requirement through additional park specific conditions that may be attached to this permit. Additional conditions regarding the positioning and identification of markers and field equipment may be issued by staff at individual parks.

**15. Access to park and restricted areas** - Approval for any activity is contingent on the park being open and staffed for required operations. No entry into restricted areas is allowed unless authorized in additional park specific stipulations attached to this permit.

**16. Notification** - The permittee is required to contact the park's Research and Collecting Permit Office (or other offices if indicated in the stipulations associated with this permit) prior to initiating any fieldwork authorized by this permit. Ideally this contact should occur at least one week prior to the initial visit to the park.

**17. Expiration date** - Permits expire on the date listed. Nothing in this permit shall be construed as granting any exclusive research privileges or automatic right to continue, extend, or renew this or any other line of research under new permit(s).

**18. Other stipulations** - This permit includes by reference all stipulations listed in the application materials or in additional attachments to this permit provided by the superintendent or a designee. Breach of any of the terms of this permit will be grounds for revocation of this permit and denial of future permits.