

[illegible]

This SOP was adopted with modifications from Wilson and Wilson (2014).

Differences in Methods

- Protocol-specific equipment and procedures were changed to suit sampling wadeable streams.
- Updated NGPN and NPS policies and procedures.
- Incorporated new IMD Protocol Review Guidance for operational reviews.

Introduction

This SOP lists procedures performed at the end of the field season, including equipment maintenance, data management tasks, and assessment of monitoring protocols.

Procedures

Equipment Maintenance and Inventory

Inspect all equipment for damage and note any missing equipment. Clean and repair all equipment, then update the equipment inventory. Consult the Equipment and Supply Lists SOP to ensure adequate supplies for the next field season and order replacements as needed.

Data management and entry

While all field crewmembers are still available, the Aquatic Ecologist completes a final, thorough check of all data sheets. This is the last opportunity resolve ambiguous, missing, or questionable information before data entry.

Field crewmembers enter data into the NGPN or EQuIS following the Data Management SOP. The Aquatic Ecologist checks that data are correctly entered and verified, and that all photographs are labeled and oriented correctly.

Operational Review

Prior to the departure of seasonal field crewmembers, the Aquatic Ecologist leads an operational review of the field season following the guidelines in Mitchell et al. (2018). At a minimum, the review captures suggestions to improve the protocol, identifies safety hazards and their mitigation, plans updates to protocol documents, and documents deviations between the protocol and field implementation. This is an opportunity for everyone involved in implementation to suggest improvements, voice concerns, and identify successes and challenges in the protocol. Notes and results from the operational review will become part of the permanent record for the protocol, and will be loaded to the IMD Data Store.

Logistics

Update site folders with new and updated access and logistical information for each park, such as road closures, park personnel turnover, and new field conditions.

Literature Cited

- Mitchell, B., A. Chung-MacCoubrey, J. Comiskey, L. Garrett, M. MacCluskie, B. Moore, T. Philippi, G. Sanders and J.P. Schmit. 2018. Inventory and Monitoring Division protocol review guidance. Natural Resource Report. NPS/NRSS/IMD/NRR—2018/1644. National Park Service, Fort Collins, Colorado
- Thornbrugh, D. J., I. W. Ashton, A. R. Jarding, J. S. Mills, and K. Paintner-Green. 2019. Protocol implementation plan for stream channel monitoring in the Northern Great Plains Network: narrative version 1.0. Natural Resource Report NPS/NGPN/NRR—2019/1918. National Park Service, Fort Collins, Colorado.
- Wilson, M. H. and S. K. Wilson. 2014. Water quality monitoring protocol for wadeable streams and rivers in the Northern Great Plains Network: Standard operating procedures version 1.0. Natural Resource Report NPS/NGPN/NRR—2014/868.1. National Park Service, Fort Collins, Colorado.