United States Department of the Interior
National Park Service
Grand Canyon National Park
Research Office
1824 S. Thompson Street, Suite 200
Flagstaff, AZ 86001
928-638-7447

GUIDELINES FOR STUDY PROPOSALS

Your proposal should include each of the required information items listed below, in enough detail that an educated non-specialist can understand exactly what you plan to do. If you have already prepared a relevant proposal for a funding application, work plan, formal agreement, or similar document, then your original proposal likely will satisfy NPS proposal requirements. The primary area where new information may be necessary concerns the ability of the park to assess what, if any, impacts your research may have on park resources. You should compare your original proposal to these guidelines to be certain that you have provided all the required information. If additional information is required, you can provide it to the Research Coordinator as a supplement to your proposal, as appropriate. If a required topic does not apply to your proposed study, simply list the topic and write "non-applicable."

The length of your proposal depends primarily on the complexity of the work planned. In some cases, a proposal may consist of 1-2 pages for a study expected to have no significant impact on park resources or visitor experiences. However, proposals for lengthy or complex research problems, for extensive collecting, and for work with special status species of sensitive cultural resources are typically longer, more detailed, and well-organized. Incomplete, disorganized, or illegible proposals will be returned for revision.

I. INTRODUCTION

A. Title

B. Date of Proposal

C. Investigators

Provide the name, title, address, telephone number, email address, and institutional affiliation of the Principal Investigator and all additional investigators listed in the proposal

D. Table of Contents

Recommended for long or complex proposals

E. Abstract

Provide a brief summary description of the proposed project. Include up to five keywords that can be used by the NPS to quickly identify the proposal subject (i.e. microbiology, geology, fire ecology, etc.).

II. OVERVIEW

Summarize the proposed project by describing the problem or issue being investigated as well as any previous pertinent research.

A. Statement of Issue

Describe the issue to be investigated and its importance and relevance to science and to the park. Provide relevant background information that clarifies the need for the project and why it is valuable for the research and/or collecting to be conducted in the park.

B. Literature Summary

Summarize the relevant literature regarding the issue, problem, or questions that will be investigated.

C. Scope of Study

Describe the overall geographic and scientific scope of the project.

D. Intended Use of Results

Describe how the products will be used, including any anticipated commercial use.

III. OBJECTIVES/HYPOTHESIS TO BE TESTED

Describe the specific objectives of the proposed project. Where appropriate, the objectives should be stated as specific hypotheses to be tested.

IV. METHODS

Describe how the proposed methods and analytical techniques will achieve the study objectives or test the stated hypothesis/question. Provide pertinent literature citations.

A. Description of Study Area

Clearly describe the study area in terms of park name(s), geographic locations(s), and place names. Provide UTM coordinate information (if known prior to conducting the study) in UTM Zone 12N NAD83 (2011), as appropriate. Indicate whether your work will take place in an area designated or managed as wilderness by the NPS.

B. Procedures

Describe the proposed study design that addresses the stated objectives and hypotheses. Explain the methods and protocols to be employed in the field and laboratory.

C. Collections

Describe the type, size, and quantity of specimens or materials to be collected, sampled, or captured, and your plans to remove them from the collecting site. If you are aware specimens of the proposed types already exist in a repository, explain why additional collecting is necessary. Provide scientific nomenclature where possible. Provide information on all other applicable federal or state permits where required.

D. Analysis

Explain how the data from the study will be analyzed to meet the stated objectives or test the hypotheses. Include any statistical techniques or mathematical models necessary to the understanding of the analysis.

E. Schedule

Provide a schedule that includes start of project, approximate dates or seasons of fieldwork, analysis, reporting, and completion dates.

V. PRODUCTS

A. Publications and Reports

Describe the expected publications or reports that will be generated from this study.

B. Collections

Describe the proposed disposition of collected specimens or materials. If you propose that the NPS lend the specimens or samples to a non-NPS institution for long-term storage, identify that institution and give a brief justification for this proposal.

C. Data and Other Materials

Describe any other products to be generated as part of the project, such as photographs, maps, models, handouts, exhibits, software presentations, raw data, GIS coverages, or videos, and the proposed disposition of these materials. If data are to be collected from the public as part of this study, provide a copy of the data collection instrument (survey, questionnaire, interview, protocol, etc.).

VI. LITERATURE CITED

Include full bibliographic citations for all reports and publications referenced in the proposal.

VII. QUALIFICATIONS

Provide a background summary or curriculum vitae for the principal investigator and other investigators listed in the proposal. Identify their training and qualifications relevant to the proposed project and their ability to conduct field activities in the environment of the proposed study area. Describe previous research and collecting in NPS areas, including and permit numbers if available.

VIII. SUPPORTING DOUCMENTATION AND SPECIAL CONCERNS

Provide information on the following topics where applicable. Attach copies of any supporting documentation that will facilitate processing of your application, such as other required federal and state permits, copies of peer reviews, letters of support and funding commitments, and certifications. Collection of information from the public when federal funds are used may require approval from the office of Management and Budget (OMB). Upon your request, the NPS Social Science Program will advise you on the steps needed to obtain this approval.

A. Safety

Describe any known potentially hazardous activities, such as electrofishing, rock climbing, whitewater boating, aircraft use, wilderness travel, wildlife capture, handling or immobilization, use of explosives, etc.

B. Access to Study Sites

Describe the proposed method and frequency to travel to and within the study site(s). Explain any need to enter restricted areas. Describe duration, location, and number of participants for planned backcountry camping.

C. Use of Mechanized or Other Equipment

Describe any field equipment, markers, or supply caches by types, number, and location. Explain how long they are to be left in the field. If there is a need to use these materials in restricted areas, explain why and describe the alternatives that were considered.

D. Chemical Use

Identify chemicals and hazardous material that you propose using within the park. Indicate the purpose, method of application, and amount to be used. Describe plans for storage, transfer, and disposal of these materials and describe steps to remediate accidental releases into the environment. Attach copies of Material Safety Data Sheets.

E. Ground Disturbance

Describe the type, location, area, depth, number, and distribution of expected ground- disturbing activities, such as soil pits, cores, stakes, or latrines. Describe plans for site restoration of significantly affected areas.

Proposals that entail ground disturbance may require an archaeological survey and special clearance prior to approval of the study. You can help reduce the extra time that may be required to process such a proposal by providing UTM coordinate information for each ground disturbance area.

F. Animal Welfare

If the study involves vertebrate animals, describe your protocol for any capture, holding, marking, tagging, tissue sampling, or other handling of these animals (including the training and qualifications of personnel relevant to animal handling and care). If your institutional animal welfare committee has reviewed your proposal, please include a photocopy of their

recommendations. Describe alternatives considered, and outline procedures to be used to alleviate pain or distress. Include contingency plans to be implemented in the event of accidental injury to or death of the animal.

G. NPS Assistance

Describe any NPS assistance needed to complete the proposed study, such as use of equipment or facilities or assistance from staff.

H. Wilderness Minimum Requirement Analysis (MRA) Protocols

Research projects are subject to an MRA to evaluate appropriateness of research activities and methods. If some or all of your activities will be conducted within a location administered by the NPS as a designated, proposed, or potential wilderness area, your proposal should describe how the project adheres to wilderness minimum requirement and minimum tool concepts. Refer to the park's wilderness management plan for further information.

CLOSED and RESTRICTED AREAS

The following areas are **closed to public entry at all times**:

- Anasazi Bridge
- Hopi Salt Mines
- Deer Creek Narrows
  (the closure extends from the second (or downstream) waterfall) to the base of the main waterfall at river level. If you can "walk" to a given point, it is open, if you need your hands or a rope to get in/out, it is closed.
- Furnace Flats
- All caves and mines

The following areas are **closed to camping** and restricted to *day use only*:

- Basin use area
- Manzanita use area
- Uncle Jim Point
- Transept use area
- Long Jim use area
- Tusayan use area
- Deer Creek Falls
- Redwall Cavern
- Shinumo Creek
- Elves Chasm
- Page Spring
- Deer Spring
- Havasu Creek
- Dripping Springs
- Black Bridge to Pipe Creek
- Grandview historic mining district
- Columbine Falls - within 300 yards of the falls
- Between mouth of the Paria & Navajo Bridge
- Phantom Ranch (except for designated sites)
- Matkatamiba Canyon below Redwall formation
- All limestone caves in Redwall formation
- Saddle Canyon below the Redwall formation
- Clear Creek drainage from the Colorado River north to the first major side canyon entering from the east. *Restriction does not apply to river parties at the Colorado River*
- Phantom Creek below the major waterfall near the 3600 foot contour line
- Little Colorado River (LCR) confluence (river left - mile 60 to 65)
- Tapeats Creek drainage, including 1/8 mile upstream or downstream of the confluence (Restriction does not apply to backpackers)
- Thunder River drainage from Surprise Valley to confluence with Tapeats Creek
- Kanab Creek drainage, including the area ¼ mile upstream and downstream