

## Sierra Nevada Adaptive Management Experiment (AMEX)

### Data Sharing, Data Use, Publication, & Site Use Guidelines

The Sierra Nevada Adaptive Management Experiment (AMEX) is an interdisciplinary, multi-agency collaborative project. To facilitate data sharing, site use, and collaborative authorship between the AMEX Team Principal Investigators (PIs, Bisbing, York, & Satomi), AMEX Team Site Managers (Knapp, Kral, Poburko, & Roughton), and future research collaborators, the following guidelines have been developed with guidance from CAL FIRE's Fire & Resource Assessment Program Team. The AMEX Team encourages collaboration and aims to make data available and sites accessible while protecting the interests of those involved in project development.

Potential research collaborators are invited to complete and submit a study plan proposal (Appendix 1) to any AMEX PI: [www.adaptive-forest-management-experiment.com](http://www.adaptive-forest-management-experiment.com). Proposals will be reviewed by the members of the AMEX Team tied to the request (e.g., Kral and PIs for work proposed at Mountain Home) and based on the following guidelines. See Appendix 2 for details on *italicized terminology* utilized throughout the document.

#### 1. Data Sharing & Use

- 1.1 As a general policy, the *AMEX Team* believes that scientific findings from publicly funded research should be broadly disseminated and shared with both the *funding source* and general public, while also protecting the interests of those who established the study and collected the data by allowing a reasonable time period for first publications.
- 1.2 Project data represents the intellectual investment of the AMEX Team. During the *active research period* of the experiment, data sharing is limited but may be shared at the discretion of the AMEX PIs. Data may be made publicly available at the conclusion of individual *funding periods*, pursuant to funding source requirements, or at the conclusion of the experiment.
- 1.3 A given dataset is considered *preliminary* until the *AMEX PIs* have created a final authoritative version that is not expected to undergo any further revision or correction. Data is considered *interim* if it is intended to be paired with additional data, usually collected at a later date or another site, and is considered incomplete or preliminary without the other data. Interim and preliminary datasets can be shared after quality checking at the discretion of the AMEX PIs.
- 1.4 Preliminary, interim, or *final* datasets may be shared with funding sources, including site managers of AMEX project sites, at the discretion of the AMEX PIs with the understanding that, unless mutually agreed upon with the AMEX PIs or legally compelled to do so, the recipient will not share the data with other researchers or the general public without express consent of the AMEX PIs, or until the AMEX PIs have made the data public.

- 1.5 All datasets distributed beyond the AMEX Team, whether preliminary, interim or final, should include: metadata; version information (if applicable – i.e., interim, final, date or version number), descriptions of sample design and data collection methods; point of contact; and credit to research team and funding sources.
- 1.6 By a date mutually agreed upon between the AMEX PIs and public funding sources (usually end of funding period), AMEX PIs will provide funding sources with paper or electronic copies of: final datasets; study/plot locations; GPS/GIS information; progress reports; final reports; theses; dissertations; and publications. The AMEX PIs will provide for long-term storage and access to these data and records. Final reports, publications and authoritative datasets arising from publicly funded research may be made publicly available by the funding source on completion of the funding period, pursuant to the terms and conditions agreed upon between the funding source and the AMEX PIs.
- 1.7 Due to the long-term nature of the AMEX project, as long as the project is active, we will request that public funding sources consult with the AMEX PIs prior to distributing any datasets, regardless of status (publicly available or not) or whether the funding source is still actively supporting the project.

## **2. Data Sharing & Collaboration Process**

- 2.1 To encourage the timely production of interdisciplinary publications, the timeframe to publish work is limited to one year after the date of last planned pre- or post-treatment data collection. If additional lab analysis is required to process field samples, the one-year period begins when processing is complete, after which point data will be made publicly available. If data sharing requests are made during data analysis but prior to publication, the AMEX PIs are free to embargo the data until the paper is published.
- 2.2 Data requests from any person/party should be submitted with a written proposal that includes clear, testable questions, hypotheses, and methods explicitly stating how data will be used in their research (Appendix 1: Study Plan). The proposal will be reviewed by the AMEX Team in a timely manner. Negotiations between the parties are encouraged, but, if the AMEX Team decides that the proposed work would duplicate their efforts, they can deny the request. All data requests must be approved by the AMEX Team in writing. Data requests may be made prior to data release.
- 2.3 Co-authorship of papers produced from the shared data must be negotiated with the AMEX PIs in advance (see Appendix 1: Study Plan). It is expected that in cases where substantial amounts of information are shared that at least one person from the primary study will be given the option of contributing intellectually to the new study and co-authoring any resulting publications. If two or more people/groups propose similar analyses using AMEX data, AMEX PIs will negotiate with the parties to see if a mutually beneficial decision is possible. If this cannot be done, a vote from the AMEX Team will decide the issue.

### **3. Publications & Presentations Using AMEX Data**

- 3.1 AMEX PIs reserve the right to review analysis and interpretation of data by any groups before use in presentation or publication, as well as the right to request co-authorship.
- 3.2 Authorship will be determined by the contribution(s) of each person to each individual paper. Ideally, those contributions and the order of authorship are negotiated early on and determined before a paper is drafted. Participation in plot establishment or data collection does not automatically merit authorship when the individual is following a set of protocols established by another individual.
- 3.3 To be included as an author, an individual must make significant intellectual contributions (in conception, design, data collection, data analysis, or interpretation) and make significant contributions to manuscript (write, review, or edit). A person can only be included as an author if he/she is willing to be held responsible for both the interpretation of the data and the conclusions as presented (Patton-Mallory et al., 2000).
- 3.4 Project Team will ensure that any publications arising from public funding will be accessible to the general public pursuant to any state and federal laws pertaining to publicly funded research, including California AB 2192.

### **4. Experimental Site Use**

- 4.1 During the active research period, access to AMEX sites by outside groups is at the discretion of AMEX PIs, in coordination with the landowner or Site Managers of the land where the research occurs. During periods of inactivity (no active research or monitoring) or at the conclusion of this long-term study, access to field sites by outside groups is at the discretion of the landowner or site manager of the land where the research occurs.
- 4.2 Site managers should coordinate with AMEX PIs when developing new projects using AMEX study sites with interested Research Collaborators. Site managers should reach out to AMEX PIs with potential collaborations prior to extending invitations to other interested research parties. Coordination between existing active research and interested collaborators should complement research efforts.
- 4.3 AMEX treatment sites were developed through a rigorous, collaborative process by the AMEX Team. A non-AMEX project that utilizes field sites because of the AMEX experimental design in order to conduct research or extension, regardless of whether AMEX data is used or not, is considered to be a use of the AMEX Team's intellectual investment. Fair use of AMEX study sites is therefore equivalent to the use of AMEX data. All provisions stated herein regarding the use of AMEX data, including publications and presentations, apply.

### **References**

Patton-Mallory, Marcia; Franzreb, Kathleen; Carll, Charles; Cline, Richard. 2000. Ethical conduct for research: a code of scientific ethics. *Journal of Forestry*. July:32-33.

**APPENDIX 1: STUDY PLAN REVIEW AND APPROVAL FORM**

**Review & Approvals:**  
*Principal Investigator*  
*Site Manager*

Date  
\_\_\_\_\_  
\_\_\_\_\_

Please use a **DIFFERENT FONT** to fill out the proposal.

1) **AMEX PROJECT #** (assigned by AMEX staff)

2) **PROJECT TITLE:**

3) **PROJECT DESCRIPTION:**

4) **PROJECT PERSONNEL:**

**Principal Investigator:**

Name:

Title:

Address:

email:

Telephone:

Signature: \_\_\_\_\_ Date: \_\_\_\_\_.

***The signature above signifies acceptance of the terms and agreements described in this proposal.***

**Other personnel:** Please list all other personnel involved with this project (collaborators, graduate students, field personnel). Provide names and email addresses. Email addresses will be added to the AMEX list-serve to deliver periodic announcements.

5) **TIME FRAME**

Date project study plan submitted:

Planned date for starting data/site use:

Planned date of data/site use completion:  
(including removal of ALL field equipment)

Planned type and date of publication:

6) **PROPOSAL TO AMEX TEAM**

Clearly articulate request made to AMEX Team. Proposal must address each element listed above (data request, data use, site use, and publication plans). If requests change, approval from the AMEX team must be obtained. This may require a new proposal review. Be as detailed as possible.

7)

**KNOWLEDGE GAP OR PROBLEM ADDRESSED IN STUDY:**

Provide background on state of knowledge (including literature cited) and the knowledge gaps addressed with proposed research. Please be as complete as possible. Attach additional pages as necessary.



8)

**RESEARCH OBJECTIVE OR HYPOTHESES EXAMINED:**

State immediate objectives and questions to be answered with data requested or collected. Please be as complete as possible. Attach additional pages as necessary.



9) **EXPERIMENTATION & ANALYSIS**

Summarize variables (dependent and independent), analytical models, techniques, instrumentation, treatments used, etc. If Chemicals, Insects, Fungi, Bacteria, Animals, Plants, Seeds, Toxic Materials, etc. are to be brought to the sites as part of the project, the amount, time, and location of use on the forest needs detailed specification (attach a detailed study plan if one has been prepared). Each Toxic Material must have a MSDS attached.



10) **METHODS (Site use, data collection & processing)**

Describe the study or experiment, including field, laboratory, and processing methods (i.e., experimental design and proposed analysis of data).



11) **FREQUENCY (OR SCHEDULE) OF SITE USE & DATA COLLECTION**

Detail your schedule of activities and timeline for completion

12) **APPLICATION OF RESEARCH RESULTS**

Describe anticipated application opportunities and methods of presentation of expected results, including publication and presentation plans.

13) **SAFETY PROTOCOL TO BE IMPLEMENTED (SITE USE ONLY)**

AMEX is not responsible for ensuring safe handling of researchers' own equipment. However, it is required that appropriate documentation be provided to assure that appropriate safety measures will be in place when field work is done. Please provide a list of equipment or materials that will be used and any safe handling instructions that will be provided to users. Identify safety and health hazards associated with the study, and assign responsibilities to insure follow through.

14) **COORDINATING REQUIREMENTS**

Please list additional relationships key to project success, including links to other research projects, the annual timber sale, and forest management program at project site. For larger area habitat-related or longer-term longitudinal studies, this needs careful planning and consulting with the AMEX team to be sure the research is feasible and possible conflicts are resolved or mitigated.

15) **LOCATION OF ACTIVITY (ATTACH MAP, INCLUDE TEXT DESCRIPTIONS)**

Identify and list the number of plots, treatments, and other activities. If desired study locations change, approval from the AMEX team must be obtained. This may require a new proposal review.

**PLEASE SUBMIT THIS COMPLETED FORM IN ELECTRONIC FORMAT TO:**  
[sbisbing@unr.edu](mailto:sbisbing@unr.edu)

16) **ADDITIONAL INFORMATION:**

## Appendix 2: Terminology

*AMEX PIs* – Project Principal Investigators responsible for study design, project initiation, data collection, and project funding.

*AMEX Team* – Includes Principal Investigators, Project Scientists, Discipline Scientists and Site Managers. Core members include:

- Principal Investigators (PIs) = *Bisbing, York, & Satomi*
- Site Managers = *Knapp, Kral, Poburko, & Roughton*

*Preliminary Data* - Data is considered preliminary until the AMEX team has created a final authoritative version that is not expected to undergo any further revision or correction.

*Interim Data* – Data is considered interim if it is intended to be paired with additional data, usually collected at a later date or another site, and is considered incomplete or preliminary without the other data.

*Final Data* – Data is considered final if it has undergone quality assurance checking and correction and is not expected to undergo any further revision or correction. Final data is considered to be authoritative and appropriate for public distribution.

*Data Development Period* – Defined as one year after the date of last planned pre- or post-treatment data collection. If additional lab analysis is required to process field samples, the one-year period begins when processing is complete.

*Active Research Period* – The period of time beginning at the starting date of the AMEX project, and ending one-year after the last planned field measurements and analysis are to be taken at any of the project sites. This period may extend across multiple funding or grant periods.

*Funding Period* or *Grant Period* – For a given contract or grant agreement, the period of time between contract or grant agreement execution and the end date of the contract or grant.

*Site Managers* – Individuals or groups responsible for management of project sites, including agency forest managers.

*Funding Source* – Agency or organization providing funding for research activities.