

06-SU-11132652-044
MEMORANDUM OF UNDERSTANDING

between

USDA FOREST SERVICE

and

NATIONAL PARK SERVICE

This **MEMORANDUM OF UNDERSTANDING** (MOU) is entered into by and between the USDA Forest Service, hereinafter referred to as the Forest Service, and the USDI National Park Service, hereinafter referred to as the Park Service.

A. PURPOSE

The purpose of this MOU is to establish a general framework for cooperation between the Forest Service and the Park Service in inventorying and monitoring natural resources within the legal responsibilities of the respective agencies. Such cooperation, which brings together programmatic entities within the Forest Service research arm with individual entities within the Park Service operations arm, is considered to be in the best interest of the United States Government.

B. STATEMENT OF MUTUAL BENEFITS AND INTERESTS

It is recognized that the Park Service, in managing lands under its jurisdiction (individual units of the National Park System, hereinafter called parks), has a need for information on the nature, distribution, status, condition, and trend of soil, water, animals, plants, plant and animal communities, and natural processes on such Federal lands, including their potential and limitations for long term preservation and tolerance to different human uses and activities.

It is recognized that the Forest Service, in discharging its obligations in the management of lands under its jurisdiction, has a need for information on the nature, distribution, status, condition, and trends in vegetation, soil, and water resources on such Federal lands, including their potential and limitations for different values, uses, and activities.

The Forest Service discharges its inventory and monitoring obligations under the Forest and Rangelands Renewable Resources Research Act of 1978 (Public Law 95-307 Sec. 3e), and is concerned with providing leadership for a national strategic inventory of forests across all land ownerships. This inventory, conducted by the Forest Service's Forest Inventory and Analysis Program, hereinafter called FIA, is carried out in cooperation with Federal and State agencies and private forest landowners.

The Park Service discharges its inventory and monitoring obligations under the National Park Service Act of 1916, under the National Parks Omnibus Management Act of 1998, and under provisions of

individual park enabling acts. The Park Service conducts its inventory and monitoring activities to meet the information needs of individual park managers, Park Service regional directors, and the Director.

Inventories on areas contained within park external boundaries will usually be conducted by the Park Service except where Forest Service is mandated to conduct field investigations. The Forest Service FIA program inventory, mandated under the Forest and Rangelands Renewable Resources Research Act (P.L. 95-307, Sec. 3e), falls within this category and shall be administered by the Forest Service in cooperation with the Park Service as outlined in this MOU.

Both the Park Service and FIA have broad responsibilities that require detailed information and analysis to inform decisions on management of forest resources. It is beneficial to both agencies to collaborate in the collection of data, integration and synthesis of data collected independently and jointly by each agency, and to use this information to improve management of Federal lands. A goal of this MOU is to foster collaboration between FIA and the Park Service that enables application of FIA data to support Park Service activities and enhances the mission of FIA by integrating Park Service data and information. The programs of both agencies will derive considerable benefits at both local and national levels from such cooperation.

C. FOREST SERVICE SHALL:

1. Provide a regional written work plan, including compliance with all special provisions in Section F of this MOU, for review and approval of the Park Service Regional Director.
2. Provide the regional work plan, approved by the Park Service Regional Director, to the Park Superintendent for the Superintendent's information and submit the Scientific Research and Collecting Permit application electronically to the park. Through the Scientific Research and Collecting Permit process, receive park and project-specific permit conditions for each Park to be inventoried.
3. Identify program intensification opportunities that FIA is prepared to authorize, identify those opportunities it is prepared to support, and develop agreement on who pays for or conducts any intensification opportunities that both parties agree to adopt.
4. Submit the Investigator's Annual Report electronically to the Park Superintendent according to approved Park Service protocols.
5. Invite the Park Service to attend the forest inventory work-planning conferences in each State containing lands administered by the Park Service, and to participate in development of annual and long-range forest inventory plans where such lands are involved as appropriate.

D. PARK SERVICE SHALL:

1. Provide program review and acceptance of Forest Service multi-year and/or annual written work plans by the Park Service Regional Director and general guidance by the Park Service Regional Director to parks regarding park review and approval of Forest Service applications for park Scientific Research and Collecting Permits.
2. Identify all FIA sites as Objects of Cultural Patrimony and withhold information about the specific locations of these sites.
3. Provide long term conceptual commitment by each park Superintendent who accepts one or more Forest Service FIA sites to the establishment and operation of those sites and to having

Park management of the area containing those sites be in keeping with the agreed guidelines of the FIA program, consistent with provisions of the park general management plan.

4. Approve, in a timely manner, Scientific Research and Collecting Permits, compliant with Park Service requirements, which are necessary for Forest Service FIA inventory personnel to conduct mandated inventory responsibilities in accordance with park approved FIA work plans and the guidelines in section F, special provisions, in this MOU.
5. Provide park logistic and other support in keeping with agreements identified in provisions of the Scientific Research and Collecting Permit.
6. Invite the Forest Service to participate in relevant Park Service inventory and monitoring park, network, regional, and Service meetings.

E. IT IS MUTUALLY AGREED AND UNDERSTOOD BY AND BETWEEN THE PARTIES THAT:

1. FREEDOM OF INFORMATION ACT (FOIA). Any information furnished to the Forest Service under this instrument is subject to the Freedom of Information Act (5 U.S.C. 552).
2. MODIFICATION. Modifications within the scope of the instrument shall be made by mutual consent of the parties, by the issuance of a written modification, signed and dated by all parties, prior to any changes being performed.
3. PARTICIPATION IN SIMILAR ACTIVITIES. This instrument in no way restricts the Forest Service or the Park Service from participating in similar activities with other public or private agencies, organizations, and individuals.
4. COMMENCEMENT/EXPIRATION DATE. The instrument is executed as of the date of the last signature and is effective for 5 years at which time it will expire unless extended.
5. TERMINATION. Any of the parties, in writing, may terminate the instrument in whole, or in part, at any time before the date of expiration.

Neither party shall incur any new obligations for the terminated portion of the instrument after the effective date and shall cancel as many obligations as possible. Full credit shall be allowed for each Party's expenses and all non-cancelable obligations properly incurred up to the effective date of termination.

6. PRINCIPAL CONTACT. The principal contacts for this instrument are:

Forest Service Project Contact	Park Service Contact
Richard Guldin	Mike Soukup
USDA Forest Service, Research & Development	USDI National Park Service
Director, Science, Policy, Planning, Inventory and Information	Assoc. Director Natural Resource Stewardship & Science
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Forest Service Administrative Contact	Park Service Administrative Contact
W. Brad Smith	John Gross
USDA Forest Service, Research & Development	USDI National Park Service
Associate National Program Manager, FIA	Ecologist, Office of Inventory, Monitoring, and Evaluation
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7. NON-FUND OBLIGATING DOCUMENT. This instrument is neither a fiscal nor a funds obligation document. Any endeavor or transfer of anything of value involving reimbursement or contribution of funds between the parties to this instrument will be handled in accordance with applicable laws, regulations, and procedures including those for Government procurement and printing. Such endeavors will be outlined in separate agreements that shall be made in writing by representatives of the parties and shall be independently authorized by appropriate statutory authority. This instrument does not provide such authority. Specifically, this instrument does not establish authority for

noncompetitive award to the cooperator of any contract or other agreement. Any contract or agreement for training or other services must fully comply with all applicable requirements for competition.

8. DRUG-FREE WORKPLACE. All activities under this MOU or any agreement(s) written hereunder will be in compliance with the Drug-Free Workplace Act of 1988 (Public Law 100-690, Title V, Subtitle D).

9. FGDC COMPLIANCE. All inventories pursuant to this MOU will, at minimum, meet any standards established by the Federal Geographic Data Committee (FGDC) and its relevant subcommittees.

10. INVENTORY RESPONSIBILITY. Initiation of, and financial and management responsibility for, inventories on areas contained within park external boundaries will usually be by the Park Service except where Forest Service is mandated to conduct field investigations. The Forest Service FIA program inventory, mandated under the Forest and Rangelands Renewable Resources Research Act (P.L. 95-307, Sec. 3e), falls within this category and shall be administered by the Forest Service in cooperation with the Park Service as outlined in this MOU.

11. WORK PLANS. A work plan will be developed for the parks in each Park Service Region where FIA or other joint inventory and monitoring will be conducted. It will set forth the efforts of cooperating agencies for that area with respect to all activities in parks pertaining to Forest Service inventory and monitoring, and with respect to the limits established by this MOU. Interagency work plans for specific areas will be signed by the Park Service Regional Director, or that official's designated representative, and the Forest Service Station Director, or those officials' designated representatives. It is recognized that cooperation is a matter of working together to a common end, and is not dependent on, or in proportion to, the financial contribution of the cooperating agencies.

The agencies, jointly or separately, as set forth in the interagency work plan(s) described above, will gather and analyze basic data required for soil, water, plant, animal, and habitat interpretation. Although all data will be gathered in ways that meet applicable FGDC Standards referenced above, each agency will be responsible for the interpretive groupings of resource data as developed for use in its individual program.

12. FIA PLOT COORDINATES. The most accurate FIA plot location coordinates and all associated data for designated Park Service lands will, when requested by the Park Service, be made available to staff identified by the Park Superintendent upon compliance with guidance provided by FIA privacy policy (including the Food Security Act and FSH 4809 Interim Directive or its successor) and in compliance with the National Parks Omnibus Management Act of 1998. Under these guidelines, public disclosure of any information regarding the exact location of FIA plots is prohibited. Less accurate plot location information, available in on-line FIA databases, that does not provide the ability for the general public to identify precise plot locations may be shared freely between agencies without restriction.

13. DISSEMINATION OF INFORMATION. Each of the cooperating agencies shall have full opportunity to cooperate appropriately in the planning, execution, dissemination, and publication of the results of all inventories conducted as a result of this agreement. It is recognized that the Park Service and Forest Service individually will make in-house use of data, maps, and interpretations prior to a final report.

Parties to this agreement shall be free to use in official correspondence any of the results obtained in the inventories made under this MOU, and any work plans written hereunder, giving due credit to the other party. It is understood that the publishing of maps, reports, and data on inventories made by the cooperating agencies will be agreed upon in specific interagency work plans. However, each agency has the right to use or publish information as may be required, provided appropriate credit is given to the other agencies involved in making the inventories and provided there is no release of any specific information protected by law from release.

14. PROHIBITION ON BENEFIT TO GOVERNMENT PERSONS. No member of, or delegate to, Congress or resident commissioner, and no officer, agent, or employee of the Government shall be admitted to any share or part of this MOU or any agreement(s) written hereunder or to any benefit to arise there from.

F. SPECIAL PROVISIONS

The following are provided as minimum guidelines for conducting FIA inventories in units of the National Park System. Additional guidance and conditions may be established in coordination with individual Park Superintendents, but no such provisions may rescind these minimum guidelines unless by mutual written consent of both Principal Contacts listed in Item E.6 above.

Personnel/Equipment

- o All working arrangements which might result in the temporary assignment of personnel, and/or the use of lands, buildings, and other facilities will be identified in the terms and conditions of park Scientific Research and Collecting Permits.
- o Field data collection may be accomplished by Forest Service employees, State employees, and/or contractors. This may vary by regional FIA program. In all cases, data collectors will be operating as agents of the Forest Service FIA program and will be subject to Federal confidentiality requirements.
- o Any equipment or supplies purchased for the conduct of this project shall remain the property of the purchasing program.

Field Access

- o At least one month prior to commencement of field operations in a park, the FIA Principal Investigator named in the previously issued park permit will furnish the Park Research Coordinator with the following information:
 - a. Name and contact information for FIA supervisor who will be overseeing conduct of field work.
 - b. Approximate dates and locations of field work within park boundaries.
 - c. Identification of number and type of pack animals or type of other supplemental means of transportation involved in inventory operations.
 - d. Identification of planned overnight accommodations.
 - e. Upon the start of the field work, such specific information to be identified by the park as vehicle license plate numbers, radio frequencies used by and call names or numbers of all inventory crews, etc.
- o Although this agreement, by itself, does not authorize any entry upon, or activities within, any lands not under the jurisdiction of the Park Manager, including private inholdings within park boundaries,

it does influence park authorization with respect to activities under park jurisdiction. Such activities must be coordinated and authorized prior to entry, through the respective agency or owner.

- Field personnel will carry a copy of their approved Scientific Research and Collecting permit at all times when engaged in data collection activities on park lands. This permit identifies times, places, and types of activities that are permitted and authorizes only activities that apply to the timeframe and content of the approved annual plan of work.
- Park Service natural and cultural resource specialists will identify possible heritage or sensitive areas and assist Forest Service FIA personnel in developing strategies to avoid such areas while traversing to, or working within, field sample locations. This will require FIA sharing maps showing exact plot locations for planning and compliance purposes, but these maps will remain the sole property of FIA.
- Park Service personnel will perform necessary NEPA and other compliance analyses as part of the Park Service Scientific Research and Collecting Permit review and approval process.

Marking Samples and Locations

- Providing consistent and scientifically reliable resource data across all ownerships and classes of forest land in the United States is a hallmark of the Forest Inventory and Analysis research program. Measuring and recording methods on the Park Service lands, however, must be sensitive to the existing character of these areas and leave as few signs of human disturbance as possible. Appropriate use of marking techniques will be identified in project-specific permit conditions, generally will include the permit number on the specified marking devices, generally will observe the following guidance, and will be enforced by FIA for field measurements in park areas:

Location Monumentation

- It is important to be able to relocate plots, subplots, and trees measured during the inventory. On the Park Service lands, the following marking strategies will be used to minimize the visibility of FIA plots, recognizing that local vegetation and terrain conditions may require different strategies, and that all strategies will be addressed in the permit conditions. Detailed, concise sketches, notes, and GPS locations where possible will also make subsequent relocation easier.
 - *Identifying tags/nails* - Marking tags/nails should be used minimally, painted an approved color, and face away from obvious trails and roads. Tags/nails may only be used at the base of the tree.
 - *Flagging* - Any flagging used to facilitate entry and exit from the plot area will be removed upon completion of the plot measurements.
 - *Painting/Scribing* - This practice will not be used (such as to monument the plot, identify witness trees, or to mark breast height).

Sample Plot Monumentation

- Monumentation of sample plots generally will observe the following constraints:
 - *Starting point trees* - Starting Point or Reference Point trees will not be painted or scribed. Instead, nail a tag marked with "SP" or "RP" to the base of the tree facing the direction of normal approach. Describe the starting point on the plot sheet notes and include reference landmarks.
 - *Subplot center* - Subplot centers are witnessed with a metal wire/rod in the ground as a marker which may not protrude from the ground more than 1 inch, unless local density of vegetation requires a different approach. Flagging may not be attached to the marker.
 - *Subplot witness trees* - Witness trees will not be painted or scribed. Nail a tag with the letter X on it to the base of the tree facing subplot center.

- *Subplot reference trees* - Reference trees will not be painted or scribed. Nail a tag with the subplot number to the base of each reference tree.
- *Sample trees* - Sample trees will not be painted or scribed. Each sample tree 5.0" DBH and larger may have a tag placed at ground level either facing subplot center or on the uphill side of the tree if there is a slope. If the sample tree is in view of a known path or trail, place the tag away from the path or trail and note in the field tally. If only saplings are on the subplot mark a couple of them with nails at ground level and note which are so marked.

Boring Trees

- Boring or drilling will be done only when absolutely necessary to estimate site, age, or growth. (This will generally be the case only during initial establishment of permanent plots to assess site productivity.) Following on-site analysis, increment cores will be discarded on the ground, saved to be used and discarded after lab analysis, or saved for permanent retention in the park collection.

Cutting Vines and Moss

- Destructive sampling will not be done. In cases where vines or moss preclude the use of diameter tapes for estimation of diameter, calipers or other estimation procedures may be used. In these cases, field notes should identify trees with estimated diameters and the method used.

Specimen Collection

- No personal flora, fauna, geological, or other natural or cultural resource collection is permitted on Park Service lands. Collections are for scientific purposes only, and may not be used for personal or commercial purposes. In general, collections for scientific purposes removed from a site for more detailed analysis and classification will be destroyed following analysis. Forest Service FIA will maintain no voucher specimen collections. If any collection of voucher specimens becomes necessary, the approval to collect must be authorized in the Scientific Research and Collecting Permit.
- No archeological or vertebrate paleontological materials may be collected. Upon location of any historical or archeological remains field work will cease and the site shall be reported immediately to the Park Manager. No disturbance of such a site is permitted. Park Service personnel will assist Forest Service crews in identifying possible heritage sites and will notify Forest Service crews of any potential heritage areas prior to entry.

Site Condition

- All refuse associated with field operations shall be removed from Park Service lands and the site of any data collection or encampment shall be returned to the condition in which it was found, except as authorized by the Scientific Research and Collecting Permit.
- In some cases, the permit conditions may need to require additional special provisions for preventing the introduction into FIA plots of seeds, pathogens, or other propagules of exotic species.
- Soil disturbance is to be limited to necessary sampling as described in the FIA inventory field instructions provided with the approved plan of work. Soil disturbance must be authorized by the Scientific Research and Collecting Permit and must be conducted in conformity with the provisions and conditions identified in the permit. Total sample volume per location usually will be limited to 2,500 cubic centimeters and all samples will be destroyed during or following analysis.

- Temporary markers, such as flagging, usually may not remain in place for more than one week when study teams are not present on a site. Paint, or similar semi-permanent markers, may not be applied to rocks, plants, or other natural surfaces.


Wildlife Interaction

- Harassment, hazing, collecting, or other disturbance of wildlife is prohibited.
- Problem encounters with wildlife, including any experienced or observed incidents of wildlife harassing humans or obtaining food or garbage from humans, shall be reported promptly to the Park Manager.
- All food and garbage will be stored in sealed containers and under specified conditions approved by the Park Manager. Field personnel will prevent wildlife from obtaining any of their food or garbage.
- Firearms generally are not authorized to be carried on park lands. In the rare situations, usually in Alaska parks, where possession of firearms may be approved under special conditions identified in the Scientific Research and Collecting Permit, such possession is restricted to only approved personnel who have successfully completed Forest Service and Park Service approved training in both the use and safety of firearms and proper human behavior around bears and other potentially threatening wildlife. Firearms may be carried only for defense of life during periods of field work.

Each agency, respectively, is authorized by one or more of the following acts to perform the above activities:

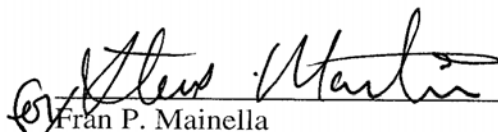
Act of August 25, 1916, 39 Stat. 535 as amended (The National Park Service Organic Act);
 Public Law 105-391 of November 13, 1998 112 Stat. 3497 (National Parks Omnibus Management Act of 1998)
 Public Law 88-577 of September 3, 1964. 78 Stat. 890. (Wilderness Act);
 Public Law 74-46 of April 27, 1935. 49 Stat. 163 (Soil Conservation and Domestic Allotment Act);
 Public Law 93-378 of August 17, 1974. 88 Stat. 476 (Resources Planning Act);
 Public Law 94-588 of October 22, 1976. 90 Stat. 2949 (National Forest Management Act);
 Public Law 95-307 of June 30, 1978. 92 Stat. 353 (Forest and Rangeland Renewable Resources Research Act- which repealed and replaced the Forest Service inventory mandate initially set forth in the McSweeney/McNary Act of May 1928);
 Public Law 95-313 of July 1, 1978. 92 Stat. 365 (Cooperative Forestry Assistance Act);
 Public Law 99-198 of December 23, 1985. 7 U.S.C. 2276 (Food Security Act);
 Public Law 100-521 of 1988. (Forest Ecosystems and Atmospheric Pollution Research Act);
 Public Law 84-159 (Title IX Amendments of the Clean Air Act of 1990); and
 Public Law 105-185 of June 13, 1998. [16 USC 1642 (e)] (Agricultural Research, Extension, and Education Reform Act- which amended the Forest and Rangeland Renewable Resources Research Act of 1978 requiring annual FIA inventory measurements in all States).

THE PARTIES HERERTO have executed this instrument



Dale N. Bosworth
 Chief, Forest Service

Date
 8/17/06

 9/29/06

Fran P. Mainella
 Director, National Park Service

Date