

SERVICEWIDE AGREEMENT
09-SA-FIA01

between

FOREST INVENTORY AND ANALYSIS
U.S. Forest Service, Research and Development

and

NATIONAL FOREST SYSTEM
U.S. Forest Service

This Service-wide Agreement (SA) is entered into by and between the U.S. Forest Service (FS) Research and Development FOREST INVENTORY AND ANALYSIS (FIA) Program and NATIONAL FOREST SYSTEM (NFS) including ECOSYSTEM MANAGEMENT COORDINATION (EMC) and FOREST MANAGEMENT (FM) staffs.

Enclosures: 1 (Terms used in this SA) and 2 (FIA Organizational Structure) are considered to be a part of this SA.

I) PURPOSE

The purpose of this SA is to establish a framework for cooperation between the above organizations in implementation of the FIA program on NFS lands and for the use of data collected. Such cooperation is considered to be in the best interest of the U.S. Government and is consistent with the direction contained in the Wilderness Act of 1964 (78 Stat 890), the Forest and Rangeland Renewable Resources Planning Act of 1974 (88 Stat 476), the National Forest Management Act of 1976 (90 Stat 2949), and the Forest and Rangeland Renewable Resources Research Act of 1978 (92 Stat 353, as amended).

This SA acknowledges the need within the FS to establish and maintain basic information on the extent and condition of all of the Nation's ecosystems. Reliable strategic and mid-level inventory data are fundamental for developing land and resource management assessments, plans, plan implementation, and subsequent monitoring.

This SA also acknowledges that NFS managers will be allowed access to all FIA data collected on NFS lands. In many instances this includes access to exact plot coordinates. This information is essential not only for the use of FIA data to support decision-making and planning activities but also for the integration and use of FIA data to minimize overall inventory and monitoring costs within the Agency. The plot coordinates, however, are subject to the non-disclosure provisions of Section 1770(d) of the Food Security Act of 1985 (99 Stat 1535) as noted in Section IV of this SA.

The scope of this SA is limited to issues pertaining to data collected, processed, or stored by the FIA program on all NFS lands. Nothing in this SA is intended to otherwise limit what either NFS or FIA chooses to do beyond this scope.

II. STATEMENT OF MUTUAL BENEFITS AND INTERESTS

Since the FS has dual responsibilities to manage national forests and grasslands and to provide strategic information about all forested areas regardless of ownership, we recognize that it is in the best interest of the FS and our customers that FIA and NFS collaborate to ensure that NFS lands are included as part of the core FIA program.

We recognize that NFS may elect to leverage the value of FIA inventory products by coordinating other inventories (e.g., inventories designed and implemented for broad-scale assessments, land management

plans, or other objectives associated with managing resources) conducted on NFS lands with FIA sampling designs, methods, and schedules. As the FS increases coordination across inventory and monitoring programs, it will be increasingly important to sustain close collaboration between NFS and FIA related activities.

We recognize that the FIA program, in discharging its inventory and analysis obligations, conducts an integrated, consistent, strategic-level forest inventory on all forest lands of the United States, including all NFS lands. We recognize that FIA has the lead responsibility for implementing a complete core FIA program, in cooperation with key partners including NFS, State and Private Forestry, and state forestry agencies, as described in the Forest Inventory and Analysis Strategic Plan (March 2015), hereafter referred to as the FIA Strategic Plan. "Core program" refers to a complete set of procedures regarding program management, planning, sample design, data collection standards, definitions, protocols, quality assurance, data editing, compilation, analysis, reporting, and data publication activities completed in the same way across all ownerships. The core program consists of national core program elements (common across all FIA activities nationwide) and regional core program elements (common to all FIA activities within a given FIA region). National core program elements will be decided by the FIA National Management Team, and regional core program elements will be decided by the Regional FIA Management Team. National and regional management teams will include representatives from FIA and NFS.

We recognize that FIA customers (including state foresters and their organizations; consultants, private corporate enterprises, and environmental organizations; government and academic research institutions; federal policymakers including Congress; and other customers) need a core strategic inventory program that will provide consistent information to support analyses that span administrative boundaries.

III. THE FOREST INVENTORY AND ANALYSIS PROGRAM SHALL:

1. Assume responsibility for implementing the core FIA program on NFS lands.
2. Include NFS representatives in all working organizational levels and meetings of the FIA program. These organizational levels are further described in Enclosure 2 "FIA Organizational Structure" and include:
 - a. At least three NFS representatives on the FIA National Management Team including up to two NFS regional representatives.
 - b. At least one NFS representative on each of the technical teams ("Bands") chartered by the FIA Management Team. As needed, the FIA core band will allow participation by NFS on issues sent to task teams for resolution. FIA will ensure that a mechanism is in place that notifies the NFS representatives of pending issues.
 - c. At least one NFS representative from each NFS region within a FIA unit on the Regional/State FIA Management Teams. It is preferable that the NFS representative be the designated NFS regional FIA coordinator.
 - d. At least two Washington Office (WO) Directors, one from EMC and one from FM.
3. Send a courtesy copy of draft publications that either focus on NFS lands or have policy implications to the NFS regional FIA coordinators at the time of the FIA policy review.
4. Abide by restrictions on access and operations in some areas as outlined in travel plans, by legislation, or by other management direction. Operations will be conducted consistent with these closures or restrictions. Requests for exceptions to restrictions, including access behind locked gates, will be submitted as part of the general notice to forest supervisors and district rangers. The general policy is that FIA personnel, including cooperators (e.g., state forestry agencies, universities, or other federal agencies), and contractors under the official direction of the FIA program, will have the same privileges and restrictions on access and operations as those placed on forest staff for the execution of official duties.
5. Be flexible in enhancing the core FIA program to better meet NFS needs, (e.g., through the collection of additional data attributes and/or plots on NFS lands). Such enhancements may be initiated through negotiations with the NFS regional FIA coordinator along with appropriate

funding instruments required to fulfill work beyond the scope of the core FIA program. All enhancements of the core FIA program shall be implemented at cooperator expense and coordinated with the FIA program well in advance of the field season to ensure adequate staffing and preparation. This will include all costs including, but not limited to, data collection, quality assurance activities, information management, and so on. Timelines for data acquisition, QA/QC, and delivery into FSVeg will be agreed upon in advance and will be considered when determining cost.

6. Maintain the complete core FIA program on each NFS unit consistent with all other forested lands within the same state and region. This includes all surveys normally included in the state as part of the complete core FIA program. In cases where a single NFS region overlaps with multiple FIA units, the lead FIA unit (see V.3 below) is responsible for contacting the other affected FIA units and negotiating with the NFS regional FIA coordinator to ensure consistency in data collection and protocols across the NFS region. Any agreement shall be consistent with financial caveats in item 5 above (i.e., additional variables/plots are not part of the standard data collected in a state/region).
7. Edit, compile, analyze, and report on core FIA data on a 5-year reporting cycle as stated in the FIA Strategic Plan from NFS lands along with data from other lands within the same state as each national forest or grassland. Other data, such as intensified plots on NFS lands, may be included upon discussions with the FIA unit prior to initiating preparations for the 5-year report. Editing, compiling, analyzing, and reporting on additional data attributes and/or plots for special reports on NFS lands would need to be negotiated and be consistent with financial caveats in item 5 above.
8. Give NFS credit in all reports, publications, and presentations resulting from NFS/FIA collaboration, including the use of NFS funded data, as appropriate.
9. Collaborate with NFS to ensure that all field-collected data for NFS lands are loaded into the DATIM DataMart, the Natural Resource Information System (NRIS-FSVeg) in the Natural Resource Manager (NRM) database(s), or other mutually agreed on information management systems. Implementing and testing data loading techniques is a complex process and will require significant time to accomplish. Consequently, the process has been divided into long-term and short-term objectives. The long-term objectives for FIA are to:
 - a. Load both the DATIM DataMart and NRIS-FSVeg from the FIADB.
 - b. Load intensified FIA-compatible plots, and NFS add-ons in addition to the FIA core data loaded from the NIMS database into FIADB at the same time as the FIA core data with the exception of special studies and plots not included in FIA routine reports. See III.12 for more information.
 - c. Update the DATIM DataMart during the regular DATIM load process as soon as the FIADB is updated.
 - d. Update NRM-FSVeg after the FIADB has been updated upon request, review, and approval by the NRM-FSVeg data custodian and the NFS regional FIA coordinator.
 - e. Load data into DATIM DataMart and NRIS-FSVeg from the FIADB after the data has been checked for quality and accuracy against NIMS.
10. NFS and FIA agree that until the long-term objectives are achieved, the short-term NFS and FIA objectives are to:
 - a. Work together to develop the protocol sample design, a mechanism to track significant data changes, and a system of notification of these changes to the benefit of both parties.
 - b. Load the complete dataset from intensified FIA compatible plots, NFS add-ons, and the FIA core data into NRIS FSVeg.
 - c. Load the data into the NRIS FSVeg database(s), or other mutually agreed on information management systems, within 1 year of collection. As the loaders to the DATIM DataMart matures, the same 1-year time line will apply to the DATIM DataMart.

- d. Load the complete dataset from intensified FIA compatible plots, NFS add-ons, the core FIA data, and regional data that meets the policy for inclusion into the DATIM DataMart as the load routines are developed and tested.
 - e. Update the DATIM DataMart as NIMS and FIADB are updated during the regular DATIM load process.
 - f. Update FSveg only after notification, review, and approval by the NRM-FSveg data custodian and the NFS regional FIA coordinator.
 - g. Ensure that the data loaded into DATIM DataMart and NRIS-FSveg from NIMS and FIADB has been checked for quality and accuracy against NIMS.
11. Use of exact core FIA plot coordinates by parties outside of NFS must go through FIA access and confidentiality procedures for non-NFS users. Further, FIA will:
- a. Provide the exact location (coordinates) of the FIA plots on NFS lands within each NFS region to the respective NFS regional FIA coordinator or designated representatives. Each designate must have a nondisclosure agreement in place.
 - b. Provide assistance to NFS users to collaborate on the use of plot location information for private and other lands that would include derived layers (but not exact coordinates unless a separate agreement is in place) to support NFS analysis, assessment, planning, and inventory objectives.
 - c. Decide whether requests for site visits to FIA plot locations on NFS lands meet the criteria established by the FIA unit responsible for the plot locations.
12. Annually meet with the NFS regional FIA coordinator to:
- a. Inform NFS of 5-year state reports planned for the year and discuss the region's level of support in the review process.
 - b. Discuss upcoming FIA analysis being conducted with data collected on NFS lands.
 - c. Discuss which plots will be included in FIA 5-year annual and any specialized forest-level reports requested by NFS.
 - d. Discuss issues related to field operations for each national forest among, but not limited to, the primary point of contact (POC), and other appropriate NFS staffs (e.g., district rangers, wilderness managers, law enforcement, and so on).
 - e. Provide the names and contact information of FIA personnel who will have the ability to determine location and status of FIA crews (federal, state, or contract) working on local NFS units to the NFS regional FIA coordinator and the local NFS managers if situations requiring crew contact and/or evacuation arise.

IV. THE NATIONAL FOREST SYSTEM SHALL:

- 1. Appoint representatives to each of the FIA organizational levels described above in Section III.2 and ensure that appropriate funding or other resources are available for its representatives to participate on national and regional committees and to attend national and regional meetings. Representatives will be responsible for networking within their level of the NFS organization to fairly represent NFS interests to FIA decision-makers and to disseminate information about FIA throughout their respective levels of NFS.
- 2. Attend the National FIA User Group Meeting with at least two NFS representatives from a combination of the Washington Office and regional representatives.
- 3. Provide resources necessary to implement NFS-initiated enhancements to the core FIA program on NFS lands. Costs for data collection, management, and reporting that are not part of the FIA core program will be borne by the sponsoring unit through either cash, mutually agreeable in-kind contributions, or other funding mechanisms. Unless other arrangements have been negotiated, NFS will be available to clarify data questions from FIA in order to load DATIM

DataMart and the Natural Resource Information System (NRIS-FSVeg) database(s) in NRM or other mutually agreed on information management systems.

4. Provide technical review of the 5-year reports and forest-level analysis requested by NFS as agreed upon in the annual meeting. If separate reports are developed for NFS lands, NFS will either be solely responsible or collaborate with FIA staff in the analysis and reporting. If NFS requests FIA collaboration in separate reports, NFS will bear the FIA costs unless otherwise stipulated.
5. Treat normal NFS management activities as blind to FIA plot locations, even those accidentally discovered since change detection is a vital role for FIA. Maintain normal business operations/forest management activities without regard to any signing or monumentation on the FIA plot locations. For example, no road locations or cutting unit boundaries will be moved, no tree will be marked or unmarked for harvest, no treatment of exotic/invasive species, and no other changes in treatment will result from any deliberate or accidental knowledge of a plot location.
6. Provide security and protection measures to NFS databases that include FIA exact plot location information and provide access only to authorized NFS personnel. NFS FIA regional coordinators will provide a copy of the non-disclosure agreement to the appropriate FIA regional program managers for their records. These measures will include the name of the individual, dates of access, purpose, and copies of agreements provided to the respective FIA program.
7. Withhold the FIA plot locations from any other party, including requests under the Freedom of Information Act. This information is exempt by statute from disclosure under the provisions of the Freedom of Information Act (5 U.S.C. 552(b)(3)). The statute that specifically proscribes release of FIA sample locations is the Food Security Act of 1985 as amended (7 U.S.C. 2276(d)). Any act by a partner/cooperator and/or their assigns that violates any of the provisions of plot location access, use, and disclosure will be subject to penalties pursuant to the provisions of the Food Security Act. For each NFS region, appoint a NFS regional FIA coordinator to serve as the primary point of contact for coordination and communication between the FIA regional manager(s) and the regional NFS staffs.
8. Give FIA credit in all reports, publications, and presentations resulting from FIA/NFS collaboration, including the use of FIA funded data, as appropriate.
9. Collaborate with FIA to ensure that all field collected data for NFS lands are loaded into the DATIM DataMart, the Natural Resource Information System (NRIS-FSVeg) in the Natural Resource Manager (NRM) database(s), or other mutually agreed on information management systems. Implementing and testing data will require a significant amount of time to accomplish. Consequently, the process has been divided into long-term and short-term objectives. The long-term objectives are to have FIA:
 - a. Load both the DATIM DataMart and NRIS-FSVeg from the FIADB.
 - b. Load intensified FIA-compatible plots, and NFS add-ons in addition to the FIA core data loaded from the NIMS database into the FIADB at the same time as the FIA core data with the exception of special studies and plots not included in FIA routine reports. See III.12 for more information.
 - c. Update the DATIM DataMart during the regular DATIM load process as soon as FIADB is updated.
 - d. Update NRM-FSVeg after the FIADB has been updated upon request, review, and approval by the NRM-FSVeg data custodian and the NFS regional FIA coordinator.
 - e. Load data into DATIM DataMart and NRIS-FSVeg from FIADB after the data has been checked for quality and accuracy against NIMS.
10. NFS and FIA agree that until the long-term objectives are achieved, the short-term NFS and FIA objectives are to:
 - a. Work together to develop the protocol sample design, a mechanism to track significant data changes, and a system of notification of these changes to the benefit of both parties.

- b. Load the complete dataset from intensified FIA compatible plots, NFS add-ons, and the FIA core data into NRIS FSveg.
 - c. Load data into the NRIS FSveg database(s), or other mutually agreed on information management systems, within 1 year of collection. As the loaders to the DATIM DataMart matures, the same 1-year time line will apply to the DATIM DataMart.
 - d. Load the complete dataset from intensified FIA compatible plots, NFS add-ons, the core FIA data and regional data that meets the policy for inclusion into the DATIM DataMart as the load routines are developed and tested.
 - e. Update the DATIM DataMart as NIMS and FIADB are updated during the regular DATIM load process.
 - f. Update FSveg only after notification, review, and approval by the NRM-FSveg data custodian and the NFS regional FIA coordinator.
 - g. Ensure that the data loaded into DATIM DataMart and NRIS-FSveg from NIMS and FIADB has been checked for quality and accuracy against NIMS.
11. Annually meet with the NFS regional FIA coordinator to:
- a. Review the region's level of support for the 5-year state reports.
 - b. Discuss upcoming FIA analysis being conducted with data collected on NFS lands.
 - c. Discuss which plots will be included in the FIA 5-year annual and any specialized forest-level reports requested by NFS.
 - d. Discuss issues related to field operations for each national forest among, but not limited to the primary point of contact each National Forest and other appropriate NFS staffs (e.g., district rangers, wilderness managers, law enforcement, and so on).
 - e. Provide names, titles, and phone numbers for local NFS points of contact at each national forest if requested by the FIA unit. It is the responsibility of the local NFS point of contact to arrange the necessary support for law enforcement, wilderness rangers, district contacts, and so on if requested by the FIA unit.
12. The WO Directors from EMC, FM, and possibly other NFS Directors will meet with the Director of Inventory, Monitoring & Assessment Research at least one time a year.

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

- 1. Separate jointly-developed agreements between FIA and NFS are needed for any expenditure of funds or use of human resources, equipment, supplies, facilities, training, public information, and expertise.
- 2. The standard FIA sample intensity provided by the current federal FIA budget consists of measuring 10 percent per year of phase 2 sample locations in every state in the western U.S. (Pacific Northwest FIA, Interior West FIA regions, west Texas, and Oklahoma); 15 percent per year of the phase 2 sample locations in every state in the eastern U.S. (Northern and Southern FIA regions except west Texas and Oklahoma). The spatial and temporal sampling intensity is contingent on an adequate budget but as a minimum will remain consistent with forest land ownership across a state. NFS regional FIA coordinators and the FIA unit manager shall agree on an acceptable resolution for national forests that straddle different sampling intensities or cycle lengths. States, NFS regions, or other partners may, at their option and agreement with FIA, contribute resources to increase the spatial or temporal sampling intensity and/or collect additional data elements. Hawaii, interior Alaska, and Pacific and Caribbean Island territories will be treated as special cases, per congressional direction, with programs designed to meet specific local needs.
- 3. Each regional FIA unit will assemble a FIA Management Team to address regional- or state-specific issues such as logistics, analyses, data collection needs, transition from a former data system to the current system, and other items of local interest. These teams will typically be comprised of FS, state forestry agency staff, and other federal agencies engaged in the implementation of the FIA Program.

Each FIA Management Team will include at least one representative from each of the NFS regions within the geographical area covered by the meeting.

4. Appropriate FIA and NFS staffs will collaborate to produce forest- or sub-region level data summaries and analyses when requested. Regional and NFS staffs and forest officials will negotiate and agree in advance on the timing and resources necessary for this work.
5. Future enhancements to the core program will be coordinated across FIA and NFS regions to provide for consistency in standards, protocols, classifications, and data management to the extent needed for data analysis across administrative boundaries and for the effective maintenance of information systems.
6. FIA and NFS staffs will collaboratively establish a cohesive internet accessible suite of records (e.g., contact lists, manuals, reports, and data) in order to foster efficient communication and information exchange among FS programs and between the FS and partners. A national-level suite of records will be coordinated by the FIA and NFS Washington Office staffs while regional-level records will be coordinated by the NFS regional FIA coordinator and the FIA unit manager.
7. FIA and NFS staffs will participate in a personal or virtual annual national meeting to discuss issues arising from this SA or other issues that affect multiple NFS or FIA regions. NFS will initiate the annual meeting, and it may be cancelled upon mutual agreement of both parties.
8. All activities under this SA 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. NON-FUND OBLIGATING DOCUMENT. This SA is neither a fiscal nor a funds obligation document. Any endeavor, including work plans, where there is to be 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. Representatives of the participating programs, authorized by appropriate statutory authority, shall make such endeavors and work plans in writing in a separate and independent agreement. This SA does not provide such authority. Specifically, this SA does not establish authority for a 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.
10. COMPLETION DATE. This SA will be effective on the date of the last signature affixed hereto, and unless terminated sooner, will remain in full force until October 1, 2025, at which time it will expire or be renewed.
11. MODIFICATIONS. Changes within the scope of this SA shall be made by the issuance of a fully executed modification, in writing, by all participating program officials prior to any changes occurring.
12. RESTRICTION FOR DELEGATES. No member of, or delegate to, Congress shall be admitted to any share or part of this SA or any agreement(s) written hereunder or to any benefit to arise therefrom.
13. PARTICIPATION IN SIMILAR ACTIVITIES. This instrument in no way restricts the NFS and FIA organizations from participating in similar activities with other public or private agencies, organizations, and individuals.
14. TERMINATION. Either party, in writing, may terminate the instrument in whole, or in part, at any time.

15. PRINCIPAL CONTACTS. The principal contacts for this SA are:

Forest Inventory National Program Leader
U. S. Forest Service, R&D, Inventory, Monitoring & Assessment Research Staff

Assistant Director for Resource Information
U.S. Forest Service, NFS, Ecosystem Management Coordination Staff

Assistant Director for Forest Management
U.S. Forest Service, NFS, Forest Management Staff

VI. SPECIAL PROVISIONS

The following are minimum guidelines for conducting FIA inventories on NFS lands. Additional guidance may be established in coordination with the NFS regional FIA coordinators, but no such agreements may rescind these minimum guidelines unless by mutual consent of both FIA and NFS.

Personnel/Equipment

1. All working arrangements, which might result in the temporary assignment of personnel, and/or the use of lands, buildings, and other facilities, will be supplemental to this SA.
2. Any equipment or supplies purchased for the conduct of this project shall remain the property of the purchasing program unless otherwise agreed upon by both parties.

Communications

FIA and NFS acknowledge that effective communications between programs cannot occur without effective communications within each program. To this end, all communications between FIA and NFS at any level will be transmitted to the appropriate personnel within each program.

Field Access

1. FIA crews (federal, state, or contract) working on NFS land will follow the approved documentation procedures for pack animals or other supplemental means of transportation involved in inventory operations.
2. The national forest POC will provide details for any local or seasonal restrictions or hazards existing on the appropriate national forest upon request of local FIA personnel. These will be updated as needed.
3. Field personnel will be briefed and have access to this SA when engaged in data collection activities on NFS land.
4. This agreement does not authorize any entry upon, nor activities within, any lands not under the jurisdiction of NFS, including private inholdings within NFS boundaries. Such activities must be coordinated and authorized prior to entry, through the respective agency or landowner.

Safety

1. All FIA units will comply with the requirements in the Forest Service Safety and Health Manual, (Forest Service Handbook EM-6709.11), and the Driver-Operator Guide, (EM-7130-2), including a thorough job hazard analyses and associated training requirements.
2. Safety considerations for contract crews will follow the contracting officer's contract specifications.
3. All FIA field crews (federal, state, or contract) working on NFS lands will follow the regional FIA unit's procedure for crew tracking and status procedures.
4. FIA units will notify local NFS contacts as soon as possible in the event of incidents involving loss of contact with or emergency evacuation of FIA field crews (federal, state, or contract) working on NFS lands.
5. Safety issues involving contractors will be reported to the appropriate contracting party (FIA unit or NFS regional FIA coordinator).

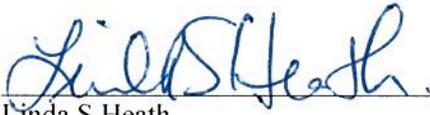
Marking Samples and Locations: Providing consistent and scientifically reliable resource data across all ownerships and classes of forest land in the United States is a hallmark of the Forest Inventory and Analysis research program. Measuring and recording methods on NFS lands must be sensitive to the character of these lands and leave as few signs of disturbance as possible. FIA will enforce the following general rules for field measurements on NFS lands.

1. General Sample Plot Monumentation: It is important to be able to revisit plots, subplots, and trees measured during the inventory. Less visible markings on NFS lands are always appropriate. Detailed, concise sketches and notes will also make subsequent relocation easier. Special provisions for congressionally designated wilderness areas withdrawn from timber production, known as "reserved" lands, are listed below (see Wilderness Sample Plot Monumentation). These provisions will also be applied to other "reserve" NFS lands designated by Congress and withdrawn from timber production as interpreted by the NFS region and the Office of General Counsel when the interpretation is unclear. At the direction of NFS managers, these special provisions may be applied to plots in sensitive non-reserved areas. For plots in non-sensitive areas, outside wilderness, the following will apply (enhanced monumentation may be negotiated at the forest/regional level):
 - a. Identifying tags/nails – Use marking tags/nails minimally. Place them to minimize visibility near residences, campgrounds, trails, roads, or other recreational or high-use areas. Place them in alternate spots, painted a blending color, or use wilderness provisions.
 - b. Flagging – Remove any flagging used to facilitate entry and exit from the plot area on completion of the plot measurements.
 - c. Painting/Scribing – Apply paint minimally, and only by means of paint pen/tube or crayon. Apply no spray or brush paint to any surface in the field. Use a bark scribe when scribing, and do not penetrate to the cambium layer. Do not blaze trees using hatchets.
2. Wilderness Sample Plot Monumentation
 - a. Identifying tags/nails – Use tags/nails only at the base of the tree in wilderness areas, and paint with an approved color (generally green, brown, or black). The NFS regional FIA coordinator will determine tag color in consultation with appropriate staffs.
 - b. Starting/Reference point trees – Do not paint or scribe starting/reference point trees. Instead, nail a tag with identifying marks 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.
 - c. Subplot center – Witness subplot centers with a metal wire/rod or cedar stake in the ground as a marker. It may not protrude from the ground more than 1 inch. Do not attach flagging to the marker.
 - d. Subplot witness trees – Do not paint or scribe witness trees. Nail a tag with identifying marks to the base of the tree facing the subplot center.
 - e. Subplot reference trees – Do not paint or scribe reference trees. Nail a tag with the subplot number to the base of each reference tree.
 - f. Sample trees – Do not paint or scribe sample trees. Mark each sample tree 5.0" DBH and larger with a small nail or tag at ground level either facing the 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 nail or 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. Measure the diameter at exactly 4.5 feet above the nail. If the diameter needs to be taken at a different location, follow the FIA procedures.
3. Boring trees: Do not bore or drill trees unless absolutely necessary to estimate site, age, or growth, or as part of a dendrochronology assessment. (This will generally be the case only during initial establishment of permanent plots.)
4. Cutting vines and moss: Do not do destructive sampling. In cases where vines or moss preclude the use of diameter tapes for estimation of diameter, use calipers or other estimation procedures. In these cases, identify trees with estimated diameter and the method used to make the estimate in your field notes.

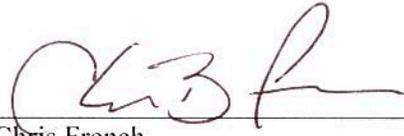
5. Specimen Collection:
 - a. Do not collect personal flora or fauna on NFS lands. Collections are for scientific or educational purposes only, dedicated to public benefit, and may not be used for personal or commercial profit. For unidentified plant species that meet the minimum cover threshold, collect material to create one herbarium specimen. Make the collection off of the plot if possible. Collection of any plant listed under the provisions of the Endangered Species Act as Threatened or Endangered requires holding a current take permit from the Fish and Wildlife Service before collection takes place.
 - b. Do not collect archeological or vertebrate paleontological materials. Stop field work and report the site to the NFS regional FIA coordinator immediately if you locate any historical or archeological remains. No disturbance of such a site is permitted.
6. Site Condition:
 - a. Remove all refuse associated with field operations from NFS lands, and return the site of any data collection or encampment to the condition in which it was found, as much as practicable.
 - b. Do not disturb the soil, except for soil sampling or as specifically authorized by the NFS regional FIA coordinator.
 - c. Do not leave temporary markers, such as flagging, in place for more than 1 week when the study teams are not present on a site. Do not apply paint, or similar semi-permanent markers, to rocks, plants (except as described above), or other natural surfaces.
7. Wildlife Interaction
 - a. Do not harass, haze, or disturb wildlife.
 - b. Make all reasonable efforts to prevent wildlife from obtaining food, garbage, or other attractants from humans. FIA employees/contractors will follow local guidance/regulations provided by the forest/district.
 - c. Do not carry firearms on NFS lands. Only approved agency personnel (employee, partner, or contractor as authorized) who have successfully completed training, formally approved by the Forest Service, both in the use and safety of firearms and in proper human behavior around bears and other potentially threatening wildlife can carry firearms. Firearms may be carried only for defense of life during periods of field work.

VII. ADMINISTRATION

The R&D Deputy Area and its Inventory, Monitoring & Assessment Research (IMAR) staff and the NFS Deputy Area and its Ecosystem Management Coordination (EMC) and Forest Management (FM) staffs of the U.S. Forest Service shall administer this SA. Responsible parties are:



Linda S Heath
Director, R&D, IMAR
U.S. Forest Service
201 14th Street. SW
Washington, DC, 20250



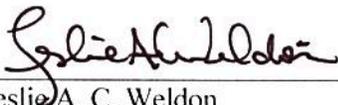
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Each Program, respectively, is authorized by one or more of the following legal mandates to perform the activities addressed in this SA:

- Public Law 74-46, April 27, 1935, 49 Stat. 163 (Soil Conservation and Domestic Allotment Act);
- Public Law 88-577, September 3, 1964, 78 Stat 890. (Wilderness Act);
- Public Law 91-190, January 1, 1970, 42 U.S.C. 4321-4347 (The National Environmental Policy Act of 1969);
- Public Law 93-378, August 17, 1974, 88 Stat 476 (Resources Planning Act);
- Public Law 94-588, October 22, 1976, 90 Stat 2949 (National Forest Management Act);
- Public Law 95-307, June 30, 1978, 92 Stat 353 (Forest and Rangeland Renewable Resources Research Act);
- Public Law 95-313, July 1, 1978, 92 Stat 365 (Cooperative Forestry Assistance Act);
- Public Law 99-198, December 23, 198, 7 U.S.C. 2276 (Food Security Act of 1985);
- Public Law 100-521, October 24, 1988, 102 Stat. 2601 (Forest Ecosystems and Atmospheric Pollution Research Act);
- Public Law 84-159 (Title IX Amendments of the Clean Air Act of 1990);
- Public Law 105-185, June 13, 1998. [16 USC 1642 (e)] (Agricultural Research, Extension, and Education Reform Act); and

Forest Inventory and Analysis Strategic Plan. March 2015. United States Department of Agriculture, Forest Service.

ENCLOSURE 1

TERMS USED IN THIS SERVICEWIDE AGREEMENT

FIA Program: The FIA program is described in Section 3(e) of the Forest and Rangeland Renewable Resources Research Act of 1978 (92 Stat 353, 16 U.S.C. 1642(e) as amended) and in the FIA Strategic Plan approved by Congress in April 1999.

Regional FIA Program: A sub-national portion of the FIA program managed and implemented in one of four regional areas of the U.S. (North, South, Interior West, or Pacific Northwest).

FIA Regional Manager: A research station officer responsible for managing the regional FIA Program. There is one FIA regional manager per FIA regional program, assigned to the Research Station responsible for implementing the FIA regional program.

NFS Regional FIA Coordinator: A NFS officer appointed by the regional forester or their designee to serve as a liaison and coordinator for FIA activities on NFS lands within the NFS region. Coordinates communication between the FIA program and all region and forest staff within the region.

National Forest FIA Coordinator: A NFS officer identified by the Regional Office who has their supervisor's permission to serve as a liaison and coordinator for all FIA activities on NFS lands within a certain national forest or group of national forests.

Regional/State FIA Management Team: A group of Forest Service, state, and other partners who are contributing resources (funds, staff, equipment, data, or other in kind contributions) in order to implement the FIA program. This group communicates as needed to ensure that work is done efficiently and effectively.

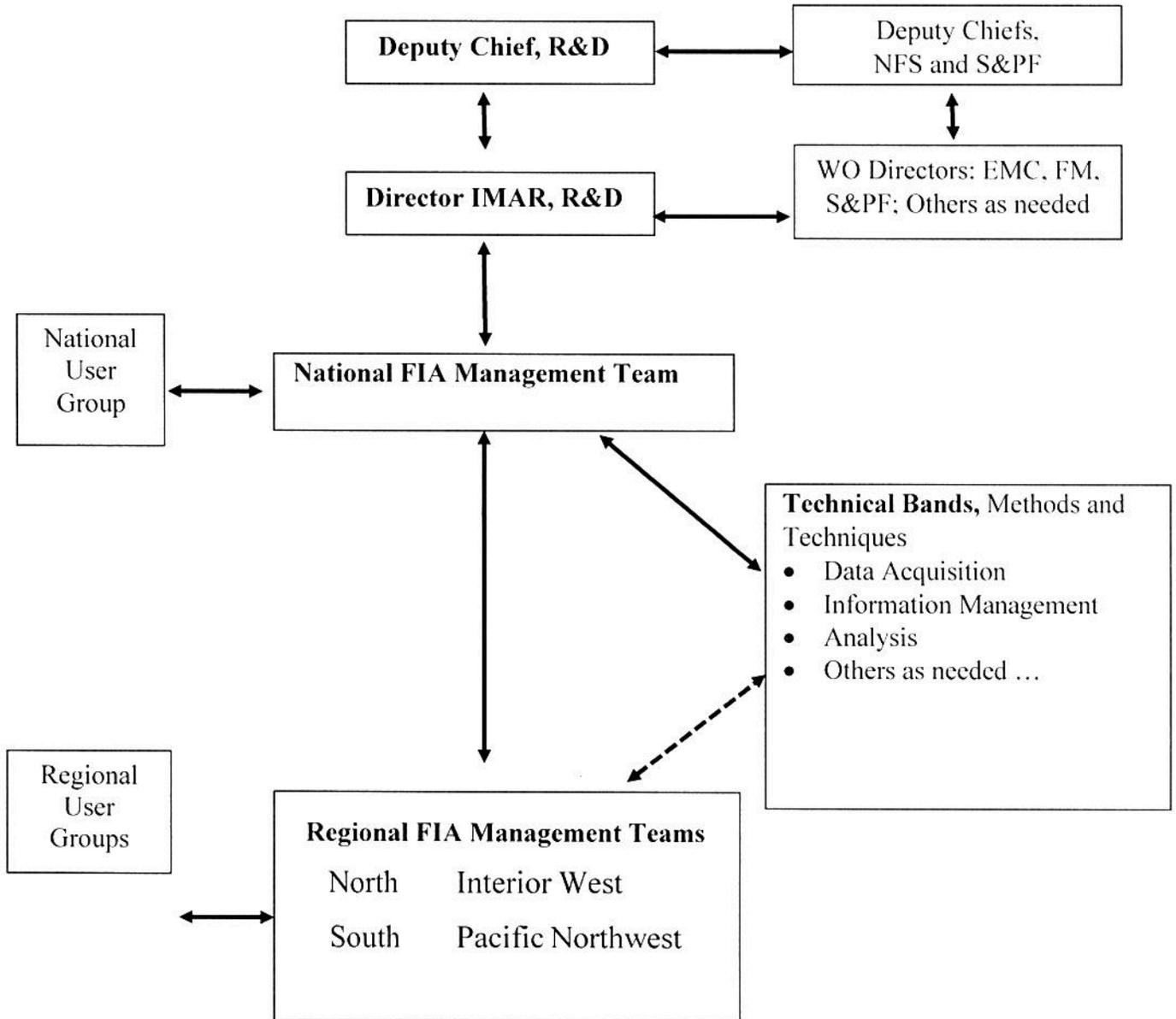
National FIA Management Team: A group of Forest Service (FIA, NFS, FHM) and state forestry agency managers who are contributing resources (funds, staff, equipment, data, or other in kind contributions) in order to implement the FIA program. This group meets annually to review FIA program progress, resolve national and cross-regional issues and ensure that the FIA program is implemented efficiently and effectively.

Core: A subset of the program that is implemented in an identical fashion across all ownerships. There are two kinds of core:

1. National Core - A subset of the FIA program implemented consistently on all forest land in compliance with the U.S. National Core program elements that are defined by the National FIA Management Team.
2. Regional Core - A subset of the program implemented consistently on all forest land within an FIA region. Regional Core program elements are defined by regional FIA management teams.

ENCLOSURE 2

FIA Organizational Structure



ENCLOSURE 3

NFS Regional FIA Coordinator Responsibilities

FIA Plot Security Background

The Federal Government considers FIA plot locations and ownership data sensitive but unclassified (SBU) information. In addition, private ownership information is treated as personally identifiable information (PII). Both types of information are restricted from general public access.

The applicable law (aka 'Privacy Act') that governs access to FIA data may be found here:
<http://codes.lp.findlaw.com/uscode/7/55/2276>

In addition to the restrictions provided in the Privacy Act, the USDA Cyber Security Manual (Chapter 10-Part 2) (aka DM 3550-002) states that:

"All SBU/SSI information transmitted via any media will be encrypted in accordance with the Media Encryption Chart Requirements..."

FIA and NFS have signed a Service wide Agreement (SA) (2009-SA-FIA01) that lays out the cooperation between the two programs to the benefit of both. Part of this agreement is that NFS regions will designate a NFS regional FIA coordinator that is responsible for being the primary point of contact for coordination and communication between the region and FIA. If the region determines it has a need for actual plot locations, then the NFS regional FIA coordinator is responsible for maintaining the integrity and security of those locations. This person must sign a non-disclosure agreement with FIA (FS 6600-5 modified). The NFS regional FIA coordinator reviews requests to use the actual plot locations from other NFS employees in their region to determine if such access is warranted. If the decision is positive the NFS regional FIA coordinator must secure a signed non-disclosure agreement (FS 6600-5 modified for FIA) from the NFS staff.

Issues to Consider with SBU FIA Plot Data

Do's

- Maintain actual FIA plot coordinates in a secure manner: stored on a Forest Service (FS) imaged computer with password protection (password required to logon), which is protected within the FS firewall. These coordinates may be stored in any format (shapefile, text file, geodatabase, and so on) as long as access is restricted to and controlled by the NFS FIA regional coordinator.
- Review requests from NFS regional employees to access actual FIA plot locations, and ensure that actual plot locations are indeed necessary for the proposed work (as compared to using fuzzed plot locations). If actual FIA plot locations are deemed necessary, then each NFS regional employee who will have access to the actual FIA plot coordinates will need to sign a modified nondisclosure form, FS-1600-5, (also known as a confidentiality certification form), which references the current FIA-NFS SA. This form details the corresponding security requirements and procedures necessary to comply with the current FIA-NFS SA.
- Consider using the O or T drive to transfer actual FIA coordinate files. These files must be stored in a restricted folder, so that only those employees with a signed nondisclosure form can access the folder. Never store these SBU files in a location that the entire FS could access!
- If you decide to transfer actual FIA plot coordinate files by email, then encrypt as a zip file. Please call the recipient with the corresponding password or put it in a separate email. The NFS regional FIA coordinator should encrypt files using WinZip - higher than version 10. To do this, use an option under Actions, with the 256-bit AES encryption. NIST (National Institute for

Standards and Technology) approved the Advanced Encryption Standard (AES). The password used to encrypt the zip file will be used to unencrypt that file by the recipient. This password should not be transmitted with the zip file.

- FS ftp sites, Dropbox or other Cloud data-sharing storage system are NOT restricted to the FS. Do not use this method of file transfer for SBU data.
- Online plot conversion is okay to use (e.g. UTM to NAD83), particularly if it is a site run by an academic or scientific agency.
- ArcGIS Explorer is okay to use since all the information is stored locally on your FS computer and you also have access to ESRI's map servers.
- For other questions related to FIA plot security or coordinate access, please contact FIA Spatial Data Services (SDS) personnel.

Don'ts

- Email or text actual FIA plot coordinates (SBU or PII information), or transmit in any format (shapefiles, spreadsheets, and so on) without adequate security and proper protection.
- Handle any data request that involves private land coordinates. These should be referred to the Spatial Data Services (SDS) team.
- Disclose actual FIA plot coordinates to any other party, including requests made under the Freedom of Information Act, Sunshine Laws, or other similar law. FIA data is exempt by statute from disclosure under those laws.
- Do not use Google Maps, Mapquest, or other commercial web map applications by typing in exact coordinates. These applications collect data for marketing purposes, and can even collect information on the area being viewed. Also, browsing a specific geographic area is acceptable, since the actual FIA plot coordinates are not entered and/or collected.
- Do not create and/or use a KML file online involving FIA plot coordinates.
- Do not create, display, or publish a map showing actual FIA plot locations with enough detail such that a user may determine the plot location.

SDS Personnel assigned to FS Regions

National Coordinator, Team Lead
Elizabeth Burrill eburrill@fs.fed.us
603-868-7675

R1, R2, R9
Northern Research Station FIA
Rich McCullough rmccullough01@fs.fed.us
610-557-4081

R8
Southern Research Station FIA
Sam Lambert slambert@fs.fed.us
865-862-2097

R1, R2, R3, R4
Rocky Mountain Research Station - Interior West FIA
Chris Toney christoney@fs.fed.us
406-829-6980

R5, R6
Pacific Northwest Research Station FIA
John Chase jchase@fs.fed.us
503-808-2089

R10
Pacific Northwest Research Station FIA
Tom Thompson tthompson03@fs.fed.us
907-743-9401

For More Information

Link to 'Privacy Law': <http://codes.lp.findlaw.com/uscode/7/55/2276>
FS Manual Section 4810 – Forest Resources Economics Research; Forest Inventory and Analysis
FS Handbook Chapter 10: 4809.11
The Cyber Security Manual - DM 3500: <http://www.ocio.usda.gov/directives/>
Data Encryption Standard (DES) - FIPS PUB 46-3
FIPS Pub 197 (AES)
FIPS Pub 200 - Minimum Security Requirements for Federal Information and Information Systems
NIST 800-83 - Recommended Security Controls for Federal Information Systems (very, very dense)

The Confidentiality and Data Access Committee (CDAC) group within the Federal Committee on Statistical Methodology. The CDAC has a lot of information on their website:
<http://www.fesm.gov/committees/cdac/cdac.html>