2200-CFI <u>Continuous Forest Inventory (CFI) :</u>

The function of Continuous Forest Inventory (CFI) system, stored in a MS Access database format and written in Visual Basic and Visual FORTRAN, is to provide for the collection and analysis of the forest resources using scientifically based data for the monitoring and management of resources on Indian forest land. The CFI computer system is designed to facilitate the processing and analysis of the data collected. The system has been implemented at all reservations that have a major forest resource, what is called a Category 1 forest (See 25CFR Sec. 163.36 for definitions of the forest categories). The system resides at the Division of Forestry – Branch of Forest Resources Planning (BOFRP) in Lakewood, Colorado and at individual reservations, with copies given to the agency and regional offices. See attached diagram for system design.

The CFI is a forest-wide sample of the forest resources that will provide a statistically reliable estimation of the forest resource. Contained in a CFI database is data on the measurement plot site and individual sample trees. Plot data includes information on the location, site quality and administrative classifications. Individual tree data includes tree size (diameter, height) and condition (problems, vigor). The plots are re-measured periodically, which allows for the estimation of forest change. Since the forest resource is a trust asset, the BIA must ensure that the condition and volume of the forest is sustained or improved. Most CFI inventories have at least three measurements, with some having up to 6 measurements. The CFI system maintains all previous measurement information so that trends in the resource can be evaluated. With the individual tree samples and plot summaries, statistics are produced to show the structure, growth, harvest and mortality that have occurred over the measurement period. Field guides defining the procedures and data definitions are developed for each project and are maintained for future reference. Past data for a reservation's CFI are migrated to the database from ASCII formatted data files at the time of re-measurement.

Since each reservation has specific needs beyond the basic data collected on all reservations, the forest inventory is tailored as needed. Because of this tailoring and the different measurement dates, each individual forest inventory is maintained in its own database. While each database is unique, it is required to follow the standard CFI database format. The format is defined in the "Data Organization Guide" developed by BOFRP. All inventories must follow this database format for integration with standard processing programs that generate summary tables for the inventory. Because of the individualization of the database data fields, there is little application on a bureau-wide basis as a "one-size-fits-all" application.

A. Source Records/Inputs

1. Source Records (Paper): The inputs are preprinted on tally sheets or loaded into electronic field data recorders and taken to the plot. The field crew then measures the same trees at the same point and records the new information. Any past data provided is also verified in the field. Data is entered and error checked through an application written in Visual Basic. This application is modified as needed for each reservation inventory. Original input forms are maintained at the reservation level.

Disposition Instructions: Apply disposition instructions approved for paper and microfilm records. (Reference Indian Affairs Records Schedule record series for specific program records)

2. <u>Source Records (Electronic)</u>: Electronic files or records used to create or update a master file, including, but not limited to, work files, valid transaction files, and intermediate input/output records. (GRS-20/1b)

Disposition Instructions: TEMPORARY. Delete after information has been transferred to the master file and verified. Subject to Multiple Record Freezes and/or Litigation holds.

B. Master Data File

The master data file is stored in a MS Access database. There are five different data tables generated for each measurement:

- Plot Classification the collected field data for the plot;
- Plot Summary tree data summaries (stocking, growth, harvest, etc);
- Tree Measurement collected tree information, plus any calculated data;
- Regeneration data data on the measured regeneration trees on plot;
- Fuels data data collected on wild land fire fuels present; and,

• Additional data tables needed for the administration and processing of an inventory are also maintained in the database. See Data Organization Guide for details.

The individual reservation that is doing the analysis determines what sorting and summaries it wants to create. The CFI programs are designed to allow the user the ability to sort on any plot variable.

Disposition Instructions: PERMANENT. Create duplicate copy of records off-line and physically transfer to the National Archives upon approval of this schedule in accordance with NARA instructions and guidance. Subsequent legal transfer of the records will be as jointly agreed to between DOI and NARA, in accordance with regulations currently cited in 36 CFR 1228.270. (N1-075-05-3)

C. System Generated Documents/Outputs

1. System Generated Documents in Case Files: Case files specific queries, sorts, reports, tables, and related records and data compilation reports (e.g., management reports and plans) that are created for case files, studies, inquiries, inspections, and related program files.

Disposition Instructions: Apply disposition instructions approved for paper and microfilm records. (Reference Indian Affairs Records Schedule record series for specific program records)

2. System Generated Documents organized by Program, Regional, Agency or Field Offices: Data compilation reports (e.g., management reports and plans) that are not case file specific and generated bi-weekly, monthly, quarterly, and annually. These reports cannot be easily separated and filed in case specific files. (N1-075-05-3)

Disposition Instructions: PERMANENT. Printed Report Files. File by System Report Name, Program, Region, Agency or Field Office, Job Run Date and Fiscal Year. Cut off at the end of the fiscal year. Maintain in office of record for a maximum of 2 years after cut off or when no longer needed for current business operations; and then retire to records center. Subsequent legal transfer of the records to the National Archives of the United States will be as jointly agreed to between United States Department of Interior and the National Archives and Records Administration.

3. Data Verification Reports or Screen Prints, Data Verification – Non case/subject file specific screen prints, test reports, data validation reports and system diagnostics.

a. Electronic files or records created solely to test systems performance, as well as hard-copy printouts and related documentation for the electronic files/records. (GRS-20/1a)

Disposition Instructions: TEMPORARY. Delete/Destroy when the agency determines that they are no longer needed for administrative, legal, audit, or other operational purposes.

b. Electronic files or records used to create or update a master file, including, but not limited to, work files, valid transaction files, and intermediate input/output records. (GRS-20/1b)

Disposition Instructions: TEMPORARY. Delete after information has been transferred to the master file and verified.

c. Electronic files and hard-copy printouts created to monitor system usage, including, but not limited to, log-in files, password files, audit trail files, system usage files, and cost-back files used to assess charges for system use. (GRS-20/1c)

Disposition Instructions: TEMPORARY. Delete/Destroy when the agency determines that they are no longer needed for administrative, legal, audit, or other operational purposes.

d. Records create and retained for asset management, performance and capacity management, system management, configuration and change management, and planning, follow-up, and impact assessment of operational networks and systems. Includes, but is not limited to: Data and detailed reports on implementation of systems, applications, and modifications; application sizing, resource and demand management; documents identifying, requesting, and analyzing possible changes, authorizing changes, and documenting implementation of changes; documentation of software distribution and release or version management. (GRS-24/3b1)

Disposition Instructions: TEMPORARY. Destroy/delete 1 year after termination of system. **SUPERSEDES ALL PREVIOUSLY RELEASED RECORDS SCHEDULES**

D. Documentation

1. System Data specifications, file specifications, code books, record layouts, user guides, output specifications, final reports, regardless of medium, relating to a master file or database. (N1-075-05-3)

Disposition Instructions: PERMANENT. Transfer to the National Archives with Master Data file as identified above.

2. Copies of Records relating to system security, including records documenting periodic audits or reviews and re-certification of sensitive applications, disaster and continuity plans, and risk analysis, as described in OMB Circular No. A-130. (GRS-20/11b)

Disposition Instructions: TEMPORARY. Destroy or delete when superseded or obsolete.

E. Backups/Vital Record Backups

Backups are intended for making a copy of computer files for use if the original is lost, damaged or destroyed. The Backup process includes copying recorded information from internal storage to an external storage medium, such as magnetic tape, cartridges, CDs, and Optical disk. The Disposition of Backups is Temporary because they are intended to restore a system in case of failure. Backups do not meet NARA requirements for long term retention or preservation of permanent data. (GRS-20/8a)

Disposition Instructions: TEMPORARY. File identical to records scheduled for transfer to the National Archives: Delete when the identical records have been captured in a subsequent backup file or when the identical records have been transferred to the National Archives and successfully copied.