



What is Inventory, Monitoring and Assessment (IMA)?

IMA is a new and evolving approach to providing natural resource information for the Forest Service and partners that:

- ◇ Is dynamic, supports management, and is responsive to social, economic, and ecological change ;
- ◇ Is focused on quality and consistency of information to make effective land management decisions;
- ◇ Is focused on data and information that is accurate, timely and accessible;
- ◇ Is informed by partner and stakeholder interests and addresses shared information needs;
- ◇ ensures that IM&A activities address issues across organizational and geographic boundaries

Current situation

Beyond FIA, the Forest Service does not have a comprehensive approach for conducting strategic inventory, monitoring and assessment activities in support of priority business requirements of the agency and its partners.

The Forest Service needs to build upon existing national programs such as FIA to move from a collection of disjointed activities to an integrated system that identifies, collects and processes core information that can be used at multiple scales to meet business requirements of both the agency and partners.



The IMA Vision

Assure that land managers and partners have the natural resource information they need to collaboratively manage and utilize forests and rangelands sustainably.

Desired Characteristics

The Forest Service will build upon existing programs such as FIA to move from a collection of independent activities to an integrated, efficient IMA system that would encompass:

LEADERSHIP: Improve clarity and understanding of IMA priorities, policies, direction, decision-making processes, and roles and responsibilities;

DATA: Ensure consistent and comparable information for use at multiple scales, across multiple units and landownerships, and for multiple resource areas;

COLLABORATION: Provide a perspective that extends beyond the boundaries of National Forest System lands to meet information needs shared with public and private partners; and

ASSESSMENT: Improve understanding of interrelated natural resource, infrastructure, social, and economic conditions at national, mid, and local levels and the management actions that contribute to sustainability of benefits for the public.



For more information on Forest Service IMA

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 703-605-4177
<http://fia.fs.fed.us>



NFS IMA Implementation Lead
Portland, OR
 503-808-2406
<http://www.fs.fed.us/emc/rig/directives.shtml>



The United States Forest Service Caring for the Land and Serving People



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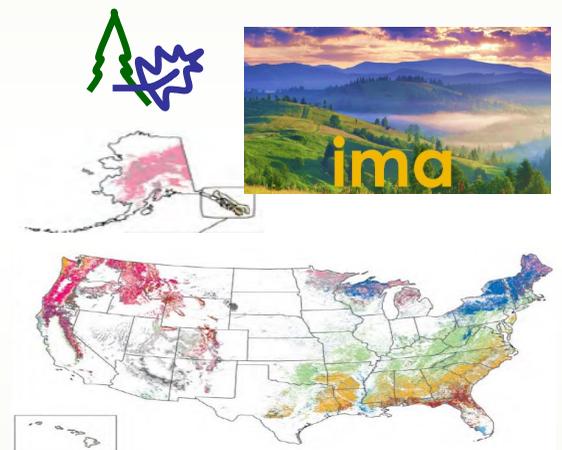
October 2014



Inventory, Monitoring and Assessment

supporting landscape scale decisionmaking processes

Forest Inventory and Analysis



FIA Mission: *Improving the understanding and management of the nation's natural resources by maintaining a comprehensive inventory of the status and trends of our diverse forest ecosystems, their use and health for over 80 years.*

Science Serving Society



Kentucky Colorado Wisconsin

What is the FIA Program?

- FIA is an 80+ years strong forest inventory program working in partnership with the nation's state forestry agencies, universities, and NGOs.
- FIA is the only comprehensive field-based inventory of all forest ownerships in each of the 50 states, affiliated Pacific Islands, Puerto Rico, and the US Virgin Islands (since 1928).
- FIA conducts extensive collaborative research to develop and use the latest technology in remote sensing, field measurement and information management.
- FIA provides public access to current and historic resource data through user-friendly online tools with over 100,000 data accesses annually and provides forest inventory data to all 50 states and affiliated islands for Forest Assessments.
- FIA conducts surveys of the management objectives and value of forests of over 10 million private forest landowners in the U.S. (since 1953).
- FIA conducts wood flow surveys of all primary wood-using facilities in the U.S. (since 1947).
- FIA is guided by a management team that relies on partner participation and currently relies on 550 federal, state, university and other professional staff to efficiently deliver the program.



North Carolina Arizona Oregon



Alaska South Carolina Ohio

NFS Information Needs

The National Forest System (NFS) has 192 million acres across 44 states composed of 155 national forests and 20 national grasslands managed by the USDA Forest Service. This land comprises 8.5 percent of the total U.S. land area and 20 percent of its forest land.

NFS lands provide important social, economic, and ecological benefits to the Nation, including fresh drinking water, clean air, aesthetic and spiritual values, recreation opportunities, timber and other forest products, minerals, oil and gas, livestock grazing, and abundant habitats for fish and wildlife species.

National forests and grasslands, along with nearby private and other agency lands are under increased demands and stresses from population growth, urbanization and environmental changes. These changes are altering the ecological, social, and economic benefits and services provided by public and related lands and increasing their management costs.

Integrated, spatially relevant information is needed to assess and monitor these shared dynamics and concerns. Consistent, scientifically sound methods for data collection and analyses are needed across landscapes that include national forests and grasslands. Sound strategies and plans to sustain our natural resources for future generations depend on well designed IMA systems.



Virginia Montana South Dakota



Vermont Wyoming Louisiana

An Implementation Strategy

NFS will leverage FIA data by adding NFS-defined attributes and co-funding development of webtools for Forest and landscape analyses and to develop more efficient, question-driven monitoring designs to provide critical forest planning information. NFS serves on the management teams for both FIA and tool development. Specialized, quality assured attributes might relate to:

- ◇ Wildlife habitat (forage and cover)
- ◇ Invasive plants (spread and impact)
- ◇ Insect and disease (risk and impacts)
- ◇ Recreation impacts (erosion, degradation)
- ◇ Hazardous fuels (buildup, reduction)
- ◇ Adjacent land use/land cover changes
- ◇ Current calibration data for growth and yield models for evaluating risks and management outcomes

FIA will incorporate specialized NFS layers in the interactive National Atlas of U.S. Forests to provide spatial detail of resources for planners and managers, including the underlying statistical data layers

FIA will provide collaboratively funded technical support and reviews to NFS Regions and Forests

FIA will provide support to demonstrate the value of NFS-funded plot intensification, similar to what many States currently fund. The goal will be an "all lands" approach to answer management and planning questions using reliable data at multiple scales.



Nevada West Virginia Minnesota



Missouri New Jersey Mississippi

What planners and users are saying



"The NFS Alaska Region relies on the FIA monitoring program to maintain continuity of forested resource information. It is the only consistent measure we have for this information, and resource managers rely on this

data for a variety of uses such as modeling successional dynamics and forest productivity, evaluating wildlife habitat, evaluating carbon stocks, and assisting in vegetation classification and mapping." - Barbara Schrader, NFS Alaska Region, Regional Ecologist

"It is easy for Forest managers to overlook the substantial base of information we have in FIA. Most of what we know about the broad context for forest management in the U.S. is built on the foundation of FIA data. I believe we have not tapped the full potential for valuable information we can develop from FIA and related information." - David Meriwether, NFS Southern Region, Inventory and Monitoring,



"FIA is the only national inventory system that delivers timely and consistent information about the condition and trends of America's forestland, across all types of ownerships. FIA is essential to land managers in order to make sound ecological, economic, and social decisions about the current and future state of the nation's forests." - National Association of State Foresters



"FIA provides valuable information on: forest area and condition, timber and biomass supply potential, growth versus removals, rates of forest conversion to non-forest use, carbon stocks, and biodiversity." - National Council on Air and Stream Improvement



"The present day carbon content of forests will be calculated using FIA data. Reliance on a standardized dataset is critical to estimating U.S. forest carbon stocks and fluxes." - Univ. of Wisconsin



Indiana Oklahoma New York