

**Forest Service Manual
National Headquarters - Washington Office
Washington, DC**

**Forest Service Manual 5600 – Boundary Management
Zero Code**

Amendment: 5600-2020-1

Effective date: August 25, 2020

Duration: This amendment is effective until superseded or removed.

Superseded Directive:

Approved by: Tina Terrell, Associate Deputy Chief, NFS

Date approved: August 17, 2020

Responsible Staff:

Explanation of changes: Following is an explanation of the changes throughout the directive by section.

5600: Establishes new chapter and sets forth codes, captions, and direction for Boundary Management.

Removes direction previously contained in FSM 7150 -7155, Surveying, and incorporates into title 5600. Revises responsibilities to implement and maintain the Boundary Management and Land Surveying program, FSH 5609.11, Boundary Management Handbook. Washington Office level, responsibilities for program management, formerly assigned to the Director of Engineering, are now assigned to the Director of Lands and Realty Management.

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The purpose of the boundary management program is to actively locate and manage the boundaries of National Forest System lands to facilitate land and resource management activities, support restoration projects, provide for legally defensible and visibly marked National Forest System boundaries, recognize private property rights, and protect title to the public estate. To accomplish these objectives the boundary management program surveys, locates, marks, describes, and manages the legal boundaries of National Forest System lands, and completes reviews of land surveys and land titles for sufficiency relating to Federal land adjustment and land management activities.

National Forest boundary location is a primary function of the boundary management program and is exclusively the responsibility of the State-licensed Forest Service land surveyors. Land surveys define title interests held by the United States of America. An effective boundary management program protects the public estate by adequately identifying and marking legal boundaries that affect Federal land management activities, and verifying that title to Federally-managed National Forest System lands are free of potential title defects. Efficient management of forest land and resources also requires land surveys to locate other rights, titles, or interests on National Forest System and private lands, including easements, rights-of-way, and partial interests. Refer to direction in this manual and the detailed policies and procedures found in FSH 5609.11, Boundary Management, in carrying out the boundary management program.

5601 - Authority

The Forest Service land surveyor is State-licensed and performs land survey work under multiple authorities to accomplish the goals and objectives of the boundary management program. The status and history of the land being surveyed and/or described determines which authority controls.

5601.1 - Federal Survey Authority

The Public Land Ordinance of May 20, 1785, vests Federal cadastral survey authority to the Department of the Interior, Bureau of Land Management (BLM), inherited from the General Land Office, for original land surveys in the Public Land Survey System (PLSS) (43 U.S.C. 2, 52). BLM also has resurvey authority (43 U.S.C. 772, 773). The BLM defines the limits of the public domain land either by actual cadastral survey or by protractors (43 U.S.C. 751).

5601.2 - Federal Survey Authorities for the National Forest System Lands

1. Organic Administration Act of June 4, 1897 (16 U.S.C. 471). This Act authorizes the Secretary of Agriculture to delegate to the Chief of the Forest Service the authority to identify, define, administer, and manage National Forest System lands and resources. This Act requires the Forest Service to either perform or contract for administrative (engineering, cartographic, geodetic), cadastral, or boundary surveys.
2. Weeks Act of March 1, 1911 (16 U.S.C. 515). This Act authorizes and directs the Secretary of Agriculture to examine, locate, and purchase such forested, cut-over, or denuded lands within the watersheds of navigable streams as in their judgment may be

necessary to the regulation of the flow of navigable streams or for the production of timber.

3. Townsite Act of July 31, 1958 (16 U.S.C. 478a). This Act is used to create a townsite to serve indigenous community objectives. The creation of the townsite authorizes the Forest Service to survey, monument property boundary corners, mark and post property boundary lines, and describe parcels of land as part of the conveyance process.
4. Wilderness Act of September 3, 1964 (16 U.S.C. 1131). This Act directs the Secretary of Agriculture to prepare and maintain maps and legal descriptions for designated Wilderness Areas.
5. Small Tracts Act of January 12, 1983 (16 U.S.C. 521e). This Act is used to resolve land disputes and management problems. If utilized, it authorizes the Forest Service to survey, monument property boundary corners, mark and post property boundary lines, and describe parcels of land as part of the conveyance process.

5601.3 - State Survey Authority

Each State regulates the professional practice of land surveying and the registration of land surveyors. State land surveying laws, rules, and regulations apply to Forest Service land surveys, which includes the location of boundary lines between National Forest System land and other Federal, State, tribal, local, and private lands. The Forest Service obtains State authority to perform land surveys by employing or contracting with State-licensed land surveyors.

When contracting a State-licensed land surveyor for land surveying services for finding, locating and monumenting property corners, and marking legal boundary lines, the Forest Service Contracting Officer shall comply with the prescribed policies and procedures in the Federal Acquisition Regulations (FAR), subpart 36.6 – Architect-Engineering Services, including the FAR guidance on designation of qualified Contracting Officer Representatives (COR). Forest Service CORs on land surveying contracts shall have a land surveying license in a United States' State or territory, or meet the Office of Personnel Management qualifications required for the GS-1373, Land Surveying series.

5602 - Objectives

The objectives of the boundary management program are to:

1. Protect the land and its resources, land title, and interest in lands held, or soon to be acquired, by the United States from boundary disputes, unauthorized use and occupation, encroachments, trespass, and title claims.
2. Provide the Forest Service and the public with visible and legally defensible property boundary lines or other designated boundary lines. Refer to FSH 5609.11, chapter 30.

3. Create and maintain a reliable spatial depiction of the boundaries and title interests of National Forest System lands for inclusion in the Land Status Record System (LSRS) to support the development and maintenance of a National cadaster.
4. Manage survey records consistent with Federal, State, and local laws and policies regulating the management of Forest Service records for internal and external use.
5. Support Forest Service strategic objectives by providing land survey services to all Forest Service programs and resource areas requiring land survey expertise.

5603 - Policy

1. Conduct all boundary management activities affecting the real property rights of the United States, and adjoining land owners, in accordance with applicable Federal and State-specific laws, rules, regulations, procedures, and acceptable professional standards of practice.
2. All National Forest System property line and special designated area boundary lines are to be surveyed, marked, and maintained in their correct legal location prior to undertaking any land, resource, or restoration projects occurring within one-quarter mile of any National Forest System boundary line. While the Forest Service national standard is within one-quarter mile of any National Forest System boundary line, the regional land surveyors and/or Forest land surveyors may increase or decrease this distance based upon their professional knowledge of the accuracy and reliability of Forest Service maps, the Land Net, and land surveys of record.
3. Fully manage the National Forest System land and resources to the legal boundary location on the ground. Creating false or misleading boundary lines by deliberately offsetting back onto National Forest System lands from an unknown or an approximated boundary, or adjusting land, resource, or restoration project boundaries to avoid the responsibility to mark National Forest System boundary lines, violates Forest Service boundary line policies and is unacceptable.
4. Locate, monument, mark, and post property boundaries and special designated area boundary lines to Forest Service standards prior to implementing land and resource management activities (refer to FSH 5609.11, ch. 20 and 60).
5. Maintain established and marked boundary lines and corners to Forest Service standards to support land and resource management activities, and to protect National Forest System lands against unauthorized use, encroachment, and trespass (refer to FSH 5609.11, ch. 30).
6. Maintain boundary management and land survey records in conformance with State law and Forest Service records management policy. Ensure that these records are available to the public when requested.

7. Geographic Information System (GIS) coordinates for the Land Net must not be used as authoritative indicators of legal boundary lines and property corners, unless the GIS coordinate values are derived from direct physical occupation and observation, and validated by a State-licensed land surveyor or an authorized BLM cadastral surveyor. In addition, fence lines, fence corners, and other proffered physical evidence of the lines and corners are not to be used as indicators of boundary lines unless their locations are also validated by a State-licensed land surveyor or a BLM cadastral surveyor.
8. It is against Forest Service policy for any employee, other than an individual authorized by the Forest Service or BLM and acting in their official capacity as a land surveyor, to determine and/or mark National Forest System boundaries. Surveying, locating, marking, and maintaining National Forest System boundaries of any type shall be performed under the direct supervision and responsible charge of a land surveyor working under Federal or State land survey authority, whether the survey work is completed by an agency employee or contract.
9. A Forest Service State-licensed land surveyor, or a BLM cadastral surveyor, shall be consulted prior to any ground-disturbing activity, such as a prescribed burn, fire rehabilitation, mechanical thinning, road realignment and construction, or facilities improvement or construction. All original corner and boundary locations must be searched, restored, and maintained so that the expense of perpetuating original corners and lines to standard is not lost during the management activity. National Forest System boundaries that have not been previously located and marked will be surveyed and marked according to Forest Service boundary line marking standards. All land surveys and identification of National Forest System boundary lines will be completed to Forest Service land surveying standards, and comply with all appropriate Federal and State laws, regulations, and guidelines governing the profession of land surveying.
10. Provide technical and professional land surveying expertise and support to other resource management areas as needed and appropriate. This expertise extends to engineering surveys, right-of-way surveys, plane and geodetic coordinate systems, control surveys for data acquisition, Global Navigation Satellite Systems applications, and oversight of architectural and engineering land survey services contracts.
11. A topical reference library, including hard copy and digital material on public land laws, survey manuals and guidelines, land surveying standards and practices, appropriate State registration rules, geodesy, land descriptions, land information systems, and boundary location principles must be maintained at each Forest Service office engaged in land surveying activities.

5604 - Responsibility

5604.1 - Director of Lands and Realty Management, Washington Office

The Washington Office Director of Lands and Realty Management has the responsibility to develop and manage a National program that defines the minimum standards and procedures necessary to implement the boundary management program.

5604.2 - Regional Forester

The Regional Forester, in conjunction with the Regional Director of Lands, has the responsibility to coordinate, monitor, and provide expertise to ensure compliance with National and Regional standards and direction. Standards and direction should provide for consistent program implementation across Regions. The Regional Forester ensures that each region has an appropriate boundary management organization in place to establish:

1. Standards to monument PLSS corners, property corners, and property-controlling corners, as well as mark, post, and maintain boundary lines of National Forest System land.
2. Boundary line and corner location standards that meet land surveying standards and Federal, State, and local requirements.
3. A procedure to review each contract and Forest Service-prepared land survey plat for correctness of procedure, completeness, and data accuracy before the survey plat is entered into the public record.
4. A program to establish geographic coordinates, defined by the National Spatial Reference System, on corners recovered and re-established, and established by land survey.
5. A regional program for the maintenance and dissemination of land survey records.

5604.3 - Forest Supervisor

The Forest Supervisor has the responsibility to administer the designated boundary management organization to (except in regions that are zoned, where responsibility would be shared with the Regional Director of Lands or equivalent):

1. Provide the necessary technical expertise and equipment to accomplish the required work under the boundary management program.
2. Provide professional and technical training and supervision for Forest Service land surveyors to assist in program accomplishment and the maintenance of State licensure and certification as land surveyors.

3. Ensure that all land surveys meet Federal, State, and local requirements, in addition to land surveying standards.
4. Establish program priorities in budget requests.
5. Enter and maintain Forest Service boundary management target accomplishments in the LSRS.
6. Develop and maintain a corner and boundary line maintenance program to ensure high visibility of marked boundary lines to prevent encroachments and the need for costly resurveys. Refer to FSH 5609.11, chapter 30 and 60.

5604.4 - District Ranger

The District Ranger has the responsibility to:

1. Inventory and assess the condition of boundary lines on the District and coordinate with the boundary management program to determine the resources needed to mark and maintain property-controlling corners and boundary lines to established Forest Service standards.
2. Coordinate with the boundary management organization to develop and implement a multi-year boundary management plan that:
 - a. Identifies and locates National Forest System property boundary and designated area boundary lines using accepted land survey procedures prior to beginning land and resource management activities occurring within one-quarter mile of those lines.
 - b. Accounts for planned land and resource management activities on National Forest System lands.
 - c. Protects National Forest System property boundary and designated area boundary lines, and boundary-controlling corners to established National and Regional standards through education, coordination, and enforcement.
 - d. Resolves in a timely manner property boundary and designated boundary line conflicts, unauthorized occupancy and use (such as encroachments and trespasses), and title claims on National Forest System lands.
3. Establish relationships with local jurisdictions and area planning organizations to become knowledgeable with and monitor development plans that have potential for encroachment onto National Forest System land.

5605 - Definitions

Administrative Boundaries. Land area boundaries that describe an administrative management unit or land area (such as Regional boundaries, conterminous Forest boundaries, Ranger District boundaries, and Administrative Site boundaries). Administrative boundaries do not identify title or ownership. However, these boundaries may have use and management restrictions or limitations different from adjoining Federal lands, and need to be located according to land survey standards.

Land Net. The geospatial orientation and layout of survey lines, parcel boundaries, controlling corners, and parcel corners that define the entire network of land managed and administered by the Forest Service.

Land Surveying. The application of specialized knowledge of the principles of mathematics; the related physical and applied sciences; and the relevant requirements of law to correctly measure, locate, and identify areas of land and water or to legally describe, plat, or map those areas for conveyance, acquisition, or recording. State laws further describe the profession of land surveying and should be consulted within each jurisdiction involved.

National Forest System Lands. Lands of the public estate administered by the Forest Service, title to which is vested in the United States of America. This includes lands reserved from the public domain or acquired lands managed by the Forest Service. This also includes riparian land which may be dry, temporarily or partially covered by water (such as floodplains, marsh land, swamps, streams, sloughs, and estuaries), or lands completely submerged under non-navigable bodies of water. This excludes lands where the Forest Service only administers partial interests, such as conservation easements, mineral rights, and rights-of-way easements (these are identified separately as National Forest System partial interests in lands).

Special Designated Area Boundary. The boundary between special designated areas and other National Forest System lands. These special designated areas include Wilderness, Wild and Scenic Rivers, National Monuments, National Recreation Areas, and other management areas designated by public law, proclamation, and land orders. Special designated area boundaries have legal standing; define areas that have use restrictions or limitations; and need to be located according to land survey standards.