

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

**Forest Service Manual 2300 – Recreation, Wilderness, And Related Resource Management
Chapter 2350 - Trail, River, and Similar Recreation Opportunities**

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

Section 2353.05: Adds new definitions for “bicycle,” “electric bicycle (e-bike),” “Class 1 e-bike,” “Class 2 e-bike,” and “Class 3 e-bike.

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Trail, river, and similar recreation opportunities occur over broad expanses of land or water in natural settings and accommodate recreational activities that involve relatively low-density use and limited infrastructure. These activities include hiking, caving, rock climbing, mountaineering, over-snow vehicle (OSV) use, cross-country skiing, horseback riding, bicycling, off-highway vehicle (OHV) use, driving for pleasure, boating, hunting, and fishing.

2350.2 – Objectives

1. Provide recreation-related opportunities for responsible use of National Forests and National Grasslands.
2. Provide opportunities for a variety of recreational pursuits, with emphasis on activities that harmonize with the natural environment and are consistent with the applicable land management plan.
3. Mitigate adverse impacts of recreational uses on natural, cultural, and historical resources and on other uses through education, outdoor ethics programs, and on-the-ground management, including law enforcement and restoration.

2350.3 – Policy

1. Manage trail, river, and similar recreation opportunities and their recreational access and support facilities under the principles enumerated in FSM 2303.
2. Emphasize recreation opportunities and supporting facilities that are consistent with applicable Recreation Opportunity Spectrum classes.
3. Coordinate management of trail, river, and similar recreation opportunities with management of neighboring recreational sites and facilities, including campgrounds, picnic areas, ski areas, resorts, and, as appropriate, recreational facilities off National Forest System (NFS) lands.
4. Coordinate management of trail, river, and similar recreational opportunities with other related resource management activities to maximize efficiency and integrate management objectives, as appropriate.
5. Regulate uses to the extent necessary to provide for user and public safety; to protect natural, cultural, and historical resources; to minimize conflict and maximize responsible use; to achieve recreation experience objectives; and to comply with Federal and State laws.
6. Designate a system of NFS roads, NFS trails, and areas on NFS lands where motor vehicle use is allowed (36 CFR Part 212, Subpart B; FSM 7710.1, para. 1) and a system of NFS roads, NFS trails, and areas on NFS lands where OSV use is allowed (36 CFR Part 212, Subpart C; FSM 7710.1, para. 1).
7. Inform users about management objectives.

8. Do not maintain unauthorized trails.
9. Inform users about low-impact recreation practices through our outdoor ethics partners Leave No Trace and Tread Lightly, as appropriate.

2353 – National Forest System Trails

2353.01 – Authority

2353.01a – Laws

The principal laws for administration of NFS trails are:

1. National Trails System Act (16 U.S.C. 1241 (note), 1241-1249). This act establishes a National Trails System containing National Recreation, National Scenic, and National Historic Trails and connecting and side trails for the purpose of providing recreation opportunities. The Act addresses trail development and administration and encourages the use of volunteers in the Forest Service's Trail program. The Act also authorizes agreements to carry out its purposes.
2. National Forest Roads and Trails Act (16 U.S.C. 532-538). This Act recognizes that construction and maintenance of an adequate system of roads and trails within and near the National Forests are essential to meeting the increasing demands for timber, recreation, and other uses. The Act establishes procedures related to rights-of-way, easements, construction, record-keeping, and agreements.
3. Surface Transportation Assistance Act of 1978, as amended (23 U.S.C. 101a, 201-204). This Act establishes criteria for forest highways, defines NFS roads and NFS trails, and authorizes funding for construction and maintenance of NFS roads and NFS trails.
4. Emergency Relief for Federally Owned Roads (ERFO) Program (23 U.S.C. 125). This program authorizes the Federal Highway Administration to make funds available for repair of federally owned roads and trails damaged or destroyed by natural disasters or catastrophic events.
5. Architectural Barriers Act of 1968, as amended (42 U.S.C. 4151 *et seq.*). This Act requires that all facilities designed, constructed, altered, or leased by a Federal agency be accessible to persons with disabilities.
6. Rehabilitation Act of 1973, as amended, Sections 504 and 508 (29 U.S.C. 794 and 794d). Section 504 of this Act (29 U.S.C. 794) prohibits Federal agencies and recipients of Federal financial assistance from discriminating against any person with a disability. Section 508 of this Act (29 U.S.C. 794d) requires that all electronic and information technology purchased or developed by a federal agency allow persons with disabilities to have access to and use of the information and data that are comparable to those provided to persons without disabilities.

7. Americans with Disabilities Act of 1990 (42 U.S.C. 12101 *et seq.*). This Act prohibits discrimination on the basis of disability by State or local governments and in public accommodation and public transportation. The ADA does not apply to Federal agencies except for Title V, section 507c. This provision clarifies that the Wilderness Act of 1964 is preeminent in federally designated wilderness areas, contains a definition of a wheelchair, and states that a device that meets that definition can be used wherever foot travel is permitted in federally designated wilderness areas (FSM 2353.05).

2353.01b – Regulations

The principal regulations for administration of NFS trails are:

1. Travel Management (36 CFR Part 212, Subparts A, B, and C).

a. Subpart A establishes requirements for administration of the forest transportation system, including NFS roads, NFS trails, and airfields on NFS lands, and contains provisions for acquisition of rights-of-way.

b. Subpart B describes the requirements for designating NFS roads, NFS trails, and areas on NFS lands for motor vehicle use and for identifying designated roads, trails, and areas on a motor vehicle use map (MVUM).

c. Subpart C describes the requirements for designating NFS roads, NFS trails, and areas on NFS lands for OSV use and for identifying designated roads, trails, and areas on an OSV use map (OSVUM).

2. Prohibitions (36 CFR Part 261). These regulations establish prohibitions necessary to manage and control use, including use of NFS trails. In particular, these regulations include a prohibition (36 CFR 261.13) on the use or possession of a motor vehicle on

NFS lands other than in accordance with designations established under 36 CFR 212.51, and a prohibition (36 CFR 261.14) on the use or possession of an OSV on NFS lands other than in accordance with designations established under 36 CFR 212.81. In addition, these regulations authorize issuance of orders that prohibit certain activities.

3. Wilderness and Primitive Areas (36 CFR Part 293). These regulations prohibit the use of motor vehicles in wilderness and primitive areas, with certain exceptions. Additionally, mechanical transport and motorboats are prohibited in wilderness areas, with certain exceptions.

4. Minerals (36 CFR 228.4). This provision prescribes the requirements for a plan of operation and access routes.

5. Enforcement of Nondiscrimination on the Basis of Disability in Programs or Activities of USDA (7 CFR Parts 15e and 15b). USDA regulations implementing section 504 of the Rehabilitation Act as it applies to programs and activities conducted by USDA are found at 7 CFR Part 15e. USDA regulations implementing section 504 of the

Rehabilitation Act as it applies to USDA-assisted programs are found at 7 CFR Part 15b. These provisions address program accessibility; requirements for accessible programs in new, altered, or existing facilities; accessibility transition planning; accessible communication requirements; and compliance procedures.

6. Architectural Barriers Act Accessibility Standards (41 CFR Part 102-76, Subpart C). These guidelines, which were issued by the Architectural and Transportation Barriers Compliance Board (Access Board) in 2004, apply to buildings and facilities subject to the Architectural Barriers Act and were adopted on November 8, 2005, by the General Services Administration (GSA) as accessibility standards to be used by federal agencies operating under the authority of GSA.

2353.01c – Executive Orders

Executive Order 11644, “Use of Off-Road Vehicles,” as amended by Executive Order 11989. These Executive Orders provide for regulations governing use of off-road vehicles on Federal lands to protect natural resources, promote public safety, and minimize conflicts among uses.

2353.01d – Other Authorities

1. Forest Service Outdoor Recreation Accessibility Guidelines (FSORAG). The FSORAG applies to recreation sites within the National Forest System boundaries that are not addressed in Federal accessibility guidelines or standards or when the FSORAG sets a standard for those programs, sites or facilities that is equal to or higher than that established by the Federal accessibility guidelines or standards. The FSORAG is available electronically at <http://www.fs.fed.us/recreation/programs/accessibility>. Copies of the FSORAG may also be obtained by writing to the Accessibility Program Manager, Recreation and Heritage Resources Staff, Washington Office.

2. Forest Service Trail Accessibility Guidelines (FSTAG). The FSTAG applies to new or altered trails in the NFS that are not addressed in Federal accessibility guidelines or standards, or when the FSTAG sets a standard for new or altered trails, sites, or facilities that is equal to or higher than that established by federal accessibility guidelines or standards. The FSTAG is available electronically at <http://www.fs.fed.us/recreation/programs/accessibility>. Copies of the FSTAG may also be obtained by writing to the Washington Office, Accessibility Program Manager, Recreation, Heritage, and Volunteer Resources Staff.

3. See FSM 2330.12 for related direction on authorities governing accessibility of recreation programs, sites, and facilities.

4. See FSM 5301 for authorities regarding law enforcement.

5. The amended Continental Divide National Scenic Trail Comprehensive Plan.

2353.02 – Objectives

1. Provide trail-related recreation opportunities that serve public needs and that meet land management and recreation policy objectives.
2. Provide trail-related recreation opportunities that emphasize the natural setting of NFS lands and that are consistent with land capability.
3. Provide trail access for management and protection of NFS lands.

2353.03 – Policy

1. Manage NFS trails to achieve the Trail Management Objectives identified for each trail (FSM 2353.12).
2. Provide a variety of trail opportunities, settings, and modes of travel consistent with the applicable land management plan.
3. Establish outstanding and qualified trails or trail networks as components of the National Trails System.
4. Emphasize long-term cost effectiveness and need when developing or rehabilitating trails.
5. Where needed, provide trail access for resource management and protection.
6. Inventory and include all NFS trails in the forest transportation atlas. Forest trails that are not under the jurisdiction of the Forest Service may also be included.
7. Provide a system of NFS trails that is environmentally, socially, and financially sustainable.
8. Designate NFS trails for motor vehicle use following the process identified in 36 CFR Part 212, Subpart B, and direction in FSM 7710, and designate trails for OSV use following the process identified in 36 CFR Part 212, Subpart C, and direction in FSM 7710.
9. Ensure that motor vehicle use of NFS trails is in accordance with designations established under 36 CFR 212.51 and direction in FSM 7710, and that OSV use of NFS trails is in accordance with designations established under 36 CFR 212.81 and direction in FSM 7710.
10. Issue a recreation event permit involving competitive use of NFS roads, NFS trails, and areas on NFS lands only when the event is appropriate for the NFS setting (FSM 2302 and 2303).

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11. Use signing as necessary to inform the public in accordance with EM-7100-15 and in coordination with local, State, and other Federal Trail Managers and Law Enforcement Officers.

12. Ensure that all new or altered trails with a Designed Use of Hiker/Pedestrian that connect directly to a trailhead or currently accessible trail comply with applicable Federal accessibility guidelines for trails and the FSTAG (FSM 2353.01a, para. 5-7; 2353.01b, para. 5-6; and 2353.01d, para. 1). The FSTAG applies when it establishes an equal or higher standard for trails than Federal accessibility standards (FSM 2353.01b, para.6).

13. Inform users about low-impact recreation practices through our outdoor ethics partners Leave No Trace and Tread Lightly!, as appropriate.

2353.04 – Responsibility

See FSM 7700 and 7710 for additional responsibilities related to travel management.

2353.04a – Secretary of Agriculture

The Secretary of Agriculture has delegated all actions prescribed by the National Trails System Act to the Chief in accordance with 7 CFR 2.60(a)(1) and (a)(7), except:

1. Appointment of a chairperson and members of the advisory council for a particular National Scenic or National Historic Trail.
2. Selection of the Department's representative on the advisory council for a National Scenic or National Historic Trail administered by another agency.

2353.04b – Chief of the Forest Service

The Chief of the Forest Service is responsible for:

1. Recommending to the Secretary National Scenic and National Historic Study Trails for inclusion in the National Trails System.
2. Approving and submitting National Scenic and National Historic Trail comprehensive management plans to Congress (16 U.S.C. 1244(e) and (f)).
3. When in the public interest, entering into an agreement with the Secretary of the Interior that transfers management responsibilities for segments of National Scenic or National Historic Trails (16 U.S.C. 1246(a)(1)(B)).
4. Selecting the corridor for National Scenic and National Historic Trails and publishing notice of availability of required maps and descriptions in the *Federal Register* (16 U.S.C. 1246(a)(2)).

5. Referring a recommended substantial relocation of a National Scenic or National Historic Trail to Congress for action (16 U.S.C. 1246(b)).

2353.04c – Deputy Chief for the National Forest System

The Deputy Chief for the National Forest System is responsible for:

1. Assigning Forest Service leadership for National Scenic and National Historic Trail studies conducted by the Forest Service or the Secretary of the Interior.
2. Consulting with the Secretary of the Interior on matters related to the National Trails System.

2353.04d – Washington Office, Director of Recreation, Heritage, and Volunteer Resources

The Washington Office, Director of Recreation, Heritage, and Volunteer Resources is responsible for:

1. Providing leadership for planning, development, and management of NFS trails.
2. Making recommendations regarding the Forest Service trail program and budget, including trail planning, construction and reconstruction, improvement, maintenance, operation, research, and monitoring.
3. Coordinating with national representatives of trail organizations, other agencies, affected tribes, and Members of Congress and preparing memoranda of understanding and cooperative agreements when appropriate.
4. Providing leadership for development and management of a trail information system capable of providing data to managers and the public.
5. Preparing regulations relating to development and operation of NFS trails.
6. Providing leadership for the management and sustainability of National Scenic and National Historic Trails, including establishment of connecting and side trails on NFS lands (16 U.S.C. 1245).
7. In coordination with the Secretary of the Interior, providing leadership for establishment of National Recreation Trails (16 U.S.C. 1243).
8. Working with national trail organizations and manufacturers of recreational equipment to achieve trail program objectives.
9. Providing leadership for designation, management, and monitoring of motor vehicle use and OSV use on NFS roads, on NFS trails, and in areas on NFS lands (36 CFR Part 212, Subparts B and C).

10. Identifying and coordinating research and monitoring to evaluate the effects of off-highway vehicles on NFS lands and on users' expectations, characteristics, and experiences.
11. Disseminating information to the public to enhance understanding of the proper use of motor vehicles for recreational purposes.
12. Developing, issuing, reviewing, and monitoring policy, functional standards, technical guidelines, specifications, and other requirements for planning, developing, operating, and maintaining trails.
13. Maintaining relationships with other agencies and user groups.
14. Providing leadership to the regions on appropriate trail operation, maintenance, planning, and design.

2353.04e – Washington Office, Director of Engineering

The Washington Office, Director of Engineering is responsible for:

1. Providing engineering expertise with respect to recreation activities involving the forest transportation system.
2. Providing leadership to the regions on engineering issues related to NFS trails.
3. Providing support to the recreation program in developing equipment and methods for construction, maintenance, and monitoring of trails.
4. Issuing technical specifications for sign and poster design, manufacture, and maintenance (FSM 7160.41b).
5. Approving the acquisition, installation, and use of non-standard symbols and traffic control devices (FSM 7160.41b).

2353.04f – Washington Office, Director of Law Enforcement and Investigations

The Washington Office, Director of Law Enforcement and Investigations is responsible for:

1. Providing regulatory and enforcement expertise with respect to recreation activities on NFS lands.
2. Coordinating with NFS Line Officers to ensure that law enforcement and compliance responsibilities are met (FSM 5304).

2353.04g – Regional Foresters

Regional Foresters are responsible for:

1. NFS Trails.

- a. Providing direction, consultation, assistance, technology transfer, and training to administrative units in their region for all phases of planning, development, operation, and maintenance of NFS trails.
- b. Ensuring that adequate levels of trail management skills exist in their region.
- c. Developing and maintaining effective working relationships with trail organizations and Tribal governments and coordinating regional trail programs and activities.
- d. Except as reserved to the Washington Office, Director of Engineering per FSM 7160.41, approving deviations from standards for the acquisition, design, and installation of signs and posters.

2. National Recreation Trails.

- a. Establishing National Recreation Trails on NFS lands.
- b. Establishing National Recreation Trails on non-NFS lands with the consent of cooperating Federal, State, and local agencies or private landowners.

3. National Scenic and National Historic Trails.

- a. Participating in the study, development, and operation of National Scenic and National Historic Trails administered by the Secretary of the Interior when those trails cross NFS lands.
- b. For trails administered by the Secretary of Agriculture:
 - (1) Recommending organizations and individuals to be represented on the advisory council and providing administrative support to the council.
 - (2) Approving the location of these trails within the applicable corridor and signing notices for the Federal Register of availability of maps and descriptions of the location of these trails (16 U.S.C. 1246(a)(2) and (b)). For trails that traverse multiple regions, the lead Regional Forester has this responsibility.
 - (3) Preparing and, if needed, revising a comprehensive plan and submitting the plan to the Chief for approval, in accordance with the National Trails System Act. For trails that traverse multiple regions, the lead Regional Forester has this responsibility.
 - (4) Entering into cooperative agreements with States, counties, or private organizations to construct, maintain, and manage those portions of the trail located on non-federal land outside the boundaries of the NFS.

- (5) When in the public interest, entering into cooperative agreements with States, local governments, private landowners, private organizations, or individuals to develop, operate, and maintain any part of a National Scenic or National Historic Trail.
- (6) Approving non-substantial relocations of National Scenic and National Historic Trails, publishing required notices in the Federal Register, and referring recommendations for substantial relocations to the Chief (16 U.S.C. 1246(b)). For trails that traverse multiple regions, the lead regional forester has this responsibility.
- c. Conducting studies authorized by the National Trails System Act to determine the feasibility and desirability of establishing trails as National Scenic or National Historic Trails. Where those studies involve more than one region, the region with the most trail mileage involved will be the lead region.
4. Connecting and Side Trails. Establishing connecting and side trails as components of National Recreation, National Scenic, or National Historic Trails, as appropriate, under Section 6 of the National Trails System Act.
5. Lead Forest Service Official for National Scenic and National Historic Trails. The Regional Forester for the following regions is the lead Forest Service official for coordinating matters concerning the study, planning, location, and operation of each of the following trails:
- a. Southern Region: Appalachian National Scenic Trail and Florida National Scenic Trail.
 - b. Rocky Mountain Region: Continental Divide National Scenic Trail.
 - c. Pacific Southwest Region: Pacific Crest National Scenic Trail.
 - d. Northern Region: Nez Perce (Nee Me Poo) National Historic Trail and Lewis and Clark National Historic Trail.
6. Trails Designated for Motor Vehicle Use and OSV Use.
- a. Ensuring that designations of motor vehicle use and OSV use for all administrative units under their supervision are completed in accordance with Executive Order 11644, as amended by Executive Order 11989, 36 CFR Part 212, Subpart B or C, as applicable, and FSM 7710.
 - b. Engendering cooperation and support of user groups on a regional basis to help achieve program objectives.
 - c. Providing program assessments through management review and monitoring per the applicable land management plan.

- d. Ensuring that MVUMs comply with the MVUM production guide, including collar contents and templates (36 CFR 212.56; FSM 7710).
- e. Ensuring that OSVUMs comply with the OSVUM production guide, including collar contents and templates (36 CFR 212.81(c); FSM 7710).

2353.04h – Regional Office, Director of Engineering

The Regional Office, Director of Engineering is responsible for the technical adequacy of design, construction, and routine inspection of trail bridges (FSM 7723).

2353.04i – Forest and Grassland Supervisors

Forest and Grassland Supervisors are responsible for:

1. Planning, developing, operating, and maintaining NFS trails.
2. Applying the Trail Fundamentals and National Quality Standards for Trails in accordance with FSM 2353.13 and 2353.15 for planning, management, and operation of NFS trails.
3. Designating appropriate NFS trails for motor vehicle use and OSV use in accordance with 36 CFR 212.51 or 212.81, as applicable, and FSM 7710. This responsibility may be delegated to District Rangers.
4. Maintaining a travel management atlas, including MVUMs, OSVUMs, and the forest transportation atlas, for the administrative unit under their supervision (FSM 7711).
5. Ensuring the availability of Trail Managers with expertise in the operation and maintenance of trails and the availability of Engineering, Recreation, and Forest Protection Officer support for management of NFS trails.
6. Preparing reports on establishment of National Recreation Trails and connecting and side trails.
7. Supporting and coordinating responsible use of NFS trails through appropriate outdoor ethics programs.
8. Consistent with the applicable land management plan, integrating management of trail use with other resource management programs.
9. Establishing monitoring intervals and criteria, practices, a sampling basis, and standards against which the effects of motor vehicle use will be evaluated and reported through land management planning and management review.
10. Coordinating with interested individuals and groups, adjacent administrative units, local, State, and other Federal agencies, Tribal governments, and Law Enforcement

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Officials in implementing and obtaining compliance with regulations affecting trail use, including designating trails for motor vehicle use.

11. Immediately closing trails to motor vehicle use or OSV use when it is directly causing or will directly cause considerable adverse effects, until it is determined that those adverse effects have been mitigated or eliminated and that measures have been implemented to prevent future recurrence (36 CFR 212.52(b)(2); 212.81(d)). This responsibility may not be delegated to the District Ranger.

12. Ensuring that sign planning addresses NFS trails in sufficient detail to aid public compliance with trail designations on an MVUM or OSVUM (FSM 7716.42).

13. Administration of the Continental Divide National Scenic Trail (CDNST), specifically:

- a. Developing and approving a CDNST unit plan to address the site-specific requirements of the National Trails System Act, as amended, and the CDNST Comprehensive Plan, as amended (FSM 2353.44b, para. 2). This authority may not be redelegated.
- b. Deciding if bicycle use will be allowed on the CDNST (FSM 2353.44b, para. 10). This authority may not be redelegated.
- c. Deciding if motor vehicle use will be allowed on the CDNST (FSM 2353.44b, para. 11). This authority may not be redelegated.
- d. Identifying and obtaining necessary access for the CDNST and coordinating with adjacent Federal administrative units (FSM 2353.44b, para. 5 and 6).
- e. Ensuring that CDNST related Geographic Information System (GIS) features and corresponding data are created properly and populated with current and accurate information.
- f. Encouraging the use of volunteers and volunteer organizations in planning, developing, maintaining, and managing the CDNST (16 U.S.C. 1250).

2353.04j – District Rangers

District Rangers are responsible for approving Trail Management Objectives (FSM 2353.12), unless that responsibility has been reserved by the Forest Supervisor.

2353.05 – Definitions

All-Terrain Vehicle (ATV). A type of off-highway vehicle that travels on three or more low-pressure tires; has handle-bar steering; is less than or equal to 50 inches in width; and has a seat designed to be straddled by the operator.

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Area. A discrete, specifically delineated space that is smaller, and, except for OSV use, in most cases much smaller, than a Ranger District (36 CFR 212.1).

Bicycle. A pedal-driven, solely human-powered device, with two wheels attached to a frame, one behind the other.

Design Parameters. Technical guidelines for the survey, design, construction, maintenance, and assessment of a trail, based on its Designed Use and Trail Class.

Designated Road, Trail, or Area. An NFS road, an NFS trail, or an area on NFS lands that is designated for motor vehicle use pursuant to 36 CFR 212.51 and identified on an MVUM.

Designation of OSV Use. Designation of an NFS road, an NFS trail, or an area on NFS lands where OSV use is allowed pursuant to 36 CFR 212.81.

Designed Use. The Managed Use of a trail that requires the most demanding design, construction, and maintenance parameters and that determines which design, construction, and maintenance parameters will apply to a trail.

Difficulty Level. The degree of challenge a trail presents to an average user's physical ability and skill, based on trail condition and route location factors such as alignment, steepness of grades, gain and loss of elevation, and amount and kind of natural barriers that must be crossed, and which may temporarily change due to weather.

- a. Easiest. A trail requiring limited physical ability and skill to travel.
- b. More Difficult. A trail requiring some physical ability and skill to travel.
- c. Most Difficult. A trail requiring a high degree of physical ability and skill to travel.

Electric Bicycle (E-Bike). Also referred to as an electric mountain bike (eMTB), a type of motor vehicle with two or three wheels, fully operable pedals, and an electric motor of not more than 750 watts that meets the requirements of one of the following three classes:

- a. Class 1 E-Bike. An e-bike equipped with a motor that provides assistance only when the rider is pedaling and that ceases to provide assistance when the e-bike reaches the speed of 20 miles per hour.
- b. Class 2 E-Bike. An e-bike equipped with a motor that may be used exclusively to propel the e-bike and that ceases to provide assistance when the e-bike reaches the speed of 20 miles per hour.

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- c. Class 3 E-Bike. An e-bike equipped with a motor that provides assistance only when the rider is pedaling and that ceases to provide assistance when the e-bike reaches the speed of 28 miles per hour.

Establishment of a National Recreation, Scenic, or Historic Trail. The designation, establishment, or authorization of a National Recreation, Scenic, or Historic Trail (16 U.S.C. 1243(a) and 1244(a)).

Forest Trail. A trail wholly or partly within or adjacent to and serving the NFS that the Forest Service determines is necessary for the protection, administration, and utilization of the NFS and the use and development of its resources (36 CFR 212.1).

Four-Wheel Drive Vehicle Greater Than 50 Inches in Width. An off-highway vehicle greater than 50 inches in width that operates on four wheels and with a drive train that allows all four wheels to receive power from the engine simultaneously.

Managed Use. A mode of travel that is actively managed and appropriate on a trail, based on its design and management.

Motorcycle. A two-wheeled motor vehicle on which the wheels are situated in a line, rather than side by side.

Motor Vehicle. Any vehicle which is self-propelled, other than:

- a. A vehicle operated on rails; and
- b. Any wheelchair or mobility device, including one that is battery-powered, that is designed solely for use by a mobility-impaired person for locomotion and that is suitable for use in an indoor pedestrian area (36 CFR 212.1).

Motor Vehicle Use Map (MVUM). A map reflecting designated roads, trail, and areas on an administrative unit or a ranger district of the NFS (36 CFR 212.56; FSM 7711.3).

National Forest System Trail. A forest trail, other than a trail which has been authorized by a legally documented right-of-way held by a state, county, or other local public road authority (36 CFR 212.1).

National Quality Standards for Trails. National criteria that establish the level of quality in terms of health and cleanliness, resource setting, safety and security, responsiveness, and condition of facilities for NFS trails managed at a full-service level.

National Trails System Components. National Recreation Trails, National Scenic Trails, National Historic Trails, and connecting and side trails (16 U.S.C. 1243-1245).

Off-Highway Vehicle (OHV). Any motor vehicle designed for or capable of cross-country travel on or immediately over land, water, sand, snow, ice, marsh, swampland, or other natural terrain (36 CFR 212.1).

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Over-Snow Vehicle (OSV). A motor vehicle that is designed for use over snow and that runs on a track or tracks and/or a ski or skis, while in use over snow (36 CFR 212.1).

OSV Use Map. A map reflecting roads, trails, and areas designated for OSV use on an administrative unit or a ranger district of the NFS (36 CFR 212.81; FSM 7711.4).

Route. A road or trail.

Snowmobile. An over-snow vehicle that operates on a track, uses one or more skis for steering, and has handle-bar steering and a seat designed to be straddled by the operator.

Temporary Trail. A trail necessary for emergency operations or authorized by contract, permit, lease, or other written authorization that is not a forest trail and that is not included in a forest transportation atlas (36 CFR 212.1).

Trail. A route 50 inches or less in width or a route over 50 inches wide that is identified and managed as a trail (36 CFR 212.1).

Trail Class. The prescribed scale of development for a trail, representing its intended design and management standards.

Trail Fundamentals. The five concepts that are the cornerstones of Forest Service trail management, including Trail Type, Trail Class, Managed Use, Designed Use, and Design Parameters.

Trail Management Objectives. Documentation of the intended purpose and management of an NFS trail based on management direction, including access objectives.

Trail Type. A category that reflects the predominant trail surface and general modes of travel accommodated by a trail.

- a. Standard Terra Trail. A trail that has a surface consisting predominantly of the ground and that is designed and managed to accommodate use on that surface.
- b. Snow Trail. A trail that has a surface consisting predominantly of snow or ice and that is designed and managed to accommodate use on that surface.
- c. Water Trail. A trail that has a surface consisting predominantly of water (but may include land-based portages) and that is designed and managed to accommodate use on that surface.

Trailhead. The transfer point between a trail and a road, water body, or airfield, which may have developments that facilitate transfer from one mode of transportation to another. For purposes of the FSTAG (FSM 2353.27), a trailhead is a site designed and developed to provide staging for trail use and does not include:

- a. Junctions between trails where there is no other access.

- b. Intersections where a trail crosses a road or users have developed an access point, but no improvements have been provided beyond minimal signage for public safety.

Unauthorized Trail. A trail that is not a forest trail or a temporary trail and that is not included in a forest transportation atlas (36 CFR 212.1).

Utility Terrain Vehicle (UTV) or Side-by-Side. A type of off-highway vehicle that travels on 4 or more low-pressure tires, has a steering wheel or tiller, provides side-by-side seating, and is of various widths.

Wheelchair or Mobility Device. A device, including one that is battery-powered, that is designed solely for use by a mobility-impaired person for locomotion, that is suitable for use in an indoor pedestrian area, and that may be used by a person whose disability requires its use anywhere that foot travel is permitted (Title V, sec. 507c, of the Americans With Disabilities Act and 36 CFR 212.1).

2353.1 – Administration of NFS Trails

Comply with the direction in FSH 2309.18, Trails Management Handbook.

2353.11 – Relationship Between National Recreation, National Scenic, and National Historic Trails and NFS Trails

Manage National Recreation, National Scenic, and National Historic Trails as NFS trails. Administer each National Recreation, National Scenic, and National Historic Trail corridor to meet the intended nature and purposes of the corresponding trail (FSM 2353.31).

2353.12 – Trail Management Objectives (TMOs)

Manage each trail to meet the TMOs identified for that trail, based on applicable land management plan direction, travel management decisions, trail-specific decisions, and other related direction, as well as management priorities and available resources. For each NFS trail or NFS trail segment, identify and document its TMOs, including the five Trail Fundamentals, Recreation Opportunity Spectrum classifications, design criteria, travel management strategies, and maintenance criteria.

2353.13 – Trail Fundamentals

Identify the five Trail Fundamentals for each NFS trail or trail segment based on applicable land management plan direction, travel management decisions, trail-specific decisions, and other related direction. Each Trail Fundamental is addressed in FSH 2309.18, section 14.

2353.14 – Recreation Opportunity Spectrum (ROS)

Use the ROS in trail planning, development, and operation (FSM 2310 and FSH 2309.18, Trails Management Handbook, chapter 10).

2353.15 – National Quality Standards for Trails

Apply the National Quality Standards for Trails in the planning, construction, maintenance, condition assessment, and management of NFS trails, in accordance with FSH 2309.18, section 15.

2353.16 – Cooperative Agreements and Rights-of-Way

Use cooperative agreements or acquisition authorities as appropriate to protect National Recreation, National Scenic, and National Historic Trails and their corridors (National Trails System Act (16 U.S.C. 1246(e) and FSM 5400).

2353.17 – Accessibility

1. Ensure that all new or altered trails with a Designed Use of Hiker/Pedestrian that connect directly to a trailhead or currently accessible trail comply with Federal and Forest Service accessibility guidelines and standards (FSM 2353.01c, para.1-6). The FSTAG applies to trails when it establishes an equal or higher standard for those trails than federal accessibility standards (FSM 2353.01c, para. 2). The FSTAG is available at <http://www.fs.fed.us/recreation/programs/accessibility>.
2. Under section 504 of the Rehabilitation Act of 1973, no person with a disability can be denied participation in a Federal program that is available to all other people solely because of their disability. Consistent with 36 CFR 212.1, FSM 2353.05, and Title V, Section 507(c), of the Americans With Disabilities Act, wheelchairs and mobility devices, including those that are battery-powered, that are designed solely for use by a mobility-impaired person for locomotion and that are suitable for use in an indoor pedestrian area are allowed on all NFS lands that are open to foot travel.
3. There is no legal requirement to allow persons with disabilities to use motor vehicles on roads, on trails, and in areas that are closed to motor vehicle use. Restrictions on motor vehicle use that are applied consistently to everyone are not discriminatory. Generally, granting an exemption from designations for people with disabilities would not be consistent with the resource protection and other management objectives of designation decisions and would fundamentally alter the nature of the Forest Service's travel management program (29 U.S.C. 794; 7 CFR 15e.103).

2353.18 – Cooperative Relationships and Volunteers

Develop cooperative relationships with local, State, and other Federal agencies and Tribal governments, organizations, and private individuals on matters concerning NFS trails. Wherever appropriate, enlist volunteers and volunteer organizations in developing and maintaining trails (16 U.S.C. 1241(c)).

2353.2 – Trail Management

1. Develop and implement Trail Management Objectives for each NFS trail as specified in FSM 2353.12.
2. When planning, evaluating, and managing NFS trails and trail system networks, where appropriate, consider linking routes into cohesive and expanded trail networks through collaboration with local, State, and other Federal agencies and Tribal governments.
3. Minimize use conflicts by educating the public about outdoor ethics for responsible trail use, using Leave No Trace and/or Tread Lightly!.

2353.2a – Information

1. Use appropriate and effective communication methods to ensure understanding of management strategies and requirements.
2. Use our outdoor ethics partners, Leave No Trace and/or Tread Lightly!, to communicate a consistent responsible use message and to leverage appropriated dollars for the benefit of the public.
3. Use our outdoor ethics partner, Leave No Trace, including national educational campaigns such as *PEAK* and *Hot Spots* to communicate a consistent responsible use message and to leverage appropriated dollars for the benefit of the public. See 2353.28a for related direction on communications related to motorize and recreational shooting activities.

2353.2b – Safety

Promote public safety through cooperation with user groups, dissemination of information, public contact, and active enforcement.

2353.21 – Trail Inventory

Inventory all NFS trails, and record the inventory in the Infra Trails Module.

2353.22 – Documentation

1. Document all NFS trails in an administrative unit in the applicable forest transportation atlas (see FSM 7711.2). Use the Forest Service Infra database and the transportation layer of the geographical information system (GIS) for the storage and analysis of information in a forest transportation atlas.
2. Identify NFS trails on a map of suitable scale, and make it available to the public at offices of the Forest Supervisor, District Ranger, and cooperators.

3. Link the Infra data to the transportation layer in the GIS, and record travel management strategies in the Infra Access and Travel Management (ATM) Module.

2353.23 – Signing

1. Sign NFS trails, as appropriate, using standard designs and procedures in Engineering Manual 7100-15, Sign and Poster Guidelines for the Forest Service.
2. Consult with the Regional Sign Coordinator to ensure compliance with the process for approving non-standard signs (EM-7100-15).

2353.24 – Establishment of Management Priorities

See FSH 2309.18, Trails Management Handbook, chapter 10, for direction on establishment of management priorities.

2353.25 – Development, Reconstruction, Maintenance, and Decommissioning

1. Follow the direction in FSH 2309.18, Trails Management Handbook, chapters 10 and 20, when developing, reconstructing, or maintaining trails.
2. Consider available resources and maintenance costs when deciding to construct new trails, reconstruct existing trails, or convert other types of routes to NFS trails.
3. Consider decommissioning trails when alternative routes are available.

2353.26 – Preconstruction and Construction

See FSH 2309.18, Trail Management Handbook, chapter 30, for direction on preconstruction and reconstruction of NFS trails. As applicable, when constructing trails, comply with EM-7720-103, “Standard Specifications for Construction of Trails,” and EM-7720-104, “Standard Drawings for the Construction and Maintenance of Trails.”

2353.27 – Operation and Maintenance

See FSH 2309.18, Trails Management Handbook, chapter 40, for direction on management, operation, and maintenance of NFS trails.

2353.28 – Management of Motor Vehicle Use and OSV Use

1. Direction on travel planning and analysis, including designation of NFS roads, NFS trails, and areas on NFS lands for motor vehicle use and OSV use, is contained in FSM 7700 and 7710 and FSH 7709.55. Trails open to motor vehicle use must be designated through the process established in 36 CFR Part 212, Subpart B, and FSM 7710. Trails open to OSV use must be designated through the process established in 36 CFR Part 212, Subpart C, and FSM 7710 where snowfall is adequate for that use to occur.

2. After these roads, trails, and areas are designated and identified on an MVUM or OSVUM, motor vehicle use or OSV use not in accordance with these designations is prohibited by 36 CFR 261.13 or 36 CFR 261.14.
3. Administrative units or Ranger Districts, or parts of administrative units or Ranger Districts, where snowfall is not adequate for OSV use to occur are exempt from the designation requirement (36 CFR 212.81(a)). In these cases, provide public notice (for example, in local papers, on a unit's website, or through other media), and include documentation in the unit's or District's travel management files briefly explaining why the unit or District or part of the unit or District does not have adequate snowfall for OSV use to occur, for example, based on average temperatures and snowfall and National Visitor Use Monitoring Data. Upon issuance of the public notice, any OSV use in the unit or District or part of the unit or District that does not have adequate snowfall will be prohibited (36 CFR 261.14).
4. Motor vehicle use and OSV use on National Scenic and National Historic Trails must be consistent with the National Trails System Act (16 U.S.C. 1244 and 1246(c)).
5. Consider linking routes into a cohesive trail system for motor vehicle use or OSV use.
6. In areas where use conflicts occur, attempt to minimize conflicts by educating the public about outdoor ethics for responsible use, using Leave No Trace and/or Tread Lightly. Where trails are scarce and conflicts are likely, consider physical or temporal separation of uses.

2353.28a – Information

1. Publish an MVUM or OSVUM clearly identifying NFS roads, NFS trails, and areas on NFS lands designated for motor vehicle use or OSV use (FSM 7711.3).
2. Use appropriate and effective communication methods to ensure understanding of motor vehicle management strategies and requirements.
3. Use our outdoor ethics partner, Tread Lightly!, including national educational campaigns such as *Ride On* and *Respected Access is Open Access* to communicate a consistent responsible use message and to leverage appropriated dollars for the benefit of the public.

2353.28b – Safety

1. Promote public safety through cooperation with user groups, dissemination of information, public contact, and active enforcement. For example, in areas of concentrated public use or where there may be an unusual level of risk involved in OHV use, it may be desirable to place conspicuous warnings in written material distributed to the public or on signs. Consult with the local Office of the General Counsel in connection with placement and wording of warnings.

2. Coordinate with Law Enforcement and Investigations personnel in developing safety education programs, identifying safety issues, and in developing enforcement programs.
3. Review mixed use analysis (FSH 7709.55, chapter 30) as necessary when existing conditions (such as State law or traffic type or volume) change to ensure public safety.

2353.28c – Signing for Motor Vehicle Use and OSV Use

For direction on signing, see FSM 7716.42.

2353.28d – Regulation of Use

1. Designate those NFS roads, NFS trails, and areas on NFS lands that are open to motor vehicle use by vehicle class and, if appropriate, by time of year in accordance with 36 CFR 212.51.
2. Designate those NFS roads, NFS trails, and areas on NFS lands that are open to OSV use and, if appropriate, designate those routes and areas by vehicle class and time of year in accordance with 36 CFR 212.81.
3. Temporary, emergency closures may be implemented pursuant to 36 CFR 212.52(b)(1) and 36 CFR Part 261, Subpart B, without advance public notice to provide short-term resource protection or to protect public health and safety.
4. Temporary, emergency closures must be implemented if the Forest Supervisor determines that motor vehicle use or OSV use on an NFS road or NFS trail or in an area on NFS lands is directly causing or will directly cause considerable adverse effects on public safety or soil, vegetation, wildlife, wildlife habitat, or other natural or cultural resources associated with that trail or area (36 CFR 212.52(b)(2), 212.81(d)).
5. Temporary, emergency closures implemented under this paragraph must remain in effect until the Forest Supervisor determines that such adverse effects have been mitigated or eliminated and that measures have been implemented to prevent future recurrence (36 CFR 212.52(b)(2), 212.81(d)). Coordinate closure orders with Law Enforcement and Investigations personnel.
6. Sign temporary, emergency closures in accordance with EM 7100-15.

2353.28e – Law Enforcement

Coordinate enforcement of trail designations and other enforcement issues associated with trails with Law Enforcement and Investigations personnel (FSM 5300 and 7716.54 and FSH 5309.11).

2353.28f – Permits

1. Require permits for:

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- a. Commercial filming (36 CFR 251.50(d)(1); FSH 2709.11, ch. 40);
 - b. Still photography (36 CFR 251.50(d)(1); FSH 2709.11, ch. 40);
 - c. Outfitting and guiding (36 CFR 251.50(d)(1); FSH 2709.11, ch. 40);
 - d. Recreation events (36 CFR 251.50(d)(1); FSM 2721.49); and
 - e. Noncommercial group uses (36 CFR 251.50(d)(1); FSM 2723.11).
2. Authorize motor vehicle use or OSV use on NFS roads and NFS trails and in areas on NFS lands that are not designated for motor vehicle use or OSV use under a permit or other written authorization issued under Federal law or regulations (36 CFR 212.51(a)(8), 212.81(a)(5)).

2353.28g – Permit Issuance

See FSM 1950, 2700, and 2710 and FSH 2709.11, chapter 10.

2353.28h – Permits for Recreation Events Involving Motor Vehicle Use

1. In issuing permits for recreation events involving motor vehicle use, consider, with the objective of minimizing, adverse effects on natural and cultural resources; promote activities in harmony with the natural terrain; and enhance the experience and appreciation of the NFS. Examples include events based on a driver's ability to travel without environmental or machine abuse, traveling in a predetermined safe time over an environmentally acceptable route, and following that route by map and compass or GPS. See FSM 2721.49 for direction on recreation event permits.
2. Do not issue permits for motorized recreation events involving:
 - a. Activities that are inappropriate on NFS lands or NFS trails, such as events involving obstacle courses or hill climbs, drag or acceleration events, or pulling vehicles or heavy objects (FSM 2302 and 2303).
 - b. Competitive events that can reasonably be accommodated off NFS lands.
 - c. Activities that are not appropriate for a National Forest or National Grassland setting.

2353.28i – Monitoring Effects of Motor Vehicle Use and OSV Use

Monitor the effects of motor vehicle use and OSV use (36 CFR 212.57, 212.81(d); FSM 7717). Use applicable criteria established in 36 CFR 212.55 as a basis for identifying effects to monitor.

2353.28j – Relationship Between NFS Roads and NFS Trails Designated for Motor Vehicle Use or OSV Use

1. NFS roads and NFS trails designated for motor vehicle use or OSV use provide different recreation opportunities and may serve different purposes. Driving on trails may present different challenges and require different skills from driving on roads. Trails designed for motor vehicles or OSVs are generally characterized by narrower treads and clearing limits, slower speeds, narrower turning radii, and a more intimate experience with the surrounding landscape than roads designed for motor vehicles. While roads often provide a recreation experience, they are usually intended to provide access for multiple purposes on NFS lands and may connect neighboring communities. Visitors value roads as a means of access to NFS lands and as connections between NFS destinations such as trailheads, campgrounds, and overlooks, as well as a means of recreation.
2. Manage a route identified in a forest transportation atlas as an NFS road in accordance with applicable RMOs. Manage a route identified in a forest transportation atlas as an NFS trail in accordance with applicable TMOs. An NFS road and an NFS trail can overlap. For example, a route may be managed as a road in the summer for motor vehicle use and as a trail in the winter for OSV use.
3. Local engineering and recreation staffs should coordinate, as appropriate, to provide for complementary management of designated NFS roads and designated NFS trails. For example, it may be appropriate for the two staffs to coordinate regarding the various classes of motor vehicles that are allowed on a designated NFS trail that overlaps a designated NFS road.

2353.29 – Difficulty Levels

1. For trails with a Designed Use of Hiker/Pedestrian, refer to the direction on signs in section 7.3.10 of the FSTAG.
2. For other trail uses, as deemed appropriate based on the applicable Trail Class, Managed Uses, and Designed Use and other management considerations, difficulty levels may be used to communicate to trail users what to expect when using a trail and to broaden their recreation experience by introducing various degrees of challenge.
3. If difficulty levels are used, their symbols may be displayed on maps, brochures, and signs (FSH 2309.18, ch. 20).
4. If a difficulty level is assigned to a trail, specify the Managed or Designed Use to which the difficulty level applies (FSH 2309.18, ch. 20). Specification of the Managed or Designed Use to which the difficulty level applies is particularly important on trails where more than one use occurs.

2353.3 – Administration of National Recreation, National Scenic, and National Historic Trails

2353.31 – Policy

1. The National Trails System (16 U.S.C. 1242(a)) includes:
 - a. National Recreation Trails. These trails provide a variety of outdoor recreation opportunities and are accessible from urban areas.
 - b. National Scenic Trails. These extended trails are located so as to provide for maximum outdoor recreation potential and for conservation and enjoyment of the nationally significant scenic, historic, natural, or cultural qualities of the areas through which these trails pass (16 U.S.C. 1242(a)(2)).
 - c. National Historic Trails. These trails follow as closely as possible a route of historic significance, so as to protect the route and its artifacts for public use and enjoyment.
 - d. Connecting and Side Trails. These trails are components of National Recreation, National Scenic, and National Historic Trails (16 U.S.C. 1245). Connecting and side trails provide access to and alternate routes for National Recreation, National Scenic, and National Historic Trails.
2. Ensure that management of each trail in the National Trails System addresses the nature and purposes of the trail and is consistent with the applicable land management plan (16 U.S.C. 1246(a)(2)).
3. TMOs for a National Recreation, National Scenic, or National Historic Trail should reflect the nature and purposes for which the trail was established.

2353.32 – Administration of Connecting and Side Trails

Establish connecting and side trails where appropriate (16 U.S.C. 1245). Connecting and side trails complement National Recreation, National Scenic, and National Historic Trails by providing additional public access or additional recreational opportunities. Manage connecting and side trails in accordance with the direction for the trails they complement.

2353.4 – Administration of National Scenic and National Historic Trails

2353.41 – Objectives

Develop and administer National Scenic and National Historic Trails to ensure protection of the purposes for which the trails were established and to maximize benefits from the land.

2353.42 – Policy

Administer National Scenic and National Historic Trail corridors to be compatible with the nature and purposes of the corresponding trail.

CDNST. The nature and purposes of the CDNST are to provide for high-quality scenic, primitive hiking and horseback riding opportunities and to conserve natural, historic, and cultural resources along the CDNST corridor.

2353.43 – Development of the National Scenic and National Historic Trail System

National Scenic Trails, National Historic Study Trails, and National Historic Trails are established by act of Congress (16 U.S.C. 1244(a)-(c)).

2353.43a – National Historic Study Trails

Conduct studies of National Historic Study Trails in accordance with sections 5(b) and 5(c) of the National Trails System Act (16 U.S.C. 1244(b) and (c)).

2353.43b – Administration of National Scenic and National Historic Trails

1. Form an advisory council within 1 year of establishment of a National Scenic or National Historic Trail (16 U.S.C. 1244(d)).
2. When it is in the public interest, transfer management responsibilities for a segment of a National Scenic or National Historic Trail from the U. S. Department of Agriculture to the U. S. Department of the Interior through a memorandum of understanding (MOU) between the two departments. Develop, operate, and maintain the trail segment for which management responsibilities have been transferred under the laws, regulations, and policies of the department acquiring the management responsibilities, except to the extent the MOU expressly provides otherwise (16 U.S.C. 1246(a)(1)(B)).
3. The Secretary shall submit to Congress a comprehensive trail management plan within 2 fiscal years of establishment of a National Scenic or National Historic Trail, and after consulting with affected Federal agencies, States, and the trail's advisory council, in accordance with section 5(f) of the National Trails System Act (16 U.S.C. 1244(f)).

2353.43c – Relocation of National Scenic and National Historic Trails

A segment of a National Scenic or National Historic Trail corridor may be relocated to preserve the nature and purposes for which the trail was established and to promote sound multiple-use management. Relocation requires the consent of the agency with jurisdiction over the underlying land. Publish notice of the relocation in the Federal Register. Substantial relocations require an act of Congress (16 U.S.C. 1246(b)).

2353.44 – Management of National Scenic and National Historic Trails

2353.44a – National Scenic and Historic Trails in General

1. Develop and, if necessary, revise a comprehensive plan for acquisition, management, development, and use of each National Scenic and National Historic Trail (16 U.S.C. 1244(e) and (f)).
2. Manage each National Scenic and National Historic Trail in a wilderness area so that the trail and its associated uses are compatible with wilderness management direction.
3. Except as provided in the applicable enabling legislation, do not designate a National Scenic Trail for motor vehicle use. Motor vehicle use of a National Scenic Trail may be specifically authorized as necessary to meet emergencies or to enable access by adjacent landowners (16 U.S.C. 1246; 36 CFR 212.51).
4. National Historic Trails may be designated for motor vehicle use if the designation is made when the trail is established as a National Historic Trail and motor vehicle use will not substantially interfere with the nature and purposes of the trail.

2353.44b – Continental Divide National Scenic Trail (CDNST)

1. The land management plan for an administrative unit through which the CDNST passes must provide for the nature and purposes of the CDNST (FSM 2353.42) and, in accordance with the programmatic requirements of the National Trails System Act, as amended (16 U.S.C. 1244(f)), and the CDNST Comprehensive Plan, as amended, must:
 - a. Except where the CDNST traverses a wilderness area and is governed by wilderness management prescriptions (36 CFR Part 293), establish a management area for the CDNST that is broad enough to protect natural, scenic, historic, and cultural features (FSH 1909.12);
 - b. Prescribe desired conditions, objectives, standards, and guidelines for the CDNST; and
 - c. Establish a monitoring program to evaluate the condition of the CDNST in the management area.
2. A CDNST unit plan must be developed for each administrative unit through which the CDNST passes. Each CDNST unit plan must provide for the nature and purposes of the CDNST (FSM 2353.42), and, in accordance with the site-specific requirements in the National Trails System Act, as amended (16 U.S.C. 1244(f)), and the CDNST Comprehensive Plan, as amended, must:
 - a. Identify and display the segments of the CDNST that traverse that unit.

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- b. Except where the CDNST traverses a wilderness area and is governed by wilderness management prescriptions (36 CFR Part 293) and except where delineated in the applicable land management plan, establish a management area for the segments of the CDNST that traverse that unit that is broad enough to protect natural, scenic, historic, and cultural features (FSH 1909.12);
 - c. Establish the Trail Class, Managed Uses, Designed Use, and Design Parameters for the segments of the CDNST that traverse that unit and identify uses that are prohibited on the segments of the CDNST that traverse that unit (FSH 2309.18).
 - d. Provide for development, construction, signing, and maintenance of the segments of the CDNST that traverse that unit.
 - e. Identify and preserve significant natural, historical, and cultural resources along the sections of the CDNST corridor that traverse that unit.
 - f. Consistent with the provisions of the applicable land management plan and the nature and purposes of the CDNST (FSM 2353.42), establish carrying capacity for the segments of the CDNST that traverse that unit (FSM 2353.44b, para. 1). The Limits of Acceptable Change or a similar system may be used for this purpose.
 - g. Establish monitoring programs to evaluate the site-specific conditions of the CDNST.
3. Monitor implementation of a CDNST unit plan by establishing a program to evaluate and report on the overall condition of the segment of the CDNST that traverses that unit. To the extent practicable, utilize information collected through land management planning and site-specific monitoring programs.
4. The CDNST may be located in a wilderness area (16 U.S.C. 1131-1136). Recreational use on the CDNST in a wilderness area is governed by regulations at 36 CFR Part 293. Where the CDNST is located in a congressionally designated wilderness study area or an area recommended for designation as a wilderness area in the land management plan, manage the CDNST so as to leave the area unimpaired for inclusion in the National Wilderness Preservation System.
5. Where the CDNST crosses private property, it should be located within the scope of a permanent easement (FSM 5460.3). Address CDNST access needs in assessing adjustments to land ownership in an administrative unit. Do not acquire land or an interest in land outside the boundary of a federally administered area for the CDNST without the owner's consent (16 U.S.C. 1244(a)(5)). Do not acquire fee title of more than an average of one quarter mile on either side of the CDNST.
6. Cooperative agreements may be executed with other federal agencies and state, local, and tribal governments for CDNST purposes (16 U.S.C. 1246(h)).

7. Use the Scenery Management System (FSM 2382.1; *Landscape Aesthetics: A Handbook for Scenery Management*, Agricultural Handbook 701, 1995, <http://www.fs.fed.us/cdt>) in developing CDNST unit plans and managing scenery along the CDNST. The one-half mile foreground viewed from either side of the CDNST travel route must be a primary consideration in delineating the boundary of a CDNST management area (para. 2b). The CDNST is a concern level 1 route (*Landscape Aesthetics*, page 4-8), with a scenic integrity objective of high or very high, depending on the trail segment (*Landscape Aesthetics*, page 2-4).

8. Manage the CDNST to provide high-quality scenic, primitive hiking and pack and saddle stock opportunities. Backpacking, nature walking, day hiking, horseback riding, nature photography, mountain climbing, cross-country skiing, and snowshoeing are compatible with the nature and purposes of the CDNST (FSM 2353.42). Use the Recreation Opportunity Spectrum (ROS) and the ROS Users Guide in delineating and integrating recreation opportunities in CDNST unit plans and managing the CDNST (FSM 2311.1). Where possible, locate the CDNST in primitive and semi-primitive non-motorized ROS classes, provided that the CDNST may have to traverse intermittently through more developed ROS classes to provide for continuous travel between the Montana-Canada and New-Mexico-Mexico borders. Locate a CDNST segment on a road only where it is primitive and offers recreational opportunities comparable to those provided by a trail with a Designed Use of Pack and Saddle Stock, provided that the CDNST may have to be located on or across designated routes because of the inability to locate the trail elsewhere (FSM 2353.44b, para. 11).

9. Generally, segments of the CDNST should fall into Trail Class 2 or 3 and have a Designed Use of Pack and Saddle Stock (FSH 2309.18). However, a CDNST segment may fall into Trail Class 1, 2, or 3 and have a Designed Use of Hiker/Pedestrian where a substantial safety or resource concern exists or the direction for the management area provides only for hiker/pedestrian use. Where a CDNST segment has a Designed Use of Hiker/Pedestrian, consider establishing side trails to accommodate pack and saddle stock needs (16 U.S.C. 1245). If the interval between natural water sources is excessive, consider developing and protecting water sources for hikers and pack and saddle stock use.

10. Bicycle use may be allowed on the CDNST (16 U.S.C. 1246(c)), using the appropriate trail design standards, if the use is consistent with the applicable CDNST unit plan and will not substantially interfere with the nature and purposes of the CDNST (FSM 2353.42).

11. Motor vehicle use by the general public is prohibited on the CDNST, unless that use is consistent with the applicable CDNST unit plan and:

- a. Is necessary to meet emergencies;
- b. Is necessary to enable adjacent landowners or those with valid outstanding rights to have reasonable access to their lands or rights;

- c. Is for the purpose of allowing private landowners who have agreed to include their lands in the CDNST by cooperative agreement to use or cross those lands or adjacent lands from time to time in accordance with Forest Service regulations;
- d. Is on a motor vehicle route that crosses the CDNST, as long as that use will not substantially interfere with the nature and purposes of the CDNST (FSM 2353.42);
- e. Is designated in accordance with 36 CFR Part 212, Subpart B, and:
 - (1) The designated vehicle class and width were allowed on that segment of the CDNST prior to November 10, 1978, and the use will not substantially interfere with the nature and purposes of the CDNST (FSM 2353.42) or
 - (2) The designated segment was constructed as a road prior to November 10, 1978; or
- f. In the case of over-snow vehicles, is allowed in accordance with 36 CFR Part 212, Subpart C, and the use will not substantially interfere with the nature and purposes of the CDNST (FSM 2353.42).

2353.45 – Cooperative Management of National Scenic and National Historic Trails

Provide for development and maintenance of National Scenic and National Historic Trails where they traverse Federal land, and cooperate with and encourage States to operate, develop, and maintain National Scenic and National Historic Trail segments located outside the boundaries of Federal lands. When in the public interest, enter into cooperative agreements with States and local governments, landowners, private organizations, and individuals to operate, develop, or maintain any portion of National Scenic and National Historic Trails either on or off Federal lands. The agreements may include provisions for limited financial assistance to encourage participation in the acquisition, protection, operation, development, or maintenance of these trails (16 U.S.C. 1246(h)(1) and 1250).

2353.5 – Administration of National Recreation Trails

2353.51 – Policy

1. In establishing National Recreation Trails, integrate them into a trail network where possible. Establish interconnecting trails as National Recreation Trails where a number of them meet the applicable criteria.
2. NFS trails designated for motor vehicle use also may be established as National Recreation Trails.
3. Do not establish a National Recreation Trail entirely in a wilderness area. A segment of a National Recreation Trail may be located in a wilderness area.
4. Avoid overlapping a National Recreation Trail with a National Scenic Trail or National Historic Trail.

5. The Regional Forester may establish National Recreation Trails on NFS lands and on lands not under the jurisdiction of the Forest Service with the written consent of the administering agency or private land owner.

2353.52 – Establishment of National Recreation Trails

Regional Foresters may establish National Recreation Trails (FSM 2353.04) as provided in section 4 of the National Trails System Act (16 U.S.C. 1243). These trails should represent outstanding recreation opportunities and contribute to a network of National Recreation Trails.

2353.53 – Criteria for Establishment of National Recreation Trails

A National Recreation Trail must:

1. Be an NFS trail that already exists and is available for public use.
2. Be consistent with the applicable land management plan.
3. Provide a day-use or extended trail experience for a variety of recreation opportunities within approximately 2 hours drive of a population center.
4. Provide a trail experience, rather than a road experience, although short segments of roads, generally less than one mile, may be incorporated into the trail to provide continuity.
5. Incorporate the significant natural and cultural features of the area through which the trail passes.

2353.54 – Establishment Reports for National Recreation Trails

Prepare an establishment report for each National Recreation Trail, and submit it to the Regional Forester. The report must include the following:

1. An approval page.
2. The name and location of the trail, including a map showing the trail.
3. The history of the trail, including the date of its construction; its purposes, significance in local, regional or national events, and connections with forest history; and other notable information about the trail.
4. A description of the trail, its TMOs, and its environment, including cultural features. If the trail is long enough to be managed in segments, include descriptions for each separately managed segment.
5. Management direction for the trail, including resource protection, safety, maintenance, applicable regulations, signing, and associated recreational facilities.

6. An assessment of impacts on the trail and its associated resources as a result of its establishment.
7. A statement that the trail or trail system will be available for public use and enjoyment for at least 10 consecutive years.

2353.55 – Distribution of Establishment Reports for National Recreation Trails

Submit one copy of the establishment letter and report for National Recreation Trails to the Washington Office, Director of Recreation, Heritage, and Volunteer Resources and affected cooperators.

2353.56 – Development of the National Recreation Trail System

Follow the direction on Trail Design in chapter 20 of FSH 2309.18, Trails Management Handbook.

2353.57 – Management of National Recreation Trails

1. Other Uses of National Recreation Trails. The primary purpose of National Recreation Trails is outdoor recreation use. Allow other uses such as power transmission, livestock drives, and logging operations that do not conflict with the nature and purposes of the trail. Ensure that scenery management considerations are incorporated into authorization of these uses.
2. TMOs. Manage use of National Recreation Trails consistent with their TMOs and the management objectives for the surrounding NFS lands. Where a segment of one of these trails traverses a wilderness area, manage that segment so that the segment and its associated uses are compatible with wilderness objectives.
3. Rescission of Establishment of National Recreation Trails. Occasionally it may be necessary to rescind establishment of a National Recreation Trail. When it is not possible to relocate a National Recreation Trail or otherwise preserve its status, the Regional Forester may approve rescinding its establishment. Submit copies of the report effecting the rescission to the Washington Office, Director of Recreation, Heritage, and Volunteer Resources and cooperators involved in establishment of the National Recreation Trail (FSM 2353.54).
4. Rescission of Establishment of National Recreation Trails in a Wilderness Area. National Recreation Trails that predate a wilderness area may remain. However, they should be considered for rescission 10 years after their establishment. See FSM 2353.54 regarding the statement in the establishment report for National Recreation Trails concerning their availability for public use for at least 10 consecutive years.

2354 – River Recreation Management

2354.01 – Authority

Administration of the rivers within the National Forest System falls under the general statutory and regulatory authorities, including mining and mineral leasing, laws, that apply to lands. The basic authority to regulate public use of waters within the boundaries of a National Forest or Wild and Scenic River derives from the property clause of the U.S. Constitution as implemented through the laws pertaining to the administration of the National Forests. The authority of the Secretary of Agriculture to regulate the public use of waters found at 16 USC 551 has been upheld in many court decisions. The most notable cases are:

1. United States v. Lindsey, 595 F.2d 5 (1979). The court held that within a federally designated area the Federal Government had the authority to regulate camping on State-owned land below the high water mark of a river.
2. United States v. Richard, 636 F.2d 236 (1980) and United States v. Hells Canyon Guide Service, 660 F.2d 735 (1981). The courts held that the Forest Service can regulate use of a river notwithstanding the fact that users put in and take out on private land.

The principal laws with special applicability to river management are:

1. Wild and Scenic Rivers Act (82 Stat. 906, as amended; 16 U.S.C. 1271 (Note), 1271-1287) herein referred to as the Act. The Act establishes the National Wild and Scenic River System, designates the rivers included in the System, establishes policy for managing designated rivers, and prescribes a process for designating additions to the system.
2. Federal Power Act (16 U.S.C. 791 et seq.). This Law governs the development of hydroelectric projects on rivers. The Federal Energy Regulatory Commission is responsible for implementing the Act. However, the Secretary of Agriculture is empowered under section 4(e), 16 U.S.C. 797, to prescribe conditions for any project license, which he deems "necessary for the adequate protection and utilization of the national forests."
3. Federal Water Pollution Control Act Amendments of 1972 (86 Stat. 816, as amended; 33 U.S.C. 1251, et seq.). Commonly referred to as the Clean Water Act, it proscribes the discharge of pollutants into streams. Section 402 requires discharge permits. Section 208 prescribes best management practices for non-point sources of pollution. Section 313 requires Federal facilities to comply with all substantive and procedural requirements of the States pertaining to pollution abatement.
4. Fish and Wildlife Coordination Act (Ch. 55, 48 Stat. 401, as amended; 16 U.S.C. 661, 662(a), 662(h), 663(c), 663(f)). Departments or agencies proposing water resource projects must first consult with U.S. Department of Interior, Fish and Wildlife Service to

ensure wildlife conservation receives equal consideration and is coordinated with the water resource project.

5. Wilderness Act (78 Stat. 890; 16 U.S.C. 1121 (Note), 1131-1136). This Act establishes the National Wilderness Preservation System, defines what wilderness is, the purpose of wilderness and how to manage it, and prescribes the process for adding additional areas to the System.

6. National Historic Preservation Act (94 Stat. 2987; 16 U.S.C. 470, 470-1, 470a, 470h-z, 470v, 470w-3). This Act declares a national policy on historic preservation and prescribes policy and procedures to reach that end.

The principal policies and regulations concerning river management are the Final Revised Guidelines for Eligibility, Classification, and Management of River Areas (47 FR 39454, Sept. 7, 1982), herein referred to as the guidelines, EO 11988, Floodplain Management, 36 CFR 261, Prohibitions; 291, Occupancy and Use of Developed Sites and Areas of Concentrated Public Use; 297, Wild and Scenic Rivers; and 800, Protection of Historic and Cultural Properties.

2354.02 – Objective

Provide river and similar water recreation opportunities to meet the public needs in ways that are appropriate to the National Forest recreation role and are within the capabilities of the resource base. Protect the free-flowing condition of designated wild and scenic rivers and preserve and enhance the values for which they were established.

2354.03 – Policy

1. Plan and manage river recreation in a context that considers the resource attributes, use patterns, and management practices of nearby rivers. Consider both designated and nondesignated rivers managed by the Forest Service and/or other Federal, State, and local management entities.
2. Emphasize activities that harmonize with the natural setting of the National Forest. Normally, limit river recreation opportunities to the primitive to rural portion of the recreation opportunity spectrum (ROS, FSM 2310).
3. Manage the use of rivers by establishing as few regulations as possible. Ensure that established regulations are enforceable.
4. Emphasize user education and information. Educate users before they enter a river area. When necessary, prescribe direct management techniques (FSM 2354.41a) that are sensitive to the values users seek. Impose only that level of direct management necessary to achieve management objectives.

5. Coordinate river management with other Federal, State, or local agencies having primary or concurrent jurisdiction. Where appropriate, enter into memorandums of understanding or cooperative agreements. Encourage the participation of State and local governments in planning and administering river management.
6. Ensure that proposed and ongoing projects and activities conform with the purposes of the Act.
7. Establish use limits and other management procedures that best aid in achieving the prescribed objectives for a river and in providing sustained benefits to the public.
8. Acquire water rights needed to ensure sufficient water to achieve management objectives.

2354.04 – Responsibility

2354.04a – Chief of the Forest Service

The Chief of the Forest Service reserves the authority to:

1. Transmit detailed boundary descriptions, river segment classifications, and management and development plans for wild and scenic rivers to the President of the Senate, to the Speaker of the House of Representatives, and to the Federal Register.
2. Submit study river recommendations to the Secretary of Agriculture.

2354.04b – Washington Office, Director of Wilderness and Wild and Scenic Rivers

The Washington Office, Director Wilderness and Wild and Scenic Rivers shall:

1. Provide leadership for planning, development, and management of:
 - a. Designated National Wild, Scenic, and Recreation Rivers.
 - b. Study rivers being considered for formal designation.
 - c. Other rivers offering recreation opportunities.
 - d. Other similar water recreation opportunities, such as swamps.
2. Recommend program and budget direction for rivers as a component of the total recreation program.
3. Coordinate with National user groups, other agencies, and members of Congress. Prepare memorandums of understanding and cooperative agreements when necessary.

4. Maintain a river information system capable of providing river information to management and the public.
5. Prepare relevant regulations relating to development and operation of rivers and similar water recreation opportunities.

2354.04c – Washington Office, Director of Ecosystem Management Coordination

The Washington Office, Director of Ecosystem Management Coordination (WO) shall:

1. Provide leadership for the study of rivers to determine their eligibility, suitability, and potential classification under the Wild and Scenic River Act.
2. Prepare recommendations for submission of study results to the Secretary of Agriculture.
3. Prepare Federal Register notices lifting the protected status of study rivers after a recommendation not to designate has been reported to Congress.
4. With the Washington Office, Director of Recreation, Heritage and Wilderness Resources, develop procedures for incorporating river management direction into the Forest land management planning process.

2354.04d – Washington Office, Director of Lands

The Washington Office, Director of Lands shall:

1. Coordinate and review prior to Regional Forester signature determination of impact for hydroelectric projects pursuant to section 7 of the Wild and Scenic Rivers Act.
2. Forward decisions of Regional Foresters regarding hydroelectric projects pursuant to section 7 of the Wild and Scenic Rivers Act to the Federal Energy Regulatory Commission.

2354.04e – Regional Foresters

Regional Foresters shall:

1. Approve detailed boundary descriptions, river classifications, and development and management plans for designated wild and scenic rivers.
2. Determine the direct and indirect effects of water resource projects upon designated or study wild and scenic rivers, and determine, pursuant to section 7 of the Wild and Scenic Rivers Act, whether the U.S. Department of Agriculture will consent to a proposed action (36 CFR 297). This authority must not be redelegated. Send decisions regarding hydroelectric projects to the Washington Office, Director of Lands for forwarding to the

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Federal Energy Regulatory Commission (follow the review and routing procedures of FSH 2709.15, section 54.72).

3. Approve memorandums of understanding or cooperative agreements between the Forest Service and other Federal agencies, States, and local governments involved in administration of components of the National Wild and Scenic River System. This approval may be delegated to Forest Supervisors.
4. Approve land acquisition actions taken pursuant to section 6 of the Act.
5. Approve interim measures for wild and scenic river management, pending completion and approval of the management plan.
6. Approve activities for gathering information about water resources.
7. Designate a lead Forest Supervisor when more than one Forest is involved with the study and management of a river.

2354.04f – Forest Supervisors

Forest Supervisors shall:

1. Develop detailed boundary descriptions, river classifications, and development and management plans for designated rivers. Integrate this direction into the Forest Plan.
2. Approve implementation plans developed as part of the Forest Plan.
3. Initiate cooperative agreements as permitted by section 10(a) of the Act.
4. Obtain public comments in the development of river management direction.
5. Approve requests for research into scientific values within a wild and scenic river area.

2354.05 – Definitions

Act. The Wild and Scenic Rivers Act of October 2, 1968 (P.L. 90-542, 82 Stat. 906, as amended; 16 U.S.C. 1271 (Note), 1271-1287), and all subsequent amendments thereof.

Classification. The administrative process whereby designated rivers are segmented according to the criteria established in section 2(b) of the Act.

Designation. The process whereby additional components are added to the National Wild and Scenic Rivers System (sec. 2(a) of the Act). This can be by Act of Congress under section 2(a)(i), or by administrative action of the Secretary of the Interior with regard to State designated rivers under section 2(a)(ii).

National Rivers Inventory (NRI). A national inventory of potential Wild and Scenic Study Rivers developed pursuant to direction in the Wild and Scenic Rivers Act. It provides baseline data on the condition and extent of significant free flowing river resources in the nation.

Nondesignated River. A river that has not been designated under the Wild and Scenic Rivers Act but that has sufficient recreation opportunities or use to warrant management activities.

River Area. For a river study, that portion of a river authorized by Congress for study and its immediate environment comprising an area extending at least one-quarter mile from each river bank. For designated rivers, the river and adjacent land within the authorized boundaries.

Wild and Scenic Study River. Rivers identified in section 5 of the Act for study as potential additions to the National Wild and Scenic Rivers System. The rivers must be studied under the provisions of section 4 of the Act.

2354.1 – Administration

2354.11 – Coordination

Ensure that management is coordinated for rivers that are in more than one administrative unit.

2354.12 – Management Research

Continue research efforts to improve knowledge for the effective management of river recreation. Give particular attention to:

1. Cooperating with research efforts of the various Forest Service recreation research work units focusing on problems associated with river recreation and related dispersed recreation management.
2. Identifying significant river-related management problems that require research and assisting in conducting such studies.
3. Cooperating with other Federal, State, and local agencies involved in river recreation management and research in the planning, implementation, and dissemination of research. Maintain liaison with such Federal agencies as the Bureau of Land Management, Corps of Engineers, National Park Service, and the Tennessee Valley Authority.
4. Actively seeking and cooperating with universities and other research institutions interested in conducting river and related water-based research.

2354.13 – Technology Transfer

Give priority to disseminating and implementing proven and promising river management and research technology. Refer to FSM 1251 for direction on technology transfer.

2354.14 – Navigability of Rivers

Rivers are, as a matter of law, either navigable or nonnavigable. Navigability is a judicial finding and must be made by a Federal court in order to bind the United States. Most rivers in the country have not been adjudicated as navigable or nonnavigable. Consider them nonnavigable until adjudicated otherwise.

If navigable, then the State owns the bed of the river up to the high water mark, and the Coast Guard and the Corps of Engineers have certain additional regulatory powers.

The Forest Service retains authority to regulate the use of a river and the National Forest lands on the shorelines whether it is navigable or nonnavigable. This jurisdiction may be concurrent with other State and Federal agencies. In particular for navigable rivers, cooperate with State authorities to the extent that the State wishes to manage certain activities on rivers. In cases of a conflict between National Forest and State interests, consult with the U.S. Department of Agriculture, Office of the General Counsel.

2354.2 – Wild and Scenic Study Rivers

Wild and Scenic study rivers are established by Congress and are studied using existing planning and environmental analysis procedures. See FSM 1924, FSH 1909.12, 36 CFR 297, and the Revised Guidelines for Eligibility, Classification, and Management of River Areas (47 FR 39454, Sept. 7, 1982).

2354.21 – Management of Study Rivers

Manage wild and scenic river study areas to protect existing characteristics through the study period and until designated or released from consideration.

Resource management activities may be carried out provided they do not cause a negative or reduced classification recommendation.

Land management plans must identify the areas managed for the wild and scenic study river values.

The Act protects designated study rivers from Federal Power Act projects on or affecting the river (sec. 7(b)).

The protection periods prescribed by the Act are three complete fiscal years for the study and a period not to exceed 3 years for Presidential and Congressional action. In the event of any type of delays on reports with a designation recommendation, extend the protected period to ensure Congress has up to 3 years to consider the study report.

If the study recommendation is for no designation, the protected status expires after a notice to that effect is published in the Federal Register. Congressional committees on Interior and Insular affairs shall receive written notice of this determination while in session and 180 days prior to publishing in the Federal Register.

Continue existing improvements or uses until there is a final designation decision. Permit temporary uses when these uses do not alter the wild and scenic river characteristics of land and physical resources or when there is a legitimate fire, insect, disease, or flood emergency. Suppress wildfires and pest epidemics under the same directions established for designated Wild and Scenic Rivers.

Mineral prospecting and development shall conform with existing laws, regulations, and sec. 9 of the Act. Protect the wild and scenic river values subject to these laws and regulations (FSM 2810, 2820, and 2850).

Do not recommend leasing with surface occupancy in study areas if the applicant proposes surface disturbance that would adversely affect existing wild and scenic river values, or if such disturbance is unavoidable.

2354.3 – Wild and Scenic River Plans

2354.31 – River Management Plan Relationship to the Forest Management Plan

Place river management direction in the Forest Management Plan. If timing or other factors preclude this, include the direction as a Forest Management Plan appendix or an associated implementation plan.

2354.32 – River Management Plan

Prepare a management plan in accordance with section 3(b) of the Act within 1 year following designation or as otherwise provided by the designation language.

Management plans for designated rivers must:

1. Establish management objectives for each segment of the river. As a minimum, state the Recreation Opportunity Spectrum class featured (ROS, FSM 2310) and procedures for maintaining the ROS for each segment over time. To the extent possible, the management objectives should reflect the river's recreational relationship to nearby rivers.
2. Describe historical trends in use, demands, and needs of the river resources and likely future trends.
3. Include specific and detailed management direction necessary to meet the management objectives.

4. Establish detailed river area boundaries.
5. Determine wild, scenic, and recreation classifications that best fit the river or its segments, unless those classifications are prescribed in the designating legislation.
6. Establish appropriate levels of recreation use and developments to protect the values for which the river was designated. See section 3(b) and 10(a) of the Act and the guidelines.
7. Provide for public safety and refer to State boating laws, U.S. Coast Guard Regulations, and other applicable State and Federal Regulations.
8. Prescribe actions needed to manage development along the stream bank (sec. 6 of the Act).
9. Provide for monitoring and evaluating visitor use patterns, use impacts on the river, and visitor experiences.

2354.4 – Wild and Scenic River Management Activities

2354.41 – Recreation Visitor Use

When necessary, develop prescriptions to manage the character and intensity of recreational use on the river.

Use specific management objectives for each segment. Consider the following factors in developing direction:

1. Capabilities of the physical environment to accommodate and sustain visitor use.
2. Desires of the present and potential recreation users and trends over time in the amounts, types, and distribution of recreational use and the characteristics of recreation users. These help identify what kinds of recreation opportunities to provide and how and where to manage and maintain such opportunities.
3. The diversity of river recreation opportunities available within the geographic region.
4. History of nonrecreation uses that are compatible or conflict with recreation use of the river.
5. Budgetary, personnel, and technical considerations.

Exhibit 01, showing the relationship of Recreation Opportunity Spectrum (ROS) categories to the river classifications and management activities, is an aid in determining if an adequate mix of recreation opportunities is feasible.

Forest Service Manual 2300 – Recreation, Wilderness, And Related Resource Management

Chapter 2350 - Trail, River, and Similar Recreation Opportunities

Amendment: 2300-2022-1

Effective date: March 31, 2022

2354.41 – Exhibit 01: Guidelines for River Recreation Opportunities Management^{1/}

ROS Category	River Classification or Management Objective	Facilities	Access	Compatible With
PRIMITIVE	Wild river	None except where absolutely necessary for health, safety and resource protection. Very primitive where provided.	Water or trails.	Wilderness and primitive areas, national recreation areas, roadless areas, administratively established areas in Forest Plans. Truly remote.
SEMI- PRIMITIVE NON- MOTORIZED	Wild and scenic river	Primitive. Facility emphasis is on health, safety and resource protection plus some degree of user convenience.	Water, trails, and unobtrusive traffic service level C or D; roads closed to motorized use.	Watershed, range, wildlife, and timber management activities. Grazing. Perception of remoteness.
SEMI- PRIMITIVE MOTORIZED	Scenic river	Same as above.	As above. Opened to motorized use.	As above. Perception of remoteness.
ROADED NATURAL	Recreational river	Nonurban as necessary and cost efficient	Water, roads, railroads and powerboats. Traffic service level A, B, C, and D.	As above. Perception of development in a natural environment.
RURAL	Recreational river	As authorized and existing.	As above.	As above.
URBAN	Recommend adjustments where appropriate.	As above.	As above.	Generally not compatible with Forest Service resource management.

^{1/} Some noted exceptions occur to the guidelines as a result of specific designation act language.

2354.41a – Distribution of Visitor Use

Develop visitor management techniques needed to achieve the river management objectives. Use management techniques including site management, indirect regulation of use, and direct regulation of use. Exhibit 01 summarizes management techniques and selected methods for each.

Recognize that use-management techniques may have a significant effect on the character of the river area and the kind of recreation opportunities available. Ensure that management techniques relate to specific river management objectives.

When regulatory measures are necessary to manage use, apply these measures as far in advance of the visitor's arrival as possible. Apply management techniques before the visitor enters the river area. Then to the extent possible, allow the user to move about freely without interference.

Apply indirect techniques for regulation of use before taking more direct action. However, do not ignore violations of laws and regulations.

When it becomes necessary to limit use, ensure that all potential users have a fair and equitable chance to obtain access to the river. Also ensure that the use-limiting system is within the administrative capabilities of the managing unit.

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2354.41a – Exhibit 01: Some Techniques to Manage the Character and Intensity of Recreational Use to Achieve Established Objectives

<u>Type of Management Techniques</u>	Method	<u>Specific Actions</u>
Site Management (Emphasis on site design, landscaping, and engineering)	Harden site	Install durable surfaces (native, nonnative, synthetic). Irrigate. Fertilize. Convert to more hardy species. Thin ground cover and over story.
	Channel use	Erect barriers (rocks, logs, posts, fences, guardrails). Construct paths, roads, trails, walkways, bridges, and so forth. Landscape (vegetation patterns).
	Develop facilities	Provide access to underused and/or unused areas. Provide sanitation facilities. Provide overnight accommodations. Provide concessionaire facilities. Provide activity-oriented facilities (camping, picnicking, boating, docks, and other platforms). Provide interpretive facilities.
<u>Indirect Regulation Of Use</u> (Emphasis on influencing or modifying use; retains freedom to choose; control less complete, more variation in use possible)	Alter physical facilities Inform users	Improve (or not) access roads and trails. Improve (or not) campsites and other concentrated use areas. Improve (or not) fish or wildlife populations (stock, allow to die out). Publicize specific attributes of the area. Identify the range of recreation opportunities in surrounding area. Educate users to basic concepts of ecology. Publicize underused areas and general patterns of use.
		Describe special types of skills and/or equipment needed to enjoy the recreation opportunities.

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2354.41a – Exhibit 01 – Continued

<u>Type of Management Techniques</u>	Method	<u>Specific Actions</u>
<u>Direct Regulation of Use</u> (Emphasis on regulation of behavior; individual choice restricted; high degree of control)	Increase policy enforcement	Impose fines at a level that ensures compliance. Increase administration of area.
	Zone use	Zone incompatible uses spatially (Designate hiker-only zones, prohibit motor use, and so forth). Limit camping in some campsites to one night, or establish some other limit.
	Restrict use intensity	Rotate use (open or close roads, access points, trails, campsites). Require reservations. Assign campsites and/or travel routes to each camper group in backcountry. Limit usage via access point. Limit size of groups, number of horses, vehicles. Limit camping to designated campsites only. Limit length of stay in area (max/min).
	Restrict activities	Restrict the building of campfires. Recommend restricted fishing or hunting to the State.

2354.41b – Water Safety

The manager's role in safety is advisory and informational. Provide opportunities for the river recreation user to become informed of current river flows, equipment and experience minimums and hazards. The user must make the final decision about whether or not to engage in the recreation activity.

The enforcement of State boating laws, U.S. Coast Guard regulations, and other applicable State and Federal regulations shall remain with the appropriate agency.

2354.41c – Sanitation

Provide sanitation facilities as necessary for the health of the user and the protection of the resource. Vary these facilities according to the individual river classification and management objectives. Appropriate facilities may range from various types of onsite toilets to requirements for complete removal of human wastes.

Provide for litter and garbage disposal in the river management direction.

2354.41d – Outfitting and Guiding

The services of outfitters or guides may be necessary to assist the public in use of recreation rivers. Where appropriate, provide for a full range of outfitting and guide services. Issue permits in accordance with FSM 2720.

2354.42 – Wild and Scenic River Resource Protection and Management

2354.42a – Range

Permit livestock grazing within the designated river area provided it does not substantially interfere with public use or detract from the values which caused the river to be included in the National Wild and Scenic River System. For Wilderness River Areas see FSM 2320.

Permit facilities and improvements within a wild river area, if they are necessary to support the range activities, provided the area retains a natural appearance and the structures harmonize with the environment. Such improvements must conform to established river management direction and FSM 2520, 2526, and 2527.

2354.42b – Wildlife and Fish

Manage wildlife and fish habitats in a manner consistent with the other recognized river attributes.

Recommendations to State agencies concerning the management of fisheries must be consistent and in harmony with established river objectives.

Stocking of fish is generally consistent with designated river status. Stocking levels and habitat manipulation must complement and be compatible with the recreation opportunity objectives set for the river segment and the law designating the river.

The construction of minor structures for such purposes as improvement of fish and game habitat are acceptable in wild river areas provided they do not affect the free-flowing characteristics of the river and harmonize with the surrounding environment.

2354.42c – Water

The objectives of water management as described in the Act require that "selected rivers or sections thereof be preserved in their free-flowing condition to protect the water quality"

1. Maintain or enhance existing water quality on all rivers managed for recreation. The river management plan must prescribe a process for monitoring water quality on a continuing basis.
2. Advise users on safe drinking-water practices.
3. Undertake watershed improvements where deteriorated soil or hydrologic conditions create a threat to the values for which the river is managed; where these conditions present a definite hazard to life or property; or where such conditions could cause serious depreciation of important environmental quality outside the river area.

Undertake no rehabilitation or stabilization projects unless they enable the area to retain its natural appearance, harmonize with the environment, and have no substantial adverse effect on the river and its environment.

When practical, use native species to restore watershed vegetation. All such watershed restoration measures shall follow the prescriptions established for the river and shall be consistent with the requirements of FSM 2526 and 2527.

4. Approve only those watershed projects that protect and enhance the values that caused the river to be designated and that do not substantially interfere with public use and enjoyment of these values. Normally, there is little opportunity for increasing water yield or for changing the timing of runoff within the confines of a river area.
5. For issuance of licenses, permits, or other authorizations concerning projects under the Federal Power Act or other construction, see 36 CFR part 297.
6. Permit the construction of water bars, drainage ditches, flow measurement devices, and other minor structures or management practices when necessary for protection, conservation, rehabilitation, or enhancement of the river area resources. They must be compatible with the classification of the river area and harmonize with the surrounding environment. They must not pose a direct and adverse impact on the river values.

7. Address the need for retaining and maintaining existing water divisions, ditches, and water management devices. If retention is part of a valid existing right or in the interest of good river management, prescribe maintenance standards in the management plan.

When an existing structure is not retained, return the area to a more natural condition in a manner that does not have an adverse effect on the river and its immediate environment.

8. Approve gathering of water resources information if the permittee carries out these activities in a manner that protects the values for which the river was designated. Approvals should show the Forest Service is not committed to concur with any future development proposal that may result from such activity or studies.

Permit prospecting for water resources that is, drilling or digging to locate underground water supplies, for minor developments for range, wildlife, recreation, or administrative facilities.

2354.42d – Vegetation and Forest Cover

Manage the forest cover to maintain or enhance those values for which a particular river segment is managed.

1. Ensure trees are not sold, cut, or otherwise harvested in a designated wild river area except under emergency conditions, such as for insect or disease control, fire, natural catastrophe, disaster, public safety, or under specified conditions on valid mining claims.
2. Harvest timber or manipulate vegetation in classified scenic or recreation river areas, in a manner that satisfies river management objectives.
3. Reestablish tree cover, preferably by natural revegetation. Reforestation plans are subject to the objectives of river management.
4. Trees may be cut for use in the construction and maintenance of authorized improvements located in the designated river area when it is not reasonably possible to obtain or bring in the necessary materials from outside the area. Design the harvest to avoid conflicts with the river management objectives.

Such cutting must be away from trails, campsites, or other public-use developments to the degree practical.

5. Limit fuel wood cutting to dead or down material. Where necessary, prescribe restrictions on the use of wood for fuel.

2354.42e – Wilderness Rivers

Manage rivers that are entirely or partially within a component of the National Wilderness Preservation System to preserve the wilderness resources including solitude, natural environments, and opportunities for primitive, unconfined activities that offer challenge.

Resolve any conflicts between provisions of the Wilderness Act and provisions of the Wild and Scenic Rivers Act in favor of the more restrictive of the provisions unless a specific exception is stated (FSM 2320).

2354.42f – Structures and Improvements

Prescribe structures and improvements needed for visitor use and administration in the river management direction. Examples of such structures and improvements are: boat launch and dock facilities, parking areas, bridges, portages, campground and toilet facilities, trails, information centers, and administrative sites.

1. Wild River. Where practical, locate administrative headquarters and interpretive centers outside the river area.
2. Scenic River. Administrative site developments and modest public information centers may be located in the river area provided they are not readily visible from the river.
3. Recreation River. Administrative site developments and public information centers may be located along the river shoreline providing they do not have adverse effects on the values for which the river was designated and classified.

2354.42g – Transportation System

Decide the type and location of transportation facilities in the river management direction.

1. Wild River. Generally, a wild river is accessible only by trail. Normally, do not permit motorized travel on the trail system in the river area. Airfields in existence at the time of designation may remain if needed. Do not develop new airfields. Normally do not permit the landing of aircraft except for emergencies and then only at facilities that existed prior to designation. Develop airfield management and maintenance direction as needed (FSM 7725).
2. Scenic River. A scenic river may be accessible in places by road. However, scenic rivers should not include long stretches of conspicuous and well-traveled roads closely paralleling the riverbank. Trails may be located and designed to accommodate motorized travel.

Establish transportation design criteria to protect the values for which the river is managed.

3. Recreation River. A recreation river is usually readily accessible by road. Roads are normally open to motorized travel but use may be regulated.

2354.42h – Minerals

(See FSM 2810, 2820, and 2850).

2354.42i – Cultural Resources

(See FSM 2360).

Identify and evaluate cultural resource sites in a manner compatible with the management objectives of the river and in accordance with 36 CFR part 800. Protect sites in accordance with relevant laws and regulations. Under certain conditions, site-specific information may be withheld from the public if disclosures could lead to damage. Consult with the Regional FOIA Officer prior to withholding such information.

2354.42j – Research

The scientific value of wild and scenic rivers is implied in the Act and in the legislative history leading to development of the Act. Research into these scientific values is appropriate use and should generally follow the guidelines developed for wilderness (FSM 2320).

2354.42k – Air Quality

Comply with the appropriate air regulatory agency requirements and the objectives established in the Forest Plan.

2354.42l – Forest Pest Management

Control forests pests in a manner compatible with the intent of the Act and management objectives of contiguous National Forest System lands (FSM 3400).

2354.42m – Visual Resources

Establish visual management objectives for the river area that reflect the classification of the river. Coordinate the visual objectives for the river area with those of adjacent National Forest System lands (FSM 2380).

2354.42n – Fire

Manage fire within a designated river area in a manner compatible with contiguous National Forest System lands.

On wildfires, use suppression activities that cause the least lasting impact on the river and river area. Conduct presuppression and prevention activities to reflect the management objectives for the specific river segment.

Prescribed fire may be utilized to maintain environmental conditions or to meet objectives specified in the river management plan.

2354.42o – Motorized Use

Permit motorized use if such use is compatible with other management direction, public use of the resource, and resource attributes of the river. Prohibit motorized use if the use causes, or is likely to cause, considerable adverse effects on the resource. Normally, motorized use will be prohibited in a wild river area. Establish prescriptions for management of motorized use.

2354.42p – Signing

Establish standards and guidelines for posting informational, interpretive, safety, hazardous areas, and boundary location signs.

2354.5 – Non-National Forest Lands on Designated Rivers

2354.51 – Private Lands

Many river areas within the National Forest contain a significant amount of private land. Certain management practices and use patterns on these private lands can greatly enhance the recreation opportunities on adjacent or intermingled National Forest land and the river system.

Cooperate with private owners, local, and State governments, and other Federal agencies to meet demonstrated public need for recreational opportunities within and adjacent to the river area.

Inventory existing uses of private land as part of river management planning.

Work with private landowners to minimize incompatible use and to prevent other potential problems. This action may include:

1. Working with local governments for suitable zoning in river areas.
2. Negotiating cooperative agreements and memorandums of understanding.
3. Encouraging appropriate private sector development and providing for complementary Forest Service development.
4. Acquiring key private land in fee title or partial interests. Acquire lands and interests in lands only to the extent necessary to protect, maintain, and/or enhance the river area and the established recreation objectives.

2354.51a – Fee Title Acquisition on Designated Rivers

Fee title acquisition along a designated river is limited by the Act to an average of no more than 100 acres per mile on both sides of the river.

Do not use condemnation to acquire fee title when 50 percent or more of the designated river area is in public ownership.

Condemnation may be used to clear title or acquire scenic easements or other such easements deemed reasonably necessary to provide public access to the river and to permit the public to traverse the length of the river or selected segments.

2354.51b – Partial Interest Acquisition

(See FSM 5440).

2354.51c – Partial Interest Administration

Establish procedures to administer partial interests in private lands acquired within the river area. Include monitoring and annual review procedures necessary for enforcement actions.

2354.52 – Other Federal Lands

Negotiate cooperative agreements, memorandums of understanding, or other appropriate documents to provide for needed coordination.

2354.6 – Nondesignated Rivers

Some rivers that are not designated under the Act provide excellent river recreation opportunities and are addressed herein as nondesignated rivers. The management of these rivers should generally follow the direction provided for designated rivers but without some of the legislative protection or constraints of the Act.

2354.61 – Study of Rivers in the National Rivers Inventory

Rivers or river segments occurring within National Forest boundaries and listed in the National Rivers Inventory (NRI) should be studied to determine their eligibility and suitability for designation to the Wild and Scenic River System. Use the land management planning process to conduct the study.

2354.62 – Management of National Rivers Inventory Rivers

Rivers occurring within the National Forest and listed in the National Rivers Inventory must be protected to the extent initial studies indicate the river has outstanding values and therefore is eligible for designation by Congress. Determine the level of protection as part of the study process. A river found to be eligible and suitable must be protected as far as possible to the same extent as a designated study river (FSM 2354.21).

Submit eligible and suitable rivers to Congress for consideration and designation.

2354.63 – Nondesignated River Management Direction

Develop river management direction for nondesignated rivers when the amount of use, resource issues, or other conditions warrants the expenditure for planning. River Management Direction for nondesignated rivers should include:

1. Clear management objectives for each segment of the river. As a minimum, these objectives must establish the Recreation Opportunity Spectrum (ROS, FSM 2310) class featured and procedures for maintaining the established ROS for each segment. To the extent possible, the management objectives should be developed in a context that considers nearby rivers.
2. Historical trends in use, demands, and needs of the river resources and likely future trends.
3. Specific and detailed direction necessary to meet the objectives of river administration.
4. Provisions for public safety and shall refer to State boating laws, U.S. Coast Guard Regulations, and other applicable State and Federal Regulations.
5. Provisions for monitoring and evaluating visitor use patterns, use impacts on the river, and visitor experiences.

2354.64 – Relationship of Nondesignated River Management Direction to the Forest Plan

See FSM 2354.31.

2354.7 – Procedure for Evaluation of Water Resources Projects

2354.71 – Authority

Evaluation of water resources projects within the National Forest System is addressed in the Wild and Scenic Rivers Act (82 Stat. 906, as amended; 16 U.S.C. 1271 (Note), 1271-1287). Section 7 of the Act provides authority to the Secretary of Agriculture to evaluate and make a determination on water resource projects that affect wild and scenic rivers. Implementing rules to guide evaluation of proposed water resource projects are at Title 36, Code of Federal Regulations Part 297 (36 CFR 297). Additionally, the Forest Service must comply with the Interagency Guidelines for Eligibility, Classification, and Management of River Areas, published in the Federal Register on September 7, 1982 (47 FR 39454).

In addition to these authorities, Office of the General Counsel and the most recent Congressional interpretations of the intent of the Act relative to water resources projects are set out in exhibit 01.

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Key provisions of the Act are as follows:

1. Section 1(b) declares as policy of the United States that:

. . . certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values, shall be preserved in free-flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations.

2. Section 7(a) prohibits departments and agencies of the United States from assisting in the construction of any water resources project that ". . . would have a direct and adverse effect on the values for which such a river was established . . ."

Section 7 also places limitations on Federal licensing of or Federal assistance on developments below or above designated or proposed wild and scenic rivers that ". . . invade the area or unreasonably diminish the scenic, recreational, and fish and wildlife values present in the area on the date of designation . . ."

3. Section 10(a) provides general management direction as follows:

Each component of the national Wild and Scenic Rivers System shall be administered in such manner as to protect and enhance the values which caused it to be included in said system without, insofar as is consistent therewith, limiting other uses that do not substantially interfere with public uses and enjoyment of these values. In such administration primary emphasis shall be given to protecting its aesthetic, scenic, historic, archeologic, and scientific features. Management plans for any such component may establish varying degrees of intensity for its protection and development, based on special attributes of the area.

4. Section 16(b) provides the relevant definition of "free-flow" and "water resource projects" (see FSM 2354.75 for definitions).

Section III of the interagency final guidelines establishes a non-degradation and enhancement policy for designated river areas. Manage each component of the Wild and Scenic River system to protect and enhance the values for which the river was designated, while providing for public recreation and resource uses, which do not adversely impact or degrade those outstanding river values.

2354.71 – Exhibit 01: Office of General Counsel and Congressional Interpretations of the Wild and Scenic Rivers Act Relative to Water Resources Projects

Office of General Counsel

A May 1969 memorandum to the Chief from Clarence W. Brizee (Deputy Director, Forestry Natural Resources Division; USDA, OGC) provides the following interpretation:

With regard to water resources projects, the Wild and Scenic Rivers Act is not a blanket ban or absolute prohibition . . . The only activity absolutely prohibited by Section 7 is the licensing of dams and other project works by the Federal Energy Regulatory Commission under the Federal Power Act within the boundaries of a designated or study river. Other federally assisted water resources projects may be permitted. Thus, rather than being characterized by absolute prohibitions, the Act embodies a flexible approach. Section 7 establishes a procedure for making a specific determination with respect to each proposed water resources project.

The evolution of Section 7 demonstrates that Congress did not intend that the Act automatically ban all developments and uses on or near a (study or designated) river. To the contrary, the legislation was specifically amended in order to provide a procedure via Section 7 for review of proposed water resources projects on a case-by-case basis.

This memorandum also provides an interpretation of the "direct and adverse effect standard":

With regard to projects inside the designated boundary, there is no definition provided by the Act or legislative history as to what constitutes such a "direct and adverse" effect. We do not construe this section as a ban on all projects, which might be built on a river proposed or designated as a component of the System. Rather, the Act contemplates that each proposed project be considered on its own merits. In making this determination, we consider the values of the river, as they now exist; a "direct and adverse" effect is one, which will result in marked diminutions of the values enumerated in Section 1(b) of the Act.

Also relevant to the consideration of the project's impacts is the degree to which it blends in or is otherwise compatible with the natural qualities of the river, whether there may be a diminution in the air and water quality, and the effects on animals and vegetation. The duration of the impact is another important consideration; long lasting or permanent impacts must be viewed more strictly than temporary or short-term impacts.

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Congressional Direction

Recent Congressional direction is provided in the Senate Committee on Energy and Natural Resources report on the Michigan Scenic Rivers Act of 1991 (H.R. 476), dated November 23, 1991, which states:

The Committee is aware of the concern expressed by some parties of the potential effect that designation of certain rivers as components of the Wild and Scenic Rivers System may have ongoing stream restoration and improvement projects in the State of Michigan. The committee notes the importance of these projects in restoring damaged riparian areas and improving water quality and aquatic habitat. In the Committee's view, such projects are not inconsistent with Wild and Scenic River designation, and in fact similar projects have been successfully completed on Wild and Scenic River segments throughout the nation. The Committee directs the Forest Service to develop a consistent and coordinated policy permitting the implementation of such projects within Wild and Scenic River segments in order to avoid unnecessary concern and confusion.

Similarly the House Committee on Interior and Insular Affairs report on the Michigan Scenic Rivers Act of 1991 states:

The committee has provided flexibility with regards to sea lamprey control in order that appropriate management actions can be taken consistent with the requirements of law. In keeping with sound management practices for wild and scenic rivers, the Committee believes there is appropriate flexibility in law to provide for fish and wildlife habitat and water quality improvement in a manner that will protect the values for which a river segment was designated. Some of the finest fisheries in the country are found on rivers designated as part of the National Wild and Scenic Rivers System. The committee recognizes the importance of the fisheries on the Michigan rivers designated by this Act and is supportive of efforts to correct significant water quality, aquatic habitat, or other ecological degradation caused by past human activity. The Wild and Scenic Rivers Act permits structural and non-structural techniques of fish restoration to be used as long as such activities do not have an adverse impact on the values for which such rivers are designated. Such activities consistent with this standard are occurring on wild and scenic rivers across the country. As provided for by law, the Secretary will cooperate with the state on these matters.

2354.72 – Objectives

1. To maintain or enhance the free-flowing characteristics of select rivers, to the extent practicable.
2. To protect or enhance the values of rivers within the National Wild and Scenic River System.
3. To protect features of aesthetic, scenic, historic, archaeological, or scientific importance on these rivers.
4. To continue public uses and enjoyment of National Wild and Scenic Rivers consistent with protection and enhancement of river values.

2354.73 – Policy

1. Manage wild and scenic river ecosystems to achieve management goals and objectives set forth in the comprehensive management plan for each river through natural processes and use of techniques that mimic those processes.
2. Use an interdisciplinary process to evaluate the effects of proposed water resources projects on free-flowing characteristics and the outstanding values for which the river was designated, or for which it is being studied.
3. Follow procedures set out in FSM 2354.76 for evaluating proposed water resource projects that may have an effect on free-flowing characteristics or that may have an effect on the scenic, recreational, geologic, fish and wildlife, historic, cultural, or other outstandingly remarkable values of the river or its corridor lands.
4. Coordinate evaluation of water resource projects with state agencies responsible for fish and wildlife, water quality, and other related resources.
5. Permit water resources projects if the net effect protects or enhances values for which the river was designated, or for which it is being studied.
6. Do not permit a water resources project under any of the following conditions:
 - a. The project would have a direct and adverse effect on, or unreasonably diminish designated river values; or
 - b. In the case of a study river, if the project would result in a recommendation for a reduced classification status; or
 - c. If the project is inconsistent with relevant forest plan standards and guidelines.
7. Permit water resources projects even though they may affect free-flowing characteristics if all of the following conditions exist:

- a. The specific purpose of the project is to protect or enhance the values for which the river was designated or is being studied, restores the natural characteristics of the river, and/or improves the water quality of the river.
- b. Associated impacts on free-flowing characteristics of the river are minimized to the extent practicable; and,
- c. The proponent and manager of the project is a Federal, State, or local governmental entity.

2354.74 – Responsibility

The Responsible Official for evaluating a water resource project varies with the status of the river and whether another Federal agency is involved.

2354.74a – Regional Foresters

It is the responsibility of the Regional Forester to make determinations for proposed water resources projects on designated wild and scenic rivers (listed under Section 3(a) of the Act) and congressionally authorized study rivers (listed under Section 5(a) of the Act), where other Federal agency assistance is involved. This responsibility may not be delegated. It is also the responsibility of the Regional Forester to:

1. Ensure that the agency does not assist in the construction of any water resource projects that would have a direct and adverse effect on the values for which wild and scenic rivers were established, as provided for in Section 7 of the Act.
2. Provide for interdisciplinary review of water resource project analysis completed within the Region to ensure a consistent approach to the evaluation of proposed water resources projects.

2354.74b – Forest Supervisors

It is the responsibility of the Forest Supervisor to make determinations for proposed water resources projects on designated wild and scenic rivers (listed under Section 3(a) of the Act) and congressionally authorized study rivers (listed under Section 5(a) of the Act), where there is no other Federal agency assistance; and on rivers identified for study by the Forest Service (Section 5(d) of the Act). This responsibility may be delegated to the District Ranger.

2354.75 – Definitions

Free-flowing. As applied to any river or section of a river, this means existing or flowing in natural condition without impoundment, diversion, straightening, rip-rapping, or other modification of the waterway (16 U.S.C. 1287).

Section 7 determination. The standards and procedures established in Regulation at 36 CFR part 297, whereby the Forest Service will consider consenting to construction of

water resources projects on components of the Wild and Scenic Rivers System administered by the Secretary of Agriculture.

Water resources projects. Any dam, water conduit, reservoir, powerhouse, transmission line, or other project works under the Federal Power Act, or other construction or development which would affect the free-flowing characteristics of a Wild and Scenic River or study river (36 CFR part 297).

2354.76 – Evaluation Procedures

Evaluate proposed water resources projects using the following ten steps. Consider all activities which meet the definition of water resources projects found at 36 CFR part 297 to be water resources projects for the purposes of the evaluation as outlined in this section. Also, use the procedure of applicable parts of it, to evaluate activities proposed outside a designated or study river corridor to determine if the actions result in indirect effects that invade the area, or unreasonably diminish the scenic, recreation, or fish and wildlife values present in the area.

1. Establish Need. Define the need for the proposed activity and make a preliminary determination whether the proposed activity is consistent with the management goals and objectives for the river. If management goals and objectives have not been formalized through a river planning process, utilize Forest Plan standards and guidelines and any applicable State fish and wildlife, water quality, or other State agency management plans or policies consistent with identified values to develop objectives for each of the outstanding river values.

If the activity does not evidence a compelling need or is inconsistent with the management goals and objective or other applicable laws, the project need not be considered further. If there is a need for the activity and it appears consistent with management goals and objectives, proceed with Steps 2-10. In conducting and documenting the analysis, the scope of the evaluation is to be consistent with the magnitude and complexity of the proposed activity.

2. Define the Proposed Activity. Objectively describe the proposed activity in terms of the:

- a. Project proponent(s);
- b. Purpose/need for the project (document results of Step 1);
- c. Geographic location of the project;
- d. Duration of the proposed activities;
- e. Magnitude/extent of the proposed activities; and,
- f. Relationship to past and future management activities.

3. Describe How the Proposed Activity Will Directly Alter Within-Channel Conditions.

Address the magnitude and spatial extent of the effects the proposed activity will have on in-channel attributes. Give special attention to changes in features that would affect the outstandingly remarkable and other significant resource values. Describe:

- a. The position of the proposed activity relative to the streambed and stream banks.
- b. Any likely resulting changes in:

- (1) Active channel location;
- (2) Channel geometry (cross-sectional shape, width/depth characteristics);
- (3) Channel slope (rate or nature of vertical drop);
- (4) Channel form (straight, meandering, or braided); and,
- (5) Relevant water quality parameters (turbidity, temperature, nutrient availability).

4. Describe How the Proposed Activity Will Directly Alter Riparian and/or Floodplain Conditions.

Address the magnitude and spatial extent of the effects the proposed activity will have on riparian/floodplain attributes. Give special attention to changes in features that would affect the outstandingly remarkable and other significant resource values. Describe:

- a. The position of the proposed activity relative to the riparian area and floodplain.
- b. Any likely resulting changes in:

- (1) Vegetation composition, age structure, quantity, or vigor.
- (2) Relevant soil properties such as compaction or percent bare ground.
- (3) Relevant floodplain properties such as width, roughness, bank stability, or susceptibility to erosion.

5. Describe How the Proposed Activity Will Directly Alter Upland Conditions. Address the magnitude and spatial extent of the effects the proposed activity will have on upland attributes. Give special attention to changes in features that would affect the outstandingly remarkable and other significant resource values. Describe:

- a. The position of the proposed activity relative to the uplands.
- b. Any likely resulting changes in:

- (1) Vegetation composition, age structure, quantity, or vigor.
- (2) Relevant soil properties such as compaction or percent bare ground.

(3) Relevant hydrologic properties such as drainage patterns or the character of surface and subsurface flows.

c. Potential changes in upland conditions that would influence archeological, cultural, or other identified significant resource values.

6. Evaluate and Describe How Changes in On-Site Conditions Can/Will Alter Existing Hydrologic or Biologic Processes. Evaluate potential changes in hydrologic and biological processes by quantifying, qualifying, and/or modeling the likely effects of the proposed activity on:

- a. The ability of the channel to change course, re-occupy former segments, or inundate its floodplain;
- b. Streambank erosion potential, sediment routing and deposition, or debris loading;
- c. The amount or timing of flow in the channel;
- d. Existing flow patterns;
- e. Surface and subsurface flow characteristics;
- f. Flood storage (detention storage);
- g. Aggradation/degradation of the channel; and,
- h. Biological processes such as:
 - (1) Reproduction, vigor, growth and/or succession of streamside vegetation;
 - (2) Nutrient cycling;
 - (3) Fish spawning and/or rearing success;
 - (4) Riparian dependent avian species needs; and,
 - (5) Amphibian/mollusk needs.

7. Estimate the Magnitude and Spatial Extent of Potential Off-Site Changes. Address potential off-site, or indirect effects of the proposed activity, acknowledging any uncertainties.

- a. Consider and document:
 - (1) Changes that influence other parts of the river system;
 - (2) The range of circumstances under which off-site changes might occur (for example, as may be related to flow frequency); and,

(3) The probability or likelihood that predicted changes will be realized.

b. Specify processes involved, such as water and sediment, and the movement of nutrients.

8. Define the Time Scale Over Which Steps 3-7 are Likely to Occur. Review steps 3-7 looking independently at the element of time. Define and document the time scale over which the effects will occur.

9. Compare Project Analyses to Management Goals. Based on the analysis of steps 3-8, identify and document project effects on achievement, or timing of achievement, of management goals and objectives relative to free-flow, water quality, riparian area and floodplain conditions, and the outstandingly remarkable and other significant resource values.

10. Make Section 7 Determination. Make the Section 7 determination consistent with the policy outlined in FSM 2354.73. Based on the analysis of steps 3-9, document:

a. The effects of the proposed activity on conditions of free-flow, including identification of any proposed measures to minimize those effects;

b. Any direct and adverse effects on the outstandingly remarkable and other significant resource values for which the river was designated or is being studied; and,

c. Any unreasonable diminishing of scenic, recreational, fish and wildlife values associated with project activities above or below the area.

2354.77 – National Environmental Policy Act Compliance

Use the Section 7 procedure outlined in FSM 2354.76 to determine the effects of a proposed water resources project in compliance with the National Environmental Policy Act (NEPA). The procedure must be completed as a separate analysis by an interdisciplinary team, but included as part of the broader environmental analysis.

2354.78 – Environmental Analysis Documentation

For designated rivers and congressionally authorized study rivers, the Section 7 procedure must be documented in, or appended to, the environmental analysis document with appropriate reference in the environmental analysis. For rivers identified for study via the land management planning process, an analysis as to the potential effect of a proposed project on free-flow and the outstandingly remarkable values must be incorporated, appended, or available in the analysis file.

Use the decision document to describe the Section 7 determination for the preferred alternative. The determination should state if the proposed project will:

1. Affect free-flow characteristics, and the extent to which those effects will be minimized; and,
2. Have a direct and adverse effect on, or unreasonably diminish the values for which the river was designated (or might be added to the system), or have a net effect of protecting or enhancing those values, contributing to attainment of river management goals and objectives.

2354.8 – River Resources Protection and Management (Nondesignated) [Reserved]

2356 – Cave Management

Caves are dynamic natural systems affected by surface and subterranean environmental changes.

While similar in many respects to surface resources, cave resources present some unusual management challenges because of the nonrenewable nature of cave contents and the sensitivity of cave ecosystems to man-caused changes.

2356.01 – Authorities

Principal laws and regulations affecting management of National Forest caves.

1. The Organic Administration Act of June 4, 1897. (16 U.S.C. 551). This Act authorizes the Secretary of Agriculture to regulate occupancy and use of the National Forests. Regulations issued under the Act authorize protection of cave resources from theft and destruction (36 CFR 261.9a, 9b, 9g, and 9h). Under 36 CFR 294.1, classification is authorized for special interest areas that are managed for recreation use substantially in their natural condition. Special closures are authorized under 36 CFR 261.53 to protect threatened cave resources.
2. Antiquities Act of 1906 (34 Stat. 225; 16 U.S.C. 431 et seq.). This Act provides for the protection of historic or prehistoric remains or any object of antiquity on Federal land. Criminal sanctions are authorized for destruction or appropriation of antiquities. Scientific investigations of antiquities on Federal lands are permissible subject to permit and regulations. Uniform rules and regulations pursuant to this Act are in FSM 1530.12.
3. Archaeological Resources Protection Act (ARPA) October 31, 1979 (16 U.S.C. 470aa). This Act clarifies and defines "archaeological resources," prohibits the removal, sale, receipt, and interstate transport of archaeological resources obtained illegally from public lands. The Act authorizes confidentiality of site location information, authorizes permit procedures to enable study and investigation of archeological resources on public lands by qualified individuals; provides for substantial criminal and civil penalties, forfeiture of equipment used in the crime, and rewards for citizens who report the crime. The Act supplements but does not replace the Antiquities Act of 1906.

4. Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531). The Act describes the process for determining endangered and threatened species, establishes prohibited acts, prescribes penalties, mandates a recovery plan, and defines interagency and State cooperative relationship requirements.

2356.02 – Objectives

Provide cave related recreational, cultural, educational, and scientific study opportunities that serve public needs. Balance surface resource management and cave use with the protection of cave values.

2356.03 – Policy

1. Manage caves as a nonrenewable resource to maintain their geological, scenic, educational, cultural, biological, hydrological, paleontological, and recreational values.
2. Classify caves containing outstanding values as Geological or Historical Areas (FSM 2372).
3. Emphasize wild cave management with few or no facilities to aid or facilitate use.
4. Develop management prescriptions for caves of significant value.
5. Coordinate surface and cave resource management activities.
6. Protect threatened, endangered, proposed and sensitive, species in accordance with the Endangered Species Act (16 U.S.C. 1531) and FSM 2670.
7. Protect cultural sites and deposits in accordance with FSM 2361.03.
8. Develop and foster communications, cooperation, and volunteerism with interested publics, Federal agencies, States, and local governments.

2356.04 – Responsibilities

2356.04a – Deputy Chief for National Forest Systems

The Deputy Chief for National Forest Systems approves Memorandums of Understanding with national organizations and agencies for cooperative cave management programs.

2356.04b – Washington Office, Director, Recreation, Heritage and Wilderness Resources

The Washington Office, Director, Recreation, Heritage and Wilderness Resources:

1. Provides leadership through development and implementation of a cave management policy.

2. Coordinates cave management policy with Director of Minerals and Geology Management and the Director of Wildlife and Fish.

2356.04c – Regional Forester

Regional Foresters approve special area designations and implementation plans.

2356.04d – Forest Supervisor

Forest Supervisors:

1. Approve Memorandums of Understanding for cooperative cave management activities with local organizations.
2. Incorporate cave management prescriptions into the Forest Land Management Plan.

2356.05 – Definitions

Cave. Any naturally formed void, cavity, recess, or system of interconnected passages which occurs beneath the surface of the earth or within a cliff or ledge, including natural subsurface water and drainage systems, which is large enough to permit a person to enter, whether or not the entrance is naturally formed or manmade. The term "cave" shall also include any natural pit, sinkhole, or other feature, which is an extension or component of a cave.

Cave Life. All life forms, including plants and vertebrate or invertebrate animals endemic to caves or which commonly use caves during the completion of their life cycles.

Cave Resource. The cave itself and any material occurring naturally in caves, including sediments, paleontological deposits, minerals, speleothems, water, cave life, and other natural resources.

Developed Cave. Any cave or cave site that has been developed for the benefit of the public. This includes items such as construction or improvement of access roads, parking areas, sewage and sanitation facilities, trails, safety barriers, interpretive displays, and other similar features designed for public use.

Hydrological Setting. All natural components of a particular hydrological system, including areas of recharge, drainages, watersheds, regional movement of water through a particular geographical and topographical area, and the related structural components and geological formations through which it moves or by which it is controlled.

Sensitive Cave. A cave containing resources, which have significant values that can be easily damaged, disturbed, or destroyed.

Wild or Undeveloped Cave. As contrasted to a developed cave, lacks developments, which facilitate public use. Trails are user developed or nonexistent; parking, sanitation, interpretive displays are lacking.

2356.06 – References

"Spelaeen Inventory and Evaluation System" by Jim Neiland and Jer Thorton. American Cave Conservation Association, Cave Management Series Volume 1, Number 1, December 1985.

2356.1 – Planning

1. Incorporate cave management activities, considerations, and prescriptions in Forest Plans.
2. Acquire the inventory data needed to manage cave resources. Use the inventory and evaluation procedures in "Spelaeen Inventory and Evaluation System" (FSM 2356.06) or an equivalent inventory and evaluation procedure.
3. Utilize multi-discipline teams to acquire needed inventory data.
4. Establish appropriate cave use limits.
5. Prescribe techniques to control cave use. Manage use to the minimum extent needed to accomplish management objectives.

Regulation techniques include user education, information dissemination, access facility (roads and trails) management, permit system (FSM 2720), and physical barriers.

6. Avoid locating facilities, such as roads, trails, parking lots, sanitation, chemical and fuel storage, where they post a threat to cave resources and users.
7. Incorporate education and interpretative programs into cave management prescriptions where appropriate. Use these activities to take advantage of recreation opportunities, minimize use impacts, and help solve management problems.
8. Biotic communities are generally the most sensitive and easily damaged cave resource. Give priority to protection of these communities during planning and management.
9. Establish monitoring activities as needed to assess changes in the cave environment.

2356.11 – Developing Caves

A few caves may be of sufficient interest and significance to warrant consideration for development. Forest planning should identify caves for development and prescribe the general extent of development.

2356.11a – Caves Unsited for Development

Caves having the following conditions are generally not suited for development. Caves that:

1. Provide habitat for endangered, threatened, proposed, or sensitive species (FSM 2670).
2. Contain delicate formations and deposits or cultural resources that cannot be adequately protected.
3. Are the sites of ongoing scientific studies or have opportunities for scientific studies not found elsewhere.
4. Require special spelunking skills or equipment for access and use.
5. Contain natural hazards, such as bad air, flooding potential, or unstable conditions.

2356.11b – Cave Development Plan

Prepare a development plan for any cave identified for development. The plan must give priority consideration to protection of cave values. The plan should address the following items:

1. Development objectives.
2. Analysis of anticipated use.
3. Access to road and parking area location.
4. Sanitation and sewage disposal placement.
5. Water quality, quantity, and hydrological settings.
6. Visual quality.
7. Trail placement and design.
8. Cave weather (temperature, humidity, air flow, and quality).
9. Protection of sensitive features, biotic and abiotic.
10. Lighting design.
11. Use control.
12. Use limits.
13. Public safety.

14. Interpretive programs.
15. Development maintenance and operation, including concessions (FSM 2343).
16. Surface and underground management relationships.

2356.2 – Management

1. Publish and distribute information on cave management to direct use to suitable caves and as an educational tool to reduce use impacts. Also use information to increase public awareness and sensitivity to cave resource values.

Limit distribution of information to the public where such information might result in a conflict with cave management objectives.

Insure cooperators understand the laws governing public access to government information.

As a rule, cave information is available to the public under the Freedom of Information Act.

However, cultural resource and threatened and endangered species data may be exempted from release (FSM 6270).

2. Work with organizations and members of the caving community when establishing regulations.
3. Use trails within the cave to direct use through or around sensitive areas.
4. Use full seasonal or partial closures to protect sensitive wildlife during critical periods in the year. Where possible, use public education and interpretation or marked trails to reduce the need for closures.
5. Regulate use with a gate as a last resort. If a gate is used, ensure that it allows natural movement of air, water, wildlife, and other biota in and out of the cave. Design and install the barrier in a manner to minimize the possibility of breaking and entry by unauthorized persons.
6. Use law enforcement as required to protect users and cave values.
7. Obtain water rights where needed to maintain minimum stream flows.

2356.3 – Coordination With Other Resource Uses

Cave environments are dynamic and closely linked to surface environments and surface activities. This linkage generally occurs through the movement of air, water, plants, insects, and other animals into and out of caves. Altering these movements, or the nature of the material

being moved, can cause undesirable changes in the cave environment. The importance of changes is dependent upon the nature of the cave and what cave resources are involved. Some important considerations are:

1. Vegetation manipulation in and around cave entrances and within the hydrological setting for the cave.
2. Activities, which would alter entrances or create new entrances affecting air flow, temperature, humidity, and movement of materials in and out of the cave.
3. Introduction of pesticides, herbicides, fertilizers, and other deleterious materials either directly into the cave or indirectly through the cave's hydrological setting.
4. Changes in water quality and quantity. Pollution of underground waters by septic systems, landfills, and leaking underground tanks can spread quickly throughout the underground watershed to pollute domestic water supplies and impact cave biota (FSM 2880).
5. Construction of surface facilities such as roads, pipelines, buildings, parking areas, and storage facilities for volatile, toxic, and other environmentally harmful materials.
6. Extraction of minerals and other materials (FSM 2800).
7. Activities affecting the food chain and critical habitat of cave life.
8. Runoff water from roads and parking areas.
9. Blocking or changing natural water percolation due to compaction, paving, or vegetative management.
10. Activities affecting the air quality of a cave.

2356.31 – Public Safety and Public Information

Inform the public of the general hazards associated with cave exploration and any particular hazards, which a reasonably prudent person might not otherwise be aware.

Use the following warning in general maps and literature if there are caves open to public use by permit or otherwise.

"Caves may pose special dangers to visitors due to flooding, falling rocks, and other hazards which may require special skills and equipment. Cave visitors are responsible for their own safety and should take precautions to learn safety procedures and utilize proper equipment."

Use this warning on any special-use permit issued for cave users (FSM 2721.43).

Where special dangers are known to exist in a cave, efforts should be made to warn visitors in advance either through written warnings, in maps and guidebooks, or on permits, or by signs posted at entry points.

This is particularly important when the danger is not readily apparent to the user and a reasonably prudent person might not otherwise be prepared.

2356.4 – Volunteers

Encourage volunteer involvement for projects such as cave mapping, inventorying, planning, monitoring use, guiding, and interpretation through development of adopt-a-cave programs, volunteer agreements, and memoranda of understanding.

2356.5 – Cooperation

Utilize natural history associations to provide visitor services such as guides, lights, and educational materials.

Cooperate with local law enforcement agencies and caving volunteers to develop and maintain search and rescue contingency plans. Jointly publicize contacts for emergency use. As a rule, rely upon local law enforcement agencies to provide search and rescue leadership.

2356.6 – Research

Promote research activities by qualified persons or institutions to increase knowledge and improve management. Review research proposals to prevent long-term adverse impacts upon the cave.

2357 – Avalanche Information and Education Program

Avalanches are a significant hazard for the public. Winter recreation in the backcountry on National Forest System (NFS) lands often occurs in or near avalanche terrain. The Forest Service has worked on snow avalanche issues in the backcountry on NFS lands since at least the 1950s.

Avalanche conditions vary due to seasonal weather variations, current snowpack structure, and local weather patterns. Thus, avalanche danger is dynamic. The best way to mitigate avalanche risk is to have an informed and educated public. The Avalanche Information and Education Program (AIEP) addresses winter recreational safety in the backcountry on NFS lands by providing, to the extent practicable, timely and relevant snow, weather, and avalanche information and education to the public.

2357.01 – Authority

This section contains the principal laws and regulations pertaining to snow avalanche issues in the backcountry on NFS lands. See FSM 2301 for a list of authorities applicable to management of recreation opportunities generally on NFS lands.

1. Organic Administration Act of 1897 (16 U.S.C. 551). This act authorizes the Forest Service to regulate the occupancy and use of National forests and to preserve them from destruction.
2. Multiple Use–Sustained Yield Act of 1960 (16 U.S.C. 528-531). This act provides that National forests are to be established and administered for multiple uses, including recreation and recreation-related services, and authorizes cooperation with entities interested in developing and managing recreation on NFS lands.
3. Disaster Relief Act of 1974 (42 U.S.C. 5121 and 5132). This act provides for the Federal Government to provide for assistance to State and local Governments in connection with disaster relief, including fostering the development of comprehensive disaster preparedness and assistance programs and hazard mitigation, and for appropriate Federal agencies to be prepared to issue disaster warnings to state and local officials and to provide technical assistance to State and local Governments to ensure that timely and effective disaster warnings are provided.
4. Forest and Rangeland Renewable Resources Research Act of 1978 (16 U.S.C. 1641-1644). This act authorizes the Forest Service to conduct renewable resource environmental research related to understanding, predicting, and modifying weather, climatic, and other environmental conditions that affect management of forests and rangelands.
5. The Technology Innovation Act of 1980 (15 U.S.C. 3701-3710). This act supports domestic technology transfer and utilization of science and technology resources of the Federal Government and requires the Federal Government to strive, where appropriate, to transfer federally owned or originated technology to state and local Governments and the private sector.
6. The Federal Technology Transfer Act of 1986 (15 U.S.C. 3710a). This act authorizes Federal agencies to enter into cooperative research and development agreements with other Federal agencies, State and local Governments, industrial organizations, public and private foundations, and other persons.

2357.02 – Objective

The AIEP’s objective is to address public safety in the backcountry on NFS lands by providing, timely and relevant avalanche information and education to members of the public to help them make informed decisions about their exposure to avalanche conditions, to the extent practicable.

2357.03 – Policy

1. Address public and employee safety and awareness in the backcountry on NFS lands through a network of avalanche centers that provide avalanche information and education to the public, permit holders, and employees, as well as municipalities, counties, states, and other Federal agencies.
2. Consider and balance available agency resources, the nature and magnitude of avalanche risk, and the ability and willingness of cooperators to support the delivery of avalanche information and educational services relating to the backcountry on NFS lands, and document the consideration of those factors, in developing and maintaining an AIEP.
3. Foster cooperative agreements with local governmental entities and community groups that support the availability of avalanche information and education relating to the backcountry on NFS lands.
4. Document all backcountry avalanche incidents on NFS lands that result in serious injury, death, or property damage, to the extent practicable.
5. Support administrative units, permit holders, and the winter sports industry by facilitating the transfer of emerging technologies and techniques relating to avalanche control and emerging avalanche science.

2357.04 – Responsibility

2357.04a – Washington Office Director of Recreation, Heritage, and Volunteer Resources

The Washington Office Director of Recreation, Heritage, and Volunteer Resources, through the Winter Sports Program Manager and Director of the National Avalanche Center, is responsible for:

1. Developing and maintaining directives for the AIEP.
2. Serving as the primary contact for all avalanche-related issues for the Forest Service, including:
 - a. Providing expertise to regions, administrative units, and ranger districts on avalanche-related issues in the backcountry on NFS lands.
 - b. Coordinating with the Forest Service’s Office of Communication to handle National media inquiries regarding avalanches.
 - c. Coordinating and facilitating cooperative agreements with relevant agencies and the winter sports industry regarding avalanche-related issues in the backcountry on NFS lands.

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3. Providing leadership for addressing avalanche-related safety in the backcountry on NFS lands, including:

- a. Promoting the AIEP by providing program guidance, support, and coordination for the Forest Service's avalanche centers.
- b. Addressing safety practices relating to avalanches in the backcountry on NFS lands.
- c. Promoting the development of educational programs relating to avalanches in the backcountry on NFS lands.
- d. Facilitating the transfer of emerging avalanche technologies to administrative units, permit holders, the winter sports industry, and the public.
- e. Facilitating research on avalanches in the backcountry on NFS lands.
- f. Developing, maintaining, and fostering relationships with winter sports organizations and user groups.
- g. Serving as the primary point of contact with the Department of the Army and providing program guidance and management for the Forest Service's military artillery for avalanche mitigation program (FSM 2340).

2357.04b – Regional Foresters

Regional Foresters are responsible for:

- 1. In consultation with the National Avalanche Center, determining the need for an AIEP program in their region.
- 2. Ensuring that avalanche centers in their region are administered consistent with FSM 2357.
- 3. Coordinating with public affairs, law enforcement, and avalanche center staff in investigating avalanche incidents.

These responsibilities may be delegated to Forest Supervisors.

2357.04c – Forest Supervisors

Forest Supervisors who have been delegated responsibilities by the Regional Forester may re-delegate them to District Rangers who administer avalanche center operations.

2357.04d – Avalanche Center Directors and Lead Avalanche Specialists

Avalanche Center Directors and Lead Avalanche Specialists are responsible for:

1. Overseeing avalanche center operations in accordance with FSM 2357.
2. Developing and maintaining relationships with local communities and entering into cooperative agreements with cooperators that contribute to the AIEP's objective.
3. Managing avalanche center budgets, workflow, and cooperative agreements.
4. Supporting their administrative unit's project planning and resource management by providing input specific to avalanches and related risks.

2357.05 – Definitions

Avalanche Center. A Forest Service, other agency, or non-profit operation staffed by one or more full-time, paid avalanche specialists that provides avalanche information and education to the public primarily on avalanche safety in the backcountry on NFS lands.

Avalanche Center Director. The person who manages the day-to-day operations at a Type 1 Avalanche Center and usually also serves as an avalanche specialist or meteorologist.

Avalanche Danger. The risk of injury, death, and property damage from an avalanche that is determined using the North American Public Avalanche Danger Scale and that is based on the expected character, likelihood, size, and distribution of an avalanche in an entire mountain range, rather than on a specific slope.

Avalanche Forecast. Daily information provided to the public regarding current mountain weather, snowpack characteristics, travel advice, anticipated avalanche activity, and an avalanche danger rating that is specific to a particular backcountry area on NFS lands.

Avalanche Meteorologist. A professional meteorologist who specializes in making avalanche forecasts in support of avalanche mitigation programs.

Avalanche, Snow, and Weather Summary. Information provided to the public one to three times per week regarding mountain weather, snowpack characteristics, travel advice, and anticipated avalanche activity (but not an avalanche danger rating) that is specific to a particular backcountry area on NFS lands.

Avalanche Specialist. A professional snow and avalanche expert who specializes in backcountry avalanche danger assessment and public communication of that assessment.

Backcountry. For purposes only of FSM 2357, undeveloped NFS lands outside a ski area, roadway, or municipality.

Lead Avalanche Specialist. The avalanche specialist who assists the Avalanche Center Director with managing the daily work and field operations of a Type 1 Avalanche Center or acts in the lead administrative position at a Type 2 Avalanche Center.

Type 1 Avalanche Center. An avalanche center that collects daily snowpack and weather data; issues daily avalanche forecasts during the winter season and may also issue avalanche, snow, and weather summaries for areas where information or resources are scarce; issues and terminates avalanche warnings; provides or facilitates avalanche education; and acts as a platform for the exchange of information for avalanche safety programs and public users.

Type 2 Avalanche Center. An avalanche center that collects regular but intermittent snowpack and weather data; issues regularly scheduled (1 to 4 times per week) avalanche, snow, and weather summaries for supported backcountry areas during the winter season; may issue avalanche forecasts and avalanche warnings if resources allow full-time staffing for the duration and termination of the forecasts and warnings; provides or facilitates avalanche education; and acts as a platform for the exchange of information for avalanche safety programs and public users.

2357.1 – Establishing and Maintaining an Avalanche Center

Establishment and maintenance of an avalanche center can provide a significant community and public benefit. Several factors should be considered when deciding whether to establish and maintain an avalanche center, including the geographic area that would be supported, the type of center that should be established, available funding sources, staffing, use of volunteers, potential to collaborate with other avalanche centers, and consistency with the applicable land management plan.

The National Avalanche Center provides program guidance, education, and training to avalanche centers and military artillery programs. Contact the National Avalanche Center and consult the guidance below for advice on establishing and maintaining avalanche centers.

2357.11 – Criteria for Establishing and Maintaining an Avalanche Center

The area covered by an avalanche center is not dictated by Forest Service administrative boundaries, local governmental designations, or land ownership. The following three factors should be considered in determining appropriate avalanche center coverage:

1. The presence of backcountry avalanche terrain accessed by the public.

2. Potential risk of avalanches or a history of avalanches in previously less travelled areas where backcountry use is rapidly increasing.
3. The local community is willing and able to work with the Forest Service to support the AIEP.

2357.12 – Types of Avalanche Centers

All new avalanche centers shall be either a Type 1 or Type 2 Avalanche Center. As resources and opportunities allow, modify existing avalanche centers to meet the criteria of a Type 1 or Type 2 Avalanche Center. Contact the National Avalanche Center for further information on how to convert an existing avalanche center into a Type 1 or Type 2 Avalanche Center.

2357.13 – Avalanche Center Funding

The National Avalanche Center is funded through appropriations allocated to the Washington Office Recreation, Heritage, and Volunteer Resources program. Funding for Forest Service avalanche centers is the responsibility of the administering unit. Avalanche centers are funded through a combination of agency appropriations, cooperative agreements, and recreation fee retention. Possible funding sources will vary by location, local community interest, and capacity to support the AIEP. Use of volunteers may help defray expenditures on staffing. Units are encouraged to take advantage of all possible funding sources and the use of volunteers while maintaining managerial and operational control of avalanche centers.

2357.14 – Nonprofit Entities

Avalanche center success depends upon strong local community relations, support, and engagement. Nonprofit entities are an effective way to establish and maintain these community relationships. Affiliated and other nonprofit organizations are exempt from State and Federal income tax to the extent their activities support public safety and education.

The following are essential for an effective cooperative agreement: a shared mission and shared monetary and non-monetary responsibilities, both of which should be enumerated in the cooperative agreement (see FSH 1509.11). The Forest Service is responsible for field operations, avalanche forecasting, and contributing content and technical information to the avalanche center website. The cooperator maintains the copyright on the website and conducts fundraising and outreach. The cooperator may also help purchase some items, such as remote weather stations, which allow for the collection and distribution of avalanche information related to public safety and may retain ownership of major capital investments at an avalanche center. Avalanche education is a shared responsibility between partners.

2357.15 – Avalanche Center Staffing

Avalanche center staffing depends on the type of center, the size and complexity of the supported backcountry area, the level of engagement of local community groups, and available funding.

Type 1 Avalanche Centers employ three or more full-time avalanche specialists or avalanche meteorologists and have a robust network of field observers or volunteers assisting with data collection in the supported area. One or more Type 1 Avalanche Centers may be located in a Forest Service region to provide avalanche expertise at the state or regional level. Type 1 Avalanche Centers may utilize a central office that supports and shares resources with smaller offices. This scenario may be useful in geographically large mountainous areas.

Type 2 Avalanche Centers employ at least one full-time avalanche specialist and may depend upon volunteers and other Forest Service employees for field and administrative duties.

Encourage involvement by other agency employees in field operations if possible. Use of other agency employees to work with avalanche specialists as field partners and observers or to conduct public outreach as needed bolsters avalanche center resources.

2357.16 – Volunteers

When appropriate, enlist volunteers and volunteer organizations to promote the AIEP. Encourage volunteer involvement in accordance with FSM 1830 for projects such as field data collection, observations, awareness events, and avalanche center infrastructure maintenance. Volunteers who accompany staff into the field must execute volunteer agreements and must adhere to all standards required of Forest Service employees. Volunteers should be included in daily planning, carry appropriate personal protective equipment, and are expected to have a level of training, skill, and fitness commensurate with the terrain and conditions they will encounter.

2357.17 – Working with Other Agencies' Avalanche Centers

Strive to form productive partnerships with avalanche centers operated by other agencies. Work toward standardizing public safety products between agencies.

2357.18 – Working with Non-Governmental Avalanche Centers

In some cases, non-governmental entities endeavor to provide avalanche information or education regarding NFS lands. In these circumstances, offer the expertise and support of local Forest Service avalanche center staff or the support of avalanche specialists at the National Avalanche Center. If a non-governmental entity's objective includes providing products and services that are comparable to the AIEP's and the non-governmental entity has the organizational capacity and capability to do so, consider entering into a cooperative agreement or memorandum of understanding with or issuing a special use authorization to the non-governmental entity, as appropriate, for those purposes. Contact the National Avalanche Center for further guidance on working with non-governmental entities to promote the AIEP.

There may be areas where non-governmental entities do not operate on or seek to provide avalanche information or education regarding NFS lands, but are located close to Forest Service

avalanche centers. Make an effort to form productive working relationships with these entities and promote best practices with regard to avalanche information and education.

2357.19 – Land Management and Project Planning

Consider avalanche specialists in the local administrative unit or at the National Avalanche Center as resource specialists for questions related to land management and project planning in avalanche terrain. Avalanche specialists can provide input or liaison with consulting entities about decisions such as siting, construction, and management of facilities and resources on NFS lands that may be affected by avalanche hazards.

2357.2 – Avalanche Center Operations

2357.21 – National Avalanche Center

The National Avalanche Center provides guidance to Forest Service avalanche centers and the Agency's Military Artillery for Avalanche Mitigation Program, as well as education and training for associated staff. Specific functions are specified in section 2357.21a through 2357.21f.

2357.21a – Avalanche Center Guidance and Support

The National Avalanche Center has a command of current best practices for avalanche center operations and provides advice to field units regarding establishment and maintenance of avalanche centers. The National Avalanche Center strives to promote consistency among avalanche centers in the United States, both on and off NFS lands.

2357.21b – Avalanche Safety

The National Avalanche Center facilitates and promotes consistent avalanche safety practices. This work includes:

1. Maintaining relevant and modern content on a variety of media platforms;
2. Developing and maintaining partnerships with professional snow and avalanche groups; and
3. Developing educational materials for, and presenting them to, a wide range of user groups.

2357.21c – Avalanche Expertise

The National Avalanche Center answers avalanche-related questions from Forest Service field units pertaining to avalanche center operations, ski area expansions, issuance and administration of special use authorizations, travel management planning, and any other agency issues requiring avalanche expertise.

2357.21d – Military Artillery for Avalanche Mitigation

Coordinate and manage the Forest Service’s Military Artillery for Avalanche Mitigation Program in accordance with the current interagency agreement between the Department of the Army and the Forest Service (FSM 2340).

2357.21e – Technology Transfer

The National Avalanche Center gives priority to assessing, disseminating, and implementing proven and promising avalanche forecasting and mitigation technology to agency personnel, permit holders, and cooperators. The National Avalanche Center serves as a focal point for the transfer of information among scientists, practitioners, and outdoor companies who are developing techniques and tools to improve avalanche forecasting, mitigation, safety, and education. In addition, the National Avalanche Center facilitates research and administrative studies when they are directly related to the effectiveness of Forest Service avalanche specialists and winter sports staff. See FSM 1251 for further direction on technology transfer.

2357.21f – National Avalanche School

The National Avalanche Center serves as a partner and resource for the National Avalanche School (NAS). The NAS is run biennially by the National Ski Areas Association’s National Avalanche Foundation (NAF). The NAS provides professional-level avalanche education to ski patrollers, backcountry guides, highway avalanche forecasters, and Forest Service avalanche specialists and snow rangers. Avalanche specialists from local avalanche centers and the staff of the National Avalanche Center are among those teaching at the NAS.

2357.22 – Avalanche Centers

2357.22a – Coordination and Consistency

Avalanche centers on NFS lands should coordinate with the National Avalanche Center to promote consistency and best practices in the avalanche center network.

2357.22b – Data Collection and Field Work

Snow and avalanche conditions are dynamic and are monitored to enhance public safety. Avalanche centers conduct field work to obtain information necessary for timely and accurate public safety messages and to educate the public and other NFS visitors. Safety is critically important and depends on employees having adequate training, expertise, equipment, and terrain familiarity. All avalanche specialists shall adhere to the safety procedures outlined in their avalanche center’s operational safety plan. All field work should be conducted with the least amount of hazard exposure and only when it can be conducted safely based on the Agency’s assessment of the conditions and terrain and the individual’s training, skill, and fitness, to the extent practicable. Field work may need to be postponed or cancelled based on conditions and other factors. Appropriate field work includes but is not limited to collecting snow, weather, and

avalanche data and information; maintaining remote weather stations; conducting recreational and professional educational programs; and reporting avalanche incidents.

Avalanche specialists work in a challenging environment, and they shall exercise skill, initiative, and self-reliance. Avalanche specialists need to be familiar with the forecast area's geography and conditions in order to inform and educate a variety of user groups on general environmental and avalanche hazards that may be encountered.

2357.22c – Employee Safety

The objective of the Forest Service's safety and health program is to ensure adequate protection for Forest Service employees and property, volunteers, and the visiting public (FSM 6700). Employee safety is paramount for all avalanche center fieldwork. Avalanche centers shall develop and maintain an operational safety plan and shall review that plan annually. All Forest Service avalanche specialists shall maintain a current Job Hazard Analysis (JHA) and Project Risk Analysis (PRA) or their equivalents. Contact the National Avalanche Center for sample templates for operational safety plans, JHAs and PRAs, and daily field work planning forms. See FSM 6700 for additional guidance on employee safety.

2357.22d – Public Safety Products

Optimize public safety by providing relevant winter information to backcountry travelers. Use appropriate and effective communication methods. Products may consist of but are not limited to avalanche forecasts, avalanche and mountain weather summaries, and avalanche warnings. Prioritize consistency in the design and function of other public safety products. Contact the National Avalanche Center for current tools and templates for public safety products.

2357.22e – National Map and Avalanche.org

All Forest Service avalanche centers shall contribute to the National Avalanche Danger Map. The National Avalanche Danger Map is designed to display current avalanche danger and to be a public portal to local backcountry avalanche information. The National Avalanche Danger Map is posted on Avalanche.org, which provides industry-wide avalanche information and acts a repository for avalanche forecasting tools. The Avalanche.org domain is maintained through a partnership between the Forest Service and the American Avalanche Association.

2357.22f – Social Media

Social media are an effective and practical way to communicate avalanche information to the public. Social media and cooperator websites may be used to disseminate public safety information and to collect crowd-sourced information on current and past avalanche conditions. Focus social messaging on mission-critical public safety announcements, collection of relevant information, and promotion of community partnerships.

2357.22g – Avalanche Education

Public avalanche awareness is essential in avalanche-prone areas, and avalanche education is needed for the public to effectively mitigate or avoid avalanche risks. Conduct or facilitate awareness classes tailored to the needs of local user groups (such as, non-motorized, motorized, youth, and professional organizations and agency personnel) in backcountry areas supported by an avalanche center, as resources allow. Also, facilitate professional continuing education for local snow and avalanche professional, as resources allow. In some areas, it may be effective to form partnerships that allow other entities – such as associated non-profit “Friends” groups or outfitters and guides – to take a leading role in providing community education.

2357.22h – Documenting Avalanche Incidents

Document all backcountry avalanche incidents on NFS lands that result in serious injury, death, or property damage, to the extent practicable. Assist Forest Service and local law enforcement personnel in investigating fatalities, when requested. See *Snow, Weather, and Avalanches: Observational Guidelines for Avalanche Programs in the United States* for reporting procedures.

2357.22i – Weather Stations

Install remote weather stations to gather and disseminate data that support the AIEP, where appropriate. See FSM 2590 for specific guidance on remote weather stations. Place stations used for avalanche-related operations in locations relevant to the forecasting location and problem. Coordinate and leverage use with other governmental agencies in the area.

2357.22j – Search and Rescue

As requested, support local search and rescue, local law enforcement, and Forest Service law enforcement personnel during avalanche incident responses. Support may include avalanche and weather hazard assessment and consultation, avalanche rescue training, and serving on incident response teams. Consult with the Forest Service’s Law Enforcement and Investigations staff when considering entering into a memorandum of understanding with local search and rescue. Lead search and rescue authority may be assigned to avalanche centers in areas where the Forest Service has assumed search and rescue responsibility. See FSM 1596 for more guidance on Forest Service search and rescue operations.

2357.22k – Media Contacts

Prior to providing an interview on an avalanche incidents, consult FSM 1650, and work closely with the local public affairs staff or the Forest Service’s Office of Communication, as appropriate, for adequate media clearances. Utilize the media to provide the public with accurate and timely information about winter snow, weather, and avalanche conditions that may have public safety implications in the affected backcountry area. This specific information should be limited to the affected backcountry area, although more general information may be provided for surrounding backcountry areas.

Pursue public affairs training opportunities.

2357.22l – Cooperative Agreements

Utilize grants and agreements personnel to develop and maintain mutually beneficial cooperative agreements that further the AIEP's mission.

Avalanche center operations may be conducted in cooperation with other entities, such as governmental agencies and non-profit organizations, to leverage the expertise, and capabilities of each cooperator to more effectively serve public safety interests. Execute an appropriate cooperative agreement that specifies the monetary and non-monetary responsibilities of each party and each party's specific areas of authority. Maintain control of public safety products, and ensure the consistency and quality of field operations and educational content.

2357.22m – Continuing Education

Continuing education and training are essential for avalanche center personnel and can be obtained on the job, at avalanche or communications schools, at the NAS, at regional snow and avalanche workshops, and at the International Snow Science Workshop. Avalanche specialists are encouraged to be involved in avalanche education at the National and local levels, to contribute to projects facilitated by the National Avalanche Center, and to stay abreast of current avalanche studies. In particular, avalanche specialists are encouraged to attend the International Snow Science Workshop and regional Snow and Avalanche Workshops and to consider employee exchange opportunities at other avalanche centers for cross-training, to the extent permitted by resources and administrative capacity.

2358 – Saw Program

This section covers only chain saws and crosscut saws as defined in FSM 2358.05. The operation of saws not covered by this section, such as bow saws, pruning saws, brush saws, and pole saws, requires appropriate training (FSH 6709.11, ch. 41).

The direction within this section applies to all activities on National Forest System (NFS) lands that involve the use of saws, unless a separate interagency fire management cooperative agreement covers that activity. The Forest Service Saw Program provides direction on qualifications, training, evaluation, and certification requirements for Forest Service employees, volunteers, training consultants, and cooperators using saws on NFS lands.

The terms "saw" and "Saw Program" refer to both chain saws and crosscut saws, unless specified otherwise, for the purposes of this directive.

The Wilderness Act and FSM 2320 govern the type of saw use allowed in wilderness.

2358.01 – Authority

The principal authorities and regulations for the Forest Service Saw Program are:

1. Occupational Safety and Health Act of 1970, Sections 6 (29 U.S.C. 655) and 19 (29 U.S.C. 668).
2. Executive Order 12196, Occupational Safety and Health Programs for Federal Employees.
3. Title 29, Code of Federal Regulations:
 - a. Part 570, Subpart E – Occupations Particularly Hazardous for the Employment of Minors Between 16 and 18 Years of Age or Detrimental to Their Health or Well-Being.
 - b. 1910.95 – Occupational Noise Exposure.
 - c. 1910.132 – Personal Protective Equipment.
 - d. 1910.151 – General Requirements.
 - e. 1910.242 – Hand and Portable Powered Tools and Equipment, General.
 - f. 1910.266 – Logging Operations.
 - g. Part 1960 – Basic Program Elements for Federal Employee Occupational Safety and Health Programs and Related Matters.
4. Forest Service Handbook (FSH) 6709.11, Health and Safety Code Handbook.
5. FSH 1509.11, Grants, Cooperative Agreements, and Other Agreements Handbook.

2358.02 – Objective

The objective of this directive is to establish minimum prerequisites and standards for training, field proficiency evaluation, and qualification and certification requirements for the safe use of saws by Forest Service employees, training consultants, volunteers, and cooperators on NFS lands, including the development of stand-alone cooperator and volunteer training and certification programs for sawyer instructors and sawyer evaluators.

2358.03 – Policy

1. Allow the use of saws on NFS lands only if the sawyer has successfully completed training and field evaluation, possesses a valid National Sawyer Certification Card, and meets any other specified qualifications to perform assigned saw work, including current first aid and cardiopulmonary resuscitation (CPR) certification.

2. Ensure that employee and volunteer sawyers, sawyer instructors, sawyer evaluators, and training consultants who use saws on NFS lands are trained, evaluated, qualified, and certified in accordance with this directive.
3. Ensure that agreements with cooperators (other than those working under interagency fire management cooperative agreements) provide that the cooperators operating saws on NFS lands are responsible for sawyer training, evaluation, and certification of their employees, participants, and volunteers in accordance with this directive. Appropriate provisions regarding the use of saws must be inserted into cooperative agreements per FSH 1509.11, section 91.2. See FSM 1580 and FSH 1509.11, chapter 90, for direction on cooperative agreements generally. See FSH 1509.11, chapter 50, for direction on interagency fire management agreements. See FSH 1509.11, section 91.2, for direction on certification of cooperators' sawyers. Cooperators may participate and be certified in Nationally Recognized Sawyer Training Courses (NRSTCs) offered by the Forest Service or may train, evaluate, and certify their volunteers and employees through NRSTCs offered by Forest Service-recommended cooperator sawyer evaluators and sawyer instructors (FSM 2358.04g, para. 4).
4. Volunteers operating saws under a qualifying mutual benefit cooperator must be trained, evaluated, and certified in accordance with this directive. A cooperator's volunteers may participate and be certified in NRSTCs offered by the Forest Service or may be trained, evaluated, and certified through NRSTCs offered by Forest Service-recommended cooperator sawyer evaluators and sawyer instructors. See FSM 1830 for additional direction on volunteers working under a mutual benefit cooperator.
5. Ensure that sawyers do not use saws outside the limits of their certification or qualifications, except during formal evaluation proceedings or under the immediate supervision of a higher-qualified sawyer. A crosscut sawyer trainee may use a crosscut saw only under the immediate supervision of a qualified sawyer and only for bucking.
6. The completion of classroom, field proficiency, and evaluation requirements may result in certification, certification with restrictions, or no certification.
7. Chain saw sawyers must be at least 18 years of age (29 CFR Part 570, Subpart E). Crosscut sawyers must be at least 16 years of age.

Forest Service Manual 2300 – Recreation, Wilderness, And Related Resource Management
Chapter 2350 - Trail, River, and Similar Recreation Opportunities
Amendment: 2300-2022-1
Effective date: March 31, 2022

2358.04 – Responsibility

2358.04 – Exhibit 01: Delegated Authorities

Task	Regional Forester	Forest Supervisor	District Ranger	Regional Saw Program Manager	Saw Program Coordinator
Implementing the Saw Program	Has authority*	Delegation permitted**	Delegation permitted	Delegation not permitted	Delegation not permitted
Appointing the Regional Saw Program Manager	Has authority	Delegation not permitted	Delegation not permitted	Delegation not permitted	Delegation not permitted
Designating the Saw Program Coordinator for an administrative unit	---	Has authority	Delegation permitted	Delegation not permitted	Delegation not permitted
Signing National Sawyer Certification Cards***	Has authority	Has authority	Has authority	Delegation permitted	Delegation permitted
Revoking National Sawyer Certification Cards	Has authority	Delegation permitted	Delegation permitted	Delegation not permitted	Delegation not permitted
Approving training consultants and volunteer sawyer instructors and sawyer evaluators	Has authority	Delegation not permitted	Delegation not permitted	Delegation permitted	Delegation not permitted
Providing cutting areas to meet Saw Program training requirements and maintain sawyer proficiency	---	Has authority	Delegation permitted	Delegation not permitted	Delegation not permitted
Meeting periodically with the Saw Program Coordinator to review the Saw Program	---	Has authority	Delegation permitted	Delegation not permitted	Delegation not permitted

* Only line officers can delegate authority.

** “Delegation permitted/not permitted” means may/may not be delegated to this level.

*** Certifying officials for cooperator sawyers under an FSM 1580 agreement should follow the language in the agreement (FSM 1509.11, sec. 91.2).

2358.04a – Washington Office Director of Recreation, Heritage, and Volunteer Resources (RHVR)

It is the responsibility of the Washington Office, Director of Recreation, Heritage, and Volunteer Resources (RHVR) to:

1. Implement the Saw Program consistent with the requirements in this directive.
2. Develop and revise policy on use of saws that covers, at a minimum:
 - a. Standards.
 - b. Qualifications.
 - c. Initial and recurrent training requirements.
 - d. Currency and proficiency of skills.
 - e. Field evaluation and reevaluation.
 - f. Required personal protective equipment (PPE).
 - g. Operational procedures.
 - h. Job hazard analysis (JHA).
3. Coordinate with other resource program areas prior to making policy changes to the Saw Program.

2358.04b – National Saw Program Manager

It is the responsibility of the National Saw Program Manager to:

1. Submit a letter to the Washington Office, Director of RHVR, to document the National Saw Program Manager's approval of each NRSTC and maintain a list of NRSTCs.
2. Coordinate the review by the Technical Advisory Group (TAG) of training, evaluation, and certification programs submitted by cooperator or volunteer organizations and manage day-to-day operation of the Saw Program.
3. Monitor and evaluate the Saw Program in accordance with FSM 2358.3.
4. Serve as chairperson or designate a chairperson for the TAG.
5. Maintain a list of Regional Saw Program Managers.
6. Coordinate or assist in review and analysis of saw-related accidents and near misses.

7. Serve as liaison with Federal, State, local, tribal, and private entities on saw matters.
8. Recommend revisions to the Saw Program directives to the Washington Office, Director of RHVR.

2358.04c –Technical Advisory Group (TAG)

The TAG provides multidisciplinary expertise in saw operations. The TAG consists of the National Saw Program Manager, Regional Saw Program Managers, a representative from the Forest Service Technology and Development Centers, and other federal agency saw and safety-related subject matter experts. The purpose of the TAG is to develop, coordinate, and provide advice and guidance to the National Saw Program Manager in connection with training, skills, and safety for all aspects of chain saw and crosscut saw operations on NFS lands. In particular, the TAG provides recommendations on the approval of NRSTCs to the National Saw Program Manager.

2358.04d – Regional Foresters

It is the responsibility of the Regional Foresters to:

1. Implement the Saw Program in their Region, which includes:
 - a. Providing for training and certification of Forest Service employees and volunteers who use saws in accordance with this directive; and
 - b. Incorporating appropriate provisions into FSM 1580 agreements (per FSH 1509.11, sec. 91.2) regarding cooperators' responsibility for sawyer training, evaluation, and certification of their employees and volunteers in accordance with this directive.
2. Appoint, the Regional Saw Program Manager in writing.
3. Sign National Sawyer Certification Cards as the certifying official based on the requisite sawyer evaluator recommendation. This authority may be delegated to the Regional Saw Program Manager and Saw Program Coordinators (FSM 2358.04, ex. 01).
4. Revoke, in writing, sawyers' National Sawyer Certification Card when their demonstrated skills are no longer considered adequate or they are deemed by a sawyer evaluator to be a danger to themselves or others. This authority may be delegated to Forest Supervisors and District Rangers (FSM 2358.04, ex. 01).
5. Approve, in writing, training consultants and volunteer sawyer instructors and sawyer evaluators based on a written recommendation from the Regional Saw Program Manager. This authority may be delegated to the Regional Saw Program Manager (FSM 2358.04, ex. 01).

2358.04e – Forest Supervisors

It is the responsibility of the Forest Supervisors to:

1. Coordinate with affected staff within their jurisdiction to secure sufficient resources for administration of the Saw Program.
2. Designate in writing the Saw Program Coordinator for their administrative unit and specify in writing the length of the appointment, responsibilities, and criteria for renewal of the designation. This authority may be delegated to District Rangers (FSM 2358.04, ex. 01).
3. Sign National Sawyer Certification Cards as the certifying official based on the requisite sawyer evaluator recommendation. This authority may be delegated to the Saw Program Coordinator (FSM 2358.04, ex. 01).
4. Provide cutting areas to meet Saw Program training requirements and maintain sawyer proficiency. This authority may be delegated to District Rangers (FSM 2358.04, ex. 01).
5. Meet periodically with the Saw Program Coordinator to review the Saw Program for their administrative unit. This authority may be delegated to the District Ranger (FSM 2358.04, ex. 01).

2358.04f – District Rangers

It is the responsibility of the District Rangers to:

1. Provide input on the selection of the Saw Program Coordinator for their administrative unit.
2. Sign National Sawyer Certification Cards as the certifying official based on the requisite sawyer evaluator recommendation. This authority may be delegated to the Saw Program Coordinator (FSM 2358.04, ex. 01).

2358.04g – Regional Saw Program Managers

It is the responsibility of the Regional Saw Program Managers to:

1. Serve as the primary contact for Saw Program Coordinators in their Region.
2. Guide and assist sawyer evaluators, sawyer instructors, and sawyers with implementation and monitoring of saw operations.
3. Serve on the TAG.
4. Develop and maintain a cadre of sawyer instructors and sawyer evaluators, as well as schedule and coordinate training for Saw Program Coordinators. This responsibility

includes the evaluation of training consultants, volunteer and cooperator sawyer instructors and sawyer evaluators, and a recommendation based on that evaluation to the certifying official.

5. Coordinate and maintain all required records for the Saw Program in their Region. This authority may be delegated to Saw Program Coordinators in their Region.
6. Notify the Regional Safety and Occupational Health Manager, Regional Forester, and National Saw Program Manager when serious saw accidents or fatalities occur and share lessons learned from those incidents with other Regional Saw Program Managers.
7. Supplement NRSTC curriculum and field proficiency evaluations, as appropriate, to reflect unique or special conditions, such as storm damage or disease outbreaks, carpentry, or orchard pruning.
8. Monitor and evaluate the Saw Program in accordance with FSM 2358.3.
9. Periodically monitor saw instruction given by both Forest Service and volunteer or cooperator organizations to assess sawyer instructors' effectiveness and to determine compliance with this directive.
10. Regularly meet with Saw Program Coordinators and C Sawyer Evaluators.
11. Make recommendations in writing to the District Ranger or Forest Supervisor regarding the designation of C Sawyer Evaluators. This authority may be delegated to another C Sawyer Evaluator.

2358.04h – Regional Safety and Occupational Health Managers

It is the responsibility of the Regional Safety and Occupational Health Managers to:

1. Monitor the Saw Program and assist the Regional Saw Program Manager, when requested (FSM 2358.3).
2. Provide guidance on compliance with the Occupational Safety and Health Act of 1970 and its implementing regulations, 29 CFR Part 1910, as applicable to the Saw Program.
3. Review all saw incidents or accident reports submitted by the Saw Program Coordinator and provide oversight and assistance with saw-related accidents and near misses as a member of the accident review team.
4. Notify the Regional Saw Program Manager of review of saw-related accidents and near misses.

2358.04i – Saw Program Coordinators

It is the responsibility of the Saw Program Coordinators to:

1. Serve as the primary contact for line officers and first-line supervisors in their administrative unit.
2. Assist sawyer evaluators, sawyer instructors, and sawyers with the implementation and monitoring of on-the-ground saw operations and training.
3. Develop and maintain a cadre of sawyers, sawyer evaluators, and sawyer instructors, as well as schedule and coordinate training for sawyers.
4. Monitor and evaluate the Saw Program in accordance with FSM 2358.3.
5. Review final reports of saw-related accidents and near misses.
6. Coordinate with the appropriate line officers, the Regional Saw Program Manager, and other Saw Program Coordinators to report Saw Program accomplishments, issues, concerns, and recommendations for improvement of the Saw Program.
7. Maintain sawyer proficiency sufficient to train, evaluate, and reevaluate sawyer instructors and sawyer evaluators.
8. Identify sawyers whose demonstrated skills are no longer considered adequate or who are a danger to themselves or others and recommend revocation of their National Sawyer Certification Card to the appropriate line officer.

2358.04j – First-Line Supervisors

It is the responsibility of the first-line supervisors to:

1. Notify the local line officer of the need for qualified sawyers.
2. Provide opportunities for sawyers to receive proper training, including training on first aid and CPR, and any additional requirements specified in the JHA and field evaluation necessary for saw use.
3. Monitor sawyers under their supervision, including terminating and correcting any hazardous operation of saws that they observe.
4. Provide a recommendation to the appropriate line officer on suspension or revocation of a sawyer's National Sawyer Certification Card when the sawyer violates these directives and notify the Saw Program Manager when this recommendation is made.

2358.04k – Sawyer Instructors

It is the responsibility of the sawyer instructors to:

1. Instruct at the skill level commensurate with their saw qualifications and recommend that sawyers who have successfully completed the requisite NRSTCs be evaluated for certification.
2. Conduct sawyer training using NRSTCs.
3. Confer periodically with the Saw Program Coordinator to provide continuity in the Saw Program in their jurisdiction.
4. Monitor and evaluate the Saw Program in their jurisdiction in accordance with FSM 2358.3.

2358.04l – Sawyer Evaluators

It is the responsibility of the sawyer evaluators to:

1. Evaluate and reevaluate sawyers' proficiency in the field using the Sawyer Training and Field Evaluation form (FSM 2358.3, ex. 03 and 04) and assist Saw Program Coordinators in their jurisdiction.
2. Sign the Sawyer Training and Field Evaluation form (FSM 2358.3, ex. 03 and 04) as the sawyer evaluator for sawyers that are determined to have satisfactorily met the requirements for the safe use of saws and recommend them for certification by the certifying official.
3. Input information from Sawyer Training and Field Evaluation forms (FSM 2358.3, ex. 03 and 04) into the National Sawyer Certification Database when it becomes available.
4. Issue a National Sawyer Certification Card to sawyers within 14 days of successfully completing their evaluation (FSM 2358.3 – Exhibit 05).
5. Assist Saw Program Coordinators in scheduling sawyer training.

2358.04m – Sawyers

It is the responsibility of the sawyers to:

1. Perform all work safely and within the scope of their current certification as documented on their National Sawyer Certification Card (FSM 2358.3, ex. 05).
2. Maintain proper saws, tools, and accessories in good repair before starting any sawing assignment, including protecting saws, tools, and accessories from damage during transport or use.

3. Notify their first-line supervisor or Saw Program Coordinator of any sawing assignment that they are not comfortable performing or that is beyond their ability to perform.
4. Maintain records of all completed sawyer training and renew required prerequisite certifications (first aid and CPR training) as needed to keep sawyer certifications current.
5. Report all saw accidents and near misses to the Forest Service's current safety reporting system. In cases where multi-agency jurisdiction exists, accident reporting responsibility falls on the agency managing the sawyer's volunteer or cooperator agreement.

2358.05 – Definitions

Advanced Teaching Method or Technique. A method or technique for teaching adult learners that takes into consideration different learning abilities, motivations, and life experiences.

A Sawyer. An apprentice sawyer who may saw only in the least complex situations or, for training purposes, at the next higher level and in either case only under the immediate supervision of a B or C Sawyer qualified to supervise the work (FSM 2358.1, ex. 02).

B Sawyer – Bucking Only (not applicable in the fire management context). An intermediate sawyer who may independently buck and limb any size material in moderately complex situations and who may saw at the next higher level, but only under the immediate supervision of a sawyer qualified to supervise the work (FSM 2358.1, ex. 02).

B Sawyer – Felling and Bucking. An intermediate sawyer who may independently fell, buck, and limb any size material in moderately complex situations. This person may saw at the next higher level under the immediate supervision of a sawyer qualified to supervise the work (FSM 2358.1, ex. 02). This person may also conduct classroom and field training for A and B Sawyers with prior written approval from the Saw Program Coordinator.

Brush. Any vegetation less than 5 inches diameter at breast height (DBH).

Brushing. Removing brush and shrubs of less than 5 inches DBH, either during fire line construction or while clearing out a work area.

Bucking. Sawing logs and limbs into shorter lengths.

C Sawyer – Bucking Only (not applicable in the fire management context). An advanced sawyer who may independently buck and limb any size material in highly complex situations based on the Regional Saw Program Manager's or Saw Program Coordinator's written recommendation. The recommendation must be supported by demonstrated

advanced saw knowledge, skills, and in most cases certification as a B Sawyer (FSM 2358.1, ex. 02). This person may conduct classroom and field training within that person's skill level for A and B Sawyers, and may conduct field proficiency evaluations within that person's skill level for A Sawyers and B Sawyers – Bucking Only.

C Sawyer – Felling and Bucking. An advanced sawyer who may independently fell, buck, and limb any size material in highly complex situations based on the Regional Saw Program Manager's or Saw Program Coordinator's written recommendation. The recommendation must be supported by demonstrated advanced saw knowledge, skills, and in most cases certification as a B Sawyer (FSM 2358.1, ex. 02). This person may conduct classroom, field training, and proficiency evaluations for A and B Sawyers.

C Sawyer Evaluator. An advanced sawyer who may independently fell, buck, and limb any size material in highly complex situations based on the Regional Saw Program Manager's written recommendation. The recommendation must be supported by the successful completion of training on organizing and conducting advanced sawyer evaluation sessions in the field, demonstrated advanced saw knowledge and skills, and in most cases certification as a C Sawyer – Felling and Bucking for at least 3 years (FSM 2358.1, ex. 02). This person may conduct classroom, field training, and proficiency evaluations for sawyers at all certification levels.

Certification. Confirmation a sawyer meets applicable training and field proficiency requirements and can competently saw at the identified skill level by a certifying official based on the requisite sawyer evaluator recommendation.

Certifying Official. The Regional Forester, Forest Supervisor, District Ranger, or with delegated authority the Regional Saw Program Manager or Saw Program Coordinator who confirms that a sawyer meets applicable training and field proficiency requirements and can competently saw at the identified skill level based on the requisite sawyer evaluator recommendation.

Chain Saw. Any power saw that runs on gasoline or electricity and utilizes a guide bar and chain, other than a power pole saw.

Complex or Complexity. A characterization of the cutting situation that determines the level of sawyer certification needed based on the tree species and crown, amount of material, size, lean, binds, condition of the fiber, topography, stability, and any other factors that will affect the sawing operation.

Cooperator. An individual or entity that voluntarily enters into a challenge cost share, participating, collection, or other agreement with the Forest Service to work on a project under FSM 1580.5 and FSH 1509.11, section 91.2, other than another agency working with the Forest Service on fire management activities (FSH 1509.11, ch. 50).

Crew Leader. The person who conducts immediate supervision of a saw crew and who reports its progress and any problems to the first-line supervisor, if that person is not also the crew leader (FSH 6709.11).

Crosscut Saw. Any of various styles of handsaws operated by one or more persons to fell timber or cut logs manually, other than a bow saw, pruning saw, or brush saw.

Crosscut Sawyer Trainee. A sawyer who performs crosscut bucking tasks as part of on-the-job training, but only under the immediate supervision of a B or C Crosscut Sawyer.

Danger Tree. A standing tree that presents a hazard to people due to conditions such as deterioration or physical damage to the root system, trunk, stem, limbs, and the direction and lean of the tree (29 CFR 1910.266(c); FSH 6709.11, glossary).

Evaluation. A determination in the certification process by a sawyer evaluator that indicates whether a sawyer is proficient in the safe use of a saw in the field and that is documented using the Sawyer Training and Field Proficiency Evaluation form (FSM 2358.3, ex. 03 and 04).

Felling. Safely cutting down a tree, including making a series of cuts that causes a tree to fall to the ground.

First-Line Supervisor. An employee who is responsible for the planning and implementation of a saw project that involves one or more other employees, who typically verifies the other employees' time and attendance records for the project, and who may also be the crew leader for the project.

Formal Instruction. Instructor-led sawyer training in a classroom, online, or field setting that includes, at a minimum, an NRSTC.

Immediate Supervision. On-site supervision with a clear view and control of the sawing operation that allows the supervisor to warn, advise, or assist the sawyers being supervised, when needed.

Job Hazard Analysis (JHA). A systematic process for the identification of safety and health hazards associated with a project or activity and the development of abatement actions for those hazards. The resulting documentation (using form FS-6700-7 or its equivalent) specifies required procedural and personal protective equipment, qualifications, training, safety practices, and emergency evacuation procedures for that project or activity.

Limbing. Cutting branches off a tree.

Nationally Recognized Sawyer Training Course (NRSTC). A training course that satisfies the formal instruction requirements for a particular level of sawyer certification (FSM 2358.1, ex. 02). The National Saw Program Manager maintains a list of approved courses.

National Sawyer Certification Card. The certification card issued by the Forest Service or a cooperator to a sawyer that qualifies the sawyer to work on all NFS lands (FSM 2358.3, ex. 05). This card is issued to all sawyers, sawyer instructors, and sawyer evaluators upon the successful completion of training and field evaluation.

Qualified Sawyer. A certified sawyer in compliance with FSM 2358.06.

Reevaluation. Confirmation a sawyer still meets applicable training and field proficiency requirements and can competently saw at the identified skill level by the certifying official based on the requisite sawyer evaluator recommendation.

Saw Operations. Any activity using a chain saw or crosscut saw.

Sawyer. The primary operator of a saw.

Sawyer Evaluator. A C Sawyer or C Sawyer Evaluator, including a volunteer or training consultant, who determines as part of the certification process whether a sawyer is proficient in the safe use of a saw in the field and who documents that determination using the Sawyer Training and Field Proficiency Evaluation form (FSM 2358.3, ex. 03 and 04).

Sawyer Instructor. A qualified sawyer, including a volunteer or training consultant, with the requisite skill to conduct or assist with training at the sawyer's skill level and who has received written approval to conduct that training from the Saw Program Coordinator (FSM 2358.1, ex. 02).

Situation Awareness. An individual's perception of a given situation that results from an ongoing process of gathering and integrating information by observation and communication with others.

Specialty Saw Use. Any use of a saw requiring additional training beyond the requirements of the NRSTCs, such as using a saw in a tree canopy or using a saw to mill lumber.

Stump Analysis. The process of examining the stump of a tree to determine how the tree was cut.

Training Consultant. A professional sawyer instructor or sawyer evaluator who supplements Forest Service sawyer instructors or sawyer evaluators and who is deemed qualified in writing by the Regional Forester to instruct and evaluate sawyers at all certification levels. The qualification determination is based on the written recommendation of the Regional Saw Program Manager or someone who is deemed qualified in writing by the Regional Saw Program Manager, acting with delegated authority (FSM 2358.01, ex. 01).

Tree. Any vegetation with a bole greater than 5 inches DBH.

Volunteer. A person who gives time and talent to advance the mission of the Forest Service and who receives no salary or wages from the Forest Service for that service, including for purposes of this section sponsored volunteers and international volunteers as defined in FSM 1830.5.

2358.06 – Qualifications

Ensure all sawyers (except crosscut sawyer trainees) using saws on NFS lands:

1. Are trained, evaluated, and certified through an NRSTC;
2. Have a current National Sawyer Certification Card and current first aid and CPR certification (FSH 6709.11, sec. 52.3); and
3. Meet any other qualifications for assigned saw work specified in the JHA for the work.

In addition to the foregoing qualifications:

1. The National Saw Program Manager must have prior experience as a C Sawyer, C Sawyer Evaluator, and Saw Program Coordinator;
2. Regional Saw Program Managers must maintain C Sawyer Evaluator skill proficiency and should have crosscut saw experience;
3. Sawyer instructors must be certified as B Sawyers or higher (FSM 2358.3, ex. 06); and
4. Sawyer evaluators must be certified as C Sawyers or higher (FSM 2358.3, ex. 06).

Sawyers, upon successful completion of required training and a field proficiency evaluation, are certified. A National Sawyer Certification Card (FSM 2358.3, ex. 05) is issued to a sawyer to document the sawyer's certification and qualify the sawyer to work on NFS lands within the restrictions noted on the card. All National Sawyer Certification Cards must be issued from the National Sawyer Certification Database as soon as it is available.

The primary purpose of sawyer certification is to address sawyer safety and the safety of those in the vicinity of sawing operations by confirming that the sawyer has met applicable training requirements and has successfully completed a sawyer training and field proficiency evaluation. It is imperative that sawyer certification and reevaluation adequately evaluate potential sawyers on both the principles of sawing and the sawyers' proficiency in implementing those principles. Recommendations to the certifying official by sawyer instructors and sawyer evaluators should match the sawyers' knowledge, skill, and demonstrated performance. Sawyer training and field proficiency evaluation for each certification level must address all skills, knowledge, and safety concerns associated with that level. Certifying officials must verify successful completion of required prerequisite training, completion of an NRSTC, and a field proficiency evaluation.

2358.1 – Training, Knowledge, and Skill Requirements

See FSM 2358.1, exhibit 02, for detailed guidance on National Saw Program training, knowledge, and skill requirements.

An individual's successful demonstration of the knowledge and skills listed in FSM 2358.1, exhibit 02, to a sawyer evaluator can satisfy formal instruction requirements. However, it is anticipated that these situations will be rare.

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Chapter 2350 - Trail, River, and Similar Recreation Opportunities

Amendment: 2300-2022-1

Effective date: March 31, 2022

2358.1 – Exhibit 02: Sawyer Responsibilities and Limitations and Training, Knowledge, and Skill Requirements

Skill Level	Responsibilities and Limitations	Training	Knowledge	Skills
Crosscut Sawyer Trainee	<p>May occasionally single buck or double buck. No felling.</p> <p>Must work under the immediate supervision of a B or C Sawyer.</p>	<p>Formal Instruction: N/A</p> <p>Demonstrated Field Proficiency: N/A</p> <p>Total Training: N/A</p> <p>Prerequisites: None</p>	<p>Acquired as sawyer assists and works under immediate supervision of a B or C Sawyer in most aspects of crosscut sawing operations, from planning to execution. The B or C Sawyer will introduce and review:</p> <ul style="list-style-type: none"> • JHA. • PPE requirements. • Forest Service saw directives (FSM 2358 and FSH 6709.11, sec. 22.48). • Situation awareness. • Proper selection, maintenance, and care of saws and other cutting equipment. • Operational safety (e.g., sheath placement and removal). • Crosscut sawing techniques. <p>Proper stance and maintenance of a safe work area.</p>	<p>Developed while assisting and working under the immediate supervision of a B or C Sawyer.</p> <p>Field Evaluation: N/A</p>

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2358.1 – Exhibit 02 – Continued

Skill Level	Responsibilities and Limitations	Training	Knowledge	Skills
A Sawyer	<p>May saw only in the least complex situations or, for training purposes, at the next higher level and in either case only under the immediate supervision of a B or C Sawyer qualified to supervise the work.</p> <p>Sawing activities restricted to brushing, bucking, and limbing and, if specifically noted on the sawyer's National Sawyer Certification Card, felling the least complex, small-diameter trees.</p> <p>Has successfully completed an NRSTC that introduces general sawing principles, including brushing, bucking, limbing, and felling; has been trained at the introductory level; and has successfully completed a sawyer training and field proficiency evaluation for that level.</p> <p>The proficiency of A Sawyers is determined by a sawyer evaluator, certified by the certifying official, and documented on the National Sawyer Certification Card.</p>	<p>Formal Instruction: at least 4 hours</p> <p>Demonstrated Field Proficiency: at least 8 hours</p> <p>Total Training: 12-36 hours</p> <p>Prerequisites: First Aid and CPR</p>	<p>Acquired through formal instruction utilizing one or more NRSTCs, including introduction and review of:</p> <ul style="list-style-type: none"> • JHA. • PPE requirements. • Saw accidents, near misses, and lessons learned from them. • Forest Service saw directives (FSM 2358 and FSH 6709.11, sec. 22.48). • Situation awareness. • Proper selection, maintenance, and care of saws and other cutting equipment. • Operational safety. • Introduction to brushing, bucking, limbing, and felling techniques. • Proper stance and maintenance of a safe work area. 	<p>Developed through hands-on operation of saws and axes.</p> <ul style="list-style-type: none"> • Emphasis is placed on situation awareness, correctly selecting and using tools, and saw and axe handling techniques. • Practices and successfully demonstrates brushing, bucking, and limbing logs of various sizes and in minimally complex situations. • Introduced to felling in minimally complex situations. • Demonstrates ability to identify various binds and the proper method and sequence of cuts to safely release them. • Demonstrates ability to assess when a sawing task exceeds the sawyer's capabilities. <p>Field Evaluation: Demonstrated application of formal instruction in brushing, bucking, and limbing techniques of least complexity. Demonstrated proficiency in and safe use of a saw in the least complex situations.</p>

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2358.1 – Exhibit 02 – Continued

Skill Level	Responsibilities and Limitations	Training	Knowledge	Skills
B Sawyer – Bucking Only	<p>This certification level is not used for fire management activities. There is no Incident Qualification and Certification System (IQCS) equivalent.</p> <p>May independently buck and limb any size material in moderately complex situations within the restrictions noted on the sawyer’s National Sawyer Certification Card.</p> <p>May saw at the next higher level, but only under the immediate supervision of a sawyer qualified to supervise the work.</p> <p>May not fell.</p> <p>Can supervise A Sawyers when they are bucking but not when felling</p> <p>Has successfully completed an NRSTC covering general saw bucking, limbing, and brushing.</p> <p>The proficiency of B Sawyers – Bucking Only is determined by a sawyer evaluator, certified by the certifying official, and documented on the National Sawyer Certification Card.</p>	<p>Formal Instruction: at least 4 hours</p> <p>Demonstrated Field Proficiency: at least 4 hours</p> <p>Total Training: 8-36 hours</p> <p>Prerequisites: First Aid and CPR</p>	<p>Acquired through formal instruction utilizing one or more NRSTCs, which review the topics covered in A Sawyer training and introduce:</p> <ul style="list-style-type: none"> • Types of binds and techniques to relieve them. • In-depth instruction on bucking, limbing, and brushing techniques. • Identification and evaluation of hazardous bucking situations. • Proper turndown procedure for cutting situations that exceed the sawyer’s abilities. • Specialized saw uses, as needed. 	<ul style="list-style-type: none"> • Proficient in basic saw skills and use of tools needed for crosscut, axe, and chain saw use. • Successfully demonstrates techniques for brushing, bucking, and limbing logs of various sizes and in various binds. • Demonstrates completeness and accuracy of log size-up, placement of wedges, complexity analysis, and application of safe bucking techniques. • When using a crosscut saw, proficient in single and double bucking techniques, including clear team communication. • Demonstrates ability to assess when a sawing task exceeds the sawyer’s capabilities. <p>Field Evaluation: Demonstrated application of formal instruction in brushing, bucking, and limbing techniques of moderate complexity. Demonstrated proficiency in and safe use of a saw in moderately complex situations.</p>

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2358.1 – Exhibit 02 – Continued

Skill Level	Responsibilities and Limitations	Training	Knowledge	Skills
<u>B Sawyer – Felling and Bucking</u>	<p><u>May independently fell, buck, and limb any size material in moderately complex situations within the restrictions noted on the sawyer’s National Sawyer Certification Card.</u></p> <p><u>May saw at the next higher level under the immediate supervision of a sawyer qualified to supervise the work.</u></p> <p><u>Has successfully completed an NRSTC for general felling and bucking.</u></p> <p><u>Can supervise any A Sawyer.</u></p> <p><u>May conduct formal instruction for A and B Sawyers with written approval from the Saw Program Coordinator.</u></p> <p><u>May not conduct field proficiency evaluations of A and B Sawyers.</u></p> <p><u>The proficiency of B Sawyers – Felling and Bucking is determined by a sawyer evaluator, certified by the certifying official, and documented on the National Sawyer Certification Card.</u></p>	<p><u>Formal Instruction: at least 8 hours</u></p> <p><u>Demonstrated Field Proficiency: at least 12 hours</u></p> <p><u>Total Training: 20-36 hours</u></p> <p><u>Prerequisites: First Aid and CPR</u></p>	<p><u>Acquired through formal instruction utilizing one or more NRSTCs, which review the topics covered in A Sawyer training and introduce:</u></p> <p><u>Types of binds and mitigation techniques.</u></p> <p><u>Principles of felling and bucking.</u></p> <p><u>In-depth instruction on felling techniques in moderately complex situations.</u></p> <p><u>Identification and evaluation of hazardous felling and bucking situations.</u></p> <p><u>Proper turndown procedure for cutting situations that exceed the sawyer’s abilities.</u></p> <p><u>Solutions for hung-up trees.</u></p> <p><u>Specialized saw uses, as needed.</u></p>	<p><u>Proficient in basic saw skills and tools needed for crosscut, axe, and chain saw use.</u></p> <p><u>Demonstrates proficiency in all skills listed in B Sawyer – Bucking Only.</u></p> <p><u>Demonstrates proper placement of face cuts and back cuts in sound trees, as verified by stump analysis.</u></p> <p><u>Demonstrates completeness and accuracy in tree size-up, complexity analysis, placement of wedges, undercuts, back cuts, and stump analysis.</u></p> <p><u>Proficient in single and double bucking techniques, including clear team communication (crosscut saw only).</u></p> <p><u>Demonstrates ability to assess when a sawing task exceeds sawyer’s capabilities.</u></p> <p><u>Can safely remove hung-up trees of low complexity.</u></p> <p><u>Field Evaluation: Demonstrated application of formal instruction in brushing/felling/bucking/limbing tech. of moderate complexity.</u></p> <p><u>Demonstrated proficiency in/safe use of saw in moderately complex situations.</u></p>

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2358.1 – Exhibit 02 – Continued

Skill Level	Responsibilities and Limitations	Training	Knowledge	Skills
C Sawyer – Bucking Only	<p>This certification level is not used for fire management activities. There is no IQCS equivalent.</p> <p>May independently buck and limb any size material in highly complex situations based on the recommendation of the Regional Saw Program Manager or Saw Program Coordinator, which is supported by demonstrated advanced saw knowledge and skills and, in most cases, certification as a B Sawyer.</p> <p>Has experience working with C Sawyers in analyzing and implementing safe bucking practices in complex situations. Has demonstrated ability for advanced saw work, advanced understanding of Forest Service saw directives, and ability to teach saw skills to others. Has demonstrated good judgment in assessing complex situations and own skill limitations and in safely completing sawing tasks.</p> <p>May conduct formal instruction within that person’s skill level for A and B Sawyers.</p> <p>May conduct field proficiency evaluations within their skill level for A Sawyers and B Sawyers – Bucking Only.</p> <p>The proficiency of C Sawyers – Bucking Only is determined by one sawyer evaluator, certified by the certifying official, and documented on the National Sawyer Certification Card.</p>	<p>Formal Instruction: required; variable</p> <p>Demonstrated Field Proficiency: variable</p> <p>Total Training: to be determined by sawyer instructor</p> <p>Prerequisites: First Aid and CPR</p>	<p>Acquired through formal instruction that:</p> <p>(a) utilizes information gathered and activities designed by the C Sawyer Evaluator that are specifically tailored to local needs; (b) reviews the topics covered in B Sawyer training; and (c) introduces:</p> <ul style="list-style-type: none"> • Principles of advanced bucking. • Advanced bucking techniques. • Determination of complexity of saw operations. • Tree health. • Fiber characteristics. • Advanced teaching methods and techniques for evaluating A and B Sawyers. 	<ul style="list-style-type: none"> • Proficient in advanced saw skills and tools needed for crosscut saw, axe, and chain saw use. • Able to communicate knowledge effectively and demonstrate field skills clearly to A and B Sawyers. • Able to understand, use, and communicate the contents of applicable federal regulations regarding the use of saws in the workplace and Forest Service saw directives to other sawyers and staff. • Able to complete complex bucking tasks safely, including single and double bucking (crosscut saw only). • Able to identify defects in danger trees comprehensively and clearly. • Additional skills may include refinement of various cutting techniques; decision processes for determining the use of saws, rigging, and explosives; and techniques for removing cut logs, such as use of skids and other mechanical means. <p>Field Evaluation: Evaluations may take place during regularly scheduled NRSTCs. Demonstrated application of formal instruction in brushing, bucking, and limbing techniques in highly complex situations. Demonstrated proficiency in and safe use of a saw in highly complex situations.</p>

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2358.1 – Exhibit 02 – Continued

Skill Level	Responsibilities and Limitations	Training	Knowledge	Skills
C Sawyer – Felling and Bucking	<p>May independently fell, buck, and limb any size material in highly complex situations based on the written recommendation of the Regional Saw Program Manager or Saw Program Coordinator, which is supported by demonstrated advanced saw knowledge and skills and, in most cases, certification as a B Sawyer.</p> <p>Has experience working with C Sawyers in analyzing and implementing safe felling and bucking practices in complex situations. Has demonstrated ability for advanced saw work, advanced understanding of Forest Service saw directives, and the ability to teach saw skills to others. Has demonstrated good judgment in assessing complex situations and own skill limitations and in safely completing sawing tasks. May conduct formal instruction and proficiency evaluations for A and B Sawyers.</p> <p>The proficiency of C Sawyers – Felling and Bucking is determined by two sawyer evaluators, certified by the certifying official, and documented on the National Sawyer Certification Card.</p>	<p>Formal Instruction: required; variable</p> <p>Demonstrated Field Proficiency: variable</p> <p>Total Training: to be determined by sawyer instructor</p> <p>Prerequisites: First Aid and CPR</p>	<p>Acquired through formal instruction that:</p> <p>(a) utilizes information gathered and activities designed by the C Sawyer Evaluator that are specifically tailored to local needs;</p> <p>(b) reviews the topics covered in B Sawyer training; and</p> <p>(c) introduces:</p> <ul style="list-style-type: none"> • Principles of advanced felling and bucking. • Advanced felling and bucking techniques. • Determining complexity of saw operations. • Tree health. • Fiber characteristics. • Advanced teaching methods and techniques for evaluating A and B Sawyers. 	<ul style="list-style-type: none"> • Proficient in advanced saw skills and tools needed for crosscut, axe, and chain saw use. • Demonstrates proficiency in all skills listed in C Sawyer – Bucking Only. • Able to communicate knowledge effectively and demonstrate field skills clearly to A and B Sawyers. • Able to identify defects in danger trees comprehensively and clearly. • Able to fell trees of a greater diameter than the length of the saw bar (chain saw only). • Able to fell trees against their natural lean. • Additional skills may include refinement of various cutting techniques; decision processes for determining the use of saws, rigging, and explosives; and techniques for removing standing trees. <p>Field Evaluation: Evaluations may take place during regularly scheduled NRSTCs. Demonstrated application of formal instruction in brushing, bucking, felling, and limbing techniques in highly complex situations. Demonstrated proficiency in and safe use of a saw in highly complex situations.</p>

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Skill Level	Responsibilities and Limitations	Training	Knowledge	Skills
C Sawyer – Evaluator	<p>May independently fell, buck, and limb any size material in highly complex situations.</p> <p>May conduct formal instruction and proficiency evaluations for all sawyer certification levels.</p> <p>This certification level is not used for fire management activities. There is no IQCS equivalent.</p> <p>Has successfully completed training to organize and conduct advanced sawyer certification sessions in the field and has received a recommendation from the Regional Saw Program Manager, which is supported by demonstrated advanced saw knowledge and skills and, in most cases, certification as a C Sawyer – Felling and Bucking for at least 3 years.</p> <p>Has demonstrated ability for advanced instruction, hazard assessment, and instruction in complex sawing techniques and an advanced understanding of Forest Service saw directives. Has demonstrated good judgment in assessing complex situations and own skill limitations and in safely completing sawing tasks.</p> <p>The proficiency of C Sawyer Evaluators is determined by the Regional Saw Program Manager (or that person’s designee) and another sawyer evaluator, certified by the certifying official, and documented on the National Sawyer Certification Card.</p>	<p>Formal Instruction: required</p> <p>Demonstrated Field Proficiency: variable</p> <p>Total Training: to be determined by Regional Saw Program Manager (or that person’s designee)</p> <p>Prerequisites: First Aid and CPR</p>	<p>Must be recommended for the training by the immediate supervisor, a line officer, or the Saw Program Coordinator.</p> <p>Acquired through formal instruction that:</p> <p>(a) utilizes information gathered and activities designed by the Regional Saw Program Manager (or that person’s designee) that are specifically tailored to local needs;</p> <p>(b) may be tailored to the students’ needs; and</p> <p>(c) includes:</p> <ul style="list-style-type: none"> • Administrative duties and responsibilities. • Advanced teaching methods and techniques for evaluating A, B, and C Sawyers. 	<ul style="list-style-type: none"> • Able to effectively demonstrate and teach advanced sawing techniques, field skills, and hazard assessment decision-making processes. • Able to understand, use, and communicate applicable federal regulations regarding the use of saws in the workplace and Forest Service saw directives to other sawyers and staff. <p>Field Evaluation: Evaluations may take place during regularly scheduled C Sawyer NRSTCs. Demonstrated knowledge of techniques for providing instruction in brushing, bucking, felling, and limbing techniques in highly complex situations. Demonstrated ability to provide instruction in safe use of a saw in highly complex situations.</p>

2358.2 – Sawyer Training and Field Proficiency Evaluation

A sawyer training and field proficiency evaluation determines whether a person can demonstrate proficient use and care of a saw by applying learned knowledge and skill. Sawyer evaluators shall conduct a sawyer training and field proficiency evaluation in the field within the limits of their certification level as identified on their National Sawyer Certification Card (FSM 2358.3, ex. 05). The Sawyer Training and Field Proficiency Evaluation form (FSM 2358.3, ex. 03 and 04) must be used to document field skills and record the evaluation of each sawyer.

2358.21 – Sawyer, Sawyer Instructor, and Sawyer Evaluator Training and Field Proficiency Reevaluation

The National Sawyer Certification Card is valid for 3 years and is subject to review any time prior to expiration. Minimum requirements for sawyer training and field proficiency reevaluation include:

1. A knowledge refresher conducted in the classroom or the field and including discussion or demonstrations that cover current saw directives, emerging safety issues, emergency procedures, and cutting techniques.
2. A skill refresher, including a field proficiency evaluation, equivalent to the initial evaluation for the sawyer's certification level that involves sawing tasks relevant to the sawyer's certification level (FSM 2358.1, ex. 02, and FSM 2358.3, ex. 06).
3. For sawyer instructors, in addition to items 1 and 2, conducting at least one NRSTC or refresher NRSTC every three years.
4. For sawyer evaluators, in addition to items 1 and 2 above, conducting at least one sawyer field proficiency evaluation or reevaluation every three years.

2358.22 – Revocation of Certification

Recommendations for revocation of a sawyer's certification must be made in writing by the Regional Saw Program Manager or Saw Program Coordinator and approved by the Regional Forester or other line officer with delegated authority (FSM 2358.04, ex. 01).

Revoke a sawyer's certification when:

1. The sawyer has failed to demonstrate appropriate cutting procedures, thereby placing the sawyer or others in danger;

2. The sawyer has failed to demonstrate the requisite knowledge or skills for the sawyer's certification;
3. The sawyer lacks the physical ability safely to undertake sawing activities commensurate with the sawyer's certification; or
4. A review of saw-related accidents reveals the sawyer was acting outside the sawyer's certification level.

2358.3 – Saw Program Monitoring and Evaluation

It is critical to monitor correct saw operation procedures by sawyers, sawyer instructors, and sawyer evaluators (FSM 2358.04h and 2358.04i) and assess trends in saw accidents, near misses, and changes in learning techniques. Saw Program monitoring and evaluation may include the following:

1. Review of a sawyer's certification level and, if needed, training records to verify that the sawyer is cutting within the sawyer's certification level.
2. Review of a sawyer's felling methods, felling steps, understanding of wedges, escape routes, felling cuts, and their relationship to each other, and other critical points of saw use.
3. Review of the use of PPE.
4. Review of JHAs and safety meeting records.
5. Taking corrective actions when observing unsafe practices.
6. Review of supervision and instruction of sawyer trainees or sawyers with certification restrictions.
7. Tracking the number of qualified sawyers, sawyer evaluators, sawyer instructors, and completed saw-related projects while identifying trends in saw accidents and near misses.
8. Reporting the results of monitoring and evaluation, including any recommendations, to the Saw Program Coordinator, Regional Saw Program Manager, or National Saw Program Manager, as appropriate.
9. Annual review of Forest Service safety data associated with saw use to determine trends in saw accidents and possible corrective actions.
10. Review of recordkeeping procedures for the Saw Program to determine that current and accurate records are kept.

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**2358.3 – Exhibit 03: Form FS-2300-52, Sawyer Training and Field Evaluation for Chain Saws
(v08-2014)**

Name:		Date:		Agency/Cooperator Name:	
Training Location: <i>Classroom:</i> <i>Field:</i>				Address:	
Telephone Number:				<input type="checkbox"/> Yes, I permit the Forest Service to share my Sawyer qualifications and e-mail address with other federal agencies and non-federal organizations so that I can be contacted about saw project opportunities in my area. _____ (initial)	
E-mail Address:					
Previous Certification: Yes <input type="checkbox"/> No <input type="checkbox"/> Level _____ Agency/Unit _____ Year _____					
First Aid/CPR: <input type="checkbox"/> I certify that I have completed and will maintain first aid and CPR training _____ (initial)					
BELOW THIS LINE – TO BE COMPLETED BY SAWYER EVALUATOR					
SAFETY EQUIPMENT AND TOOLS					
Y/N		Y/N		Y/N	
	Hard hat		Gloves		Approved fuel/oil container
	Eye protection		Boots		Bar guard
	Hearing protection		Chaps		Whistle/radio/cellular telephone
	Long-sleeved shirt		Axe (3-5 lb)		Wedges
	First aid kit		Chain saw		Tool kit
SAW USE: APPLIES TO ALL CUTTING OPERATIONS					
SCORE		SCORE			
					Bar tip use (boring)
					Positive communication with co-workers
					Control of cutting area
					Cut preparation
LIMBING and BRUSHING					
SCORE		SCORE			
					Limb removal sequence
					Spring poles (tension/compression analysis)
					Kickback recognition
BUCKING					
SCORE		SCORE			
					Wedging procedure
					Bucking sequence
					Axe use
					Use of compound cuts
					Kickback recognition

Forest Service Manual 2300 – Recreation, Wilderness, And Related Resource Management

Chapter 2350 - Trail, River, and Similar Recreation Opportunities

Amendment: 2300-2022-1

Effective date: March 31, 2022

2358.3 – Exhibit 03 – Continued

Privacy Act Statement

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To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, 1400 Independence Avenue, SW, Washington, DC 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA and USDI are equal opportunity providers and employers.

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2358.3 – Exhibit 03 – Continued

Sawyer Name: _____

FELLING					
SCORE		FELLING AREA	SCORE		FELLING PROCEDURE
		Control of cutting area			Procedure alteration (if necessary)
		Ground & overhead hazard analysis			Wedging procedure
		Positive communication			Use of escape route/safety zone
		FELLING PROCEDURE			Exposure time at stump
		Go/no-go decision/walk away			
		Plumbing of lean (determination of lay)			STUMP ANALYSIS
		Cutting Plan			Felling to desired lay
		Use of gunning sights			Undercut/facecut
		Undercut/facecut			Stump shot
		Warning shout			Hinge/holding wood
		Back cut			Other
		Proper body position/looking up			

EVALUATOR'S STUMP ANALYSIS SKETCHES					
Tree 1 Height _____ DBH _____ % Slope _____ Species _____ Condition _____ Feet from center of lay _____		Tree 2 Height _____ DBH _____ % Slope _____ Species _____ Condition _____ Feet from center of lay _____		Tree 3 Height _____ DBH _____ % Slope _____ Species _____ Condition _____ Feet from center of lay _____	
COMMENTS: Attitude, Confidence, Comfort, Technical Skills, Awareness, Verbal Skills, Weak-Strong Traits, etc.					
Certification Level, Subject to Final Approval <div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> A Sawyer <input type="checkbox"/> B Sawyer – Bucking Only <input type="checkbox"/> B Sawyer – Felling and Bucking <input type="checkbox"/> C Sawyer – Bucking Only </div> <div> <input type="checkbox"/> C Sawyer – Felling and Bucking <input type="checkbox"/> C Sawyer Evaluator </div> </div>					

Evaluator's Signature _____ Sawyer
 Level _____

Evaluator's Name _____ Evaluator's E-mail _____
 Address _____

Evaluator's Signature _____ Sawyer
 Level _____

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Evaluator's Name _____ Evaluator's E-mail _____
Address _____

Student's
Signature _____

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2358.3 – Exhibit 04: Form FS-2300-52, Sawyer Training and Field Evaluation for Crosscut Saws

Name:		Date:		Agency/Cooperator Name:	
Training Location: Classroom- Field-				Address:	
Telephone Number:				<input type="checkbox"/> Yes, I permit the Forest Service to share my Sawyer qualifications and e-mail address with other federal agencies and non-federal organizations so that I can be contacted about sawyer project opportunities in my area. _____ (Please initial here)	
E-mail Address:					

Previous Certification: Yes <input type="checkbox"/> No <input type="checkbox"/> Level _____ Agency/Unit _____ Year _____ First Aid/CPR: <input type="checkbox"/> I certify that I have completed and will maintain current first aid and CPR training _____ (initial)					
---	--	--	--	--	--

BELOW THIS LINE TO BE COMPLETED BY SAWYER EVALUATOR					
SAFETY EQUIPMENT AND TOOLS					
Y/N		Y/N		Y	
	Hard hat		First aid kit		Saw sheath
	Eye protection		Saw selection & condition		Axe sheath
	Long-sleeved shirt		Axe selection & condition		Whistle/radio/cellular telephone
	Gloves		Maintenance of saw & axe		
	Boots		Wedges		

SAW USE APPLIES TO ALL CUTTING OPERATIONS					
SCORE			SCORE		
		Transportation of saw & axe			Correct body position and technique
		Sheath placement & removal			Cut preparation
		Field storage of saw & axe			Positive communication with co-workers
		Saw passing			Control of cutting area

LIMBING and BRUSHING					
SCORE			SCORE		
		Overhead & ground hazard analysis			Swamp out of work area
		Limb removal sequence			Use of axe and general technique
		Escape route			Spring poles (tension/compression analysis)

BUCKING					
SCORE			SCORE		
		Overhead & ground hazard analysis			Single bucking
		Escape route			Double bucking
		Swamp out of work area			Underbucking
		Bind/tension (compression analysis)			Wedging procedure
		Bucking sequence			Axe use and general technique
		Kerf observation			Communication with partner
		Use of compound cuts			

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2358.3 – Exhibit 04 – Continued

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2358.3 – Exhibit 04 – Continued

Sawyer Name: _____

FELLING					
SCORE		FELLING AREA	SCORE		FELLING PROCEDURE-CONTINUED
		Control of cutting area			Procedure alteration (if necessary)
		Ground & overhead hazard analysis			Wedging procedure
		Positive communication			Saw removal
		FELLING PROCEDURE			Use of escape route/safety zone
		Go/no-go decision/walk away			Exposure time at stump
		Plumbing of lean (determination of lay)			STUMP ANALYSIS
		Cutting Plan			Felling to desired lay
		Use of gunning sights			Undercut/facecut
		Undercut/facecut			Back cut
		Warning shout			Stump shot
		Back cut			Hinge/holding wood
		Proper body position/looking up			Other

EVALUATOR'S STUMP ANALYSIS SKETCHES

<p>Tree 1</p> <p>Height _____ DBH _____</p> <p>% Slope _____ Species _____</p> <p>Condition _____</p> <p>Feet from center of lay _____</p>			<p>Tree 2</p> <p>Height _____ DBH _____</p> <p>% Slope _____ Species _____</p> <p>Condition _____</p> <p>Feet from center of lay _____</p>			<p>Tree 3</p> <p>Height _____ DBH _____</p> <p>% Slope _____ Species _____</p> <p>Condition _____</p> <p>Feet from center of lay _____</p>		
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COMMENTS: Attitude, Confidence, Comfort level, Technical Skills, Awareness, Verbal Skills, Weak-Strong Traits, etc.

Certification Level, Subject to Final Approval

- ☐ A Sawyer
 ☐ B Sawyer – Bucking Only
 ☐ B Sawyer – Felling and Bucking
 ☐ C Sawyer – Bucking
 ☐ C Sawyer – Felling and Bucking
 ☐ C Sawyer Evaluator

Evaluator's Signature _____ Sawyer Level _____

Evaluator's Name _____ Evaluator's E-mail Address _____

Evaluator's Signature _____ Sawyer Level _____

Evaluator's Name _____ Evaluator's E-mail Address _____

Student's Signature _____

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2358.3 – Exhibit 05: Form FS-2300-53, National Sawyer Certification Card

USDA United States Department of Agriculture			
National Sawyer Certification Card (Ref. FSM 2358)			
Sawyer Name:		Date Issued:	Sawyer ID:
Agency:		Region:	
Cooperator:		Forest:	Unit:
 Forest Service		FS-2300-53 (v09/2016)	
USDA is an equal opportunity provider and employer.			
Chain Saw Expiration	Crosscut	Skill Level	Evaluator (Print)
		A Sawyer — All Skills	
		B Sawyer — Bucking Only	
		B Sawyer — Felling and Bucking	
		C Sawyer — Bucking Only	
		C Sawyer — Felling and Bucking	
		C Sawyer — Evaluator	
Certifying Official Signature:		Title:	Date:

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2358.3 – Exhibit 06: Sawyer Instructors and Sawyer Evaluators Required at Each Certification Level

	A SAWYERS AND B SAWYERS	C SAWYER – BUCKING ONLY	C SAWYER – FELLING AND BUCKING	C SAWYER EVALUATOR
Sawyer Instructor	<u>ONE OF THE FOLLOWING:</u> <ul style="list-style-type: none"> • C Sawyer¹ or • C Sawyer Evaluator or • B Sawyer approved by Saw Program Coordinator or • Training Consultant 	<u>ONE OF THE FOLLOWING:</u> <ul style="list-style-type: none"> • C Sawyer Evaluator or • Training Consultant 	<u>ONE OF THE FOLLOWING:</u> <ul style="list-style-type: none"> • C Sawyer Evaluator or • Training Consultant 	<u>ONE OF THE FOLLOWING:</u> <ul style="list-style-type: none"> • C Sawyer Evaluator or • Training Consultant
Sawyer Evaluator	<u>ONE OF THE FOLLOWING:</u> <ul style="list-style-type: none"> • C Sawyer or • C Sawyer Evaluator² or • Training Consultant 	<u>ONE OF THE FOLLOWING:</u> <ul style="list-style-type: none"> • C Sawyer Evaluator or • Training Consultant 	<u>TWO AS FOLLOWS:</u> <ul style="list-style-type: none"> • C Sawyer Evaluator and • C Sawyer Evaluator or • C Sawyer or • Training Consultant 	<u>TWO AS FOLLOWS:</u> <ul style="list-style-type: none"> • Regional Saw Program Manager or C Sawyer Evaluator with delegated authority and • C Sawyer Evaluator or • C Sawyer or • Training Consultant

¹ **C Sawyers** (Bucking Only or Felling and Bucking) can instruct and evaluate A, B, and C Sawyers only up to their own skill level.

² **All C Sawyer Evaluators** and **Training Consultants** must be certified as C Sawyer – Felling and Bucking.

2358.4 – Saw-Related Accidents and Near Misses

1. Document accidents or incidents that result in saw-related injuries. Share the documentation with the Regional Safety and Occupational Health Manager.
2. Reviews of accidents involving saws must follow established procedures.
3. Saw Program Coordinators must be involved in reviews of saw accidents in their administrative unit.
4. Regional Saw Program Managers must be involved in reviews of all saw accidents in their Region that result in serious injury or fatality.
5. The National Saw Program Manager must be involved in reviews of all saw accidents on NFS lands that result in serious injury or fatality.

2358.5 – Specialty Saw Uses [Reserved]

2358.6 – Saw Operations

Qualifications, PPE requirements, safety procedures, and safety practices for saw operations are specified in FSH 6709.11, section 22.48.