

Appendix G – Trail Standards

Forest Service Direction

Forest Service Manual (FSM) 2353.15 - National Quality Standards for Trails

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

Forest Service Handbook (FSH) 2309.18, 14.2 - Trail Class

Use Trail Classes to inventory NFTS trails and to identify the applicable Design Parameters and costs for meeting the National Quality Standards for Trails.

1. Identify only one Trail Class per trail or trail segment.
2. Class descriptors reflect typical attributes of trails in each class. Local deviations from any Trail Class descriptor may be established based on trail-specific conditions, topography, or other factors, provided that the deviations are consistent with the general intent of the applicable Trail Class.
3. There is a direct relationship between Trail Class and Managed Uses (sec. 14.3): generally, one cannot be determined without consideration of the other.
4. Identify the appropriate Trail Class for each NFTS trail or trail segment based on the management intent in the applicable land management plan, travel management decisions, trail-specific decisions, and other related direction. Apply the Trail Class that most closely reflects the management intent for the trail or trail segment, which may or may not reflect the current condition of the trail.

FSH 2309.18, 15 - National Quality Standards for Trails

In accordance with FSM 2353.15, apply the National Quality Standards for Trails in planning, constructing, and managing NFTS trails and related trail projects.

1. The National Quality Standards for Trails establish desired outcomes for NFTS trails managed at a full-service level. These standards also form the baseline for estimating the cost of managing NFTS trails. The National Quality Standards for Trails consist of five key measures: health and cleanliness, safety and security, condition of facilities, responsiveness, and resource setting.
2. The complete set of National Quality Standards for Trails is contained in FSH 2309.18, exhibit 01.
3. Critical National Quality Standards for Trails are identified with an asterisk. If any of these standards is not met, the resulting conditions pose a high probability of immediate and permanent injury to persons or property. If any of the critical standards cannot be met due to budget or other constraints, take action as soon as practicable to correct or mitigate the problem. Corrective or mitigating measures may include closing the trail, portions of the trail, or associated trail structures to public use.
4. Take mitigating steps if conditions, facilities, or services addressed by noncritical standards decline to the point where visitor's health or safety is threatened. Examples

include repairing the trail, portions of the trail, or associated trail structure or removing trail structures that are in disrepair and no longer needed.

5. The National Quality Standards for Trails apply to NFTS trails and associated trail structures. The National Quality Standards for Trails do not apply to trailheads. Trailheads, which are constructed with the primary purpose of providing visitor amenities, are typically considered developed sites. Trailheads constructed with the primary purpose of resource protection are typically considered concentrated use areas within General Forest Areas.

National Quality Standards

National quality standards define the corporate level of quality the Forest Service plans to provide the public at full service (Forest Plan) levels. These standards form the baseline for estimating the total cost of providing the quality opportunities visitors and customer's expectations.

Recreation program components with National Quality Standards include: Developed Sites, Trails, General Forest Areas, Interpretive Services and Recreation Special Use Permit Administration. National Quality Standards for these components have been established for the Key Measures: Health and Cleanliness, Safety and Security, Condition of Facilities, Responsiveness, Resource Setting, and Permit Administration & Monitoring.

Critical National Standards are identified with an asterisk (*). If not met, the resulting conditions pose a high probability of immediate or permanent loss to people or property. If they cannot be met, due to budget or other constraints, immediate action must be taken to correct or mitigate the problem. Immediate action may include closing to public use the site, trail, area, permit, or portions of the affected site, trail, or area. If conditions, facilities, or services addressed by "non-critical" standards decline to the point where the health or safety of the visitor is threatened, then mitigating actions must be taken.

The TRAILS Component is made up of National Forest System Trails.

National Quality Trail Standards apply to system trails and associated trail structures. The standards for Trails do not typically include trailhead facilities. Trailheads, constructed with the primary purpose of providing visitor amenities, are typically considered developed sites and are included in the Developed Sites Component. Trailheads constructed with the primary purpose of resource protection, are typically considered Concentrated Use Areas within the General Forest Area Component.

National Quality Trail Standards describe outputs customers can expect to encounter when visiting any System Trail.

The task frequencies described in the clarifiers suggest a typical range and do not preclude the possibility of exceptions.

Trail Key Measure: HEALTH AND CLEANLINESS

- Healthy environment for users and employees.
- No threat of disease or infection.
- Trails free of litter and graffiti.

STANDARD	CLARIFIERS	“CREW” TYPE	TASKS
1. Visitors are not exposed to human waste along trails.	<p>Remove evidence of human waste visible along the trail at an appropriate frequency to minimize visitor exposure.</p> <p>To meet this standard, removal frequency can be as seldom as once a year or as often as weekly.</p>	Trail Operations	<ul style="list-style-type: none"> • Pick-up, remove and dispose of human waste visible on or along the trail.
2. The trail and trailside are free of litter.	<p>Remove litter (including dog waste) along the trail at an appropriate frequency to minimize accumulation.</p> <p>To meet this standard, cleaning frequency can be as seldom as once a year or as often as daily.</p>	Trail Operations	<ul style="list-style-type: none"> • Pick-up, remove and dispose of litter visible on or along the trail. • Pick-up, remove and dispose of dog waste visible on or along the trail corridor.
3. The trail and trailside are free of graffiti.	<p>Graffiti is intentional human-caused markings applied to constructed or natural features. Graffiti typically contains words and/or symbols that are offensive and intrusive to most visitors. At a minimum, the very existence of graffiti markings on constructed features and /or natural features is offensive and intrusive to trail visitors, even if the message per se is not offensive.</p> <p>Remove graffiti visible from the trail in a timely manner given the relative offensiveness (size, content) of the graffiti message or symbols, and the potential for repeat occurrences if not removed promptly.</p> <p>To meet this standard, graffiti removal occurs as soon as workers can be mobilized and dispatched to the trail. This response is typically within 48 hours from discovery or notification; remote trails may necessitate a longer response time.</p>	Trail Operations/ Trail Maintenance	<ul style="list-style-type: none"> • Remove graffiti from constructed features using appropriate, cost-effective and environmentally acceptable techniques. Methods can include sandblasting and the application of cleaning compounds. • Remove graffiti from natural features using appropriate, cost-effective and environmentally acceptable techniques. Methods can include sandblasting, the application of cleaning compounds, or the application of masking materials such as paints that blend in with natural colors.

conditions of the adjacent management area(s).	recommendations for proposal modification and/or mitigation.		
3. Trail opportunities, trail development, and trail management are consistent with Recreation Management System (ROS, SMS, BBM) objectives and the Forest Land Management Plan.	<p>To meet this standard, the trail manager ensures the trail is managed per the Forest Plan prescription. This includes ensuring that:</p> <ul style="list-style-type: none"> • Trail location, design and management are consistent with ROS and SMS objectives for the area; • The trail is managed per assigned Trail Class; and that • Designed Use and Managed Uses are implemented and managed per prescription; 	Trail Manager	<p>Ensure that the Forest Plan trail prescription is met, including:</p> <ul style="list-style-type: none"> • Ensure the trail is located, designed and managed consistently with ROS and SMS objectives for the area; • Ensure the trail is constructed, maintained and managed per the assigned Trails Class; • Ensure that the Trail's Designed Use and Managed Uses prescriptions are met. • Establish trail capacities, if needed
4. The trail, use of the trail, and trail maintenance methods do not cause unacceptable damage to other resources.	<p><u>Initiate Analysis</u>. As often as necessary, based on local situations and the potential for negative impacts, the trail manager assesses trailside resources for damage as a result of poorly maintained, poorly located or poorly designed trails and trail structures. The trail manager identifies the need for appropriate specialist analysis, if any, and then participates as needed in the determination of mitigation.</p> <p><u>Mitigate</u> Mitigation includes correcting or preventing loss of vegetation and erosion caused by the trail, use of the trail, and maintenance methods on the trail.</p> <p>To meet this standard, mitigation is limited to operations activities, e.g. stream-bank stabilization, tree/shrub/grass planting, temporary/disposable fencing, warning signs, enforcement patrols, etc.</p> <p>Mitigation that includes maintenance, repair, replacement, decommissioning, alteration, expansion or construction of any constructed feature is costed in the appropriate COF standard.</p>	Trail Manager	<p><u>Initiate Analysis</u></p> <ul style="list-style-type: none"> • Assess trailside resources for damage as a result of poorly maintained, poorly located or poorly designed trails and trail structures. • Identify the need for any appropriate specialist analysis. • Participate as needed in the determination of mitigation. <p><u>Mitigate</u></p> <ul style="list-style-type: none"> • Stabilize stream banks. • Plant Trees/grass/shrubs. • Install fencing. • Post warning, closure, or detour signs. • Install traffic control

			devices (Non-constructed features)
5. Trail use does not exceed established trail capacity.	<p>This standard only applies to trails with established capacities per unit management decisions.</p> <p><u>Monitor.</u> Monitor use levels.</p> <p><u>Mitigate.</u> Mitigate use impacts when use levels exceed capacities.</p> <p>To meet this standard, mitigation is limited to operations activities such as patrolling the trail as needed to protect the trail features, adjacent resources, and visitor experience, and monitoring the effectiveness of physical barriers, signs, and traffic control devices.</p> <p>Mitigation that includes maintenance, repair, replacement, decommissioning, alteration, expansion or construction of any constructed feature is costed in the appropriate COF standard.</p> <p><u>Administer Permits/Passes.</u> For those trails which require a permit/pass system to control and/or manage use to capacity or acceptable use type, meeting this standard includes implementing and managing that system (e.g. selling or issuing permits/passes, keeping records, establishing and managing reservations systems, etc.). Meeting this standard DOES NOT include administration of Special Use Permits – that cost is captured in the RSUP component.</p>	<p>Trail Operations</p> <p>Trail Operations</p> <p>Trail Manager</p>	<p><u>Monitor</u></p> <ul style="list-style-type: none"> • Install traffic counters. • Contact/observe trail users. • Track/record/analyze use counts. <p><u>Mitigate</u></p> <ul style="list-style-type: none"> • Post warning, closure, or detour signs. • Enforce capacity regulations. • Install traffic control devices (non-constructed features). • Monitor effectiveness of traffic control devices <p><u>Administer Permits/Passes</u></p> <ul style="list-style-type: none"> • Sell/issue passes. • Maintain records or accounts. • Develop and manage reservation systems.

Trail Key Measure: SAFETY AND SECURITY

- Safe environment for users and employees.
- Uniformed Forest Service personnel are present.
- Abusive and nonconforming activities are controlled
- Risk of crime is eliminated

STANDARD	CLARIFIERS	“CREW” TYPE	TASKS
1. *Hazards do not exist on or along the trail.	<p>Hazards are conditions not meeting the trail prescription that adversely affect user safety.</p> <p>Hazardous conditions are corrected per the trail prescription. (“Hazardous” varies based on the trail ROS classification and the trail prescription).</p> <p>Hazardous trail conditions (caused either by</p>	<p>Trail Manager</p> <p>Trail Maintenance</p>	<ul style="list-style-type: none"> • Conduct prescribed safety inspections. • Identify mitigation tasks • Fence off sloughs. • Close/fence off hazardous

	<p>humans or natural occurrences) that develop during the managed use season are mitigated or the affected section of trail is closed.</p> <p><u>Mitigate</u> Mitigation includes operations activities such as posing warning signs, increasing patrols or closing the trail is included under this standard.</p> <p>Mitigation that includes maintenance, repair, replacement, decommissioning, alteration, expansion or construction of any constructed feature is costed in the appropriate COF standard.</p>	Trail Operations	<p>structures.</p> <ul style="list-style-type: none"> • Sign/post trail closures.
2. Enforce laws, regulations and special orders.	<p>Enforce 36 CFR 261 regulations enforceable by Forest Protection Officers (LE Level II) as needed to protect government facilities from damage and to ensure visitors are not exposed to prohibited activities.</p> <p>Mitigate, as appropriate, activities prohibited under the 36 CFR261 sections pertinent to use of Forest Development Trails. As discretion warrants, counsel or advise users engaged in prohibited activities on the effects and impacts of their actions.</p> <p>Respond to complaints of non-conforming trail use. Typically this includes follow-up or response by the FPO or trail manager, depending on the scope and urgency of the situation.</p> <p>Patrol frequency can be as seldom as once a year and typically not more than once daily.</p>	Trail Operations	<ul style="list-style-type: none"> • Enforce regulations upon contact with users engaged in prohibited activities. • Respond to complaints from third parties. • As discretion warrants, counsel or advise users engaged in prohibited activities on the effects and impacts of their actions.

Trail Key Measure: RESPONSIVENESS

- Experience meets visitor expectations, needs and preferences.
- Information and interpretive services are available.
- Appropriate amenities are available
- “Good Host “ approach is implemented and apparent

STANDARD	CLARIFIERS	“CREW” TYPE	TASKS
1. *When signed as accessible, trails meet current accessibility guidelines.	<p>If trails signed as accessible do not, in fact, meet accessibility direction or if accessibility conditions are altered, remove or correct accessibility signs or schedule accessibility signs for removal.</p> <p>[Meeting this standard does not include the repair and/or replacement of improper or inadequate accessibility signs (See Condition of Facilities).]</p>	Trail Operations	<ul style="list-style-type: none"> • Check accessible trail features and accessibility signing at appropriate frequencies to ensure accessibility signing is accurate and meets current agency guidelines. • If features signed as accessible do not meet

			accessibility guidelines, remove or correct inaccurate signs, or schedule signs for removal, upon discovery.
2. Information is posted in a user-friendly and professional manner.	Allowable trail uses, restrictions and other important information such as access, are posted along the trail or at the trailhead.	Trail Operations	<ul style="list-style-type: none"> Post applicable trail use and trail management information in appropriate locations at the termini or along the trail.
3. Visitors are provided opportunities to communicate expectations and satisfaction.	<p>Establish efficient and cost-effective systems to provide visitors a means to communicate needs and expectations at appropriate levels and frequencies, by trail or trail network.</p> <p>Systems can include:</p> <ul style="list-style-type: none"> Trail rangers provide customer comments cards along the trail as part of regular patrol. Comment cards and receptacles are provided at selected trailheads and other contact points as deemed appropriate by the trail manager. 	Trail Operations	<ul style="list-style-type: none"> Distribute visitor comment cards as the opportunity arises. Provide distribution and collection information to users. Provide comment card receptacles at trailheads and other contact points.
<p><u>Trail Key Measure: CONDITION OF FACILITIES</u></p> <ul style="list-style-type: none"> Trail facilities look good. Trail facilities are in good repair Trail facilities are appropriate Trail facilities function 			
STANDARD	CLARIFIERS	“CREW” TYPE	TASKS
1. The trail and its structures are serviceable and in good repair throughout the designed service life.	<p>Annual Maintenance. Work performed to maintain serviceability, or repair failures during the year in which they occur. Includes preventive and/or cyclic maintenance performed in the year in which it is scheduled to occur. Includes periodic condition assessment surveys by qualified personnel as required by agency protocol. Unscheduled or catastrophic failures of components or assets may need to be repaired as a part of annual maintenance.</p>	Trail Maintenance	<ul style="list-style-type: none"> Inspect trail bridges and other trail structures with high-hazard potential. Conduct condition survey assessments per agency protocols. Perform annual or cyclic work to restore damaged, broken, or worn-out fixed

	<p>Repair. Work to restore a damaged, broken, or worn-out fixed asset, component, or item of equipment to normal operating condition. <u>Repairs may be done as annual maintenance</u> or deferred maintenance activities.</p> <p>Preventive Maintenance. Scheduled servicing, repairs, inspections, adjustments, and replacement of parts that result in fewer breakdowns and fewer premature replacements, and help achieve the expected life of the fixed asset. Inspections are a critical part of preventive maintenance as they provide the information for scheduling maintenance and evaluating its effectiveness.</p> <p>Cyclic Maintenance. Preventive maintenance activities that recur on a periodic and scheduled cycle. Typical cyclic maintenance includes refinishing sign, etc.</p>		<p>asset, component, or item of equipment to normal operating condition</p> <ul style="list-style-type: none"> • Perform scheduled servicing, repairs, inspections, adjustments, and replacement of parts that result in fewer breakdowns and fewer premature replacements, and help achieve the expected life of the fixed asset. • As appropriate, analyze environmental impacts of ground-disturbing activities.
<p>2. Trails in disrepair due to lack of scheduled maintenance, or in non-compliance with safety codes (e.g. life safety, OSHA, environmental, etc.) or other regulatory requirements (ABA/ADA, etc.), or beyond the designed service life, are <u>repaired</u>, <u>rehabilitated</u>, <u>replaced</u>, or <u>decommissioned</u>.</p>	<p>Deferred Maintenance. Maintenance that was not performed when it should have been or when it was scheduled and which, therefore, was put off or delayed for a future period. When allowed to accumulate without limits or consideration of useful life, deferred maintenance leads to deterioration of performance, increased costs to repair, and decrease in asset value.</p> <p>Code compliance (e.g. life safety, ABA/ADA, OSHA, environmental, etc.), Forest Plan Direction, Best Management Practices, Biological Evaluations, other regulatory or Executive Order compliance requirements, or applicable standards not met on schedule are considered deferred maintenance.</p> <p>Repair. Work to restore a damaged, broken, or worn-out fixed asset, component, or item of equipment to normal operating condition. Repairs may be done as annual maintenance or deferred maintenance activities.</p> <p>Rehabilitation. Renovation or restoration of an existing fixed asset or any of its components in order to restore the functionality or life of the asset.</p> <p>Replacement. Substitution or exchange of an existing fixed asset or component with one having essentially the same capacity and purpose. Replacement eliminates deferred maintenance needs for the replaced fixed asset or component. The decision to replace a fixed asset or component is usually reached when</p>	<p>Trail Maintenance</p>	<ul style="list-style-type: none"> • Perform work to restore a damaged, broken, or worn-out fixed asset, component, or item of equipment to normal operating condition. • Renovate or restore existing fixed asset or any of its components in order to restore the functionality or life of the asset. • Substitute or exchange existing fixed asset or component with one having essentially the same capacity and purpose. • Demolish, dismantle, remove, obliterate and/or dispose deteriorated or otherwise unneeded asset or component, including necessary cleanup work. • As appropriate, analyze environmental impacts of ground-disturbing activities • Conduct, per agency protocols, condition survey assessments that have been deferred

	<p>replacement, rather than repair or rehabilitation, is more cost effective, more environmentally sound, or in the best interest of the government. Replacement of an asset or component usually occurs when it nears has or exceeded its useful life.</p> <p>Decommission. Demolition, dismantling, removal, obliteration and/or disposal of a deteriorated or otherwise unneeded asset or component, including necessary cleanup work. This action eliminates the deferred maintenance needs for the fixed asset.</p>		<ul style="list-style-type: none"> • Survey features to obtain detailed information required for subsequent design. • Design features requiring repair, rehab or replacement. • Prepare, administer and inspect deferred maintenance contracts
<p>3. <u>New, altered, or expanded</u> trails meet Forest Service design standards and are consistent with Forest Plan prescriptions.</p>	<p>Capital Improvement. The construction, installation, or assembly of a new fixed asset, or the significant alteration, expansion, or extension of an existing fixed asset to accommodate a change of purpose.</p> <p>New Construction. The erection, construction, installation, or assembly of a new fixed asset.</p> <p>Alteration. Work to change the function of an existing fixed asset. The capacity or size of the fixed asset is not significantly changed. Deferred maintenance of the original fixed asset may be reduced or eliminated by an alteration.</p> <p>Expansion. Increasing the capacity or size of an existing fixed asset to serve needs different from, or significantly greater than, those originally intended.</p>	<p>Trail Maintenance</p>	<ul style="list-style-type: none"> • Erect, construct, install, or assemble a new fixed asset. • Perform work to change the function of an existing fixed asset. The capacity or size of the fixed asset is not significantly changed. • Increase the capacity or size of an existing fixed asset to serve needs different from, or significantly greater than, those originally intended. • As appropriate, analyze environmental impacts of ground-disturbing activities in existing developed sites or on existing system trails • Survey features to obtain detailed information required for subsequent design. • Design features to be altered, expanded or constructed in existing developed sites or on existing system trails. • Prepare, administer and inspect contracts for feature alteration, expansion, or new construction in existing developed sites or on existing system trails.