MINIMUM REQUIREMENT DECISION GUIDE

Herbicide Treatments

To Control Exotic Species

in the

Never Summer and Byers Peak Wilderness Areas

Arapaho-Roosevelt National Forest

Abstract: The Sulphur District proposes to apply herbicides within the Never Summer and Byers Peak Wilderness Areas to control small Canada thistle infestations. The herbicide formulation is chlorsulfuron or clopyralid, at the respective rates 0.5 pounds or 1.5 pounds of active ingredient per acre. They will be applied using non-motorized means (i.e. backpacks and/or Saddle-lite with pack stock). The objective is to eradicate the targeted invasive species, maintain the health of native plant communities and protect Wilderness values.

This document discusses minimization of the effects of the noxious weeds and their management on Wilderness values.

Minimum Requirements Worksheets

STEP 1 - DETERMINING THE MINIMUM REQUIREMENTS (a two part process)

PART A - Minimum Requirement Key to making a determination on wilderness management proposals

(This flow chart will help you assess whether the project is the minimum required action for administration of the area as wilderness. Answering these questions will help determine **IF** this action is really the **minimum required** action in wilderness.)

Guiding Questions	*Use the available space or additional sheets as necessary.*
Is this an emergency? (i.e. a situation that involves an inescapable urgency and temporary need for speed beyond that available by primitive means, such as fire suppression, health and safety of people, law enforcement efforts involving serious crime or fugitive pursuit, retrieval of the deceased or an immediate aircraft accident investigation.)	**Answer:** YES: ☐ NO: x **Explain: This is not an emergency. Failure to conduct the project will not jeopardize personal safety or cause loss of life. However, if the project is not done, the native plant communities in the Wilderness area will be gradually degraded over time by the expanding Canada thistle. Ecosystem functions such as energy flow and nutrient cycling will be hampered on infested sites. Watershed stability is also impaired on sites that are badly infested.**
If **Yes**, then: Document rationale for line officer approval using the minimum tool form and proceed with action. If **No**, then: ⇓ *go to next question*	
Does the project or activity conflict with the stated wilderness goals, objectives, and desired future conditions of applicable legislation, policy and management plans?	**Answer:** YES: ☐ No: X Explain: **The project is not in conflict with stated Wilderness area goals, objectives, and desired future conditions.**
If **Yes**, then: Do not proceed with the proposed project or activity. If **No**, then: ⇓ *go to next question*	
Are there other less intrusive actions that should be tried first? (i.e. signing, visitor education, or information.)	**Answer:** YES: ☐ No: x **Explain: The use of herbicides at prescribed label rates has been proven to be the only means of effectively treating Canada thistle infestations. The target species are deep-rooted and rhizomatous species and are not controllable with methods such as hand pulling, digging, mowing, or other techniques. While awaiting approval for the use of herbicides in Wilderness, 2 of the infestations have been hand-pulled to prevent seed production but overall infestation size has still expanded due to rhizomatous spread.**
If **Yes**, then: Implement other actions using the appropriate process. If **No**, then: ⇓ *go to next question*	

Minimum Requirements Worksheets

Can this project or activity be accomplished outside of wilderness and still achieve its objectives? (i.e. some group events.)	**Answer:**	**YES:** ☐	**NO: x**☐
	Explain: The proposal specifically targets populations of non-native plants that are located within Wilderness. The treatments are designed to complement other activities that are ongoing outside of the Wilderness area, including direct control and prevention.		

If **Yes**, then:
Proceed with action outside of wilderness using the appropriate process.

If **No**, then:
⇓
go to next question

Is this project or activity subject to valid existing rights? (i.e. a mining claim or right-of-way easement.)	**Answer:**	**YES:** ☐	**NO: x**☐
	Explain: N/A		

If **Yes**, then:
Proceed to minimum tool section of this document, STEP 2.

If **No**, then:
⇓
go to next question

Is there a special provision in legislation (the 1964 Wilderness Act or subsequent wilderness legislation), that <u>allows</u> this project or activity? (i.e. maintenance of dams and water storage facilities with motorized equipment and mechanical transport or control of fire, insects and disease.)	**Answer:**	**YES:** ☐	**NO: X**☐
	Explain: Herbicide application is not specifically mentioned in the Wilderness Act. Sec. 4d(1) authorizes measures to be taken in the control of fire, insects, and diseases. Sec. 4b directs that agencies are responsible for preserving the wilderness character of an area. Canada thistle was not recognized as a threat to Wilderness values when the Wilderness Act became law in 1964.		

If **Yes**, then:
The proposed project or activity can be **<u>considered</u>** but is not necessarily <u>required</u> just because it is mentioned in legislation.
Go to Part B, as needed.

If **No**, then:
⇓
Proceed to Part B, Responsive Questions

Minimum Requirements Worksheets

PART B - Determining the Minimum Requirement

Responsive Questions for Minimum Requirements Analysis: Explain your answer in the response column. If your responses indicate potential adverse impacts to wilderness character, evaluate whether or not you should proceed with this proposal. If you decide to proceed, begin developing plans to mitigate impacts, and complete the Minimum Tool Analysis in this guide. Some of the following questions may not apply to your proposed project or activity.

	RESPONSIVE STATEMENT
EFFECTS ON WILDERNESS CHARACTER	
How does the project or activity benefit the wilderness resource as a whole as opposed to maximizing one resource?	*The native plant community that has evolved on the site has been in place for many hundred of years. After the passage of the Wilderness Act, native plant communities both in and out of Wilderness have become threatened by the invasion of exotic plants that did not evolve on the site along with the soils and native plant complex.* *The project is not designed to maximize forage production for either wildlife or domestic livestock purposes. The project is aimed at enhancing the health of the ecosystem and maintaining the integrity of plant communities and Wilderness values in the long run.*
If this project or activity were not completed, what would be the beneficial and detrimental effects to the wilderness resource?	*If the project were not done, the invasion of exotic targeted plants would continue unimpeded. Canada thistle is a prickly plant that could cause discomfort to wilderness users. It will quickly out-compete and displace native plants within infested sites and will reduce available forage for wildlife and will reduce wildflower populations.* *The treatments are proposed under the assumption that the benefits to ecosystem health will outweigh any potential negative aspects of the appearance of humans meddling with the natural Wilderness ecosystem. The current infestations are, in fact, the result of humans inadvertently introducing weed seed into the areas, prior to their designation as Wilderness (related to historic logging activity).*
How would the project or activity help ensure that human presence is kept to a minimum and that the area is affected primarily by the forces of nature rather than being manipulated by humans?	*The treatments are proposed because they are targeting infestations that are at an early stage of development. By acting now, we can prevent a much higher level of intervention or vegetative manipulations that would be needed to control large infestations that could spread into sensitive riparian or wetland habitats.*
How would the project or activity ensure that the wilderness provides outstanding opportunities for solitude or a primitive and unconfined type of recreation? (i.e. does the project or activity contribute to people's sense that they are in a remote place with opportunities for self-discovery, adventure, quietness, connection with nature, freedom, etc.)	*Some Wilderness Users may feel that their experience is degraded if they happen to visit a treatment site during or directly after treatment. While important to those it affects, it is a short-term impact (no longer than 1 day needed at each site per year) and will affect very few people. This project is proposed with the belief that Wilderness users In the long term will be positively affected by the restoration of native plant communities*.

MANAGEMENT SITUATION		
What does your management plan, policy, and legislation say to support proceeding with this project?	*The 1997 Revision of the Arapaho and Roosevelt National Forest Land and Resource Management Plan supports the goal of managing undesirable vegetation. Standard 129 states "Control undesirable nonnative and noxious plants throughout the Forests, with priority given to new species, and to wilderness areas."*	
How did you consider wilderness values over convenience, comfort, political, economic or commercial values while evaluating this project or activity?	*This project is being proposed for purposes of maintaining Wilderness values. It is not proposed for political, convenience, comfort, economic, or commercial reasons. Treatment of infestations when they are just beginning minimizes the amount of herbicide needed and increases the chance of successfully eradicating the noxious weeds.*	
SHOULD WE PROCEED?	**YES: X** *Go to Step 2*	**NO:** *Stop*

Minimum Requirements Worksheets

STEP 2 - DETERMINING THE MINIMUM TOOL (the Minimum Tool Analysis)

These questions will assist you in determining the appropriate tool(s) to accomplish the project or proposed activity with the least impact to the wilderness resource. This analysis can be used as part of the NEPA process if desired. This analysis can be documented on the following form or on additional sheets. Directions are in **bold** type. Prompting questions are in *italics*.

<table>
<tr><td colspan="4">Develop several approaches to resolve the issue or problem. At a minimum consider the following three methods:</td></tr>
<tr><td>Alternative 1: An alternative utilizing motorized equipment or mechanical transport</td><td>Alternative 2: An alternative using non-motorized equipment and non-mechanical transport.</td><td>Alternative 3: Variations of method 1 and 2, as appropriate.</td><td>Alternative 4: Other ideas?</td></tr>
<tr><td colspan="4">Describe the alternatives. Be specific and provide detail.
What is proposed?
Why is it being proposed in this manner?
Who is the proponent?
When will the project take place?
Where will the project take place?
How will it be accomplished? (What methods and techniques will be used?)</td></tr>
<tr><td>Alt#1: The proposed action will implement small-scale applications of herbicide on a site-specific manner to targeted plant species.</td><td>Alt#2: No Action</td><td>Alt#3: Mechanical treatments such as handpulling, grubbing, or mowing.</td><td>Alt#4: Biological management of the targeted species. This would involve the release of non-native insects that are adapted to use of the target species, and inflict damage on the host plant.</td></tr>
<tr><td colspan="4">Utilize the following criteria to assess each method (a brief statement should suffice) :</td></tr>
<tr><td colspan="4">Biophysical effects
Describe the environmental resource issues that would be affected by the project.
Describe any effects this action will have on protecting natural conditions within the regional landscape (i.e. insect, disease, or noxious weed control).
Include both biological and physical effects.</td></tr>
<tr><td>Alt#1: The project will not have any measurable adverse effect on water quality, soil productivity, wildlife, and watershed</td><td>Alt#2: There will be no immediate adverse effects of not conducting the proposed action. Adverse effects including loss of native</td><td>Alt#3: Mechanical methods would disturb the soil more than Alt#1. Pulling would not</td><td>Alt#4: Release of non-native insect species is not recommended on small infestations, such as those targeted under this proposal, because the insect population is not able to adequately expand to provide measurable impact on</td></tr>
</table>

stability. It will have a positive effect on the maintenance of plant community species composition, soil productivity, wildlife habitat, and watershed stability over the long run.	biodiversity, loss of wildlife forage, and encroachment of weeds into sensitive habitats, including wetlands and riparian areas, will occur within 3-5 years.	accomplish the desired goal of eradicating or suppressing the non-native vegetation because of its rooting properties.	the target weed before the weed spreads to many more acres. Under Integrated Weed Management principles, the goal on small infestations is eradication in the shortest period possible before introduction of more seed occurs on the site. Adverse effects of introduced bugs are difficult to quantify but may occur. Past attempts at releasing insects on large infestations demonstrated poor over-winter insect survival on Sulphur.

Minimum Requirements Worksheets

Social/recreation/experiential effects
Describe how the wilderness experience may be affected by the proposed action.
Include effects to recreation use and wilderness character.
Consider the effect the proposed action may have on the public and their opportunity for discovery, surprise, and self-discovery.

Alt#1:All aspects of this question are found in "Effects on Wilderness Character" Part B-4 above	Alt#2: There is no immediate adverse effect of not conducting the project. In the long term, failure to conduct the project may impact the Wilderness character of the project area through significant alterations to native plant communities and biodiversity.	Alt#3: Disturbed ground which would result from this alternative would have a greater adverse affect on wilderness experiences because it would be visible from a distance, and would last for a longer period.	Alt#4: This alternative is not likely to affect the average Wilderness user, unless the insect populations multiplied to huge proportions or affected non-target species. This is unlikely, as it has not occurred at any other District releases and all insects are approved as safe for biological release by the USDA.

Societal/political effects
Describe any political considerations (i.e. MOUs, agency agreements, local positions) that may be affected by the proposed action.
Describe relationship of method to applicable laws.

Alt#1: Noxious weed Laws at the local, State, and federal level, including a recent Presidential Order, directs the timely treatment of noxious weeds. The Sulphur District is in a weed treatment Cooperative Agreement with other entities in Grand	Alt#2: Taking this action would be in conflict with our Forest Plan, Cooperative Agreement, and with the State Noxious Weed Law.	Alt#3: This alternative would not be in conflict with existing direction, agreements and laws, other than it would result in ineffective treatment of existing infestations.	Alt#4: This alternative would not be in conflict with existing direction, agreements and laws, other than it would result in ineffective treatment of existing infestations.

County and has an added responsibility to treat weeds since we are upstream of all other partners.			

Health and safety concerns
Describe and consider any health and safety concerns associated with the proposed action.
Consider the types of tools used, training, certifications, and other administrative needs to ensure a safe work environment for employees.
Consider the effect the proposed action may have on the health and safety of the public.

Alt#1: Herbicides proposed for use under this proposal have not been found to cause any health and safety problems, when used in accordance with EPA label directions. All applications will be conducted in keeping with Colorado Herbicide Application and Licensing procedures.	Alt#2: Canada thistle is a prickly plant that, if left untreated, could cause discomfort to the Wilderness user and/or their pets if they walk through an infestation.	Alt#3:Back Strain is a common problem associated with pulling deep rooted species.	Alt#4: none documented

Minimum Requirements Worksheets

Economic and timing considerations
Describe the costs and timing associated with implementing each alternative
Assess the urgency and potential cumulative effect from this proposal of similar actions.

Alt#1: The urgency for timely treatments of the targeted species is discussed elsewhere in this document. The longer treatment is delayed, the more extensive treatment (increased costs and more herbicide needed) will be required to restore native vegetation	Alt#2: N/A	Alt#3:For this treatment to be successful, all plants would need to be hand-pulled several times each season, as new plants emerge throughout the growing season, and for as many years as it takes to exhaust all built-up seed in the ground and all remaining rhizomatous activity.	Alt#4: This method works better the longer you wait, allowing populations to get so large they cannot be controlled using the most effective method which is herbicide control.

Formulate a preferred action. Be specific and describe in detail below.

Choose a preferred alternative: *The proposed action, herbicide use at the prescribed rate, using site specific treatments on target weeds only, is the preferred alternative.*
Further refine the preferred alternative to minimize impacts to wilderness.
What will be the specific operating requirements for the action? Include information on timing, locations, amounts, etc… Be as specific as possible.
Do not conduct treatments on weekends: carry out control activities when there are few people in the area. This precaution is not for the health protection of visitors (as the herbicides proposed for use have not been found to be dangerous under proper use scenarios) but, rather, for purposes of minimizing the effect of the presence of weed treatment crews on the sense of visitor solitude.
What are the maintenance requirements? Describe any ongoing or repeat efforts that will be necessary.
Control of deep-rooted species is a continuing effort. Often it takes five to ten years of vigilant effort to get the desired result of eradication.
What standards and designs will apply?
Follow all label directions, EPA requirements, and direction in the ARP Noxious Weed Management Plan (in press).
Develop and describe any mitigation measures that apply.
Follow all label directions and mitigations in the EA and Management Plan.
What will be provided for monitoring and feedback to strengthen future effects and preventative actions to be taken to help in future efforts?
The treatment sites will be monitored annually using camera points and narrative descriptions to track progress over time. These will be submitted every three years, as part of the Pesticide Use Proposal to the RO. Additional areas adjacent to current infestations will be monitored to detect any new infestations.

Minimum Requirements Worksheets

Approvals	Signature	Name	Position	Date
Prepared by:	/s/*Doreen Sumerlin*	Doreen Sumerlin	District Rangeland Staff	2/27/03
Recom-mended By:	*/s/Bradley J Orr*	Bradley J Orr	District Recreation Staff	3/1/03
Recom-mended By:	*/s/ Craig A Magwire*	Craig A Magwire	District Ranger	2/27/03
Approved by:				

Minimum Requirements Worksheets

NEPA Worksheet

Note: This may not apply to your agency. Refer to your agency's policy on NEPA requirements before using this worksheet.

Determine the appropriate level of NEPA analysis and documentation. Answer the following questions.

Guiding Questions	*Use the available space or additional sheets as necessary.*
Is the action authorized by a previous NEPA document?	**Answer:** **YES: x**☐ **NO:** ☐ **Explain:** The action is covered within the ARP Noxious Weed Management Plan and associated EA and Decision (in press) and would not be implemented until the implementation date of said Decision.
If **Yes**, then: Proceed with action, document approval for those actions requiring use of motorized equipment or mechanical transport with a letter of delegation from the appropriate line officer. If **No**, then: ⇓ *go to next question*	
Is the action of limited scope and duration and qualifies under one of the Secretary of Agriculture exemptions or Chief of the Forest Service exemptions for categorical exclusion without a case file?	**Answer:** **YES:** ☐ **NO:** ☐ **Explain:**
If **Yes**, then: Proceed with action, document approval for those actions requiring use of motorized equipment or mechanical transport with a letter of delegation from the appropriate line officer. If **No**, then: ⇓ *go to next question*	
Is the action of limited scope and duration, has no extraordinary circumstances, and qualifies for a Chief of the Forest Service exemptions for categorical exclusion with a case file?	**Answer:** **YES:** ☐ **NO:** ☐ **Explain:**
If **Yes**, then: Scope interested publics and prepare Decision Memo for the appropriate line officer. If **No**, then: ⇓ *go to next question*	

Minimum Requirements Worksheets

Is the action likely to have significant adverse effects on the wilderness resource or human environment?

If **Yes**, then:	If **No**, then:
Proceed with an EIS and ROD for the appropriate line officer.	Scope interested publics and prepare an EA and Decision Notice for the appropriate line officer.

Answer:	**YES:** ☐	**NO:** ☐
Explain:		

APPENDIX A

Agency Policy related to minimum requirement/minimum tool

Bureau of Land Management:

Code of Federal Regulations 6303.1

How does BLM carry out administrative and emergency functions?
As necessary to meet minimum requirements for the administration of the wilderness area, BLM may:

(a) Use, build, or install temporary roads, motor vehicles, motorized equipment, mechanical transport, structures or installations, and land aircraft, in designated wilderness;

(b) Prescribe conditions under which other Federal, State, or local agencies or their agents may use, build, or install such items to meet the minimum requirements for protection and administration of the wilderness area, its resources and users;

(c) Authorize officers, employees, agencies, or agents of the Federal, State, and local governments to occupy and use wilderness areas to carry out the purposes of the Wilderness Act or other Federal statutes; and

(d) Prescribe measures that may be used in emergencies involving the health and safety of persons in the area, including, but not limited to, the conditions for use of motorized equipment, mechanical transport, aircraft, installations, structures, rock drills, and fixed anchors. BLM will require any restoration activities that we find necessary to be undertaken concurrently with the emergency activities or as soon as practicable when the emergency ends.

National Park Service:

Director's Order #41:
Wilderness Preservation and Management

C. Wilderness Management Issues

2. Application of the Minimum Requirement Concept

. . . except as necessary to meet the minimum requirements for the administration of the area for the purpose of this Act (including measures required in emergencies involving the health and safety of persons within the area) there shall be no temporary road, no use of motor vehicles, motorized equipment or motorboats, no landing of aircraft, not other form of mechanical transport, and no structure or installation within any such area.

– The Wilderness Act: Section 4(c)

All management decisions affecting wilderness must be consistent with a minimum requirement concept . . . . When determining minimum requirement, the potential disruption of wilderness character and resources will be considered before, and given significantly more weight than,

economic efficiency and convenience. If a compromise of wilderness resource or character is unavoidable, only those actions that preserve wilderness character and/or have localized, short-term adverse impacts will be acceptable.

– NPS Management Policies: 6.3.5 Minimum Requirement

The National Park Service will apply the minimum requirement concept to all administrative activities that affect the wilderness resource and character. The application of the minimum requirement concept is intended to minimize impacts on wilderness character and resources and must guide all management actions in wilderness.

Wilderness managers may authorize (using a documented process) the generally prohibited activities or uses listed in Section 4(c) of the Wilderness Act if they are deemed necessary to meet the minimum requirements for the administration of the area as wilderness and where those methods are determined to be the 'minimum tool' for the project. The use of motorized equipment and the establishment of management facilities are specifically prohibited when other reasonable alternatives are available. The minimum requirements process cannot be used to permit roads or inappropriate commercial enterprises within wilderness unless these are authorized by specific legislation.

The minimum requirement concept is to be applied as a two-step process that documents:

> (1) A determination as to whether or not a proposed management action is appropriate or necessary for the administration of the areas as wilderness, and does not pose a significant impact to the wilderness resources and character; and,
>
> (2) If the project is appropriate or necessary in wilderness, the selection of the management method (tool) that causes the least amount of impact to the physical resources and experiential qualities (character) of wilderness.

It is important to understand the distinctions between the terms "Minimum Requirement," and "Minimum Tool."

> Minimum Requirement is a documented process the NPS will use for the determination of the appropriateness of all actions affecting wilderness.
>
> Minimum Tool means a use or activity, determined to be necessary to accomplish an essential task, which makes use of the least intrusive tool, equipment, device, force, regulation, or practice that will achieve the wilderness management objective. This is not necessarily the same as the term "primitive tool," which refers to the actual equipment or methods that make use of the simplest available technology (i.e., hand tools).

Park managers will apply the minimum requirement concept when making all decisions concerning management of the wilderness area. This includes decisions concerning administrative practices, historic properties, proposed special uses, research, and equipment use in wilderness.

Planned administrative actions that may result in an exception to a prohibited use (i.e., chainsaws, aircraft use, radio repeater sites, rock drills, patrol structures, weather stations), or

have the potential to impact wilderness resources and values must be consistent with an approved wilderness management plan and be documented in accordance with the park's minimum requirements process. The minimum requirements process will be conducted through appropriate environmental analysis (e.g., categorical exclusions, environmental assessment/ FONSI, or an environmental impact statement/Record of Decision).

When determining the minimum requirement for a proposed action, the manager will strive to minimize the extent of adverse impact associated with accomplishing the necessary wilderness objective. The determination as to whether or not an action has an adverse impact on wilderness must consider both the physical resources within wilderness, and wilderness characteristics and values. These characteristics and values include: the wilderness's primeval character and influence; the preservation of natural conditions (including the lack of man-made noises); cultural resource values, the assurance of outstanding opportunities for solitude; the assurance that the public will be provided with a primitive and unconfined type of recreational experience; and the assurance that wilderness will be preserved and used in an unimpaired condition.

Managers must give appropriate consideration to the aesthetic values of wilderness as well as the physical resource. These factors take precedence over cost or convenience in determining minimum requirement. National Parks with wilderness must have a documented process for applying the minimum requirement concept. Reference Manual #41: Appendix F includes examples of "decision trees," which may be adopted or referred to as a procedure by which alternatives can be assessed and final management decisions developed. These decision tree examples do not alleviate a park's responsibility for providing adequate environmental compliance documentation for individual projects.

U.S. Fish and Wildlife Service:

Refuge Manual
8. Wilderness Area Management

8.5 Definitions.

A. Minimum tool. The minimum action or instrument necessary to successfully, safely, and economically accomplish wilderness management objectives.

8.8 Administrative guidelines.

A. Use of motorized equipment. Motorized equipment may be used in special circumstances if it is the minimum tool necessary to accomplish a task safely and without long term impairment of the area's wilderness character. However, except where Congress specifically authorizes such uses in the establishing laws or in other acts modifying the Wilderness Act such as ANILCA, the use of motor vehicles, motorized equipment, mechanical transportation, and the landing of aircraft would not be used in the routine administration of wilderness. The determination of when motorized equipment constitutes the minimum tool will be left to the refuge manager. Some examples of special situations are given below:

(1) Emergency situations involving the public's health and safety, including search and rescue operations.

(2) Activities essential to accomplishing refuge objectives. For example, if bighorn sheep tanks dry up and the only means of supplying water is by trucking it into the tanks or, where grazing is permitted, bringing a veterinarian in by truck to treat seriously ill cattle.

(3) In the control of fire, insects, diseases, or other hazards.

C. - Final paragraph related to wildfire management and minimum tool:

While an aggressive approach to wildfire control on certain wilderness areas may be in order, the method(s) utilized should be the "minimum tool." The minimum tool may include, but is not limited to, lookout towers, tool caches, firebreaks, motorized land, water or air equipment, and chemical retardants. In conducting wildfire control activities, care must be taken to ensure that control methods do not harm the refuge and wilderness area more than the wildfire itself. For example, extensive bulldozed firebreaks on a hillside that result in permanent scars and soil erosion may have a far greater adverse effect than the temporary effect of fire. These kinds of situations should be carefully analyzed and adequately provided for in the refuge management plans.

Forest Service:

2320 Manual Direction

2326 - USE OF MOTORIZED EQUIPMENT OR MECHANICAL TRANSPORT IN WILDERNESS

1. Accomplish management activities with nonmotorized equipment and nonmechanical transport of supplies and personnel.

2. Exclude the sight, sound and other tangible evidence of motorized equipment or mechanical transport within wilderness except where they are needed and justified.

2326.03 Policy

2. Do not approve the use of motorized equipment or mechanical transport unless justified as described in 2326.1. For definition see 2320.5.

2326.1 - Conditions Under Which Use May Be Approved. Allow the use of motorized equipment or mechanical transport only for:

1. Emergencies where the situation involves an inescapable urgency and temporary need for speed beyond that available by primitive means. Categories include fire suppression, health and safety, law enforcement involving serious crime or fugitive pursuit, removal of deceased persons, and aircraft accident investigations.

2. Aircraft or motor boat use established before the area was designated as wilderness by the Act of 1964 or subsequent wilderness legislation.

3. Exploration and development of valid existing mineral rights (FSM 2323.7).

4. Access to surrounded State and private lands and valid occupancies (FSM 2326.13).

5. To meet minimum needs for protection and administration of the area as wilderness, only as follows:

a. A delivery or application problem necessary to meet wilderness objectives cannot be resolved within reason through the use of nonmotorized methods.

b. An essential activity is impossible to accomplish by nonmotorized means because of such factors as time or season limitations, safety, or other material restrictions.

c. A necessary and continuing program was established around the use of motorized equipment before the unit became a part of the National Wilderness Preservation System, and the continued use of motorized equipment is essential to continuation of the program.

d. Removal of aircraft wreckage when nonmotorized methods are unsuitable.

Specify, for each wilderness, the places and circumstances in which motorized equipment, mechanical transport, or aircraft are necessary for protection and administration of the wilderness and its resources in the forest plan.

The Line Officer approving the use of motorized equipment, aircraft, or mechanical transport shall specify what uses of that equipment are suitable and will have the least lasting impact to the wilderness resource. Schedule use of this equipment to minimize impact on wilderness visitors.

Code of Federal Regulations:
CFR 292.6
Commercial enterprises, roads, motor vehicles, motorized equipment, motorboats, aircraft, aircraft landing facilities, airdrops, structures, and cutting of trees.

Except as provided in the Wilderness Act, subsequent legislation establishing a particular Wilderness unit, or 294.2(b), 294.2(c), and 294.2(e), paragraphs (c) and (d) of this section, and 293.7, 293.8, and 293.12 through 293.16, inclusive, and subject to existing rights, there shall be in National Forest Wilderness no commercial enterprise; no temporary or permanent roads; no aircraft landing strips; no heliports or helispots, no use of motor vehicles, motorized equipment, motorboats, or other forms of mechanical transport; no landing of aircraft; no dropping of materials, supplies, or persons from aircraft; no structures or installations; and no cutting of trees for nonwilderness purposes.

APPENDIX B

DEFINITIONS

Mechanical Transport
Any contrivance which travels over ground, snow, or water, on wheels, tracks, skids, or by flotation and is propelled by a nonliving power source contained or carried on or within the device. *Source: 36 CFR 293.6a*

Mechanical Transport
Any contrivance for moving people or material in or over land, water, snow or air that has moving parts and is powered by a living or non-living power source. This includes (but is not limited to) wheeled vehicles such as bicycles, game carriers, carts and wagons. "Mechanical transport" does not include wheelchairs when used as necessary medical appliances, not does it include skis, snowshoes, sleds, travois, non-motorized river craft including driftboats, rafts, or canoes, or similar primitive devices. *Source: National Park Service Director's Order #41*

Minimum Tool
The least impactive method, equipment, device, force, regulation, practice, or use that will meet the management objective in a wilderness context. This represents the "how" question that must be asked to ensure that the process to implement the minimum required action will minimize impact on social and biophysical wilderness values. Minimum tool is not synonymous with primitive tool. In some cases the minimum tool could be a motorized tool or a form of mechanical transport.

Minimum Requirement
An action that is determined to be absolutely necessary but results in the least discernible impact on all the wilderness values and is the least manipulative or restrictive means of achieving a management objective in wilderness. This represents the "why" and "is it necessary" questions that must be answered before deciding that an action, that could potentially leave a mark of human influence in wilderness, is necessary.

Motorized Equipment
Machines that use a motor, engine, or other nonliving power sources. This includes, but is not limited to, such machines such as chain saws, aircraft, snowmobiles, generators, motor boats, and motor vehicles. It does not include small battery or gas powered hand carried devices such as shavers, wristwatches, flash-lights, cameras, stoves, or other similar small equipment. *Source: FSM 2320.5, 36 CFR 293.6b*

Permanent Improvement
A structural or non-structural improvement that is to remain at a particular location for more than one field season. Permanent improvements include such items as trails, toilet buildings, cabins,

fences, tent frames, fire grills, and instrumentation stations. Permanent improvements may be allowed in wilderness, subject to a minimum requirement analysis. *Source: FSM 2320.5*

Primitive Skills
The proficient and safe use of primitive tools and methods of transportation.

Primitive Traditional Tool
Implements, devices, equipment, and tools that originated in the pre-motorized or pioneering era such as the axe, cross-cut saw, hammer, wrench, hand winch, pulley, packstring, oar-powered or paddle-powered water craft, and skis. Modern versions of these tools and other hand or stock operated tools, that are powered by a living source, are also included.

Temporary Structure
Any structure that is easy to dismantle, that could be removed completely from a site between periods of actual use, and that must be removed at the end of each season of use. *Source: FSM 2320.5*

Untrammeled
Not confined, not restrained, free from hindrances. *Source: American Heritage Dictionary*

Wilderness Appropriate Response
The minimum required action and the minimum tool selected by managers to respond to a wilderness issue, need, opportunity, or threat.

Wilderness Values
The recognized reasons for wilderness to exist and be preserved. Wilderness has natural values that are vital to the health of our planet as well as the enjoyment of those visiting them. Wilderness values include things such as watersheds for cities, benchmark for scientific research, critical habitat for wildlife, genetic material for plant and animal diversity, undisturbed geological resources, sanctuary from the pressures and pace of modern society, and a repository for cultural resources. The public values of wilderness include, but are not limited to, opportunities for scientific study, education, solitude, physical and mental challenge and stimulation, inspiration, and primitive recreation experiences.

OTHER RELEVANT TERMS

The following definitions are straight out of the dictionary but may be useful for the reader to help put the minimum tool/minimum requirement in context.

Appropriate
Especially suitable or compatible.

Minimum
The smallest quantity, number, or degree possible or permissible.

Necessary
That must be done; undeniable; mandatory; required; indispensable; inherent in the situation.

Requirements
Something needed; a necessity; something obligatory or demanded, as a condition; something required.

Tool
Something used in performing an operation; a means to an end.

APPENDIX C

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