WHAT IS A TRAMMELING ACTION?

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The purpose of this short document is to provide guidelines and examples to clarify what is and is not a trammeling action. This document does not discuss how to weight such actions, how to find or record the data for these actions, or any other aspect of using this information in wilderness character monitoring. These guidelines and examples are intended to capture about 90% of the cases and provide sufficient guidance for local staff to figure out the novel and rarer cases as they occur.

The following definitions are used in this document:

- Trammeling action: an action that intentionally manipulates "the earth and its community of life" inside a designated wilderness or inside an area that by agency policy is managed as wilderness.
- Intentional: done on purpose; deliberate; willful
- Manipulation: an action that alters, hinders, restricts, controls, or manipulates "the earth and
 its community of life" including the type, amount, or distribution of plants, animals, or physical
 resources inside a designated wilderness or inside an area that by agency policy is managed as
 wilderness.
- Intentional manipulation: an action that purposefully alters, hinders, restricts, controls, or manipulates "the earth and its community of life."

Based on these definitions, trammeling occurs when a manager makes a decision and takes action that intentionally manipulates the Natural Quality. Once action is taken the effect on the Natural Quality cannot typically be halted or stopped or reversed, and therefore the effect typically persists from the moment of the action onwards over time. Because of this persistent or permanent effect on "the earth and its community of life," managers need to think long and hard about these types of decisions.

Trammeling actions are often considered only in terms of how they degrade the Untrammeled Quality, but the agency takes all sorts of such actions for many different reasons that support or sustain the other qualities of wilderness character. For example, actions taken to protect and sustain the Natural Quality include controlling or eradicating non-native species, restoring degraded habitat, or protecting species from harm such as installing gates across caves to prevent people from entering. Resource management actions in wilderness almost always involve tradeoffs, and while there may be valid and good reasons for taking trammeling actions, these actions nonetheless degrade the Untrammeled Quality. The framework of wilderness character simply allows agency staff to be transparent about these tradeoffs, for example the tradeoffs that might be involved in actions taken to improve the Natural Quality that degrade the Untrammeled Quality. The goal of using the framework of wilderness character is to help agency staff make the decision that is deemed best overall for preserving wilderness character.

TYPES OF TRAMMELING ACTIONS

There are two broad classes of trammeling actions, those that are authorized by the federal land manager and those that are not. Under each of these broad classes there are several subclasses that

reflect whether the action is taken on a biological resource, a physical resource, and whether the effect of the action is on a biological or physical resource. Almost always the concern is for actions that occur inside a designated wilderness, but one subclass provides examples of actions taken outside a designated wilderness that would be included as a trammeling action because the intention is to affect biological or physical resources inside the wilderness.

<u>Agency authorized trammeling actions</u> – actions authorized by the federal wilderness land manager as well as actions by other agencies, organizations, or individuals that have been approved or permitted by the federal land manager

- 1. Actions taken inside the wilderness on vegetation or fish and wildlife to intentionally and directly affect this vegetation or fish and wildlife. Examples include:
 - a. Removing or killing native vegetation or fish and wildlife
 - b. Adding or restoring native vegetation or fish and wildlife
 - c. Adding non-native vegetation for erosion control
 - d. Adding non-native fish and wildlife
 - e. Spraying chemicals to control non-native vegetation or fish and wildlife
 - f. Releasing biocontrol agents to control non-native vegetation or fish and wildlife
 - g. Collecting vegetation for scientific study
 - h. Collecting or capturing and releasing fish and wildlife for scientific study
 - i. Collecting vegetation or fish and wildlife for commercial purposes
 - j. Enclosing or excluding fish and wildlife from an area to protect vegetation or to study the effects of enclosing or excluding fish and wildlife on protecting vegetation or animals
 - k. Adding piscicides to water to eliminate non-native fish
- 2. Actions taken inside the wilderness on a physical resource to intentionally and directly affect this physical resource. Examples include:
 - a. Suppressing naturally-ignited fire
 - b. Lighting fire (under management prescription) to reduce fuels or for other purposes
 - c. Constructing or maintaining a dam or diversion structure to alter the quantity or seasonal flow of water
 - d. Constructing a road to allow access to mineral, oil, or gas leases; communication sites; or inholdings
- 3. Actions taken inside the wilderness on a physical resource that intentionally affects the physical resource to directly or indirectly affect vegetation or fish and wildlife. Examples include:
 - a. Installing a gate across a cave that will protect bats but exclude other animals from using the cave
 - b. Constructing or maintaining a range allotment fence
 - c. Constructing a dam to exclude non-native species from moving up or down a stream
 - d. Installing guzzlers to provide water for wildlife
 - e. Lighting fire (under management prescription) or any other vegetation manipulation to improve wildlife habitat

- f. Adding acid-buffering limestone to water to neutralize the effects of acid deposition on aquatic flora and fauna
- 4. Actions taken outside the wilderness on a physical or biological resource to intentionally and directly affect that resource inside a wilderness. Examples include:
 - a. Cloud seeding that occurs above the wilderness, and is therefore outside it, to intentionally increase precipitation inside the wilderness
 - b. Damming a river outside a wilderness to intentionally create a lake or water storage area inside the wilderness
 - c. Killing fish and wildlife outside the wilderness to intentionally affect the population or distribution of this species inside the wilderness
 - d. Planting or stocking fish and wildlife outside the wilderness to intentionally or foreseeably affect the population or distribution of this species inside the wilderness because of known habitat inside the wilderness

<u>Unauthorized trammeling actions</u> – citable and other actions taken by other agencies, organizations, or individuals that have not been authorized, approved, or permitted by the federal wilderness land manager

- 1. Actions taken inside the wilderness on vegetation or fish and wildlife to intentionally and directly affect this vegetation or fish and wildlife. Examples include:
 - a. Adding vegetation or fish and wildlife by a federal agency (other than the federal land managing agency), a state agency, or the public
 - b. Removing vegetation or fish and wildlife by a federal or state agency or the public
 - c. Inclosing or excluding fish and wildlife to study the effects of inclosing or excluding on vegetation or fish and wildlife
- 2. Actions taken inside the wilderness on a physical resource to intentionally and directly affect this resource. Examples include:
 - a. Modifying water flow to store water or alter the timing of water flow
 - b. Setting arson fire
- 3. Actions taken inside the wilderness on a physical resource that intentionally affects the physical resource to intentionally (either directly or indirectly) affect vegetation or fish and wildlife. Examples include:
 - a. Modifying water resources to provide water for wildlife
- 4. Actions taken outside the wilderness on vegetation or fish and wildlife to intentionally and directly affect the occurrence or distribution of these or other species inside a wilderness. Examples include:
 - a. Releasing species outside a wilderness with the intention to affect a population whose range expands into the wilderness
 - b. Killing wildlife outside of the wilderness with the intention to affect populations whose ranges expand into the wilderness

FLOWCHART

In addition to the examples above, the flowchart below is intended to help agency staff determine when an action should be considered a trammeling action. In this flowchart, all of the examples described above would typically fall under the far left branch as trammeling actions, although they may occur under the middle branch of maybe being a trammeling action depending on the circumstances. The flowchart begins with the question "Is there an opportunity for restraint?" because at root the idea behind "untrammeled" is the legislative and policy mandate that managers use restraint in wilderness stewardship. Simply, if there is no opportunity for managerial restraint, or for managers to try and restrain unauthorized action taken by others, then there is no impact to the Untrammeled Quality even though there may be large impacts to the Natural Quality. This question is placed first in the flowchart to help avoid confusing those actions and their effects for which managers typically lack the opportunity for restraint and where there is no intention to manipulate wilderness, such as global climate change, air pollutants, and many others, from actions that intentionally affect "the earth and its community of life" and that managers do have an opportunity to influence.

In some situations managers may assume that they do not have the opportunity for restraint, for example taking action to restore habitat for a listed endangered species, or spraying herbicides to eradicate an invasive non-native plant that is degrading wildlife habitat, or transplanting an extirpated species back into the wilderness, or suppressing a naturally-ignited fire to save timber or homes adjacent to the wilderness. However, even in these situations managers are choosing to take action as well as the type and intensity of action. In addition, there are many situations where managers must choose to take an action that supports one law (such as the Endangered Species Act) that degrades another (in this case the Wilderness Act), or they must make difficult tradeoffs because of agency policy. In all of these situations there is an opportunity for restraint, and these guidelines and flowchart should help managers be consistent and transparent in making these decisions.

If there is an opportunity for restraint, the manager must then consider the intent of the action. Intent is notoriously difficult to discern, but in many cases deciding whether an action is an intentional trammel is straightforward, while in other cases it is more complex and nuanced. These nuanced cases typically involve some type of action where the intent is not to manipulate the "earth and its community of life" but to have some other outcome that is limited in its scope and effect. On the flowchart these situations are under the question "Will the action have a foreseeable and substantial effect on the earth and its community of life?" These nuanced cases may be confusing because even though the primary intent is not to manipulate species or physical resources, action is nonetheless intentionally being taken and there may be a foreseeable and substantial effect on "the earth and its community of life."

In the table below, several hypothetical situations illustrate how an action may or may not be a trammeling depending on the scope and scale of the action and its effects. Each bullet in the table presents a situation where the action being taken likely would, or would not, be considered a trammeling. For every real situation, agency staff need to think through whether the proposed action will have a foreseeable and substantial effect on "the earth and its community of life" and if their answer is "yes" then it's a trammeling action, and if the answer is "no" then it's not a trammeling action.

Also, in this table an action may not be a trammeling but it still may affect other qualities of wilderness character. For example, installing rebar monumentation would likely not be a trammeling, but such installations would likely degrade the Undeveloped Quality.

Action	Likely Not a Trammeling	Likely a Trammeling
Building system trail	 Routing a trail needs around a rock slide that obliterated the former trail Building a bridge across a stream to prevent stream bank erosion Installing a small section of corduroy across a wet area to prevent trenching Installing in water bars Removing rock in a trail Building rock-cribbing to support a trail 	 Routing a trail through an area of endangered alpine butterfly habitat Building a large amount of new trail to go around a section of a river or a cliff Building a trail that requires extensive earth movement or tree cutting
Obliterating non-system trail	 Piling vegetation or rocks at the beginning and end of trail sections that cut a switchback Piling vegetation or rocks to block social trails around campsites 	Obliterating a large section of non- system trail that requires extensive earth movement
Restoring campsites	 Restoring a single, isolated campsite Restoring a number of campsites (e.g., that are clustered around a lake) that doesn't require degrading the soil or vegetation in the surrounding area 	Restoring a number of campsites that does require moving a significant amount of soil or number of plants in the surrounding area
Closing caves	Installing a bat gate across one or a few caves of many in the area	Installing bat gates across all the caves in an area
Removing hazard trees	 Removing one or a few hazard trees that threaten designated campsites or that are along a trail 	Removing all of the hazard trees over a large area
Treating non- native invasive plants	Hand pulling a small area of non- native invasive plants	Spraying any herbicide
Permitting scientific activities	 Installing research plot monumentation, such as rebar stakes or nails Installing most scientific instrumentation Collecting a limited number of voucher specimens with no impact species distribution or abundance 	 Installing enclosures or exclosures that affect the movement of fish and wildlife Installing instrumentation that disrupts the movement or behavior of plants, or fish and wildlife Collecting voucher specimens that does affect the species distribution or abundance

Is there an opportunity for restraint?

Is the purpose of the action to intentionally manipulate the earth and its community of life inside a wilderness?

This is NOT a trammeling action

This IS a trammeling action

Examples include:

- Authorized actions such as suppressing fire, lighting fire, trapping wildlife, killing predators, habitat restoration, transplanting species, constructing or maintaining a dam or water diversion structure, constructing an access road, installing or maintaining a range allotment fence, installing or maintaining guzzlers, releasing biocontrol species, adding piscicides or other chemicals to water
- Unauthorized actions such as releasing fish, releasing game or non-game wildlife, marijuana grow sites, modifying water flow, arson fire, weather manipulation

ON /

Will the action have a foreseeable and substantial effect on the earth and its community of life?

ON /

disperse into a wilderness

Air pollutants that drift

into a wilderness

Invasive species that

Global climate change
 An escaped campfire

Examples include:

This MAY be a trammeling action depending on the size of the area affected, how long the effect is, and whether there are cumulative effects of the action

Examples include:

- Resource management such as creating system trails, trail maintenance, campsite restoration, creating designated campsites, cave closure or gating, treating invasive species
 - Reducing hazards such as cutting hazard trees
- Permitted scientific activities
 Unauthorized actions such as cutting or digging vegetation, poaching or collecting species

This is a NOT a trammeling action although there may be impacts to the other qualities of wilderness character

Installing a weather monitoring station

Examples include:

- Removing trash
- Landing a helicopter for SAR operations
- Camping violations
- Motorized incursions