

Petrified Forest National Park

Wilderness Stewardship Plan/Environmental Assessment



Dear Friends and Neighbors,

We are beginning a new planning effort at Petrified Forest National Park. We are embarking on the development of a Wilderness Stewardship Plan / Environmental Assessment for the park's wilderness area. This wilderness area was established by Congress on October 23, 1970—the first wilderness area designated in the entire national park system. The wilderness area at Petrified Forest National Park includes two separate units—the north unit, located within the Painted Desert, and the south unit, located along Puerco Ridge, east of Crystal Forest—totaling 50,260 acres.

The purpose of this newsletter is not only to provide you with information about this planning effort, but also to ask for your input. By sharing your ideas and opinions about how the park's wilderness area should be managed, you can help us shape its future.

Thank you for your interest in Petrified Forest National Park. We look forward to hearing from you!

Sincerely,

*Brad Traver, Superintendent
Petrified Forest National Park*

SHARE YOUR THOUGHTS

From late June through July 2011, we are asking for you to share your thoughts, concerns, and vision for the future of the Petrified Forest National Park wilderness area. Your input is very important in guiding the planning team in our work. Please take time to share your comments with us on our website at <http://parkplanning.nps.gov/PEFOWSPNews1>, or by completing and mailing the enclosed comment card back to us.

We look forward to hearing from you.

PURPOSE OF THE PLAN

The purpose of a wilderness stewardship plan is to guide the preservation, management, and use of the park's wilderness area to ensure it remains unimpaired for future use and enjoyment. National Park Service policy directs the plan to include "desired future conditions, as well as establish indicators, standards, conditions, and thresholds beyond which management actions will be taken to reduce human impacts to wilderness resources." The overarching goal of the plan is to restore, protect, and enhance overall wilderness character.

RELATIONSHIP TO OTHER PLANS

In 1979, Petrified Forest National Park completed a backcountry management plan for the park's wilderness. This backcountry management plan is now outdated and does not adequately address the protection of the area's four wilderness qualities (see next page) that are essential to effective wilderness management. The wilderness stewardship plan will replace the park's existing backcountry management plan, while ensuring consistency with the park's existing general management plan (1993, revised 2004, amended 2010).



The north wilderness unit protects the expansive, yet fragile Painted Desert.

KEY COMPONENTS OF THE WILDERNESS STEWARDSHIP PLAN

Wilderness Character – The Foundation for Wilderness Planning

Describing wilderness character is central to meeting the goals and objectives of a Wilderness Stewardship Plan. The principle tool for describing wilderness character is “Keeping it Wild: An Interagency Strategy to Monitor Trends in Wilderness Character Across The National Wilderness Preservation System.” This interagency guidance interprets the congressional intent of the concept of wilderness character in the 1964 Wilderness Act to identify four tangible qualities that are relevant and practical to wilderness stewardship.

Baseline Condition Assessment

This plan will assess baseline conditions for the four qualities of wilderness character, and will address the specific characteristics that are important to describe and measure trends in each wilderness quality. The plan will identify strategies for tracking trends in wilderness qualities to understand if those qualities are improving, stable, or degrading over time. Desired conditions for this plan will restore, protect, and enhance the overall wilderness character (the sum of all four qualities).

Indicators, Measures, and Standards

A major part of a wilderness stewardship plan is the development of a comprehensive monitoring strategy to track trends in wilderness character by developing a set of indicators and measures for each wilderness quality. Indicators and measures track conditions to assess progress towards attaining desired conditions and preserving wilderness character. Standards (or thresholds) are based on the measures and developed to ensure that trends are stable or improving over time.

Management Actions

The Wilderness Act of 1964 requires each agency administering wilderness to “preserve the wilderness character of an area.” Two main types of management actions will be employed to meet this goal: 1) actions that can be implemented immediately following approval of the plan as part of a broad management strategy and 2) actions that would be triggered by exceeding a standard (based on the results of ongoing monitoring).

WILDERNESS QUALITIES

The foundation for preparing a wilderness stewardship plan is to clearly describe a designated wilderness area's four wilderness qualities, so that these qualities can be protected in accordance with the mandate of the Wilderness Act. National Park Service staff developed the following set of draft wilderness quality narratives for the Petrified Forest National Park Wilderness Area. Please review these statements and let us know if you think they accurately reflect the value of the wilderness area to you.

Untrammeled

An "untrammeled" wilderness is essentially unhindered and free from the actions of modern human control or manipulation. Therefore, actions that intentionally manipulate or control ecological systems inside wilderness degrade the untrammeled quality of wilderness character

The Petrified Forest National Park Wilderness Area has been affected primarily by the forces of nature and is largely untrammeled by humans. There has been very little manipulation of the biophysical environment through unauthorized or federally authorized land management actions; thus the untrammeled quality of the area has not been greatly affected. The National Park Service takes few intentional actions that might affect plants, animals, soil, water, or natural fire in this wilderness area.

However, there are some current and future threats to this wilderness quality. Unauthorized actions include the trespass of cattle and all-terrain vehicles (ATVs) into the wilderness area and damage or illegal collection of archeological or paleontological resources. Authorized actions that could affect this quality include maintenance of the boundary fence, treatments to control nonnative and invasive species (e.g. tamarisk and Russian thistle), ecosystem restoration, and



activities related to paleontological and archeological work.

Additionally, the purpose of Petrified Forest National Park is to preserve, protect, and provide opportunities to experience globally significant Late Triassic paleontological resources, nationally significant archeological sites, and scenic and natural resources, including the Painted Desert, and to foster scientific research and public understanding and appreciation of park resources. The collection and preservation of these resources, though impacting to the untrammeled nature of the wilderness area, are necessary to fulfill the purpose of the park.



The wilderness area supports a diversity of wildlife species that are well-adapted to its harsh environment.

Natural

The "natural" quality of wilderness is best represented when ecological systems are substantially free from the effects of modern civilization. This quality is degraded by the effects of modern people on the ecological systems within the wilderness area since the time the area was designated as wilderness.

In the Petrified Forest National Park wilderness area, the integrity of the ecosystem relies on natural processes for renewal and regeneration. Evolving landforms prevail and reveal the stories of geologic time. Sculptured hoodoos, tumbled talus slopes, petrified wood, and paleontological resources are revealed as the landscape continues to change. Windswept landscapes, flashfloods, and seasonal watering holes are driving forces within this system. The interaction of the underlying geology with unfettered natural processes results in a unique landscape type

that was and is unsuitable for development. As a result, this preserved and undisturbed wilderness area provides rare opportunities to witness natural processes acting on the landscape. Extraordinary sights, sounds, and smells abound in this natural environment.

Geologic and climatic systems provided the foundation for the ecosystems that developed within the wilderness area.



Petrified wood is a common sight in the remote Black Forest portion of the north wilderness unit.

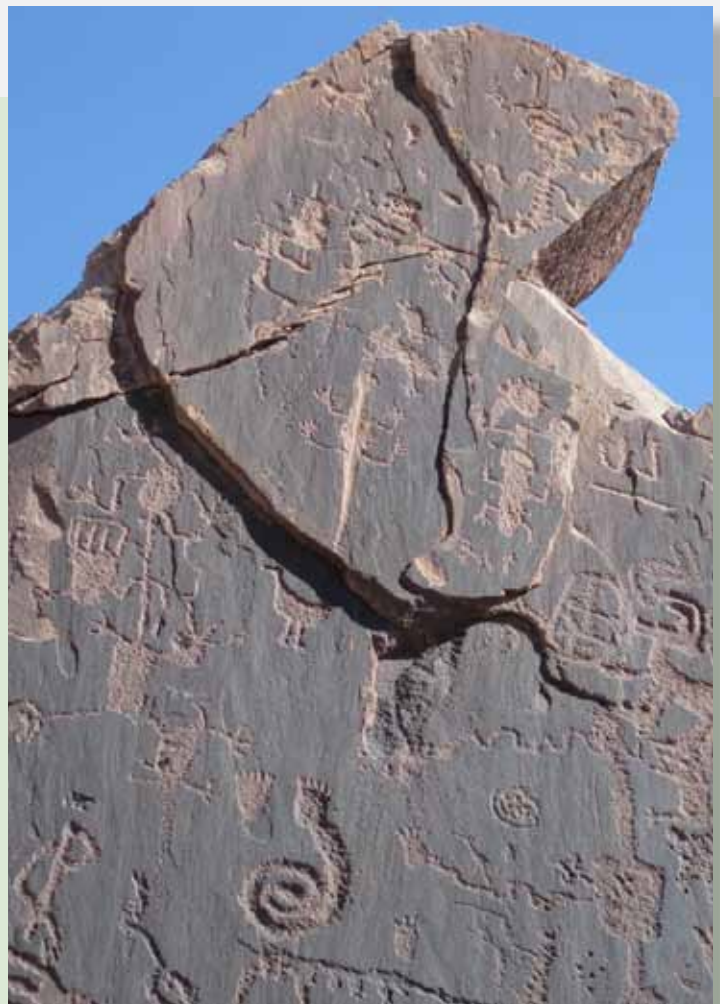
Undeveloped

The “undeveloped” quality is best represented when wilderness retains its primeval character and influence, and is essentially without permanent improvement or modern human occupation. The presence of structures, installations, habitations, and other evidence of modern human presence or occupation degrades this quality. Cultural resources (also known as heritage resources) within a wilderness also may be an important part of the undeveloped quality because they primarily represent human relationships with the land prior to modern wilderness designation.

The pristine, undeveloped lands of Petrified Forest National Park were considered a prime candidate for becoming one of the first wilderness areas designated in the national park system. Unlike areas that may require removal of developments in order to become eligible for wilderness designation, the two wilderness units of Petrified Forest National Park were free of any permanent improvements or modern human occupation. Furthermore, the lack of private inholdings not only made it easier to designate wilderness, but also helps to maintain wilderness values to this day. Its remoteness, the lack of water, extreme topography, and harsh conditions have limited land use and development of the area. The only evidence of past use (such as rusted out vehicles and old road traces) speaks to the challenging conditions of the area and the inability of modern humans to establish a permanent foothold. However, there are signs of prehistoric human occupations (such as petroglyphs, artifacts, and dwellings) that do not detract from the undeveloped character of the area.

Geologic processes influenced and shaped the ecological diversity which is now characteristic of the wilderness. Pristine short grass prairie, badlands, sand dunes, playa lakes, and riparian areas are among the distinct ecological zones that occur across the variable elevations in the region’s semi-arid climate.

The natural quality of wilderness character could be degraded due to encroaching development, climate change, the introduction of nonnative species, habitat fragmentation, and the effects of increased visitor use of the wilderness area. Activities that could affect the natural quality of the wilderness area include social trails (e.g., resulting in damage to cryptobiotic soils), the building of rock cairns, cattle trespass, ATV trespass, littering and vandalism, and the removal of archeological and paleontological resources from their natural context. Natural sounds and night skies are currently threatened by mining and other external forces. This delicate ecosystem does not recover easily from impacts, and the loss of connectivity with surrounding landscapes is also a threat to keystone species living in or near the wilderness areas (e.g., prairie dogs and pronghorn).



Petroglyphs provide evidence of prehistoric human occupation within the wilderness area.

Since wilderness designation, the park's management strategy has been to refrain from any developments. Only a few modern signs of humans can be found—for example, geologic survey markers are unobtrusive and minor, considering the vastness of the wilderness area. The boundary fence surrounding the wilderness area is another modern development; however, it is essential for wilderness preservation in order to prevent trespass livestock and ATVs from entering the area.

The undeveloped character of the wilderness area is further exemplified

by the integrity of the ecological communities. The health of the regionally significant grasslands and the presence of rare wildlife species evoke a sense of the primitive West. As such, the wilderness area serves as a bellwether for climate change and a baseline for the study of other similar ecosystems that have been affected by human development and use.

Challenges to the pristine, undeveloped nature of the wilderness area are primarily external and beyond the control of the National Park Service. Surrounding development and industry can contribute to the degradation of dark night skies,

natural sounds, and viewsheds as experienced from within the wilderness area. For example, traffic on Interstate 40, cell towers, wind and solar energy development, mining, other similar developments, and climate change can have profound effects on the undeveloped quality of the wilderness area. The vastness of the landscape magnifies the impacts of these surrounding developments and is therefore more vulnerable to these threats.

Solitude or a Primitive and Unconfined Type of Recreation

This quality is degraded by settings that reduce opportunities for solitude (such as encounters with other wilderness visitors), opportunities for primitive recreation (such as signs of modern civilization adjacent to the wilderness), or by facilities provided by the agency or created by users that reduce people's self-reliance or manage visitor behavior.

The Petrified Forest National Park wilderness area evokes a special sense of place for visitors who seek to explore this vast and open landscape. With low visitation and lack of infrastructure, the wilderness area provides opportunities for solitude, and is the epitome of primitive and unconfined types of recreation. With no trails, no signs, no accessible water sources, and no campsites; visitors must come prepared, must be self-reliant, and are personally responsible for their choices and experiences. Nature reigns supreme as natural processes and elements dictate visitation due to flooding, high winds, excessive heat, and lack of a usable water. The park does not provide visitors with suggested travel plans or destinations, which leaves visitors with a sense of freedom to explore.

From grasslands to badlands, the natural ecosystems set the stage for solitude and unconfined recreation opportunities. With each ridge crested and every valley explored, the story

of the wilderness unfolds. The meandering topography, undeveloped views, pristine soundscapes, and dark night skies provide visitors with the opportunity to experience solitude, freedom, and spirituality in a setting that is undisturbed by modern human influences. As explained in the narrative discussing the "undeveloped" quality, these experiences are threatened and degraded by encroaching development, activities, and influences from outside of the park boundaries. Impacts to the solitude or primitive and unconfined types of

recreation include degraded viewsheds, soundscapes, and night skies.

Educating visitors about the wilderness area and encouraging use would provide more people with opportunities to have this type of experience. However, increased visitation to the wilderness area has the potential to impact resources and visitor experiences. It could also lead to increased evidence of and damage from human activities including crowding, human waste, cairns, and disturbance to

artifacts, petroglyphs, and petrified woods. Wind-blown trash, air tours, and climate change can also have profound effects on the experience of visitors. It is important to note conditions are not uniform throughout the north and south wilderness areas and some threats are greater in certain sections of the wilderness.



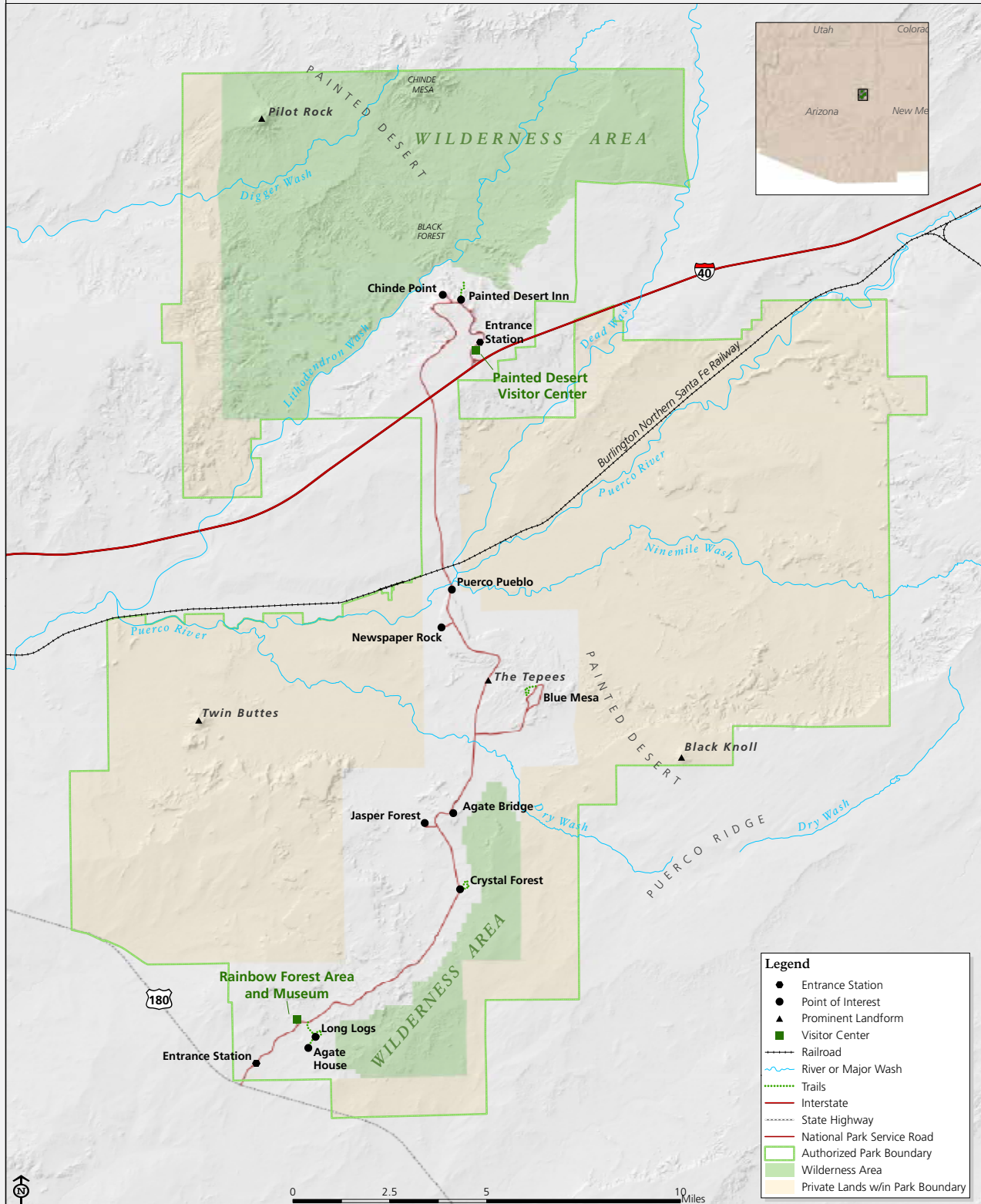
MAP OF WILDERNESS AREAS

Petrified Forest National Park
Arizona

National Park Service
U.S. Department of the Interior



Wilderness Areas



Produced by: NPS Denver Service Center Planning Division

Date : May, 2011

WILDERNESS ISSUES AND OPPORTUNITIES

One of the first steps in any planning process is the scoping or “discovery” phase, in which we gather initial ideas about what the plan should address. The planning team has begun this step by developing a preliminary set of issues and opportunities facing the park’s wilderness area. Please review these topics below and then share your thoughts with us about how these issues could be resolved or if there are other topics that should be considered as part of this wilderness planning effort.

- **Paleontological and archeological research.** What strategies are appropriate for conducting scientific research within the wilderness area to ensure wilderness resources and values are protected?
- **Boundary fence.** What is the most appropriate way to maintain the park’s boundary fence around the wilderness area in a manner that is consistent with wilderness management requirements?
- **External developments.** How can the National Park Service protect the quality of the park’s wilderness area in the face of increasing developments surrounding the park (e.g., potash mining, wind and solar energy development, cell towers, etc.)?
- **Community outreach.** How can the National Park Service engage its neighbors to encourage thoughtful development which will reduce impacts to wilderness character?
- **Visitor use.** What strategies are appropriate for managing visitor use in the wilderness area to ensure that evidence of human activities (e.g., human waste, social trails, vandalism) does not diminish the wilderness experience for others?



The wilderness area protects a unique landscape, sculpted by unfettered natural processes.

PLANNING SCHEDULE AND OPPORTUNITIES FOR PUBLIC INPUT

The public scoping period (late June through July 2011) is the ideal time for you to share your thoughts, concerns, and vision for the future of the Petrified Forest National Park wilderness area. This input will guide the planning team in developing the wilderness stewardship plan, including the consideration of various alternatives for managing the wilderness areas.

You can share your comments with us on our website at <http://parkplanning.nps.gov/PEFOWSPNews1>, or by completing and mailing the enclosed comment card back to us. We look forward to hearing from you.

Milestone	Completion Date	Public Input
Describe Wilderness Character	Spring 2011	
Public Scoping Newsletter	Early Summer 2011	Review the newsletter and provide your comments
Development of the Preliminary Alternatives	Late Summer 2011	Stay up-to-date on the planning process by visiting the website at: http://parkplanning.nps.gov/PEFOWSP
Identification of the Preferred Alternative	Winter 2011	
Wilderness Stewardship Plan/ Environmental Assessment Released	Summer 2012	
Public Review of Plan	Fall 2012	Review the plan, attend a public meeting, and provide your comments
Decision Document	Spring 2013	

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