Nez Perce-Clearwater National Forests Forest Plan Assessment
Introduction
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Table of Contents

Introduction	1
Overview	1
Location of the Plan Area	2
Background of the Plan Area	2
History and Distinctive Features	2
Nez Perce National Forest	2
Clearwater National Forest	2
Nez Perce-Clearwater National Forests	4
Important Ecological Influences on the Plan Area	4
Climate	4
Dominant Ecosystems	4
Terrain	5
System Drivers	5
Vegetation	5
Important Social and Economic Influences on the Plan Area	6
Demographics and Population Trends	6
Relevance of National Forest System Lands	6
Current Contribution to Ecological, Social, and Economic Sustainability, and Multiple Us	es6
Ecological, Social, and Economic Sustainability and Multiple Uses	6
Key Ecosystem Services and How Communities Benefit	7
Provisioning Services	7
Regulating Services	7
Supporting Services	8
Cultural Services	8

Introduction

OVERVIEW

The National Forest Management Act (NFMA) of 1976 requires each National Forest to develop a Land and Resource Management Plan (commonly referred to as a Forest Plan) and amend or revise the plan when conditions significantly change. The Clearwater and Nez Perce National Forest Plans were approved in 1987, and both Forests are working together to revise these Forest Plans. Planning and revision for a Forest Plan is an iterative process that includes writing an Assessment (36 CFR 219.6); developing, amending, or revising a Forest Plan (§§ 219.7 and 219.13); and monitoring (§ 219.12).

This document comprises the Assessment stage and is designed to rapidly evaluate existing information about relevant ecological, economic, and social conditions, trends, and sustainability and their relationship to the land management plan within the context of the broader landscape. Assessments are not decision-making documents but provide current information on select topics relevant to the plan area.

This Assessment identifies and evaluates existing information relevant to the plan area for the following topics:

- 1) Terrestrial ecosystems, aquatic ecosystems, and watersheds
- 2) Air, soil, and water resources and quality
- 3) System drivers, including dominant ecological processes, disturbance regimes, and stressors, such as natural succession, wildland fire, invasive species, and climate change; and the ability of terrestrial and aquatic ecosystems in the plan area to adapt to change
- 4) Baseline assessment of carbon stocks
- 5) Threatened, endangered, proposed, and candidate species and potential species of conservation concern in the plan area
- 6) Social, cultural, and economic conditions
- 7) Benefits people obtain from the National Forest System planning area (ecosystem services)
- 8) Multiple uses and their contributions to local, regional, and national economies
- 9) Recreation settings, opportunities and access, and scenic character
- 10) Renewable and nonrenewable energy and mineral resources
- 11) Infrastructure, such as recreational facilities and transportation and utility corridors
- 12) Areas of tribal importance
- 13) Cultural and historic resources and uses
- 14) Land status and ownership, use, and access patterns
- 15) Existing designated areas in the plan area, including Wilderness and Wild and Scenic Rivers, and potential need and opportunity for additional designated areas

LOCATION OF THE PLAN AREA

The Nez Perce–Clearwater National Forests (Forests) are located in the heart of north-central Idaho, in a 5-county region comprising Clearwater, Idaho, Latah, Lewis, and Nez Perce counties (Figure 1). The Forest Service is responsible for managing approximately 4 million acres on these Forests. The Clearwater River drains most of these acres in both Forests, and rugged mountain ranges, pristine rivers and streams, and extensive forested landscapes combine to create diverse ecosystems that provide spectacular recreational opportunities; substantial fish and wildlife habitat; and forest, minerals, and range products.

BACKGROUND OF THE PLAN AREA

History and Distinctive Features

Nez Perce National Forest

The Nez Perce National Forest was established on July 1, 1908, by the U.S. Forest Service with 1,946,340 acres (7,876.6 square kilometers [km²]) from parts of Bitterroot National Forest and Weiser National Forest. On October 29, 1934, part of Selway National Forest was added.

The Nez Perce National Forest occupies the southwest corner of the Northern Region of the Forest Service and extends from the Idaho–Montana border in the Bitterroot Mountains southwesterly to the Idaho–Oregon border on the Snake River in Hells Canyon. The Forest is partially bounded on the north by the Middle Fork Clearwater River and on the south by the Salmon River. The Forest is approximately 105 miles long and 77 miles wide. Forest headquarters are located in Grangeville, Idaho, and local ranger district offices are located in Elk City, Kooskia, and White Bird. The Nez Perce National Forest is the largest of the 6 National Forests that are contained entirely within a single county (Idaho County).

The anadromous fisheries and the elk herds in the Nez Perce National Forst are of national significance. The Forest also contains parts of 3 Wildernesses (Hells Canyon, Frank Church River of No Return, and Selway-Bitterroot) and all of the Gospel-Hump Wilderness. In addition, parts of 4 classified Wild and Scenic Rivers (the Middle Fork of the Clearwater, Salmon, Selway, and Rapid River) flow through or are adjacent to the Forest, and 16 roadless areas totaling 503,162 acres are within Forest boundaries. These roadless areas are also of national significance.

The Nez Perce Tribe has hunting and fishing treaty rights and has interests in fishery and wildlife habitat management on the Forest. This Forest has been the home of the Nez Perce Tribe for centuries.

Clearwater National Forest

The Clearwater National Forest was established on July 1, 1908, with 2,687,860 acres (10,877.4 square kilometers) from parts of Coeur d'Alene National Forest and Bitterroot National Forest. On October 29, 1934, part of Selway National Forest was added.

The Clearwater National Forest is bounded on the east by the state of Montana, on the north by the Idaho Panhandle National Forests, and on the south and west by the Nez Perce National Forest and the Palouse Prairie, respectively. Forest headquarters are located in Orofino, Idaho, and local ranger district offices are located in Kamiah, Kooskia, Lolo (Montana), Orofino, and Potlatch (all in Idaho, except as indicated).

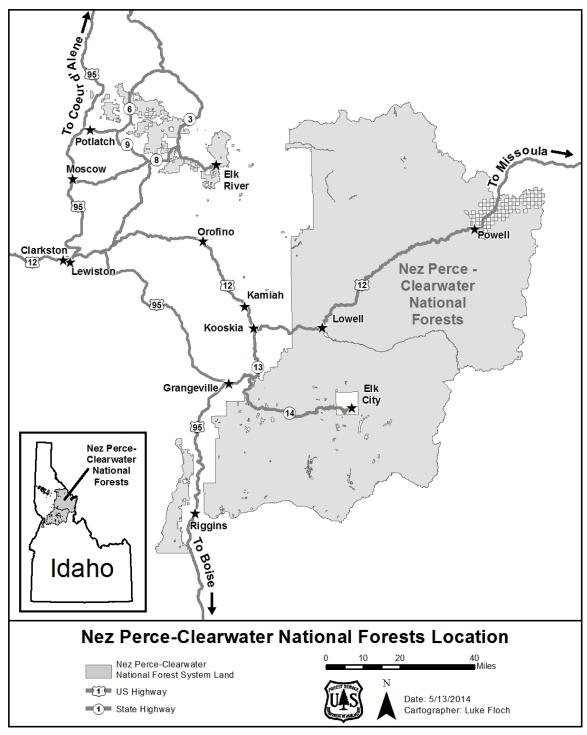


Figure 1. Vicinity map

Like the Nez Perce National Forest, the Clearwater National Forest contains anadromous fisheries and elk herds that are both of national significance. The Clearwater National Forest also contains a portion of the Selway-Bitterroot Wilderness and a portion of the Middle Fork Lochsa Recreation River. Sixteen roadless areas totaling 950,311 acres are also within Forest boundaries.

The Clearwater National Forest is home to the well-known Jerry Johnson Hot Springs and the smaller Weir Creek Hot Springs. Both springs are accessible via trails from U.S. Highway 12 and are popular tourist attractions, drawing visitors from Idaho and western Montana.

Historically, the Clearwater National Forest was inhabited by the Nez Perce Tribe. Currently, the Supervisor's Office and all but 2 of the District offices are located on the Nez Perce Reservation. The Forest Servide has the responsibility to protect the rights of the Nez Perce Tribe, as emphasized in treaties and the NFMA. The Forest Service also has the responsibility to protect the rights of the Shoshone-Bannock, Kootenai, and Coeur d'Alene tribes to the north, and the rights of the Warm Springs, Yakama, and Umatilla tribes to the west. These tribes have interests in anadromous fish habitat and water quality management of the Clearwater National Forest.

Lewis and Clark travelled through the region in their journey westward in 1805–1806. Upon reaching Lolo Pass at the eastern edge of the forest on September 15, 1805, William Clark was quoted as saying, "From this mountain I could observe high rugged mountains in every direction as far as I could see."

Nez Perce-Clearwater National Forests

In December 2010, the Regional Forester decided to combine the Nez Perce and Clearwater National Forests. The combination of the two Forests reduced the number of rangers, staff officers, and program managers required to manage the land and was thus consistent with the Northern Region's "Roadmap" for sharing leadership.

To implement this decision, the Nez Perce and Clearwater National Forests are working toward a unified organization, which includes Forest Plan revision efforts. The name Nez Perce—Clearwater National Forests (Forests) has been adopted.

IMPORTANT ECOLOGICAL INFLUENCES ON THE PLAN AREA

Climate

The climate of the Forests varies with location. Generally, the climate is maritime-influenced, cool-to-warm temperate with dry summers. Winters can be mild to severe: lower-elevation river valleys have moderate winter temperatures, while average temperatures in the Bitterroot Mountains can be well below 0 degrees Fahrenheit (°F).

Dominant Ecosystems

The Forests are within 2 ecological provinces: the Northern Rocky Mountain Forest Steppe—Coniferous Forest—Alpine Meadow Province (north of the Middle Fork Clearwater and Lochsa rivers) and the Middle Rocky Mountain Steppe—Coniferous Forest—Alpine Meadow Province (south of the Middle Fork and Lochsa rivers).

Terrain

Of all the features of the Forests, terrain is perhaps the most varied. Breaklands have very steep, straight tributaries with high sediment delivery efficiency. Rolling uplands have gentle slopes, with complex dendritic and structurally controlled drainage patterns with low sediment delivery efficiencies. Mountains are steep and dissected, some with sharp crests and narrow valleys. Landforms are moderately to strongly dissected loess-covered basalt plains, hills with large steptoes, undulating plateaus, and some river breaklands. Alpine meadows and barrens occupy the highest elevations.

System Drivers

Dominant ecological processes within the Forests include disturbance regimes and stressors, such as natural succession, wildland fire, invasive species, and climate change. Insects and diseases are ongoing ecosystem drivers. These ecological processes have been present as long as the Forests have been in existence and continue to affect forest composition and structure. Fire also drives ecosystem changes; it is often tied to insects and diseases that have left dead wood in the forest, increasing fuel loads and fire risk. Invasive species have invaded dry forest/grassland habitats within the Forests, threatening forage habitats in the affected areas.

Forests have a substantial influence on global climate by removing CO₂ from the atmosphere and storing carbon as biomass. The Forests store an estimated 306 million metric tons of carbon, which represents about 0.7% of the total carbon in forests of the coterminous United States. The principal drivers of aboveground forest carbon stocks are forest growth and mortality. The primary agents for decadal and longer-scale carbon changes on the Forests are root diseases, wildland fire, bark beetles, and timber harvest.

Vegetation

Common vegetation species vary depending on location and include grand fir, Douglas-fir, lodgepole pine, Engelmann spruce, subalpine fir, and western ponderosa pine in the Idaho Batholith; grand fir, western redcedar, Douglas-fir, ponderosa pine, subalpine fir, lodgepole pine, western hemlock, and western white pine in the Bitterroot Mountains; grasslands and meadow-steppe vegetation dominated by bluebunch wheatgrass and Idaho fescue on the Palouse Prairie; and grand fir–Douglas-fir, ponderosa pine, Engelmann spruce–subalpine fir, whitebark pine, Great Basin sagebrush, and juniper in the Blue Mountains.

Vegetation has changed dramatically from historic conditions on the Forests. Some forest types and structures have declined, while others have increased. In particular, large, old western redcedar forests have decreased; large, old, single-story ponderosa pine forests have decreased; early seral forests have decreased; grasslands have been invaded by weeds; and white pine blister rust has almost eliminated western white pine and whitebark pine. These changes have implications for the future health of ecosystems on the Forests.

IMPORTANT SOCIAL AND ECONOMIC INFLUENCES ON THE PLAN AREA

Demographics and Population Trends

In Idaho, a 5-county region comprising Clearwater, Idaho, Latah, Lewis, and Nez Perce counties is most closely associated with the Forests. The Forest Service manages the majority of land in this 8,545,088-acre region. The population of the 5-county region has grown by 10% over the past 20 years; however, not all counties have experienced growth. Two rural counties, Clearwater County and Lewis County, have actually seen population decreases. Idaho County, a third rural county, experienced very modest growth. The 2 most urban counties, Latah County and Nez Perce County, are experiencing the most growth.

Except for Latah County, which includes the student population at the University of Idaho in Moscow, all 5 counties had higher median ages than either the nation or the state of Idaho in 2010. Clearwater County had the highest median age at 49, Idaho County and Lewis County were close behind at 48, and Nez Perce County's median age was 40.8. Additionally, except for Latah County, the change in the median age from 2000 to 2010 was greater for these 5 counties than it was for the state or the nation, with the largest increase occurring in Clearwater County, where the median age increased by 17.5%.

RELEVANCE OF NATIONAL FOREST SYSTEM LANDS

National Forests are important to all people of the United States. The Forests are geographically located in Idaho and near Oregon, Washington, and Montana, and many residents from these states work or recreate on these lands.

For public land managers, understanding the age distribution of the local population most likely to use the Forests can help highlight whether management actions might affect some age groups more than others; different age groups may have different needs, values, and attitudes that must be considered. For example, a geographic location with a large retired population, or soon-to-be-retired population, and an area with a large number of minors or young adults may place very different demands on public land managers, who would respond accordingly to the needs and interests of the public in each case.

CURRENT CONTRIBUTION TO ECOLOGICAL, SOCIAL, AND ECONOMIC SUSTAINABILITY, AND MULTIPLE USES

Ecological, Social, and Economic Sustainability and Multiple Uses

The Forests provide economic, social, and cultural benefits for local and regional communities; tribes; and people across the nation. Products and services generated on National Forest System (NFS) lands continue to sustain traditional livelihoods; provide for subsistence uses; and provide new economic opportunities, jobs, and benefits, such as those generated through sustainable recreation and tourism, restoration activities, ecosystem services, and renewable energy. The Forests lands are also of immense social and cultural importance, enhancing quality of life; sustaining scenic, historic, and culturally important landscapes; sustaining traditional lifeways; and providing places to engage in outdoor recreation, improve physical and mental health, and reconnect with the land.

The current Forest Plans provide for multiple uses, including outdoor recreation, range, timber, watershed, wildlife, and fish. To meet multiple use requirements and provide for integrated resource management, Responsible Officials consider a range of uses, values, and benefits that may be important to communities and relevant to the unit, such as outdoor recreation, range, timber, water, wildlife, wilderness, energy, minerals, and ecosystem services. Responsible Officials also consider issues such as sustainable infrastructure needs; opportunities to work with neighboring landowners; habitat conditions needed for hunting and fishing; public drinking water supplies; and reasonably foreseeable risks to sustainability.

Key Ecosystem Services and How Communities Benefit

Provisioning Services

The Forests are capable of providing each of the provisioning services at varying levels to the local and national communities. For example, clean air is ensured through compliance with regulatory agencies, with spatial and temporal thresholds regularly assigned to standards. Fresh water is ensured through managing watershed lands for multiple uses while recognizing domestic supply needs. The Forest Service recognizes 3 municipal watersheds on the Forests: City of Elk River, Clearwater Water District, and Elk City Water District.

Renewable energy resources include biomass (fiber), wind, solar, geothermal, and hydroelectric energy, while nonrenewable energy resources consist of oil, gas, and coal. On the Forests, biomass is used as a product and by-product of timber operations, an occasional solar panel is used to power a remote site, and firewood is commonly collected and used as a heat source. No nonrenewable energy is being produced on the Forests.

Wildlife forage is provided across the Forests, and the agriculture sector accesses public lands for grazing forage. The Forests contain cattle, horse, and sheep allotments but generally do not have large grazing programs.

A variety of mineral deposit types and mineral resources, including gold, silver, and copper, occur within the boundaries of the Forests.

Regulating Services

Forests substantially mitigate the climate effects of increasing atmospheric CO_2 concentrations by removing carbon from the atmosphere and storing the carbon as biomass. U.S. forests offset about 10%-20% of U.S fossil fuel emissions. Available information suggests that carbon stocks of the Forests have been increasing over the last several decades as the Forests recover from extensive fires. However, the future trajectory of carbon stocks on the Forests is uncertain.

The current strategy of the Forest Service is to ensure that land management actions on the Forests continue to provide water quantity and quality that support recreational uses, healthy riparian and aquatic habitats, the stability and effective functioning of stream channels, and the ability to route flood flows. Additionally, through filtering and buffering, the Forests' soils protect the quality of water, air, and other resources. Though past Forest Service practices have negatively impacted soil functions through compaction, erosion, and loss of organic matter, the Forest Service has decreased these types of effects substantially through management practices. Coupling these current practices with extensive soil restoration activities, the Forest Service expects soils to gain an increased capacity to provide multiple uses and ecosystem services in perpetuity, including storage, soil stabilization, and flood control.

Human health, particularly risk of exposure to many infectious diseases, may depend on the maintenance of biodiversity in natural ecosystems. Biodiversity is the number, abundance, and composition of genotypes, populations, species, functional types, communities, and landscape units. Evidence is accumulating that greater wildlife species richness may decrease the spread of wildlife pathogens to humans. The Forest Service is committed to maintaining biodiversity.

Supporting Services

Major ecosystem services, such as herbivory, pollination, and seed dispersal, are supported by the direct interactions between plants and animals. Biodiversity strongly influences the provision of these ecosystem services and therefore influences human well-being. The Forest Service recognizes wild pollinators and seed dispersal as important functions of the ecosystem and ensures that management actions are sensitive to maintaining biodiversity.

Regarding soil formation and nutrient cycling, the emphasis of soil management was changed in 2010 to focus on long-term soil quality and ecological function instead of disturbance tracking. The new approach monitors 6 soil functions: soil biology, soil hydrology, nutrient cycling, carbon storage, soil stability and support, and filtering and buffering. The 2 objectives of this approach are to maintain or restore soil quality on NFS lands and to manage resource uses and soil resources on NFS lands to sustain ecological processes and functions so that desired ecosystem services are provided in perpetuity.

Cultural Services

Across the Forests, nature provides an extraordinary scenic backdrop for numerous recreational experiences, including camping, hiking, big game hunting, fishing, and boating. Visitors can travel extensive scenic byways, visit interpretive and educational sites that reveal the rich history of the region, reach areas of the backcountry on foot or in a vehicle, and view wildlife in their natural surroundings. Visitors who participate in these activities generally visit adjacent communities and contribute to the local economies in various ways.

Travel and tourism consist of sectors that provide goods and services to visitors and to the local population. These sectors include retail trade; passenger transportation; arts, entertainment, and recreation; and accommodation and food. Around 19% of total private employment in the 5-county area is associated with industries connected to travel and tourism, which can directly and indirectly be related to NFS lands.

Hundreds of historic properties exist across the plan area and vary by resource class, location, age, and condition. Taken as a whole, historic properties across the plan area exist in fair condition, and Forest managers are dedicated to conserving these properties.

Additionally, particular landscape features and places connect the traditions and history of the past with the identity and values of the present for members of the various tribes with interests in the Forests, including the Nez Perce Tribe. The Forest Service respects these cultural values and ensures that treaty obligations are honored.