

Nez Perce-Clearwater National Forests

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# **2023 Land Management Plan** Nez Perce-Clearwater National Forests





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#### Land Management Plan

#### 2023 Land Management Plan for the Nez Perce-Clearwater National Forests

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BA	Basal Area (square feet per acre)
CCF	Hundred Cubic Feet
CFR	Code of Federal Regulations
cfs	Cubic feet per second
CWN	Conservation Watershed Network
DBH (dbh)	Diameter at Breast Height
DC	Desired Conditions
ESA	Endangered Species Act
FSH	Forest Service Handbook
FSM	Forest Service Manual
GA	Geographic Area
HUC	Hydrologic Unit Code
INFISH	Inland Native Fish Strategy
IRR	Idaho Roadless Rule
LCAS	Lynx Conservation and Assessment Strategy 2013
MA	Management Area
MBF	Thousand Board Feet
MMBF	Million Board Feet
MMCF	Million Cubic Feet
NEPA	National Environmental Policy Act 1970
NPCLW	Nez Perce-Clearwater National Forests
NRLMD	Northern Rockies Lynx Management Direction 2007
NRV	Natural Range of Variation
NWGC	National Wildfire Coordinating Group
PACFISH	Pacific Anadromous Fish Strategy
PIBO	PACFISH and INFISH Biological Opinion
PVT	Potential Vegetation Type
RMZ	Riparian Management Zone
RNA	Research Natural Area
VCC	Vegetation Condition Class
WSR	Wild and Scenic River

# Table of Contents

Introduction	1
Forest Plan Revision	1
Planning Area: The Nez Perce-Clearwater National Forests	2
Plan Structure	3
Life of the Plan	5
Distinctive Roles and Contributions	5
Plan Elements	11
Desired Conditions	11
Objectives	11
Standards	11
Guidelines	11
Suitability	12
Management and Geographic Areas	12
Management Areas	12
Geographic Areas	13
Other Required Content	14
Monitoring Program	14
Priority Watersheds	14
Proposed and Possible Actions	15
Additional Plan Content	15
Determining Consistency	16
Hierarchy of Plan Guidance	16
Rights and Interests	16
Best Available Scientific Information	17
Relationship to Other Strategic Guidance	17
Maintaining the Plan and Adapting to New Information	17
Physical and Biological Ecosystems	
Terrestrial Ecosystems	
Across the Landscape	
Cave and Karst Features	19
Forestlands	20
Carbon Storage and Climate Change	35
Meadows, Grasslands, and Shrublands	
Fire Management	
Invasive Species	

#### Land Management Plan

Soils Resource	40
Aquatic Ecosystems	
Water and Aquatic Resources	
Riparian Management Zones	
Conservation Watershed Network	
Infrastructure (Aquatics and Riparian)	
Energy and Minerals (Aquatics and Riparian)	
Livestock Grazing (Aquatics and Riparian)	
Lands and Special Uses (Aquatics and Riparian)	
Recreation (Aquatics and Riparian)	
Wildlife	
Goals	
Desired Conditions	
Standards	
Guidelines	
Multiple Uses Wildlife	
Goals	
Desired Conditions	
Objectives	
Standards	
Guidelines	
Air Quality	
Goals	
Desired Conditions	
ribal Trust	
Goals	
Desired Conditions	
Objectives	
Standards	
Guidelines	
Iuman Uses of the Forest	
Cultural Resources	
Goals	
Desired Conditions	
Guidelines	
Objectives	

Municipal Watersheds and Source Water Protection Areas	
Desired Conditions	
Standards	72
Sustainable Recreation Management	
Goals	
Desired Conditions	74
Objectives	
Standards	
Guidelines	
Suitability	
Scenery	77
Desired Conditions	
Guidelines	
Public Information, Interpretation, and Education	
Goals	
Desired Conditions	
Infrastructure	
Desired Conditions	
Objectives	
Guidelines	
Suitability	
Land Ownership and Land Uses	
Desired Conditions	
Ecosystem Services	
Desired Conditions	
Guidelines	
Production of Natural Resources	
Timber	
Desired Conditions	
Objectives	
Standards	
Guidelines	
Suitability-Timber Production	
Energy and Minerals	
Desired Conditions	
Standards	

Livestock Grazing	
Desired Conditions	
Objectives	
Guidelines	
Special Forest and Botanical Products	90
Desired Conditions	90
Designated, Recommended, Geographic and Other Special Areas	90
Management Area 1: Designated Wilderness Areas, Designated Wild and Scenic Rivers, an Historic Landmark	d National 90
Designated Wilderness Areas	90
Designated Wild and Scenic Rivers	92
Management Area 2: Recommended Areas and Roadless Areas	94
Recommended Wilderness	94
Eligible and Suitable Wild and Scenic Rivers	96
Idaho Roadless Areas	99
Research Natural Areas	100
Geographic Areas	
Gospel-Hump Geographic Area	
Lower Salmon River Geographic Area	
Pilot Knob	104
Lolo Trail National Historic Landmark Geographic Area	
Special Areas	108
Desired Conditions	109
Literature Cited	110

# List of Tables

Table 1. Classification of broad potential vegetation type groups from habitat types	.21
Table 2. Potential Vegetation Type (PVT) as percent (%) of each management area (MA) and the	
plan area	.21
Table 3. Percent (%) desired and current composition by dominance type for Warm Dry potential	
vegetation type group in each management area (MA)	.24
Table 4. Existing condition and desired range of size class distribution (in percent) for Warm Dry	
potential vegetation type group in each management area (MA)	.26
Table 5. Existing condition and desired range of dominance type and management area (in percent	of
MA) for Warm Moist potential vegetation type group	.27
Table 6. Existing condition and desired range for size class distribution by management area (in	
percent MA) for Warm Moist potential vegetation type group	.28
Table 7. Existing condition and desired range of dominance type and management area (in percent	of
MA) for Cool Moist potential vegetation type group	.29

#### Land Management Plan

Table 8. Existing condition and desired range for size class distribution by management area (in	
percent MA) for Cool Moist potential vegetation type group	30
Table 9. Existing condition and desired range of dominance type and management area (in percent	of
MA) for Cold potential vegetation type group	31
Table 10. Existing condition and desired range for size class distribution by management area (in	
percent management area) for Cold potential vegetation type group	32
Table 11. Objectives for Management Area 2 by potential vegetation type (PVT) group	33
Table 12. Coarse woody materials to maintain, by potential vegetation type (PVT) group	34
Table 13. Guidelines for minimum snags per 100 acres	34
Table 14. Conservation Watershed Network	52
Table 15. Recreation opportunity spectrum classes and definitions	73
Table 16. Summer recreation opportunity spectrum (ROS) percentages	75
Table 17. Winter recreation opportunity spectrum (ROS) percentages	75
Table 18. Management action suitability in developed recreation sites	77
Table 19. Management action suitability in recreation opportunity spectrum (ROS) classes	77
Table 20. Scenic integrity objectives by rounded percent of Nez Perce-Clearwater area	78
Table 21. Management action suitability in administrative sites	80
Table 22. Minimum trees per acre to certify a stand as restocked on suitable lands	84
Table 23. Forestwide and Management Area desired condition codes for forest resiliency, pattern,	
and patch size	84
Table 24. Minimum age at which stands generally reach Culmination of Mean Annual Increment	
(CMAI) by cover type	86
Table 25. Timber production suitability classification	87
Table 26. Designated Wilderness Areas	91
Table 27. Management action suitability in designated Wilderness	92
Table 28. Designated Wild and Scenic Rivers	92
Table 29. Management action suitability on designated Wild and Scenic Rivers	93
Table 30. Recommended Wilderness acres	94
Table 31. Management action suitability in recommended wilderness	95
Table 32. Eligible and suitable Wild and Scenic Rivers, with preliminary classification and eligible	:
length	97
Table 33. Management action suitability on eligible and suitable Wild and Scenic Rivers	98
Table 34. Management action suitability in Idaho Roadless Areas1	00
Table 35. Designated and proposed research natural areas1	01
Table 36. Management action suitability in research natural areas1	02
Table 37. Gospel-Hump geographic areas	03
Table 38. Management action suitability in the National Historic Landmark1	08
Table 39. Names and acreage of the proposed Special Areas1	08

# List of Figures

Figure 1. Map of Nez Perce-Clearwater National Forests	3
Figure 2. Example of desired within-stand characteristics for warmest and driest sites. Photo b	y Z.
Peterson, South Fork Clearwater River in 2017	25

# Introduction

# Forest Plan Revision

The National Forest Management Act requires all National Forests to develop plans (previously called "Forest Plans," now referred to as "Land Management Plans") that direct resource management activities. These plans must be revised when conditions have changed significantly or around a 10- to 15-year cycle.

The existing plans for the Nez Perce and Clearwater National Forests were completed in 1987 and have been amended many times. The two forests were administratively combined in 2013; in addition, the Idaho Roadless Rule made management decisions that affected approximately 1.5 million acres of the Nez Perce-Clearwater National Forests, hereafter referred to as the Nez Perce-Clearwater. Revised Forest Service policies, congressional direction, court decisions, new or updated conservation agreements and recovery plans, and new scientific findings have all highlighted that the current plans are outdated and need to be revised.

To respond to these challenges the Nez Perce-Clearwater is currently in the process of revising the existing Forest Plans. The combined Land Management Plan will incorporate changes in the natural environment and new scientific understandings and social trends, as well as satisfy regulatory requirements.

Nine primary decisions are made in land management plans:

- 1. Forestwide components to provide for integrated social, economic, and ecological sustainability and ecosystem integrity and diversity, while providing for ecosystem services and multiple uses. Components must be within Forest Service authority and consistent with the inherent capability of the plan area (36 CFR 219.7 and CFR 219.8–219.10).
- 2. Recommendations to Congress (if any) for lands suitable for inclusion in the National Wilderness Preservation System or rivers eligible for inclusion in the National Wild and Scenic Rivers System (36 CFR 219.7(2)(v) and (vi)).
- 3. The plan's distinctive roles and contributions within the broader landscape.
- 4. Identification or recommendation (if any) of other designated areas (36 CFR 219.7 (c)(2)(vii).
- 5. Identification of suitability of areas for the appropriate integration of resource management and uses, including lands suited and not suited for timber production (36 CFR 219.7(c)(2)(vii) and 219.11).
- 6. Identification of the maximum quantity of timber that may be removed from the plan area (36 CFR 219.7 and 219.11 (d)(6)).
- 7. Identification of geographic or management area specific components (36 CFR 219.7 (c)(3)(d).
- 8. Identification of watersheds that are a priority for maintenance or restoration (36 CFR 219.7 (c)(3)(e)(3)(f).
- 9. Plan monitoring program (36 CFR 219.7 (c)(2)(x) and 219.12).

Many other laws and regulations apply to the management of National Forests, including, but not limited to, the National Trails Act, the Clean Air Act, the Clean Water Act, and the Endangered Species Act. These laws are generally not repeated or referenced in the language of this Plan unless there is an issue that merits a reference to the direction of the law.

Additional direction for managing National Forest System lands comes from a variety of sources, including Executive Orders, the Code of Federal Regulations (CFRs), and the Forest Service directive system, which consists of the Forest Service Manual (FSM) and the Forest Service Handbook (FSH). This direction does not need to be restated in this plan.

## Planning Area: The Nez Perce-Clearwater National Forests

The Nez Perce-Clearwater is in North-Central Idaho, in a five-county region comprised of Clearwater, Idaho, Latah, Lewis, and Nez Perce counties (Figure 1; map also included in Appendix 1). The plan area encompasses six ranger districts: Palouse, North Fork, Lochsa and Powell, Moose Creek, Salmon River, and Red River. The Nez Perce-Clearwater is responsible for managing approximately four million acres across this landscape. The Clearwater River drains most of the acres within the Nez Perce-Clearwater. 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.

The landscape of the Nez Perce-Clearwater is characterized by deep, rugged river canyons surrounded by either rolling hills or steep jagged mountains. Mixed conifer forests interspersed with small but distinctive open meadows, grasslands, and pockets of deciduous trees and shrubs comprise most of the vegetative cover. Rivers, lakes, and streams are often framed by lush riparian vegetation that transition to open meadows. Western redcedar, western larch, western hemlock, Douglas-fir, grand fir, lodgepole pine, and Ponderosa pine are the dominant conifer species, which drape the canyon walls and stretch to the uplands. Historically, western white pine and white bark pine were found throughout the area. Disturbances, in the form of wildland fire and insect and disease, are continually cycling through the landscape. These natural processes create a patchwork of openings with vegetation of all age classes found across the Nez Perce-Clearwater.

The rich heritage of the area is still visible. Native American use of the area dates back for millennia and the Nez Perce-Clearwater has been the home of the Nez Perce Tribe for centuries. Early travelers used routes through the Bitterroot Mountains to explore the far reaches of the country. These events have been remembered through the designation of the Lolo Trail National Historic Landmark corridor and other historic routes that bisect the Nez Perce-Clearwater. Historic mining towns, log cabins, Forest Service facilities, and fire lookouts dot the landscape, adding to the unique scenic character of the area.



Figure 1. Map of Nez Perce-Clearwater National Forests

# **Plan Structure**

This Land Management Plan contains the following chapters, sections, and appendices:

- Introduction
  - Forest Plan Revision
  - **Plan Elements**
  - Management and Geographic Areas ٠
  - Other Required Content ٠
  - Additional Plan Content ٠
  - Determining Consistency ٠
  - **Rights and Interests** ٠
  - Best Available Scientific Information ٠
  - Relationship to Other Strategic Guidance ٠
  - Maintaining the Plan and Adapting to New Information ٠
- Physical and Biological Ecosystems •
  - **Terrestrial Ecosystems** ٠
  - Aquatic Ecosystems
  - Wildlife ٠
  - Air Quality ٠
- Tribal Trust ٠
- Human Uses of the Forest
  - Cultural Resources ٠
  - Municipal Watersheds and Source Water Protection Areas ٠
  - Sustainable Recreation Management ٠
  - Scenery ٠
  - Public Information, Interpretation, and Education ٠
  - Infrastructure ٠
  - Land Ownership and Land Uses ٠
  - **Ecosystem Services** ٠
  - Suitability ٠
- Production of Natural Resources
  - Timber ٠
  - Energy and Minerals ٠
  - Livestock Grazing ٠
  - Special Forest and Botanical Products
  - Management Area 1: Designated Wilderness Areas, Designated Wild and Scenic Rivers, and ٠ National Historic Landmark

#### Introduction - Land Management Plan

- Management Area 2: Recommended Areas and Roadless Areas
- Geographic Areas
- ♦ Special Areas
- Literature Cited
- Appendix 1: Maps
- Appendix 2: Glossary
- Appendix 3: Monitoring Plan
- Appendix 4: Potential Management Approaches and Possible Actions
- Appendix 5: Northern Rockies Lynx Management Direction, Record of Decision
- Appendix 6: Water Resources and Fisheries
- Appendix 7: Scenic Character Descriptions

# Life of the Plan

The National Forest Management Act of 1976, Section 6 Part 5, modified the Forest and Rangeland Renewable Resources Planning Act of 1974 to require land management plans and states that plans shall "be revised from time to time when the secretary finds conditions in a unit have significantly changed, but at least every fifteen years." Based on experience nationwide, however, plans remain in effect until such time they are revised by a new plan, which may be longer than fifteen years between revisions. The first forest plans on the Nez Perce and Clearwater National Forests have been in effect since 1987 and will continue to be in effect until a Record of Decision is signed on a revised plan, estimated to be 34 years since the forest plans originated. As such, the life of the plan throughout this environmental impact statement will be used to mean the time from the signing of a Record of Decision on this plan through signing a Record of Decision of not to exceed fifteen years. When "the life of the plan" is used in plan components or analysis, it is assumed that the component or analysis will be based on implementation over 20 to 30 years.

# **Distinctive Roles and Contributions**

The unique qualities of the Nez Perce-Clearwater and its ability to provide ecosystem services characterize the roles and contributions of the area. These roles and contributions provide the basis for management direction and the foundation for realistic and achievable desired conditions.

In addition to the role of providing common National Forest ecosystem services, such as clean air, clean water, nutrient cycling, and carbon sequestration, the Nez Perce-Clearwater plays a distinctive role in the local area, the region, and the nation by uniquely contributing diverse outdoor recreation opportunities; social and economic sustainability; cultural and heritage values; and ecological diversity.

## **Outdoor Recreation**

The diverse landscapes and stunning scenery of the Nez Perce-Clearwater provide extraordinary settings for recreational activities, such as hiking, camping, driving for pleasure, horseback riding, backcountry skiing, snowmobiling, motorized and mechanized trail use, hunting, wildlife watching and photography, and fishing and boating on the world-renowned Selway, Salmon, Clearwater, and Lochsa Rivers. The Nez

Perce-Clearwater provides crucial habitat for salmon, steelhead, and resident fish, including nationally renowned blue-ribbon fisheries in Kelly Creek, the North Fork Clearwater River, and the Lochsa River.

The Nez Perce-Clearwater serves a unique national role, providing vast, contiguous wildland areas, including the Selway-Bitterroot, Gospel-Hump, and Frank Church-River of No Return wilderness areas with regional linkages in the Hells Canyon Wilderness area and Idaho Roadless Rule areas, such as the Great Burn (Hoodoo) and Mallard-Larkins. Together, these areas comprise the largest complex of unroaded lands in the lower forty-eight states. This vast landscape offers semi-primitive and primitive settings that provide an opportunity for challenge, adventure, self-reliance, and solitude.

Travel routes and corridors, such as the Northwest Passage Scenic Byway (U.S. Highway 12), the National Historic Landmark Lolo Trail corridor, the Magruder Corridor, and the Elk City Wagon Road, trace the paths of the Nez Perce Tribe, Lewis and Clark, and early traders, providing recreation access and unique historical and cultural recreation experiences. The Nez Perce-Clearwater road and trail systems provide a community backyard connection from the river valleys to the remote alpine elevations that are highly valued by residents and visitors. In addition, seven backcountry airstrips provide a distinct opportunity for access to the remote areas of the Nez Perce-Clearwater.

## Social and Economic Contributions

As the largest land jurisdiction in Idaho and Clearwater counties, the Nez Perce-Clearwater serves as a backdrop for the local area and plays a key role in supporting the social and economic sustainability of local communities, the State of Idaho, the Nez Perce Tribe, and the broader region. The productive forest lands continue to support traditional lifestyles and generational ties to the land; provide commodities, such as timber, grazing, and minerals, for regional industry; and sustain an outfitter and hunting guide recreation economy. The sport fisheries for spring and fall Chinook salmon, westslope cutthroat trout, steelhead, and kokanee and big game hunting opportunities for elk, black bear, moose, and big horn sheep are important components supporting the area's social and economic vitality.

The Nez Perce Tribe has reserved treaty rights, which entitle them to hunt, fish, gather, and graze livestock on the Nez Perce-Clearwater. Subsistence hunting, fishing, and gathering are both socially and economically critical to the Nez Perce and are not viewed by them as recreation activities. The Nez Perce Tribe is involved in consultation regarding the management of the Nez Perce-Clearwater, and staff from both organizations strive for a productive working relationship, particularly in efforts to support recovery of anadromous fisheries. In addition to being culturally and socially important to the tribe, healthy salmon runs are an important economic component for both the tribe and local communities.

## Cultural and Heritage Values

For millennia, the Nez Perce-Clearwater has been uniquely situated at the crossroads of several American Indian cultural areas, each possessing their own characteristic lifeways, languages, customs, and traditions. The river systems that bisect this topographically and culturally diverse region have helped create a unique archaeological and historical record on National Forest System land. The Salmon River is exceptional as the longest undammed river system in the contiguous United States. Through the centuries, the river was home to countless American Indian peoples, Euro-American homesteaders, and miners, as well as Chinese sojourners. While thousands of archaeological sites now lie inundated under dams on the Columbia Plateau, the Salmon River flows unencumbered, and the archaeological record remains relatively intact.

The Nez Perce Tribe has ancestral and treaty-reserved rights to uses and resources on the Nez Perce-Clearwater. Trust responsibility arises from the United States' unique legal and political relationship with Indian tribes. It derives from the federal government's consistent promise via treaties signed to protect the safety and well-being of the Indian tribes and tribal members. The federal trust responsibility is a legally enforceable fiduciary obligation on the part of the United States to protect tribal treaty rights, lands, assets, and resources, as well as a duty to carry out the mandates of federal law with respect to all federally recognized American Indian and Alaska Native tribes and villages. See the Tribal Trust section for more information. The Nez Perce-Clearwater's rugged landscape required the development of ancient trail networks. The two most important were the Southern Nez Perce Trail and the Nez Perce National Historic Trail, which connected the Nez Perce homeland with buffalo country in Montana and the Northwestern plains and facilitated the dramatic 1877 flight of the Nez Perce from the U.S. Army. These mountain routes were also important to other Great Basin and Plateau Indian groups, including the Coeur d'Alene, Shoshone, and Salish (Pend 'd Oreille and Flathead), who traveled and used the area for subsistence and trade and to maintain kinship ties and tribal alliances. Today, these Indian groups and descendant communities, including the Nez Perce, retain an on-going and vibrant culture with unbroken ties to this region.

The history of the Nez Perce-Clearwater, especially that related to timber and mining, continues to influence local communities today. Mining began in the early 1860s around today's Elk City, Florence, and Pierce, Idaho. Together, these localities provided the political and financial impetus that culminated in Idaho statehood in 1890. Today, the ghost town of Florence is the oldest town site in Idaho on National Forest System land. The diverse landscape of the Nez Perce-Clearwater contains an abundance of agriculture, industrial, and domestic ruins and standing structures that document and enhance local history and are important to the identity of many rural communities within and near the Nez Perce-Clearwater boundaries.

#### **Ecological Diversity**

The Nez Perce-Clearwater is located directly in the path of ash dispersal from three major Pacific Rim volcanic eruptions – Glacier Peak, Mount Mazama, and Mount Saint Helens – depositing an ash cap as deep as 36 inches in some depressions. The resulting soil fertility and water-holding capacity supports the Nez Perce-Clearwater's highly productive ecosystems. Definitions of ecosystem and ecosystem, as well as other helpful terms, are available in the Glossary (Appendix 2).

The Nez Perce-Clearwater possesses a tremendous range and unusual diversity of habitats, from boreal and coastal elements in the North to extensive grasslands and pine forests in the South. The maritime influence of the Pacific Ocean also contributes to a unique coastal disjunct ecosystem with associated species uncommon to the Northern Rockies, such as the Coeur d'Alene and Idaho giant salamanders, deerfern, and Pacific dogwood. The local climatic transition caused by extreme terrain differences result in high floral diversity, including endemic species like the evergreen kittentail, Dasynotus, Idaho barren strawberry, spacious monkeyflower, the federally listed Spalding's catchfly, and four species of pine. The three major river systems – Salmon, Clearwater, and Snake – and their accompanying tributaries provide important aquatic and riparian habitat for many species, including bull trout, steelhead, westslope cutthroat trout, and Chinook salmon. Additionally, many endemic gastropods are found in the major river systems, particularly in the Salmon River. The sheer number of endemic aquatic species within the planning area is notable and exemplary within the western United States. The Nez Perce-Clearwater's substantial spawning and rearing habitat for steelhead and Chinook salmon provides a large portion of the total returns of adult anadromous salmonids in the Snake and Columbia River basins.

In addition, the diverse vegetative communities on the Nez Perce-Clearwater provide terrestrial habitats that host several regionally unique native wildlife populations. This includes native lineages of fisher and bighorn sheep, as well as mountain quail, the white-headed woodpecker, and the harlequin duck. The

extensive acreage of undeveloped lands on the Nez Perce-Clearwater interconnected with neighboring public lands provide important habitat security and linkage for wide-ranging species, such as lynx, wolverine, and other carnivores. Notable large herds of elk are significant to the people of the area historically and currently. Many economies within the planning area benefit greatly from the elk herds.

#### Wildlife Species

#### **Bighorn Sheep**

Rocky Mountain bighorn sheep historically occurred in Northeastern Oregon, Central Idaho, Montana, Wyoming, and Northeastern Nevada. After a severe population decline in the early 1900s, bighorn remained in only a few isolated areas of their former habitat (Wisdom et al. 2000a, c). The current range represents an increase in occupied habitat since that time because of a combination of reintroductions and protection of remnant populations. Much of the historical range, however, is still unoccupied in the Salmon and Clearwater River basins and Idaho (Wisdom et al. 2000b, Idaho Department of Fish and Game 2005, Wisdom et al. 2000a).

Bighorn sheep prefer open habitats with short vegetation, both for high-quality forage (Wisdom et al. 2000b, a) and to maintain high visibility for predator avoidance. Additionally, cliffs, talus, and seasonal springs and seeps are important drivers of bighorn habitat. The location of cliffs and talus ultimately defines the distribution of bighorn sheep because such features are essential for escape cover and the secure rearing of young (Wisdom et al. 2000c).

The primary reason the bighorn declined is due to their susceptibility to pneumonia after exposure to bacteria (for example, *Mycoplasma ovipneumoniae*, *Pasteurella* spp.), viruses (for example, *Parainfluenza* type-3), lungworm, and stress agents. Sources of these pathogens are generally domestic sheep and goats. Major reductions or total extirpation of bighorn herds due to pneumonia outbreaks are well documented.

Bighorn in the planning area have survived when other regional populations have been reduced or extirpated. This, coupled with the fact that domestic sheep grazing on the Nez Perce-Clearwater has been ongoing for centuries, make these populations of bighorn particularly interesting. In fact, individuals of this population have served as the source for other bighorn re-introductions around the West (Mack et al. 2017).

Bighorn sheep are a species of great cultural value to the Nez Perce Tribe. Additionally, they are an important game species historically and presently in Idaho.

#### Fisher

The Nez Perce-Clearwater National Forests and Southern Idaho Panhandle National Forests are the primary areas that support fisher in the U.S. Forest Service Northern Region (Krohner 2020). The fisher is a forest-dependent species that evolved in the Northern Rocky Mountains in a complex landscape mosaic shaped by regularly occurring environmental influences on its preferred habitat, such as fire, tree disease, and wind-throw. Fishers are associated with areas of high cover and structural complexity in large tracts of mature and old-growth forests (Powell and Zielinski 1994, Sauder and Rachlow 2014, Schwartz et al. 2013). Other important site characteristics include the presence of nearby water, slope, elevation, and snow characteristics (U.S. Department of the Interior 2011, Olson et al. 2014).

#### Anadromous Fish

The Nez Perce-Clearwater supports four fish species federally listed as threatened under the Endangered Species Act and one listed as endangered. Spring and summer Chinook salmon on the Nez Perce-Clearwater constitute nationally renowned fisheries of considerable local socioeconomic importance. Their cultural importance to the indigenous people of the area, the Nez Perce Tribe, cannot be overstated. Snake River steelhead on and originating from the Nez Perce-Clearwater form a nationally renowned fishery of considerable socioeconomic importance, attracting anglers from all over the Western United States and places beyond. Spawning and rearing habitat provided by Nez Perce-Clearwater rivers and streams is vital for both species within the context of the Snake River basin and for all stocks of Chinook salmon within the Columbia River basin.

#### Endemic gastropods

The plan area supports high gastropod diversity, including slugs and snails. In fact, approximately 68 species of gastropods are known to occur in the plan area, which is the result of the Northern Rocky Mountain refugium (Stagliano et al. 2007, Brunsfeld et al. 2001). This area occurs along the Idaho and Montana border and was neither covered by Northern ice sheets during glaciation periods nor paved with lava from the South and West (Stagliano et al. 2007). Many species of gastropods in the plan area are regional endemic species limited to Northern Idaho, Western Montana, Southern British Columbia, and Eastern Washington. Others are Idaho endemics limited in many cases to Idaho while some are local endemics with distributions limited to parts of the Nez Perce-Clearwater and some lands just outside the plan area. The Selway forestsnail (*Allogona lombardii*), the Mission Creek Oregonian (*Chryptomasix Magnidentata*) and the Nimapuna disc (*Anguispira nimapuna*) are some examples of local endemic gastropods.

Similarly, the lower Salmon River canyon has exceptional landsnail diversity, which has been recognized by scientists since the 1860s (Frest and Johannes 1995, 1997). Several species and sub-species of landsnail species are local endemics limited to the lower Salmon River canyon. Some of them are only known from small or scattered areas within the lower Salmon River canyon. Most of these species occur outside of the plan area boundaries at lower elevations but some taxa have been observed on Nez Perce-Clearwater.

#### Elk

Historically, elk herds were scattered, and numbers were low in the planning area. Few elk were found along the Clearwater River by Lewis and Clark in the early 1800s, probably due in part to the dense, unbroken canopy of forest that covered the area. Wildfires burned over vast expanses near the beginning of the twentieth century, creating vast shrub-fields that provided abundant forage areas for elk. Elk numbers subsequently increased and apparently peaked around 1950. Elk herds declined into the 1970s, partially due to the maturation of the shrub-fields and ensuing decline in forage availability, logging and road-building activity that increased elk vulnerability to hunters under liberal hunting seasons and the loss of some major winter ranges due primarily to invasive species (Wakkinen et al. 2017).

Elk are a prominently profiled, culturally important species, both historically and currently, of high economic value in the area. Much local collaboration has occurred with the primary goal of increasing elk herds. The Nez Perce-Clearwater is considered essential in providing habitat for them.

#### Harlequin Duck

Harlequin ducks are medium sized ducks that prefer turbulent, highly oxygenated waters. They breed in fast moving mountain streams and prefer rivers with closed canopies for breeding. On the Nez Perce-

Clearwater, populations are routinely monitored on the Lochsa River and its major tributaries, including North Fork Spruce Creek. The Lochsa River has the highest number of breeding pairs of harlequins in the State of Idaho according to the 2017 Idaho State Wildlife Action Plan (Idaho Department of Fish and Game 2017). Many observations are documented to occur on tributaries of the North Fork Clearwater and Selway Rivers (Idaho Species Diversity Database<sup>1</sup>). Harlequin ducks migrate and winter on rocky coastlines. Harlequin ducks face many of the same threats other migratory birds face and their populations have diminished greatly over time. The breeding habitats on the Nez Perce-Clearwater are some of the best breeding habitats in Idaho and in the continental United States.

#### Mountain Quail

Mountain quail populations on the Nez Perce-Clearwater are remnants of once larger populations in Idaho and Oregon. Until the 1950s, mountain quail populations were abundant in Western Idaho. They were found from the Southwestern deserts North to the area along the lower Snake, Salmon, and Clearwater Rivers. Now they are found in only a few places, mostly along the Salmon River. They live in steep rugged terrain and can survive along dry slopes. The reasons for their decline are unknown. Mountain quail, as their name suggests, are usually found at higher elevations, unlike the more common California or valley quail.

Mountain quail are quite unique. They are Idaho's largest quail species and the only North American quail that exhibits locally migratory behavior. They move up and down along riparian zones changing elevation depending on snow conditions, food availability, and other factors.

#### Whitebark Pine

On December 14, 2022 the U.S. Fish and Wildlife Service (Service) announced a final action to list the whitebark pine (*Pinus albicaulis*) as a threatened species under the Endangered Species Act (ESA). The Service has concluded that the whitebark pine is likely to become endangered in the foreseeable future throughout its range. These protections follow a proposal to list the species as threatened in December 2020 with a subsequent public comment period. The proposal and final action to list the whitebark pine were made based on a rigorous Species Status Assessment, using the best available science.

White pine blister rust remains the primary threat to whitebark pine. This blister rust is a non-native fungal disease that harms whitebark pine trees across the West. Additional threats impacting the health of the species include mountain pine beetles, altered wildfire patterns, and climate change. As a result of these threats, scientists estimate that as of 2016, 51 percent of all standing whitebark pine trees are dead.

The Service is not designating critical habitat for this species as part of the listing because habitat loss is not a threat to the species' continued survival; disease from white pine blister rust is the primary threat. Providing ESA protections to whitebark pine will boost new and ongoing research efforts to conserve the species, including future developments in combatting white pine blister rust.

In the U.S., 88 percent of the species range is on federal land managed by the U.S. Forest Service, National Park Service, and Bureau of Land Management, allowing for thoughtful management of these lands through the ESA consultation process.

<sup>&</sup>lt;sup>1</sup> Idaho Fish and Wildlife Information System, Species Diversity Database: <u>https://idfg.idaho.gov/species/</u> [Accessed September 2022]

To allow for further conservation of the species, the Service has included a 4(d) rule with this listing decision. A 4(d) rule is one of the tools in the ESA that allows the Service to authorize activities that benefit and conserve the species. With this 4(d) rule, the Service is allowing research, forest management, and restoration work on federal lands where it might otherwise be prohibited. This provision also allows for the collection of seeds on federal lands for Tribal ceremonial and traditional use.

# **Plan Elements**

There is an important distinction between plan components, such as desired conditions, objectives, standards, guidelines, and suitability, and other content of the plan. A plan amendment is required to add, modify, or remove one or more plan components or to change how or where one or more components apply to all or part of the plan area, including management areas or geographic areas (36 CFR 219.13(a)).

Background material integral to the successful implementation of this plan is also included. As conditions change, this information can be updated with administrative changes.

# **Desired Conditions**

A desired condition is a description of specific social, economic, or ecological characteristics of the plan area, or a portion of the plan area, toward which management of the land and resources should be directed. Desired conditions must be described in terms that are specific enough to allow progress toward their achievement to be determined but not include completion dates (36 CFR 219.7(e)(1)(i)).

These are the social, economic, and ecological attributes that will be used to guide management of the land and resources of the plan area. They may apply to the entire plan area or to specific geographic or management areas. Desired conditions are not commitments or final decisions approving projects and activities. The desired condition for some resources may currently exist or may only be achievable over a long time for other resources. The Nez Perce-Clearwater may need to adjust the desired conditions if monitoring results indicate they are not achievable in the long-term. Desired conditions will only be found in the section of the plan labeled "Desired Conditions."

# **Objectives**

An objective is a concise, measurable, and time-specific statement of a desired rate of progress toward a desired condition or conditions. Objectives should be based on reasonably foreseeable budgets (36 CFR 219.7(e)(1)(ii)). Objectives describe the focus of management in the plan area within the plan period. Objectives that are defined as occurring "over the life of the plan.". Objectives will only be found in the section of the plan labeled "Objectives."

# Standards

A standard is a mandatory constraint on project and activity decision-making established to help achieve or maintain the desired condition or conditions, to avoid or mitigate undesirable effects, or to meet applicable legal requirements (36 CFR 219.7(e)(1)(iii)). Standards can be developed for forestwide application or for specific areas and may be applied to all management activities or selected activities. Standards will only be found in the section of the plan labeled "Standards."

# Guidelines

A guideline is a constraint on project or activity decision-making that allows for departure from its terms, so long as the purpose of the guideline is met. Guidelines are established to help achieve or maintain a desired condition or conditions to avoid or mitigate undesirable effects or to meet applicable legal

requirements (36 CFR 219.7(e)(1)(iv)). Guidelines can be developed for forestwide application or for specific areas and may be applied to all management activities or selected activities. Guidelines will only be found in the section of the plan labeled "Guidelines."

# Suitability

Specific lands within the Nez Perce-Clearwater will be identified as suitable for various multiple uses or activities based on the desired conditions applicable to those lands. The plan will also identify lands within the Nez Perce-Clearwater as not suitable for uses that are not compatible with desired conditions for those lands. The suitability of lands need not be identified for every use or activity (36 CFR 219.7 (e)(1)(v)).

If a plan identifies certain lands as not suitable for a use, then that use, or activity may not be authorized. Public uses for which a special use authorization is not required, such as biking, motor biking, snowmobiling, boating, camping, hiking, or hunting, will not be affected by such a designation in the plan; such uses can only be restricted by an action, such as a closure order.

Identifying suitability of lands for a specific use indicates that the use may be appropriate, but does not authorize that use. Identifying suitable use is not a promise that use will be approved in project or activity level decision-making. Final suitability determinations for specific authorizations occur at the project or activity level decision-making process. Generally, the lands on the Nez Perce-Clearwater may be suitable for all uses and management activities appropriate for National Forests, such as outdoor recreation, range, or timber, unless identified as not suitable.

# Management and Geographic Areas

Management areas and geographic areas are spatially identified areas within the Nez Perce-Clearwater (Appendix 1). These areas are assigned sets of plan components, such as desired conditions, suitable uses, and in some areas either standards or guidelines, or both.

# **Management Areas**

Management areas include: (1) Wilderness, Wild and Scenic Rivers, and National Historic Landmark Areas; (2) backcountry; and (3) front country. Maps are available in Appendix 1.

# Management Area 1: Wilderness, Wild and Scenic Rivers, and National Historic Landmark Areas

Management Area 1 is comprised of protected areas with national designations. This management area consists of three sub-categories, each with their own specific management direction. The sub-categories include designated wilderness, designated wild and scenic rivers, and National Historic Landmarks. Components specific to Management Area 1 are coded as "MA1." Direction for Management Area 1 is found in Physical and Biological Ecosystems organized by resource area and in Management Area 1: Designated Wilderness Areas, Designated Wild and Scenic Rivers, and National Historic Landmark.

## Management Area 2: Backcountry

Management Area 2 includes lands within Idaho Roadless Rule areas, recommended wilderness areas, suitable wild and scenic rivers, parts of the Gospel-Hump Geographic Area, and proposed and designated research natural areas. This management area is made up of relatively large areas, generally without roads, and provides a variety of motorized and non-motorized recreation opportunities. Trails are the primary improvements constructed and maintained for recreation users. In some areas, lookouts, cabins,

or other structures are present, as well as some evidence of management activities. Components specific to Management Area 2 are coded "MA2." Direction for Management Area 2 is found in Physical and Biological Ecosystems organized by resource area and in Management Area 2: Recommended Areas and Roadless Areas.

## Management Area 3: Front Country

The rest of the Nez Perce-Clearwater comprises Management Area 3. Most of this management area consists of the areas with roads, trails, and structures, as well as signs of past and ongoing activities designed to actively manage the area. This management area includes parts of the Gospel-Hump Geographic Area and proposed and designated special areas. This management area provides a wide variety of recreation opportunities, both motorized and non-motorized. Components specific to Management Area 3 are coded "MA3." No chapter with direction specific to Management Area 3 is presented because all forestwide direction applies, as well as direction in Physical and Biological Ecosystems organized by resource area with the "MA3" label.

# **Geographic Areas**

Geographic areas include Gospel-Hump, Lower Salmon River, Pilot Knob, and the Lolo Trail National Historic Landmark. Maps are available in Appendix 1.

## Geographic Area: Gospel-Hump

The Gospel-Hump Geographic Area is located South of Highway 14, East of Riggins and North of Mackay Bar on the main Salmon River. (Map in Appendix 1.) The Endangered American Wilderness Act (1978) divided the roadless area, formerly known as the Gospel-Hump area, into three portions. The largest portion, consisting of 206,000 acres, became wilderness; another portion, comprising 45,000 acres, became available for immediate development; and a third portion, including three areas totaling 92,000 acres referred to as the Gospel-Hump Multi-Purpose Area, was designated for multiple purpose resource development. Section Four of the Endangered American Wilderness Act directed the completion of the Gospel-Hump Multi-Purpose Plan, which was completed in 1985 and incorporated into the 1987 Nez Perce Forest Plan. The Endangered American Wilderness Act provides for periodic updates to this multipurpose plan. This section fulfills that legislative intent and would replace the direction for the area found in the Gospel-Hump Multipurpose Resource Development Plan and the 1987 Nez Perce National Forest Land Management Plan.

## Geographic Area: Lower Salmon River

The Lower Salmon River Geographic Area is located just East of Highway 95, North of Riggins and South of Grangeville, Idaho. (See map in Appendix 1.) The lower Salmon River area contains rich geological complexity contributing to a biological community that is unique within the plan area. This geographic area contains a large portion of the driest areas within the warm, dry potential vegetation group dominated by Ponderosa pine under a frequent low intensity fire return interval. These habitats support species associated with Ponderosa pine dominated habitats, including several species of conservation concern.

## Geographic Area: Pilot Knob

The Pilot Knob geographic area, known as T'amloyiitsmexs by the Nez Perce, is a very important cultural and sacred site to the Nez Perce Tribe. Located North of Highway 14, West of Elk City, Idaho, T'amloyiitsmexs is a significant landmark used by the Nez Perce for "weyekin," or spiritual quests. Pilot Knob has a significant historic meaning with respect to the Nez Perce religious values and weyekin

practices that have been used from time-immemorial and remains to be respected and used by Nez Perce tribal members. Per the Nez Perce Tribal Executive Committee, these tribal religious rites can be conducted in no other place. The Nez Perce Tribe strives to maintain its cultural and traditional practices and to keep alive the knowledge of the beliefs and interpretations of such values. Because of its elevation and central location, Pilot Knob started being used as a site to locate communication equipment in 1977 with issuance of a communication use permit to the State of Idaho Military Division Public Safety Communications Unit. By 1988, the Nez Perce Tribal Executive Committee described that most of Pilot Knob's features had been altered, defaced, or destroyed by man-made devices. The Pilot Knob geographic area is also an Idaho Roadless Rule area with a "Special Areas of Historic or Tribal Importance" theme. A map is available in Appendix 1.

## Geographic Area: Lolo Trail National Historic Landmark

The Lolo Trail, a National Historic Landmark administered in cooperation with the National Park Service, is part of the Nez Perce National Historical Park. The trail extends through the Nez Perce-Clearwater from Lolo, Montana, to Weippe, Idaho. (Map in Appendix 1.)

The Lolo Trail National Historic Landmark was designated in 1963. Its significance lies in its roots as an ancient American Indian trail. This trail comprises the route Lewis and Clark traveled from 1805 to 1806, as well as the path taken by the Nez Perce Indians during the Nez Perce Indian War of 1877. The landmark stretches about 62 miles from the Nez Perce-Clearwater boundary near Musselshell Meadows to the Nez Perce-Clearwater boundary near Lolo Pass.

The Lolo Trail National Historic Landmark is a geographic area, and also part of Management Area 1, as a congressionally designated landmark.

# Other Required Content

# **Monitoring Program**

The Monitoring Program identifies monitoring questions and associated indicators. The Monitoring Plan (Appendix 3) will inform the management of resources on the Land Management Plan area, including testing relevant changes and measuring management effectiveness and progress towards achieving or maintaining the plan's desired conditions or objectives per 36 CFR 219.129(a)(2).

# **Priority Watersheds**

The 2012 Planning Rule requires that plans identify watersheds that are a priority for maintenance or restoration (36 CFR 219.7(f)(1)). Priority watersheds are identified through the Forest Service Watershed Condition Framework, which is one of the agency's only outcome-focused restoration tools. The Forest Service launched the Watershed Condition Framework in 2010 with the aim of providing a nationally consistent way of assessing watershed condition and prioritizing watershed restoration on national forests and grasslands. Highlighting the value of the Watershed Condition Framework, Section 8405 of the Agricultural Improvement Act of 2018 (2018 Farm Bill) provides specific legislative authorization and requirements for the process, one of those being to identify for protection and restoration up to 5 priority watersheds in each National Forest.

Current priority watersheds that have restoration activities in progress include:

- Upper Elk Creek (Hydrologic Unit Code [HUC] 12 #170603080701)
- Upper Clear Creek (HUC12 #170603040102)

- Upper Little Slate Creek (HUC12 #170602090301)
- Lower Crooked River (HUC12 #170603050302)
- Musselshell Creek (HUC12 #170603060202)

Future priority watersheds will be determined throughout the life of this plan. Priority watersheds are selected by a forest or area responsible official after analysis and evaluation using a multi-functional interdisciplinary approach, with the consideration of:

- Agency watershed restoration policies and priorities that have been established at other scales, including national- and regional-scale restoration strategies.
- The importance of water and watershed resources (resource value), the urgency of management action to address conditions and threats, and economic considerations.
- Alignment with other Forest Service strategic objectives and priorities.
- Alignment with the strategies and priorities of other Federal and State agencies, tribes, community and collaborative efforts, nongovernmental conservation organizations, and public desires.

The participation of partners in the priority selection process is expected and highly encouraged. The 2012 Planning Rule and the planning directives require the responsible official to reach out to local, state, tribal, and other federal agencies and interest groups when identifying priority watersheds (Forest Service Handbook 1909.12, section 22.31). Priority watersheds could occur in watersheds included in the Conservation Watershed Network that require process-based restoration strategies to support ESA listed fish species and Species of Conservation Concern. Maps of Conservation Watersheds are included in Appendix 1.

By design, Watershed Condition Framework priority watersheds are not intended to be permanent designations - when all needed work is completed, a new Watershed Condition Framework priority watershed is to be identified. Priority areas for potential restoration activities could change quickly because of disturbance events, such as wildfire or severe flooding. Therefore, the 2012 Planning Rule includes priority watersheds as other plan content, so that an administrative change could be used to quickly respond to changes in priority.

Watershed Condition Framework priority watersheds should not be mistaken for Inland Native Fish Strategy (INFISH) priority watersheds that were selected through the amendment of the 1987 Forest Plans. See Appendix 6 for more information regarding priority watersheds.

# **Proposed and Possible Actions**

A list of proposed and possible actions that could be implemented under this land management plan are listed in Appendix 4. This information is not a commitment to take any action and is not a "proposal," as defined by the Council on Environmental Quality regulations for implementing NEPA (36 CFR 219.7 (e)(1)(f)(iv).

# Additional Plan Content

Additional plan content can include information, such as potential management approaches or strategies, partnership opportunities, coordination activities, or other information, to support movement toward desired conditions. These include:

• Management Approaches and Possible Actions, Appendix 4

- Northern Rockies Lynx Management Direction, Record of Decision, Appendix 5
- Water Resources and Fisheries Appendix, Appendix 6
- Scenic Character Descriptions, Appendix 7

# **Determining Consistency**

Because of the many types of projects and activities that can occur over the life of the plan, it is not likely that a project or activity can maintain or contribute to the attainment of all desired conditions, nor are all desired conditions relevant to every activity (for example, recreation desired conditions may not be relevant to a fuels treatment project). Most projects and activities are developed specifically to maintain or move conditions toward one or more of the desired conditions of the plan.

Every project and activity must be consistent with the applicable plan components. A project or activity approval document must describe how the project or activity is consistent with applicable plan components by meeting the following criteria (36 Code of Federal Regulations 219.15(d)):

- **Goals, desired conditions, and objectives.** The project or activity contributes to the maintenance or attainment of one or more goals, desired conditions, or objectives, or does not foreclose the opportunity to maintain or achieve any goals, desired conditions, or objectives, over the long term.
- Standards. The project or activity complies with applicable standards.
- Guidelines. The project or activity:
  - Complies with applicable guidelines as set out in the plan; or
  - Is designed in a way that is as effective in achieving the purpose of the applicable guidelines (§ 219.7(e)(1)(iv)).
- Suitability. A project or activity would occur in an area:
  - That the plan identifies as suitable for that type of project or activity; or
  - For which the plan is silent with respect to its suitability for that type of project or activity.

# **Hierarchy of Plan Guidance**

If conflicting plan guidance is discovered, the guidance for the most restrictive land allocation should be applied. Lands designated by Congress take precedence, such as Designated Wilderness, Designated Wild and Scenic Rivers, or National Historic Trails followed by land allocations made by rule, such as the Idaho Roadless Rule Areas which specifically state that direction supersedes any conflicting direction in the Land Management Plan. For lands where no higher-level designations exist, the most restrictive direction is used.

# **Rights and Interests**

The Land Management Plan provides a strategic framework that guides future management decisions and actions. As such, the Land Management Plan will not create, authorize, or execute any ground-disturbing activity. The plan does not subject anyone to civil or criminal liability and creates no legal rights. The Land Management Plan does not change existing permits and authorized uses.

# Best Available Scientific Information

The 2012 Planning Rule requires the responsible official to use the best available scientific information to inform the development of the plan, including plan components and the monitoring program. The foundation from which the plan components were developed for the plan was provided by the Assessment Report of Ecological, Social, and Economic Conditions on the Nez Perce National Forest (February 2017) and associated resource reports, and the best available scientific information and analyses therein. From this foundation, resource specialists used several resources that included peer-reviewed and technical literature, databases and data management systems, and modeling tools and approaches to develop the plan. Geographic information system (GIS) data and product precision may vary but provide a sufficient depiction for purposes of the plan. Resource specialists considered what is most accurate, reliable, and relevant in their use of the best available scientific information as described in the final EIS and plan record for this plan.

# Relationship to Other Strategic Guidance

The national forest contributes to the accomplishment of national strategic guidance in accordance with its own unique combination of social, economic, and ecologic conditions. This plan helps define the Nez Perce-Clearwater National Forests' role in advancing the agency's national strategy and reflects the national goals. This plan is reflective of the mission of the Forest Service, which is "to sustain the health, diversity, and productivity of the nation's forests and grasslands to meet the needs of present and future generations." The plan also considers the direction and goals in other applicable tribal, Federal, State, and county plans and an "all lands" integrated approach that considers the broader landscape that the plan operates within.

# Maintaining the Plan and Adapting to New Information

The plan is an integral part of an adaptive management cycle that guides future management decisions and actions. Plan-level adaptive management includes:

- Assessing information relevant to the Nez Perce-Clearwater National Forests.
- Developing land management direction to respond to social, economic, and ecological conditions.
- Monitoring management outcomes and changing circumstances.
- Revising or amending management strategies accordingly.

This adaptive management cycle enables the Nez Perce-Clearwater National Forests to identify and respond to changing conditions, changing public desires, and new information, such as that obtained through research and scientific findings. The national forest's monitoring program is an integral part of this adaptive management cycle, consisting of monitoring questions and performance measures. The monitoring evaluation report will indicate whether a change to the plan may be warranted, based on new information.

# **Physical and Biological Ecosystems**

# **Terrestrial Ecosystems**

Direction related to the terrestrial ecosystems is designed to provide for ecological integrity and sustainability, supporting a full suite of native plant and animal species while providing for the social and economic needs of human communities. The vegetation across the Nez Perce-Clearwater has changed dramatically from historic conditions. For a variety of reasons, including past timber harvest practices that targeted large trees, introduction of non-native invasive weeds, and fire exclusion that reduced early seral conditions, current forest vegetation is less diverse than historic conditions. The plan components related to terrestrial ecosystems are proposed to guide management of Nez Perce-Clearwater land, so they resemble the natural range of variation and are ecologically sustainable.

# Across the Landscape

## Goals

**FW-GL-TE-01.** The Nez Perce-Clearwater works with federal, state, tribal, and private land managers towards an all-lands approach through management and cooperation, including efforts to mitigate threats or stressors, provide for wildlife and fish habitat connectivity, and to provide social, economic, and ecological conditions that contribute to mutual objectives.

**FW-GL-TE-02.** The Nez Perce-Clearwater cooperates with state agencies, federal agencies, and tribes to develop actions that lead to progress towards meeting other agencies' objectives for native and desired non-native fish and wildlife species.

## **Desired Conditions**

**FW-DC-TE-01.** Uncommon habitat elements (mineral licks, talus slopes, fractured wet bedrock, rocky outcrops, scree slopes, waterfalls, and geologic inclusions) support long-term persistence of endemic species with narrow or vary narrow habitat specificity and limited distribution associated with these habitats.

**FW-DC-TE-02.** Peatlands, including fens and bogs, have the necessary soil, hydrologic, water chemistry, and vegetative conditions to provide for continued development and resilience to changes in climate and other stressors. Peatlands support unique plant and animal species.

**FW-DC-TE-03.** Plant communities are comprised of a diverse mix of native grass, forb, shrub, and tree species, which provide forage for pollinator species.

**FW-DC-TE-04.** Vegetation reflects natural disturbance regimes. The composition, structure, function, and connectivity of native plant communities are appropriate for a given landscape and climatic setting.

**FW-DC-TE-05.** Riparian vegetation includes native assemblages of hardwood trees, deciduous shrubs, conifers, and, where appropriate, unique coastal disjunct species.

## Objectives

**FW-OBJ-TE-01.** Restore hardwood overstory and understory species or allow disturbance processes such as fire or other disturbance, on 3,000 to 4,200 acres of riparian areas every 5 years.

## Guidelines

**FW-GDL-TE-01.** To conserve at-risk plants, terrestrial invertebrate animals, and Coeur d'Alene salamanders that are found only near the uncommon habitat elements described in FW-DC-TE-01, activities should not remove or alter the habitat when terrestrial plant or invertebrate animal communities that have been assigned a NatureServe ranking of G1 globally critically imperiled or G2 globally imperiled are present unless designed specifically to improve conditions for these species.

# **Cave and Karst Features**

Cave and karst features include natural structures, such as caves, karst, and rock cavities. Caves include any naturally occurring void, cavity, recess, or system of interconnected passages beneath the surface of the Earth or within a cliff or ledge which is large enough to permit a person to enter, whether the entrance is excavated or naturally formed. This definition includes any fissure (large crack), lava tube, natural pit, sinkhole, or other opening which is an extension of a cave entrance or which is an integral part of the cave. Karst features are geological landforms that predominantly result from the shaping process controlled by soluble bedrock. Karst features create unique microhabitats and are important areas for rapid subsurface drainage and aquifer recharge. Karst landscape is characterized by closed depressions, disappearing streams, and solutional shaping.

Cave and karst features include any material or substance occurring naturally within them such as plant and animal life, paleontological deposits, sediments, minerals, cave formations, and cave relief features. Archeological resources may also be present within caves and would be addressed under the cultural resources section. Cave and karst feature resources are both fragile and nonrenewable, so special considerations are required to provide resource protection.

The Nez Perce-Clearwater National Forests contains some significant caves and karst resources. The Federal Cave Resources Protection Act of 1988 (102 Stat. 4546; 16 U.S.C. § 4301-4309) defines a significant cave as a cave located on National Forest System lands that has been evaluated and shown to possess features, characteristics, values, or opportunities in one or more of the following resource areas: biota; cultural; geologic and mineralogic and palaeontologic; hydrologic; recreational; or educational-scientific and which has been designated significant by the forest supervisor.

Cave and karst features provide specialized seasonal and year-round habitats for a variety of wildlife species including bats, cliff-nesting birds, terrestrial snails, invertebrates, reptiles, and amphibians.

## **Desired Conditions**

**FW-DC-CAVE-01.** The cultural, archaeological, geological, hydrological, paleontological, biological, and aesthetic resources associated with cave and karst features are protected and maintained.

**FW-DC-CAVE-02.** Cave formations, relief features, and karst landscapes continue to develop or erode under natural conditions.

**FW-DC-CAVE-03.** Water flowing into, from, or within caves is not altered or diverted in its flow; contains normally fluctuating background levels of sediment, organic matter, and dissolved minerals; and is not polluted.

**FW-DC-CAVE-04.** Cave and karst features continue to provide habitat for species, particularly bats, that require specialized niches for raising young, roosting, and overwintering. New bat diseases, such as white-nose syndrome (*Pseudogymnoascus destructans*), are not introduced into cave and karst features.

**FW-DC-CAVE-05.** The significant features of caves designated or nominated under the federal Cave Resources Protection Act are protected and maintained.

#### Standards

**FW-STD-CAVE-01.** Cave and karst features environments shall not be altered, except where necessary to protect associated natural resources or to protect health and safety. Installation of closure devices, if necessary, for human health and safety concerns shall protect the biological, geological, and hydrological resources by allowing wildlife movement, airflow exchange, and water exchange.

**FW-STD-CAVE-02.** Forest Service employees and agency-authorized personnel, including contractors, researchers, permittees, volunteers, and cooperators, shall use established decontamination procedures to prevent the introduction or spread of disease prior to entering and upon exiting caves or abandoned mines known to be used as roost sites or winter hibernacula by bats.

#### Guidelines

**FW-GDL-CAVE-01.** Surface management activities, including vegetation management, fuels management, and drilling, in the vicinity of cave and karst features should avoid actions that would significantly impact underground ecosystems by modifying drainage patterns, subsurface water, and airflow or other natural processes.

**FW-GDL-CAVE-02.** Bat habitat enhancement and protection measures should be used when cave or abandoned mine lands are to be closed.

**FW-GDL-CAVE-03.** To protect significant caves resources, those identified as such under the federal Cave Resources Protection Act should not be signed, disclosed on maps, mentioned in brochures, or have monument markers.

# Forestlands

The desired conditions in this section are meant to be used in conjunction with one another and provide a picture of what the Nez Perce-Clearwater should look like in the future. The "Dominance Type" and "Size Class" categories of desired conditions warrant some explanation here. Dominance types are used to describe the most prevalent tree species within a stand and do not indicate that an area should be a monoculture of one species. Likewise, the size class desired conditions do not indicate that a stand should consist of trees of only one size class. The size class is an average size of trees that should occur in an area but, recognizing that varying structure is important for ecological reasons, it is fully expected that trees of other sizes will occur in those areas as well. This structural complexity desired within a given patch is described in the "Within-Stand Characteristics" sections.

Lands across the Nez Perce-Clearwater have been grouped into broad potential vegetation types, consistent with the groupings established for the Forest Service in the USDA Forest Service Northern Region. Hereafter in this plan, the broad potential vegetation type groups are referred to simply as "potential vegetation type" or, in some cases, simply as "group" (as in "warm-moist group").

Forestlands of the Nez Perce-Clearwater are divided into four broad potential vegetation type groups: Warm Dry, Warm Moist, Cool Moist, and Cold. These potential vegetation type groups are aggregations of Region 1 habitat type groups. Habitat type groups are groupings of habitat types having similar biophysical characteristics with similarities in historical disturbance regimes that have affected a similar range of tree composition, structural characteristics, productivity, and successional trends into mature forests. These groups can be effectively mapped to show spatial extent on the landscape. Landscape topography can influence the extent and size of patches across these biophysical settings. Broad potential vegetation type is a coarse grouping of Northern Region habitat type groups that is applicable for broad level analysis and monitoring.

Each potential vegetation type group is discussed in detail in Section 0 Forestlands and Appendix B of the Final Environmental Impact Statement. Table 1 provides an example of the process of grouping habitat types into broad potential vegetation type groups as defined by (Milburn et al. 2015). This reference document provides detailed descriptions of habitat type groupings into coarse scale, broad classifications used in landscape scale planning. A complete table listing all four broad potential vegetation types described for the Nez Perce-Clearwater can be found in Appendix B of the Final Environmental Impact Statement. Table 2 displays the potential vegetation type group's percentage by management area and distribution of each potential vegetation type group by percentage on the Nez Perce-Clearwater.

R1 Broad PVT	R1 Habitat Type Groups	ID habitat type groups 2005	R1 ID PVT	Habitat Type Code
Warm Moist	Moderately Warm Moist	4 moderately warm & moderately dry	abgr3	500, 516, 517, 518, 519, 520, 521, 522, 524, 525, 526, 529
Warm Moist	Moderately Cool Moist to Wet	Aoderately Cool Moist to & 5 moderately cool & Wet & t		555
Warm Moist	Warm Moist Moderately Cool Moist to Wet		thpl2	501, 530, 531, 532, 533, 534, 535, 545, 546, 547, 548
Warm Moist	Moderately Cool Moist to Wet	5 moderately cool & moist	tshe	502, 565, 570, 571, 572, 573, 574, 575, 576, 577, 578
Warm Moist	Moderately Cool Moist to Wet	6 moderately cool & wet	thpl1	540, 541, 542, 550, 560
Warm Moist	Moderately Cool Moist to Wet	7 cool & wet	tshe	579

Table 1. Classification of broad potential vegetation type groups from habitat types

R1 = Northern Region

PVT = Potential Vegetation Type. Types from Milburn, Bollenbacher and Bush (Milburn et al.). abgr = Abies grandis. thpl = Thuja plicata. tshe = Tsuga heterophylla.

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PVT Group	% in MA1	% in MA2	% in MA3	% of Nez Perce- Clearwater
Warm Dry	31	26	32	29
Warm Moist	8	34	49	32
Cool Moist	34	30	13	25
Cold	26	10	4	12
Non-Forest	2	1	2	1

#### Table 2. Potential Vegetation Type (PVT) as percent (%) of each management area (MA) and the plan area

PVT = Potential Vegetation Type. MA = Management Area.

Data Source: 2015 FIA Hybrid dataset (FW-MA-PVT-Hybrid15.xlsx)

Along with varying by broad potential vegetation type group, forested vegetation components also vary by management area. The management areas have different management emphases for forested vegetation, so the following desired conditions vary to reflect those differences. The management emphasis of Management Area 1 is that natural processes and management actions that mimic natural processes are what drive changes in forested vegetation. Management Area 2 has a strong emphasis on managing for ecological restoration. More intensive management to restore forest structure and composition is feasible here than in what is feasible in Management Area 1. The desired conditions for Management Area 2 are intended to reflect this emphasis on restoration. The emphasis for Management Area 3 is a blend of meeting ecological, economic, and social needs; the components for Management Area 3 are designed to be ecologically appropriate, to provide for timber production, and to provide for meeting other resource needs.

Desired conditions for both dominance types and size class were informed by natural range of variation (NRV) analysis modelled through SIMPPLLE. The natural range of variation analysis included a model run for 1,000 years to capture the variation in climatic conditions and the predicted response of vegetation to these changes. Each decade of the climate model simulation was characterized into one of three scenarios – cooler and wetter, normal, warmer and drier – as compared to the estimated drought index for each decade. The full natural range of variation analysis included all 100 decades modelled in the Living Blended Drought Atlas version 2 climate model.<sup>2</sup> A dry natural range of variation analysis was generated to compare the effects of a warmer and drier climate scenario with the full natural range of variation analysis. This dry natural range of variation analysis included only those decades classified as warmer and drier in the climate model. A more detailed description of the climate model and development of desired conditions can be found in Appendix B of the final environmental impact statement. These ranges were compared and combined to establish the final range of variation for all modelled metrics. In many cases, the lower bound of the natural range of variation for species composition and size class is derived from the dry natural range of variation analysis and the upper bound from the full natural range of variation analysis. Desired conditions for dominance types and size class distribution are informed by the natural range of variation analysis and generally fall within the bounds of the full and dry ranges. However, other resource objectives also informed the final desired condition ranges. For example, the desired conditions for grand fir species dominance type are set below the natural range of variation to accommodate the western white pine restoration objectives, and Ponderosa pine desired ranges are set above the natural range of variation to provide more resilience in anticipation of warmer future climates.

Desired conditions for dominance types and size class are consistent across management areas for each potential vegetation type group. Differences in desired conditions for dominance types between potential vegetation type groups is the result of shifts in species compositions between potential vegetation type groups. Dominance types within a potential vegetation type group are species with the greatest desired abundance based on the natural range of variation analysis and historical data. These dominance type species are those that are predicted to provide the most resistance to disturbance and provide resiliency resulting from natural disturbances. For example, Ponderosa pine is a fire adapted species more resilient to natural fire regimes than grand fir occurring in the same stand.

#### **Desired Conditions Forestwide**

**FW-DC-FOR-01.** Aspen (*Populus tremuloides*) persists as vigorous, multi-age stands over time across its range on the Nez Perce-Clearwater and aspen stands cover 1 percent of the Nez Perce-Clearwater.

<sup>&</sup>lt;sup>2</sup> (https://www.ncei.noaa.gov/access/paleo-search/study/22454).

**FW-DC-FOR-02.** Within-Stand Characteristics of Hot Dry and Warm Dry habitat type groups in the Warm Dry broad potential vegetation type group<sup>3</sup>: Stand density reflects the historic fire regime, which typically included frequent underburns, so stands are open and many-aged with younger trees occurring as small even-aged groups or individuals interspersed among the larger, long-lived trees. The overstory is dominated by large Ponderosa pine and the understory is composed of native grasses, forbs, and low shrubs.

#### Desired Conditions by Management Area

Desired Conditions for Management Area 2 and 3 across All Potential Vegetation Type Groups MA2 and MA3-DC-FOR-10. Amounts of old growth where the cover type is Ponderosa pine, western larch, western white pine, and whitebark pine are maintained or increased from existing amounts. Amounts of old growth where the cover type is western redcedar, Pacific yew, and western hemlock are maintained through time.

Desired Conditions for Management Area 3 across All Potential Vegetation Type Groups **MA3-DC-FOR-11.** Snags are present across Nez Perce-Clearwater lands, contributing to diversity of structure and habitat. Snags are unevenly distributed and dynamic over time with highest densities occurring in burned areas and those infested by insects. The lowest densities of snags occur along roads and in developed sites or other areas where the concern for human safety is elevated. A range of decay classes is represented.

**MA3-DC-FOR-12.** Although natural ecological processes and disturbances are still present, timber harvest has a dominant role in affecting the composition, structure, and pattern of vegetation.

## Warm Dry Potential Vegetation Type Group

This potential vegetation type group includes the warmest and driest sites that support forest vegetation. Forested sites in the warm dry potential vegetation type group primarily fall into the Ponderosa pine (*Pinus ponderosa*), Douglas-fir (*Pseudotsuga menziesii*), and dry grand fir (*Abies grandis*) habitat type series (Ferguson et al. 2005). These sites occur at lower elevations, at mid-elevations on Southerly aspects, and on soils with low moisture holding capacity.

#### **Desired Conditions**

**FW-DC-FOR-03.** Composition for Management Area 1, Management Area 2, and Management Area 3: Within the warm dry potential vegetation type group, the amount of each dominant type found in each management area reflects the ranges shown in Table 3. Figure 2 illustrates this condition. The Ponderosa pine dominance type increases on all aspects relative to the current condition. Douglas-fir and grand fir remain as components of many stands, but these dominance types are reduced to reflect desired conditions given in Table 3. The Warm Dry potential vegetation type group is on the drier end of sites that support western larch, so the western larch dominance type primarily increases on northerly aspects. A portion of this potential vegetation type group is dominated by seral grasses and shrubs; the table below gives desired percentages for the portion that is dominated by both trees and seral grasses and shrubs.

<sup>&</sup>lt;sup>3</sup> This is meant to include only the warmest and driest Ponderosa pine and Douglas-fir habitat types that historically experienced low severity underburns almost exclusively. This includes the Hot Dry and Warm Dry Region 1 Habitat Type Groups as described in (Milburn et al. 2015).

 Table 3. Percent (%) desired and current composition by dominance type for Warm Dry potential vegetation type group in each management area (MA)

Dominance Type	MA1 Existing Condition (%)	MA1 Desired Range (%)	MA2 Existing Condition (%)	MA2 Desired Range (%)	MA3 Existing Condition (%)	MA3 Desired Range (%)
Ponderosa pine	16	50-60	6	50-65	17	50-60
Douglas-fir	29	15-20	31	15-20	14	15-20
Lodgepole pine	3	5-12	13	5-15	13	10-15
Western larch and Douglas-fir	4	1-4	2	2-4	2	2-4
Grand fir	22	5-15	25	2-10	33	2-10
Seral stage grass and shrub	28	2-10	21	1-10	17	1-10



Figure 2. Example of desired within-stand characteristics for warmest and driest sites. Photo by Z. Peterson, South Fork Clearwater River in 2017

Within-Stand Characteristics of Moister Sites within Warm Dry Potential Vegetation Type Group<sup>4</sup>

**FW-DC-FOR-04.** Within-stand characteristics of Mod Warm Dry and Mod Warm Mod Dry habitat type groups of the Warm Dry potential vegetation type group forestwide: These stands are single or two-storied with live legacy trees and snags from past disturbance persisting well into the next generation. These live legacy trees and snags, which are important as habitat for cavity nesting or denning wildlife, are primarily the largest Ponderosa pine, and they are present and distributed across the habitat type groups.

**MA1-DC-FOR-01.** Density of the Mod Warm Dry and Mod Warm Mod Dry habitat type groups of the Warm Dry potential vegetation type group within Management Area 1: Natural disturbance processes promote resilient stands dominated by Ponderosa pine and Douglas-fir and provide for meeting desired conditions within Management Area 1.

**MA2-DC-FOR-01.** Density of Mod Warm Dry and Mod Warm Mod Dry habitat type groups of the Warm Dry potential vegetation type group within Management Area 2: Density may vary to promote vigorous stands dominated by Ponderosa pine or other dominance types given in Table 3 and provides habitat for wildlife or meeting other desired conditions.

**MA3-DC-FOR-01.** Density of Mod Warm Dry and Mod Warm Mod Dry habitat type groups of the Warm Dry potential vegetation type group within Management Area 3: Management promotes vigorous stands dominated by desired species in the rates shown in Table 3, with a preference towards Ponderosa pine, and provides for wildlife habitat, produces high volumes of timber, provides resistance to stand replacing fire, or meets other desired conditions.

**FW-DC-FOR-05.** Size Class Distribution within Management Area 1, Management Area 2, and Management Area 3: When measured across each management area, the Warm Dry potential vegetation type group consists of the distribution of size classes given in Table 4. Large Ponderosa pine and western larch legacy trees 20 plus inches in diameter that have survived previous disturbance events persist on the landscape as live trees and snags and continue to persist following vegetation treatments.

Size Class	MA1 Existing Condition (%)	MA1 Desired Range (%)	MA2 Existing Condition (%)	MA2 Desired Range (%)	MA3 Existing Condition (%)	MA3 Desired Range (%)
Seral grass and shrub	33	2–10	25	1–10	18	1–10
0–4.9" DBH	4	10–25	0	7–25	4	5–25
5–9.9" DBH	12	10–20	18	7–20	26	10–20
10–14.9" DBH	14	12–20	27	10–25	24	10–20
15–19.9" DBH	19	20–35	17	20–35	14	20–35
20" + DBH	18	10–25	13	15–25	14	15–28

Table 4. Existing condition and desired range of size class distribution (in percent) for Warm Dry potential vegetation type group in each management area (MA)

<sup>&</sup>lt;sup>4</sup> This includes the moister Douglas-fir and dry grand fir sites within the Warm Dry potential vegetation type group that historically experienced both low severity underburns and mixed severity fire. Northern Region habitat type groups included in this group are: Mod Warm Dry and Mod Warm Mod Dry as described in Milburn et al 2015.

**MA1 and MA2-DC-FOR-06.** Landscape Pattern and Patch Size within Management Area 1 and Management Area 2: Landscape and within-patch patterns reflect historic fire regimes within the types represented here, which typically included low severity underburns, mixed severity fire, and occasional stand replacing events. Patterns are guided by a combination of topography and land type changes or to meet desired conditions. Patch size reflects the variety, size, and scales of natural disturbances.

**MA3-DC-FOR-02.** Landscape Pattern and Patch Size within Management Area 3: The pattern on the landscape is a mosaic of size classes. Patches of different size classes vary in extent, consistent with historical wildfire patterns. Patches are generally bounded by ridges, streams, and other topographic features. Patches of the 0 to 4.9-inch diameter at breast height size class contain larger live trees in patterns consistent with historic fire regimes and endemic disturbance processes.

## Warm Moist Potential Vegetation Type Group

This potential vegetation type group includes low-elevation upland sites with deeper soils on North and East aspects, extensive mid-elevation moist upland sites, and most low and mid-elevation wet stream bottoms, riparian benches, and toe-slopes.

Mixed mesic forest types are found here, and the grand fir and Douglas-fir dominance types are currently the most common. Moist sites along streams and wetlands and toe slopes are often dominated by grand fir and western redcedar (*Thuja plicata*). The greatest conifer species diversity can be found here, although most sites are now dominated by grand fir and Douglas-fir due to fire exclusion, white pine blister rust, and past harvest practices that removed early seral species.

#### **Desired Conditions**

**FW-DC-FOR-06.** Composition for Management Area 1, Management Area 2, and Management Area 3: Within the warm moist potential vegetation type group, the amount of each dominance type found in each management area reflects the ranges shown in Table 5.

Dominance Type	MA1 Existing Condition (%)	MA1 Desired Range (%)	MA2 Existing Condition (%)	MA2 Desired Range (%)	MA3 Existing Condition (%)	MA3 Desired Range (%)
Ponderosa pine	0	5–20	1	5–20	2	10–20
Douglas-fir	28	5–10	20	5–10	11	2–5
Lodgepole pine	0	1–2	6	1–2	2	1–2
Western larch	0	5–10	1	5–10	2	5–15
Grand fir and western redcedar	18	15–25	15	15–20	17	10–20
Western white pine	0	10–20	1	15–25	3	25–40
Subalpine fir and Engelmann spruce	2	0–2	3	0–2	4	1–2
Douglas-fir and western larch	4	5–10	7	5–10	5	5–10
Grand fir	43	10–20	35	10–15	46	5–15
Seral stage grass and shrub	5	5–20	11	5–20	10	1–5

Table 5. Existing condition and desired range of dominance type and management area (in percent of MA) forWarm Moist potential vegetation type group

**FW-DC-FOR-07**. Within-stand characteristics for the Warm Moist potential vegetation type group for Management Area 1, Management Area 2, and Management Area 3: Within-stand structure for these stands is even-aged or two-aged with live legacy trees and snags from previous disturbance persisting
well into the next generation. These live legacy trees and snags, which are important as habitat for cavity nesting wildlife, are primarily the largest western larch, western white pine, Ponderosa pine, grand fir, and western redcedar and they are present and distributed across the potential vegetation type group.

**MA1-DC-FOR-02.** Density within Management Area 1—Natural disturbance processes promote resilient stands dominated by western white pine, western larch, and Ponderosa pine and provide for meeting desired conditions within Management Area 1.

**MA2-DC-FOR-02.** Density within Management Area 2—Density may vary to promote vigorous stands dominated by western white pine, western larch, or other dominance types given in Table 5 and provides habitat for wildlife or meeting other desired conditions.

**MA3-DC-FOR-03.** Density within Management Area 3—Management promotes vigorous stands dominated by desired species in the rates shown in Table 5, with a preference towards western white pine and western larch, and provides for wildlife habitat, produces high volumes of timber, provides resistance to stand replacing fire, or meets other desired conditions.

**FW-DC-FOR-08.** Size class distribution within Management Area 1, Management Area 2, and Management Area 3: Across each management area, the Warm Moist potential vegetation type group consists of the distribution of size classes given in Table 6. Large trees 20 plus inches in diameter that have survived previous disturbance events persist on the landscape as live trees and snags and continue to persist following vegetation treatments.

Size Class	MA1 Existing Condition (%)	MA1 Desired Range (%)	MA2 Existing Condition (%)	MA2 Desired Range (%)	MA3 Existing Condition (%)	MA3 Desired Range (%)
Seral grass and shrub	10	5–20	10	5–20	11	1–5
0–4.9" DBH	4	10–25	4	10–25	4	5–25
5–9.9" DBH	14	10–20	14	12–20	23	10–20
10–14.9" DBH	20	10–20	20	12–20	23	10–20
15–19.9" DBH	29	20–30	29	15–25	21	20–35
20" + DBH	23	10–20	23	10–25	19	15–33

Table 6. Existing condition and desired range for size class distribution by management area (in percent MA) for Warm Moist potential vegetation type group

**MA1 and MA2-DC-FOR-07.** Landscape pattern and patch size within Management Area 1 and Management Area 2: Landscape and within-patch patterns reflect historic fire regimes within the types represented here, which typically included mixed severity fire and stand replacing events. At smaller scales, patterns and patch size are guided by topography and land type changes or to meet desired conditions. Larger scale disturbances result in landscapes with high percentages of early seral conditions locally with some clumps of mature trees that survive. These large-scale disturbances contribute to forestwide desired conditions for smaller size classes. Forests resulting from these large disturbances regrow to provide landscapes with high percentages of mature forests, scattered clumps of old forest, and few early seral inclusions. These landscapes of mature forest contribute to desired conditions for larger size classes at the forestwide scale.

**MA3-DC-FOR-04.** Landscape pattern and patch size within Management Area 3: The pattern on the landscape is a mosaic of size classes. Patches of different size classes vary in extent, consistent with

typical historical fires and they are generally bounded by ridges, streams, and other topographic features. Patches of the 0 - 4.9" diameter at breast height size class contain larger live trees in patterns consistent with historic mixed severity fire patterns or addressing land type concerns or management objectives.

#### Cool Moist Potential Vegetation Type Group

The cool moist potential vegetation type group consists mainly of subalpine fir (*Abies lasiocarpa*), mountain hemlock (*Tsuga mertensiana*), and Engelmann spruce (*Picea engelmanii*) habitat types. These sites support the higher elevation forest types lying between the warmer uplands and the cold forest near the timberline.

On more moderate sites, species diversity can be high, with Douglas-fir, western larch (*Larix occidentalis*), western white pine (*Pinus monticola*), Engelmann spruce, lodgepole pine (*Pinus contorta*), subalpine fir, and grand fir forming various admixtures. Sites are generally too cool for western hemlock (*Tsuga heterophylla*), grand fir, and western redcedar to play a dominant role. Drier sites support more Douglas-fir while frost-prone sites support the lodgepole pine dominance type.

#### **Desired Conditions**

**FW-DC-FOR-09.** Composition for Management Area 1, Management Area 2, and Management Area 3: Within the cool moist potential vegetation type group, the amount of each dominance type found in each management area reflects the ranges shown in Table 7. On moderate sites within this potential vegetation type group, Douglas-fir, western white pine, and western larch dominate after stand-replacing disturbances; lodgepole pine and Engelmann spruce increase relative to the current condition on sites that are colder and more frost-prone; and whitebark pine is present and may dominate after disturbance on the coldest sites. Riparian sites tend to be dominated by Engelmann spruce and subalpine fir but include admixtures of grand fir, western white pine, western redcedar, and mountain hemlock. Whitebark pine is common on the colder habitat types within this potential vegetation type group, either as pure stands or in mixtures primarily with lodgepole pine, subalpine fir, Engelmann spruce, and alpine larch. A portion of this potential vegetation type group is dominated by seral grasses and shrubs; the table below gives desired percentages for each dominance type.

Dominance Type	MA1 Existing Condition (%)	MA1 Desired Range (%)	MA2 Existing Condition (%)	MA2 Desired Range (%)	MA3 Existing Condition (%)	MA3 Desired Range (%)
Douglas-fir	8	2–4	12	2–4	3	2–4
Lodgepole pine	10	20–30	19	20–30	12	20–30
Western larch	0	5–10	3	5–10	4	5–10
Grand fir and mountain hemlock	1	1–2	9	1–2	9	1–2
Western white pine	0	5–10	0	5–10	0	5–15
Subalpine fir and Engelmann spruce	53	25–40	41	25–40	60	25–35
Whitebark pine	0	2–10	1	2–10	0	2–10
Douglas-fir and western larch	0	1–2	0	1–2	1	1–2
Seral stage grass and shrub	28	5–25	16	5–25	10	5–25

Table 7. Existing condition and desired range of dominance type and management area (in percent of MA) for
Cool Moist potential vegetation type group

**FW-DC-FOR-10.** Within-stand characteristics for the Cool Moist potential vegetation type group within Management Area 1, Management Area 2, and Management Area 3: Where subalpine fir and Engelmann spruce dominate, stand level structure is often multi-storied. Where other species dominate, structure is even-aged or two-aged with live legacy trees and snags from previous disturbance persisting well into the next generation. These live legacy trees and snags, which are important as habitat for cavity nesting wildlife, are primarily the largest western larch, western white pine, Douglas-fir, and whitebark pine and they are present and distributed across the potential vegetation type group. Whitebark pine of all sizes is present on the colder habitat types within this potential vegetation type group.

**MA1-DC-FOR-03.** Density within Management Area 1—Natural disturbance processes promote resilient stands dominated by resilient dominance types and provide for meeting desired conditions within Management Area 1.

**MA2-DC-FOR-03.** Density within Management Area 2—Density may vary to promote vigorous stands dominated by western white pine, western larch, or other dominance types given in Table 7 and provides habitat for wildlife or meeting other desired conditions.

**MA3-DC-FOR-05.** Density within Management Area 3—Management promotes vigorous stands dominated by desired species in the rates shown in Table 7 with a preference towards seral species, and provides for wildlife habitat, produces high volumes of timber, provides resistance to stand replacing fire, or meets other desired conditions.

**FW-DC-FOR-11.** Size class distribution within Management Area 1, Management Area 2, and Management Area 3: Across each management area, the cool moist potential vegetation type group consists of the distribution of size classes given in Table 8. Large trees 20 plus inches in diameter that have survived previous disturbance events persist on the landscape as live trees and snags and continue to persist following vegetation treatments.

Size Class	MA1 Existing Condition (%)	MA1 Desired Range (%)	MA2 Existing Condition (%)	MA2 Desired Range (%)	MA3 Existing Condition (%)	MA3 Desired Range (%)
Seral grass and shrub	34	5–25	20	5–25	17	5–25
0–4.9" DBH	3	15–30	5	15–30	3	15–30
5–9.9" DBH	15	10–25	23	10–25	23	10–25
10–14.9" DBH	27	10–20	32	10–20	32	10–20
15–19.9" DBH	13	15–30	11	15–30	16	15–30
20" + DBH	8	5–10	9	5–10	8	5–10

Table 8. Existing condition and desired range for size class distribution by management area (in percent MA)for Cool Moist potential vegetation type group

**MA1 and MA2-DC-FOR-08.** Landscape pattern and patch size within Management Area 1 and Management Area 2: Landscape and within-patch patterns reflect historic fire regimes within the types represented here, which typically included mixed severity fire and stand replacing events. Patterns and patch size are guided by topography and land type changes or to meet desired conditions.

**MA3-DC-FOR-06.** Landscape pattern and patch size within Management Area 3: The pattern on the landscape is a mosaic of size classes. Patches of different size classes vary in extent, consistent with typical historical fires, and they are generally bounded by ridges, streams, and other topographic features.

Patches of the 0–4.9" diameter at breast height size class contain larger live trees in patterns consistent with historic mixed severity fire patterns and addressing land type concerns or management objectives.

### Cold Potential Vegetation Type Group

The cold potential vegetation type group consists of the coldest, high elevation sites supporting tree growth in the subalpine fir, mountain hemlock, whitebark pine (*Pinus albicaulis*), and alpine larch (*Larix lyallii*) habitat type series (Ferguson et al. 2005). Though some of the sites on the Nez Perce-Clearwater may have alpine larch on them, alpine larch-dominated stands generally do not occur in great enough abundance for it to be classified as one of the desired dominance types on the Nez Perce-Clearwater. Sites in the cold potential vegetation type group are generally too cold for Douglas-fir, western larch, and western white pine to play any substantial role. Whitebark pine has the potential to be a major stand component after fire and on the coldest sites.

#### Desired Conditions Cold Potential Vegetation Type Group

**FW-DC-FOR-13.** Composition for Management Area 1, Management Area 2, and Management Area 3: When measured across each management area, composition of the cold potential vegetation type group reflects the desired dominance types in Table 9. A portion of this potential vegetation type group is dominated by seral grasses and shrubs; the table below gives desired percentages for the portion that is dominated by trees.

Dominance Type	MA1 Existing Condition (%)	MA1 Desired Range (%)	MA2 Existing Condition (%)	MA2 Desired Range (%)	MA3 Existing Condition (%)	MA3 Desired Range (%)
Lodgepole pine	28	30–40	34	30–35	56	30–40
Subalpine fir and Engelmann spruce	46	3–10	26	5–15	26	3–10
Whitebark pine	0	35–50	1	35–50	0	35–50
Douglas-fir and western larch	4	0–5	0	0–5	6	0–5
Mountain hemlock	0	2–5	22	0–5	0	2–5
Seral stage grass and shrub	23	5–15	16	5–15	14	5–15

 Table 9. Existing condition and desired range of dominance type and management area (in percent of MA) for

 Cold potential vegetation type group

**MA1 and MA2-DC-FOR-09.** Within-stand characteristics for the cold potential vegetation type group within Management Area 1 and Management Area 2: Where subalpine fir and Engelmann spruce dominate, stand level structure is often multi-storied. Where other species dominate, structure is even-aged or two-aged with live legacy trees and snags from previous disturbance persisting well into the next generation. These live legacy trees and snags are present and distributed across the potential vegetation type group. Whitebark pine of all sizes is present on the colder habitat types within this potential vegetation type group.

**MA3-DC-FOR-07.** Within-stand characteristics for the Cold potential vegetation type group within Management Area 3: Where subalpine fir and Engelmann spruce dominate, stand level structure is often multi-storied. Where other species dominate, structure is even-aged or two-aged with live legacy trees and snags from previous disturbance persisting well into the next generation and providing habitat for cavity nesting wildlife. These live legacy trees and snags are primarily the largest western larch, Douglas-fir, and whitebark pine and they are present and distributed across the potential vegetation type group. Whitebark pine of all sizes is present on the colder habitat types within this potential vegetation type group.

**MA1-DC-FOR-04.** Density within Management Area 1—Natural disturbance processes promote resilient stands dominated by resilient dominance types and provide for meeting desired conditions within Management Area 1.

**MA2-DC-FOR-04.** Density within Management Area 2—Density may vary to promote vigorous stands dominated by dominance types given in Table 9 and provides habitat for wildlife or meeting other desired conditions.

**MA3-DC-FOR-08.** Density within Management Area 3—Management promotes vigorous stands dominated by desired species in the rates shown in Table 9 with a preference towards whitebark pine, and provides for wildlife habitat, produces timber volumes, provides resistance to stand replacing fire, or meets other desired conditions.

**FW-DC-FOR-12.** Size class distribution within Management Area 1, Management Area 2, and Management Area 3: Across each management area, the cold potential vegetation type group consists of the distribution of size classes given in Table 10.

 Table 10. Existing condition and desired range for size class distribution by management area (in percent management area) for Cold potential vegetation type group

Size Class	MA1 Existing Condition (%)	MA1 Desired Range (%)	MA2 Existing Condition (%)	MA2 Desired Range (%)	MA3 Existing Condition (%)	MA3 Desired Range (%)
Seral grass and shrub	27	5–20	17	5–15	36	5–15
0–4.9" DBH	6	15–30	10	15–30	11	15–30
5–9.9" DBH	33	5–25	34	7–25	28	10–25
10–14.9" DBH	26	5–15	28	7–15	22	5–15
15–19.9" DBH	6	25–50	10	25–50	0	25–50
20" + DBH	2	0–5	2	0–5	3	0–5

**MA1 and MA2-DC-FOR-05.** Landscape pattern and patch size within Management Area 1 and Management Area 2: Landscape and within-patch patterns reflect historic fire regimes within the types represented here, which typically included mixed severity fire and stand replacing events. Patterns and patch size are guided by topography and land type changes or to meet desired conditions.

**MA3-DC-FOR-09.** Landscape pattern and patch size within Management Area 3: The pattern on the landscape is a mosaic of size classes. Patches of different size classes vary in extent, consistent with typical historical fires, and they are generally bounded by ridges, streams, and other topographic features. Patches of the 0 - 4.9" diameter at breast height size class contain larger live trees in patterns consistent with historic mixed severity fire patterns addressing land type concerns or management objectives.

#### Objectives

Objectives for forestlands vary based on the management area and the potential vegetation type.

#### **Objectives Forestwide**

FW-OBJ-FOR-01. Restore aspen on 680 acres annually across the Nez Perce-Clearwater.

Objectives for Management Area 3 Warm Dry Potential Vegetation Type Group **MA3-OBJ-FOR-01.** Restore 18,832 acres within the warm dry potential vegetation type group through timber harvest every 5 years.

Objectives for Management Area 3 Warm Moist Potential Vegetation Type Group **MA3-OBJ-FOR-02.** Restore 34,440 acres within the warm moist potential vegetation type group through timber harvest every 5 years.

Objectives for Management Area 3 Cool Moist Potential Vegetation Type Group **MA3-OBJ-FOR-03.** Restore 5,840 acres within the cool moist potential vegetation type group through timber harvest every 5 years.

Objectives for Management Area 3 Cold Potential Vegetation Type Group **MA3-OBJ-FOR-04.** Restore 530 acres within the cold potential vegetation type group through timber harvest every 5 years.

Objectives for Management Area 2 across all Potential Vegetation Type Groups **MA2-OBJ-FOR-01.** Restore 27,118 acres through harvest or prescribed fire every five years.

Objectives for Management Area 2 by Potential Vegetation Type Group MA2-OBJ-FOR-02. Increase seral species component through artificial regeneration following wildfire every 5 years, per Table 11.

Objective	PVT group	Minimum reforestation target (acres)	Species
MA2-OBJ-FOR-02a	Warm Dry	250	Ponderosa pine
MA2-OBJ-FOR-02b	Warm Moist	250	western white pine and western larch (50/50)
MA2-OBJ-FOR-02c	Cool Moist	100	whitebark pine
MA2-OBJ-FOR-02d	Cold	100	whitebark pine

Table 11. Objectives for Management Area 2 by potential vegetation type (PVT) group

#### Standards

Standards for Management Area 3 across All Potential Vegetation Type Groups

**MA3-STD-FOR-01.** Within old growth where the cover type is Ponderosa pine, western larch, western white pine, Pacific yew, western redcedar, western hemlock, and whitebark pine, vegetation management activities shall not be authorized if the activities would likely modify the characteristics of the stand to the extent that the stand would no longer meet the minimum screening criteria of an old growth type. See glossary (Appendix 2) for old growth definitions.

#### Guidelines

# Guidelines for Management Area 2 and Management Area 3 across All Potential Vegetation Type Groups

**MA2 and MA3-GDL-FOR-01.** To ensure sufficient organic materials to maintain nutrient cycling and soil biology and to provide habitat structure for various terrestrial wildlife, the levels listed in Table 12 of downed coarse woody material greater than 3 inches should be retained onsite following regeneration

harvest and fuels management and site preparation activities. Coarse woody material greater than 12 inches in diameter is preferred. The following amounts are recommended by Graham et al (1994) and are intended to give general direction for retention of coarse woody debris within potential vegetation type groups. If sufficient downed coarse woody material is unavailable, standing retained trees and snags may be counted toward meeting the numbers in the table below. Exceptions to vary from the ranges listed may occur in areas near administrative sites, developed recreation sites, sensitive natural resources, or historic properties. Coarse woody material should be well distributed across each treatment unit.

PVT Group	Tons per Acre
Warm Dry	7–15
Warm Moist	17–33
Cool Moist	9–18
Cold	7–24

Table 12. Coarse woody materials to maintain, by potential vegetation type (PVT) group

**MA2 and MA3-GDL-FOR-02.** Vegetation management activities may be authorized in old growth stands where the cover type is Ponderosa pine, western larch, western white pine, Pacific yew, western redcedar, western hemlock, and whitebark pine only if the activities are designed to increase the resistance and resiliency of the stand to disturbances or stressors and if the activities are not likely to modify stand characteristics to the extent that the stand would no longer meet the minimum screening criteria definition of an old growth type (Green et al. 2011). See the glossary for the definitions of resistance and resilience.

**MA2 and MA3-GDL-FOR-03**. To prevent fragmentation of existing old growth where the cover type is Ponderosa pine, western larch, western white pine, Pacific yew, western redcedar, western hemlock, and whitebark pine, permanent road construction should be avoided in these old growth cover types unless a site-specific analysis determines that route is optimal considering other desired conditions.

**MA2 and MA3-GDL-FOR-04.** To promote resilient old growth cover types, stands other than those types described in MA2 and MA3-DC-FOR-10 should be managed to meet minimum screening criteria for old growth of the types specified in MA2 and MA3-DC-FOR-10, if present.

**MA2 and MA3-GDL-FOR-05.** When managing forested stands, to maintain snags (standing dead trees) over the long-term for wildlife habitat and ecosystem processes, snags should be retained and distributed to achieve the amounts specified in the table below (Table 13). If sufficient snags are not available to meet the numbers below, retain additional live trees  $\geq 15$ " diameter at breast height.

Dominance Group	Broad PVT Group	Minimum Number Snags per 100 Acres ≥15" DBH	Additional Snags per 100 Acres ≥20" DBH	Total Minimum Number Snags per 100 Acres
Lodgepole pine <sup>1</sup>	All	100	100	200
All Other Groups	Warm Dry	200	100	300
All Other Groups	Warm Moist	300	300	600
All Other Groups	Cool Moist and Cold	300	100	400

Table 13. Guidelines for minimum snags per 100 acres

<sup>1</sup>Lodgepole pine dominance group is listed separately due to this species limited attainment of ≥15" DBH class (Bollenbacher et al. 2009).

The distribution of snags does not need to be uniform—some areas may have more snags; others may have fewer or none. Snags are retained as the number of snags per 100 acres within the project area. Guideline FW-GDL-FIRE-04 identifies exceptions to snag retention requirements for safety purposes.

#### Guidelines for Management Area 3 across All Potential Vegetation Type Groups

**MA3-GDL-FOR-06.** Where present, a minimum of three live trees per acre  $\geq 15$ " diameter at breast height should be retained within harvest units to provide future snags and large tree structure. Retained live trees should reflect the distribution of diameters present within the project area and should focus on retention of the largest trees with the greatest potential to become a future snag. Trees retained for reasons other than snag recruitment count toward this number. The minimum is meant to be an average across an entire timber sale unit and does not mean that three live trees must be retained on every acre.

**MA3-GDL-FOR-07.** Where snags do not pose a risk to human life and safety, non-merchantable snags should be retained to benefit wildlife.

### **Carbon Storage and Climate Change**

Carbon storage is the process by which atmospheric carbon dioxide is taken up by trees, grasses, and other plants through photosynthesis and stored as carbon in soils and biomass, such as trunks, branches, foliage, and roots. Carbon storage in forests and wood products helps to offset sources of carbon dioxide to the atmosphere, such as deforestation, forest fires, and fossil fuel emissions. Sustainable forestry practices can increase the ability of forests to sequester atmospheric carbon while enhancing other ecosystem services, such as improved soil and water quality. Planting new trees and improving forest health through thinning and prescribed burning are some of the ways to increase forest carbon in the long run. Harvesting and regenerating forests can also result in net carbon storage in wood products and new forest growth.

Climate change is a variation in the usual weather patterns that occur in a particular place. This change can be measured and persists for an extended amount of time, usually decades or longer. Climate change may contribute to more frequent and intense extreme events and disturbances in addition to wildfire, including floods, drought, insect and disease outbreaks, and the spread of invasive species. Climate change impacts on aquatic and terrestrial ecosystems can also alter ecological processes and amplify other anthropogenic threats to species and habitats.

Resilient forests accommodate change and have the ability to quickly recover and regain normal function in the face of climate change. Healthy forests and grasslands with ecosystem integrity can best maintain function, structure, composition, and connectivity of ecosystems or are more able to adapt to the effects of a changing climate and other ecosystem drivers and stressors. Identifying climate change vulnerabilities and risks and incorporating adaptation strategies into management actions can improve the resiliency of forests and grasslands and associated aquatic and terrestrial ecosystems.

#### **Desired Conditions**

**FW-DC-CARB-01**. Carbon storage and sequestration potential are sustained through maintenance or enhancement of ecosystem biodiversity and function, and forests are resilient to natural disturbance processes and changing climates.

### Meadows, Grasslands, and Shrublands

The Nez Perce-Clearwater contains a mosaic of forest, grassland, meadows and shrubland vegetation. Meadows, grasslands, and shrublands support native plant communities and forage for animals throughout the planning area.

#### **Desired Conditions**

**FW-DC-GS-01**. Bluebunch wheatgrass habitat type groups are dominated by native bunchgrasses while conifers are absent or occur as scattered individuals. Dominant vegetation includes bluebunch wheatgrass (*Pseudoroegneria spicata*) and Sandbeurg's bluegrass (*Poa secunda*), along with a variety of native forbs, including arrowleaf balsamroot (*Balsamorhiza sagittata*), lupine (*Lupinus sericeus*), phlox (*Phlox longifolia*), and yarrow (*Achillea millefolium*). Individual species can vary greatly in the amount of production depending on growing conditions. Plant litter is a common component and is available for soil building and moisture retention. There is very little movement of plant litter off-site with natural plant mortality typically being low. Biological soil crusts are found on almost all soil types but are more commonly found in arid areas where plant cover is low, and plants are more widely spaced. Bare ground is present because of the warm dry nature of these sites but in low amounts. Invasive plant species either are not present or occur with low cover.

**FW-DC-GS-02**. Fescue habitat type groups are dominated by native grasses and sedges, including Idaho fescue (*Festuca idahoensis*), prairie junegrass (*Koeleria macrantha*), Sandberg's bluegrass, western needlegrass (*Achnatherum occidentale*), elk sedge (*Carex geyeri*), Hood's sedge (*Carex hoodii*), and assorted native forbs, including cinquefoil (*Potentilla gracilis, P. glandulosa*), pearly pussytoes (*Antennaria anaphaloides*), biscuitroot (*Lomatium triternatum*), buckwheat (*Eriogonum heracleoides*), pinkfairies (*Clarkia pulchella*), and geum (*Geum triflorum*). Biological soil crusts are found on almost all soil types while these moister habitats generally support more lichens and mosses than other types of crusts. Bare ground is typically low across most sites; plant litter is the dominant ground cover and available for soil building and moisture retention. Plant litter rarely moves off-site. Conifers are absent or occur as scattered individuals. Invasive plant species either are not present or occur with low cover.

**FW-DC-GS-03.** Xeric shrubland habitat type groups are dominated by an over story of mountain mahogany (*Cercocarpus ledifolius*) and smooth sumac (*Rhus glabra*). The understory vegetation is comprised of a variety of native grasses and forbs, including those species occurring within the bluebunch wheatgrass habitat type group. Canopy cover varies depending on the site and growing conditions but is typically low to moderate. Biological soil crusts are found on almost all soil types but are more commonly found in arid areas where plant cover is low, and plants are more widely spaced. Bare ground is present because of the warm dry nature of these sites but in low amounts. Conifers are absent or occur as scattered individuals. Invasive plant species either are not present or occur with low cover.

**FW-DC-GS-04**. Wetland graminoid and riparian shrub habitat type groups are comprised of a mosaic of communities dominated by native species which tolerate and are adapted to periodic flooding and an associated seasonally high-water table. These communities may be dominated by native graminoids, such as water sedge (*Carex aquatilis*) and tufted hairgrass (*Deschampsia cespitosa*), and a variety of native forbs. Native shrubs include willow (*Salix spp.*), dogwood (*Cornus spp*), and alder (*Alnus spp.*). Native hardwood trees such as aspen (Populus tremuloides), birch (*Betula occidentalis*), and cottonwood (*Populus spp.*) occur with other native mesic species in both riparian and upland communities. Invasive plant species either are not present or occur with low cover.

**FW-DC-GS-05.** Subalpine herbaceous and shrub habitat type groups occupy harsh high elevation sites, resulting in short stature and relatively slow growth for both shrubs and herbaceous species. These

communities are dominated by native grasses, sedges, forbs, and shrubs, including Idaho fescue, prairie junegrass, Cusick's bluegrass (*Poa cusickii*), Hood's sedge, nettleleaf horsemint (*Agastache urticifolia*), woodland strawberry (*Fragaria vesca*), shrubby cinquefoil (*Potentilla fruticosa*), and mountain heather (*Cassiope spp.*). Invasive plant species either are not present or occur with low cover.

**FW-DC-GS-06.** Mollisol soils are dominated by native grasses, forbs, and shrubs and are largely free of conifer trees. Early seral conifer species may occur as scattered individuals. Grasslands and shrublands on mollisol soils do not decrease in size over time from conifer encroachment.

**FW-DC-GS-07.** Dasynotus (*Dasynotus daubenmirei*) and Pacific dogwood (*Cornus nuttallii*) persist in transitional shrubland and forested habitats throughout their ranges on the Middle Fork Clearwater River and its major tributaries.

**FW-DC-GS-08.** Douglas clover (*Trifolium douglasii*) and sticky goldenweed (*Pyrrocoma hirta* var. *sonchifolia*) persist in seasonally moist meadows over basalt on the Palouse Ranger District, particularly in the headwaters of the Potlatch River.

#### Objectives

**FW-OBJ-GS-01.** Maintain existing meadows and grasslands by reducing conifer encroachment into meadows and grasslands on a minimum of 500 acres every five years.

### **Fire Management**

Fire is a necessary and critical ecological function across the Nez Perce-Clearwater that plays a central role in providing quality habitat for both plant and wildlife species. Wildland fire refers to both wildfire (unplanned ignitions) and prescribed fire (planned ignitions). Wildland fire management includes all activities for the management of wildland fires to meet land management objectives. Fire management includes the entire scope of activities from planning, prevention, fuels or vegetation modification, prescribed fire, hazard mitigation, fire response, rehabilitation, monitoring, and evaluation.

The management of wildland fire influences whether fire effects have beneficial or non-beneficial impacts on resources, such as air and water quality, wildlife habitat, recreation areas, and communities. Wildland fire management incorporates a spectrum of responses ranging from full suppression to managing for resource objectives. Suppression is a management strategy used to extinguish or confine all or a portion of a wildfire. Fuels management is the practice of controlling flammability and reducing resistance to control wildland fuels through mechanical, chemical, biological, or manual means or by fire in support of land management objectives. Fuels treatments result in a change in the amount, configuration, and spacing of live and dead vegetation, creating conditions that result in more manageable fire behavior and reduced intensity during future wildland fire events.

#### Goals

**FW-GL-FIRE-01.** Fire adapted communities: The Nez Perce-Clearwater works with adjacent communities to manage vegetation within and adjacent to the National Forests to withstand a wildfire without loss of life and property.

**FW-GL-FIRE-02.** Wildfire response: The Nez Perce-Clearwater and local, state, tribal, and other federal agencies support one another with wildfire response, including engagement in collaborative planning and the decision-making processes that consider all lands and recognize the interdependence and statutory responsibilities among jurisdictions. All jurisdictions that are impacted by wildfire participate in making and implementing safe, effective, efficient risk-based wildfire management decisions.

**FW-GL-FIRE-03.** The Nez Perce-Clearwater works with adjacent communities, landowners, permittees, and state, local, and other federal agencies to promote a collective understanding about wildfire risk and that wildland fire is an ecological process.

**FW-GL-FIRE-04.** Fire hazards in wildland urban interface areas are continually monitored. Project development, planning, and treatments are coordinated with local and tribal governments, agencies, and landowners to reduce the risk from wildland fire.

#### **Desired Condition**

**FW-DC-FIRE-01**. Restore and maintain landscapes: Landscapes across the Nez Perce-Clearwater are resilient to fire-related disturbances in accordance with management objectives. Natural fuel conditions emulate the structure, species mix, spatial pattern, extent, and resiliency of the historic fire regime of the area. Wildland fires burn with a range of intensity, severity, and frequency that allows ecosystems to function in a healthy and sustainable manner and meet desired conditions for other resources.

**FW-DC-FIRE-02**. The full range of fire management activities, including both prescribed fire and natural wildfire, are recognized and used by Nez Perce-Clearwater administrators as an integral part of achieving ecosystem sustainability, including interrelated ecological, economic, and social components, such as improved ecosystem resilience and wildlife habitat, protection of property, other values at risk, and public safety.

**FW-DC-FIRE-03**. Fuels conditions adjacent to private property, administrative sites, and infrastructure promote lessened fire behavior that facilitates safe, effective fire management opportunities. Wildfire occurs at smaller scales and lesser severities in areas where resource objectives and infrastructure limit the desirability of a wildland fire event.

**FW-DC-FIRE-04.** The role of wildland fire is recognized as an important component of fire adapted ecosystems of the Nez Perce-Clearwater and is increasingly accepted and understood by the public, partners, and within the agency.

#### Objectives

**FW-OBJ-FIRE-01.** Based on the historical disturbance regimes, use wildland fire and other vegetation treatments, as described in Objectives 2 and 3, to improve or maintain desired forest vegetation conditions on 530,000 to 645,000 acres per decade over the life of the plan.

**FW-OBJ-FIRE-02.** Mitigate hazardous fuels on 227,242 acres per decade. Treatment includes initial entry and maintenance to ensure desired conditions are achieved. These acres are a subset of the acres in FW-OBJ-FIRE-01, not in addition to.

**FW-OBJ-FIRE-03.** Allow fire to play its natural role, where appropriate and desirable, to reduce the risk of uncharacteristic and undesirable wildland fires by managing natural, unplanned ignitions to meet desired conditions and objectives as defined in the Land Management Plan on 360,258 acres per decade over the life of the plan. These acres are a subset of the acres in FW-OBJ-FIRE-01, not in addition to.

#### Standards

**FW-STD-FIRE-01.** All wildfires shall have a management response that considers risk to life and safety, considering the costs and effects to resources and values at risk.

#### Guidelines

**FW-GDL-FIRE-01.** To restore fire as an ecological process, wildfire management strategy and tactics should utilize the opportunity to integrate wildland fire into other disturbances on the landscape. Exceptions to this guideline may occur to mitigate risk to responders or the public and protect other values at risk.

**FW-GDL-FIRE-02.** To prevent expansion of invasive plant species, planned ignitions in areas highly susceptible to weed invasion should be planned and implemented with design features to address the spread of invasive species. Follow national and regional guidelines to prevent invasive species transport on wildland fire mobile equipment.

**FW-GDL-FIRE-03.** To maximize firefighter safety and ensure escape routes are available for firefighters and the public in the event of a wildfire, snags should not be retained when working within close proximity to the wildland urban interface and intermix, administrative sites, permitted infrastructure, or near roads that serve as fire fighter or public escape routes.

### **Invasive Species**

A species is considered invasive if it meets two criteria: (1) it is a nonnative organism to the ecosystem under consideration, and (2) its introduction causes, or is likely to cause, economic or environmental harm or harm to human, animal, or health (Executive Order 13751, 2016). Invasive species include all taxa, including plants, such as state and county designated noxious weeds; vertebrates; invertebrates, such as the emerald ash borer and non-native mussel larvae; and pathogens, such as blister rust or white-nosed syndrome fungus. The Idaho Invasive Species Act of 2008 defines an invasive species as "species not native to Idaho, including their seeds, eggs, spores, larvae or other biological material capable of propagation, that cause economic or environmental harm and are capable of spreading in the state." The term 'invasive species' does not include crops, improved forage grasses, domestic livestock, or other beneficial nonnative organisms. The 2012 Planning Rule identifies invasive species as a "stressor" to natural processes and requires the responsible official to consider stressors when developing plan components for integrated resource management to provide for ecosystem services and multiple uses in the plan area 36 CFR 219.10.

Invasive species management activities on the Nez Perce-Clearwater are currently guided by conditions and constraints of specific Environmental Impact Statements or Environmental Assessments for management and treatment of invasive species. Invasive plant management priorities, objectives, and activities on the Nez Perce-Clearwater are coordinated and collaborated through participation in several organized Cooperative Weed Management Areas. The Nez Perce-Clearwater will follow all laws, regulations, and policies that relate to managing National Forest System land. The Land Management Plan is designed to supplement, not replace, direction from these sources. Other Forest Service direction, including laws, regulations, policies, executive orders, and Forest Service directives found in manuals and handbooks, are not repeated in the Land Management Plan.

For other plan components related to invasive plant and aquatic species see FW-GDL-FIRE-02, FW-DC-GS-01, FW-DC-GS-02, FW-DC-GS-03, FW-DC-GS-04, FW-DC-GS-05, FW-GL-WTR-01, FW-STD-WTR-05, FW-DC-WLMU-06, MA1-OBJ-WLMU-01, and FW-DC-ED-01.

#### Goals

**FW-GL-INV-01.** The Nez Perce-Clearwater actively participates in Cooperative Weed Management Areas, which are used to determine weed treatment priorities, projects, budgets, and annual programs.

Public awareness is promoted using various forms of outreach through the Cooperative Weed Management Areas.

**FW-GL-INV-02**. The Nez Perce-Clearwater works with federal, state, and county agencies, tribes, nongovernment organizations, permittees, and adjacent landowners to support integrated pest management, including invasive species prevention, early detection, and rapid response, control and containment, restoration and rehabilitation, and inventory and monitoring activities.

#### **Desired Conditions**

**FW-DC-INV-01.** Invasive species either are not present or occur at low levels to allow watersheds, vegetation communities, and aquatic ecosystems to retain their inherent resilience and resistance to respond and adjust to disturbances. Plant communities retain their historic diversity and provision of values to fauna.

#### Objectives

**FW-OBJ-INV-01.** Treat 6,000 acres annually to contain or reduce non-native invasive plant density, infestation area, or occurrence. Early detection and rapid response to new invaders will be a priority. Protection or enhancement for other resource concerns will be considered when developing invasive weed treatment priorities.

#### Guidelines

**FW-GDL-INV-01.** To reduce the probability of establishment or expansion of invasive weeds, management activities prone to significant soil disturbance or exposure should be planned and implemented with design features to address the potential spread of invasive weeds.

**FW-GDL-INV-02**. To prevent the introduction of non-native species, equipment operated by Forest Service employees and agency-authorized personnel should be inspected and cleaned for aquatic invasive species prior to use in a water body or when moving between subbasins (HUC08) during non-emergency operation, including pumps used to draft water from water bodies, water tenders, and helicopter buckets.

**FW-GDL-INV-03.** To reduce the probability of establishment or expansion of invasive plant species, when rehabilitating areas burned by wildfire and affected by wildfire suppression, measures should address invasive species management as part of post-fire habitat restoration.

### **Soils Resource**

Soils are an integral part of ecosystems, their function, and the above and below ground interaction of organisms. The National Forest Management Act states that management activities on National Forest System lands will not produce substantial and permanent impairment of soil productivity. Productivity is maintained by establishing soil quality standards. Since 1999, physical soil disturbance has been the focus of soil management on National Forest System lands. In 2010, the Forest Service Manual Chapter 2550 titled *Soil Management* was revised at the national level. The emphasis of soil management was changed to include long-term soil quality and ecological function. The manual defines six soil functions: soil biology, soil hydrology, nutrient cycling, carbon storage, soil stability and support, and filtering and buffering. These functions all contribute to ecological resilience. The objectives of the national direction on National Forest System lands are 1) to maintain or restore soil quality and 2) to manage resource uses and soil resources to sustain ecological processes and function so that desired ecosystem services are provided in perpetuity. In order to provide for multiple uses and ecosystem services in perpetuity, these six soil functions need to be active. The following components do not apply to intensively developed

sites, such as mines, developed recreation sites, administrative sites, rock quarries, trails, or system roads (Region 1 Supplement FSM 2500-2014-1). For other components related to soils see FW-DC-GS-01, FW-DC-GS-02, FW-DC-GS-03, FW-DC-GS-06, FW-OBJ-WTR-05, MA2 and MA3-GDL-FOR-01, FW-STD-TBR-03, FW-STD-TBR-11, FW-GDL-GRZ-03, and FW-DC-ES-01.

#### **Desired Conditions**

FW-DC-SOIL-01. Soil productivity and function contribute to the long-term resilience of ecosystems.

**FW-DC-SOIL-02.** Soil organic matter and down woody material support healthy microbial populations, protect soil from surface erosion, facilitate soil moisture retention, provide nutrients, and maintain soil development and biochemical processes.

**FW-DC-SOIL-03.** Volcanic ash-influenced soils are intact and retain unique properties, including high soil porosity and high water and nutrient holding capacity.

#### Objectives

**FW-OBJ-SOIL-01.** Restore 175 to 200 acres of soil impaired from past management actions within timber harvest units annually.

#### Standards

**FW-STD-SOIL-01.** Land management activities shall be designed and implemented in a manner that maintains soil function and productivity.

**FW-STD-SOIL-02.** To maintain long-term soil productivity, impaired soil function created through management activities, including fire suppression, shall be rehabilitated to reestablish soil function to the appropriate site potential. Limited short-term or site-scale effects from soil rehabilitation actions may be acceptable when they support long-term benefits to soil resources.

**FW-STD-SOIL-03.** Project specific best management practices and design features shall be incorporated into land management activities as a principal mechanism for protecting soil resources.

#### Forestwide Guidelines

**FW-GDL-SOIL-01.** To maintain soil stability, ground-disturbing management activities should not occur on field verified mass movement areas if they have the potential to trigger a slope failure. Vegetation management activities may be authorized to provide for long-term slope stability.

**FW-GDL-SOIL-02.** Project activities should provide sufficient effective ground cover, such as litter, fine, and coarse wood material, or vegetation with a post-implementation target of 85 percent aerial extent of an activity area to retain soil moisture, support soil development, provide nutrients, and reduce soil erosion. The depth and distribution of organic matter should reflect the amounts that occur for the local ecological type and natural wildland fire regime.

#### Guidelines for Management Area 2 and Management Area 3

**MA2 and MA3-GDL-SOIL-01.** To maintain soil productivity, ground-based equipment used for vegetation and fuels management should only operate on slopes less than 45 percent. Tractor skidding of logs should only occur on slopes less than 35 percent to limit detrimental soil disturbance. Exceptions can be authorized where soil, slope, and equipment are determined appropriate to maintain soil functions.

**MA2 and MA3-GDL-SOIL-02.** To limit additional soil disturbance, temporary roads, skid trails, and landings should be located on existing disturbed areas before creating new soil disturbance, where practical and would not exacerbate erosion.

**MA2 and MA3-GDL-SOIL-03.** When conducting timber harvest activities that have the potential to impair soil function and productivity, areas of impaired soil function from past management activities should be treated to facilitate long-term soil productivity and function.

**MA2 and MA3-GDL-SOIL-04**. To maintain long-term soil productivity, when conducting post wildland fire vegetation management activities, avoid permanent soil impairment on soils that have verified high soil burn severity.

MA2 and MA3-GDL-SOIL-05. After a road is decommissioned or after cessation of management activities on temporary roads, soil function appropriate to the site potential should be restored using demonstrably effective methods.

# Aquatic Ecosystems

Direction related to aquatic ecosystems is intended to manage for healthy aquatic and riparian ecosystems within the natural range of variation; provide clean water, abundant fish populations, places for recreation and fishing; conserve and restore habitat for fish listed under the Endangered Species Act and aquatic species of conservation concern; and prevent future listings of fish, wildlife, and plants, as well as meet Clean Water Act requirements. Riparian management zones also provide wildlife habitat, forage, increased biodiversity, and wildlife corridors, enabling connectivity within river systems. Across the Nez Perce-Clearwater, PIBO stream monitoring data indicates stream condition indicators have been generally improving over the past two decades but remain largely outside of reference conditions in areas with a history of management practices causing degradation. Legacy effects from past timber harvest practices, poor or insufficient road design, grazing, and fire suppression continue to result in a departure from the natural range of variation in some watersheds. Some of these departures from reference conditions are recognized in Endangered Species Recovery Plans and 5-Year Status Reviews for listed fish as limiting factors impeding recovery of the species.

The desired conditions for aquatic ecosystems represent riparian and stream conditions within the natural range of variation that could be achieved through purposeful efforts to ameliorate habitat impairments. Desired conditions for aquatic ecosystems are described in five groups of plan components (WTR, RMZ, CWN, ARINF, and ARREC) that are referred to in the plan, collectively, as "aquatic and riparian desired conditions." Aquatic and riparian desired conditions include key physical features of watersheds and riparian areas that drive natural habitat-forming processes in streams. Appendix 4 – Management Approaches and Possible Actions – provides examples of ways to assess departure from desired conditions; assess potential effects of management actions that may affect progress toward achieving desired conditions; and identify potential aquatic restoration opportunities.

Objectives for aquatic ecosystem components help guide restoration actions to improve stream conditions for listed fish and suggest the amounts improvements that will be implemented over various time periods. The objectives include a variety of actions that might be done to restore aquatic environments, but those actions are not needed in all places. Management approaches offer examples for identifying the types of aquatic restoration that help alleviate the factors most limiting the production of listed fish at the stream reach and watershed scales. The conservation watershed network identifies areas where those restoration actions are emphasized.

Endangered Species Recovery Plans and 5-Year Status Reviews for listed fish species provide additional up-to-date information on the status of fish populations within the Nez Perce-Clearwater and they identify habitat conditions that are limiting fish survival and production. This information, used in conjunction with plan components for aquatic ecosystems, will help guide priorities when developing aquatic restorations actions to help maximize the effectiveness of restoration efforts.

## Water and Aquatic Resources

The Nez Perce-Clearwater contains portions of fourteen subbasins that drain primarily into the Salmon River and Clearwater River Basins (Appendix 1). The watersheds, rivers, and streams of the Nez Perce-Clearwater provide many ecological, economic, and social benefits. Clean water is a critical resource with over 9,500 miles of perennial streams and 3,800 acres of lakes and ponds supporting high value recreation, municipal water, and habitat for unique and diverse populations of fish and wildlife. Tens of thousands of people rely on water from the national forests for drinking water, recreation, agriculture, industry, hydropower generation, and other uses.

This section provides forestwide direction for overall watershed health. The following desired conditions apply at the larger (for example, watershed) scale (10- or 12-digit hydrologic unit scale), not at particular sites such as stream reaches. The national hydrologic unit is the basis for defining the specific scales at which the watershed desired conditions apply. The three watershed scales most relevant to the implementation of the forest plan are subbasin (8-digit hydrologic unit), watershed (10-digit hydrologic unit), and subwatershed (12-digit hydrologic unit). Individual project assessments often use data collected at finer scales, such as the subwatershed, drainage, valley segment, site, or stream reach scale. For other components related to water and aquatic resources see FW-STD-TBR-03, FW-GDL-ES-01, FW-DC-ES-01, FW-GDL-GRZ-01, FW-STD-EM-01, FW-OBJ-TT-02, FW-OBJ-GS-01, FW-DC-GS-04, FW-OBJ-TE-01, FW-DC-TE-05, FW-DC-TE-02, FW-DC-MWTR-01, FW-STD-MWTR-01.

### Goals

**FW-GL-WTR-01.** The Nez Perce-Clearwater works with appropriate agencies to control the expansion of aquatic invasive species.

**FW-GL-WTR-02.** The Nez Perce-Clearwater builds and maintains partnerships to fund and implement projects that result in improved water quality and watershed and stream conditions.

**FW-GL-WTR-03.** The Nez Perce-Clearwater works with partners to improve aquatic habitat, increase resiliency, and enhance ecological integrity by improving habitat for beaver where appropriate.

### **Desired Conditions**

**FW-DC-WTR-01.** National Forest System lands provide the distribution, diversity, and complexity of watershed and landscape-scale features including natural disturbance regimes and the aquatic and riparian ecosystems to which species, populations, and communities are uniquely adapted. Watersheds and associated aquatic ecosystems retain their inherent resilience to respond and adjust to disturbances, including climate change, without long-term, adverse changes to their physical or biological integrity.

**FW-DC-WTR-02.** Spatial connectivity exists within or between watersheds. Lateral, longitudinal, and drainage network connections include floodplains, wetlands, upslope areas, headwater tributaries, and intact habitat refugia. These network connections provide chemically and physically unobstructed routes to areas critical for fulfilling life history requirements of aquatic, riparian-associated, and many upland species of plants and animals.

**FW-DC-WTR-03**. Aquatic habitats contribute to ecological conditions capable of supporting selfsustaining populations of native species and diverse plant, invertebrate, and vertebrate aquatic and riparian-dependent species. Aquatic habitats are key contributors to the recovery of threatened and endangered fish species and provide important habitat components for all native aquatic species.

**FW-DC-WTR-04**. Instream habitat conditions for managed watersheds move in concert with or towards reference conditions. Aquatic habitats are diverse, with channel characteristics and water quality reflective of the climate, geology, and natural vegetation of the area. Instream habitat conditions across the Nez Perce-Clearwater, such as large woody material, percent pools, residual pool depth, median particle size, and percent fines are within reference ranges as defined by agency monitoring (for example, PIBO) and match the frequency distribution of comparable reference sites for a given channel type, channel size, climate, and geomorphic setting.

**FW-DC-WTR-05**. Water quality, including groundwater, meets or exceeds applicable state water quality standards, fully supports designated beneficial uses, and is of sufficient quality to support surrounding communities, municipal water supplies, and natural resources. The Nez Perce-Clearwater has no documented lands or areas that are delivering water, sediment, nutrients, or chemical pollutants that would result in conditions that violate the State of Idaho's water quality standards.

**FW-DC-WTR-06**. Sediment delivery to streams is of the types, quantities, and rates that support the natural instream sediment transport and storage rates and instream sediment substrate composition. The sediment regime in water bodies is not chronically affected by management activities to the extent that the availability of functioning spawning areas and interstitial spaces are reduced.

**FW-DC-WTR-07**. Instream flows are sufficient to create and sustain riparian, aquatic, and wetland habitats and to retain patterns of sediment, nutrient, and wood routing. The timing, magnitude, duration, and spatial distribution of peak, high, and low flows are retained. Stream flow regimes maintain riparian ecosystems and natural channel and floodplain dimensions. Stream channels transport sediment and woody material over time while maintaining reference dimensions (for example, bankfull width, depth, entrenchment ratio, slope, and sinuosity).

**FW-DC-WTR-08.** Groundwater dependent ecosystems, including peatlands, bogs, fens, wetlands, seeps, springs, riparian areas, groundwater-fed streams and lakes, and groundwater aquifers, persist in size and seasonal and annual timing and exhibit water table elevations within the natural range of variability. Surface and groundwater flows provide late-season stream flows, cold water temperatures, and sustain the function of surface and subsurface aquatic ecosystems.

**FW-DC-WTR-09**. Beavers are present in watersheds where their activities benefit ground water, surface water, and aquatic habitat complexity, and where their activities support conservation and recovery of imperiled aquatic species.

**FW-DC-WTR-10.** Critical habitat components (physical and biological features) provide the ecological conditions necessary to achieve species recovery. Spawning, rearing, and migratory habitats are widely available and inhabited. Listed aquatic species have access to historic habitat and appropriate life history strategies (for example, bull trout resident, fluvial, adfluvial; and anadromy for salmon and steelhead) are supported.

**FW-DC-WTR-11.** Water cooling mechanisms in unconfined channels that are dependent on the exchange of surface water and groundwater are functioning at full potential. Cooling mechanisms include dynamic

scouring and bar formation, activation of side channels during high flow events, and inundation of the full floodplain extent during floods with an approximate 5- to 10-year return interval.

**FW-DC-WTR-12.** Watershed restoration projects promote the long-term ecological integrity of aquatic ecosystems and conserve the genetic integrity of native species.

#### Objectives

**FW-OBJ-WTR-01**. Complete the actions identified in watershed restoration action plans for 15 priority watersheds as identified under the Watershed Condition Framework process every 15 years.

**FW-OBJ-WTR-02**. Enhance or restore 50 to 100 miles of stream habitat within naturally unconfined channels every five years to maintain or restore connectivity, structure, composition, and function of habitat for fisheries and other aquatic species in streams with legacy effects that caused channels to become straightened or incised, impaired beaver habitat, or diminished floodplain capacity. Activities include, but are not limited to, berm removal, large woody debris placement, streamside road decommissioning, riparian planting, beaver dam analogs, and process-based restoration and floodplain restoration.

**FW-OBJ-WTR-03.** Enhance or restore stream habitat on five miles, every five years, in naturally confined channels to maintain or restore step pool structure, composition, and function of habitat for fisheries and other aquatic species. Activities include, but are not limited to, improving stream complexity, large wood debris or boulder placement, and riparian planting.

**FW-OBJ-WTR-04**. Reconnect 10 to 20 miles of habitat in streams every five years where passage barriers created by roads or culverts are limiting the distribution of fish or other aquatic species of concern.

**FW-OBJ-WTR-05**. Improve soil and watershed conditions on 3,000 to 4,000 acres every five years, emphasizing actions in priority watersheds and Conservation Watershed Network watersheds. This includes non-system road decommissioning.

#### Standards

**FW-STD-WTR-01**. New stream diversions and associated ditches shall have screens placed on them to prevent capture of fish and other aquatic organisms, using criteria established by the U.S. Fish and Wildlife Service or the National Marine Fisheries Service, when listed fish may be present.

**FW-STD-WTR-02.** Project-specific best management practices (BMPs), including both federal and state BMPs, shall be incorporated into project planning as a principal mechanism for controlling non-point pollution sources, to meet water quality desired conditions, and to protect beneficial uses.

**FW-STD-WTR-03**. Portable pump set-ups and fuel containers in riparian management zones shall include appropriate containment and cleanup provisions for fuel spills.

**FW-STD-WTR-04**. Where aquatic and riparian desired conditions are being achieved, projects shall maintain those conditions. Where aquatic and riparian desired conditions are not yet achieved, and to the degree that project activities would contribute to those conditions, projects shall restore or not retard attainment of desired conditions. Short-term adverse effects from project activities may occur when they support the long-term recovery of aquatic and riparian desired conditions and federally listed species. Exceptions to this standard include situations where Forest Service authorities are limited (1872 Mining Law, state water right, etc.). In those cases, project effects shall not retard attainment of desired conditions for watersheds, to the extent possible within Forest Service authorities.

**FW-STD-WTR-05.** When drafting water, pumps shall be screened to prevent capture or harm of fish and aquatic organisms. Pumping sites shall be located away from spawning gravels. To prevent the spread of invasive species, pumps, charged hoses, and drafted water shall not be backflushed or discharged into stream channels, wetlands, or other water bodies.

#### FW-STD-WTR-04 MANAGEMENT APPROACH

See Stream Conditions Indicator Assessment in Management Approaches (Appendix 4) of the Land Management Plan for example methodology to support conclusion that actions do not retard attainment of aquatic and riparian desired conditions.

FW-STD-WTR-06. To restore watersheds, management activities in watersheds

with approved total maximum daily loads shall be designed to comply with the total maximum daily load allocations following project implementation.

**FW-STD-WTR-07**. Large woody debris shall not be removed from stream channels or floodplains unless it threatens public safety, such as fire ingress/egress; critical infrastructure, such as mid-channel bridge piers; or for the implementation of restoration projects when there will be a net increase in the amount of woody debris in the RMZ post project.

#### Guidelines

**FW-GDL-WTR-01**. To prevent injury to fish and other aquatic organisms, screens should be installed when reconstructing or conducting maintenance on existing stream diversions. Screens should meet U.S. Fish and Wildlife Service or National Marine Fisheries Service screen criteria unless site characteristics preclude conventional screen designs.

**FW-GDL-WTR-02**. Water drafting sites should be located and managed to minimize adverse effects on stream channel stability, sedimentation, and instream flows needed to maintain riparian resources, channel conditions, and fish habitat.

**FW-GDL-WTR-03**. To avoid adverse effects to spawning and staging fish, their eggs, and embryos, instream activities, and near-stream activities with the potential to disturb spawning fish and directly deliver sediment to spawning habitat, should be implemented in accordance with State of Idaho instream work window guidelines.

**FW-GDL-WTR-04**. To maintain quality and quantity of water flows to, within, or between groundwater dependent ecosystems, new or reconstructed groundwater use developments such as recreation and administrative sites, drinking water wells, or wastewater facilities should not:

• Be developed in riparian management zones (unless no alternatives exist);

- Measurably lower river flows, lake levels, or flows to wetlands or springs; or
- Discharge pollutants directly to surface water or groundwater unless covered by a National Pollutant Discharge Elimination System permit.

**FW-GDL-WTR-05**. Firelines should be located and configured to minimize sedimentation to waterbodies, limit capture of overland and stream flows, and restrict development of unauthorized roads and trails. Firelines should be restored following suppression or prescribed fire activities.

**FW-GDL-WTR-06**. To conserve Pacific lamprey, western ridged mussel, and western pearlshell mussel populations, individuals should be re-located to an alternative site with suitable habitat prior to dewatering channel work proposed in areas containing habitat for these species.

### **Riparian Management Zones**

Riparian management zones are areas where riparian-dependent resources and aquatic species receive primary emphasis and management activities are subject to specific plan components, including standards and guidelines. They are not intended to be treated as 'no management' zones, however, since management actions may be essential to achieving or maintaining desired riparian conditions. Riparian management zones include traditional riparian corridors, wetlands, intermittent streams, and other areas that maintain the integrity of aquatic ecosystems. In the past, riparian management zones have been referred to as riparian habitat conservation areas (RHCAs) or riparian conservation areas (RCAs). For other plan components related to riparian management zones, see FW-DC-TE-02, FW-DC-TE-04, FW-DC-TE-05, FW-OBJ-TE-01, FW-DC-GS-04, FW-OBJ-GS-01, FW-OBJ-TT-02, FW-OBJ-INF-01, and FW-GDL-GRZ-01.

Riparian Management Zones are defined as and shall be delineated on the ground based on the following site conditions:

**Category 1—Fish-bearing streams:** Riparian Management Zones consist of: the stream and the area on each side of the stream extending from the edges of the active stream channel to the top of the inner gorge; or to the outer edges of the 100-year floodplain; or to the outer edges of riparian vegetation; or to a distance equal to the height of two site-potential trees; or 300 feet slope distance equaling 600 feet total, including both sides of the stream channel, whichever is greatest. If a stream contains fish at any time of the year, then this riparian management zones definition would be applied to that stream.

**Category 2—Permanently flowing non-fish bearing streams:** Riparian Management Zones consist of: the stream and the area on each side of the stream extending from the edges of the active stream channel to the top of the inner gorge; or to the outer edges of the 100-year floodplain; or to the outer edges of riparian vegetation; or to a distance equal to the height of one site-potential tree; or 150 feet slope distance equaling 300 feet total, including both sides of the stream channel, whichever is greatest.

**Category 3—Constructed ponds and reservoirs, and wetlands greater than one acre:** Riparian Management Zones consist of: the body of water or wetland and the area to the outer edges of the riparian vegetation; or to the extent of seasonally saturated soil; or the extent of unstable and potentially unstable areas; or to a distance equal to the height of one site-potential tree; or 150 feet slope distance from the edge of the wetland greater than one acre; or the maximum pool elevation of constructed ponds and reservoirs, whichever is greatest.

• Lakes and natural ponds: Riparian Management Zones consist of: The body of water and the area to the outer edges of the riparian vegetation; or to the extent of seasonally saturated soil; or to the extent

of unstable and potentially unstable areas; or to a distance equal to the height of one site-potential tree; or 150 feet slope distance, whichever is greatest.

**Category 4**—Seasonally flowing or intermittent streams, wetlands, seeps, and springs less than one acre, and unstable or potentially unstable areas: This category applies to features with high variability in size and site-specific characteristics. At a minimum, the riparian management zones should include:

- The extent of unstable and potentially unstable areas including earthflows.
- The stream channel extending to the top of the inner gorge.
- The stream channel or wetland and the area from the edges of the stream channel or wetland to the outer edges of the riparian vegetation extending from the edges of the stream channel to a distance equal to the height of one site-potential tree, or 100 feet slope distance, whichever is greatest. A site-potential tree height is the average maximum height of the tallest dominant trees for a given site class.
- Intermittent streams are defined as any non-permanent flowing drainage feature having a definable channel and evidence of annual scour or deposition. This includes what are sometimes referred to as ephemeral streams if they meet these two physical criteria. Fish-bearing intermittent streams are distinguished from non-fish-bearing intermittent streams by the presence of any species of fish for any duration. Many intermittent streams may be used as spawning and rearing streams, refuge areas during flood events in larger rivers and streams, or travel routes for fish emigrating from lakes. In these instances, the guidelines for fish-bearing streams would apply to those sections of the full-extent of intermittent stream used by the fish from the mouth to the upper-most point of fish use.

#### **Desired Conditions**

**FW-DC-RMZ-01**. Riparian Management Zones reflect a natural composition of native flora and fauna and a distribution of physical, chemical, and biological conditions as compared to reference conditions. The species composition and structural diversity of native plant communities in riparian management zones provide adequate summer and winter thermal regulation, nutrient filtering, appropriate rates of surface erosion, bank erosion, and channel migration. Nutrients, large woody debris, and fine particulate organic matter are supplied in amounts and distributions sufficient to sustain physical complexity and stability.

**FW-DC-RMZ-02.** Riparian Management Zones feature key riparian processes and conditions that function consistent with local disturbance regimes, including slope stability and associated vegetative root strength, wood delivery to streams and within the riparian management zones, input of leaf and organic matter to aquatic and terrestrial systems, solar shading, microclimate, and water quality.

#### Objectives

**FW-OBJ-RMZ-01**. Improve 300 to 700 acres of riparian habitat every 5 years, through improvements that are intended to meet desired conditions for riparian management zones, such as road obliteration, riparian planting, hardwood restoration, post assisted log structures, beaver dam analogs, and reconnecting floodplains by removing road prisms or berms.

**FW-OBJ-RMZ-02**. On an annual basis, a minimum of 10 percent of trees harvested in the portions of the Riparian Management Zone beyond 150 feet (Riparian Management Zone Category 1) and beyond 100 feet (Riparian Management Zone Categories 2 and 3) from the edge of the active stream channel are used for aquatic stream restoration either on-site or off-site to contribute large wood to stream channels.

#### Standards

conditions.

**FW-STD-RMZ-01.** Vegetation management shall only occur in riparian management zones from the edges of the active stream channel to within 150 feet within Riparian Management Zone Category 1 and to the edges of the active stream channel to 100 feet within Riparian Management Zone Category 2, 3, and 4 to restore or enhance aquatic and riparian-associated resources. Non-mechanical treatments, for example, hand fuel treatments, prescribed fire, small diameter (for example, sapling, pole) conifer thinning, may be authorized if aquatic and riparian-associated resources are maintained. Timber Harvest in this zone shall leave trees on site or use for aquatic restoration. Vegetation management may occur in the outer Riparian Management Zones to meet desired conditions for fuel loading and silvicultural desired conditions, so long as project activities retain functions of the outer Riparian Management Zone, including sediment filtering, large wood recruitment to streams, and protection of the inner Riparian Management Zone from windthrow. Vegetation management in Riparian Management Zone shall not retard attainment of aquatic and riparian desired conditions.

**FW-STD-RMZ-02.** Staging of vehicles or heavy equipment, refueling, and fuel storage shall be located outside of riparian management zones to avoid water contamination. If no other location is appropriate and refueling or storage is needed within riparian management zones, locations must be approved by the Timber Contracting Officer,

FW-STD-RMZ-01 MANAGEMENT APPROACH

Multiscale Analysis may be used to determine consistency with this standard and supports conclusions that actions do not retard attainment of aquatic and riparian desired conditions. See Management Approaches.

Contracting Officer, or their designee and have an approved spill containment plan. **FW-STD-RMZ-03**. Herbicides, other pesticides, toxicants, and chemicals shall only be applied within riparian management zones when the activity does not retard attainment of aquatic and riparian desired

FW-STD-RMZ-04. Fuelwood cutting shall not be authorized within 150 feet of the stream edge.

**FW-STD-RMZ-05**. Trees felled for safety shall be retained onsite unless more than what is needed to achieve aquatic and riparian desired conditions. Trees shall be directionally felled towards or into streams, where it is safe and practical to do so. If aquatic and riparian desired conditions for wood are met at the site, surplus wood can be transported to other aquatic and riparian restoration project sites. Exceptions to this standard are allowed in developed recreation and administrative sites where needed to address concerns for human safety or infrastructure and when not practicable to leave on site.

**FW-STD-RMZ-06.** Direct ignition of low severity prescribed fire in riparian management zones can achieve or maintain desired conditions so long as:

- direct ignition within the riparian management zone will not retard attaining water, aquatic, and riparian desired conditions.
- direct ignition within the riparian management zone maintains or enhances existing stream conditions and effects to threatened or endangered species and their designated critical habitat are considered.

**FW-STD-RMZ-07.** The Riparian Management Zone definitions in the introduction of Section 0 (Riparian Management Zones) shall be used for all actions and projects.

**FW-STD-RMZ-08.** New road and landing construction, including temporary roads and mechanical trail construction, shall not be constructed in riparian management zones except where:

- needed for the implementation of restoration projects, or
- necessary for stream crossings, or
- a road or trail relocation contributes to attainment of aquatic and riparian desired conditions, or
- a road or trail inside the RMZ would greatly reduce the total ecological, cultural or social impacts of an existing or proposed route outside the RMZ, or
- Forest Service authorities are limited by law or regulation (e.g., General Mining Act of 1872).

**FW-STD-RMZ-09.** Aerial application of chemical retardant, foam, or other fire chemicals and petroleum shall be avoided in mapped aerial retardant avoidance areas.

**FW-STD-RMZ-10.** New incident bases, camps, helibases, helispots, staging areas, and other centers for incident activities shall be located outside of riparian management zones. When no practical alternative exists, measures shall be taken to restore riparian features that were impacted by the activities.

#### Guidelines

**FW-GDL-RMZ-01**. New landings, skidding, staging, or decking and machine burn piling should be located outside riparian management zones to minimize effects to riparian and aquatic resources. Where new activities inherently must occur in riparian management zones, locate them so that they do not degrade or retard aquatic and riparian desired conditions.

**FW-GDL-RMZ-02**. To prevent damage to stream channels, yarding activities should achieve full suspension over the active channel.

FW-STD-RMZ-06 MANAGEMENT APPROACH

Multiscale Analysis may be used to determine consistency with this standard and supports conclusions that actions do not retard attainment of aquatic and riparian desired conditions. See Management Approaches (appendix 4). **FW-GDL-RMZ-03**. To minimize sediment delivery and adverse effects to stream channels, construction of machine fireline in riparian management zones should be avoided, except where needed to cross streams.

**FW-GDL-RMZ-04**. To reduce sediment delivery to streams during or after fire suppression activities, disturbed areas in riparian management zones, such as firelines, drop-points, camps, roads, and trails, should be restored by actions such as scattering slash piles, replacing logs and boulders, scarifying soils, re-contouring terrain, and reseeding with native species.

**FW-GDL-RMZ-05**. To maintain water quality, pumping directly from a stream channel should be avoided if chemical products are to be directly mixed with water being withdrawn. When chemicals are used, pumping should be conducted from a fold-a-tank that is located outside the riparian management zones.

**FW-GDL-RMZ-06**. New saleable sand and gravel mining and extraction should not occur within riparian management zones, to minimize ground disturbance and sediment inputs, and avoid adverse effects to riparian vegetation and water temperature.

### **Conservation Watershed Network**

The Conservation Watershed Network components are intended to provide a pattern of protection across the landscape in which the habitat of Endangered Species Act listed fish and species of conservation concern receives special attention and treatment. Hydrologic Unit Code 12 (HUC12) watersheds in the Conservation Watershed Network form a network of existing or historic population strongholds and habitats with high potential for productivity and fish abundance. These areas support freshwater life stages and demographic processes that are integral in contributing to sustainable populations of wide-ranging fish.

The desired conditions for the Conservation Watershed Network are intended to be used in conjunction with desired conditions for Water and Aquatic Resources and Riparian Management Zones. Conservation Watersheds are intended to maintain multi-scale connectivity for at-risk fish and aquatic species, identifying important areas needed for conservation or restoration and ensuring ecosystem components needed to sustain long-term persistence of species. While existing conditions for several stream functions have shown an improving trend, there are others that remain diverted from desired conditions. Aquatic restoration actions will focus on conditions not meeting desired conditions. Conservation Watersheds are of particular importance for recovery of Endangered Species Act listed species. The goal of the network is to sustain the integrity of key aquatic habitats to maintain long-term persistence of native aquatic species and help make habitat conditions more resilient to climate change. Designation of conservation watershed networks are expected to protect native fish and help maintain and restore healthy watersheds and river systems.

Conservation Watershed Networks are the highest priority for restoration actions for the aquatic environment. Restoration would be achieved through the collective objectives within Aquatic Ecosystem plan components. Aquatic restoration is also encouraged in HUC12 sub-watersheds outside of the Conservation Watershed Network that are important for meeting recovery of listed species. For other plan components related to conservation watershed networks see FW-STD-ARINF-07, FW-STD-ARLND-03, and FW-STD-ARLND-03. Table 14 contains the updated list of HUC12 watersheds to be included as Conservation Watershed Network, in which achievement of desired conditions for aquatic resources is expected to be emphasized, summarized by subbasin HUC8 and HUC10. These watersheds would replace Pacific Anadromous Fish Strategy (PACFISH) key watersheds and Inland Native Fish Strategy (INFISH)

priority watersheds. Under the 2012 Planning Rule, "priority watersheds" are associated with the Watershed Condition Framework program. See Appendix 6 for criteria used to identify Conservation Watershed Network.

HUC 8	HUC 10	HUC 12	HUC 12	Acres
Middle Salmon- Chamberlain	Sabe Creek	Upper Sabe Creek	170602070402	14,313
Middle Salmon- Chamberlain	Sabe Creek	Lower Sabe Creek	170602070403	7,599
Middle Salmon- Chamberlain	Bargamin Creek	Upper Bargamin Creek	170602070601	23,079
Middle Salmon- Chamberlain	Bargamin Creek	Middle Bargamin Creek	170602070602	22,605
Middle Salmon- Chamberlain	Bargamin Creek	Lower Bargamin Creek	170602070603	24,216
Middle Salmon- Chamberlain	Wind River	Anchor Creek-Wind River	170602071002	23,692
Lower Salmon River	Slate Creek	Upper Little Slate Creek	170602090301	25,524
Lower Salmon River	Slate Creek	Lower Little Slate Creek	170602090302	15,873
Lower Salmon River	Slate Creek	Lower Slate Creek	170602090304	26,281
Lower Salmon River	White Bird Creek	South Fork White Bird Creek	170602090601	22,414
Lower Little Salmon River	Rapid River	West Fork Rapid River	170602100403	10,770
Lower Little Salmon River	Rapid River	Shingle Creek-Rapid River	170602100404	12,963
Upper Selway River	Running Creek	Upper Running Creek	170603010501	24,353
Upper Selway River	Running Creek	Lower Running Creek	170603010503	12,403
Upper Selway River	Bear Creek	Upper Bear Creek	170603010602	17,999
Upper Selway River	Bear Creek	Paradise Creek	170603010604	21,317
Upper Selway River	Bear Creek	Middle Bear Creek	170603010605	16,436
Upper Selway River	Bear Creek	Lower Cub Creek	170603010606	18,197
Upper Selway River	Bear Creek	Lower Bear Creek	170603010607	,9744
Upper Selway River	Bear Creek	Elk Creek-Selway River	170603010703	11,172
Lower Selway River	Moose Creek	Upper East Fork Moose Creek	170603020102	22,439
Lower Selway River	Moose Creek	Middle East Fork Moose Creek	170603020104	30,745
Lower Selway River	Moose Creek	Middle North Fork Moose Creek	170603020107	10,675
Lower Selway River	Moose Creek	Rhoda Creek	170603020108	36,382
Lower Selway River	Moose Creek	Lower North Fork Moose Creek	170603020109	17,568
Lower Selway River	Moose Creek	Lower East Fork Moose Creek	170603020110	29,497
Lower Selway River	Moose Creek	Moose Creek	170603020111	11,509
Lower Selway River	Gedney Creek	Marten Creek	170603020201	20,987
Lower Selway River	Meadow Creek	Headwaters Meadow Creek	170603020301	24,067
Lower Selway River	Meadow Creek	Upper Meadow Creek	170603020302	22,345
Lower Selway River	Meadow Creek	Middle Meadow Creek	170603020304	33,220
I ower Selway River	Meadow Creek	Buck Lake Creek	170603020305	20 7 38

#### Table 14. Conservation Watershed Network

#### Physical and Biological Systems - Land Management Plan

HUC 8	HUC 10	HUC 12	HUC 12	Acres
Lower Selway River	Meadow Creek	Lower Meadow Creek	170603020307	31,587
Lower Selway River	Lower Selway River	O'hara Creek	170603020404	37,882
Lochsa River	Crooked Fork Creek	Spruce Creek	170603030102	15,876
Lochsa River	Crooked Fork Creek	Lower Brushy Fork	170603030103	25,819
Lochsa River	Crooked Fork Creek	Upper Crooked Fork	170603030104	19,434
Lochsa River	Crooked Fork Creek	Fox Creek-Boulder Creek	170603030105	16,021
Lochsa River	Crooked Fork Creek	Lower Crooked Fork	170603030106	21,097
Lochsa River	Colt Killed Creek	Upper Colt Killed Creek	170603030203	24,735
Lochsa River	Colt Killed Creek	Colt Creek	170603030205	16,645
Lochsa River	Colt Killed Creek	Storm Creek	170603030207	32,678
Lochsa River	Colt Killed Creek	Lower Colt Killed Creek	170603030208	21,055
Lochsa River	Upper Lochsa River	Walton Creek-Lochsa River	170603030301	18,806
Lochsa River	Upper Lochsa River	'Imnamatnoon Creek	170603030302	13,218
Lochsa River	Upper Lochsa River	Waw'aalamnime Creek	170603030303	17,197
Lochsa River	Upper Lochsa River	Wendover Creek-Lochsa River	170603030304	20,722
Lochsa River	Warm Springs Creek	Lower Warm Springs Creek	170603030403	19,438
Lochsa River	Middle Lochsa River	Postoffice Creek	170603030501	12,184
Lochsa River	Middle Lochsa River	Weir Creek-Lochsa River	170603030503	33,200
Lochsa River	Middle Lochsa River	Stanley Creek-Lochsa River	170603030504	31,574
Lochsa River	Fish Creek	Upper Fish Creek	170603030601	23,240
Lochsa River	Fish Creek	Hungery Creek	170603030602	22,676
Lochsa River	Fish Creek	Lower Fish Creek	170603030603	10,396
Lower Clearwater	Clear Creek	South Fork Clear Creek	170603040101	16,530
Lower Clearwater	Sutler Creek	Suttler Creek-Middle Fork Clearwater River	170603040203	4,161
Lower Clearwater	Lolo Creek	Upper Lolo Creek	170603060201	26,820
Lower Clearwater	Potlatch River	East Fork Potlatch River	170603060801	5,353
Lower Clearwater	Potlatch River	Hog Meadow Creek-Potlatch Creek	170603060902	9,327
South Fork Clearwater River	Red River	South Fork Red River	170603050101	24,140
South Fork Clearwater River	Red River	Upper Red River	170603050102	32,001
South Fork Clearwater River	Red River	Middle Red River	170603050103	23,120
South Fork Clearwater River	Red River	Lower Red River	170603050104	22,986
South Fork Clearwater River	American River	Upper American River	170603050201	14,397
South Fork Clearwater River	Crooked River	Upper Crooked River	170603050301	28,631
South Fork Clearwater River	Crooked River	Lower Crooked River	170603050302	16,327

HUC 8	HUC 10	HUC 12	HUC 12	Acres
South Fork Clearwater River	Newsome Creek	Upper Newsome Creek	170603050401	24,512
South Fork Clearwater River	Newsome Creek	Lower Newsome Creek	170603050402	18,040
South Fork Clearwater River	Upper South Fork Clearwater River	Whiskey Creek-South Fork Clearwater River	170603050501	10,503
South Fork Clearwater River	Upper South Fork Clearwater River	Leggett Creek-South Fork Clearwater River	170603050502	15,380
South Fork Clearwater River	Upper South Fork Clearwater River	Tenmile Creek	170603050503	34,340
South Fork Clearwater River	Johns Creek	Upper Johns Creek	170603050601	30,790
South Fork Clearwater River	Johns Creek	Lower Johns Creek	170603050603	26,142
South Fork Clearwater River	Middle South Fork Clearwater River	Mill Creek	170603050701	23,454
South Fork Clearwater River	Middle South Fork Clearwater River	Meadow Creek	170603050702	24,017
Upper North Fork Clearwater River	NF Clearwater - Lake Creek	Meadow Creek	170603070101	16,203
Upper North Fork Clearwater River	NF Clearwater - Lake Creek	Long Creek	170603070102	17,909
Upper North Fork Clearwater River	NF Clearwater - Lake Creek	Vanderbilt Gulch-North Fork Clearwater River	170603070103	34,089
Upper North Fork Clearwater River	NF Clearwater - Lake Creek	Lake Creek	170603070104	22,051
Upper North Fork Clearwater River	Cayuse Creek	Upper Cayuse Creek	170603070201	28,914
Upper North Fork Clearwater River	Kelly Creek	Middle Fork Kelly Creek	170603070401	26,217

### Goals

**FW-GL-CWN-01**. The Nez Perce-Clearwater works with the Nez Perce Tribe, State of Idaho, National Marine Fisheries Service, U. S. Fish and Wildlife Service, and other governmental organizations to plan and implement projects that contribute to recovery goals for aquatic species listed under the Endangered Species Act and their designated critical habitat, such that protective measures under the Act are no longer necessary.

**FW-GL-CWN-02.** The Nez Perce-Clearwater partners with federal agencies, including Section 7 consultation, as required; state agencies; tribes; counties; interested groups; and interested private landowners to recover threatened and endangered species.

#### **Desired Conditions**

**FW-DC-CWN-01**. Conservation Watershed Networks have functionally intact ecosystems that provide high-quality water and contribute to and enhance the conservation of aquatic species of conservation concern and recovery of threatened or endangered fish species.

**FW-DC-CWN-02**. Streams within the Conservation Watershed Network provide habitat that supports robust native fish populations, which can expand to and recolonize adjacent unoccupied habitats. These areas conserve key demographic processes likely to influence the sustainability of aquatic species.

**FW-DC-CWN-03.** Roads in the Conservation Watershed Network present minimal risk to aquatic resources.

#### Objectives

**FW-OBJ-CWN-01**. Conservation Watershed Networks are the highest priority for restoration actions for native fish and other aquatic species. Assess 500 miles of roads every 5 years to identify those roads, regardless of maintenance level, that may negatively impact streams, such as contributing excessive sediment or altering riparian areas or floodplains.

**FW-OBJ-CWN-02**. Stormproof 15 percent of roads in Conservation Watershed Network prioritized for restoration every 5 years as funding allows to benefit threatened and endangered aquatic species. Emphasize roads with greatest risk of erosion and road prism failure, including maintenance level 1 and 2 roads.

#### Standards

**FW-STD-CWN-01**. In Conservation Network Watersheds not meeting aquatic and riparian desired conditions, activities shall be designed and implemented in a manner that supports and contributes towards the recovery of federally listed species and the achievement of these desired conditions and does not retard them when evaluated at the HUC12 subwatershed scale. Short-term adverse effects from project activities may occur when they support the long-term recovery of aquatic and riparian desired conditions and federally listed species.

### Infrastructure (Aquatics and Riparian)

Infrastructure consists of system and non-system roads, airstrips, and gravel pits. It does not include administrative sites, trails, developed recreation sites, or dispersed recreation sites. For other aquatic and riparian plan components related to infrastructure see FW-OBJ-INF-01 and FW-OBJ-INF-02. The following plan components are specific to Aquatic Ecosystems, general Infrastructure plan components are outlined in Infrastructure.

#### **Desired Conditions**

**FW-DC-ARINF-01**. The transportation system has minimal impacts on aquatic and riparian conditions through reduced hydrologic connectivity of roads to streams, lower sediment delivery to streams, reduced road impact to floodplains, and improved aquatic organism passage, where transportation infrastructure affects these features.

**FW-DC-ARINF-02**. The transportation network is resilient to the effects of climate change, including the ability to accommodate increased runoff and peak flows that may exceed historic streamflow events.

#### Standards

**FW-STD-ARINF-01**. Road maintenance and new road construction shall be designed to minimize adverse effects to threatened, endangered, proposed, or candidate aquatic species and their habitat.

FW-STD-CWN-01 MANAGEMENT APPROACH

Multiscale Analysis may be used to determine consistency with this standard. See Management Approaches. **FW-STD-ARINF-02**. Best management practices shall be used during dust abatement applications on roads, and ensure chemicals are not applied directly to watercourses; water bodies such as ponds and lakes; or wetlands.

**FW- STD-ARINF-03**. To reduce or prevent sediment delivery to water, on roads other than outsloped roads, road surface and fill materials shall not be sidecast into streams during road construction or reconstruction, when occurring within or adjacent to riparian management zones.

**FW-STD-ARINF-04**. New, replacement, and reconstructed stream crossing sites, such as culverts, bridges, and other permanent stream crossings, shall accommodate at least the 100-year flow, including associated bedload and debris.

**FW-STD-ARINF-05**. When constructing or reconstructing roads, incorporating woody debris into the fill portion of the road prism shall be avoided.

**FW-STD-ARINF-06**. In fish bearing streams, construction, reconstruction, or replacement of stream crossings shall not impair passage of any life stages of native aquatic organisms, unless barriers are desired to maintain or prevent spread or invasion of non-native species in alignment with fish management agencies.

**FW-STD-ARINF-07**. In the Conservation Watershed Network and HUC12 subwatersheds with Endangered Species Act critical habitat or listed aquatic species, when constructing or reconstructing roads, projects shall result in a net decrease in the hydrologic connectivity of the road system and stream channel network unless no further decreases are needed to meet desired conditions for Water and Aquatic Resources or Conservation Watershed Network. Treatment priority shall be given to roads or road segments that pose the greatest relative ecological risk to riparian and aquatic ecosystems. The net decrease is measured by project area.

**FW-STD-ARINF-08**. Culverts and bridges in fish-bearing and perennial streams shall allow for passage of fish and other aquatic and riparian dependent species through the establishment of banks inside or beneath the crossing structure and mimicking the natural channel features, unless precluded by site characteristics such as bedrock or high channel gradient.

#### Guidelines

**FW-GDL-ARINF-01**. Construction, reconstruction, and maintenance activities of roads, skid trails, temporary roads, and airstrips, should hydrologically disconnect the drainage system from delivering water, sediment, and pollutants to water bodies to prevent concentrated water from directly entering streams.

**FW-GDL-ARINF-02**. To reduce the risk to aquatic resources when decommissioning roads, making roads impassable, or closing roads for longer than one year, roads should be left in a hydrologically stable condition where road drainage is routed away from water resources and landslide prone areas and towards stable areas of the forest floor to provide filtering and infiltration.

**FW-GDL-ARINF-03**. To reduce the risk of sediment delivery from gully formation or mass wasting when closing travel routes such as roads, skid trails, and temporary roads with physical barriers (for example, berms), drainage features should be left in a condition that will function without any maintenance for the planned duration of the closure.

**FW-GDL-ARINF-04**. To reduce road-related mass wasting and sediment delivery to watercourses, new and relocated roads, including skid trails and temporary roads, and other linear features should not be constructed on lands with high mass wasting potential.

**FW-GDL-ARINF-05**. To maintain free-flowing streams, new, replacement, and reconstructed stream crossing sites, such as culverts, bridges, and other stream crossings, should be constructed to prevent diversion of stream flow out of the channels and down the road in the event the crossing is plugged or has a flow greater than the crossing was designed.

**FW-GDL-ARINF-06**. To maintain channel stability and reduce sediment delivery to watercourses, when reconstructing roads, fords should be hardened to protect the stream bed, banks, and approaches.

**FW-GDL-ARINF-07**. To reduce sediment delivery from maintenance activities, such as road blading and snow plowing, avoid sidecasting into streams. Care should be taken when plowing snow so as not to include road soil. Breaks should be incorporated in the snow berms to direct water off the plowed surface.

**FW-GDL-ARINF-08**. To avoid adverse effects to water resources, wetlands and seasonally wet meadows should be avoided when constructing new roads and landings, including temporary roads. For all roads, and where reconstruction of existing roads cannot avoid water courses and wetlands drainage features should maintain wetland functions and characteristics.

**FW-GDL-ARINF-09**. When constructing, reconstructing, or maintaining roads, including temporary roads, road drainage should be routed away from potentially unstable channels, fills, and hillslopes, to prevent destabilization of channels and hillslopes.

**FW-GDL-ARINF-10**. Transportation infrastructure should be designed to maintain natural hydrologic flow paths, including surface and subsurface flow, to the extent practical. For example, streams and seeps upslope from roads should have cross-drains or relief culverts with sufficient capacity to ensure water is not routed down ditches.

### **Energy and Minerals (Aquatics and Riparian)**

The following plan components are specific to Aquatic Ecosystems, general Energy and Minerals plan components are outlined in Section Energy and Minerals.

#### Standards

**FW-STD-AREM-01**. Plans of Operation that propose activities in riparian management zones shall include a reclamation plan and a reclamation bond addressing the cost of removing facilities, equipment, and materials; re-contouring disturbed areas to pre-mining topography; isolating and neutralizing or removing toxic materials; salvaging or replacing topsoil; and revegetating with trees and shrubs or native plant seed to move toward attainment of aquatic and riparian desired conditions and avoid adverse effects on native fish.

**FW-STD-AREM-02**. Mine waste with the potential to generate hazardous material, as defined by the Comprehensive Environmental Response, Compensation, and Liability Act, shall not be authorized within riparian management zones where groundwater contamination is possible. The exception is temporary staging of waste during abandoned mine cleanup.

**FW-STD-AREM-03**. Mineral activities on National Forest System lands shall avoid or minimize adverse effects to aquatic threatened or endangered species and populations or their designated critical habitat.

**FW-STD-AREM-04.** Mineral exploration, processing, and extraction projects, except for suction dredging, shall not have direct water flow paths to streams, lakes, or wetlands. Projects shall install barriers between streams, lakes, wetlands, or groundwater dependent ecosystems and construction- related pollutant hazards such as sumps, processing pits, fuel storage, latrines, adits and shafts, underground workings, open pits, overburden, development rock and waste rock dumps, tailings impoundments, leach pads, mills, and process water ponds or natural pollutant hazards such as acidity, metals, sulfate, cyanide, or nitrate or a combination of the preceding.

**FW-STD-AREM-05.** Mineral operations shall minimize adverse effects to aquatic and ripariandependent resources in riparian management areas. Best management practices and other appropriate conservation measures shall be included in plans of operation to mitigate potential mine operation effects.

#### Guidelines

**FW-GDL-AREM-01**. To prevent adverse effects to streams, wetlands, and other riparian dependent resources, all proposed mineral operations should avoid riparian management zones. If the riparian management zone cannot be avoided, plan of operations should include practicable measures to maintain, protect, and rehabilitate water quality and habitat for fish and wildlife and other riparian-dependent resources affected by the operations. Operations should not retard or prevent attainment of aquatic and riparian desired conditions. Exceptions to this guideline include situations where the Forest Service has limited discretional authorities. In those cases, project effects should not prevent or retard attaining aquatic and riparian desired conditions to the extent possible within those authorities.

**FW-GDL-AREM-02**. Mineral operations should reuse existing access routes and processing sites left from previous entries if they are not causing unacceptable impacts to aquatic and riparian dependent resources. Where new construction or relocation is necessary, to the maximum extent possible, construct and locate new structures, support facilities, and roads outside of riparian management zones. If new structures, support facilities, and roads cannot be constructed outside riparian management zones because of site limitations, then construct and manage them to minimize adverse effects to aquatic and riparian dependent resources. When no longer required for mineral activities, structures and support facilities should be decommissioned or placed into intermittent stored service to achieve aquatic and riparian desired conditions.

**FW-GDL-AREM-03.** To minimize harm to listed fish and their critical habitat from suction dredge mining, Plans of Operations should be required of miners for proposed dredging in streams with ESA listed fish species or critical habitat. The Plans of Operations should include provisions consistent with Idaho Department of Water Resources to limit mining activities to specified times and methods that serve to avoid or minimize, where feasible, adverse effects such as: dewatering streams or blocking fish passage; destabilizing or undermining stream banks and large wood; and excavating potential spawning areas or covering them with spoils.

### Livestock Grazing (Aquatics and Riparian)

The following plan components are specific to Aquatic Ecosystems, general Livestock Grazing plan components are outlined in Livestock Grazing.

#### Standards

**FW-STD-ARGRZ-01**. Livestock grazing shall be authorized or reauthorized only when measures are included in the authorization to avoid or mitigate adverse effects to fish and riparian habitat that may result from grazing practices. Where livestock grazing is found to prevent or retard attainment of aquatic

and riparian desired conditions, grazing practices shall be modified by practices such as adjusting accessibility of riparian areas to livestock, length of grazing season, stocking levels, or timing of grazing.

**FW-STD-ARGRZ-02**. Where livestock trailing, bedding, watering, salting, loading, off-road vehicle use for managing or gathering livestock, and other related activities in riparian management zones are adversely affecting aquatic resources, annual operating instructions shall include measures to mitigate or relocate to other areas or times.

**FW-STD-ARGRZ-03.** During livestock grazing authorizations, reauthorizations, or updates to annual operating instructions, include measures to prevent trampling of fish redds of federally listed fish species and species of conservation concern.

**FW-STD-ARGRZ-04.** Water to new or reconstructed spring developments shall be protected from livestock trampling.

#### Guidelines

**FW-GDL-ARGRZ-01**. To maintain or improve riparian and aquatic conditions and achieve riparian desired conditions over time through adaptive management, new grazing authorizations and reauthorizations that contain low gradient, alluvial channels should require that end-of-season stubble height be 10 to 15 cm (4 to 6 inches) along the greenline. However, application of the stubble height numeric value range should only be applied where it is appropriate to reflect existing and natural conditions for the specific geo-climactic, hydrologic, and vegetative conditions where it is being applied. Other indicators more sensitive to detecting changes to streams, including those in current ESA consultation documents, may be used if they are based on current science and monitoring data and meet the purpose of this guideline. Long-term monitoring and evaluation should be used to adapt this numeric range or the use of other indicators.

**FW-GDL-ARGRZ-02.** To maintain water quality and minimize the sediment that is generated and delivered to watercourses from active livestock trailing, new grazing authorizations and reauthorizations should include measures for livestock trail stream crossings and approaches to be hardened or relocated, where needed, to achieve aquatic desired conditions.

### Lands and Special Uses (Aquatics and Riparian)

The following plan components are specific to Aquatic Ecosystems. General Land Ownership and Land Uses plan components are outlined in Special Forest and Botanical Products

#### Standards

**FW-STD-ARLND-01.** When authorizing new lands special uses, or reauthorizing existing uses, include conditions to avoid adverse effects to fish, water, and riparian resources. If adverse effects are unavoidable to Endangered Species Act listed fish, species of conservation concern, impaired water bodies, or stream habitat conditions, authorizations shall require actions that result in the re-establishment, restoration, mitigation, or improvement of conditions and ecological processes to ensure that projects that degrade conditions also include measures to improve conditions to the extent practicable. These processes include in-stream flow regimes, physical and biological connectivity, water quality, and integrity and complexity of riparian and aquatic habitat.

**FW-STD-ARLND-02.** Locate new hydropower support facilities outside of riparian management zones to reduce effects to fish, water, and riparian resources. Support facilities include any facilities or improvements such as workshops, housing, switchyards, staging areas, or transmission lines not directly

Nez Perce-Clearwater 59

integral to its operation or necessary for the implementation of prescribed protection, mitigation, or enhancement measures.

**FW-STD-ARLND-03.** In the Conservation Watershed Network and subwatersheds with Endangered Species Act critical habitat or listed aquatic species, hydroelectric and other surface water development authorizations shall include requirements for instream flows and habitat conditions that maintain or restore native fish and other desired aquatic species populations, riparian dependent resources, favorable channel conditions, and aquatic connectivity.

**FW-STD-ARLND-04.** In the Conservation Watershed Network and in subwatersheds with Endangered Species Act critical habitat or listed aquatic species, new hydroelectric facilities and water developments should not be constructed unless it can be demonstrated that there are no substantial adverse effects to critical habitat or listed aquatic species. Exceptions to this standard include situations where Forest Service authorities are limited such as the Alaska National Interest Lands Conservation Act, 1872 Mining Law, or valid state water rights. In those cases, project effects shall not retard attainment of desired conditions for watershed function, to the extent possible within Forest Service authorities.

#### Guidelines

**FW-GDL-ARLND-01.** If existing hydropower support facilities are located within the riparian management zones at time of permit reissuance, reduce impacts on aquatic and riparian resources, such as moving support facilities outside of riparian management zones or further from water bodies where feasible.

### **Recreation (Aquatics and Riparian)**

Recreation pertains to trails, administrative sites, developed recreation sites (such as campgrounds) and dispersed sites. For other aquatic and riparian plan components related to recreation see FW-OBJ-REC-01 and FW-OBJ-REC-02. The following plan components are specific to Aquatic Ecosystems, general Sustainable Recreation Management plan components are outlined in Sustainable Recreation Management.

#### **Desired Conditions**

**FW-DC-ARREC-01.** Recreation facilities and their use, including trails and dispersed sites, have minimal impacts on aquatic resources, including threatened and endangered species, designated critical habitat, and aquatic species of conservation concern.

#### Objectives

**FW-OBJ-ARREC-01**. Mitigate, remove, or relocate a minimum of two existing dispersed recreation sites from within riparian management zones to outside of riparian management zones every five years.

#### Guidelines

**FW-GDL-ARREC-01.** To protect aquatic and riparian resources, new and reconstructed solid and sanitary waste facilities should not be located within 100 feet of water, unless no other alternative exists.

**FW-GDL-ARREC-02.** To reduce potential adverse effects to water quality and aquatic resources, construction of new facilities or infrastructure within floodplains should be avoided. Where new activities inherently must occur in riparian management zones (for example, at road and trail stream crossings, boat ramps, or docks), they should be located and designed to minimize adverse effects to floodplains and

other riparian-dependent resource conditions (for example, within geologically stable areas and avoiding major spawning areas).

**FW-GDL-ARREC-03.** To reduce the risk of sediment delivery when closing trails with physical barriers (for example, berms) for longer than one season, drainage features should be left in a condition that will function without any maintenance for the planned duration of the closure.

**FW-GDL-ARREC-04**. To reduce trail-related mass wasting and sediment delivery to watercourses, new and relocated trails should not be constructed on lands with high mass wasting potential.

**FW-GDL-ARREC-05**. Trail construction, reconstruction, and maintenance activities should prevent concentrated water from directly entering streams, by hydrologically disconnecting the trails from delivering water, sediment, and pollutants to water bodies.

**FW-GDL-ARREC-06**. To maintain channel stability and reduce sediment delivery to watercourses, when constructing or reconstructing trails, fords should be hardened to protect the stream bed, banks, and approaches.

# Wildlife

This Land Management Plan incorporates a complementary ecosystem and species-specific approach to maintaining the diversity of plant and animal communities and the persistence of native species in the plan area.

Wildlife habitats depend largely on vegetation; therefore, the plan components for terrestrial ecosystems, forestlands, grass and shrublands, aquatic ecosystems, and riparian management zones provide most of the coarse-filter components that will support the persistence of native species within the plan area, ensuring that ecological conditions for most wildlife will be provided. This section provides additional species-specific plan components for threatened and endangered, proposed, candidate, and species of conservation concern for risks or stressors that are not addressed by the ecosystem level plan components.

The Canada lynx was listed as a threatened species by the U.S. Fish and Wildlife Service in 2000. As a result, the Northern Rockies Lynx Management Direction was amended to existing land and resource management plans in 2007. Habitat direction from the Northern Rockies Lynx Management Direction is retained in this plan through standard **FW-STD-WL-01**. The Nez Perce-Clearwater plan carries forward the objectives, standards, and guidelines in the Northern Rockies Lynx Management Record of Decision (Appendix 5 in the Land Management Plan). For purposes of application in the plan, the terms "standard" and "guideline" in the Northern Rockies Lynx Management Direction will be consistent with definitions of these terms found in Chapter 1 of this plan. The definition of "objectives" in the Northern Rockies Lynx Management Direction, then plan components for lynx could change through amendment to this plan. Therefore, the current record of decision for the Northern Rockies Lynx Management Direction, then plan components for lynx could change through amendment to this plan. Therefore, the current record of decision for the Northern Rockies Lynx Management Direction is included as Appendix 5 in the Land Management Rockies Lynx Management Direction is included as Appendix 5 in the Land Management Plan.

### Goals

**FW-GL-WL-01.** The Nez Perce-Clearwater cooperates and collaborates with the U. S. Fish and Wildlife Service, other federal agencies, state agencies, and tribes on conservation strategies, recovery plans, habitat management, and ecological conditions on National Forest System lands.

**FW-GL-WL-02.** The Nez Perce-Clearwater cooperates with highway managers, state agencies, tribes, and landowners to implement wildlife and aquatic organism crossings that reduce encounters and contribute to public safety.

**FW-GL-WL-03.** Recreationists utilizing pack goats have access to educational materials including best management practices for avoiding contact with and reducing the risk of disease transmission to bighorn sheep.

### **Desired Conditions**

**FW-DC-WL-01.** The Nez Perce-Clearwater provides habitat conditions for federally listed threatened, endangered, and candidate plant and animal species that contribute to their recovery to the point at which listing is no longer appropriate. Habitat used by federally listed species provides conditions to meet their life history needs.

**FW-DC-WL-02.** Ecological conditions on the Nez Perce-Clearwater contribute sustainable habitat to maintain species of conservation concern. Habitat is resilient and adaptable to stressors and likely future environments.

**FW-DC-WL-03**. The arrangement and distribution of vegetation patches is consistent with the natural range of variation and varies widely in size, shape, and structure to provide connectivity for native wildlife.

**FW-DC-WL-04.** The Nez Perce-Clearwater provides the ecological conditions for the long-term persistence of fisher, whose habitat generally follows the distribution of the warm moist potential vegetation type. Patches of tall forest cover approximately 50 percent of the warm moist broad potential vegetation type group, consistent with the desired conditions found in Table 6. Stands of tall forests, distributed across the warm moist broad potential vegetation type, provide coarse woody debris and multiple denning and resting habitat canopy layers (Sauder and Rachlow 2014).

**FW-DC-WL-05.** Bighorn sheep habitat reflects its historic distribution and connectivity and is comprised of native, high protein grass and forbs near rugged escape cover.

**FW-DC-WL-06.** The grizzly bear Bitterroot Recovery Zone provides the ecological conditions to support recolonization of grizzly bears. Land Management Plan land use allocations provide connectivity to allow secure passage from occupied habitat to the Bitterroot Recovery Zone.

**FW-DC-WL-07.** The risk of grizzly bear-human conflict is reduced through awareness. The public, Forest Service employees, contractors, volunteers, and permittees are knowledgeable of conflict prevention strategies through education and interpretation.

**FW-DC-WL-08.** Within occupied grizzly bear habitat, developed recreation sites, administrative sites, and dispersed recreation sites where garbage disposal services are provided, facilities are equipped with necessary infrastructure so that food, garbage, and other attractants can be made inaccessible to grizzly bears to reduce the potential of human-bear conflict.

**FW-DC-WL-09.** Wide-ranging species are free to move across and between habitats, allowing for dispersal, migration, genetic interaction, and species recruitment.

### Standards

**FW-STD-WL-01**. Canada lynx habitat shall be managed in accordance with the Northern Rockies Lynx Management Direction (U.S. Department of Agriculture 2007b) and Record of Decision (U.S. Department of Agriculture 2007a).

**FW-STD-WL-02**. To prevent disease transmission between wild sheep and domestic sheep and goats, domestic sheep and goat grazing (excluding pack goats) shall not be authorized in or within 16 miles of bighorn sheep occupied core herd home ranges.

**FW-STD-WL-03.** New authorizations and permit reauthorizations for domestic goat packing shall follow best management practices and include provisions to prevent disease transmission between domestic goats and bighorn sheep.

**MA2-STD-WL-01.** New NFS motorized trails open to the public should not be authorized in Idaho Roadless Areas unless there are adjacent areas of 5,000 acres without open motorized system routes. This standard does not apply to:

- Community Protection Zones (CPZs) as defined by the Idaho Roadless Rule.
- Areas with existing motorized access that are currently less than 5,000 acres.
- Existing trails that are relocated or reconstructed to mitigate negative impacts to ecological resources.

### Guidelines

**FW-GDL-WL-01**. New communication towers, new transmission lines, and associated infrastructure should be located and designed to avoid significant adverse effects on wildlife dispersal, migration, or critical habitat.

**FW-GDL-WL-02.** When closing mines, actions should be taken to avoid the loss of bat maternity roosts and hibernation habitat and prevent bat entombment.

**FW-GDL-WL-03.** New and reconstructed livestock water developments should be designed to prevent animal entrapment and facilitate animal escape.

# Multiple Uses Wildlife

The 2012 Planning Rule requires land management plans to provide for ecosystem services and multiple uses, including outdoor recreation, range, timber, watershed, wildlife, and fish, within Forest Service authority and the inherent capability of the plan area. Plans must include components that guide the contribution to social and economic sustainability to provide people and communities with a range of social, cultural, and economic benefits for present and future generations. Plan components below are designed to provide or contribute to habitat conditions for wildlife, fish, and plants commonly enjoyed and used by the public for hunting, fishing, trapping, gathering, observing, subsistence, and other activities. They also provide opportunities for the plan area to contribute to cultural traditions, history, art, and traditional resource uses important to the Nez Perce Tribe.

This section applies to wildlife, such as big game, fur bearers, and upland game, which provide nonconsumptive uses and wildlife used by the Nez Perce Tribe for ceremonial, spiritual, or cultural uses. The plan area supports native populations of mountain goat, moose, mule deer, whitetail deer, black bear, wolf, cougar, and bighorn sheep. Prominent in the area are herds of elk, which at one time were among the largest in the nation but have since greatly declined. There is a strong desire by the public, local and
state governments, tribes, outfitter and guides, sportsman's groups, and other interest groups to recover and grow elk populations. Furbearers in the plan area include beaver, badger, bobcat, river otter, musk rat, coyote, fox, skunk, long tailed weasel, marten, and mink. Other species are used by federally recognized tribes for cultural traditions, history, art, and traditional resource uses. Pursuant to the 2012 Planning Rule, plan components in this section are subject to provisions that provide for the diversity of plant and animal communities (U.S. Department of Agriculture 2012). The plan components below were developed in collaboration with the Nez Perce Tribe and the Idaho Department of Fish and Game. Plan components related to ecological sustainability and diversity of plant and animal communities also contribute to social and economic sustainability.

#### Goals

**FW-GL-WLMU-01**. The Nez Perce-Clearwater cooperates with the Nez Perce Tribe and Idaho Department of Fish and Game to provide habitat conditions that contribute to wildlife populations at levels meeting tribal trust responsibilities and Idaho Department of Fish and Game species management plan objectives.

**FW-GL-WLMU-02.** In support of the Nez Perce Tribe's healthy and harvestable fisheries objectives for Coho and spring Chinook, and the Lower Snake Compensation Plan's mitigation efforts for harvest fisheries in the Clearwater basin, the Nez Perce-Clearwater coordinates with the Tribe and the State of Idaho to conserve Clearwater River Spring Chinook and Coho fisheries on the Nez Perce-Clearwater.

### **Desired Conditions**

**FW-DC-WLMU-01**. Habitat supports opportunities for hunting, fishing, trapping, gathering, observing, photography, subsistence, cultural interactions, and the exercise of treaty reserved rights. Wildlife is distributed in habitats within their respective seasonal ranges.

**FW-DC-WLMU-02.** At the forest scale, habitat for wild ungulates provides conditions to meet life history requirements year-round. Vegetation in these habitats is primarily composed of native plants.

**FW-DC-WLMU-03.** Pacific yew plant communities and timbered areas with mature yew-wood thickets provide moose winter habitat.

FW-DC-WLMU-04. Natural processes contribute to the mosaic of habitats needed by ungulates.

**FW-DC-WLMU-05.** Residents, visitors, and tribal members that use the Nez Perce-Clearwater are socially and culturally connected to big game. Big game contributes to the social wellbeing, ecological integrity, as well as cultural and economic goals of the Nez Perce-Clearwater.

**FW-DC-WLMU-06.** Habitat conditions maintain or improve elk habitat use and provide nutritional resources sufficient to support productive elk populations. The amount and distribution of early seral nutritional resources are consistent with the desired conditions in the Forestlands and Meadows, Grasslands, and Shrublands sections. Elk habitat quality is not degraded by invasive plant species or motorized access.

**FW-DC-WLMU-07.** Elk habitat is distributed throughout the planning area to support elk populations. Motorized access does not preclude use of high-quality nutritional resources or winter ranges.

#### **Desired Conditions Management Area 1**

**MA1-DC-WLMU-01.** Elk habitats in Management Area 1 provide nutritional resources primarily through natural processes and are consistent with the natural range of variation. Vegetation is composed of native plants.

#### **Desired Conditions Management Area 2**

**MA2-DC-WLMU-01.** Ten to twenty percent of Management Area 2 is in a condition that provides moderate or high nutritional quality forage for elk. Areas with moderate or high-quality forage are distributed across the management area.

**MA2-DC-WLMU-02.** Areas at least 5,000 acres in size exist without motorized access open to the public to maintain habitat use by elk.

#### **Desired Conditions Management Area 3**

**MA3-DC-WLMU-01.** Ten to twenty percent of Management Area 3 is in a condition that provides moderate or high-quality nutritional forage for Elk. Areas with moderate or high-quality forage are distributed across the management area, with a portion of the moderate or high-quality nutritional forage occurring greater than 0.5 miles from open motorized routes.

#### **Objectives**

#### **Objectives Management Area 1**

MA1-OBJ-WLMU-01. Treat 500 acres of invasive weeds in elk habitat every 5 years.

#### **Objectives Management Area 2**

**MA2-OBJ-WLMU-01.** In Management Area 2, 10,000 to 15,000 acres are improved every five years through vegetative treatments and wildland fire to improve nutritional forage value for elk. Natural ignitions are used to improve nutritional forage when and where appropriate to contribute to these acres.

#### **Objective Management Area 3**

**MA3-OBJ-WLMU-01.** Improve habitat use for elk on 19,000 acres in Management Area 3 with moderate or high potential nutritional resources within 15 years. Treatments are preferentially focused on areas more than one half mile from roads open motorized system routes.

#### Standards

**FW-STD-WLMU-01.** When closing routes to motorized use, measures shall be included to sufficiently exclude motorized use on closed routes.

#### Guidelines

**FW-GDL-WLMU-01**. New fencing installation or reconstruction should be designed to reduce barriers to wildlife movement, except when fencing is for the purpose of restricting wildlife movement.

**FW-GDL-WLMU-02**. In order to reduce disturbance to wintering big game, management activities should be scheduled to minimize disturbance in big game winter range between December 1st and March 15th.

#### Guidelines Management Area 2

**MA2-GDL-WLMU-01.** To increase available habitat for elk, vegetation management projects designed to improve elk habitat should increase available summer forage in areas of moderate or high nutrition potential.

#### Guidelines Management Area 3

**MA3-GDL-WLMU-01.** To improve vital rates of female elk by increasing predicted percent body fat, treatments designed to improve elk habitat should focus on one or more of the habitat covariates likely to improve predicted cow elk body fat condition while also considering distance from open motorized routes.

## Air Quality

### Goals

**FW-GL-AIR-01.** Coordinate with local and regional partners to reduce cumulative air quality impacts prior to planned ignition activities.

**FW-GL-AIR-02.** The Nez Perce-Clearwater works with federal, state, and tribal partners to meet applicable air quality requirements.

### **Desired Conditions**

**FW-DC-AIR-01.** Good air quality supports human and ecosystem health and quality of life over the long-term. It enhances visibility and the visual aesthetics of the planning area over the long-term.

**FW-DC-AIR-02.** The Nez Perce-Clearwater meets applicable federal, state, and tribal air quality standards.

# **Tribal Trust**

The *Niimiipuu* (pronounced Ne-Mee-Poo) people aboriginally occupied a territory that encompassed about 13,204,000 acres of land, including nearly all land now managed by the Nez Perce-Clearwater. According to the Nez Perce Tribe Department of Fisheries Resource Management Plan 2013-2018 (Nez Perce Tribe Department of Fisheries Resources Management 2013):

The land and its waters define the Nez Perce way. Over the course of thousands of years, nature has taught us how to live with her. This intimate and sacred relationship unifies us, stabilizes us, [and] humbles us. It is what makes us a distinct people and what gives us our identity. We cannot be separated from the land or our rights without losing what makes us Nez Perce. We defend our rights to preserve who we are and what we hold sacred (5).

The Nez Perce Tribe has ancestral and treaty-reserved rights to uses and resources on the Nez Perce-Clearwater. Indian treaty rights are property rights held by the sovereign Indian tribes who signed the treaties. Under the Nez Perce Treaty of 1855 and subsequent treaties, the Nez Perce Tribe was reserved separate reservation lands, but also retained certain rights to hunt, fish, graze, and gather on the lands ceded to the United States. These rights retained on ceded lands are known as "off-reservation treaty rights" or "other reserved rights."

The general trust relationship is between the United States (including all agencies of the federal government) and Indian Tribes, in which the government "has charged itself with moral obligations of the highest responsibility and trust." The nature of the trust relationship is defined by federal law (i.e., treaties, statutes, executive orders, federal regulations) and can include particular duties or fiduciary obligations.

Sustaining these lands that we now know as both the Nez Perce homelands and the Nez Perce-Clearwater National Forests, our moral obligation goes beyond the treaties and to the people and culture themselves. We have collaboratively developed over 300 plan components to sustain and restore the resources reserved in the treaties. It is our greatest responsibility to implement this plan to honor our moral and legal responsibilities to support the past, present and future of the Nez Perce culture and their connection to the land. The Nez Perce are intimately integrated with the ecology of the land and have played a role in defining the ecology since time immemorial, not differentiating between the land and themselves. Nimiipuu are deeply and inseparably interconnected with the land and the resources. To the Nez Perce, there would not be one without the other. The Nimiipuu names for places describe this connection and understanding in a rich and holistic way. This Tribal Trust section has specific plan components that honor and signify our obligation to honor the treaties while the entirety of this plan honors and supports sustaining Nez Perce culture.

Treaties are the law of the land, but the essence of our existence is the uniqueness of who we are as Nimiipuu. Those aspects that define us are tribal, individual, familial. These aspects include but are not restricted to our language, cultural values, customs, ceremonies, rights of passage, history, heritage, hunting, fishing, and gathering. All these aspects are the duties that we as a Tribe must protect and maintain for future generations.

~Simone Wilson, in Treaties: Nez Perce Perspectives, page 48

As the Nez Perce do not differentiate themselves from the land, this Tribal Trust section is deliberately placed between the Biophysical Environment and Human Uses of the Forest sections as a bridge between the land and people, a position the Nez Perce have held since time immemorial.

# Goals

**FW-GL-TT-01**. Proposed practices and management activities honor treaty reserved rights of Indian tribes or tribal members.

**FW-GL-TT-02.** Proposed practices and management activities recognize the role the Nez Perce have had on the ecology of the area and integrate traditional ecological knowledge into future projects.

**FW-GL-TT-03.** Proposed practices and management activities are coordinated with other government agencies and Indian tribes to ensure requirements of all laws and regulations are met and terms of Indian Treaties are upheld.

**FW-GL-TT-04.** The Nez Perce-Clearwater coordinates with the Nez Perce Tribe to restore, promote, and enhance traditional botanical species that are accessible to tribal members.

**FW-GL-TT-05.** The Nez Perce-Clearwater supports the Nez Perce Tribe's interest in food sovereignty for Nez Perce Tribe members.

**FW-GL-TT-06.** The Nez Perce-Clearwater coordinates with the Nez Perce Tribe to maintain and enhance access for tribal members to exercise treaty reserved rights.

**FW-GL-TT-07.** Consultation with the Nez Perce Tribe, traditional cultural practitioners, consulting parties, adjacent landowners, and project designers aid the FS in protecting and enhancing traditional cultural properties, cultural landscapes, sacred sites, and other culturally significant areas that provide tangible links to historically rooted beliefs, customs, and practices.

# **Desired Conditions**

**FW-DC-TT-01.** Vegetative conditions provide a sustainable diversity of habitats necessary to provide plant and animal species that are of tribal importance.

**FW-DC-TT-02**. Habitats support wildlife and other resources at huntable and harvestable population levels for the exercise of treaty reserved rights.

**FW-DC-TT-03.** At the forest scale, culturally important botanical species are present and vigorous in quantities that are harvestable and accessible to Nez Perce tribal members.

**FW-DC-TT-04.** Hot springs are natural and free flowing in function and appearance. The hydrological, biological, and aesthetic resources in and around them are preserved, and are accessible for traditional cultural uses. Water quality meets state water quality standards for beneficial uses. Human use impacts are minor and consistent with traditional cultural uses of the site.

**FW-DC-TT-05.** Through co-stewardship, consultation and collaboration, the Forests provide for the past, present and future of the Nez Perce culture.

# Objectives

**FW-OBJ-TT-01.** Restore 1,000 acres of forested stands in habitat types that could produce huckleberry in a manner that promotes huckleberry abundance over the long-term every 5 years.

**FW-OBJ-TT-02.** Increase wet meadow associated culturally important botanical species, such as camas, production on 50 acres every 5 years.

**FW-OBJ-TT-03.** Develop a long-term strategy with the Nez Perce Tribe to improve Tribal member access to important cultural sites on the Forests, consistent with the Treaty of 1855 within 5 years.

## Standards

FW-STD-TT-01. RESERVED FOR NEW WORDING.

**FW-STD-TT-02.** Commercial collection of special forest products shall not be permitted if the Nez Perce Tribe Executive Committee identifies it would result in limiting tribal member access to those treaty reserved resources. This determination shall be reviewed annually.

## Guidelines

**FW-GDL-TT-01.** To ensure tribal access to first foods and culturally important botanical species, collection of special forest products should not be authorized if it would result in destruction of resources and should minimize conflicts with Nez Perce tribal uses.

**FW-GDL-TT-02.** To ensure tribal access to first foods and culturally important botanical species, personal use collection of special forest products should not be permitted in areas of known conflict with tribal uses when identified and requested by the Nez Perce Tribal Executive Committee for the duration of one harvest season.

# Human Uses of the Forest

# **Cultural Resources**

This Land Management Plan departs notably from previous Forest Plans in the way in which cultural resources are considered. The 1987 plans captured the administrative reality of a time when the agency was learning to embrace regulatory compliance procedures implementing laws from the 1960s and 1970s. Many standards were quasi-reiterations of laws meant to locate and protect historic properties but did little to advocate the actual enhancement of those properties. The current Land Management Plan makes little attempt to repackage federal mandates meant to locate and protect historic properties, as those laws are incorporated by reference into the plan. Instead, this Plan attempts to move cultural resource management more actively toward desired conditions and indicators meant to improve the condition of the Nez Perce-Clearwater's historic properties.

Historic properties are located and protected from project activities through the commonplace adherence to existing federal laws. Existing federal laws include the Antiquities Act of 1906 (16 U.S.C. 431), Historic Sites Act of 1935 (16 U.S.C. 461), National Historic Preservation Act of 1966 (16 U.S.C. 470), Archeological and Historic Preservation Act of 1974 (16 U.S.C. 469), Archaeological Resources Protection Act of 1979 (16 U.S.C. 470aa *et seq.*), and Native American Graves Protection and Repatriation Act of 1990 (25 U.S.C. 3001), and executive orders 11593, 13007, 13175, 13287 and 13327.

## Goals

**FW-GL-CR-01.** Local user groups, affected communities, and local organizations collaborate in the preservation and protection of cultural resources and maintaining the community's connection to those resources.

## **Desired Conditions**

**FW-DC-CR-01.** Historic properties with high National Register integrity are available for present and future generations. These well-maintained properties connect communities with ancient places having a deep history, as well as sites associated with the recent past. Archaeological and historical research contributes to knowledge about history and provides a valuable perspective on past climate and environment. Traditional cultural properties and other culturally significant areas identified by tribes and local communities provide tangible links to historically rooted beliefs, customs, and practices.

**FW-DC-CR-02.** Historic properties and cultural landscapes provide a greater understanding and appreciation of local, regional, and national history. Sites listed on the National Register of Historic Places add to the inventory of significant historical sites in Idaho. Restored historic buildings placed on the Forest Service facility rental program add to forest recreation program capacity and diversity and generate revenue. Historic Forest Service administrative buildings reflect agency history, identity, and function.

**FW-DC-CR-03.** Historic administrative facilities and priority heritage assets do not have deferred maintenance needs and benign neglect of these properties is avoided as a management strategy.

## Guidelines

**FW-GDL-CR-01**. To better preserve and maintain historic buildings and structures, future use determinations and other administrative processes involving the disposition of historic buildings and structures should be crafted in an integrated manner where adaptive-reuse alternatives are pursued.

**FW-GDL-CR-02.** To preserve historic properties, recreation management activities at developed and dispersed recreation sites that adversely affect historic properties should have those effects resolved or mitigated.

#### **Objectives**

**FW-OBJ-CR-01.** Evaluate 15 cultural resource sites per year for their eligibility to the National Register of Historic Places.

FW-OBJ-CR-02. Nominate one cultural resource site every three years to the National Register.

**FW-OBJ-CR-03.** Conduct 200 acres of problem oriented cultural resource surveys annually to address Heritage Program research needs.

FW-OBJ-CR-04. Conduct one public outreach project annually.

**FW-OBJ-CR-05**. Stop or mitigate ongoing effects to cultural resources at developed recreation sites at a rate of two campgrounds every 5 years.

## Municipal Watersheds and Source Water Protection Areas

Municipal Watersheds and Source Water Protection Areas are two separate constructs for drinking water protection that are applicable to National Forest System land management. Direction for management of National Forest System watersheds that supply municipal water is provided in 36 CFR 251.9 and Forest Service Manual 2542. The Forest Service is directed to manage watershed lands for multiple uses while recognizing domestic supply needs. Municipalities may apply to the Forest Service for municipal watershed agreements if they desire protective actions or restrictive measures not specified in this Plan. Formal written agreements to ensure protection of water supplies may be appropriate when multiple use management fails to meet the needs of a water user. Although there are currently no municipal watershed agreements established for watersheds on the Nez Perce-Clearwater, agreements could be developed in the future. Forest Service Manual 2542.03 states "identify watersheds providing the principal source of community water for the communities of Elk River, Elk City, and Pierce.

Source water protection areas protect public water systems from contamination in accordance with the 1996 amendments to the Safe Drinking Water Act. Public water systems are defined as entities that provide "water for human consumption through pipes or other constructed conveyances to at least 15 service connections or serves an average of at least 25 people for at least 60 days a year." The Idaho Department of Environmental Quality's Source Water Protection Program provides guidance and approval of source water protection areas within the State of Idaho. There are currently 41 public water systems derived from the Nez Perce-Clearwater. See Appendix 6 for additional information regarding municipal watersheds and source water protection areas.

## **Desired Conditions**

**FW-DC-MWTR-01.** Lands that contribute to municipal watersheds<sup>5</sup> and source water protection areas are in a condition that contributes to consistent delivery of clean water and meets or exceeds State of Idaho water quality standards.

## Standards

**FW-STD-MWTR-01.** Management activities conducted in source water protection areas<sup>6</sup> shall be consistent with source water protections and goals. Short-term effects from activities in source water protection areas may be acceptable when those activities support long-term benefits to water quality.

# Sustainable Recreation Management

The Nez Perce-Clearwater provides a range of high-quality, sustainable recreation opportunities, including four-season use, dispersed and developed facilities and sites, day use and overnight use, motorized and non-motorized use, and guided and independent opportunities. A variety of recreation settings are provided through management area allocations and recreation opportunity spectrum classes that offer a range of summer and winter recreation opportunities from well-roaded, front-country in Management Area 3; to generally unroaded backcountry in Management Area 2; to primitive, unconfined settings in designated wilderness in Management Area 1 and three recommended wilderness areas in Management Area 2.

Summer recreation settings, opportunities, and facilities include roads open seasonally that provide nature-based experiences from highly developed day use sites, campgrounds, and river facilities to primitive back country for more adventurous and self-reliant experiences. Many of these areas can be accessed by system roads suitable for passenger car as well as more challenging roads suitable for high clearance vehicles. Numerous day use and overnight sites, scenic drives, fishable and boatable rivers and streams, exhilarating hikes and rides, and wide-open natural landscapes are available within minutes of the many nearby communities. Developed sites are open seasonally and include the breadth of the recreation development scale from few constructed features at Development Scale 3 sites to multiple constructed features at Development Scale 5 sites. Some recreation sites include specialized facilities like boat ramps along rivers and lakes or livestock handling facilities. Dispersed recreation occurs outside developed sites and accounts for most of the recreation use on the Nez Perce-Clearwater. Dispersed sites have minimal development and generally no or few constructed features. Dispersed sites include, but are not limited to, camping sites, day use sites, river-based sites for swimming, fishing and lounging, hot springs, caves, wildlife viewing areas, and scenic vistas. Dispersed sites recognized by the Nez Perce-Clearwater generally form through frequent use by the visiting public versus random sites that are infrequently used and generally unknown to most of the visiting public, or sites developed and maintained for visitor enjoyment.

The Nez Perce-Clearwater also provides an array of winter recreation settings and opportunities. These include opportunities for winter over-snow motorized use on numerous groomed snowmobile trails; back-country riding opportunities along closed, snow covered roads and open meadows; and high alpine

<sup>&</sup>lt;sup>5</sup> The definition does not include communities served by a well or a confined groundwater aquifer that is unaffected by Nez Perce-Clearwater activities.

<sup>&</sup>lt;sup>6</sup> As defined by the Safe Drinking Water Act or any subsequent laws applicable to public water systems that provide water for human consumption.

challenges for the most adventuresome. Non-motorized winter opportunities range from groomed crosscountry ski trails to back-country opportunities for skiing and snowshoeing limited only by one's skill level and sense of adventure.

Unroaded backcountry lands in Management Area 2 provide large, relatively undeveloped country that offer visitors over 5,000 miles of trails suitable for a variety of uses, including hiking, biking, equestrian and other pack animals, motorcycles, all-terrain vehicles, and utility terrain vehicles. These areas provide a spectrum of semi-primitive motorized and non-motorized experiences that offer adventure and challenge in natural settings.

These year-round recreation settings and opportunities are allocated across the Nez Perce-Clearwater through the application of Recreation Opportunity Spectrum classes as designated on the Recreation Opportunity Spectrum maps in Appendix 1. Table 15 provides the definitions of the various classes on the Nez Perce-Clearwater.

Recreation Opportunity Spectrum	Definition
Primitive (P)	This setting supports large, remote, wild, and predominantly unmodified landscapes. There is no motorized activity and little probability of seeing other people. Primitive settings are managed for quiet solitude away from roads, people, and development. There are few, if any, facilities or developments. The primitive settings align with the Nez Perce-Clearwater's designated wilderness areas.
Semi-Primitive Non- motorized (SPNM)	The semi-primitive non-motorized settings include areas of the Nez Perce-Clearwater managed for non-motorized use. Mechanized transport such as mountain bikes are often present. Rustic facilities are present for the primary purpose of protecting the natural resources of the area. These settings are not as vast or remote as the primitive settings, but they also offer opportunities for exploration, challenge, and self-reliance.
Semi-Primitive Motorized (SPM)	This setting is managed for backcountry motorized use on designated routes and areas. Routes are designed for off-highway vehicles and other high-clearance vehicles. This setting offers visitors motorized opportunities for exploration, challenge, and self-reliance. Mountain bikes and other mechanized transport are also sometimes present. Rustic facilities are present for the primary purpose of protecting the natural resources of the area or providing portals to adjacent primitive or semi-primitive non-motorized areas.
Roaded Natural (RN)	This setting is managed as natural appearing with nodes and corridors of development that support higher concentrations of use, user comfort, and social interaction. The road system is generally well defined in this setting and can typically accommodate passenger car travel. System roads also provide access to other recreation opportunity spectrum settings of semi-primitive motorized, semi-primitive non-motorized, and primitive areas.
Rural (R)	This setting represents the most developed recreation sites and modified natural settings on the Nez Perce-Clearwater. Facilities are designed primarily for user comfort and convenience.

 Table 15. Recreation opportunity spectrum classes and definitions

Note: Urban is not described since it is not present on the Nez Perce-Clearwater.

Data Source: Adapted from text in Nez Perce-Clearwater National Forests Forest Plan Assessment Section 9.0 Recreation.

Three designated wilderness areas and three recommended wilderness areas, totaling 1,402,416 acres, offer remote, wild settings for quiet, primitive, and unconfined recreation with opportunities for solitude, self-reliance, and a sense of freedom found in few other places.

Five designated Wild and Scenic Rivers provide 214 miles of high-quality river recreation experiences, including camping, fishing, swimming, and world class white-water adventure. These rivers include many

miles accessible by road and many more miles in remote, pristine back-country settings. The Wild and Scenic Salmon River offers a unique wilderness opportunity by enjoying the river into the Frank Church River of No Return Wilderness using motorized boats. Eleven additional rivers found suitable for designation as Wild and Scenic Rivers provide another 233 miles of wild, scenic, and recreational experiences like the designated rivers. Hundreds of other rivers, streams, and high mountain lakes across the Nez Perce-Clearwater offer water-based recreation opportunities for all interests and skill levels.

National Historic Trails and other historic travelways, including the Nez Perce National Historic Trail, Lewis and Clark National Historic Trail, Southern Nez Perce Trail, Magruder Road, Lolo Motorway (Forest Road 500), and Elk City Wagon Road, are accessible to the public to enjoy using a variety of motorized and non-motorized methods. Interpretation and related visitor information is available and enhances visitor appreciation of the outdoors, natural resources, history, and scenic values of these routes while also promoting stewardship and protecting these resources. The historic ridgeline corridor along the Lolo Trail National Historic Landmark stretches about 62 miles across the Nez Perce-Clearwater from near Musselshell Meadows to near Lolo Pass. This trail offers visitors the opportunity to learn about and enjoy this ancient American Indian trail that served as the route of Lewis and Clark in 1805 and the Nez Perce Indians during the Nez Perce Indian War of 1877.

Suitability for motorized and non-motorized recreation is determined through management area allocation, Idaho Roadless Rule area direction, and application of the recreation opportunity spectrum classes across the landscape. While management area allocation and Idaho Roadless Rule area designation are constant year-long, recreation opportunity spectrum classes are differentiated between summer and winter and motorized and non-motorized vehicle use. Site specific decisions about where or what motorized or non-motorized recreational activities may occur are not made in this Plan. These decisions are made through travel management planning decisions or other site-specific decisions that address non-motorized and mechanized uses made before or after this Plan.

The Nez Perce-Clearwater's 4 million-acre landscape offers ample, year-long opportunities for hunters, anglers, adventure seekers, and those that simply want to get out and enjoy all that the natural environment has to offer.

Some Nez Perce-Clearwater visitors prefer to recreate on the Nez Perce-Clearwater using the services of an outfitter-guide who may provide specialized skills, equipment, or knowledge. The Nez Perce-Clearwater values the services that outfitters and guides provide to help people enjoy hunting, fishing, floating, and recreating on the Nez Perce-Clearwater lands and waters.

## Goals

**FW-GL-REC-01.** The Forest Service participates in and supports the nomination of the Southern Nez Perce Trail as a National Historic Trail if proposed by other agencies.

**FW-GL-REC-02.** Relationships with local communities, partners, stakeholders, outfitters and guides, and others are developed and sustained to support Nez Perce-Clearwater outdoor recreation opportunities and community connections.

## **Desired Conditions**

**FW-DC-REC-01**. Recreation opportunities are available across a variety of settings that foster quality year-round developed and dispersed experiences, as well as motorized and non-motorized opportunities consistent with the applicable recreation opportunity spectrum (ROS) class. These settings reflect the

integration of other resource values in a sustainable manner with the desired recreation opportunities, facilities, infrastructure, and access provided within those settings.

A table of the summer recreation opportunity spectrum classes is displayed in Table 16 and winter recreation opportunity spectrum classes in Table 17, as well as in maps in Appendix 1.

Summer Recreation Opportunity Spectrum	Percent of Forest by ROS class
Primitive	28.9
Semi-primitive non-motorized	16.2
Semi-primitive motorized	24.6
Roaded natural	27.2
Rural	3.1

 Table 16. Summer recreation opportunity spectrum (ROS) percentages

Table 17. Winter recrea	ion opportunity spectrum	(ROS) percentages
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Winter Recreation Opportunity Spectrum	Percent of Forest by ROS class
Primitive	28.9
Semi-primitive non-motorized	11.0
Semi-primitive motorized	54.1
Roaded natural	6.0
Rural	0.1

**FW-DC-REC-02.** Recreation infrastructure, such as campgrounds, day-use areas, and trails, facilitates visitor enjoyment of the opportunities and experiences provided by the Nez Perce-Clearwater.

**FW-DC-REC-03.** Recreation opportunities adapt to the changing social and cultural needs of the Nez Perce-Clearwater to foster a sense of place and societal relevance to natural and cultural landscapes.

**FW-DC-REC-04.** The type and level of infrastructure, visitor services, and information are sustainable and consistent with the desired recreation opportunity spectrum settings.

**FW-DC-REC-05.** Recreation activities are available to contribute to the local economy, community stability, quality of life, and diverse lifestyles in the area throughout the year.

**FW-DC-REC-06.** Recreation sites and facilities are available, sustainable, and complement the natural setting. They are adaptable to new recreation demands.

**FW-DC-REC-07.** Cultural resources, such as historic roads and trails, old mining towns and settlements, ranger stations, and fire lookouts, offer visitor opportunities to learn about, connect to, and experience the rich heritage of the Nez Perce-Clearwater.

**FW-DC-REC-08.** National Historic Trails and other historic travelways, including the Nez Perce National Historic Trail, Southern Nez Perce Trail, Lewis and Clark National Historic Trail, Magruder Road, Lolo Motorway (Forest Road 500), and Elk City Wagon Road, are available to the public to enjoy using a variety of methods both motorized and non-motorized as defined in travel plans. Interpretation and related visitor information is available and enhances visitor appreciation of the outdoors, natural resources, history, and scenic values of these routes while also promoting stewardship and protecting these resources.

**FW-DC-REC-09.** The Nez Perce-Clearwater trail system provides an array of trail classes for a variety of designed uses. Trail systems connect local communities through the Nez Perce-Clearwater, facilitating long-distance travel, as well as loop opportunities to accommodate short-term, day use activities.

**FW-DC-REC-10.** The designated system of trails provides opportunities for summer and winter motorized and non-motorized recreation with minimal conflict between modes of travel.

**FW-DC-REC-11.** The Grand Exploration Motorized Trail provides motorized travel connections between community hubs by primarily using existing roads and trails.

**FW-DC-REC-12.** Trails (for example, trails converted from roads, user created trails) not needed to serve management or public needs and purposes are absent.

**FW-DC-REC-13.** Dispersed recreation sites are available in desirable locations, are socially and environmentally sustainable, and are compatible with the recreation opportunity spectrum classes and travel management designations.

**FW-DC-REC-14.** The seven existing public backcountry airstrips provide users the unique opportunities to quickly access vast and remote backcountry and wilderness areas for recreational activities.

## Objectives

**FW-OBJ-REC-01.** Annually maintain to standard a minimum of 30 percent of National Forest System trail miles.

FW-OBJ-REC-02. Reduce deferred maintenance of trails by five percent, every five years.

### Standards

**FW-STD-REC-01.** Construction and reconstruction of recreation facilities and trails shall be compatible with the appropriate recreation opportunity spectrum class and other applicable resource management plans, such as wilderness, recreation corridor, river management, scenic byway, or trail plans.

**FW-STD-REC-02.** All new or rehabilitated developed recreation facilities, sites, and programs shall comply with applicable federal accessibility guidelines and standards.

## Guidelines

**FW-GDL-REC-01.** To compliment the natural setting, the built environment and resource conditions at new and reconstructed developed recreation sites, administrative facilities, and trails should be consistent with applicable scenic integrity objectives and the Forest Service Built Environment Image Guide. New and reconstructed trails should also be compatible with trail management objectives.

**FW-GDL-REC-02.** When developed or improved, developed recreation sites and facilities should enhance natural and cultural resource-based activities typically associated with a natural environment.

## Suitability

Within sustainable recreation management, there are multiple designations of land that may or may not be suitable for management actions. Broad suitability determinations are made across the recreation opportunity spectrum classes and more specific suitability determinations are applied for developed recreation sites. Table 18 indicates suitability within developed recreation sites. Five recreation

opportunity spectrum classes apply to the Nez Perce-Clearwater: primitive, semi-primitive non-motorized, semi-primitive motorized, roaded natural, and rural.

Table 19 indicates suitability within recreation opportunity spectrum classes.

Management Action	Suitability
FW-SUIT-REC-01. Timber Production	No
FW-SUIT-REC-02. Timber Harvest	Yes
FW-SUIT-REC-03. Permanent Road Construction	Yes
FW-SUIT-REC-04. Temporary Road Construction	Yes
FW-SUIT-REC-05. Prescribed Fire	Yes
FW-SUIT-REC-06. Livestock Grazing	No
FW-SUIT-REC-07. Minerals Materials-Saleable	No
FW-SUIT-REC-08. Minerals Materials-Leasable	No
FW-SUIT-REC-09. Minerals Materials-Locatable	No
<b>FW-SUIT-REC-10</b> . Construction of new permanent buildings <sup>1</sup> or structures	Yes
FW-SUIT-REC-11. Over-snow vehicle use	Yes
FW-SUIT-REC-12. Motorized travel	Yes
<b>FW-SUIT-REC-13</b> . Mechanized travel (for example, bicycles, game carts)	Yes

Table 18. Management action suitability in developed recreation sites

<sup>1</sup>Building is defined as a structure designed to be inhabited.

Table 19.	Management action	suitability in	recreation opportunity	spectrum	(ROS) classes
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Management Action	Primitive and Semi- Primitive Non- Motorized ROS Class Suitability	Semi-Primitive Motorized, Roaded Natural, and Rural ROS Class Suitability
FW-SUIT-ROS-01. Recreational motorized travel	No <sup>1</sup>	Yes <sup>1</sup>

<sup>1</sup>As designated on recreation opportunity spectrum summer and winter maps in Appendix 1.

## Scenery

Many visitors to the Nez Perce-Clearwater value and enjoy the scenery resource and the view of the surrounding landscape is often an important part of their recreational and cultural experience. Although a variety of landscapes may be visually pleasing, the Scenery Management System sets a comprehensive science-based framework to determine and describe scenic character, as well as manage to maintain it. Scenic character descriptions not only describe the physical and biological features of the landscape but also the cultural features, such as historic cabins and natural disturbances like fire on a landscape.

Scenic integrity objectives (SIO), along with scenic character descriptions, have been developed following the Scenery Management System handbook direction. Scenic integrity objectives are a measure of the degree to which a landscape is visually perceived to be complete when compared to the scenic character of an area. Scenic integrity objectives have been assigned to all Nez Perce-Clearwater lands to aid in the design and implementation of land management activities to meet desired conditions of the scenery resource. The scenic integrity objectives of high, moderate, low, or very low facilitate project design as viewed in the foreground, middle ground, and background from the identified critical viewing

platforms (travelways and viewpoints); or, where the scenic integrity objective is very high as viewed from anywhere. Projects that are not visible from any identified critical viewing platforms, based upon landforms and not vegetation blocking, do not need design measures to meet the areas' assigned scenic integrity objectives. SIO maps are included in Appendix 1, and scenic character descriptions are included in Appendix 7.

## **Desired Conditions**

**FW-DC-SCENERY-01.** The Nez Perce-Clearwater's scenery reflects the natural and cultural range of variability within the landscape's varied ecological regions in relation to viewing contexts and expectations for the viewsheds. This is reflected in the scenic character descriptions.

**FW-DC-SCENERY-02.** The Nez Perce-Clearwater's scenery, as described by the scenic integrity objectives (Table 20), reflects a range of variation that considers social and economic values, ecosystem processes, resilient landscapes, and communities.

Scenic Integrity Objective <sup>1</sup>	Percent
Very High	30
High	12
Moderate	45
Low	13

Table 20. Scenic integrity objectives by rounded percent of Nez Perce-Clearwater area

<sup>1</sup>Scenic integrity objectives are the minimum level of allowable scenic integrity as measured in comparison to the scenic character description. Very Low is not included because the Scenery Management System handbook directs that no lands shall be given this objective and is reserved only for the existing condition of the scenery resource.

**FW-DC-SCENERY-03.** Facilities reflect the architectural character of the area and blend with natural settings to remain an integrated part of the cultural and scenic landscape.

## Guidelines

**FW-GDL-SCENERY-01.** Considering the Nez Perce-Clearwater's scenic resource, management actions should be designed consistent with the assigned scenic integrity objectives.

**FW-GDL-SCENERY-02.** When practicable, construction or reconstruction of facilities or structures, including those authorized under special use permits, should be consistent with the Forest Service architectural character guidance (for example, Built Environment Image Guide) for the Nez Perce-Clearwater natural setting and province.

**FW-GDL-SCENERY-03.** To support achievement of the scenic integrity objectives, management activities should incorporate the scenic attributes of the surrounding landscape, including line, form, color, texture, size, shape, edge effect, and patterns of natural vegetation openings.

**FW-GDL-SCENERY-04.** Management activities should be designed to rehabilitate areas with very low existing scenic integrity to support achievement of the scenic integrity objectives and long-term management and stewardship of the scenic character of the area.

# Public Information, Interpretation, and Education

The Nez Perce-Clearwater strives to connect people to their environment and to the natural and cultural history of the area. Relevant and timely public information, creative interpretation, and stimulating

education help the Nez Perce-Clearwater communicate with the public and enable visitors to be involved in the activities, actions, and expectations for activities on Nez Perce-Clearwater lands. These connections provide opportunities for the development of strong stewardship ethics and appreciation for the natural and cultural history across these landscapes.

## Goals

**FW-GL-ED-01.** Partnerships with federal and non-federal entities help achieve desired conditions and improve overall resource management. Partnerships and collaborative processes within the local communities fosters relationships that help accomplish projects in the communities' and Nez Perce-Clearwater's shared interest and provide hands-on educational opportunities.

**FW-GL-ED-02.** Partners assist the Nez Perce-Clearwater in delivering interpretation and education that instills an appreciation for the natural and cultural resources of the Nez Perce-Clearwater and promotes conservation and stewardship.

**FW-GL-ED-03.** Nez Perce-Clearwater employees participate in community events, such as county fairs, Nez Perce tribal events, and events sponsored by user groups or partners, by providing educational or interpretive materials or programs.

**FW-GL-ED-04.** Nez Perce-Clearwater employees coordinate with wilderness leaders in the region to provide wilderness management and traditional skills education on the Nez Perce-Clearwater.

**FW-GL-ED-05**. Nez Perce-Clearwater employees coordinate with partners to provide strong and vigorous youth education in the communities in and adjacent to the Nez Perce-Clearwater.

## **Desired Conditions**

**FW-DC-ED-01.** Interpretation and educational opportunities enhance the visitor's understanding and appreciation for the rich natural and cultural history of the Nez Perce-Clearwater and build support for public lands. Interpretive and educational opportunities focus on relevant themes (for example, heritage and cultural resources, ecosystem processes and restoration, invasive species, wildlife [including human interactions with wildlife], sustainable public lands, and the history of Nez Perce-Clearwater associated with logging, mining, trapping, settlement, and rivers).

**FW-DC-ED-02.** A variety of educational and interpretive opportunities are available, as appropriate, for the development scale of sites through a variety of methods to reach the broadest audience. New and emerging technologies (for example, electronic media, mobile device based) are a source of interpretation to reach a variety of people of different ages and cultures.

**FW-DC-ED-03**. Opportunities are available for educators in local communities to learn about local natural resource issues and partner with the Nez Perce-Clearwater to deliver place-based outdoor learning opportunities.

# Infrastructure

For other plan components related to infrastructure see the Infrastructure (Aquatics and Riparian) plan components in the Aquatic Ecosystems (Section 0).

## **Desired Conditions**

**FW-DC-INF-01**. The road system serves land management and public needs and purposes. It is interconnected with federal, state, and local public roads to provide access to lands, infrastructure, other land ownerships, and inholdings where appropriate. Although roads maintained for passenger cars meet public road safety standards, roads maintained for high clearance vehicles may have hazards and require operator judgment and skill to negotiate.

FW-DC-INF-02. Roads not needed to serve management and public needs and purposes are absent.

**FW-DC-INF-03**. Administrative facilities serve the needs of land managers in an economical and costeffective manner. The size, number, and location of facilities meet management needs; are affordable, safe, and energy efficient; and meet the appropriate level of accessibility.

**FW-DC-INF-04** Airstrips serve the Nez Perce-Clearwater land management and public recreation opportunities. The seven existing public backcountry airstrips for airplane and helicopter access to the Nez Perce-Clearwater's backcountry maintain historical site conditions to provide safe and functioning airstrips for backcountry access.

## Objectives

**FW-OBJ-INF-01.** Complete 600 miles of road work, such as reconstruction; re-routing; road improvements; decommissioning; or placing roads in intermittent stored service, every 5 years. Priorities shall include reducing effects on desired aquatic and riparian conditions from chronic sediment delivery or potential future road prism failures, including previously decommissioned roads where drainage features have failed.

**FW-OBJ-INF-02.** Annually maintain 1,400 miles of operational maintenance level two through five roads.

FW-OBJ-INF-03. Every 2 years, complete one facilities project to improve energy efficiency or safety.

### Guidelines

**FW-GDL-INF-01.** Management and maintenance of all airstrips should follow Idaho Aeronautics Network recommendations to provide for safe and functioning airstrips to meet FW-DC-INF-04.

**FW-GDL-INF-02.** As facilities are identified as no longer being needed, they should be transferred to other uses or ownership or disposed.

## Suitability

Management Action	Suitability
FW-SUIT-INF-01. Timber Production	No
FW-SUIT-INF-02. Timber Harvest	Yes
FW-SUIT-INF-03. Permanent Road Construction	Yes
FW-SUIT-INF-04. Temporary Road Construction	Yes
FW-SUIT-INF-05. Prescribed Fire	Yes
FW-SUIT-INF-06. Livestock Grazing	No

Table 21.	Management action	on suitability i	n administrative	sites

Management Action	Suitability
FW-SUIT-INF-07. Minerals Materials-Saleable	No
FW-SUIT-INF-08. Minerals Materials-Leasable	No
FW-SUIT-INF-09. Minerals Materials-Locatable	No
<b>FW-SUIT-INF-10</b> . Construction of new permanent buildings <sup>1</sup> or structures	Yes
FW-SUIT-INF-11. Over-snow vehicle use	Yes
FW-SUIT-INF-12. Motorized travel	Yes
FW-SUIT-INF-13. Mechanized travel (for example, bicycles, game carts)	Yes

<sup>1</sup>Building is defined as a structure designed to be inhabited.

# Land Ownership and Land Uses

Management of National Forest System lands on the Nez Perce-Clearwater is important to protect the public's estate interest in its National Forest. Surveying and posting the National Forest boundary, maintaining posted property lines, and defending public lands from trespass or encroachment are activities that maintain the integrity of the National Forest System.

Public lands are generally retained in federal ownership to provide long-term values. The vision for the planning area is to retain in public ownership all lands currently under its administration that meet the long-term needs of maintaining the integrity of contiguous natural ecosystems, river frontage, riparian areas, and wetland ecosystems; recreation and open space; scenery; clean air and water; and habitat for plant and animal populations. Through the methods available to the agency, the Nez Perce-Clearwater would acquire lands and mineral estates that enhance this vision. Lands and mineral estates that do not meet these needs would be considered for disposal. In all such cases, the primary guiding principle would be the greater public benefit.

Lands uses authorizations, such as permits and leases, sanction the occupancy and use of National Forest System lands by private individuals or companies for a wide variety of uses, such as roads, utility corridors, communication sites, and other private or commercial uses that cannot be accommodated on private lands. Approval of these uses strive to meet the needs of current and future generations of the American public.

For other plan components related to land ownership and land uses see the Lands and Special Uses (Aquatics and Riparian) plan components in the Aquatic Ecosystems.

## **Desired Conditions**

**FW-DC-LND-01.** Land ownership, rights-of-way, and conservation easements provide access for recreation and facilitate restoration or conservation of high value resources, including habitat for at-risk species and significant cultural sites.

**FW-DC-LND-02.** Surveys and markings of the Nez Perce-Clearwater property boundaries are prioritized adjacent to private lands, followed by boundaries of areas with special restrictions, such as designated wilderness areas.

**FW-DC-LND-03.** Road and trail rights-of-way provide reasonable public and administrative access to National Forest System lands.

**FW-DC-LND-04.** Energy corridor infrastructure throughout the planning area provides efficient and effective delivery of electricity, oil, and gas and enhances the Western electric transmission grid by improving reliability, reducing congestion, and contributing to the national electrical grid.

**FW-DC-LND-05.** Existing communication sites are used to provide communication for the Nez Perce-Clearwater and other government entities and to meet various public needs. Obsolete or unused facilities are not present on the landscape.

## **Ecosystem Services**

Ecosystem services are the benefits the National Forests provide to area residents, visitors, and the American public. Ensuring ecosystem services are provided is critical to providing for ecologic, social, and economic sustainability. Plan components throughout the plan all provide for ecosystem services. This section highlights and builds upon other sections to ensure the full suite of ecosystem services are provided by the Nez Perce-Clearwater.

## **Desired Conditions**

**FW-DC-ES-01.** The Nez Perce-Clearwater provides ecosystem services to area residents and visitors. Key benefits the Nez Perce-Clearwater provides include clean water; clean air; wood products, including timber and firewood; forage; hunting, trapping and fishing; fish; cultural values, including heritage values, subsistence food gathering, and spiritual and inspirational values; scenery; recreation; and flood control and soil stabilization.

**FW-DC-ES-02.** Opportunities for recreation, hunting, gathering, firewood collection, and other subsistence activities align with the value system and lifestyles of area tribal members, residents, and visitors.

## Guidelines

**FW-GDL-ES-01.** To provide for social and economic sustainability of rural communities, access to activities such as recreation, hunting, fishing, gathering, egress, and wildfire management should continue to be provided for on routes or in areas designated as open to motorized use in the summer and winter. If a route is identified as adversely affecting aquatic ecological values, rerouting and route improvement should be considered prior to closure, to preserve motorized access opportunities. If a route or area needs to be closed, alternate motorized access to maintain social and economic sustainability of rural communities should be provided.

# **Production of Natural Resources**

# Timber

Per the National Forest Management Act and 2012 Planning Rule regulations, the quantity of timber that may be sold must be less than or equal to the sustained yield limit. It is the volume that could be removed annually in perpetuity on lands that may be suitable for timber production. The calculation of the sustained yield limit is not limited by land management plan desired conditions, other plan components, or the Nez Perce-Clearwater's fiscal or organizational capacity. However, to meet overall multiple-use objectives and achieve the plan's desired conditions and objectives, the expected sale of timber may be increased above the sustained yield limit for a limited time (see FSH 1909.12, Chapter 60). The sustained yield limit for the Nez Perce-Clearwater is 241 million board feet annually.

To display the intended timber program, the plan must identify the sustained yield limit, the projected wood sale quantity, and the projected timber sale quantity. The projected wood sale quantity is the estimated output of timber and all other wood products expected to be sold during the plan period for any purpose, except salvage harvest or sanitation harvest, on all lands in the plan area. The projected timber sale quantity is the portion of the projected wood sale quantity that is the quantity that meets applicable utilization standards. Timber suitability maps are included in Appendix 1.

## **Desired Conditions**

**FW-DC-TBR-01.** National Forest System lands of the Nez Perce-Clearwater contribute to a sustainable flow of saw timber and non-saw timber through vegetation treatments intended to restore resilient ecosystem structure and function.

**FW-DC-TBR-02.** Restoration treatments and timber harvesting opportunities contribute to business and employment opportunities. Productive timber lands continue to support traditional lifestyles and generational ties to the land. A sustainable mix of timber products from a variety of harvest methods contract authorities contribute to economic and social sustainability in our communities.

**FW-DC-TBR-03.** Dead or dying trees in excess of those needed for snags, snag recruitment, and course wood material are salvaged, where practicable, in areas suitable for timber production (see MA3-GDL-FOR-05 for requirements).

**FW-DC-TBR-04.** Harvests, including regeneration harvests, reflect the scale and pattern of natural disturbances.

**FW-DC-TBR-05**. Timber harvest in the wildland urban interface reduces fuel loads and mitigates the risk of wildfire affecting the adjacent populated areas and provides for safer firefighting conditions.

**FW-DC-TBR-06.** Loss of timber volume due to wildfire is minimal on lands suitable for timber production.

## Objectives

FW-OBJ-TBR-01. Offer 190 to 210 million board feet timber sale per year.

FW-OBJ-TBR-02. Offer 37 to 43 million cubic feet in wood sale per year.

#### Standards

**FW-STD-TBR-01.** Harvest for purposes of timber production shall occur only on those lands classified as suitable for timber production.

**FW-STD-TBR-02.** Timber harvest on lands identified as not suitable for timber production but where timber harvest could occur shall only be used as a tool to protect other multiple-use values and for salvage, sanitation, or public health or safety.

**FW-STD-TBR-03.** Timber shall not be harvested on lands where soil, slope, or other watershed conditions would be irreversibly damaged, as identified in project-specific findings.

**FW-STD-TBR-04.** Timber harvest activities shall only be used when there is reasonable assurance of restocking within five years after final regeneration harvest or to meet other desired conditions (Table 22). Restocking level is prescribed in a site-specific silvicultural prescription for a project treatment unit and is determined to be adequate depending on the objectives and desired conditions for the plan area. In some

instances, such as when lands are harvested to create openings for fuel breaks and vistas, to prevent encroaching trees, or to create or improve wildlife habitat, it is adequate to restock at lower numbers or not to restock. Where harvest is performed to meet vegetation desired conditions on lands not suitable for timber production, it is adequate to restock at lower levels, so long as desired conditions are met.

Species	Minimum Trees per Acre
Ponderosa pine	60
Douglas-fir, grand fir, western redcedar, subalpine fir	125
Western white pine, western larch, western hemlock, Engelmann spruce	125
Lodgepole pine	300

 Table 22. Minimum trees per acre to certify a stand as restocked on suitable lands

**FW-STD-TBR-05.** Silvicultural treatments and harvest systems shall be selected based on their ability to meet desired conditions and not based solely on economics or unit output of timber.

**FW-STD-TBR-06.** The maximum opening size created by clearcutting, seed tree cutting, shelterwood seed cutting, or other cuts designed to regenerate an even-aged stand of timber in a single harvest operation shall be 40 acres. This standard applies to newly created harvest openings on National Forest System lands only and need not consider existing recently created opening on National Forest System lands, adjacent private lands, or other agency lands.

Exceptions to the 40-acre maximum opening size standard may occur when determined necessary to help achieve desired ecological conditions for the plan areas (Table 23). The desired conditions include providing for forest patterns, patch sizes and forest resilience both in the short- and long-term, as described in Final Environmental Impact Statement Section 3.2.1. The maximum opening size exception for the Nez Perce-Clearwater is 207 acres.

Forestwide Desired Condition Code	Management Area Desired Condition Code
FW-DC-FOR-02	MA2-DC-FOR-06
FW-DC-FOR-04	MA3-DC-FOR-02
FW-DC-FOR-07	MA2-DC-FOR-07
FW-DC-FOR-10	MA3-DC-FOR-04
FW-DC-WL-03	MA2-DC-FOR-08
FW-DC-WLMU-04	MA3-DC-FOR-06
FW-DC-WLMU-06	MA2-DC-FOR-09
FW-DC-WTR-01	MA3-DC-FOR-07
FW-DC-TBR-04	MA2-DC-FOR-05
FW-DC-TBR-05	MA3-DC-FOR-09
FW-DC-FIRE-01	MA3-DC-FOR-12

 Table 23. Forestwide and Management Area desired condition codes for forest resiliency, pattern, and patch size

**FW-STD-TBR-07.** Harvest openings created because of one harvest operation that exceeds the maximum opening size established in FW-STD-TBR-06 will require a 60-day public review and regional forester approval.

**FW-STD-TBR-08.** FW-STD-TBR-06 and FW-STD-TBR-07 shall not apply to the size of harvest openings created because of natural conditions such as fire, insect and disease attack, or windstorm.

**FW-STD-TBR-09.** Clearcutting will be used only where an interdisciplinary review has occurred, and the Responsible Official has concluded one of the following situations exist:

- Where conducting regeneration harvest in a stand dominated by tree species of an undesired dominance type and shade intolerant tree species are planned for regeneration. Clearcutting may be used where there are insufficient numbers of the desired species to retain as a seed source for the new stand.
- Where conducting regeneration harvest in a stand of lodgepole pine.
- Where conducting regeneration harvest and most or all overstory trees are infected by insect or disease and where clearcutting is the optimal silvicultural system of ensuring future stands are not infected, as in the case of dwarf mistletoe.
- Where a site-specific finding determines that clearcutting is the optimum system to move towards desired conditions.

**FW-STD-TBR-10.** Seed-tree harvest will be used only where an interdisciplinary review has occurred, and the Responsible Official has concluded one of the following situations exist:

- Where conducting regeneration harvest and shade intolerant tree species are planned for regeneration. Seed-tree cutting may be used where sufficient disease-free individuals of the desired species are available to retain as a seed source for the new cohort.
- Where a site-specific finding determines that seed-tree cutting is the optimum system to move towards desired conditions.

**FW-STD-TBR-11.** Shelterwood harvest will be used only where an interdisciplinary review has occurred, and the Responsible Official has concluded one of the following situations exist:

- Where conducting regeneration harvest and shade intolerant tree species are planned for regeneration. Shelterwood cutting may be used where there are concerns over frostiness or high insolation rates on a site.
- Where a stand of root disease susceptible trees exists on soils where slope stability is a concern. Shelterwood harvest may be used to produce a cohort of root disease tolerant species.
- Where a site-specific finding determines that shelterwood cutting is the optimum system to move towards desired conditions.

**FW-STD-TBR-12.** The quantity of timber that may be sold per decade will not exceed ten times the annual sustained yield limit (See opening paragraph above). Salvage or sanitation harvest of trees substantially damaged by fire, windthrow, or other catastrophe or in imminent danger from insect or disease attack may be harvested over and above the sustained yield limit.

#### Guidelines

**FW-GDL-TBR-01.** Timber harvest on lands other than those suitable for timber production should only occur for such purposes as salvage, fuels management, insect and disease mitigation, protection or enhancement of biodiversity or wildlife habitat, meeting desired conditions, to perform research or administrative studies, or recreation and scenic-resource management consistent with other multiple use and management direction.

**FW-GDL-TBR-02.** To ensure successful regeneration of harvested stands in the grand fir mosaic, harvest plans should require mitigation techniques for factors that cause regeneration failures on these sites. These techniques include prompt planting following regeneration harvest, controlling pocket gopher populations during seedling establishment, and selecting planting stock and tree species suitable for these sites<sup>7</sup>.

**FW-GDL-TBR-03.** To maintain scenic integrity, harvest units should be shaped and blended to the natural terrain to the extent practicable and in keeping with project purpose.

**FW-GDL-TBR-04.** On lands suited for timber production, even-aged stands should generally have reached or surpassed the culmination of mean annual increment prior to regeneration harvest. The mean annual increment equals 95 percent of the culmination of mean annual increment of growth as measured by cubic volume. Table 24 gives ages at which culmination generally occurs. Stands need not have met culmination of mean annual increment prior to regeneration harvest if one of the following conditions have been identified during project development:

- When such harvesting would assist in reducing fire risk within the wildland urban interface or the community protection zone.
- When insect and disease mortality has exceeded endemic levels.
- When harvesting stands, landscapes will trend toward the desired conditions stated in this Plan.
- When harvest is thinning, stand improvement or uneven-aged systems do not regenerate even-aged or two-aged stands.
- When harvest is for sanitation or salvage of timber stands that have been substantially damaged by fire, wind-throw, or other catastrophe, or which are in imminent danger from insect or disease attack.
- When harvest is on lands not suited for timber production and the type and frequency of harvest is due to the need to protect or restore multiple use values other than timber production or to move the area towards desired conditions.

# Table 24. Minimum age at which stands generally reach Culmination of Mean Annual Increment (CMAI) by cover type

Cover Type	Minimum Stand Age at which CMAI is Generally Reached	
Ponderosa pine, Douglas-fir in dry habitat types, and grand fir in dry habitat types	90 years	

<sup>&</sup>lt;sup>7</sup> "The Grand Fir Mosaic Ecosystem—History and Management Impacts" by Ferguson et al (2005) provides further information on this subject.

Cover Type	Minimum Stand Age at which CMAI is Generally Reached
Douglas-fir in moist habitat types, western larch, western white pine, grand fir, western redcedar	70 years
Grand fir, western redcedar	80 years
Douglas-fir in cold habitat types, western larch in cold habitat types	80 years
Subalpine fir, Engelmann spruce	90 years
Lodgepole pine	70 years

### **Suitability-Timber Production**

When revising land management plans, all National Forest System lands within the plan area are reviewed to identify their suitability for timber production. The lands suitable for timber production are managed to provide commercial timber products on a regulated basis with planned, scheduled entries. Tree crops are managed by growing, tending, harvesting, and regeneration techniques. Timber harvest is the removal of trees for wood fiber utilization and other multiple-use purposes. In forest planning, a two-step approach is used to identify lands not suited for timber production. Table 25 summarizes the results of the review of lands suitable for timber production.

Timber harvest may be used as a tool for the purpose of maintaining or restoring other resource values in lands not suited for timber production due to capability and some lands in areas not suited for timber production due to legal availability. Examples include maintaining a healthy, visually pleasing forest in the recreation segment of a wild and scenic river corridor or reducing fire hazard in the wildland urban interface or riparian conservation areas.

	Table 25.	Timber	production	suitability	classification
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Land Classification Category	Acres
1. Total National Forest System lands in the plan area	3,939,056
<ul> <li>2. Lands not suited for timber production due to legal availability or technical considerations. Timber harvest for other resource objectives may occur in some areas such as riparian management zones per plan component descriptions. Includes: <ul> <li>Designated Wilderness</li> <li>Recommended Wilderness</li> <li>Idaho Roadless Area—Wild Land Recreation Theme</li> <li>Wild River segments—Designated and Suitable Wild and Scenic Rivers</li> <li>Designated Research Natural Areas</li> <li>Lands not able to reforest</li> <li>Non-forested</li> </ul> </li> </ul>	2,698,716
3. Lands that may be suited for timber production (line 1 minus line 2)	1,240,340
<ul> <li>4. Lands not suited for timber production because timber production is not compatible with the desired conditions and objectives established by the plan. Harvest may occur in some areas for other resource objectives per plan component descriptions. Includes: <ul> <li>Idaho Roadless Rule—Primitive, Backcountry Restoration, and Special Areas of Historic or Tribal Significance Themes</li> <li>Lolo Trail National Historic Landmark</li> <li>Riparian Management Zones</li> <li>Scenic and Recreation River segments—Designated and Suitable Wild and Scenic Rivers</li> <li>Proposed Research Natural Areas</li> </ul> </li> </ul>	197,821

Land Classification Category	Acres
Municipal Watersheds	
5. Lands suited for timber production (sec. 62.2) (line 3 minus line 4)	1,042,519
6. Total lands not suited for timber production. (line 2 plus line 4)	2,896,537

# **Energy and Minerals**

Locatable mineral entry is a non-discretionary Forest Service action; National Forest System lands are open to locatable mineral entry unless withdrawn from mineral entry. For other plan components related to energy and minerals see Section Energy and Minerals (Aquatics and Riparian).

## **Desired Conditions**

**FW-DC-EM-01.** Locatable minerals are available for prospecting, exploring, and development that contributes to local employment and supports traditional lifestyles and generational ties to the land.

**FW-DC-EM-02.** Abandoned mines lands and areas impacted by past mining activities reflect a state of site condition comparable to pre-mineral activity and provide comparable form and function based on site potential.

**FW-DC-EM-03.** Saleable materials are available and accessible to support resource management, such as road surfacing or protective riprap; personal uses, such as landscape rock; and local government and commercial uses. Following excavation activities, lands are in a productive capacity. Saleable rock sources for administrative use are readily available.

**FW-DC-EM-04.** Non-energy leasable minerals are available for prospecting, exploring, developing, and producing. Following leasing activity, impacted areas are in a productive capacity.

FW-DC-EM-05. Energy resources in the form of biofuels are available to contribute to demand.

**FW-DC-EM-06.** Energy resources, such as oil, natural gas, geothermal, wind, and solar, are available for lease.

## Standards

**FW-STD-EM-01.** New mineral and energy management activities shall only be authorized when the associated reclamation plan includes provisions to return disturbed areas to a state of site condition comparable to pre-mineral activity.

# Livestock Grazing

Livestock grazing on FS lands has been and continues to be an important and appropriate use of public lands and is important to the cultural identity and social and economic sustainability of many rural communities. Active grazing allotments occupy approximately 600,000 acres on the Nez Perce-Clearwater with 36 active allotments and 34 permittees. There are nine vacant allotments comprising approximately 210,000 acres.

Forest grazing allotments are managed to be responsive to current federal and state environmental laws and regulations. Allotment management plans and annual operating instructions describe the kind and amount of livestock, season of use, structural improvement maintenance, resource management objectives, and standards and guidelines to move towards desired conditions for the appropriate resources. Forest Service policy direction for permitted livestock use are found in agency manuals and handbooks. Grazing allotment locations and status are displayed in maps included in Appendix 1. For other plan components related to livestock grazing see the Livestock Grazing (Aquatics and Riparian) plan components in the Aquatic Ecosystems Section and FW-STD-WL-01, FS-STD-WL-02, FW-GDL-WL-03, FW-GDL-WLMU-02.

Additionally, the Northern Rockies Lynx Management Direction (Appendix 5) contains one objective and four guidelines pertaining to livestock grazing management in lynx habitat. The management direction only applies to occupied lynx habitat. Since the Nez Perce only currently has unoccupied lynx habitat, the direction should be "considered", but would not have to be followed until such time as lynx occupy the unit. No lynx habitat is located within livestock grazing allotments on the Clearwater.

## **Desired Conditions**

**FW-DC-GRZ-01.** Within the planning area, the Nez Perce-Clearwater provides forage for domestic livestock grazing consistent with the capacity of the land to produce sustained forage for multiple uses.

**FW-DC-GRZ-02.** Transitory forage within grazing allotments is available for livestock grazing following the reduction in conifer overstory from fire and timber harvest.

**FW-DC-GRZ-03.** Livestock grazing on the Nez Perce-Clearwater contributes to agricultural businesses and local employment opportunities, as well as supporting traditional lifestyles.

## Objectives

**FW-OBJ-GRZ-01.** Annually provide conditions which support approximately 29,800 to 34,400 animal unit months, recognizing that allotment site-specific conditions may require adjustments in permitted or annually authorized animal unit months. Examples of conditions that may result in adjustments include wildland fire, drought, vacant allotment conversions, vacant allotment closures, or increases in transitory forage within grazing allotments.

### Guidelines

**FW-GDL-GRZ-01.** To reduce localized impacts resulting from concentrated livestock use and associated trampling, livestock salting should be excluded from riparian areas, meadows, designated sensitive plant habitat, seedling conifer regeneration areas, aspen restoration areas, and other restoration areas.

**FW-GDL-GRZ-02.** New or revised allotment management plans should include measures to protect listed threatened and endangered occupied habitat during the plant species' active growth period<sup>8</sup> as needed. New or revised allotment management plans should evaluate the habitat requirements for at-risk and culturally important botanical species and adjust grazing management prescriptions as necessary to ensure plant population viability and availability across the planning area.

**FW-GDL-GRZ-03.** To allow forage plants to maintain vigor, root development, and soil cover, general upland forage utilization should not exceed 35 to 55 percent. Specific utilization guidelines should be applied during grazing allotment authorization or reauthorization, which consider variables such as ecological condition of the vegetation, timing and duration of use, and other resource values in the area.

<sup>&</sup>lt;sup>8</sup> Active growth period may be variable year to year depending on local climatic conditions.

Forage utilization values should be adapted over time based on long-term monitoring and evaluation of conditions and trends.

# **Special Forest and Botanical Products**

### **Desired Conditions**

**FW-DC-SFP-01.** Special forest and botanical products are harvested in a sustainable manner that honors treaty-reserved rights, protects resources, and provides products for current and future generations.

FW-DC-SFP-02. Firewood from desirable firewood species is available to meet local firewood demand.

# Designated, Recommended, Geographic and Other Special Areas

# Management Area 1: Designated Wilderness Areas, Designated Wild and Scenic Rivers, and National Historic Landmark

Management Area 1 is comprised of protected areas with Congressional designations. This management area consists of three sub-categories: designated wilderness areas, designated wild and scenic rivers, and National Historic Landmarks. Each sub-category incorporates their own specific management direction. Management direction for the Lolo Trail National Historic Landmark is found in Section 0 Geographic Areas.

### **Designated Wilderness Areas**

The 1964 Wilderness Act defines wilderness as,

- "... undeveloped Federal land retaining its primeval character and influence without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions ...."
- "...an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain."
- "generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable ..."

Wilderness is the land that was wild land beyond the frontier . . . land that shaped the growth of the Nation and the character of its people. Wilderness is the land that is rare, wild places where one can retreat from civilization, reconnect with the Earth, and find healing, meaning and significance. In Wilderness a tree can rot where it falls, a waterfall can pour its curve without electricity, a trumpeter swan can float on uncontaminated water, and a visitor can hike or horseback-ride the trails or float the waters without interruption from the sights or sounds of our motorized and mechanized civilization.

Federal lands qualifying as wilderness must be designated by Congress through legislation. In some cases, federal agencies recommend suitable lands. In other instances, citizens put forward proposals for consideration by Congress. The process culminates when the legislation is passed by Congress and is signed by the President. This secures "…for the American people of present and future generations an enduring resource of wilderness."

The Nez Perce-Clearwater manages the entire Gospel-Hump Wilderness and portions of the Selway-Bitterroot and Frank Church-River of No Return Wilderness areas (See maps in Appendix 1.) The combination of these three wilderness areas comprises an expansive block of nearly four million acres of wilderness in Central Idaho and Western Montana. Each wilderness area is managed according to its own designating legislation and management plans specific to that wilderness area (Table 26). Forest Service policy for managing designated wilderness is found in FSM 2320.

Wilderness	Designating Legislation	Nez Perce- Clearwater Acres <sup>1</sup>	Total Wilderness Acres, including Adjoining Forests
Gospel-Hump	Endangered American Wilderness Act, 1978	205,672	205,672
Selway-Bitterroot	The Wilderness Act, 1964	823,151	1,348,663
Frank Church River of No Return	Central Idaho Wilderness Act, 1980	110,236	2,359,948
Total Designated Wilderness	n/a	1,139,059	3,914,283

#### Table 26. Designated Wilderness Areas

<sup>1</sup>Although 59,000 acres of the Hells Canyon Wilderness are located on the Nez Perce-Clearwater, these are administratively managed by the Wallowa-Whitman National Forest and are not covered by this document.

#### Goals

**MA1-GL-WILD-01.** Nez Perce-Clearwater coordinates stewardship and management of the Selway-Bitterroot Wilderness with the Bitterroot National Forest.

**MA1-GL-WILD-02.** Nez Perce-Clearwater coordinates stewardship and management of the Frank Church-River of No Return Wilderness with the Bitterroot National Forest and Salmon-Challis National Forest.

**MA1-GL-WILD-03.** Nez Perce-Clearwater cooperates with Idaho Department of Fish and Game and U.S. Fish and Wildlife Service to manage fish and wildlife resources within designated wilderness while protecting the wilderness character as required by the Wilderness Act and each wilderness area's enabling legislation.

#### **Desired Conditions**

**MA1-DC-WILD-01**. Natural ecological processes and disturbances (for example, succession, wildfire, avalanches, insects, and disease) are the primary forces affecting the composition, structure, and pattern of vegetation.

**MA1-DC-WILD-02.** Wilderness areas provide opportunities for visitors to experience solitude and unconfined and primitive recreation with a limited amount of human influence.

**MA1-DC-WILD-03**. Designated wilderness areas meet the appropriate airshed class criteria, Class 1 or Class 2, as established for each specific wilderness area, except when fire ignitions result in short-term non-compliance.

#### Standards

**MA1-STD-WILD-01.** Management activities within designated wilderness areas shall preserve wilderness character as required by the Wilderness Act, as well as each wilderness area's enabling legislation and its specific management plan.

#### Suitability

Table 27 contains a summary of management action suitability in designated Wilderness.

Management Action	Suitability
MA1-SUIT-WILD-01. Timber Production	No
MA1-SUIT-WILD-02. Timber Harvest	No
MA1-SUIT-WILD-03. Road Construction	No
MA1-SUIT-WILD-04. Prescribed Fire	Yes
MA1-SUIT-WILD-05. Livestock Grazing	Yes <sup>1</sup>
MA1-SUIT-WILD-06. Minerals Materials-Saleable	No <sup>2</sup>
MA1-SUIT-WILD-07. Minerals Materials-Leasable	No <sup>2</sup>
MA1-SUIT-WILD-08. Minerals Materials-Locatable	No <sup>2</sup>
MA1-SUIT-WILD-09. Construction of new buildings <sup>4</sup> or structures	No
MA1-SUIT-WILD-10. Motorized travel	No
MA1-SUIT-WILD-11. Mechanized travel (for example, bicycles, game carts)	No
MA1-SUIT-WILD-12. Public backcountry airstrip use	Yes <sup>3</sup>

Table 27	Management	action	suitability in	designated	Wilderness
Table 21.	wanayement	action	Suitability III	uesignateu	vviiuei iiess

<sup>1</sup>Per designating legislation and management plans; three active allotments are located within the Gospel-Hump wilderness – Butte Gospel, Hanover Mountain, and Hungry Ridge; three active allotments are located withing the Hells Canyon wilderness – Cannon Ball, Cow Creek, and Papoose.

<sup>2</sup>Subject to the Wilderness Act, wilderness management plans, and Forest Service Manual 2323.7 <sup>3</sup>The Fish Lake, Moose Creek, and Shear airstrips are located within the Selway-Bitterroot Wilderness <sup>4</sup>Building is defined as a structure designed to be inhabited.

# Designated Wild and Scenic Rivers

The Nez Perce-Clearwater administers all or part of five designated Wild and Scenic Rivers:

- Middle Fork Clearwater River
- Lochsa River
- Selway River
- Rapid River
- Salmon River

Classifications and mileages are shown in Table 28; maps are included in Appendix 1. There are approximately 214 miles of river and 57,890 acres within the designated boundaries on the Nez Perce-Clearwater. Management direction for designated rivers is found in the Wild and Scenic Rivers Act and the Act that designated the river if not designated under the Wild and Scenic Rivers Act. Forest Service management policy is found in FSM 2350.

River	Segment	Miles	Classification	Designating Legislation
Lochsa	Powell Ranger Station to Lowell	64	Recreational	Wild and Scenic Rivers Act, 1968
Middle Fork Clearwater	Lowell to Kooskia	23	Recreational	Wild and Scenic Rivers Act
Selway	Lowell to Selway-Bitterroot Wilderness boundary	22	Recreational	Wild and Scenic Rivers Act

#### Table 28. Designated Wild and Scenic Rivers

River	Segment	Miles	Classification	Designating Legislation
Selway	Selway-Bitterroot Wilderness boundary to the Bitterroot National Forest boundary	36	Wild	Wild and Scenic Rivers Act
Rapid	Segment located on the Nez Perce-Clearwater	13	Wild	Hells Canyon National Recreation Area Act, 1975
Salmon	Salmon Falls to Long Tom Bar	56	Wild	Central Idaho Wilderness Act, 1980

#### Goals

**MA1-GL-DWSR-01.** Nez Perce-Clearwater coordinates with the Bitterroot National Forest in the stewardship and management of the Selway River portion of the Middle Fork Clearwater Wild and Scenic River to ensure consistency and compliance with the Wild and Scenic Rivers Act to protect and enhance the free-flowing character, water quality, and outstandingly remarkable values for which the river was designated.

**MA1-GL-DWSR-02.** Nez Perce-Clearwater coordinates with the Payette National Forest and the Coeur d'Alene District of the Bureau of Land Management in the stewardship and management of Salmon River to ensure consistency and compliance with the Wild and Scenic Rivers Act to protect and enhance the free-flowing character, water quality, and outstandingly remarkable values for which the river was designated.

#### **Desired Conditions**

**FW-DC-DWSR-01.** Designated wild, scenic, and recreational rivers retain their free-flowing condition, water quality, and the outstandingly remarkable values for which the river was designated.

#### Standards

MA1-STD-DWSR-01 Management activities in designated wild and scenic river corridors shall comply with their individual comprehensive river management plans.

**MA1-STD-DWSR-02.** Management activities in designated wild and scenic river corridors shall protect and enhance their free-flowing character, water quality and outstandingly remarkable values for which the river was designated.

#### Suitability

A summary of management action suitability for designated Wild and Scenic Rivers is included in Table 29.

Management Action	Wild Segment Suitability	Scenic and Recreation Segment Suitability
MA1-SUIT-DWSR-01. Timber Production	No	No
MA1-SUIT-DWSR-02. Timber Harvest	No <sup>1</sup>	Yes <sup>1</sup>
MA1-SUIT-DWSR-03. Road Construction	No <sup>2</sup>	Yes <sup>2</sup>
MA1-SUIT-DWSR-04. Prescribed Fire	Yes	Yes
MA1-SUIT-DWSR-05. Livestock Grazing	Yes	Yes

#### Table 29. Management action suitability on designated Wild and Scenic Rivers

Management Action	Wild Segment Suitability	Scenic and Recreation Segment Suitability
MA1-SUIT-DWSR-06. Minerals Materials-Saleable	No <sup>3</sup>	Yes <sup>3</sup>
MA2-SUIT-DWSR-07. Minerals Materials-Leasable	No <sup>3</sup>	Yes <sup>3</sup>
MA2-SUIT-DWSR-08. Minerals Materials-Locatable	No <sup>3</sup>	Yes <sup>3</sup>
<b>MA1-SUIT-DWSR-09.</b> Construction of new permanent buildings <sup>6</sup> or structures	Yes <sup>4</sup>	Yes <sup>4</sup>
MA1-SUIT-DWSR-10. Motorized travel	No <sup>5</sup>	Yes <sup>5</sup>
MA1-SUIT-DWSR-11. Mechanized travel (for example, bicycles, game carts)	No <sup>5</sup>	Yes <sup>5</sup>

<sup>1</sup>Subject to river management plan or policy direction in FSM 2354.42(d)

<sup>2</sup>Subject to river management plan or policy direction in FSM 2354.42(g)

<sup>3</sup>Subject to the Wild and Scenic Rivers Act, Section 9, and the General Mining Act of 1872

<sup>4</sup>Subject to river management plan or policy direction in FSM 2354.42(c) and (f)

<sup>5</sup>Subject to river management plan or policy direction in FSM 2354.42(o), except for motorized boats in the Salmon River, per the designating legislation and Comprehensive River Management Plan.

<sup>6</sup>Building is defined as a structure designed to be inhabited.

# Management Area 2: Recommended Areas and Roadless Areas

Management Area 2 is comprised of protected areas with national designations. This management area consists of four sub-categories: recommended wilderness areas, eligible and suitable wild and scenic rivers, Idaho Roadless areas, and research natural areas. Each sub-category incorporates their own specific management direction.

#### **Recommended Wilderness**

Recommended wilderness areas are lands that have wilderness characteristics and may be suitable for inclusion in the National Wilderness Preservation System. Recommendation of wilderness through this Land Management Plan is a preliminary administrative determination and will receive further review and possible modification by the Chief of the Forest Service, the Secretary of Agriculture, and the President of the United States. Congress reserves the authority to make final decisions on wilderness designation. The Forest Service preserves the opportunity for recommended wilderness areas to be included in the National Wilderness Preservation System by protecting and maintaining the ecological and social characteristics that provide the basis for their suitability for wilderness designation. For more information about this process, look at Appendix E of the Final Environmental Impact Statement for the analysis process and evaluation.

Portions of four Idaho Roadless Areas in three areas are selected as recommended wilderness (Table 30). The use of motorized equipment and mechanized transport would be suitable for administrative use by agency personnel, partners, and members of the public under agreement with the Nez Perce-Clearwater. All other motorized and mechanized equipment use by the public would not be suitable. All recommended wilderness areas are within existing Idaho Roadless Rule areas, as identified in the Idaho Roadless Rule. Maps of the recommended wilderness areas can be found in Appendix 1.

Name	Acres
East Meadow Creek	72,795 <sup>1</sup>
Hoodoo	108,276
Mallard-Larkins	82,286

Table 30	Recommended	Wilderness	acres
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Name	Acres
Total Acres	263,357

<sup>1</sup>Comprised of 64,059 acres from the East Meadow Creek IRA and 8,736 acres from the West Meadow Creek IRA.

#### **Desired Conditions**

**MA2-DC-RWILD-01.** Recommended wilderness areas maintain their existing wilderness characteristics to preserve opportunities for inclusion in the National Wilderness Preservation System.

**MA2-DC-RWILD-02.** Recommended wilderness areas are characterized by a natural environment where ecological processes and disturbances, such as natural succession, fire, avalanches, insects, and diseases are the primary forces affecting the composition, structure, and patterns of vegetation.

MA2-DC-RWILD-03. Recommended wilderness areas facilitate the connectivity and movement of wildlife species across the Nez Perce-Clearwater by remaining large areas with little human activity.

**MA2-DC-RWILD-04.** Recommended wilderness areas provide opportunities for solitude or a primitive and unconfined type of recreation. Impacts from visitor use do not detract from the natural setting.

MA2-DC-RWILD-05. Outfitter guide recreation special uses support identified public need to provide services aligned with the natural setting and recreational purposes of the recommended wilderness areas.

#### Objectives

**MA2-OBJ-RWILD-01.** Initiate site-specific planning within five years to ensure authorized activities within recommended wilderness areas are consistent with plan suitability components.

#### Standards

**MA2-STD-RWILD-01.** Summer recreation opportunities shall be compatible with the appropriate recreation opportunity spectrum classification of primitive or semi-primitive non-motorized.

**MA2-STD-RWILD-02.** Winter recreation opportunities shall be compatible with the appropriate recreation opportunity spectrum classification of primitive or semi-primitive non-motorized.

#### Guidelines

**MA2-GDL-RWILD-01.** If fire management actions are required within recommended wilderness, the Forest Service should apply minimum impact strategies and tactics to manage wildland fire that protect wilderness characteristics, unless more direct attack is needed to protect life or adjacent property or mitigate risks to responders.

#### Suitability

A summary of management action suitability in recommended wilderness is included in Table 31.

Management Action	Suitability
MA2-SUIT-RWILD-01. Timber Production	No
MA2-SUIT-RWILD-02. Timber Harvest	Yes <sup>1</sup>
MA2-SUIT-RWILD-03. Road Construction	No <sup>2</sup>
MA2-SUIT-RWILD-04. Prescribed Fire	Yes
MA2-SUIT-RWILD-05. Livestock Grazing	Yes

#### Table 31. Management action suitability in recommended wilderness

Management Action	Suitability
MA2-SUIT-RWILD-06. Minerals Materials-Saleable	No <sup>3</sup>
MA2-SUIT-RWILD-07. Minerals Materials-Leasable	No <sup>3</sup>
MA2-SUIT-RWILD-08. Minerals Materials-Locatable	Yes
MA2-SUIT-RWILD-09. Construction of new permanent buildings <sup>4</sup> or structures	No
MA2-SUIT-RWILD-10. Maintenance or replacement of existing buildings <sup>4</sup> and structures	Yes
MA2-SUIT-RWILD-11. Over-snow motorized vehicle use	No
MA2-SUIT-RWILD-12. Recreational motorized travel	No
MA2-SUIT-RWILD-13. Recreational mechanized travel (for example, bicycles, game carts)	No
MA2-SUIT-RWILD-14. Commercial Use of Permanent Structures	No
MA2-SUIT-RWILD-15. Rental cabins, rental fire lookouts	Yes
MA2-SUIT-RWILD-16. Recreational aircraft landing, including unmanned aircraft systems	No
<b>MA2-SUIT-RWILD-17.</b> Administrative use of mechanized and motorized equipment, including use by partners and volunteers under agreement with the Nez Perce-Clearwater	Yes
<b>MA2-SUIT-RWILD-18.</b> Recreational special use permits (for example, outfitter and guide, recreation event) if consistent with wilderness character	Yes
MA2-SUIT-RWILD-19. Pesticide, and biocontrol use	Yes
<b>MA2-SUIT-RWILD-20.</b> Administrative uses (for example, research, monitoring, aircraft landing including unmanned aircraft) related to management responsibilities, including by other federal and state agencies in coordination with the Nez Perce-Clearwater	Yes

<sup>1</sup>Timber cutting, sale, or removal may be allowed only to the extent permitted in the Idaho Roadless Rule (36 CFR 294.24 - Timber cutting, sale or removal in Idaho Roadless Areas).

<sup>2</sup>Except to the extent permitted in the Idaho Roadless Rule (36 CFR 294.23 - Road construction and reconstruction in Idaho Roadless Areas).

<sup>3</sup>As per conditions outlined in the Idaho Roadless Rule (36 CFR 294.25 - Minerals).

<sup>4</sup>Building is defined as a structure designed to be inhabited.

### **Eligible and Suitable Wild and Scenic Rivers**

This portion of Management Area 2 applies to river segments that have been identified as eligible or suitable for inclusion as part of the Wild and Scenic Rivers System under the authority granted by the Wild and Scenic Rivers Act of 1968, as amended. Rivers found to be eligible or suitable for inclusion will be managed to protect the river-related outstandingly remarkable values identified for the river and protect the free-flowing nature and quality of the water. They will also be managed to maintain their preliminary classifications of wild, scenic, or recreational. Additionally, any new development or water resource projects will be evaluated in the context of protecting the river's values. These protection measures will be maintained until a decision is made on the future use of the river and adjacent lands through an Act of Congress or a determination that the river is not suitable for inclusion. Appendix F of the Draft Environmental Impact Statement documents the suitability process. Individual river suitability determinations are documented in the Wild and Scenic River Appendix to this Record of Decision. Table 32 shows the 11 suitable rivers and one eligible river, their preliminary classifications, length, and suitability determinations. See the glossary for definitions of the wild and scenic river classifications.

The eligible rivers determined not to be suitable for inclusion in the National System will no longer be subject to Wild and Scenic River interim protection measures. Protection of these rivers' free-flowing character, water quality and outstanding values will be through law, policy, regulation, and Land Management Plan direction as applicable. However, the Idaho Panhandle National Forest identified 26.6 miles of the Little North Fork Clearwater River corridor as eligible for inclusion in the National System. Maintaining an eligible status with interim protection measures of the 4.3-mile river segment on the Nez

Perce-Clearwater will ensure consistency, coordinated management, and protection of the entire river corridor until such time a suitability study and determination can be completed for the entire eligible length. Therefore, the Little North Fork of the Clearwater River is determined eligible, subject to interim protection measures.

Eligible River Name	River Network	Preliminary Classification	Eligible Length (miles)	Suitable
Weitas Creek	North Fork Clearwater	S	28.5	Yes
Kelly Creek	North Fork Clearwater	W, R	26.2	Yes
North Fork Kelly Creek	North Fork Clearwater	W	5.9	Yes
Middle Fork Kelly Creek	North Fork Clearwater	W	4.9	Yes
South Fork Kelly Creek	North Fork Clearwater	W	6.2	Yes
Cayuse Creek	North Fork Clearwater	W, S, R	35.9	Yes
Little North Fork Clearwater River	North Fork Clearwater	W	4.3	Eligible <sup>1</sup>
Colt Killed Creek	Lochsa	W, S	23.3	Yes
Fish Creek	Lochsa	S, R	21.1	Yes
Hungery Creek	Lochsa	W, S	13.8	Yes
Meadow Creek (Selway)	Selway	W, S, R	44.3	Yes
Salmon River	Salmon	R	23.2	Yes

Table 32. Eligible and suitable Wild and Scenic Rivers, with preliminary classification and eligible length

W = wild classification, S = scenic classification, R = recreational classification

<sup>1</sup>River is to remain subject to W&SR interim protection measures with no suitability decision made as part of this Plan.

#### Goals

MA2-GL-E&SWSR-01. Collaborate and cooperate with other agencies, governments, and private landowners who have jurisdiction in suitable river corridors.

#### **Desired Conditions**

**MA2-DC-E&SWSR-01.** Eligible and suitable wild, scenic, and recreational rivers retain their freeflowing condition, preliminary classification, and the outstandingly remarkable values that provide the basis for their eligibility or suitability for inclusion in the system.

#### Standards

MA2-STD-E&SWSR-01. Do not authorize or construct roads, trails, facilities, or airstrips within the eligible or suitable river segment that would alter the classification of the river.

MA2-STD-E&SWSR-02: Do not authorize or construct roads outside of the eligible or suitable wild river corridor that would adversely affect the wild classification of the river segment.

#### Guidelines

MA2-GDL-E&SWSR-01. Management activities should maintain a scenic integrity objective consistent with the river's scenic outstandingly remarkable value.

MA2-GDL-E&SWSR-02. New road, trail, and airfield construction should be designed to maintain the outstandingly remarkable values, classification, free-flowing character, and water quality of the river.

MA2-GDL-E&SWSR-03: Construction of habitat structures and vegetation management to maintain or improve wildlife and fish habitat are allowed. They should be designed to protect the river's free-flowing character, classification, and outstanding remarkable values.

MA2-GDL-E&SWSR-04. Management activities to protect or stabilize heritage resources and historic properties should be designed to protect the river's free-flowing character, classification, and outstandingly remarkable values.

#### Suitability

A summary of management action suitability is included in Table 33.

Management Action	Wild Segment Suitability	Scenic and Recreation Segment Suitability
MA2-SUIT-E&SWSR-01. Timber Production	No	No
MA2-SUIT-E&SWSR-02. Vegetation Management and Timber Harvest	No <sup>1</sup>	Yes <sup>2</sup>
MA2-SUIT-E&SWSR-03. Road Construction and reconstruction	No	Yes <sup>3</sup>
MA2-SUIT-E&SWSR-04. Prescribed Fire	Yes	Yes
MA2-SUIT-E&SWSR-05. Livestock Grazing	Yes <sup>4</sup>	Yes <sup>4</sup>
MA2-SUIT-E&SWSR-06. Minerals Materials-Saleable	No	Yes <sup>5</sup>
MA2-SUIT-E&SWSR-07. Minerals Materials-Leasable	Yes <sup>6</sup>	Yes <sup>6</sup>
MA2-SUIT-E&SWSR-08. Minerals Materials-Locatable	Yes <sup>7</sup>	Yes <sup>7</sup>
<b>MA2-SUIT-E&amp;SWR-09.</b> Water resource project (for example, dams, flood control, diversions) construction	Yes <sup>8</sup>	Yes <sup>8</sup>
MA2-SUIT-E&SWR-10. Hydroelectric power facilities	No	No
MA2-SUIT-E&SWR-11. Utility lines and facilities.	No <sup>9</sup>	No <sup>9</sup>
<b>MA2-SUIT-E&amp;SWR-12.</b> Major (for example, campgrounds, interpretive centers, boat ramps, administrative buildings) facility construction, reconstruction, or maintenance; within ROS classification standards.	No	Yes <sup>10</sup>
<b>MA2-SUIT-E&amp;SWR-13</b> Minor (for example, toilet, trailhead sign, river sign) facility construction, reconstruction, or maintenance	Yes <sup>10</sup>	Yes <sup>10</sup>
MA2-SUIT-E&SWR-14. Recreational motorized travel, including over-snow vehicle use	Yes <sup>11</sup>	Yes <sup>11</sup>
<b>MA2-SUIT-E&amp;SWR-15.</b> Recreational mechanized travel (for example, bicycles, game carts)	Yes	Yes
<b>MA2-SUIT-E&amp;SWR-16.</b> Recreational special use permits (for example, outfitter and guide, recreation event)	Yes	Yes

Table 33	Management	action suitabili	ty on eligible	and suitable	Wild and	Scenic Rivers
Table 55.	wanayement	action Suitabili	ly on engible	and Suitable	white and	Scenic Kivers

<sup>1</sup>Not permitted except when needed in association with a primitive recreation experience, to protect users, or to protect identified outstandingly remarkable values (FSH 1909.12, Chapter 80, Section 84.3(9)).

<sup>2</sup>Allowed if these practices are designed to protect users, or protect, restore, or enhance the river environment, including the long-term scenic character (FSH 1909.12, Chapter 80, Section 84.3(9)).

<sup>3</sup>If construction or reconstruction fully protect river values as outlined in FSH 1909.12, Chapter 80, Section 84.3(4)).

<sup>4</sup>Livestock grazing should be managed to protect identified river values (FSH 1909.12, Chapter 80, Section 84.3(10)); Salmon River is the only suitable wild and scenic river located within an active livestock grazing allotment - the Allison-Berg Allotment.

<sup>5</sup>Allowed if the values for which the river may be included in the National System are protected (FSH 1909.12, Chapter 80, Section 84.3(3)).

<sup>6</sup>Leases must include conditions necessary to protect the values of the river corridor that make it eligible or suitable for inclusion in the National System (FSH 1909.12, Chapter 80, Section 84.3(3)).

<sup>7</sup>Subject to regulations in 36 CFR part 228 and must be conducted in a manner that minimizes surface disturbance, sedimentation, pollution, and visual impairment (FSH 1909.12, Chapter 80, Section 84.3(3)).

<sup>8</sup>Adverse effects are to be prevented to the extent of existing agency authorities (FSH 1909.12, Chapter 80, Section 84.3(1)). <sup>9</sup>Except when no other reasonable alternative exists (FSH 1909.12, Chapter 80, Section 84.3(5))

<sup>10</sup>All facilities must be located and designed to harmonize with their natural and cultural settings, protect identified river values including water, and be screened from view from the river to the extent possible. (FSH 1909.12, Chapter 80, Section 84.3(6)) <sup>11</sup>Motorized travel may be permitted but is generally not compatible with a wild classification. Where motorized travel options are deemed to be necessary, such uses should be carefully defined and impacts mitigated. On scenic and recreational rivers, motorized travel on land or water may be permitted, prohibited, or restricted to protect the river values (FSH 1909.12, Chapter 80, Section 84.3(7))

#### Idaho Roadless Areas

This management area includes lands within Idaho Roadless Areas as defined in the Idaho Roadless Rule. There are 34 separate mapped areas that vary greatly in size, elevation, and habitat. These areas range between 5,000 acres to 250,000 acres, although there are three smaller areas adjacent to wilderness or recommended wilderness. In total, the Idaho Roadless Areas comprise approximately 1,500,000 acres across the Nez Perce-Clearwater with an average size of approximately 44,000 acres. Each area is assigned one or more management themes as outlined in the Idaho Roadless Rule, and managed in a manner that is consistent with the appropriate theme as defined by the final rule outlined in 36 CFR Part 294 (Special Areas; Roadless Area Conservation; Applicability to the National Forests in Idaho; Final Rule). Each theme specifies permitted and prohibited actions for timber cutting, roads, and minerals. The Idaho Roadless Rule does not direct the management of motorized or mechanized uses. Land Management Plan suitability for motorized use is determined through the designation of Recreation Opportunity Spectrum classes. Site-specific motorized use designations are determined in travel planning consistent with land management plan direction. Trails are the primary improvements constructed and maintained for recreation users. In some areas, lookouts, cabins, or other structures are present, as well as some evidence of resource management activities.

#### Goals

MA2-GL-IRA-01. Coordinate all proposed management activities with the Idaho Roadless Commission.

#### **Desired Conditions**

MA2-DC-IRA-01. Roadless Areas maintain the roadless characteristics and themes assigned to them in the Idaho Roadless Rule.

**MA2-DC-IRA-02**. The composition, structure, and pattern of vegetation reflect natural disturbances occurring within the natural range of variation.

**MA2-DC-IRA-03.** Roadless areas contribute habitats for wide ranging species and connectivity for movement of wildlife. These areas also provide foraging, security, denning, and nesting habitat for wildlife.

**MA2-DC-IRA-04.** Roadless areas provide recreational opportunities for both motorized and nonmotorized users all year long. This is reflected in the appropriate recreation opportunity spectrum classes of primitive, semi-primitive non-motorized, and semi-primitive motorized opportunities.

**MA2-DC-IRA-05.** Habitat configuration, distribution, and composition provide ecological conditions that increase elk herds.
#### Standards

**MA2-STD-IRA-01.** The provisions in the Idaho Roadless Rule (36 CFR 294 Subpart C) shall take precedence over any inconsistent Land Management Plan component unless and until the rule is amended. Land management Plan components that are not inconsistent with the Idaho Roadless Rule will continue to provide guidance for projects and activities within Idaho Roadless Areas and those related to protection of threatened and endangered species (36 CFR 294.28(d)).

#### Suitability

Management action suitability in Idaho Roadless Areas is summarized in Table 34.

Management Action	Wild Land Recreation	Primitive and Special Areas of Historic or Tribal Significance	Backcountry Restoration
MA2-SUIT-IRA-01. Timber Production	No	No	No
MA2-SUIT-IRA-02. Timber Harvest	No <sup>1</sup>	No <sup>1</sup>	Yes <sup>2</sup>
MA2-SUIT-IRA-03. Road Construction	No <sup>3</sup>	No <sup>3</sup>	Yes <sup>4</sup>
MA2-SUIT-IRA-04. Prescribed Fire	Yes	Yes	Yes
MA2-SUIT-IRA-05. Livestock Grazing	Yes	Yes	Yes
MA2-SUIT-IRA-06. Minerals Materials-Saleable	No	No	Yes⁵
MA2-SUIT-IRA-07. Minerals Materials-Leasable	Yes <sup>5</sup>	Yes <sup>5</sup>	Yes⁵
MA2-SUIT-IRA-08. Minerals Materials-Locatable	Yes <sup>5</sup>	Yes <sup>5</sup>	Yes <sup>5</sup>
<b>MA2-SUIT-IRA-09.</b> Construction of new permanent buildings <sup>6</sup> or structures	No	No	No
MA2-SUIT-IRA-10. Over-snow motorized vehicle use	Yes <sup>7</sup>	Yes <sup>7</sup>	Yes <sup>7</sup>
MA2-SUIT-IRA-11. Recreational motorized travel	Yes <sup>7</sup>	Yes <sup>7</sup>	Yes <sup>7</sup>
<b>MA2-SUIT-IRA-12.</b> Mechanized travel (for example, bicycles, game carts)	Yes	Yes	Yes

Table 34. Manag	gement action	suitability in	Idaho Ro	adless Areas
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<sup>1</sup>Except under conditions outlined 36 CFR 294.24(a) and (b)

<sup>2</sup>As per conditions outlined in 36 CFR 294.24(c)

<sup>3</sup>Except if Regional Forester authorizes a road to be constructed or reconstructed pursuant to statute, treaty, reserved or outstanding rights, or other legal duty of the United States (36 CFR 294.23(a).

<sup>4</sup>Under conditions outlined in 36 CFR 294.23(b) and with regional forester approval.

<sup>5</sup>As per conditions outlined in 36 CFR 294.25

<sup>6</sup>Building is defined as a structure designed to be inhabited

<sup>7</sup>Suitable when designated as suitable on recreation opportunity spectrum maps in Appendix 1; if mapped as rural, roaded natural, or semi-primitive motorized, motorized use is suitable; if mapped as semi-primitive non-motorized or primitive, motorized use is not suitable.

## **Research Natural Areas**

Research Natural Areas (RNAs) are permanently established to maintain areas of natural ecosystems and areas of special ecological significance. These protected natural areas include unique ecosystems or ecological features; rare or sensitive species of plants and animals and their habitat; or high-quality examples of widespread ecosystems. These areas form a long-term network of ecological reserves established as baseline areas for non-manipulative research and the maintenance of biodiversity.

There are 23 research natural areas included in the Land Management Plan. The names and acreage of the designated and proposed Research Natural Areas are listed in Table 35. A map is available in Appendix 1 of this Land Management Plan.

Research Natural Area Name	Designated RNA	Proposed RNA	Acres
Aquarius	•		3,709
Bald Mountain	•		369
Bull Run Creek	•		383
Chateau Falls	•		198
Dutch Creek	•		302
Fenn Mountain		•1	603
Four-Bit Creek	•		392
Grave Peak	•		379
Lochsa River	•		1,508
Rhodes Peak		•1	307
Sneakfoot Meadow	•		1,946
Steep Lakes	•		797
Fred Rabe Upper Hemlock Creek		•2	1,378
Elk Creek	•		6,957
Fish Lake	•		753
Moose Meadow Creek	•		940
No Business Creek	•		1,385
O'Hara Creek	•		7,049
Square Mountain Creek	•		704
Upper Newsome Creek	•		1,192
Warm Springs Creek	•		537
Mud Springs Ridge		•2	288
Bull Run Expansion		•2	370

Table 35. Designated and proposed research natural areas

<sup>1</sup>Proposed in 1987 Forest Plans, continue to be proposed and would be established through a separate decision by the regional forester.

<sup>2</sup>Proposed after 1987 Forest Plan, candidate in the Final Environmental Impact Statement, but would be proposed under this plan. Would be established through a separate decision by the regional forester.

#### **Desired Conditions**

**MA2-DC-RNA-01.** Designated and proposed research natural areas maintain a representation of natural systems found on the Nez Perce-Clearwater as a baseline for research, monitoring, and education by the agency, academia, and public interests. Wildfire, insects, and pathogens, along with other processes and disturbances, continue to affect vegetation, reflecting the dynamic nature of the systems they represent. Research natural areas contribute to ecological sustainability and biological diversity.

#### Standards

**MA2-STD-RNA-01.** Within designated and proposed research natural areas, do not authorize the collection of forest products for commercial purposes and personal use purposes, including firewood.

MA2-STD-RNA-02. Do not authorize uses that threaten or interfere with the objectives or purposes for which a research natural area is established. See FSM 4063.3 for specific directions.

#### Suitability

Management action suitability in Research Natural Areas is summarized in Table 36.

Management Action	Suitability
MA2-SUIT-RNA-01. Timber Production	No
MA2-SUIT-RNA-02. Timber Harvest	No
MA2-SUIT-RNA-03. Permanent Road Construction	No
MA2-SUIT-RNA-04. Temporary Road Construction	No
MA2-SUIT-RNA-05. Prescribed Fire	Yes
MA2-SUIT-RNA-06. Livestock Grazing	Yes <sup>1</sup>
MA2-SUIT-RNA-07. Minerals Materials-Saleable	No
MA2-SUIT-RNA-08. Construction of new buildings or structures	No
MA2-SUIT-RNA-09. Over-snow vehicle use	Yes <sup>2</sup>
MA2-SUIT-RNA-10. Recreational motorized travel	No
MA2-SUIT-RNA-11. Recreational mechanized travel (for example, bicycles, game carts)	Yes

#### Table 36. Management action suitability in research natural areas

<sup>1</sup>As specified in the individual RNA establishment reports; Four-Bit Creek, Mud Springs Ridge, No Business Creek, and O'Hara Creek, RNAs are located within active livestock grazing allotments.

<sup>2</sup>Over-snow vehicle use is allowed unless the RNA is in a Winter Recreation Opportunity Spectrum (ROS) class of primitive or semiprimitive non-motorized.

# Geographic Areas

## **Gospel-Hump Geographic Area**

The Endangered American Wilderness Act (1978) divided the roadless area formerly known as the Gospel-Hump area into three portions; a map is presented in Appendix 1. The largest portion, consisting of 206,000 acres, became wilderness; another portion, comprising 45,000 acres, became available for immediate development; and a third portion, including three areas totaling 92,000 acres referred to as the Gospel-Hump Multi-Purpose Area, was designated for multiple purpose resource development. Section Four of the Endangered American Wilderness Act directed the completion of the Gospel-Hump Multi-Purpose Plan, which was completed in 1985 and incorporated into the 1987 Nez Perce Forest Plan. The Endangered American Wilderness Act provides for periodic updates to this multi-purpose plan. This section fulfills that legislative intent and would replace the direction for the area found in the Gospel-Hump Multipurpose Resource Development Plan and the 1987 Nez Perce National Forest Land Management Plan.

After review of the 1985 Multi-Purpose Resource Development Plan and 1987 Nez Perce Forest Plan direction, the existing management direction for each of the three geographic areas in the management plan was considered.

Geographic names have been assigned to each of the areas:

- Sourdough to the North of the Gospel-Hump Wilderness
- Big Meadows to the East of the Gospel-Hump Wilderness
- Indian Creek to the Southeast adjacent to the Salmon River corridor

Table 37 shows a cross reference of the geographic areas and the names used in the past for each area. The Gospel-Hump Geographic Area totals approximately 85,935 acres.

 Table 37. Gospel-Hump geographic areas

Geographic name	1987 Forest Plan Name	1985 Gospel-Hump Multi-purpose Resource Development Plan Name
Sourdough Geographic Area	Geographic Display Area 1	Multipurpose Resource Development Area 2
Big Meadows Geographic Area	Geographic Display Area 3	Multipurpose Resource Development Area 1
Indian Creek Geographic Area	Geographic Display Area 2	Multipurpose Resource Development Area 3

#### **Desired Conditions**

**GA-DC-GH-01.** The Gospel-Hump Geographic Area provides multiple ecosystem services consistent with Congress' legislation in the "Endangered American Wilderness Act of 1976" (public law 95-237). The area provides quality fish and wildlife habitat, motorized and non-motorized recreation opportunities, areas available for timber harvest to meet social and economic demand, and opportunities for research.

#### Objectives

**GA-OBJ-GH-01.** 500 acres of forested vegetation are treated through a combination of commercial and non-commercial silvicultural treatments within the Big Meadows Area over a 10-year period.

**GA-OBJ-GH-02.** 250 acres of pre-commercial thinning within the Big Meadows Area are completed over a 10-year period.

GA-OBJ-GH-03. 250 acres of hazardous fuels are treated in the Indian Creek Area over a 5-year period.

**GA-OBJ-GH-04.** 250 acres of roadside hazard trees are mitigated in the Indian Creek Area within the first 5 years.

#### Guidelines

**GA-GDL-GH-01.** On the Eastern portion of the Sourdough Geographic Area where timber production is suitable, harvest activities should be implemented in a manner that initiates, supports, or contributes to a trend towards achievement of aquatics desired conditions at the HUC12 scale.

**GA-GDL-GH-02.** Within the Big Meadows Geographic Area, harvest activities should be implemented in a manner that initiates, supports, or contributes to a trend towards achievement of aquatics desired conditions at the HUC12 scale.

## Lower Salmon River Geographic Area

The Lower Salmon River Geographic Area contains rich geological complexity, contributing to a biological community that is unique within the plan area. A map is available in Appendix 1. This geographic area contains a large portion of the driest of the warm dry potential vegetation group

dominated by Ponderosa pine under a frequent low intensity fire return interval. These habitats support species associated with Ponderosa pine dominated habitats, including several species of conservation concern. The Lower Salmon River Geographic Area is host to most observations of Ponderosa pine associated species of conservation concern. For example, the Idaho Department of Fish and Game's Species Diversity Database (Accessed January 2017) shows most observations of white-headed woodpecker, Lewis's woodpecker, fringed myotis, Townsend's big eared bats, and mountain quail occur within this geographic area. Similarly, the area contains substantial amounts of habitat for the flammulated owl and pygmy nuthatch.

The area is home to remarkable biodiversity and high endemism of land and aquatic snails. The lower Salmon River canyon has long been known as a hot spot of biodiversity for land snails, where more than 60 species have been identified to date, which represents more than half of the land snail biodiversity within the State of Idaho. Many of the land snail species are thought to be restricted to the lower Salmon River corridor, with some occupying this area and portions of the nearby Snake River while others are only known to inhabit a few rock outcrops. Surprisingly, none of the land snail species occur throughout the lower Salmon River. Several specimens from this area appear to warrant consideration as distinct species and have not yet been fully described within the scientific literature (Frest and Johannes 1995). It is also important to note the role of this geographic area as habitat for wintering elk and important habitat for mule deer and contributions towards habitat for bighorn sheep. The Lower Salmon River Geographic Area totals approximately 210,695 acres.

#### **Desired Conditions**

**GA-DC-SR-01.** Forest vegetation grows on soils that support and developed under forested ecosystem. Grassland soils, including mollisol soils, support healthy grassland and shrubland communities with few trees.

**GA-DC-SR-02.** Habitat for Ponderosa pine associated species, including legacy trees and snags, are within desired conditions within Ponderosa pine systems (See FW-DC-FOR-02, FW-DC-FOR-03, FW-DC-FOR-04, and FW-DC-FOR-05). Understory characteristics do not facilitate stand replacing fires and are composed of native plants that provide insect populations as forage for Ponderosa pine associated species. These habitats are resilient to changes due to climate change.

GA-DC-SR-03. Habitat for endemic terrestrial snails is available.

#### Objectives

GA-OBJ-SR-01. 100 acres of mountain quail habitat are restored in each five-year period.

## **Pilot Knob**

The Pilot Knob geographic area, known as *T'amloyiitsmexs* by the Nez Perce, is a very important cultural and sacred site to the Nez Perce Tribe. *T'amloyiitsmexs* is a significant landmark used by the Nez Perce for "*weyekin*" or spiritual quests. A map of Pilot Knob Geographic Area is available in Appendix 1. Pilot Knob has a significant historic meaning with respect to the Nez Perce religious values and weyekin practices that have been used from time-immemorial and remains to be respected and used by Nez Perce tribal members. Per the Nez Perce Tribal Executive Committee, these tribal religious rites can be conducted in no other place. The Nez Perce Tribe strives to maintain its cultural and traditional practices and to keep alive the knowledge of the beliefs and interpretations of such values. Because of its elevation and central location, Pilot Knob started being used as a site to locate communication equipment in 1977 with issuance of a communication use permit to the State of Idaho Military Division Public Safety

Communications Unit. By 1988, the Nez Perce Tribal Executive Committee described that most of Pilot Knob's features had been altered, defaced, or destroyed by man-made devices. The Pilot Knob Geographic Area is also an Idaho Roadless Area with a "Special Areas of Historic or Tribal Importance" theme. The Pilot Knob Geographic Area totals approximately 20,975 acres.

#### Goals

**GA-GL-PK-01.** The Nez Perce-Clearwater coordinates with the Nez Perce Tribe to provide opportunities for engagement in project development, analysis, implementation, and monitoring of Forest Service actions within the Pilot Knob Geographic Area as co-steward of the geographic area.

**GA-GL-PK-02.** Fire suppression activities within the Pilot Knob Geographic Area are coordinated with the Nez Perce Tribe, when timely and practicable, considering risk and the probability of success.

#### **Desired Conditions**

**GA-DC-PK-01**. Nez Perce tribal members are able to engage in religious practices undisturbed in the Pilot Knob Geographic Area.

**GA-DC-PK-02**. The Pilot Knob Geographical Area is in a pristine and natural state that provides quiet solitude. Religious sites are undisturbed.

**GA-DC-PK-03.** Critical communications infrastructure is maintained until such a time that is feasible and practicable alternatives become available. Future opportunities to consolidate to reduce the impact to cultural practices are evaluated.

**GA-DC-PK-04.** The Pilot Knob Geographical Area is accessible to Nez Perce tribal members to exercise tribal reserved treaty rights, to hunt and harvest plant and animal food sources, and participate in cultural and traditional activities.

#### Objectives

**GA-OBJ-PK-01.** Within 5 years, the Forest Service initiates a study of suitable replacement communications sites that would serve Forest Service and public safety communication needs using currently available communications technology.

#### Guidelines

**GA-GDL-PK-01**. Activities, such as timber harvest, road building, and discretionary minerals actions regulated by the Idaho Roadless Rule but not precluded by the Roadless Rule, should not be authorized unless approved by the Nez Perce Tribal Executive Committee.

## Lolo Trail National Historic Landmark Geographic Area

The Lolo Trail, a National Historic Landmark administered in cooperation with the National Park Service, is part of the Nez Perce National Historical Park. The landmark extends through the Nez Perce-Clearwater from Lolo, Montana, to Weippe, Idaho. A map is available in Appendix 1.

The Lolo Trail National Historic Landmark was designated in 1963. Its significance lies in its roots as an ancient American Indian trail. This trail comprises the route Lewis and Clark traveled from 1805 to 1806, as well as the path taken by the Nez Perce Indians during the Nez Perce Indian War of 1877. The landmark stretches about 62 miles from the Nez Perce-Clearwater boundary near Musselshell Meadows to the Nez Perce-Clearwater boundary near Lolo Pass, totaling approximately 55,760 acres.

The Lolo Trail National Historic Landmark contains two Congressionally Designated National Historic Trails. The Lewis and Clark National Historic Trail (16 USC 1244(a)(6)) was designated in 1978, is approximately 4,900 miles long extending from Pittsburg, Pennsylvania to the mouth of the Columbia River and is administered by the National Park Service in Omaha, Nebraska. Three high potential historic sites, as described in the National Register of Historic Places, within the planning area are also designated as historic themed special areas in this plan.

The Nez Perce (Nee-Me-Poo) National Historic Trail (16 USC 1244(a)(14)), spanning approximately 1,170 miles from Wallowa Lake, Oregon to Bear Paw Battlefield near Chinook, Montana, was designated in 1986 and is administered by the U.S. Forest Service. Three high potential historic sites within the planning area are also designated as historic themed special areas in this plan.

Each of the National Historic Trails has a corresponding designated auto-route. The auto route for each of the two National Historic Trails on Forest Service administered lands within the Lolo Trail National Historic Landmark is U.S. Highway 12. U.S. Highway 12 is not within the Geographic Area and is not subject to the Geographic Area plan direction, however, the Highway does have scenic integrity objectives that consider the elevated status (see the Scenic Integrity Objectives map in Appendix 1).

#### Goals

**GA-GL-NHL-01.** The Lolo Trail National Historic Landmark is no longer considered *at risk* by the National Park Service because the natural setting of the landmark is managed to benefit its National Register integrity.

**GA-GL-NHL-02.** Fire suppression activities within the Lolo Trail National Historic Landmark Geographic Area are coordinated with the Nez Perce Tribe, when timely and practicable, considering risk and the probability of success.

#### **Desired Conditions**

**GA-DC-NHL-01.** The National Register integrity of the Lolo Trail National Historic Landmark is considered *high* in order to retain its status as a National Historic Landmark and convey its exceptional value and qualities in illustrating the heritage of the United States.

**GA-DC-NHL-02.** Natural processes are the primary drivers of change to, and composition of, vegetative communities within the approximate 36-mile segment separating the Mex Mountain and Beaver Dam Saddle localities in the Western portion of the Landmark and Wendover Ridge in the Eastern portion of the Landmark to perpetuate the natural setting as seen and described by 19th century journalists.

**GA-DC-NHL-03.** Roads and trails persist in a manner that do not detract from the National Register integrity of the landmark while providing for reasonably safe passage by the public consistent with designated uses<sup>9</sup>. Non-system roads are not present.

**GA-DC-NHL-04.** Static interpretation appropriate for the solitude of the landmark communicates its national significance.

<sup>&</sup>lt;sup>15</sup> Designated use is defined by approved travel management plan record of decisions, forest orders and displayed on motor vehicle use maps (MVUMs).

#### Objectives

**GA-OBJ-NHL-01.** Use fire to ensure at least one open view of the prairies to the West and Southwest is created or perpetuated over the life of the plan.

GA-OBJ-NHL-02. Every 5 years, complete one Landmark interpretive project.

#### Standards

**GA-STD-NHL-01**. Trees shall only be felled within the landmark corridor if they pose a hazard or safety threat. All other tree felling is prohibited.

**GA-STD-NHL-02.** New temporary or permanent road and trail construction shall not be permitted within the Landmark unless the integrity of the National Historic Landmark is maintained and the purpose of the action is to benefit the National Register integrity of the Landmark.

#### Guidelines

**GA-GDL-NHL-01.** Management activities on lands within the landmark corridor and directly adjacent to it should be designed to maintain high scenic integrity and avoid creating a discernible straight edge at the landmark corridor boundary. Creating landings or other significant visual disturbances within the landmark, as a result of management activity occurring outside of the Landmark, should not occur.

**GA-GDL-NHL-02.** To maintain the National Register integrity of the landmark, trail tread associated with National Historic Trails within the landmark should not be widened or deepened during fire suppression activities.

**GA-GDL-NHL-03.** Stumps resulting from hazard tree felling should meet high scenic integrity levels (for example, flush-cut) to reduce the impact to the natural setting and National Register integrity of the Landmark (36 CFR 60.4).

**GA-GDL-NHL-04**. Road and trail maintenance and brushing, including those activities during fire suppression efforts, should adhere to maintenance standards whereby the National Register integrity of the Landmark and National Historic Trails is maintained. Trees across open roads and trails may be cut and moved to provide for safe passage.

**GA-GDL-NHL-05**. The planting of desirable tree species within the landmark to help vegetative communities achieve a natural range of variation should be conducted in a way which avoids a systematic and unnatural tree-spacing appearance.

**GA-GDL-NHL-06**. To reduce impacts to values at risk, outside the approximate 36-mile segment described in GA-DC-NHL-02, Minimum Impact Suppression Tactics (MIST) should be applied to natural wildfire ignitions.

**GA-GDL-NHL-07.** Trails within the landmark corridor should maintain their designed trail management objectives.

#### Suitability

Management action suitability in the National Historic Landmark is summarized in Table 38.

Management Action	Suitability
GA-SUIT-NHL-01. Timber Production	No
GA-SUIT-NHL-02. Timber Harvest	No
GA-SUIT-NHL-03. Permanent Road Construction	Yes <sup>1</sup>
GA-SUIT-NHL-04. Temporary Road Construction	Yes <sup>1</sup>
GA-SUIT-NHL-05. Prescribed Fire	Yes
GA-SUIT-NHL-06. Livestock Grazing	No <sup>2</sup>
GA-SUIT-NHL-07. Minerals Materials-Saleable	No
<b>GA-SUIT-NHL-08.</b> Construction of new permanent buildings <sup>3</sup> or structures	No
GA-SUIT-NHL-09. Over-snow vehicle use	Yes
GA-SUIT-NHL-10. Recreational motorized travel	Yes
GA-SUIT-NHL-11. Recreational mechanized travel (for example, bicycles, game carts)	Yes

Table 38	Management a	action suitability	in the Nationa	Historic Landmark
	management	Sultability	in the Nationa	

<sup>1</sup>Only if the purpose is to benefit integrity of the National Historic Landmark and integrity is maintained, see guideline GA-GDL-NHL-05.

<sup>2</sup>Except in the following current active allotments: Buckner, Cedar, and Musselshell. Beginning May 2024, the Cedar Allotment will be come vacant and the Musselshell Allotment will be administratively closed.

<sup>3</sup>Building is defined as a structure designed to be inhabited.

## **Special Areas**

Special areas are a category of administratively designated areas defined as an area or feature managed to maintain its unique special character or purpose (36 CFR 219.19), including those that may be botanical, geological, recreational, scenic, zoological, paleontological, or historical in nature. Such areas are protected and managed for public use and enjoyment and are identified due to their unique or special characteristics. Special areas are not congressionally designated but are administratively designated by the Chief of the Forest Service, regional forester, or forest supervisor (FSM 2372). Designated and proposed special areas are summarized in Table 39. A map of special areas is available in Appendix 1.

Special Area Name	Year Designated	Theme	Acres
Giant Cedar Grove	1987 Forest Plan	Botanical	44
Morris-Perkins Cedar Grove	1987 Forest Plan	Botanical	48
Devoto Cedar Grove	1987 Forest Plan	Botanical and Historical	15
Heritage Cedar Grove	1987 Forest Plan	Botanical	153
Colgate Licks	1987 Forest Plan	Geological and Historical	39
séewisníme (Place of Mussels)	1987 Forest Plan	Historical <sup>2</sup>	163
Walde Mountain	1987 Forest Plan	Botanical	82
Lewis and Clark Cedar Grove	1987 Forest Plan	Historical	58
Sing Lee Fen	2023 Land Management Plan	Botanical	25
Clear Creek Basalt Glades	2023 Land Management Plan	Botanical	267

Table 39. Names and acreage of the proposed Special Areas

Special Area Name	Year Designated	Theme	Acres
wispin'iitpe (as one travels out of the timber, upon coming over the divide)	2023 Land Management Plan	Botanical and Historical <sup>1,2</sup>	336
Elk Creek Falls	2023 Land Management Plan	Recreational	443
Colt Killed Creek Campsite	2023 Land Management Plan	Historical <sup>1</sup>	159
Smoking Place	2023 Land Management Plan	Historical <sup>1</sup>	173

<sup>1</sup> Designated as a "high potential historic site" for the Lewis and Clark National Historic Trail

<sup>2</sup> Designated as a "high potential historic site" for the Nez Perce (Nee-Me-Poo) National Historic Trail

## **Desired Conditions**

**GA-DC-SA-01.** Special Areas provide for public use and enjoyment and protect areas with scenic, geological, botanical, zoological, paleontological, archaeological, or other special characteristics or unique values on the Nez Perce-Clearwater. Education and interpretation of these areas promote public awareness of these special features.

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