

Little Pend Oreille NWR Thematic Matrix

Welcome to the Interpretive Thematic Matrix for Little Pend Oreille National Wildlife Refuge!

The purpose of this matrix is to connect resource management efforts to resource education efforts on National Wildlife Refuges. This process was developed by the Albuquerque Regional Office for the U.S. Fish & Wildlife Service (USFWS). The first matrices were piloted at several different national wildlife refuges within New Mexico, Arizona, Oklahoma, and Texas. This matrix, along with two others at Kootenai and Turnbull National Wildlife Refuges, represent the first to be created in the Pacific Region, which includes Washington, Oregon, Idaho, and the Pacific islands.

The Interpretive Thematic Matrix (ITM) serves as a guide for refuge managers and visitor services staff to guide decision making and available resources for community engagement and refuge programming. With a matrix in place, the refuge can create and share content that directly connects refuge management efforts to the public and in a relevant, understandable, and compelling way. Matrices can be used to create new environmental education or interpretive programming, help orient volunteers, emphasize focuses for contractors on exhibits or signage, to leverage resources or capacity, and more.

The Interpretive Thematic Matrices feature themes from subject matters and management efforts with the U.S. Fish & Wildlife Service. Each matrix contains several components including: interpretive themes, supporting concepts and ideas, tangibles, intangibles, and universals concepts. The sister agency of the USFWS, the National Park Service, states that interpretive themes "encourage exploration...[They] go beyond a mere description...to foster multiple opportunities to experience and consider the [refuge] and its resources. These themes help explain why a [refuge] story is relevant to people." Through these efforts, USFWS hopes to improve the quality of visitor services within each refuge to change public perception and increase support and share that refuges are where both wildlife and people may thrive.

From *Denali National Park and Preserve Education Plan: A Long Range Vision for Education and Interpretation*, 2010.

Denali National Park and Preserve
Interpretive Theme Matrix

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Subject Matter and Interpretive Theme Statement	Concepts and Ideas	Tangibles: Topics and Stories+	Intangibles and Universals
1. Extensive Natural Ecosystem Denali's intact, natural ecosystem embodies a wisdom from which humans can learn and promote the workings of a healthy planet for a sustainable future.	<small>Some examples of concepts and ideas to be included in the themes. (Some of these concepts may potentially develop or combine into specific programs and interpretive media themes.)</small> <ul style="list-style-type: none">An ecosystem consists of living and non-living components and elements seen and unseen.Complete understanding of such a complex system is impossible.Unaltered ecosystems can serve as baselines to understand ecosystems that have been impacted.Unaltered ecosystems provide excellent opportunities for research and learning.The ambitious vision of ANILCA was to surpass previous conservation efforts by setting aside vast areas that could protect large undisturbed and intact ecosystems. Conserving large protected areas requires recognizing that local people are part of the ecosystem and accommodating some level of human consumptive use of resources.Intact ecosystems are rare because human activity has eliminated species, altered habitat, and fundamentally changed natural relationships on much of Earth's surface.The Denali ecosystem is dependent upon the global ecosystem and vulnerable to changes that originate beyond the park's borders.Denali's ecosystem is recognized to be of international significance. (Biosphere Reserve)	<small>Some examples representing the types of stories that could be told under this theme.</small> <ul style="list-style-type: none">Species specific storiesSpecies interactionsIllustrations of complexityShort-term and long-term changeWildland valuesRole of science in preserving parksRole of science in helping us understand the world at largeHuman interaction with landscapesOpportunity for hands-on discoveryNatural cyclesExotic speciesNexus of biological and physical worlds	<small>Some examples of deeper meanings of topics.</small> Intangibles: Ecosystem Biodiversity Complexity Preservation Rare Sustainability Knowledge Conservation Heritage Universals: Protection Wonder Humility Mystery Curiosity Survival Wisdom Health

+ These topics are representative, a partial list. They are not intended to be all-inclusive (in fact they could never be) nor are they intended to exclude any topic.

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Example of an interpretive matrix at Denali
National Park and Preserve
Image courtesy of the National Park Service

Matrix Terms & Definitions

The following are the interpretation elements used in the Interpretive Thematic Matrix, as well as their definitions.

Interpretive Theme: The interpretive theme states the reasons why a person should care about/for a resource.



Supporting Ideas: The supporting ideas provide key information, facts, or definitions that support the theme.



Matrix Terms & Definitions

Tangible: A tangible is anything a visitor can see, hear, taste, touch, or smell, such as a model or live animal.



Intangible: An intangible is an abstract concept, such as feelings or beliefs.



Matrix Terms & Definitions

Universal: Universals are abstract concepts that everyone can relate to, but everyone sees differently, such as family or beauty.



Target Audience: The suggested, specific audience that could be reached by the interpretive theme.



The People Behind the Matrix

Without the support and assistance of the FWS employees detailed below, the Interpretive Thematic Matrix for Kootenai National Wildlife Refuge would not have been possible.

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**We'd like to thank you all for your hard work and participation.
We could not have done this without you: thank you!**

The Process to Develop the Matrix

The information in this matrix was gathered during a 1-month residency by the interpretive research fellow (IRF) at Little Pend Oreille NWR. During this time, a virtual scoping session with FWS staff and members from the Friends of Little Pend Oreille took place. Primary subject matter was populated during a brainstorming exercise, represented by a word cloud (seen on right). The IRF also conducted informal scoping of members of the public.

From this sessions, the IRF identified 6 primary subjects to focus on for the matrix. These primary subject matters became the basis for every theme. The IRF then worked independently to create the theme statement for every subject matter as well as identifying and forming supportive ideas for each theme statement. Weekly progress meetings between the IRF and the Visitor Services Manager helped to focus and refine the document.

The themes and full list of supporting ideas, and concepts created are stored on a separate Microsoft Word document, “Little Pend Oreille NWR Expanded Matrix – Messages and Themes.” This is intended to be a living document – revised regularly as planning, policy, regulation, or other priorities are updated.

What makes Little Pend Oreille NWR special?



ABOVE: Screenshot of Brainstorming Word Cloud with LPO Staff

BELOW: Example pages from LPO Messages and Themes

Subject Matter: Recreation

Primary Theme: Little Pend Oreille National Wildlife Refuge offers a great variety of recreational opportunities that connect people to the land while supporting the mission of the USFWS.

Supporting Concepts and Ideas:

Directly from slides:

- o Little Pend Oreille NWR features all 6 of the priority public uses, as well as additional activities such as hiking, biking, horseback riding, non-motorized boating, and auto-touring around an 11 mile auto route.
- o Little Pend Oreille NWR offers recreational opportunities that are uncommon among wildlife refuges, such as camping and horseback riding. The refuge features 5 established and maintained campgrounds and over 25 dispersed campsites.
- o The Refuge offers opportunities to recreate throughout every season. Visitors can enjoy snowshoeing and cross country skiing in the winter months.
- o Anglers can enjoy three lakes and more than 80 miles of fishable streams on the Refuge.
- o Living alongside and spending time in nature offers physical and mental health benefits.
- o Little Pend Oreille NWR promotes responsible recreation which builds public support and furthers the mission of the USFWS.
- o There is no fee to visit The Refuge or to use the maintained campgrounds.

Additional Supporting Information:

- Link for Recreate Responsibly Website: <https://www.recreateresponsibly.org/>
- Recreation is different here than on other public lands, forests, or parks. Wildlife comes first on National Wildlife Refuges. Hunting, fishing, wildlife photography, observation, education and interpretation are the recreational activities emphasized on Refuge lands. (LPO General Brochure)

Subject Matter: History of the Land

Primary Theme: The land that is now Little Pend Oreille National Wildlife Refuge has a deep and complex history regarding its use that shapes the way we engage with the space today.

Supporting Ideas & Concepts

Directly from slides:

- o Little Pend Oreille NWR was traditionally used by Kalispel and other Indigenous peoples. Although they occupied this region for centuries, Native Americans left little evidence of their use of the land in this region.
- o Fur trappers, miners, loggers and homesteaders traversed this area and eventually settled here.
- o Early logging activity shaped parts of the landscape, with the Winslow Lumber company being an influential force.
- o Railroad tracks historically passed through the refuge, transporting goods with an emphasis on lumber. Remnants of the historic railroads can still be seen today on the Refuge.
- o A long history of homesteading has taken place on Refuge lands. Most homesteads no longer stand, but remnants can be seen through orchards and fields or a visit to the Harnett Homestead.
- o In 1939, President Franklin D. Roosevelt established Little Pend Oreille as a National Wildlife Refuge for migratory birds and wildlife. This land officially transitioned from resource extraction to conservation.
- o Little Pend Oreille NWR has a complex land acquisition and management history, telling the story of how it became a National Wildlife Refuge.
- o Historic remnants and debris can be found throughout the refuge. Visitors can enjoy these glimpses into history where they find them, but should leave them undisturbed for future visitors to experience.
- o Understanding history informs stewardship today.

Additional Supporting Information:

- The Winslow Lumber Company played a significant role in the growth and development of Stevens County. From 1900 until the 1930's, David B. Winslow and his sons logged timber from the mountains of Stevens County and turned it into lumber that was shipped to markets around the country. Today, traces of Winslow

Theme: Ranging from migratory birds to megafauna, Little Pend Oreille National Wildlife Refuge’s abundance of wildlife makes every visit a chance for discovery.

Supporting Ideas and Concepts

- Little Pend Oreille National Wildlife Refuge was established to protect "migratory birds and other wildlife." The birds and animals here are inseparable from its presence and existence.
- More than 200 bird, 58 mammal, 6 amphibian and 8 reptile species can be found on the Refuge.
- The Refuge encompasses a variety of habitats that supports most wildlife species found in northeastern Washington.
- Charismatic fauna on the refuge include moose, elk, beaver, eagle, black bear, white-tailed deer, and more.
- Migratory birds use the waterways on the refuge as a crucial stopover site along the Pacific Flyway.
- Keystone species such as beavers and northern goshawks serve as indicators of thriving ecosystems.
- Observation of wildlife in their natural habitats builds appreciation and stewardship.



Tangibles: Large mammals Animal tracks & signs Habitats Wildlife viewing areas Birds	Intangibles: Life Discovery Connection Observation Curiosity
Universals: Life Discovery Connection	Target Audience: Wildlife photographers & enthusiasts Families School Groups Locals



Theme: Little Pend Oreille National Wildlife Refuge features unique montane forests and waterways across a diverse mix of habitats and elevations.

Supporting Ideas and Concepts

- The Refuge is located within the western edge of the Selkirk Mountains and abuts the Columbia River Basin Ecosystem and the Okanogan Highlands Province.
- Little Pend Oreille NWR is the only mixed conifer montane wildlife refuge in the continental United States.
- The Refuge features over 40,000 acres of diverse landscapes and habitats.
- Elevations ranges from 1,800’ on the western boundary to 5,600’ on the Eastern boundary, creating 6 different “forest zones” that host unique niche habitats.
- Forest zones include Douglas fir, grand fir, ponderosa pine, western red cedar, western hemlock, and subalpine fir.
- Dry forest can be found in the lowest elevation areas, moist forest in the mid-level elevation zones, and cold forests cover the highest ridges. Each type of forest features unique habitat qualities.
- In addition to diverse pine and fir forests, refuge habitats include scattered lakes, shallow marshes, ponds and springs, plus more than 80 miles of river and streams.

Tangibles: Mixed conifer forests Waterways Forest zones Elevation ranges	Intangibles: Rarity Beauty Vastness Protection Regional Identity
Universals: Beauty Protection Rarity	Target Audience: Retirees Conservationist Nature Lovers Scenic drivers
	

Theme: Little Pend Oreille National Wildlife Refuge offers a great variety of recreational opportunities that connect people to the land while supporting the mission of the USFWS.

Supporting Ideas and Concepts

- Little Pend Oreille NWR features all 6 of the priority public uses, as well as additional activities such as hiking, biking, horseback riding, non-motorized boating, and auto-touring around an 11-mile auto route.
- Little Pend Oreille NWR offers recreational opportunities that are uncommon among wildlife refuges, such as camping and horseback riding. The refuge features 5 established and maintained campgrounds and over 25 dispersed campsites.
- The Refuge offers opportunities to recreate throughout every season. Visitors can enjoy snowshoeing and cross-country skiing in the winter months.
- Anglers can enjoy three lakes and more than 80 miles of fishable streams on the Refuge.
- Living alongside and spending time in nature offers physical and mental health benefits.
- Little Pend Oreille NWR promotes responsible recreation which builds public support and furthers the mission of the USFWS.
- There is no fee to visit The Refuge or to use the maintained campgrounds.

Tangibles: Trails Campgrounds Auto Tour Route Interpretive Signs Waterways	Intangibles: Enjoyment Discovery Personal interests Exploration
Universals: Exploration Discovery	Target Audience: Campers Hunters & Anglers Outdoor recreators Wildlife enthusiasts Locals



Theme: In a fast-paced modern world, Little Pend Oreille National Wildlife Refuge offers rare opportunities to slow down and find solitude, reflection, and immersion in wildness.

Supporting Ideas and Concepts

- The Refuge protects over 40,000 acres of largely undeveloped land.
- There remains a 5,520-acre block of roadless and largely undisturbed forest in the SE corner of the Refuge, allowing visitors to feel surrounded by an expanse of natural land.
- Rooted in the community, Little Pend Oreille NWR is a cherished local asset, with some families visiting for generations.
- Being a lesser traveled recreation site allows for more space and solitude during visits. Little Pend Oreille NWR is a hidden gem in northeastern Washington.
- Solitude supports emotional well-being and deeper connection to nature, adding to the physical and mental health benefits of spending time outdoors.
- Natural soundscapes offer relief from the noise pollution of the modern world.
- The Refuge’s dense forests create a sense of seclusion and mystery, inviting visitors to wonder what lies just beyond the next bend.



Tangibles: Primitive campsites Natural soundscapes Inspiring views Trails	Intangibles: Seclusion Solitude Escape Peace Simplicity
Universals: Peace Solitude Escape	Target Audience: Retirees Families Burnt-out professionals Locals Outdoor enthusiasts



Theme: The land that is now Little Pend Oreille National Wildlife Refuge has a deep and complex history regarding its use that shapes the way we engage with the space today.

Supporting Ideas and Concepts

- Little Pend Oreille NWR was traditionally used by Kalispel and other Indigenous peoples. Although they occupied this region for centuries, Native Americans left little evidence of their use of the land in this region.
- Fur trappers, miners, loggers and homesteaders traversed this area and eventually settled here.
- Early logging activity shaped parts of the landscape, with the Winslow Lumber company being an influential force.
- Railroad tracks historically passed through the refuge, transporting goods with an emphasis on lumber. Remnants of the historic railroads can still be seen today on the Refuge.
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- Historic remnants and debris can be found throughout the refuge. Visitors can enjoy these glimpses into history where they find them and should leave them undisturbed for future visitors to experience.
- Understanding history informs stewardship today.

Tangibles: Historic structures & remnants Maps Interpretive Panels Railroad remnants	Intangibles: Change History Belonging Identity
Universals: Change Belonging Identity	Target Audience: History buffs Community members Educators & School groups
	

Theme: At Little Pend Oreille National Wildlife Refuge, fire is a natural and necessary force. Through careful management, the refuge works with fire rather than against it, to sustain a healthy, resilient landscape.

Supporting Ideas and Concepts

- Fire has shaped this landscape for millennia.
- Refuge forests evolved with natural fires. Many plants and animals depend on post-fire habitats.
- The United States began suppressing fires in the early 1900’s. Fire suppression has altered ecological balance, raising the risk for devastating fires.
- The Service has used fire as a management tool since the 1930’s.
- Prescribed burns mimic natural fire regimes and minimize the risk of devastating fires while regenerating landscapes.
- Managed forests are more open, and the remaining trees have room to grow with less competition for resources.
- Signs of fire can be seen throughout the Refuge through burn scars, charred vegetation, and new growth.
- Educating the public about fire reduces fear and builds understanding. Locals can take steps to lessen risk of destructive wildfires impacting their home or property.

Tangibles: Fire Regrowth zones Fire crews Prescribed burns Burn scars	Intangibles: Fire Management Renewal Balance Transformation Resilience
Universals: Balance Transformation Resilience	Target Audience: Community members Students Conservationists Policymakers
	

Bibliography

The following are the documents and resources used and referenced in the creation of the Interpretive Thematic Matrix.

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