





USDA Forest Service Pacific Northwest Region Okanogan-Wenatchee National Forest



Okanogan-Wenatchee National Forest 2016 Accomplishment Report

About the Forest

The Okanogan-Wenatchee National Forest encompasses more than 4-million acres in Washington state and stretches north to south from the Canadian border to the Goat Rocks Wilderness - a distance of about 180 miles. The forest lies east of the Cascade Crest, which defines its western boundary. The eastern edge of the forest extends into the Okanogan highlands, then south along the Okanogan and Columbia Rivers, and then to the Yakima River valley. Because of this wide geographic range, the forest is very diverse - from the high, glaciated alpine peaks along the Cascade Crest and the numerous mountain ranges extending eastward from the crest, through deep, lush valleys of old growth forest, to the dry and rugged shrub-steppe country at its eastern edge. Elevations range from below 1,000 ft. to over 9,000 ft. Precipitation varies widely – from more than 70-inches along the crest to less than 10-inches at its eastern edge. This of course greatly affects the forest and vegetation types across the area.

Restoration Strategy

Scientific studies have shown the forest is experiencing uncharacteristically severe fires, insect infestations, disease epidemics, habitat loss and hydrologic events that cause massive erosion. Scientists generally agree active, landscape-scale restoration is needed if the Forest is to become resilient to these threats.

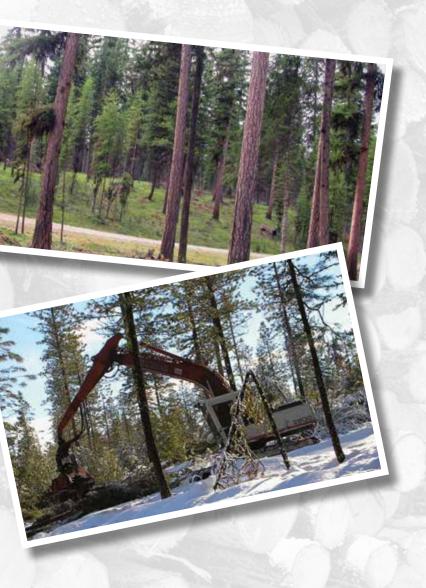
The Restoration Strategy helps managers prioritize finite land management resources, while comparing historic, current and future forest conditions in a warming climate. This streamlines project planning, helping managers to treat more acres faster.

Restoration Strategy activities include prescribed fire, repairing or closing roads, thinning forests, removing invasives and much more.





Increased Restoration through Stewardship



n 2016, the Forest awarded the Dry Restoration Stewardship Contracts to the Yakama Nation through the Tribal Forest Protection Act (TFPA). The contract includes over 500 acres of commercial thinning to improve forest health and reduce megafire risk across the landscape where Forest Service lands are adjacent or border Indian trust lands near Naches, WA. In addition to thinning, overall Forest health will also be improved through aquatic restoration efforts and sediment reduction. This contract is the culmination of years of effort on the part of the Forest and the Yakima Nation with the Tapash Collaborative and the Tapash Collaborative Forest Landscape Restoration (CFLR) project. Additionally, this is the first sale the Tribe has purchased from the Forest and the first TFPA sale the Forest has awarded.

"The TFPA authority and the Anchor Forest initiative have come together beautifully with the Dry Contract where both the Tribe and the Forest Service recognize a mutually beneficial relationship."

> -Steve Andringa Yakama Nation Administrative Forester

Forest Silviculture and Thinning

- 77,147 CCF or 39.855 million board feet sold
- 13,343 cords of firewood sold
- 1,127 acres of seedlings planted to reforest burned areas

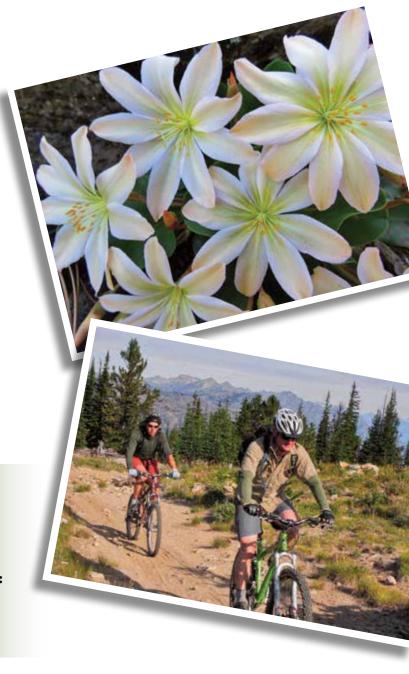
Key Purchases Increase Watershed Protection



key partnership with The Nature Conservancy has allowed the Forest to conserve thousands of acres and leverage funding to assist in large scale restoration efforts. In 2016 the Forest received Land and Water Conservation Fund (LWCF) monies to acquire two key parcels near the crest of the Cascades on the Forest near the community of Cle Elum, Washington. The project involved a partnership with support from The Nature Conservancy and several other organizations in order to purchase 1,163 acres of timberland in the Cascades. The Forest is also moving forward on the next phase of acquisition to purchase an additional 1,920 acres from TNC in early FY17. Before these acquisitions, the agency was unable to complete much needed restoration projects in this watershed.

Forest Economic Impacts

- The Forest contributes to more than 2,000 jobs in recreation in local communities, contributing approximately \$89 million in annual income.
- Across Washington, outdoor recreation generates:
 \$1.6 billion in state and local tax revenue
 \$7.1 billion in wages and salaries
 - \$22.5 billion in consumer spending



Providing Sustainable Recreation

n essential mission of the Forest is to serve the communities and people who utilize public lands. As a part of fulfilling this mission, a new dock located at Prince Creek Campground on Lake Chelan was constructed to provide year-round access for Forest visitors. The old dock was closed down in late May 2016 after approximately 30 years of service. The orientation of the new dock, parallel to the shore, will provide for wind protection of personal recreation boats on the inside, while allowing for the ferries to dock along the outside.

This will significantly expand access to the Lakeshore Trail during prime backpacking seasons in the spring and fall. Funds used to build the new Prince Creek Dock were made possible through grants from the Public Lands Highways Discretionary Program and the Paul S. Sarbanes Transit in Park program and through the Chelan PUD via the Lake Chelan Settlement Agreement.

Forest Recreation and Special Uses

- Approximately 3 Million Visitors a Year
- Over 5,880 Miles of Trails
- 8 Wilderness Areas totaling 1.5 million acres
- 4 Downhill Ski Areas
- 133 developed Campgrounds
- 5 Recreation Rental Cabins
- 682 Recreation Residences

Forest Health: Wildfire and Disease Readiness

n a dense, overstocked, disease and wildfire prone forest near the Canadian border, another small tree crashes to the forest floor. As crews move in to cut and pile the woody material, the sights and sounds of restoration are everywhere; piles to be burned in the future dot the landscape while elsewhere a skidder pulls select trees to a landing to be milled. This implementation work began in 2016 on the Joint Chief's Landscape Restoration Partnership in the Tonasket, Washington area. This project area is classified as Forest Health Hazard Warning area and is a Washington State priority area for mitigating forest health and wildfire risks. Partners in the effort include the Confederated Tribes of the Colville Indian Reservation. Okanogan Conservation District, National Resource Conservation District, North Central Washington Forest Health Collaborative and Washington State Department of Natural Resources.

In the first year, critical thinning, ladder fuel reduction and piling of hazardous fuels was completed on almost 3,200 acres and next year an additional 2,000 acres are planned with more into 2018.

To the south, on national forest lands directly adjacent to Colville Confederated Tribal lands, the scope and scale of these restoration projects will increase with the implementation of an additional 300 acres per year of restoration work over the coming three years as part of a Participating Agreement under the Tribal Forest Protection Act.



Stream Restoration Supports Threatened and Endangered Fish

n a crisp spring morning, steam rises from the clear waters of the Chewuch River north of the community of Winthrop. A sole angler tries their luck catching trout as the fly fishing line skims the top of the water. For generations, the Chewuch River in the Methow Valley was a popular fishing destination for steelhead, bull trout and spring chinook. However, past unsustainable timber harvest, wildfires, grazing and road building, have resulted in an impaired watershed with high water temperatures, a lack of needed woody material, and prone to sediment fluctuations.

Forest Aquatics, Watersheds and Wildlife

- 12 miles of stream were improved
- 12 acres of lake habitat were improved
- 730 acres of soil and watershed improved
- There are 9 Threatened and Endangered species on the forest

Now efforts are underway in this key watershed to lead to the eventual recovery and delisting of threatened and endangered species in the watershed and re-establish healthy and productive fisheries for future generations. In 2016 after several years of

community engagement and analysis, the Chewuch Transportation Plan Decision Notice was signed. The decision will decommission approximately 95 miles of unsustainable or unneeded roads and hydrologically disconnect another 130 miles of road through Maintenance Level 1 road closures. These efforts are designed to restore critical aquatic habitat, decrease sedimentation, and restore the vibrancy of this river.



Clean Water for Future Generations

Railroad Creek water inside a new water treatment plant at the Holden Mine site west of the community of Chelan, Washington.

Dense and chalky, the material contains acid mine runoff that for decades flowed freely into Lake Chelan and the greater Columbia River system. This year, the legacy of over 50 years of acid mine runoff (including heavy metals such as copper, cadmium, aluminum and zinc) from the abandoned copper mine into the adjacent Railroad Creek has been controlled.

The Holden Mine Remediation project west of the community of Chelan, is one of the largest and most logistically challenging mine cleanups on National Forest Lands. Over the last five years of remediation work, more than nine million tons of tailings and 250,000 tons of waste rock piles have been re-shaped and contoured to prevent contaminated tailings from entering Railroad Creek. Additionally the historic mine entrance has been sealed off and a system to collect and transport contaminated surface and ground water has been constructed which included a 1,000 feet long 3-5 feet wide and up to 90 feet deep underground barrier wall. In 2016 a mine water treatment plant was completed to bring the contaminated water to a standard that is safe and protective of aquatic life in Railroad Creek.



Maintaining & Improving Safe Forest Access

Pacific Northwest was hit with a series of storms that contributed to significant runoff and damage to roads across the Forest. Nearly 60 potential sites throughout the Forest were identified to be reviewed and documented for Emergency Relief for Federally Owned Roads (ERFO). 26 sites qualified for ERFO funding, with the remaining sites determined to be heavy project maintenance for Forest road crew or by task order contracts.

Road crews spent a large portion of their efforts completing Burned Area Emergency Response (BAER) projects from the devastating 2015 megafires. BAER work included constructing drainage improvements to accommodate expected post-fire runoff, gate installations, and temporary stabilization measures. Additionally, crews addressed numerous emergency road repairs after a heavy spring runoff and accomplished a large portion of the regular maintenance plans.



Forest Roads

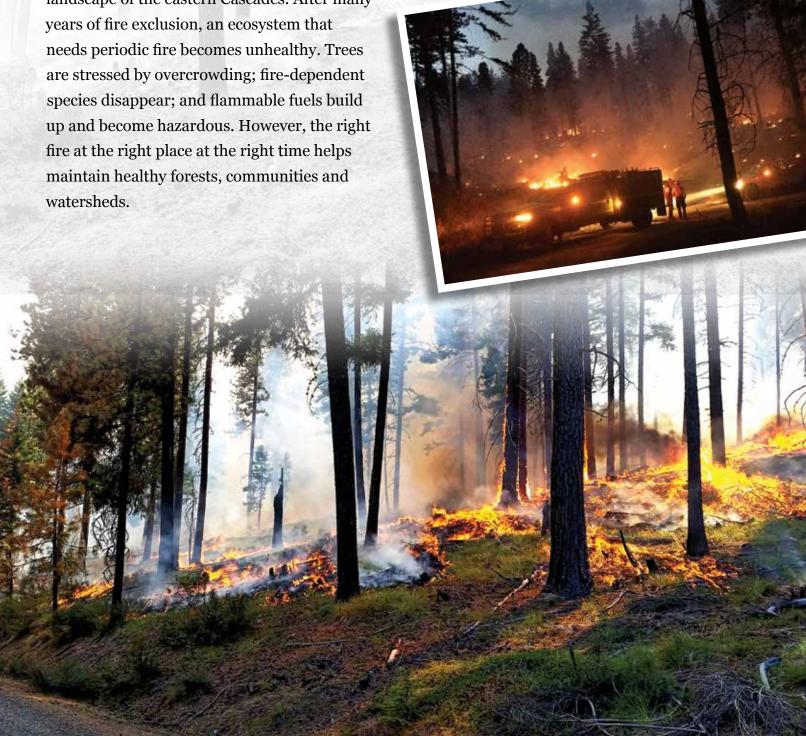
 In 2016, over 650 miles of roads received maintenance and/or improvements.

Managing Fire for Forest Health

Imoke rises up from brush and down trees burning along the forest floor west of Naches, Washington. Firefighters carefully monitor the low and moderate intensity fire behavior as the prescribed burn continues throughout the day. This burn and many like it across the Forest are part of a larger effort to return good fire to the dry-fire adapted landscape of the eastern Cascades. After many years of fire exclusion, an ecosystem that needs periodic fire becomes unhealthy. Trees are stressed by overcrowding; fire-dependent species disappear; and flammable fuels build up and become hazardous. However, the right fire at the right place at the right time helps maintain healthy forests, communities and watersheds.

Forest Fire Management

- More than 13,000 acres of fuel reduction were completed across the Forest.
- 76 wildfires
- 5,202 acres burned



Removing Barriers for Wildlife

trailers rush through a new wildlife overcrossing along Interstate-90 near Cle Elum, Washington. Above them, wildlife now have the opportunity to access forest habitat on either side of the busy Interstate without fences, pavement or moving vehicles to stop their movement. Throughout 2016 the Snoqualmie Pass East Project continued to demonstrate effective planning to meet both the needs of highway users and wildlife when good collaboration occurs with project planning, design, and implementation.

Several major accomplishments were achieved in 2016 including the continued design to install three wildlife overcrossings (land bridges 150 feet wide), 12 large undercrossings (120 to 900 feet long bridges), and numerous smaller bridges and culverts. This work will provide for wildlife and aquatic organism passage; reduce the risk of wildlife/vehicle encounters; and restore the connectivity of all hydrologic features, streams, and wetlands. Efforts also continued to collect local native plant materials and restore native plant communities within the Interstate corridor.



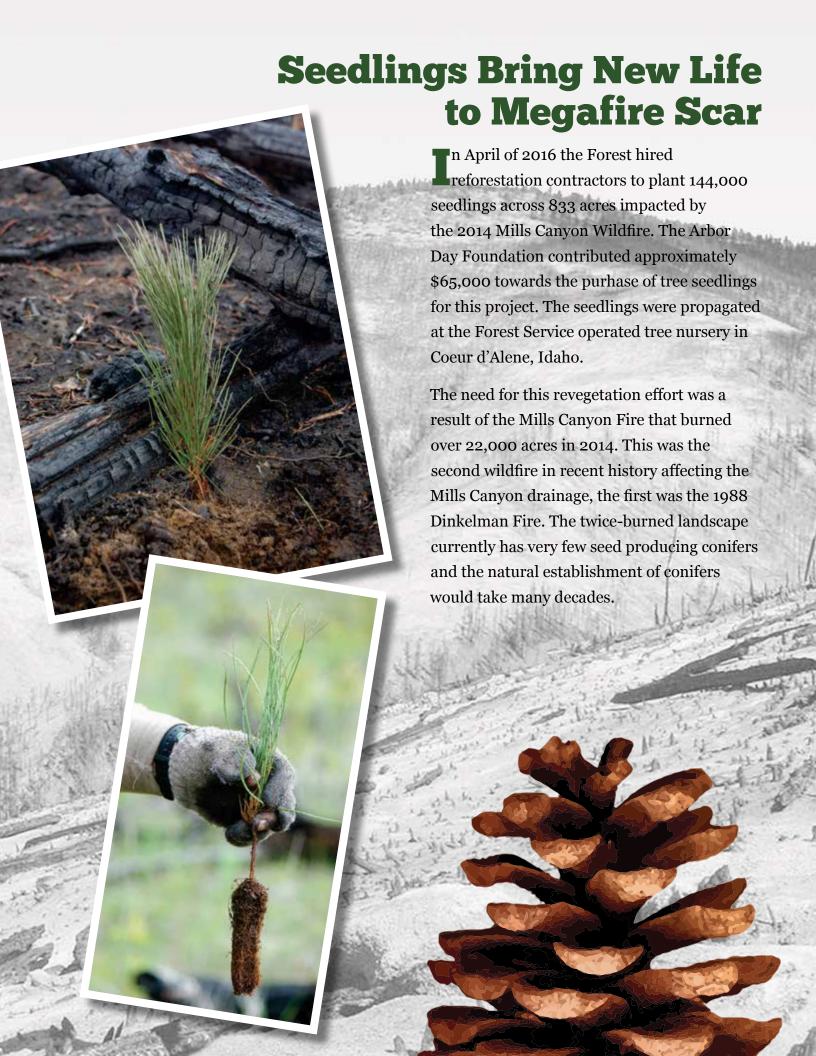
Preserving the Past for the Future

In 1923, a wooden fire lookout tower was built high atop North Twentymile Peak. Restoration of the North Twenty Mile D-6 cupola lookout continued in the summer of 2016. Donating their time and materials, volunteers completed the in-kind roof replacement and shutter restoration. Restoration of this rare lookout is complete but for exterior painting. The D-6 cupola lookout was constructed in 1923 and is one of nine remaining D-6 lookouts out of more than 200 built in the Northwest.

Heritage and Archaeology Projects

- Seven priority heritage asset site condition assessments
- Six public archaeology projects across multiple districts
- Over 200 hours of volunteer time











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