



ALASKA 2024: Annual Manager's Report

Steese

National Conservation Area



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Figure 1. Map of the two units of the Steese National Conservation Area in interior Alaska.

Accomplishments

Assessment, Inventory, and Monitoring (AIM) efforts for restoration began within the Steese National Conservation Area (NCA) in 2024. Bureau of Land Management (BLM) staff and individuals from the American Conservation Experience (ACE) implemented the Lotic AIM protocol at two reaches on North Fork Harrison Creek and a draft Lotic-Riparian and Wetland Integrated AIM protocol at two reaches on South Fork Harrison Creek. The reaches are control sites for a restoration study initiated at Nome Creek in the BLM White Mountains National Recreation Area (NRA). Sites were accessed by road with pickups and off-highway vehicles (OHVs).

The Eastern Interior Field Office (EIFO) completed the Birch Creek Wild and Scenic River (WSR) Comprehensive River Management Plan.

Recreation staff began improving trails that were designated in the recently adopted Steese Travel Management Area Approved Travel Management Plan (October, 2022). On a 2.5-mile section of trail that was very steep and rocky they widened the trail and improved the surface. These improvements resulted in a more sustainable and safer route for the public.



Figure 2. Before and after photos of trail work to reduce erosion and improve access in upper Harrison Creek.

Challenges

Title to submerged lands below navigable waters in the state passed to the State of Alaska (SOA) at statehood based on the equal footing doctrine, the Submerged Lands Act, and the Alaska Statehood Act. BLM determined that Birch Creek is navigable below the confluence with South Fork Birch Creek and non-navigable above. In 2018, the SOA asserted that the waters above the South Fork confluence are navigable and filed a Notice of Intent to file a quiet title action lawsuit to the submerged lands above the confluence. In March 2024, the SOA filed an updated Notice of Intent which added three Birch Creek tributaries to the waters included in the 2018 assertion. A similar case, previously filed by the State of Alaska for portions of the Fortymile WSR, is currently working its way through the judicial system. Judicial navigability findings from the Fortymile case, expected in 2026, could have impacts to future management of rivers on federally administered lands in Alaska.

The Steese NCA is a core use area for the Fortymile Caribou Herd, and caribou range is one of the specified resources, objects, and values in the designating legislation. One wildland fire this year burned approximately 5,000 acres of caribou range in the NCA, and approximately one percent of the high-value lichen habitat has burned in the past four seasons, which did not have particularly large fires. Studies conducted over the last few decades by various parties, including BLM, National Park Service, the University of Montana, and ABR, Inc., show that caribou avoid previous burn areas for decades, and the habitat takes as much as 120 years to recover. In addition, changing environmental conditions are favoring conversion to grass and shrub species rather than lichen recovery so burned lichen habitat may be permanently lost. The caribou herd is in decline and the Alaska Department of Fish and Game (ADF&G) reports that indicators suggest nutritional stress is a major factor. The Alaska Fire Science Consortium has published <u>overviews of the research</u>. The EIFO, U.S. Fish and Wildlife Service, and the SOA began discussions about changing fire management strategies to better protect caribou range in the future.



Figure 3. Smoke rises from the 2024 American Creek Fire after burning lichen-rich hillsides in the north unit of the Steese National Conservation Area.

Visitors

Visitation in the Steese NCA was an estimated 35,202 visits in FY2024. Many Steese NCA visitors drive the Steese Highway and enjoy the scenery from waysides during short visits. Others leave the highway to enjoy the NCA's undeveloped areas, where visitors generally stay a few days to a week. The Steese NCA has become a prime destination for hunters seeking caribou, moose, sheep, bear, gamebirds, and waterfowl. Winter hunting and trapping are also common activities. Berry picking, hiking, birding, and cross-country running are also popular activities. The NCA sees its highest levels of visitation during the fall big-game hunts that attract hunters from many parts of the state and internationally. This year, new interpretive signs were installed at the Eagle Summit and Twelvemile Summit waysides, which provides high quality accessible opportunities for visitors.



Figure 4. New interpretive signs were installed in the observation deck on the short interpretive loop at the BLM Eagle Summit Wayside.

Partnerships

The EIFO worked closely with the U.S. Geological Survey Water Resource Division, the National Weather Service River Forecast Center, and the Alaska Department of Environmental Conservation to inventory stream flow and monitor water quality and meteorological conditions in the Steese NCA. These collaborative working relationships benefit all cooperating agencies through data sharing and coordinated field logistics, significantly reducing individual agency costs for field-travel and equipment.

The EIFO worked together with American Conservation Experience (ACE) members to collect data for a restoration study. The study uses BLM National Aquatic Monitoring Framework's field protocols for lotic and riparian and wetland systems. Implementing the protocols requires at least five trained data collectors. Working with ACE members reduced the number of BLM staff needed to implement the protocols, increased the BLM's ability to accomplish additional work, and provided on-the-job experience to ACE members, who are typically early-career professionals in natural resources.

The BLM partnered with the Salcha-Delta Soil and Water Conservation District (SDSWCD) to continue monitoring revegetation and permafrost thaw on OHV-damaged sections of the Pinnell Mountain National Recreation Trail near the trailheads at Eagle Summit and Twelvemile Summit. The SDSWCD also inventoried over 100 miles of designated trail and approximately 110 miles of upper Birch Creek WSR for invasive plant species.



Figure 5. Conducting inventories for invasive plants along Birch Creek WSR.

Science

The EIFO conducted a study with the ADF&G about how surface disturbing activities alter habitat diversity and abundance, changing fish community composition and structure. The goal was to determine habitat variables likely driving differences among the fish community in historically mined streams. In the Steese NCA, Harrison Creek has two major tributaries: North Fork and South Fork. Both tributaries have experienced heavy placer mining in the last century. The study found that substrate size is likely a factor indicative of resident fish present at different life stages. Staff observed large adult sculpin (*Cottus cognatus*) and Arctic grayling (*Thymallus arcticus*) correlated with large substrates, whereas small sculpin and Arctic grayling were more frequent among small substrates.

The EIFO collaborated with ACE to collect data in the NCA for a restoration study, following protocols developed under the BLM National Aquatic Monitoring Framework to quantify aquatic and riparian habitat metrics. Four sites between North and South Fork Harrison Creeks served as control sites for a restoration effectiveness study at other locations in the Steese NCA. The data will be used to assess ecosystem function before and after restoration.

The EIFO collaborated with the University of Oregon, Yukon Environment, and others to investigate genetics of the small White Mountains Caribou Herd that resides in the White Mountains NRA and Steese NCA. It is genetically distinct from the much larger Fortymile herd, despite its range being within that of the Fortymile herd.



Figure 6. Monitoring aquatic and riparian habitats in Harrison Creek as part of a restoration effectiveness study in the Steese NCA.

Outreach and Special Events

In February 2024, the Yukon Quest Alaska Sled Dog Races started in Fairbanks, Alaska passing though the Steese NCA and Birch Creek WSR to finish in Central, Alaska. Checkpoints along the course provide rest, safety, and welfare checks for dogs and mushers. BLM sites along the Steese Highway and in Central are important for the success of the event and the safety of the competitors.



Figure 7. Official logo for the 2024 Yukon Quest Alaska, an annual sled dog race that passes through the Steese NCA.

Staff Topic of Choice

Steese NCA staff depend on agreements and partnerships to accomplish many tasks. One agreement to highlight is the Student Conservation Association (SCA). Over the past four summers they have spent over 1,000 team hours building boardwalk, conducting trail improvements, and brushing waysides in the Steese NCA. Without the agreement with the SCA, it would take EIFO staff many years to accomplish what they have done through this partnership.



Figure 8. A SCA trail crew builds boardwalk near Twelvemile Summit.



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