



**NATIONAL
CONSERVATION
LANDS**

California
2021: Annual Manager's Report

King Range

National Conservation Area



Map



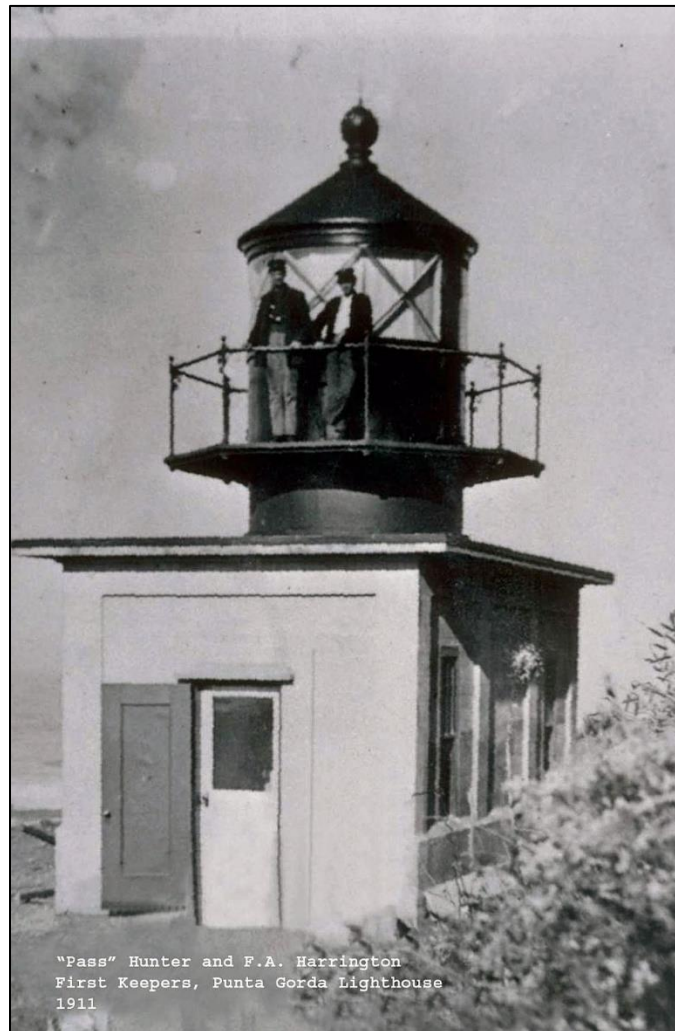
Accomplishments

The King Range National Conservation Area (KRNCA) has seen an approximate 1100% increase in visitor use between 2007 and 2021. King Range demonstrates a strong commitment by KRNCA staff and partners providing exemplary customer satisfaction at all levels of visitor services with a 95% overall visitor satisfaction rating. BLM continues its strong tradition of collaboration with King Range Alliance Organization Partners and volunteers on conservation-centered projects, for forest and grasslands health, and significant work toward watershed restoration. BLM staff and KRNCA partners are implementing the “King Range Forest Restoration and Shaded Fuel Break Enhancement Program” project. The program provides for human safety and resource protection by improving fuel breaks and implementing other critical management actions. King Range is also piloting an online permitting system for “downed” firewood collection to further support of forest health goals. BLM staff continue a major effort to expand Mattole Beach Campground. The expansion will improve visitor access and safety and benefit area natural and cultural resources that are presently impacted by campground overflow.



Challenges

In 2021 King Range NCA, part of what is colloquially known regionally as the “Lost Coast” since the 1930s, bore witness to tremendous challenges marked by a protracted regional fire season, climatic shifts influencing forest and ecosystem health, increased demands on regional watersheds and streams, and natural and cultural resources made vulnerable from unprecedented and intensified visitor use since 2007. These issues have been compounded by California’s ongoing drought (the longest and driest in the last 1,200 years), and by increasing illegal water demands impacting regional watersheds associated with the burgeoning cannabis industry.



Visitors

Despite full closure of King Range National Conservation Area’s (KRNCA)s visitor center between early December 2020 and early May 2021 in accordance with DOI’s COVID-19 Response Plan, staff completed a re-entry plan to open its doors once again to visitors through a contactless window station and virtually, an effort lauded by the California State Office. Additionally, to manage the influx of new and returning visitors, staff expanded visitor center operating hours during the summer peak recreation season to cover a full suite of visitor service operations 7 days/week. Since 2007, King Range NCA visitation has grown 1100%--soaring to unprecedented levels of primitive outdoor recreational use and visitation (camping, hiking, mountain biking, tide pooling, day use, fishing, target shooting, hunting, etc.). King Range NCA manages 24 miles of the “Lost Coast” Trail—a well-known destination hike along 35 consecutive miles of rugged beaches and scenic coastal wilderness in Northern California. As in 2020, the uptick in recreational activities and visitor services were driven undoubtedly by BLM’s formal re-opening of KRNCA’s visitor center, trails, trailhead and campgrounds and support facilities during the height of the COVID-19 pandemic, while most regional federal and state lands remained closed. There has been a notable impact to KRNCA’s carrying capacity as its infrastructure was not designed to manage this unprecedented growth in visitation. The NCA’s visitor base is growing far beyond local and regional communities as evinced by increases in wilderness permits granted to applicants from outside the Northern California region.



Partnerships

Partnerships continue to be vital for the successful stewardship of the Lost Coast. These programs have a profound mutual benefit toward the goals of King Range NCA and those of our partners in a multitude of ways. King Range NCA and its partners continue to accomplish the following mission-based objectives: conservation; science and resource management; education, outreach, and interpretation; habitat restoration; trails and facilities maintenance; to name a few.

The King Range Alliance was formed in 2014 with assistance from the Conservation Lands Foundation and is comprised of four local non-profit groups: Friends of the Lost Coast, Mattole Restoration Council, Mattole Salmon Group, and Sanctuary Forest. These groups have worked for over 30 years in the King Range National Conservation Area and the adjacent Mattole River watershed to implement environmental restoration, conservation, and education projects for the local community and visitors. The King Range Alliance inspires involvement of students, visitors, and the community to steward, preserve and restore the natural life of the King Range National Conservation Area. Successful projects and collaborative efforts are highlighted throughout the report.



Science

Wildlife:

The Punta Gorda Elephant Seal (*Mirounga angustirostris*) Study continued to examine the colony at the Punta Gorda Lighthouse. The colonies' growth continues and is beginning to accelerate as the first pups born at the colony have reached breeding age. The pups born at the colony are now adding to the population of immigrants that formed the colony. The rapid growth of the colony is expected to continue as the early cohorts produced more pups each year. At least five harems were established strung out along the beach in front of the Lighthouse. Pups survival is high and the colony has abundant available habitat for continued growth. One hundred and eighty pups were born in the winter of 2020/2021 and the population peaked at over 600 animals during the spring juvenile molt.

King Range National Conservation Area contains numerous northern spotted owl (*Strix occidentalis caurina*) territories. Northern spotted owls are a federally listed species and many portion of King Range NCA contain designated critical habitat. Two territories within King Range NCA, Big Finley Creek and the South Fork of Bear Creek, are part of a longterm region-wide demographic study looking at abundance and reproductive success. Barred owls (*Strix varia*) have moved into the region and are displacing northern spotted owls throughout most of the range causing a substantial setback to recovery of the species. Barred owls have only recently made it to the King Range NCA but their sightings have increased in frequency during the last several years.

The spotted owls in Big Finley Creek consistently have successful nests and fledge juveniles. The South Fork Bear Creek drainage habitat is traditionally not as productive as Big Finley Creek but a nesting pair was detected in the South Fork of Bear Creek Drainage near Tolkan Campground in 2021. The 2021 pair was the first nesting detection in over 10 years at the site.

Fisheries:

The Arcata Field Office (AFO) fish biologist partnered with the Mattole Salmon Group and a genetics team from UC-Davis to collect and analyze tissue samples from 250 juvenile steelhead across the Mattole River watershed to determine how prevalent the recently identified 'summer-run' gene is in the population. The Mattole River is home to a small (between 12 and 55 individuals annually over the last 30 years) but persistent run of this unique fish, and it represents the southernmost population on the continent. All other rivers supporting summer-run steelhead have barriers that segregate them from the winter-run population, and those rivers also contain cold headwaters with deep pools that allow the fish to persist through the warm summer months. However, the Mattole River has no significant barriers and lacks deep cold pools in the summer months, so the question is: What are they doing here? Study results will be available in Spring 2022, and an expanded sampling effort is planned for summer 2022. In FY21 BLM contributed \$5,000 to support the genetics laboratory work.

Salmon and Steelhead Population Monitoring:

The AFO fish biologist and three Watershed Stewards Program members partnered with the Mattole Salmon Group to complete salmon and steelhead population monitoring in the Mattole River and its tributaries. In the winter months surveyors documented the presence of redds (egg nests), live fish, and carcasses, and in the summer months surveyors conducted snorkel surveys to document the presence or absence of each species across the watershed.



Forestry & Wildfire Strategy:

In 2021, the forestry and fuels programs began work on the Paradise Ridge Road Shaded Fuel Break contract. This contract is treating approximately 245 acres along Paradise Ridge Road, which is the only ingress and egress route for property owners along the road as well as a popular mountain biking destination. The project is reducing hazardous fuels within 200' of the roadside and thinning dense forests to promote fire resilience and overall forest health. Along with this thinning, the area was opened for firewood collection in 2021 to allow for local collection and utilization of the biomass produced by the project. The firewood collection program has been utilizing a new online BLM permitting system to allow for more community members to purchase permits without needing to visit a BLM office.

The Arcata Field Office forestry and fuels staff also applied for and were awarded a CalFire California Climate Investment (CCI) Forest Health grant for Phase 1 of the King Range Forest Health and Community Protection project. This grant includes nearly \$4.4 million to complete 1,200 acres of forest health and fuels reduction work in the King Range front country, including Paradise Ridge Road. Grant work commenced in late 2021 and will continue through 2025. This grant also includes funding to plan for an additional 1,500 acres of forest health and fuels reduction work in the King Range as well as planning funds for the Shelter Cove Resource Improvement District to develop a

contiguous project on their lands. Once complete, Phase 1 and Phase 2 combined will improve forest health and reduce hazardous fuels across a large majority of the non-wilderness land in King Range.

Cultural Resources:

Managing cultural resources at King Range NCA continues to be a priority, with activities in 2021 aimed at archaeological site monitoring to identify and document any changes that have occurred at a site from the time of its original site record. Monitoring is needed to gauge and to better understand any effects from events like erosion, tectonic activity, recreation, and climate change. A temporary archaeological technician returned in 2021, after working with the BLM Arcata Field Office in 2020, to conduct the monitoring. This work involved extensive hiking and backpacking to re-locate archaeological sites throughout the King Range NCA. The project resulted in improved understanding of human land use patterns and behaviors since time immemorial.



The BLM-AFO/King Range staff worked with the BLM-California State Office (CASO) engineers to secure funding to stabilize and rehabilitate the historic Punta Gorda Light Station along the Lost Coast of the King Range National Conservation Area. This property is listed on the National Register of Historic Places as an excellent example of maritime navigation when it was actively used from 1912 through 1951. Originally, the light station complex included the light station, oil house, employee housing, fuels and storage sheds, fog-signal building, blacksmith and carpenter shop, and a barn. Today, the light station and oil house are all that remain of an important marine navigational installation.

These facilities are located along the popular Lost Coast Trail and are visited daily by recreationists. Recent condition assessments have noted deterioration at the light station, with more extensive deterioration noted at the oil house. The structures pose a significant safety hazard to the thousands of annual visitors.

Stream Habitat Improvement:

In summer 2021, the BLM Arcata Field Office (AFO) and NGO partners completed the final stages of a 10-year restoration effort in the lower Mattole River and estuary. The goal of the project was to restore natural habitat forming processes to benefit ESA-threatened Chinook salmon, Coho salmon, and steelhead. In total, 1,800 feet of estuary slough channels were excavated and connected to the river, 500 whole trees were added using helicopters and heavy equipment to form complex wood jams, and 15,000 willow cuttings and 17,000 native plants were planted to add integrity to previously barren river islands and terraces.



The BLM provided NEPA compliance and environmental permitting for the project, along with technical input on restoration techniques. Mattole Salmon Group and Mattole Restoration Council acquired grant funds and implemented the on-the-ground elements of the project.

Prosper Ridge Prairie Restoration and Native Grassland Replanting and Seeding:

2021 was the eighth year of a landscape-wide, multi-year project to restore coastal prairies being encroached by woody vegetation including coyote brush and Douglas-fir. Since the decline of Native American and agricultural burning practices, nearly half of coastal grasslands have been lost to woody vegetation encroachment. Coastal grasslands are vital for providing diverse sources of food and habitat supporting upland game, wildlife, and pollinators, as well as for providing the resources necessary for recreational and commercial uses such as sport hunting and livestock grazing.

As the project continues into its 7th year, 350 acres have been mechanically reclaimed. This effort clears the way for grassland recovery and the amazing vistas of the Pacific Ocean and mouth of the Mattole River. The project has been popular with hunting groups and has garnered external funding support in past fiscal years.

The BLM, continuing in partnership with the Mattole Restoration Council, has been propagating locally sourced, native bunchgrasses for planting and steady seed supply



for continued propagation. In 2021, the BLM continued to broaden its native plant development efforts with the development, acquisition and application of locally-adapted forb seeds. This native plant development work is consistent with the National Seed Strategy for Rehabilitation and Restoration 2015-2020. In FY2021, the BLM planted 25,000 native bunchgrass plugs consisting of six different species; and seeded 10 acres with native seed in the Prosper Ridge Prairie Plan project area.

Invasive, Non-Native Weed Control:

Working in partnership with local, non-profit Mattole Restoration Council (MRC), the BLM uses an Early Detection Rapid Response (EDRR) approach to invasive, non-native weed control in the KRNCA. In FY2021, survey work continued for roads, campgrounds, trailheads, and trail systems in the KRNCA, as well as approximately 30,000 upland and coastal acres for invasive, non-native weeds. Weeds occurring in a cumulative area of about 20,000 acres were manually treated by MRC and Watershed Steward Project (WSP) staff.



Climate Impacts

The King Range NCA Coastal landscape bears witness to variable impacts from rising sea levels, rising temperatures and intensive storm surge events driven primarily by climate change processes. This is also true of the NCA's interior/montane landscape which are additionally being impacted by changes in vegetation regimes and increases of invasive plant and animal populations, impacting the NCA's historically associated biota. Furthermore, these impacts are affecting visitor experiences and safety as the NCA's trail, roads, campgrounds, and day use areas feel the weight of unprecedented use from visitors vying to experience the Lost Coast. Stretches of the Lost Coast Trail (LCT) are washing away or displaced at unprecedented rates based on historic aerial and satellite imagery. The NCA's over 88 miles of trails and 100+ miles of road require increased attention and direct intervention to maintain safe public access. These issues have been compounded by California's on-going drought (the longest and driest in the last 1,200 years), and by increasing, and illegal, water demands impacting regional watersheds to support the burgeoning cannabis industry.

Another major concern is the effect of climate change on archaeological sites. The BLM Archaeologist has been working with the geospatial team at the BLM-National Operations Center (NOC) to collect and process data to create GIS products to help track and quantify changes along the King Range NCA coastline. Historic aerial photos are available that graphically show change but are of limited use to provide measurable and quantifiable rates of change. Instead, high resolution imagery gathered during an overflight in 2020 has been combined with available Lidar to track the rate of erosion and deposition along the coastline. In 2021, the NOC team used different analytic methods (including CloudCompare software) to determine "hot spots" of coastline change. The study thus

far has established baseline conditions which will be useful as additional information is gathered and future comparisons are made. The GIS products and monitoring program will be helpful to BLM in managing cultural resources, as well as helping in the planning of other program management needs and projects.

Climate Resiliency

While there are significant challenges managing the King Range NCA's unique coastal and montane landscapes, and important ecosystems, The Lost Coast is amazingly resilient. The changing climate has driven an outgrowth population of pinnipeds (particularly Elephant seals and Harbor seals) from Point Reyes to expand their colony to Punta Gorda along the Lost Coast Trail. Work continues among the BLM and participating organizations of the King Range Alliance to restore coastal grasslands to their natural state through historic and collaborative conservation efforts—working to curb the spread of invasive plants. Although many of the region's watersheds have seen declining water levels influenced by an ongoing 1200-year-old drought, impacting fisheries and riparian habitats, the NCA's watersheds are holding strong despite lower-than-average regional rainfall the past few years—owing to King Range's unique geological and hydrological character. Staff and partners are engaged in identifying and understanding the impacts of climate change across our diverse landscapes and unique resources, and this work will continue to yield fruit in the coming years as BLM staff, citizen scientists, academia, and the King Range Alliance develop collaborative and practical strategies to respond to this global issue.



Social and Environmental Justice

There is a long tradition of conservation and restoration at King Range NCA, stabilizing or improving watersheds, fisheries, coastal grasslands, forest health, important cultural landscapes, and much more. This work is not possible without the exceptional dedication of BLM Staff, Partners and Stakeholders, lending their diverse knowledge, passion, and drive to solving the NCA's most historic and often complex problems through a shared vision. BLM's continued financial assistance to partners is benefitting disadvantaged communities by providing economic and internship opportunities to youth groups and affiliated Tribes. Tourism is blooming in Southern Humboldt County, CA because of King Range NCA's steep climb in visitation since 2007, bringing in new streams of revenue and supporting small local businesses at the NCA's gateway and shoulder communities.

BLM staff continues to strengthen its relationship with the Bear River Band of the Rohnerville Rancheria, a federally recognized Tribe of Mattole, Bear River, and Wiyot people. The northern portion of King Range is within the ancestral territory of the Mattole people who have a strong connection to this land. Recently, the Tribe has held Salmon Dances near the mouth of the Mattole River and is interested in management practices (such as cultural burns) and traditional gathering of plants to support traditional basket weaving.

Events

Though there have been many challenges impacting event planning, King Range NCA hosted and participated in a number of public service events and volunteer days alongside our King Range Alliance partners and dedicated volunteers.

Bear River Band of the Rohnerville Rancheria organized and hosted biannual Salmon Dance Ceremonies at Mattole Estuary in close partnership with the BLM who provided agency assistance to support this historic and traditional ceremony.

Words from the staff

BLM staff, Tribes, partners, and stakeholders are dedicated to the conservation of King Range NCA for this and future generations. While there are certainly challenges on the horizon, together we can forge ahead with a shared vision by engaging in creative and collaborative solutions to meaningfully address unprecedented issues and celebrate our many successes. Many thanks to all those who contribute their considerable knowledge and passions toward preserving the NCA's remarkable landscapes, singular vistas, and significant natural and cultural resources.



NATIONAL CONSERVATION LANDS

King Range

National Conservation Area

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