Chilkat Watershed

Located at the northern reach of Southeast Alaska, where temperate rainforest meets an interior, subarctic ecosystem just north of the Tongass National Forest, the Chilkat Watershed is arguably the most biologically diverse valley in all of Alaska, but among the least protected. The Valley's north-south orientation, connecting vastly different coastal and interior ecoystems and climates, positions it as an important corridor for migratory species. Large tracts of healthy, diverse wildlife habitat with little development make for a high level of connectivity among wildlife populations, building species resilience for the broader region. Audubon Alaska's Ecological Atlas of Southeast Alaska notes:

Overlap of coastal and interior flora produces Alaska's highest vascular plant species richness, and the Chilkat River watershed is one of the highest value watersheds for salmon habitat (all five species) in Southeast Alaska....This province has the highest mammal diversity in Southeast Alaska due to an overlap of coastal and interior species, with 38 species recorded, including an endemic species of weasel (*Mustela ermine alascensis*). Only 2% of the province is legislatively protected and 10% is administratively protected.¹

The Chilkat River sustains some of Southeast Alaska's most abundant sockeye (*Oncorhynchus nerka*) and coho salmon (*Oncorhynchus kisutch*) runs, as well as a spring eulachon (*Thaleichthys pacificus*) run, a small, anadromous fish of both ecological and cultural significance. The river and its salmon runs are culturally significant to the Indigenous and non-Indigenous residents of the watershed. The salmon runs drive Southeast Alaska's regional commercial fishing and tourism sectors, and sustain local people—according to Alaska Department of Fish and Game, approximately 90% of local residents participate in subsistence fishing to feed their families.²

Consisting of nine glacially-fed rivers, complex, interconnected hydrology, and some of the world's most abundant snowpack, the Chilkat Watershed's climate resilience will be incredibly significant as a refugium for climate-sensitive species including wild Pacific salmon and the watershed's genetically diverse mountain goat (*Oreamnos americanus*) populations.³

The Chilkat River sustains the world's largest seasonal concentration of bald eagles (*Haliaeetus leucocephalus*), thanks to its unique hydrology that prevents it from fully freezing in the winter, allowing for nearly year-round salmon runs.⁴ Late fall/early winter salmon attract bald eagles and other wildlife, long after other rivers in the region have frozen over. The eagles in turn attract photographers and tourists from around the world. Due to this significance, the Alaska Chilkat Bald Eagle Preserve was established to protect a section of the Chilkat River where the eagles congregate. Mining and logging are prohibited on the Eagle Preserve, but allowed on the

¹ Audubon Alaska, Ecological Atlas of Southeast Alaska, 2016.P34

² <u>http://www.adfg.alaska.gov/sb/CSIS/index.cfm?ADFG=harvInfo.harvestCommSelComm</u>, accessed 3/1/22

³ <u>https://www.adfg.alaska.gov/index.cfm?adfg=goatresearch.main§ion=genetics</u>, accessed 3/1/22

⁴ <u>https://www.adfg.alaska.gov/index.cfm?adfg=southeastviewing.hainesbaldeaglepreserve</u>, accessed 3/1/22

Bureau of Land Management, Haines State Forest, Mental Health Trust, and University of Alaska Trust lands upstream of the Eagle Preserve and its Critical Habitat.⁵

Threats

Audubon Alaska's Ecological Atlas identifies the Chilkat River Complex as the ecological province facing the greatest cumulative ecological risk in Southeast Alaska.⁶ In this context, Audubon Alaska defines cumulative ecological risk as "an estimate of the combined effects of change in habitat values resulting from past activities such as timber harvest, road construction and urbanization, as well as the possibility of future change based on current management designations and conservation systems."⁷

The Palmer Project, a proposed sulfide mine in advanced exploration at the headwaters of the Chilkat Watershed, just three miles upstream of the anadromous reach and fifteen miles upstream of the Chilkat Bald Eagle Preserve Critical Habitat, threatens the clean water, salmon runs, and all they support. If allowed to advance, the Palmer Project will leach acid mine drainage and heavy metals into the watershed, impacting the salmon and other fish, and requiring water treatment for perpetuity. Copper, in particular, interferes with salmon's ability to avoid predation and navigate back to their natal streams to spawn, and metals like selenium can cause skeletal deformations. Local people rely heavily on salmon for their diets, and heavy metals in fish are harmful to human health.

Large-scale clearcut timber sales on the Haines State Forest, and proposed for University of Alaska Trust and Mental Health Trust lands, add significant threats as well. The Haines State Forest's inaccurate forestry models are based on a regrowth model for Southern Southeast Alaska, where a milder climate results in significantly faster regrowth, combined with inadequate implementation of public process, and a current legislative attempt to further diminish public process for timber sales, exacerbate the ecological threats, especially upstream of the Chilkat Bald Eagle Preserve, including state-designated Critical Bald Eagle Habitat.

Chilkat River chinook salmon (*Oncorhynchus tshawytscha*) runs failed to meet the Alaska Department of Fish and Game's (ADFG) lower escapement goal six times between 2010-2020.⁸ ADGF declared the Chilkat chinook a stock of concern in 2017,⁹ and has enacted heavy restrictions on harvest of Chilkat chinook salmon across all user and gear groups, to try to improve escapement, impacting local subsistence users, commercial fisheries, and local and visiting sport anglers for over a decade. While salmon have a complex life cycle requiring diverse, healthy habitats, conservation measures that protect chinook salmon, their freshwater habitat, and the uplands that support them are a critical piece in securing the future of the Chilkat chinook salmon. Climate change impacts on freshwater and marine habitats, road

⁵ <u>http://www.adfg.alaska.gov/index.cfm?adfg=chilkatriver.main</u>, accessed 3/1/22

⁶ Audubon Alaska, Ecological Atlas of Southeast Alaska, 2016. P 61

⁷ Ibid

⁸ <u>http://www.adfg.alaska.gov/index.cfm?adfg=chinookinitiative_chilkat.main</u>, accessed 3/1/22.

⁹ <u>http://www.adfg.alaska.gov/index.cfm?adfg=specialstatus.akfishstocks</u> accessed 3/1/22

construction, commercial fishery bycatch, clearcut logging, and sulfide mining all pose threats to Chilkat chinook salmon.

Recommended Conservation Measures and Protections

- Moratorium on mining and large-scale clearcut logging upstream of the Chilkat Bald Eagle Preserve
- Establish additional critical habitat areas surrounding state lands and waters that include high-value and/or sensitive fish and wildlife habitats and where multiple land or water jurisdictions overlap.
- Designate Chilkat River as a Tier III Waterbody under the Clean Water Act; Evaluate all Tier 3 nominated waterbodies for protection
- Designate the Upper Chilkat River Traditional Use Area as an Area of Critical Environmental Concern (ACEC) under the Bureau of Land Management

In light of the upstream threats to the Chilkat Bald Eagle Preserve, we propose a moratorium on mining and large-scale timber harvest on lands upstream of the Preserve, including, but not limited to Bureau of Land Management, Haines State Forest, Mental Health Trust, and University of Alaska Trust lands. Throughout the watershed, we propose protections for all waters that support significant natural wild salmon populations, and the uplands that support them, especially upstream of designated Critical Habitat. The Chilkat Bald Eagle Preserve boundary is only a few miles downstream of the Palmer Project mineral exploration site, and the salmon, eagles, and other wildlife will be severely impacted by acid mine drainage and heavy metals if mineral exploration advances underground, as expected in 2023.

Tier III Water Bodies

The Chilkat Indian Village of Klukwan nominated the Chilkat River for Tier III designation as an Outstanding National Resource Water under the Clean Water Act in 2016. To date, the State of Alaska has taken no action to evaluate this or any other Tier III nominations. The Chilkat River is critically important to the Chilkat Indian Village of Klukwan, one of the oldest continuously inhabited communities in North America, located at the confluence of Chilkat, Tsirku, and Klehini Rivers. The health of the river and its salmon runs sustain the Village's traditional way of life. We propose Tier III designation for the Chilkat River under the 30 by 30 initiative, and that all Tier III nominations in the state of Alaska be evaluated in a timely manner.

Area of Critical Environmental Concern

The Bureau of Land Management designates Areas of Critical Environmental Concern (ACEC) in areas where:

special management attention is needed in order to protect and prevent irreparable damage to important historic, cultural and scenic values, fish or wildlife resources or other natural systems or processes; or to protect human life and safety from natural hazards (BLM, ACEC Manual 1613, 1988). To be considered as a potential ACEC and

analyzed in resource management plan alternatives, an area must meet the criteria of relevance and importance as established and defined in 43 CFR 1610.7-2.¹⁰

The Upper Chilkat River Traditional Use Area has been proposed as an ACEC for its exceptional values for mountain goat populations and habitat, and for the cultural significance of the Takshanuk Mountains. The Final EIS for the Proposed Haines Amendment to the BLM Ring of Fire Management Plan evaluated the nomination and found that it meets the necessary criteria for an ACEC:

Wildlife Resources The proposed area meets the relevance criteria as it contains mountain goat habitat essential to the maintenance of mountain goat diversity. Extensive research has been conducted on both mountain goat habitat requirements and genetic differentiation within the proposed ACEC area, thus highlighting the relevant value.

Cultural Resources The proposed area meets the relevance criteria as the area contains a significant cultural resource in the form of mountain goats, which have provided wool to Chilkat Tlingit weavers for hundreds of years. The wool is used to create "Chilkat Blankets," which are an iconic Tlingit art form that is tied to their cultural, clan, moiety and village identities (Hotch, 2014). The blankets are used primarily during ceremonies and dances by high ranking members of the village (Emmons 1991:227).¹¹

The BLM determined that the proposed ACEC "meets the importance criteria because it provides habitat for mountain goat populations which may be fragile or sensitive to human activities, irreplaceable or unique and/or vulnerable to adverse change," and "it has more than locally significant qualities since 'Chilkat Blankets' made from mountain goat wool have importance beyond the local Chilkat tribe."¹² Audubon Alaska identifies the North Block of Bureau of Land Management lands, where the proposed ACEC is located, as among the top 5% of public lands for climate resilience and biodiversity.

Despite their analysis that the proposed area meets multiple criteria for an ACEC, the BLM chose not to designate the ACEC. We propose that the BLM reconsider this proposal, and designate the Upper Chilkat River Traditional Use Area as an ACEC, as described in Alternative E of the FEIS for the Ring of Fire Haines Amendment (see map on p104 of FEIS):

Alternative E This alternative would establish a 102,257 acre ACEC with a special designation as a Resource Natural Area (RNA) within the northwest portion of the Planning Area. The boundary would be drawn to include all the Monitoring and Control

¹⁰ Bureau of Land Management, Final Environmental Impact Statement for the Proposed Haines Amendment to the Ring of Fire Resource Management Plan, October, 2019. P4.

¹¹ Bureau of Land Management, Final Environmental Impact Statement for the Proposed Haines Amendment to the Ring of Fire Resource Management Plan, October, 2019. P5.

¹² Bureau of Land Management, Final Environmental Impact Statement for the Proposed Haines Amendment to the Ring of Fire Resource Management Plan, October, 2019. P5.

Area (MCA) and to take in the area identified as being of cultural significance to the federally recognized tribes. The remaining areas in the North and South Blocks would be designated as ERMAs. The total number of authorized helicopter landings in the Planning Area would be maintained at 2,700 annually (maximum 2,400 summer, 300 winter). This alternative would remove the MCA designation in the North Block.¹³

¹³ Bureau of Land Management, Final Environmental Impact Statement for the Proposed Haines Amendment to the Ring of Fire Resource Management Plan, October, 2019. P iii.