

When I Look at These Mountains, I See Life

by Shannon Donahue

At the northern

reach of Southeast Alaska, one of the longest, deepest fjords in North America stretches its watery tentacles into a rocky landscape, tickling the land with its brine. Lynn Canal splits into Chilkat and Lutak inlets, meeting the Chilkat and Chilkoot rivers. Eulachon, trout, Dolly Varden, char, and five species of Pacific salmon make their way up the Chilkat and Chilkoot watersheds to carry out their roles in an ancient lifecycle, nourishing everything in this landscape, perpetuating life as they spawn, die, and give their bodies to feed other lifeforms.

The Chilkat Valley just may be the most biologically diverse valley in all of Alaska. The temperate hemlock-spruce rainforest mixes with paper birch and giant black cottonwood; the mountains host the most genetically diverse mountain goat population in North America; black and brown bears find their niches, black bears seeking forest cover, while brown bears roam from the wide, braided, salmon-filled rivers and shorelines up to the alpine for berries, and back down again as the salmon run late into the fall and early winter. The rare mountain lady slipper finds just the right conditions to plant its toes in the glacial till and show off its elaborate flower.

At the heart of all this diversity is a dynamic, interconnected hydrology. The interaction of glacial ice and meltwater with the landscape stretching back 11,000 years to the last ice age creates ideal conditions for a much later salmon run. The Chilkat River flows from glacial sources high up in the steep mountains. Where the Chilkat, Tsirku, Klehini, and Kelsall rivers now run, glaciers flowed, scouring the earth beneath them, pushing rock, gravel, and sediment to the valley bottom. Beneath the rivers,

gravel layers measure 200 to 800 feet deep. Water flows through this gravel, an underground aquifer connected with surface waters.

Where the Tsirku, Klehini, and Chilkat rivers converge, the Tsirku and Klukwan alluvial fans force the Chilkat into a narrow channel that runs faster than its braided tributaries. Near the Tlingit Chilkat Indian Village of Klukwan, underground waters percolate to the surface, heated by the earth's energy and friction, insulated by layers of gravel. Warm upwellings interact with the fast-flowing Chilkat, resulting in a river system that remains partially ice-free throughout the winter months, and beckons a run of chum salmon in November — long after most of Southeast's other salmon runs have ended.

The Chilkat's late salmon runs draw up to 3,000 bald eagles — the largest seasonal gathering of its kind in North America. Photographers flock from all over the world to capture images of frost-glazed trees peppered with a dozen eagles, and film dynamic interactions as eagles compete for the best fishing spots. The American Bald Eagle Foundation hosts a Bald Eagle Festival, celebrating the watershed's abundance, extending the local tourism economy long after the summer tourists have migrated back south.

The lower watershed enjoys protection as the Alaska Chilkat Bald Eagle Preserve, but an existential threat looms

at the headwaters, high up Glacier Creek near the Canadian border, where meltwater from Saksai Glacier feeds the Tsirku and Chilkat rivers.

Two international corporations, Japanese smelter company DOWA, and Canadian Constantine Metal Resources, are drilling

holes in the mountains, looking for copper, zinc, gold, and silver to enrich their shareholders.

Before they even develop a full-blown mine, the Palmer Project's exploration activities threaten the pristine, life-giving waters of the Chilkat's tributaries with acid mine drainage and

heavy metals that can leach into our clean water once exposed. They want to discharge wastewater where it will likely resurface in these tributaries. Copper can interfere with salmon's ability to find their natal streams, selenium can cause deformities in fish, and acid mine drainage is similar to battery acid, leaching into our water forever, once unleashed.

With your support, SEACC and our partners are working to protect the Chilkat Watershed and its communities from destructive mining impacts, so the unique hydrology that supports all this life can continue to do so.

A Constantine representative once remarked, "When I look at these mountains, I see minerals." We who cherish the Chilkat Watershed look at these mountains and see life worth protecting for future generations.

Shannon Donahue is SEACC's Upper Lynn Canal Organizer



A Mountain Lady's Slipper Orchid
Cypripedium montanum

photo by Jessica Plachta