



# Friends Of Admiralty Island

<https://friendsofadmiraityisland.org/> - PO Box 20791, Juneau Alaska 99802

**For immediate release:**

**New Study finds High Levels of Toxic Lead Harming Alaska's Admiralty Island National Monument. Friends of Admiralty calls for mitigation/removal plan and ecosystem study.**

**Date:** March 14, 2023

**Contact:**

- John Neary, President, Friends of Admiralty Island, 907-321-8555, [john.neary99@gmail.com](mailto:john.neary99@gmail.com)
- K.J. Metcalf, Board member, Friends of Admiralty, 907-500-2894, [angkjm@yahoo.com](mailto:angkjm@yahoo.com)
- Guy Archibald, Clean Water Consulting, 907-209-2720, [garch570@gmail.com](mailto:garch570@gmail.com)

A new peer-reviewed scientific study<sup>1</sup> commissioned by the Friends of Admiralty Island (FOA) has found that tailings from the Hecla Greens Creek mine are likely the primary source of a 50 percent increase in lead that's poisoning the food chain in Admiralty Island's Hawk Inlet.

Investigators measured lead levels in Hawk Inlet clam shells using both living specimens and pre-mining clam shells, some of which are hundreds or even thousands of years old that have been preserved in uplifted beaches. Shells accurately archive the water and sediment quality during the life of the clam and thus serve as a valuable time capsule.

Results show that for many years, the lead level of clams in Hawk Inlet reflected gradual global increases until the mine began operations, after which a dramatic increase occurred. In addition, the lead found in the post-mining shells carries an isotopic signature closely matching the lead in the tailings from the Greens Creek mine. This chemical fingerprint is absent in the pre-mining shells and in all clam shells from an adjacent bay beyond the mine's watershed.

Guy Archibald, chief investigator in the study, said large amounts of lead are entering the Monument and marine ecosystem. "This is not surprising, given that lead is one of the main constituents of the tailings and monitoring by the mine shows large amounts of lead-containing fugitive dust leaving the mine tailings disposal pile." As of 2020, this pile contained approximately 53,000 tons of lead.

Greens Creek is the largest silver mine in the United States, and the only mine in the U.S. that is allowed to operate inside a federally protected national monument. Under the Alaska National Interest Lands Conservation Act (ANILCA), Congress allowed Hecla to operate the mine within the Admiralty Island National Monument until the year 2095, but only if the mine does not cause irreparable harm to the monument's natural, scientific, and biological values. "The tailings appear to be responsible for irreparable harm that the mine is required to avoid" said John Neary, President of Friends of Admiralty.

MORE>>

Page 1 of 2

Lead can have devastating long-term impacts on natural ecosystems, resident organisms, and human health. According to the Alaska Department of Environmental Conservation (DEC), there are no safe levels of human exposure to lead. “It’s a silent killer, contributing to reproductive failure, nerve damage and suppressing immune systems in living organisms,” Archibald said<sup>3</sup>. “Lead bioaccumulates in the food chain with increasing concentration and toxicity in the animals and people who consume Hawk Inlet’s wild foods. There is enough evidence to conclude that the biological community in Hawk Inlet has already been depleted and harmed.”

“The Forest Service (permitter of the mine) required that a comprehensive biological baseline study be conducted in 1981 prior to the start of mining operations to track long-term impacts” according to K. J. Metcalf, the Forest Service Ranger on Admiralty Island National Monument in 1978. It concluded that the Hawk Inlet marine environment was in a “pristine” state at the time.

“Agencies involved in developing the original Environmental Assessment were adamant that a pre-mining baseline study was essential,” Metcalf said. “It was supposed to be repeated every five to ten years to measure changes in biological health,” he said, “but it has never been replicated or used in the three decades of the mine’s operation.”

“Over a decade ago FOA conducted a reconnaissance study of Hawk Inlet and determined that the baseline study can be replicated. In the process FOA board members became alarmed at the dramatic increases in heavy metals being reported in the Hawk Inlet marine system by the mine,” Neary said. “The Alaska State Department of Environmental Conservation claims the increases are due to natural erosion and are not mine-related, so no mitigation is needed, but they have not supplied any scientific evidence to support that conclusion” according to Archibald.

In 2013, the Forest Service issued Greens Creek a ten-year permit for expanding the mine tailings, which soon expires. At the time, they denied Hecla’s request for a 30-to-50-year expansion permit due to a lack of economic, structural, and biological information, and they invited stakeholders to work with the agency to provide missing information. “That’s when FOA decided to measure the mine’s impact on the health of the marine ecosystem,” Neary said. “We are advocating for a decision based on science.”

“FOA is not advocating closure of Hecla’s mine,” said Neary. “We are aware of its economic value to our community and we want to see it fully comply with federal law and its permits,” he said. “The Forest Service is about to release a Draft Supplemental Environmental Impact Statement for Hecla’s planned expansion of their tailings pile but they must acknowledge and mitigate the serious environmental degradation that the tailings are likely causing” Neary said. Until baseline studies are replicated and a mitigation or removal plan for lead is implemented, Friends of Admiralty has requested the U.S. Forest Service delay issuance of a final Environmental Impact Statement and Decision.

<sup>1</sup> Evaluation of Stable Isotope Ratios and Lead in Clam Shells Over Time in Hawk Inlet, Guy Archibald, December 2022

<sup>2</sup> <https://www.epa.gov/lead-air-pollution/basic-information-about-lead-air-pollution>