



Water Quality Program Category 5 Summary

Draft 2026 Integrated Report

Ketchikan Creek

Abstract

Ketchikan Creek was sampled for fecal coliform bacteria during the summers of 2023 and 2024¹. Fecal coliform concentrations exceeded water quality criteria for drinking water supply in both years. Microbial source tracking analysis detected fecal bacteria associated with human and dog host species, indicating that there is an anthropogenic source to the fecal coliform found in the creek. DEC recommends placing Ketchikan Creek in Category 5 as impaired for Bacteria (fecal coliform) in the 2026 Integrated Report.



Table 1. Current assessment unit status and applicable water quality standard

Assessment Unit Name	Ketchikan Creek
Assessment Unit ID	AK_R_1010204_003
Parameter	Fecal Coliform
Category Change	3 (Insufficient Information) to 5 (Impaired)
Water Quality Standard²	(2) Bacteria, for freshwater uses
Designated Uses Affected	(A) Water Supply (i) drinking, culinary, and food processing
Criteria	In a 30-day period, the geometric mean may not exceed 20 fecal coliform/100 ml, and not more than 10% of the samples may exceed 40 fecal coliform/100 ml.

Results

Fecal coliform samples collected in Ketchikan Creek exceeded the drinking, culinary, and food processing geometric mean criterion of 20 CFU/100mL twice in 2023 and once in 2024 (Table 2). In 2023 and 2024, 41.6% and 90% of samples, respectively, exceeded the drinking, culinary, and food processing individual result criterion of 40 fecal coliform CFU/100 mL (Figure 1).

¹ Southeast Alaska Watershed Coalition. 2024. *Waterbody Field Report: Ketchikan Creek, Hoadley Creek, and Carlanna Creek, Ketchikan Alaska*.

² Alaska Department of Environmental Conservation. 2025. *18 AAC 70.010 Water Quality Standards*. Amended as of January 8, 2025.

Microbial source tracking sampling conducted in 2023 identified DNA markers from humans, dogs, birds, and ruminants (e.g., deer and goats) in Ketchikan Creek with only dog being quantifiable. No host species DNA was detected in the 2024 sampling.

Table 2. Ketchikan Creek Fecal Coliform 30-day reportable geometric means. Geomeans in bold exceed the Drinking, Culinary, and Food Processing geometric mean criterion of 20 CFU/100 mL.

Date Range	30-day Geomean
07-31-2023 to 07-01-2023	48.83
08-08-2023 to 07-09-2023	66.30
10-26-2023 to 09-26-2023	25.65
10-31-2023 to 10-01-2023	17.94
05-30-2024 to 04-30-2024	106.57

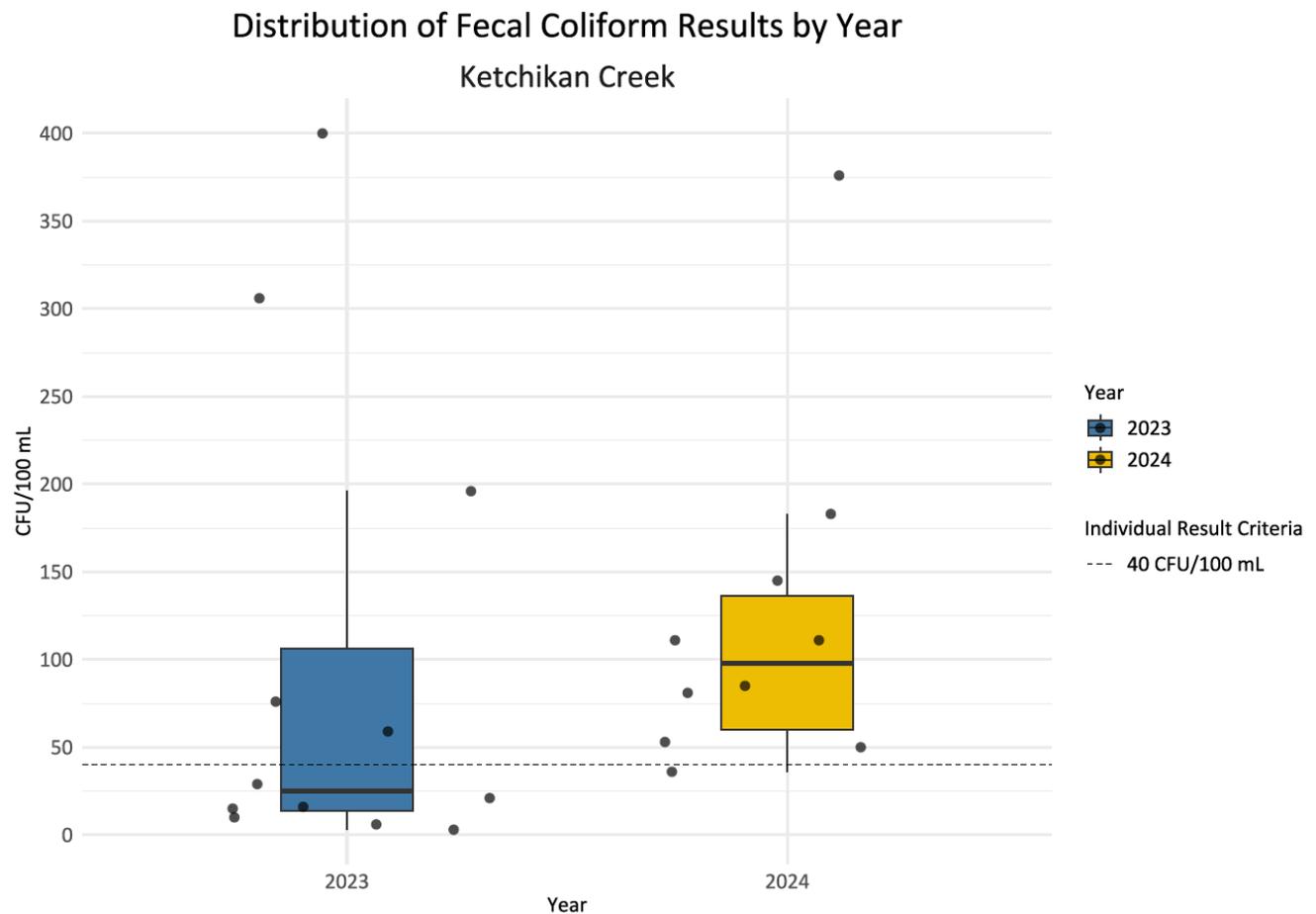


Figure 1. Ketchikan Creek Fecal Coliform samples collected during the summers of 2023 and 2024. Points are individual sample results, and boxplots show the distribution of samples. The dashed line shows the individual result allowed limit.