

# KETCHIKAN MONITORING SITES

## General Information

Ketchikan is a home rule city in the Ketchikan Gateway Borough (a second class borough). The City of Ketchikan and the Ketchikan Gateway Borough have populations<sup>1</sup> of 8,320 and 13,961 respectively. Figure 1 is a topographical map showing the entire Ketchikan area and surrounding geographical features. Ketchikan is located on the Inside Passage in South-East Alaska.

Ketchikan is located on the western coast of Revillagigedo Island, near the southernmost boundary of Alaska. It is 235 miles south of Juneau. The 2.2 million acre Misty Fjords National Monument lies 22 air miles east of Ketchikan. It is the first Alaska port of call for northbound cruise ships and State ferries. The city encompasses 3 square miles of land and 1 square miles of water. The borough encompasses 1,220 square miles of land and 524 square miles of water.

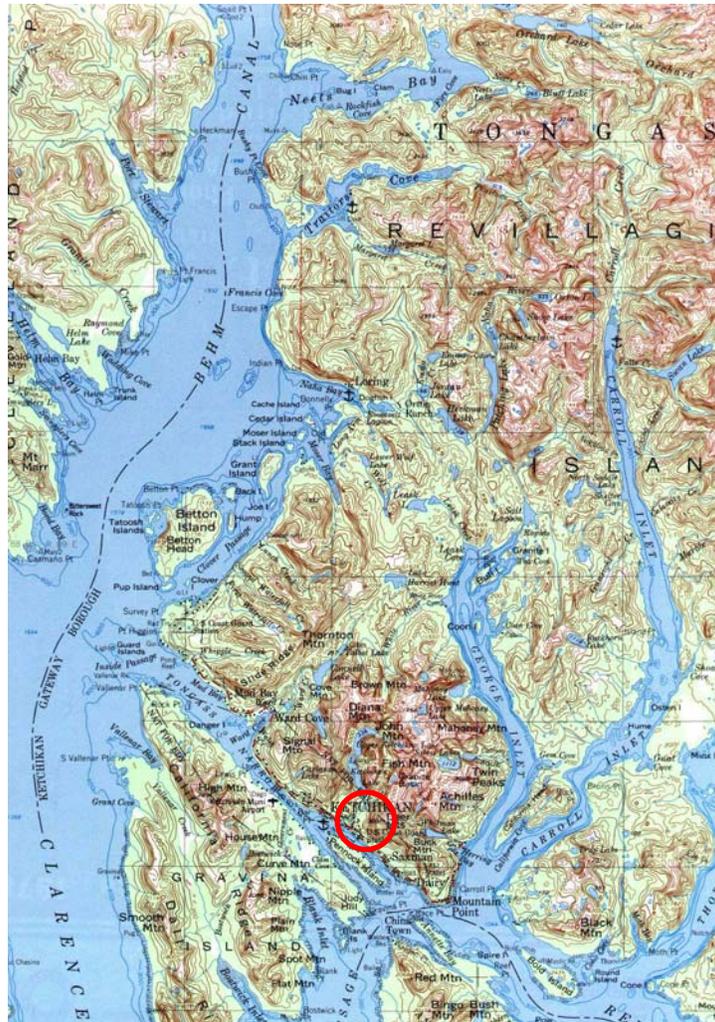


Figure 1 – Topographical map of Ketchikan area.

<sup>1</sup> Population data certified December, 1999 by the Department of Community and Economic Development.

The area lies in the maritime climate zone noted for its warm winters, cool summers, and heavy precipitation. Summer temperatures range from 51°F to 65°F; winter temperatures range from 29°F to 39°F. Ketchikan averages 162 inches (13.5 feet) of precipitation annually, including 32 inches of snowfall.

Figure 2 is an aerial photo of the Bear Valley area of Ketchikan. There is a single, seasonal particulate monitoring site in Ketchikan and it is operated by Alaska Department of Environmental Conservation staff.



Figure 2 – Aerial photo of Ketchikan. The red circle indicates the monitoring site.

# BEAR VALLEY SITE - KETCHIKAN

West Sesame Street

AIRS ID 02-130-0008  
Prepared 08 Sept, 2001

## Site Information

The site is located on a monitoring shelter at the end of West Sesame Street in Bear Valley. The latitude<sup>2</sup> is 55° 20' 57", and the longitude is -131° 38' 42". The ground elevation is 330 meters. Figure 3 is a street map of the local area. The site is located less than one kilometer from the central business district.

The location is suburban and residential. The site is within the South-East Alaska air quality control region (AIRS AQCR= 011), and is not within any metropolitan statistical area (AIRS MSA= 0000). The shelter is located in a cul-de-sac at the end of Sesame Street. Bear Valley is a neighborhood-scale, population-oriented site.

## Traffic

The Bear Valley site is on West Sesame Street, which had 20 Vehicles per day (VPD) average daily traffic in 1993. The shelter is on the edge of the cul-de-sac at the end of Sesame Street.

## Sources

In the vicinity of the sampler land use is primarily single family residential lots and undeveloped woodlands. Sources of fine particulate matter within 3 kilometers are combustion from home heating, cruise ship exhaust (summer only), and automobile exhaust.

## Monitors

The equipment is located on the roof of an eight foot tall monitoring shelter. The probe is at a height of approximately five meters above the ground. There is unrestricted air flow around the samplers. The immediate area is suburban residential with primarily single family dwellings.

## Equipment installed

The particulate monitors are two Rupprecht & Pattashnick Partisol 2000 FRM samplers (serial numbers 200FA203499907 and 200FA203649998). The site is operated seasonally on an every third day schedule. The monitors were installed on 28 Oct, 1999. This site was discontinued in the spring of 2001, and ADEC would like to relocate this sampler to another location. Filters from this site have shown consistently very low concentrations of fine particulate matter.

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<sup>2</sup> These values were determined using a 1:25,000 USGS topographical map and/or hand held GPS.



Figure 3 – The trailer and instrumentation as seen from West Sesame Street (facing southeast).



Figure 4 – The site as seen from the south.