The National Weather Service is one of six scientific agencies that make up the National Oceanic and Atmospheric Administration (NOAA).

The beginning of the National Weather Service we know today started on February 9th, 1870, when President Ulysses S. Grant signed a joint resolution of Congress authorizing the Secretary of War to establish a weather service for the country. American weather data collection and forecasting was performed by military personnel during this period.

On July 1, 1891, the Weather Bureau was officially established as a civilian agency within the Department of Agriculture. It was transferred to the Department of Commerce in 1940, where it remains today. In 1970, the Weather Bureau was incorporated into the NOAA (formerly the Environmental Sciences Service Administration, ESSA) and its named was changed to National Weather Service.

The National Weather Service Modernization took place during the 1990s. This process was a reorganization of the agency, incorporating the latest technology and streamlining operations. During this time period, the WSR-88D "NEXRAD" Doppler Radar was deployed throughout the country. These high tech radar systems have saved countless lives by allowing forecasters to peer inside severe weather and provide timely warnings on thunderstorms, tornadoes, hurricanes, and flooding rains.

Today, the NWS has 122 Weather Forecast Offices (WFO) throughout the country, including one in Anchorage, Fairbanks, and Juneau. In addition, there are 12 Weather Service Offices (WSO) in Alaska: McGrath, Annette, Barrow, King Salmon, Valdez, Kotzebue, Nome, Cold Bay, Kodiak, St. Paul, Yakutat and Bethel.

The National Weather Service Office in McGrath is available 24 hours per day.

We broadcast the latest weather information twice per day by VHF marine radio, at 7AM and 7PM local time on channel 7.

All forecasts, warnings, and climate products are available on our website:

http://pamc.arh.noaa.gov

National Weather Service
McGrath, Alaska

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Your

National Weather Service Office

McGrath, Alaska

Providing 24 hour support of weather forecasts, warnings, and observations for the communities of the Kuskokwim Valley.

- **Public Forecasts**
- **Aviation Safety**
- **River Monitoring**

What We Do...

Forecasts and Warnings

The NWS in McGrath works with the Weather Forecast Office in Anchorage to disseminate zone forecasts, watches and warnings.

WSO McGrath composes a Short Term Forecast for the Kuskokwim Valley. These forecasts provide the residents of the Valley with details on the latest weather events to allow them to plan activities by pinpointing areas of precipitation, and identifying specific areas of the Valley where significant weather impacts are expected to occur.

Surface Observations

NWS McGrath personnel closely monitor surface conditions, including cloud cover, precipitation, temperature, dewpoint, and wind. These observations are used in aviation to determine flight category rules for aircraft in the McGrath area.

These observations are also used in the climate program for McGrath, as well as for plotting surface charts to identify weather systems such as high and low pressure areas, and fronts.

The ASOS (Automated Surface Observing System) instruments, located across the main runway. This instrument array sends weather data to the office for transmission around the world.

Upper Air Observations

Twice per day, during the early morning and afternoon, the NWS in McGrath launches a weather balloon with an instrument package, called a radiosonde, attached. This instrument is tracked by a dish in the white dome of our upper air building as it ascends through the atmosphere to as high as 20 miles above the surface. The "sonde" records many variables during its flight, including temperature, humidity, winds, and pressure, and transmits it to the ground via a radio transmitter in the sonde. This data is collected by equipment inside the office, where it is processed into a coded dataset, and transmitted to the NWS' National Centers for Environmental Prediction (NCEP) in Camp Springs, Maryland.

This data, along with 91 other soundings in the United States, are used to create upper air charts for use in forecasting. The data is also incorporated into mathematical computer models of the atmosphere, which use complex equations run on supercomputers at the NCEP to produce global weather forecasts.

A Vaisala RS-80 Radiosonde, as used by WSO McGrath to measure and transmit upper air data from our weather balloons.

River Observations

WSO McGrath closely monitors the conditions of the Kuskokwim River during breakup season. We observe the river for indications of ice jam formation, as well as collect reports from pilots and citizens. This information is relayed to the NWS Alaska-Pacific River Forecast Center in Anchorage, where river flood forecasts and outlooks are produced.

WSO McGrath also records the river level each morning during the open water season. This information is used for forecasts, climatology and for studies of river and runoff processes.

In the event of an ice jam, WSO McGrath will work with WFO Anchorage to issue flood watches and warnings to alert residents of the possibility of rising water. These advisories will be broadcast over VHF and KSKO Radio when they are issued.

During breakup season, the NWS appreciates observations from the public. If you observe ice breakup, jamming, or flooding, please report it to the NWS in McGrath. Your reports will be incorporated into the forecast and warning process.