National Weather Service, Anchorage

Raven's Call

Issue 4

Spring 2008

Chignik Floods of Late 2007

By John Papineau

By late on November 28th a nearly stationary front resulted in nearly two days of heavy rain over the small communities of Perryville, Chignik, and Port. The subsequent flooding appears to be the result of the simultaneous occurrence of three factors:

- Heavy rainfall (6.59" at Cold Bay Nov 29-Dec2) in conjunction with high freezing levels on the order of 5200 ft and 7800 ft on Dec 1st).
- An extended period of strong southeast winds (onshore). The speed and longevity of the wind produced a storm surge of unknown magnitude in Chignik Bay. The tidal gauge at King Cove measured water levels on the order of 1.5 ft above Mean Astronomical High Tide on November 29-30.
- The ground aroundthe region was frozen at the start of the event. The result was that the rain which fell over the mountains (Black Lake area) quickly drained into Chignik Lake.

The primary flooding occurred in the community of Chignik located on the east shore

Chignik Floods - 2007

of Chignik Lake. This body of water is connected to Black Lake by the short Chignik River. Chignik Lake in turn drains into Chignik Bay. It is concluded that a tidal/storm surge

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New All Hazards Weather Radio Transmitter in the Copper River Basin (And the Award Goes To...)

We are proud to announce that Randy Struck and John Downes have earned the Mark Trail Award for the time, work and effort they volunteered to make the All Hazards NOAA Weather Radio (NWR) a reality for the Copper River Basin. Randy and John worked with the Copper Valley Local Emergency Planning Committee to organize a grass roots campaign to get NOAA to install this vital piece of equipment. The NWR now provides continuous weather forecasts and information and immediate weather and non weather hazard alerts. Randy and John frequently communicated with the National Weather Service Forecast Office in Anchorage to plan the installation and programming of the NWR. The radio transmits at 1000 watts on 162.55 MHZ from Tolsona Ridge, just west of Glennallen. This radio has a coverage area to Paxson to the north, McCarthy to the east and Ernestine to the southeast and to Sheep Mountain to the West. We have even received reports of the signal being heard in Port Wells in northwest Prince William Sound. Be sure to thank John and Randy if you see them. They deserve it.

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Special points of interest:

- *NWS Open House - April 19 8am to 4pm*
- *Storm Spotter Training April 19 10:30 am*
- *Alaska Aviation Trade Show - May 3,4 Booth #74*

Chignik, cont'd.

effects in the outlet of Chignik Lake at the same time that rain runoff from the surrounding terrain was flowing into Chignik Lake. As a result lake levels rose to levels not seen in recent years. Past floods in the community occurred in 1979 and once again in 2002.

At least two houses were inundated (one was floating in the lake), an unknown number of houses sustained water damage. Part of the road was underwater and a culvert was eroded in this area as well. A number of small boats anchored in the lake were swamped, but most can probably be recovered. Damage estimates as of December 10, 2007 are estimated around $700,000.

Events such as this flood in Chignik are a great example of how you can help the NWS provide timely and accurate warning service and information. Often the automated observations do not capture or provide a complete picture of what the weather is doing over a region. A volunteer spotter can provide a description of the impact of the event along with weather observations that are a vital part of our decision process.

Chignik Lake Village - right top

King Salmon Weather Service Office Liaison Visit

By Andy Dixon

On short notice, I flew to King Salmon early in the morning on Friday February 22nd and returned late the next day, on Saturday evening. This was my first experience visiting a WSO and also my first real experience off the road network in the Alaska "Bush". The trip, while short, still provided enough time to familiarize myself with the daily operations of the WSO as well as meet and spend time with all 3 of the employees. Many things were discussed; both strengths and weaknesses of the Farecast Office – WSO relationship as well as some unique challenges of simply living in such a remote location.

I knew this trip would be different than other commercial flights I've been on when we walked directly out onto the runway to climb into the SAAB 340 we would be flying to King Salmon, maximum capacity about 30 people. There are 2 flights per day back and forth from Anchorage directly to King Salmon, one in the morning and one in the evening. Upon arriving at the terminal at King Salmon, I was greeted by Peggy Perales, the OIC of the office. We drove back to the office, where she showed me around and I was introduced to Paul Rockwood, one of the Met Tech's.

This was my first experience visiting a WSO and also my first real experience off the road network in the Alaska "Bush".

Next, Peggy took me down the road to Naknek, about 15 miles down the road to the southeast, toward Bristol Bay. Immediately I was struck by how the landscape changed. All of the area is relatively flat, but in King Salmon proper there seemed to be quite a few more wooded areas to block the wind and blowing/drifting snow. This was not the case on the frequently traveled road to Naknek. Known as "The Flats", this area opens up into wide expanses of tundra that allows the snow to blow easily across the road. At the time it was snowing lightly with less than 2 inches of snow on the ground and winds less than 15 MPH, and there was already significant blowing of snow across this stretch of road. **This is likely where Blizzard warnings are most frequently verified in this area.** There are no obs officially taken along this route, but motorists or NWS employees calling reports in to the WSO represent the best chance to know what is happening along this stretch of road.

In Naknek, we ate lunch and drove around all of the boat yards that in the winter are packed full with boats up on blocks. I also observed numerous canneries in the town. Peggy informed me these canneries spring to life in the warm season and are a large reason why the population of Naknek increases dramatically during the warm months. Located on the coast of Akhiok Bay, which is itself part of Bristol Bay, Naknek is definitely a coastal location and, surprisingly, seems to be more of a commerce hub than King Salmon.

King Salmon WSO

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Meet and Greet

Sam comes to Anchorage from Champaign Illinois. Prior to his graduation from Northern Illinois University he began work at a private weather firm in western Chicago. After dabbling with operational forecasting in the private sector for almost a half year he switched gears and moved to the Midwestern Regional Climate Center. He worked as a service climatologist for the last two and a half years and expanded on his knowledge of the climate, geographical information systems and programming. He, like any other meteorologist, has an absolute love for the weather, as well as photography and anything technical.

Sam arrived in late February with his wife Cindy who just recently finished up with her M.S. in meteorology. They are looking forward to exploring and enjoying Alaska.

Sam Shea - Intern

Andy Dixon was born in Michigan but attended Valparaiso University, a small school in northwestern Indiana, where he majored in Meteorology and minored in Mathematics. While at Valpo, he joined the Air Force ROTC program.
In 2005, after graduating from Valpo, Andy earned a commission in the United States Air Force, and was assigned to Keesler Air Force Base in Biloxi, Mississippi for 4 1/2 months of training. That training was cut short when Hurricane Katrina made landfall and largely destroyed the base.

After being stuck in hurricane shelters for a week, Andy was finally sent on to his first permanent assignment at Elmendorf Air Force Base in Anchorage in September of 2005. After serving at Elmendorf for 2 years, Andy left the military in September of 2007, and began working at WFO Anchorage in October of the same year. Andy enjoys copious amounts of hiking in the summers and snowboarding in the winters, as well as recreational firearms use in all seasons.

Andy Dixon - Intern

Call For Spotters!

The Anchorage Forecast office is responsible for providing forecasts over an immense area with a very sparse observations network resulting in large spaces between observed weather information. Sounds difficult? Fortunately we have some other sources to help fill in those blank spaces including satellite images, Doppler weather radar, airport and buoy surface observations. And, as forecasters, we have years of experience recognizing how weather patterns develop and impact local areas.

All of these sources help, but our forecast area is huge, encompassing an area normally covered by over 20 forecast offices in the lower 48. It extends from the Alaska Range into the Gulf of Alaska, from the Copper River basin West across the Aleutian chain to Shemya. The computer models, satellite images, radars, and the airports and the buoys combined with the years of experience of our forecasters still need input from you to fill in these gaps.

We are looking for volunteers who would like to help us improve our forecasts. It doesn't matter where you are in Alaska. You can live or work in Anchorage or Cooper Landing, Seward or Valdez, McCarthy or Paxson, Bethel or McGrath, Port Heiden or Atka, or

National Weather Service, Anchorage

6930 Sand Lake Road
Anchorage, AK 99502

Phone: 907-266-5105
Fax: 907-266-5188
E-mail: renee.wise@noaa.gov

Call For Spotters!

We would like to find out

- when snowfall begins, and how much has fallen.
- when certain wind speeds have been reached, or when wind damage is occurring.
- if rain is freezing and how much glaze or ice has accumulated
- if creeks and rivers are approaching or above bank full
- if coastal areas are flooding and beaches or bluffs are eroding
- if there are any thunderstorms in the area
- if storms have hail, funnel clouds, or tornadoes

If you are interested in helping improve our forecasts and can provide some of the information please call us at (1-907)-266-5105 option 4, or on the web complete the on-line spotter sign up form at: http://pafc.arh.noaa.gov/spotter_signup.php

Or write to us at: Weather Forecast Office, Anchorage
Attention: Sam Albanese
6930 Sand Lake Road
Anchorage, AK 99502

We will send you a form to complete and return, so we know where you are and what information you can provide. Thanks for your help.

King Salmon Visit, cont'd.

The primary advantage King Salmon has over Naknek is the long, paved runway that allows any size plane to land. I was told that in the summer, sea fog often overtakes Naknek, and with westerly winds of virtually any strength, will also move into the King Salmon area.

We drove back toward King Salmon and kept driving for another 20 minutes past the WSO until we came to the end of the road at Naknek Lake, which is to the northeast of King Salmon. From the overlook, Peggy told me there is a great view of the west side of the Alaska/Aleutian range, but unfortunately ceilings were below 1000 feet the entire duration of my visit, so I did not get any good looks at the mountains. However, knowing that the terrain increases dramatically about 40 miles to the east of King Salmon is a very useful consideration while forecasting for this area.

Peggy had been planning a "Women in Science" conference for local school-age girls interested in learning about careers in science.

Inside WSO King Salmon

For the 2nd straight year, guest speakers flew in from around the state. I helped out setting up tables and presentation areas. Unfortunately, a large contingent of students who were scheduled to fly in from Dillingham were weathered in and unable to attend. Nevertheless, all students in attendance seemed to have a most enjoyable time and learned a lot from each of the speakers.

Overall, the experience of visiting the King Salmon WSO was completely positive and eye-opening for me. I enjoyed meeting Peggy, David, and Paul, and seeing how the office is run out there. I'm looking forward to interacting more with them in the future.