Nov. 30 Earthquake

Mayor Ethan Berkowitz
&
Bill Falsey,
Municipal Manager
Call Statistics

APD Dispatch handled **3558 total calls** on 11/30/18. **1,844** of those calls were between 08:00 and noon.

- 980 911 calls answered
- 403 Abandoned 911 calls
  - Total of **1,383 911** calls made into the PSAP.
- 912 Administration/311 calls
- 403 Administration/311 hang up calls
- 860 Outbound calls
  - Total of **2,175** other non 911 calls

The longest 911 was in queue for 1,099 seconds/18.32 minutes at 08:37.

On average, APD Dispatch answers a daily total of **1460 calls**.

- Average of 389 911 calls answered
- Average of 47 Abandoned 911 calls
  - Average total of 436 calls made into the PSAP.
- Average 603 Administration/311 calls
- Average 87 Administration/311 hang up calls
- Average 333 Outbound calls
  - Average Total of **1,023** other non 911 calls
08:297.0 Earthquake

On November 30th, 2018 at approximately 08:29hrs there was a 7.0 earthquake that rocked the Anchorage Police Dispatch Communications Center. At the time of the incident there were 12 employees working. There was one supervisor, 8 dispatchers, 2 call takers, and one dispatch recruit in the normal staffing for the day.

I (Samantha Campbell) was the dispatch supervisor working and after the initial earthquake ended I checked on all of the staff to ensure they were not injured in any way. All dispatch employees were uninjured. Next I checked to see if all the communications equipment was working and it was. There was a brief moment where it seemed like the generators kicked on or the power flickered, but everything seemed to be working correctly – turns out it was the AC unit turning off then back on. There were multiple alarms going off in dispatch to include the fire alarm, Halon alarm, the 3SI alarm at all the 5 radio positions, the property alarm on the supervisor radio console, and the Orca evidence facility alarm was calling the supervisor phone every minute with an automated message from two different phone numbers – all of that on top of the 911 PowerOps board bonking with the crazy influx of 911 calls. Needless to say, it was very loud in the dispatch center.

08:334.8 Earthquake

08:355.7 Earthquake
ONE YEAR LATER

SYMPOSIUM ON THE 2018 M7.1 ANCHORAGE EARTHQUAKE

Hotel Captain Cook, Anchorage, AK
September 24-26, 2019

http://earthquake.alaska.edu/eqsymposium
1. Stabilize all utilities.
2. Establish warming & overnight reception centers.
3. Publish & sign detour around road damage.
5. Secure scarce resources (fuel).

1) a) Accomplish by utility companies.
2) a) Warning Center (Steve Ashman, HR sect. chief)
   - Egan Center (Ani), capacity 100's
   - Mac Center (ER), closed
   b) Close temp reception centers
   - Get directed towards shelters.
3) a) Task traffic w/ signage to detours
   b) Determine road damage
   - State DOT
   - Minn Street Maintenance
4) Time Period?
4a) Begin & cont. building damage assess
   - Development Services
5a) Resources (fuel)
   - Logistics
   - Name & phone of supplier
   - Holiday gas stations & APO
Noon Status Report

UAF Earthquake Center is reporting that had an initial earthquake of magnitude 7.0 at 1:23am.

Since that time we have had approximately 10 aftershocks ranging between magnitudes 4.0 to 5.5.

https://earthquake.alaska.edu/earthquakes

Preliminary Damage Assessment

Power: 3 utilities
   M&L: Downtown and JBER lost power; JBER restored; 3 substations remain
   Chugach Electric: 5900 outages
   Matanuska Electric: Reporting over 42,000 outages. 62% of system
   35,000 in Mat-Su Borough
   11,000 in Anchorage

Gas:
   Enstar: Reporting response to small number (4-5) of reported gas leaks
   137 in Anchorage

Water:
   Anchorage Water and Wastewater reports water and sewer is functioning with
   some stations on emergency power, one exception: Grueing Water reservoir in
   Eagle River, reporting to 21 main line breaks approximately 70 requests to cut
   off residential water service;
   Bar: unclear

Communications:

   GCI: no network issues, outages are related to electric and OVERUSE
   Request stay off lines, use text not voice

Roads:
   Glenn Highway north and south bound impassable at Thunderbird Falls
   Seward Highway, closed south of Anchorage proper due to multiple rockslides
   15 miles north of Anchorage
   18 miles south of Anchorage

     Inland
     51 miles
     45 miles

Fire:
   Responded to 3 working structure fires, and two reports of structure collapse

Structure damage:
   Widespread low-level damage reports, continuing assessment

Current Operating Condition

Hospitals open

Ted Stevens Airport operating

Merrill Field airport tower is not operating; open for non-tower operations

Port Shore side crack; waterside assessment tomorrow

Debra

Today

Schools are closed. ASD is working to reunite families.

Municipal facilities are generally closed. Anchorage is attempting to return homes.

Sheltering:
   Dimana convention center is damaged and closed.
   Downtown can go to Egan
   Eagle River can go to McDonald

Utilities

washroom
roads
assess badly
needs security needs

40 each item
- stay off
- water work
- precautions

MUNI.ORG
APD. Facebook
Nixle
The spread of information is a crucial link in responding to disaster situations, especially for those who are deaf and hard of hearing, and on Nov. 30, a local network of hearing impaired community members began sharing information to keep each other informed.
Anchorage Water & Wastewater Utility Clearly
Water line breaks often have consequential damage to other facilities.
Emergency Excavation – Aircraft Drive

- 12-inch water main pipe pulled out of joint from ground movement
Emergency Excavation – Aircraft Drive

- Completing Repair & moving on to Nathan Dr., AC pipe break
Emergency Excavation – 1st Ave

- Earthquake caused system surge and subsequent pipe failure
- Removed corroded cast iron pipe and replaced with PVC
Rapid triage
<table>
<thead>
<tr>
<th>Location</th>
<th>Issue</th>
<th>Status</th>
<th>Time Reported</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>8400 Stacey Circle</td>
<td>Leaking water main, possible hydrant</td>
<td>Crews onsite</td>
<td>5:26 PM</td>
<td>Water Main off - 10 customers without water</td>
</tr>
<tr>
<td>6928 Fairweather</td>
<td>Groundwater</td>
<td>Crews Responding</td>
<td>4:30 PM</td>
<td>Water has been restored</td>
</tr>
<tr>
<td>Tudor &amp; New Seward</td>
<td>Main water break</td>
<td>Crews onsite</td>
<td>5:19 PM</td>
<td>NO BREAK - FALSE ALARM</td>
</tr>
<tr>
<td>Boom &amp; McClaren</td>
<td>South of Dimond @ 88th LEAK</td>
<td>Herrera Responding</td>
<td>5:35 PM</td>
<td>Small Leak - will check - could be ground water</td>
</tr>
<tr>
<td>Northwind &amp; Muldoon</td>
<td>Giant Hole - Lots of water (close to 32nd east end)</td>
<td>Crews Responding</td>
<td>5:19 PM</td>
<td>Engineering was to respond</td>
</tr>
<tr>
<td>Opal &amp; Ruby &amp; Arlene (Strawberry)</td>
<td>Water main break - Street Maint reported</td>
<td>Small Leak - left it on</td>
<td>5:19 PM</td>
<td>left running, small leak</td>
</tr>
<tr>
<td>Arctic &amp; 36th - Trailer Court</td>
<td>Water main break</td>
<td>Crews Responding</td>
<td>5:19 PM</td>
<td>Private system - pump house</td>
</tr>
<tr>
<td>Lily Pond</td>
<td>Break</td>
<td>Crews Responding</td>
<td>5:19 PM</td>
<td>Hydrant almost off</td>
</tr>
<tr>
<td>Happy &amp; Folker</td>
<td>Hydrant is blowing full</td>
<td>Craig is responding</td>
<td>5:19 PM</td>
<td>Repaired and water restored at 2250 hrs, 11/30/18</td>
</tr>
<tr>
<td>Forest Village Drive, W. Northern lights</td>
<td>Main water break</td>
<td>Crews responded</td>
<td>11:17 AM</td>
<td>Isolated</td>
</tr>
<tr>
<td>Norm Drive</td>
<td>Main water break</td>
<td>Crews Responding</td>
<td>5:19 PM</td>
<td>Throttled and scheduled for dig tomorrow - true outage</td>
</tr>
<tr>
<td>Maplewood</td>
<td>Main water break</td>
<td>Chris says House</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eagle River Loop Bridge (Walmart)</td>
<td>12'' ductile iron break - Northside - pipe is suspended from the bridge</td>
<td>Crews responded</td>
<td>11:30 AM</td>
<td>Water has been turned off</td>
</tr>
<tr>
<td>Ship Creek – Ulu Factory</td>
<td>Main water break/Private Line?</td>
<td>Crews onsite</td>
<td></td>
<td>Isolated</td>
</tr>
<tr>
<td>Lang Street - A&amp;S&amp;G</td>
<td>Fire line</td>
<td>Crews Responding</td>
<td>5:19 PM</td>
<td>Need to determine status</td>
</tr>
<tr>
<td>Rosehip Circle</td>
<td>Main water break - 31 Customers</td>
<td>Crews onsite</td>
<td>5:19 PM</td>
<td>Throttled down - will dig tomorrow</td>
</tr>
<tr>
<td>Gary Cooper Circle</td>
<td>Main water break</td>
<td>Crews Responding</td>
<td>5:19 PM</td>
<td>Ground Water - no leak</td>
</tr>
<tr>
<td>Elmore Road behind PM&amp;E bldg</td>
<td>12 inch Main Water Break</td>
<td>Crews are responding</td>
<td>11:30 AM</td>
<td>12pm Under control</td>
</tr>
<tr>
<td>Brittany Circle – FoxHall</td>
<td>Hydrant break</td>
<td>Crews responded</td>
<td>11:43 AM</td>
<td>Hydrant is off</td>
</tr>
<tr>
<td>MLK</td>
<td>Main water break – Hydrant</td>
<td>Crews responded</td>
<td>11:16 AM</td>
<td>Combined with Elmore Issue</td>
</tr>
<tr>
<td>3131 Amber Bay Loop - Bayshore Elementary School</td>
<td>Main water break</td>
<td>Crews responding</td>
<td>5:26 PM</td>
<td>On property issue - Main line vale 34 off.</td>
</tr>
</tbody>
</table>
GIS Information Sharing
Earthquake update and tips on how to identify an ENSTAR employee.

Current Outages

The online map shows outages on our system as reported by customers and by our own systems. Outages automatically populate to the map but are not removed until restoration has been confirmed and cleared by the dispatch center. Therefore, there can be a delay in real-time updates on the outage map.

To report an outage please call us or use the form below.

In Anchorage 907-762-7888
Outside Anchorage 800-478-7494
Danger tree hotline 907-762-7227

View Current Outage Map >

Outage Updates from Facebook

During a large outage, MEA will report information about the outage as it becomes available.

Current Outages Map

This automated map is an informational resource only. Outage map markers are shown in the general vicinity of the outage and show the number of known outages in that area. Zooming to the street level on the map is disabled for your security.
Social media worked in both directions.

Latest update from AWWU: There are no plans to shut down the entire water system but do expect isolated outages as they repair broken water mains. To stay updated, "Like" or "Follow" @AWWU_Info or text AWWU to 888777 to receive Nixle alerts to your cell phone.

@AWWU_Info There's a water break in Pamela Joy Lowry park, water running across the trail

josephx907 @josephx907 · 11h
Replying to @APDInfo @afdinfo
Thank you Alaska’s first responders
noon Status report

UAF Earthquake Center is reporting that had an initial earthquake of magnitude 7.9 at 5:36.

Since that time we have had approximately 10 aftershocks ranging between magnitude 5 and 6.

https://earthquake.alaska.edu/earthquakes

Preliminary Damage Assessment:

Power: 3 utilities

- M&I: Downtown and JBER lost power. JBER restored. 3 substations remain.
- Church Electric: 5400 outages
- Matanuska Electric: Reporting over 42,000 outages. 62% of system.

Gas:

- Enstar: Reporting response to small number (4-5) of reported gas smokes. 40%.

Water:

- 2 outages.

Communications:

- GCI: No network issues, outages are related to electric and OVERUSE.

Requests stay off lines; use text not voice.

Roads:

- Glenn Highway north and south bound impassable at Thunderbird Falls lookout.
- Seward Highway, closed south of Anchorage proper due to multiple rock slides.

Structure damage:

- Widespread low-level damage reports; continuing assessment.

Current Operating Condition:

- Hospitals open.
- Ted Stevens Airport operating.
- Merrill Field airport tower is not operating, open for non-tower operations.
- Port shore side crack; waterside assessment tomorrow.

Schools are closed. ASD is working to reunite families.

Municipal facilities are generally closed. Anchorage is attempting to return homes.

Sheltering:

- Dena’ina convention center is damaged and closed.
- Downtown can go to Egan.
- Eagle River can go to McDonald.

Utilities:

- waing / non-utility
- roads
- assealy budy
- needs seedy needs

Take neighbors

- stop
- water work
- prevent

MUNI.ORG
APD. Facebook
Nixle
Dec. 1 Update

Anchorage Police Department @APDInfo · 20h

“Power is up, heat is on, communication lines are open For that you can thank your Alaskan neighbors- the highly capable men & women serving us around town as linemen, plumbers, pipefitters, operating engineers” -Municipal Manager Bill Falsey

7.0 EARTHQUAKE IN ALASKA. WE WILL REBUILD!

72 HOURS LATER...AAAAND DONE!

ALASKA 5-DAY FORECAST

FRI | SAT | SUN | MON | TUE
---|-----|-----|-----|-----
Earthquakes | Dangerous Wind Gusts | Heavy snow fall | Ice locusts | Polarbearcano
Public Service Announcement
Anchorage Water & Wastewater Utility

Line breaks can be the source of contamination – We advised caution.

-- AWWU Responds to Earthquake Related Water Issues --

AWWU has issued a boiled water advisory out of precaution; however, there are no known water contamination issues. Our system has remained pressurized except for isolated areas we are in the process of identifying. If you have pressure to your home, you should be fine. We have no plans to shut down the entire water system. We will have isolated outages as we repair broken water mains. We will provide updates as they become available.

AWWU is investing to ensure reliable service and safeguard public health and the environment, long into the future. For more information and construction updates, visit www.AWWU.biz. We are also on Facebook and Twitter.

For more Information:
Sandy Baker, Public Outreach Officer ........................................786-5636
Alyssa Farrar, Administrative Services Division Director .............786-5589

Anchorage Police Department @APDInfo · 15h
‘There’s a remote chance of some bacterial contamination from soils around the pipeline breaks. We have completed sampling of those waters today; we will have results on those samples tomorrow.’ - Municipal Manager Bill Falsey
Bacteriological samples need 24 +/- hours for incubation and analysis.

Public Service Announcement
Anchorage Water & Wastewater Utility

December 2, 2018

AWWU Lifts Precautionary Boil Water Notice --

The Anchorage Water & Wastewater Utility has completed water quality sampling and bacteriological testing throughout the Anchorage drinking water distribution system. Findings from those tests have confirmed that the water system is operating normally and was not contaminated as a result of the earthquake. As a result, AWWU is lifting the precautionary Boil Water Advisory. Water from your tap is safe for all uses.

Safe and reliable service for drinking water and fire protection is our primary concern. AWWU will continue sampling as a matter of quality control, especially in the areas where mainline breaks have occurred, for water quality assurance.

AWWU is investing to ensure reliable service and safeguard public health and the environment, long into the future. For more information and construction updates, visit www.AWWU.biz. We are also on Facebook and Twitter.

For more information:
‘We’re all shaken up’: It’s normal to feel scared, anxious and helpless after a big quake. Here’s what to do about it.

City health department director Natasha Pineda offered additional suggestions for coping with anxiety and calming children. Her advice:

• “As much as possible you should stick to normal routines. Normal mealtimes, bedtimes. Especially if you have children.”

• “Take slow, measured breaths if you are feeling anxious or uncomfortable. Those with pre-existing mental health issues, stick with your treatment plan.”

• Seek social connections. Check on your neighbors. Make sure you are making an extra effort to connect to those around you.”

• For parents: “Have open lines of communication. Your children and your teenagers may feel anxious. They may ask the same question repeatedly. It’s OK to say that sometimes adults don’t know why things happen. But it’s important to let them continue to ask those questions. Do your best to be supportive, predictable and loving.”

As with adults, kids would benefit from getting outside, playing and staying active, she said.

Anyone who feels like they need immediate help with a mental health crisis can call a statewide hotline at (877) 266-HELP.
How it came together

ENSTAR Natural Gas Company

December 5, 2018

Can we get three cheers for Corrosion Field Technician, Ken Bearman? He retired on Nov. 9th after 46 years at ENSTAR, and has been back on the job since the earthquake hit on Nov. 30th. Around here, we say that if there's a leak, Ken will find it. Thank you, Ken, for responding when duty called!

Emergency Management
Anchorage

USE THE GOLDEN RULE
ONE YEAR LATER

SYMPOSIUM ON THE 2018 M7.1 ANCHORAGE EARTHQUAKE

Hotel Captain Cook, Anchorage, AK
September 24-26, 2019

http://earthquake.alaska.edu/eqsymposium
Buildings and homes inspected by Municipality of Anchorage for earthquake damage

Key:
- Safe to occupy
- Caution, building damaged
- Do not occupy

For some Alaskans struggling with earthquake losses, recovery aid falls short of expectations

Author: Devin Kelly  Updated: March 15  Published March 14

Ryan Munzak points to documents relating to his FEMA appeal on Friday, March 1, 2019. Munzak’s Sand Lake home was badly damaged during the Nov. 30 earthquake. (Loren Holmes / ADN)
Earthquake Resiliency and Building Code Enforcement

Is there a connection?

The Anchorage Building Safety Service Area (ABSSA) is the former boundary of the City of Anchorage. Building permits within the ABSSA require a plan review and a building inspection with a municipal inspector.

Outside the ABSSA: The Municipality of Anchorage does not require plan reviews and municipal inspections for construction outside of the ABSSA, including the communities of Eagle River, Chugiak, Indian, and Girdwood.

Distribution of the Damage

November 30, 2018: A magnitude 7.1 earthquake caused significant shaking in the communities of Anchorage, Eagle River, and Chugiak. The State of Alaska received thousands of requests for Individual Assistance, including residents of the Municipality of Anchorage.

Building Code Enforcement

Municipality of Anchorage inspectors assigned a placard color to each inspection performed per the ATC-20 process:
- Green: Safe to inhabit, may require repair
- Yellow: Hazardous condition restricts use/occupancy
- Red: Extreme hazard, unsafe for occupancy

The table below and graph (right) show the placard color assignments for single-family residences in the communities of Anchorage, Eagle River, and Chugiak.

The bottom row shows the ratio of rates outside the ABSSA to the rates inside. At all placard colors, areas outside the ABSSA maintained much higher rates of damage.

By 1990 modern seismic provisions were being enforced within the ABSSA on single family home construction. For that reason, these results show only single-family residences built since 1990.

Some of the earthquake damage was caused by soil failure under these houses. Because the building codes and inspections would not have predicted that, these inspections were also removed from this analysis.

Analyzing only homes built since 1990 and not experiencing soil failure, both inside and outside the ABSSA experienced decreases in rates of damage. That said, the inspections inside the ABSSA showed much lower rates of damage, with only one yellow placard and no red placards.

Future Directions

PGA Maps: Outside the most populated parts of Anchorage, there are fewer sensors used to create the USGS ShakeMap. Improving the detail of the PGA maps will enable a better understanding of the effects of ground motion on residential damage.

Future Earthquakes: This earthquake’s ground motion barely reached the minimum level that the building code is expected to withstand, so repeating this analysis in future events will add greater understanding.

Additional Factors: Analyze if other factors (e.g., socioeconomic data, appraisal value, English proficiency, building on historical marshlands) affect the rates of damage reported.
First Look Under the Dock Since the Earthquake

- Things we’ve seen before
First Look Under the Dock Since the Earthquake

Things we haven’t seen before.
Press Conference Live Streams

Nov. 30:
https://www.facebook.com/Ch2KTUU/videos/298217064136886/
https://www.facebook.com/Ch2KTUU/videos/463773617481644/

Dec. 1:
https://www.facebook.com/Ch2KTUU/videos/2204946279826626/
https://www.facebook.com/Ch2KTUU/videos/435001460373484/

Dec. 2:
https://www.facebook.com/Ch2KTUU/videos/1718490791612475/
https://www.facebook.com/Ch2KTUU/videos/2235322210084063/