City of Valdez Welcomes New Certified Floodplain Manager

Kate Huber took over as Certified Floodplain Manager for the City of Valdez in May of 2018.

Kate brings experience in other aspects of community development as a certified Permit Technician and Zoning Inspector. She looks forward to assisting the public with FEMA and flood mitigation information.

The City of Valdez provides free technical advice for reducing the flood hazard to personal or commercial property. When requested, staff can review flood damage and proposed development in the floodplain, and provide information about how to retrofit drainage and solve other residential issues.

Kate has been trained by FEMA and is available to provide site-specific data concerning flood elevations and historical flood levels.

For these and more services, please contact the City’s Community Development Department at 907-834-3401 or Kate directly at 907-834-3451.

Kate Huber, CFM khuber@ci.valdez.ak.us

What You Can Do in Advance

If you live in a flood prone area or behind a levee, don’t delay!

**PREPARE FOR A FLOOD**

- Purchase flood insurance.
- Prepare an emergency kit that includes at least one large flashlight, a battery powered radio, spare batteries, candles, waterproof matches, and other items you will likely need in the event of a power outage.
- Store insurance papers, deeds, and other important records in a safe-deposit box or other secure location.
- Floodproof and protect your utilities. Retrofitting & protecting your home can help in time of flooding.
- Elevate your furnace, water heater, and electric panel if they are susceptible to flooding.
- Install "check valves" in sewer traps to prevent floodwater from backing up into drains.
- Seal basement walls and crawl spaces with waterproofing compounds to avoid seepage.
- Keep heirlooms and other priceless possessions on an upper level, if possible, or in locations within your home that are least likely to flood.

**PREPARE FOR AN EVACUATION**

- Make a list of items to take with you in case of an evacuation (clothing, cash and credit cards, prescription medications, eyeglasses, mobile phones, etc.). Keep this list in a handy location.
- Determine the appropriate evacuation route to take in the event of an emergency.
- Learn the location of official shelters and plan your route to the nearest shelter or other safe area. Consider whether any location along your planned route is susceptible to flooding.
Work in the Floodplain Requires a Special Permit

The City of Valdez has required a Floodplain Development Permit for development within the Special Flood Hazard Area (SFHA) or Flood Zone A since its acceptance into the National Flood Insurance Program (NFIP).

A floodplain development permit is a separate permit that must be signed by residents building in the SFHA in addition to their building permits.

Floodplain Development Permits are required for some activities that do not require building permits.

Development is defined as any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials located within the SFHA.

One intent of the Floodplain Development Permit is to review those activities that will impact the way floodwaters would move through a community and if these proposed changes would negatively impact neighbors or downstream residents.

It may seem strange to need a Floodplain Development Permit for paving, but paving changes the permeability of the ground (water will not be absorbed) and reduces surface friction (water will move faster along this new surface).

This is not to say paving your driveway will not be approved, but the effects (singular and cumulative) on the entire floodplain must be considered.

As a reminder, to minimize damage to structures during flood events, the City requires all new construction in the floodplain to be anchored against movement by floodwaters, resistant to flood forces, constructed with flood-resistant materials and floodproofed or elevated so that the first floor of living space as well as all mechanics and services are at least one foot above the elevation of the 100-year flood.

These standards apply to new structures and to substantial improvements of existing structures.

The City defines a substantial improvement as any reconstruction, rehabilitation, or addition to an existing structure, the cost of which exceeds fifty percent of the structure's appraised or market value (whichever the builder chooses to use).

Contact the City of Valdez, Community Development Department (907) 834-3401 for further information and prior to undertaking any activity within the floodplain.

FACT NUMBER
1

Floods will happen.
All rivers, streams, and lakes will flood eventually. This means that all levees will combat floodwaters at some point. Floods can happen to anyone.

FACT NUMBER
2

Risks associated with flooding vary.
You are responsible for knowing the threat you face from flooding. Take responsibility.

FACT NUMBER
3

No levee is floodproof.
Levees reduce the risk of flooding. But no levee system can eliminate all flood risk. A levee is designed to control a certain amount of floodwater. If a larger flood occurs, floodwaters can flow over the levee.

FACT NUMBER
4

Actions taken now can save lives and property.
There are many steps you can take, from purchasing flood insurance to developing an evacuation plan. The sooner you act, the better off you will be when the next flood occurs. Be prepared.
FEMA Releases Preliminary Maps for Flood Areas Along the City of Valdez Coastline and the Lowe River, Robe River, Valdez Glacier Stream, and Mineral Creek.

The Federal Emergency Management Agency (FEMA) and the State of Alaska Department of Commerce, Community, and Economic Development hosted a public meeting on Thursday, April 6th, 2017 at the Valdez Civic Center to discuss draft flood map revisions in the City of Valdez and what they mean for property owners.

During this event, property owners and residents had the chance to learn about the flood mapping process and what the changes mean for them. Residents asked questions about how these maps will impact their property and community.

The City of Valdez encourages property owners to examine the preliminary maps which can be viewed online on the States RiskMap Portal, or in person at City Hall located at 212 Chenga Ave.

These revised maps depict the current risk of a base flood event, or the one-percent-annual chance of flood for residents in the City of Valdez. FEMA will continue to work with the City of Valdez to identify flood risks and mitigation plans, and when adopted, will be used for flood insurance, land use, and development decisions. FEMA has finalized their changes and the updates will be effective as of January 3, 2019 - after the City adopts the revised maps.

Flooding is the nation’s most common and most expensive natural disaster.

According to national statistics, homes inside high-risk flood areas have a 26% chance of being damaged by flooding over the life of a 30-year mortgage, compared with a 9% chance of sustaining fire damage.

To learn more about federal flood insurance, visit [www.floodsmart.gov](http://www.floodsmart.gov)

To stay in-tune with FEMA’s updates:

1) Review the proposed maps at: [https://www.commerce.alaska.gov/web/dcca/PlanningAndManagement/RiskMAP/CityofValdezRiskMAPStudy.aspx](https://www.commerce.alaska.gov/web/dcca/PlanningAndManagement/RiskMAP/CityofValdezRiskMAPStudy.aspx)

2) Watch for the public notice in the coming months about the adoption of the new maps.

3) Contact the City’s certified floodplain manager with any questions.

The NFIP imposes a 30 day waiting period following the purchase of flood insurance. This ensures that a policy is purchased and maintained throughout the year. Residents cannot purchase it in the wake of an impending flood or because they have heard very heavy rains are on their way. It has to be in place 30 days before a flooding event begins.

Know where to go! City of Valdez evacuation centers are as follows:

- **Downtown Valdez and surrounding areas:** High School & Civic Center.

- **Airport Area:**
  - Airport Terminal & National Guard Armory.
  - Robe River Subdivision Area: Fire Station #3.
  - Alpine Woods Area: Fire Station #4.
FIRE VS. FLOOD

If you live in a floodplain, the risk of damage to your home from flooding is five times greater than from fire.

Lowe River and Valdez Glacier Stream Gauges

The City of Valdez has entered into a joint funding agreement with the United States Geological Survey (USGS) to continue to operate a stream-gauging stations on the Lowe River and Valdez Glacier Stream.

Streamflow information is provided for a wide variety of uses including: flood prediction, water management and allocation, engineering design, research, and recreational safety and enjoyment. Data is displayed in real-time on the web (http://waterdata.usgs.gov/nwis).

The USGS graph below shows the discharge in cubic feet per second during the Glacier ice-dammed lake outburst event on June 18 & 19, 2018.

There are three ways to access stream gauge data from the Lowe River and Valdez Glacier Stream.

1) Search for USGS Gauge #15226620 (Lowe River) or #15227090 (Valdez Glacier Stream) at http://waterdata.usgs.gov/nwis.


3) Get FREE streamflow alerts via text message or email at http://water.usgs.gov/wateralerts.

Follow the steps below to receive alerts via text:

- Select Site Location by entering site number #15226620 for the Lowe River or #15227090 for the Valdez Glacier Stream.
- Click on the map pinpoint to subscribe to water alert.
- Complete subscription form, and enter a threshold condition.
- REPLY to the one-time confirmation email for either alerts, and you will receive notifications based on the threshold condition you selected.
Monitoring the Valdez Glacier Ice-Dammed Lake

Flooding occurs in rivers as a result of a large input of water to the drainage basin in the form of rainfall, snow and glacier melt, the release of glacier-dammed lakes, or a combination of these inputs.

To better assess the risks and to better understand the dynamics associated with the release of the Valdez Glacier ice-dammed lake, the City of Valdez has partnered with the Alaska Division of Geological & Geophysical Surveys (ADGGS) to conduct monitoring work on the Valdez Glacier Lake at the bottom of the Valdez Glacier and the Valdez Glacier Ice-Dammed Lake, located at 220 feet of elevation. The Valdez ice-dammed lake has biannual events that vary in magnitude.

ADGGS has published reports on the bathymetry of the Valdez Glacier Lake which is 600 feet deep at the face of the Glacier. ADGGS also produces reports on the outburst events of the ice-dammed lake. ADGGS estimated the lake volume of the June 2017 outburst event to be the equivalent of 7,200 Olympic swimming pools, but due to the slow release of the water from the ice-dammed lake, no significant flooding was reported.

The USGS graph below shows the discharge in cubic feet per second during the 2017 June 25-28th Valdez Glacier ice-dammed lake outburst event.

When compared to the 2018 USGS graph on page 4 of this publication, you will see the difference in volume of total discharge and release time span from the two different events.

The report on the 2018 June outburst event will be published by ADGGS sometime in August.

All reports by ADGGS can be accessed on the City of Valdez Floodplain Management homepage.

To view the Valdez Glacier ice-dammed lake remote viewer camera, follow the link below:
http://dgs.alaska.gov/sections/engineering/climate-hazards/valdezglacier.html

"The ice-dammed lake is the most significant abrupt contributor to runoff in the Valdez Glacier Stream watershed."

- Dr. Gabriel J. Wolken
Valdez Receives Federal Funding to Stabilize Valdez Glacier Stream—NRCS Dike Complete

In 2016 the City of Valdez requested federal assistance under Section 216 of the Flood Control Act of 1950 to restore the undermined and unstable streambanks of the Valdez Glacier Stream, which was jeopardizing public infrastructure including roads, a bridge, telephone lines, a public landfill, and an Emergency Action Service (EAS) provider radio tower.

The KCHU radio tower is the primary, and in many cases, the only EAS provider for several communities including: Chenega, Tatitlek, Whittier, Cordova, McCarthy, Ellamar, and maritime operations in Prince William Sound. The threat to the KCHU radio tower impacts state emergency operations.

In 2016 the City of Valdez spent over 1.2 million dollars protecting the unstable embankment next to the landfill to prevent contamination into the watershed.

In 2017, City Council passed Resolution #17-16, which approved acceptance of a $1,340,250 grant award from the Emergency Watershed Protection Program via the Natural Resource Conservation Service (NRCS) for the protection of the KCHU radio tower and adjacent infrastructure.

At the same time, the City of Valdez approved the expenditure of $525,790 in matching funds for the Valdez Emergency Watershed Protection Project. The NRCS project was a 75% to 25% cost-share program.

The image below (taken on 11/3/17) shows the completed work on the South end of the Valdez Glacier Bridge. The corresponding notation is as follows:

1) The four spur dikes, as indicated by arrows, constructed in the summer of 2017 by the City of Valdez.
2) The diversion and excavation channel constructed in the summer of 2017 by the City of Valdez.
3) Additional excavation and channelization to obtain additional gravel needed for the NRCS dike.
4) Completed NRCS dike along Copper Avenue.
Flood Insurance...Here’s the Scoop

The most important thing to remember about flood insurance is that general homeowner policies do not cover flooding damages so flood insurance must be purchased separately.

The National Flood Insurance Program (NFIP) is a federally backed flood insurance program that makes insurance available for all structures within a local government’s jurisdiction, regardless of whether or not the structure is actually located within the floodplain, provided the local government chooses to participate in the NFIP.

The City of Valdez chooses to participate and has done so for many years. Should the City of Valdez choose not to participate or be found not in compliance with NFIP regulations, we will be sanctioned by FEMA and residents will no longer be eligible for flood insurance. No federal grants or loans would be allowed in flood hazard areas, no federal disaster assistance would be available for damage caused by flooding, no federal mortgage insurance would be provided for buildings in identified flood hazard areas, and federally insured lending institutions would have strict requirements for applicants seeking loans for structures in a flood hazard area.

Providing the availability of floodplain insurance for all structures in a community is important because over 25% of NFIP claims are filed by properties located outside the mapped 100-year floodplain.

Structures within the 100-year floodplain (also known as the Special Flood Hazard Area or SFHA) are required to purchase flood insurance. One last thing to remember, the NFIP imposes a 30-day waiting period following the purchase of flood insurance. This ensures that a policy is purchased and maintained throughout the year. Residents cannot purchase it in the wake of an impending flood or because they have heard very heavy rains are on their way. It has to be in place 30 days before a flooding event begins.

WHEN IS FLOOD INSURANCE REQUIRED?

Federal financial assistance requires the purchase of flood insurance for buildings located within SFHA (Flood Zone A). A requirement that affects nearly all mortgages financed through commercial lending institutions.

This mandatory requirement stipulates that structural coverage be purchased equal to the amount of the loan or other financial assistance, or for the maximum amount available, currently $250,000 for a single family residence.

While the mandatory flood insurance purchase requirement has been in effect for many years, not all lending institutions have required flood insurance in the past.

Today however, FEMA can levy heavy fines against institutions that do not require the purchase of flood insurance. As a result, lenders are becoming more strict.

Some institutions are even reviewing all their mortgage loans to determine whether flood insurance is required and should have been required in the past.

Upon refinancing a loan, nearly all lending institutions will enforce the flood insurance requirement. It is the lender’s responsibility to check the Flood Insurance Rate Map (FIRM) to determine whether a structure is within the SFHA.

The mandatory flood insurance purchase requirement does not apply to loans or financial assistance for items that are not eligible for flood insurance coverage, like vehicles, business expenses, landscaping and vacant lots. The requirement does not apply to loans for structures not located in a SFHA, even though a portion of the lot may be within a SFHA.

Persons located within the SFHA who received disaster assistance after Sept. 23, 1994 for flood losses to real or personal property must purchase and maintain flood insurance coverage or future disaster assistance will be denied.

COVERAGE
The NFIP insures buildings using two types of coverage: structural or content. Structural coverage includes walls, floors, insulation, furnace and other items permanently attached to the structure. Content coverage is purchased separately the contents of the insurable building.

ICC
ICC stands for increased costs of compliance and is built into NFIP flood insurance to assist residents in taking action to prevent future flood damage by paying a portion of the cost of bringing structures into compliance with FEMA and current building codes. Often, this entails elevating structures one foot or more above the height of the 100-year flood levels. The limit of this coverage is $30,000.
City of Valdez 2018 Floodplain Newsletter

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Websites

- Federal Emergency Management Agency (FEMA)
  www.fema.gov/
- Flood Insurance
  www.fema.gov/fips/
- Map Service Center
  www.msc.fema.gov/
- National Flood Insurance Program—Flood SMART
  www.floodsmart.gov/
- U.S. Army Corps of Engineers
  www.nio.usace.army.mil/
- State of AK, Floodplain Management
  www.flood.alaska.gov

Let Us Help You!
The City of Valdez provides FREE

- Internet Floodplain Information:
  www.ci.valdez.ak.us/index.aspx?nid=411
- Valdez Consortium Library
  (Houses floodplain publications and info)
  Phone: (907) 835-4632
  Web: www.ci.valdez.ak.us/library

City personnel have been trained by FEMA on floodproofing techniques and are available to provide site-specific data concerning floor elevations and historical flood levels.

For these and more services, please contact the City’s Community Development Department and ask for:

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