

Chelan County Flood Control Zone District

May 2019 Newsletter

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Wenatchee River Watershed/Photo by Frank Cone

FCZD launches annual newsletter

Welcome to the first newsletter of the Chelan County Flood Control Zone District (FCZD). The goal of the newsletter is to not only update you on the FCZD and its projects but also pass along important safety reminders, information about ongoing projects and local resources.

Most recently, the FCZD released its first progress report. The 2018 Annual Progress Report evaluates the steps the district is taking toward implementing flood hazard mitigation efforts in Chelan County. And it shows the steady progress the district continues to make.

The progress report details a variety of information, including flood events that occurred within the last year (one in the Colockum Basin in May 2018), changes in risk exposure within the planning area (the Cougar Creek Fire in the Mad River and Entiat River watersheds burned

nearly 43,000 acres), and mitigation success stories, which are detailed in a story inside this newsletter.

The County also is making headway toward joining the Community Rating System (CRS). This program recognizes a community's floodplain management activities that reduce or prevent flood damage. In exchange for implementing these activities, flood insurance policyholders living in the county's unincorporated areas are awarded with a premium reduction. The Insurance Service Office conducted a CRS verification visit in August 2018, and we expect to join the CRS program in early 2020.

If you'd like to read the progress report, you can find it at www.co.chelan.wa.us/flood-control-zone-district.

-- Eric Pierson, FCZD District Administrator



MISSION STATEMENT: Through partnerships and careful planning, identify sustainable, cost-effective actions that will mitigate the impacts from flood hazards, to protect the health, safety, quality of life, environment and economy of the communities within Chelan County.

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What's the NFIP?

In February 1981, Chelan County joined the National Flood Insurance Program (NFIP). Joining NFIP means residents are able to purchase flood insurance, a requirement of mortgages or home equity loans for property located within the floodplain. Residents are also able to buy, sell and build on property within the floodplain.

By joining NFIP, the county also became eligible to receive disaster assistance from FEMA after a presidentially declared disaster. Since 1972, the county has had 26 Presidential Disaster Declarations related to floods, severe storms and wildfires,



which can cause post-fire flooding.

As an NFIP member, the county agreed to enforce federal regulations concerning development within a special flood hazard area shown on FEMA's Flood Insurance Rate Maps. The areas are referred to as the 100-year floodplain.

So Chelan County must issue permits for all development in the floodplain, ensuring development is regulated. The permits may make a big difference if a flood event occurs in your neighborhood.

Common Activities that May Require a Floodplain Development Permit

- The construction or addition of small storage sheds
- Excavation or infill
- Construction of some fences
- Enclosing an open-sided structure
- Cutting down trees to make room for future development
- Landscaping activities, such as the building of retaining walls or raised beds
- Installation of propane tanks



Floodplain permit aims to protect life, property

In early November, Chelan County mailed some 5,000 informational postcards to residents living in or near a floodplain. The notices are a reminder that a Floodplain Development Permit must be completed before building in a flood-prone area.

“We are hoping that with a little public education we can prevent a tragic event in the future,” said David Kuhl, director of Chelan County Community Development. “The primary purpose of the Floodplain Development Permit is to protect human life and personal property.”

Our county not only has had several major flooding events over the years but it also is experiencing increasing development, Kuhl added. The permit helps ensure that future development is properly regulated, limiting property damage and making sure that residents don't adversely impact other property owners by their actions.

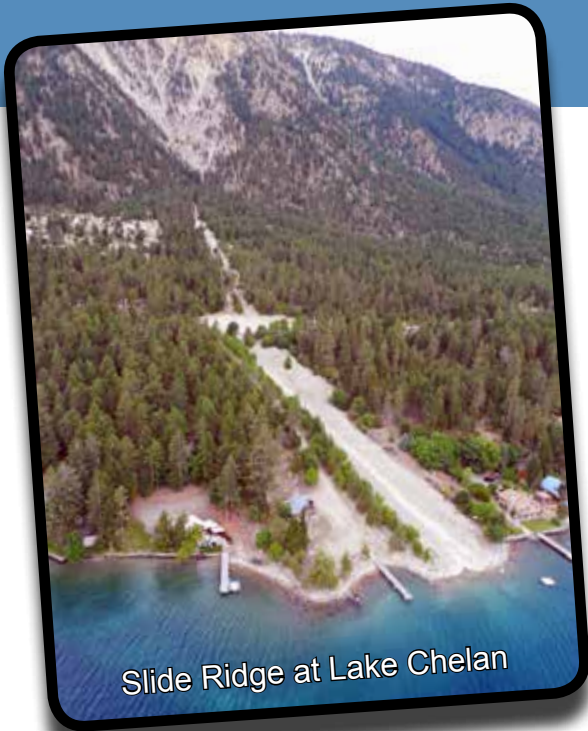
Chelan County Code Chapter 3.20 (www.codepublishing.com/WA/Chelan-County/) regulates the use and development of property within flood hazard areas in the unincorporated areas. The permits are issued by the county's Community Development Department.

A Floodplain Development Permit is required prior to beginning any development within the 100-year flood. Development includes any manmade change to improved or unimproved real estate, including, but not limited to, digging, grading, filling, paving, drilling, mining, storing equipment or materials, or construction.

Residents can ask for a Floodplain Development Permit from Chelan County Community Development. Contact the department for a permit, or if you have any questions, at 667-6225.

To determine if you are in the floodplain, go to the FEMA Flood Map Service Center (<https://msc.fema.gov/portal/home>)

Sign up for Chelan County emergency alerts at public.alertsense.com



Slide Ridge at Lake Chelan



2015
No. 1 Canyon
Flood Debris
Facility



2018
No. 1 Canyon
Conveyance
Project

Progress continues on FCZD projects

It's been an active year for the FCZD, with several longterm flood mitigation projects taking steps forward. A few highlights of what the FCZD has accomplished this past year include:

SLIDE RIDGE RETROFIT

KPFF, Inc., has been hired by the FCZD to design a bridge-like structure to eliminate Slide Ridge's impact on South Lakeshore Road at Lake Chelan. For decades, rainstorms have resulted in catastrophic debris flows from Slide Ridge. Since 2003, Slide Ridge has had eight debris flows at a cost of nearly \$750,000 to the county.

The FCZD proposes removing the existing roadway and culvert at Slide Ridge and constructing a bridge over the earthen channel to allow mud and debris flows to freely pass under -- not over -- the roadway. A bridge-like structure would reduce the risk of damage to life and property and ensure a year-round, continuous corridor for the community that surrounds Lake Chelan.

In addition, the FCZD received a \$1.3 million construction grant from FEMA to build the structure. Construction is projected to be in the summer 2022.

No. 1 CANYON GAP ANALYSIS

Number 1 Canyon can be characterized as having a steep channel profile throughout its 6.8-square-mile basin, allowing for alluvial sediment transport in debris flows

typically occurring during floods on the order of 10-year and greater recurrence intervals. When this happens, flooding of private and public property occurs, leaving costly cleanup to homeowners, Chelan County and the City of Wenatchee.

The gap analysis, currently under way by NHC of Seattle, will analyze the basin as a whole and determine where and what is needed to minimize the damage experienced from this type of flooding event.

No. 1 CANYON FLOOD DEBRIS FACILITY

RH2 Engineering is leading the design of a series of four flood debris facilities that will be built on 21 acres of county-owned land in Number 1 Canyon. The debris facilities will provide a collection and release point for reoccurring, debris-laden floodwaters that often strike the canyon following rain events or during heavy snowmelt.

The flood debris facility will be the second one built in Number 1 Canyon, with the first completed in 2015. Design is expected to be done this year and construction is expected to begin in summer 2020.

No. 1 CANYON CONVEYANCE PROJECT

This project was completed in 2018. It replaced an undersized pipe at the end of Number 1 Canyon Road to aid in flood conveyance. Construction involved the installation of 450 feet of 36-inch culvert at a cost of \$183,204.

COMMUNITY RESOURCES

Chelan County
road alerts at
co.chelan.wa.us

Chelan County
Flood Control
Zone District
[co.chelan.wa.us/
flood-control-zone-
district](http://co.chelan.wa.us/flood-control-zone-district)

Join Chelan County
Road Alerts Listserv
by emailing
[public.works@
co.chelan.wa.us](mailto:public.works@co.chelan.wa.us)

Chelan County
emergency alerts
public.alertsense.com

Chelan-Douglas
Health District
cdhd.wa.gov

Disaster
Preparedness
Ready.gov

FEMA
fema.gov

National Weather
Service
weather.gov

Flood Safety
[weather.gov/safety/
flood](http://weather.gov/safety/flood)

American Red Cross
redcross.org



With May marking National Wildfire Awareness Month, now is a good time to remind people that not only should we be preparing for the upcoming wildfire season but we also need to think about the aftermath of last year's fires.

The impact of rainfall over a recently burned area can be severe. A burned surface may not absorb even normal rainfall, causing the precipitation to travel quickly, taking rocks, boulders, dirt and debris with it and potentially overwhelming drainage systems.

Because of the loss of vegetation and changes in the physical properties of soil, flash flooding is more likely to occur after a wildfire. Steeper slopes and severely burned landscapes are at the greatest risk; however, flash flooding can occur in areas that may not typically flood, or where one wouldn't expect to see flooding.

A general rule of thumb is that half an inch of rainfall in less than an hour is sufficient to cause flash flooding in a burn area, but this can be more or less depending on such factors as how steep the terrain is, according to the National Weather Service.

Chelan County was the site of one of the largest wildfires in Washington last year. The Cougar Creek Fire near Entiat burned more than 42,700 acres. Most burn areas are prone to flash flooding or debris floods for at least three

to five years after a wildfire, the NWS reports.

The NWS shares these tips with people who live or recreate near a recently burned area:

- Make it a habit to monitor the weather forecast, especially during thunderstorm season. During times of high intensity rainfall, stay informed by monitoring a NOAA weather radio, local news media or www.weather.gov/spokane.

“ Half an inch of rainfall in less than an hour is sufficient to cause flash flooding in a burn area. ”

- Know the safety routes away from your home. In addition, have the five Ps ready to go before flooding arrives: People/pets; papers (important documents); pictures (irreplaceable mem-

ories); prescriptions; and your personal computer, including hard drives, thumb drives and back-up drives.

- If you see the tell-tale signs of a thunderstorm – rapidly rising clouds, a darkening sky, lightning in the distance and an increase in the wind – do not hesitate to get to a safe zone. You may need to move to higher ground.

- Do not drive across flooded roads or washes or wade through flooded areas. Rapidly flowing water can easily sweep you off your feet.

- When recreating in a burn area, watch for natural hazards. Snags and damaged trees can fall at any time. Or they can block trails or roads, including your exit if you should need to leave quickly during a rainstorm.