

Flood Newsletter

ISSUE

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2013 Flood Control Zone District Projects

- Flow enhancements along Crystal, Mercer, Coleman, Reecer and Currier Creeks.
- Review of new Digital floodplain maps from FEMA.
- Complete the planning process for the Manastash Reach Assessment.
- Begin the planning process for the Yakima Reach Assessment—Hansen Pits to Ringer Loop.
- Restore stormwater conveyance to reduce flooding in Roslyn.
- Update the 1996 Comprehensive Flood Hazard Management Plan.



Hansen Pits Levee

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Letter From Public Works Director Kirk Holmes

Spring is here in beautiful Kittitas County which can also be a difficult flood time in our county, so please be sure to keep an eye on the weather, especially for warming temperatures with rain in the forecast. Anywhere you live in Kittitas County can experience flooding that can impact your daily life. If you have any questions about how to prepare for a flood event or how you can protect your property, be sure to contact us with your questions.

A question commonly heard by our staff regarding the recently formed and funded Flood Control Zone District (FCZD) is “where are our tax dollars going?” It is hoped that this newsletter provides some insight into the administration and operations of your FCZD that is consistent with the purpose of the district as prescribed by the Board of Supervisors of the district with the support of the voters of Kittitas County.

The purpose of the district is to reduce flood damage through activities including flood warning and emergency response, flood proofing and elevation of structures, property acquisition, implementation of consistent development regulations that recognize the impacts of flooding, basin-wide flood planning, and the identification, engineering, and construction of capital projects that address flooding problems.

The FCZD has planned many projects for the upcoming year that are outlined in this

newsletter.

In addition to these projects, staff will be actively pursuing funding and opportunities to complete additional projects. Some of these activities include:

- Submit an application to the Community Rating System under the National Flood Insurance Program which will result in lower flood insurance rates;
- Secure funding from the Army Corps of Engineers to conduct a General Investigation of riverine protection systems;
- Apply for grants from the Salmon Recovery Funding Board to fund additional reach assessments and projects that will improve both floodplain function and habitat;
- Apply for grants from FEMA to fund property acquisition and home elevations;

If you have questions about any of the planned projects or questions regarding development activities within the regulated 100-year floodplain, please be sure to contact the Public Works office. The Public Works office is prepared to assist you in understanding what tools are available to you under current floodplain regulations.

Buying flood insurance is the most important step to take in protecting your home from flood-related losses.

WHAT IS A REACH ASSESSMENT? WHY IS THE FCZD INVOLVED?

The FCZD recently received a grant from the Salmon Recovery Funding Board (SRFB) to study the Yakima River from Hansen Pits to Ringer Loop. The SRFB funds projects that will improve fish habitat and result in better functioning floodplains throughout the State of Washington.

The Yakima River Reach Assessment - Hansen Pits to Ringer Loop, will identify and prioritize habitat restoration actions for salmon species. In addition, the assessment will also identify and prioritize floodplain restoration actions.

Floodplain habitat is vital for both healthy fish populations and flood protection. The floodplain provides habitat for spawning and rearing salmon and other fish as well as refuge from high-velocity floodwaters. Many salmon and fish prefer the calmer waters and complexity of a floodplain over the high velocity river channel. The slower flowing water allows sediment to fall out, creating cleaner water for young fish, it provides cover, such as woody debris, for fish to hide under, and it provides an abundance of food sources.

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CALL BEFORE YOU DIG... OR CONSTRUCT... OR GRADE... OR FILL...

Working in a creek or floodplain without a permit is unlawful.

We all know that before digging you need to call for a utility locate, but did you know that before digging in a creek or floodplain you should also call to find out if permits are needed?

Depending on the location and activities, various permits may be required by different agencies.

If you are planning a project but are unsure of what permits are required, Flood Control Zone District staff are available to help guide you through the permitting process.

The Governor's Office of Regulatory Assistance also provides permitting assistance to landowners. Their website has a project questionnaire to help identify what permits may be needed and who to contact. For more information visit <http://www.ora.wa.gov/resources/questionnaire.asp>.

Floodplain Development Permit. A Floodplain Development Permit is required prior to beginning any development



within the 100-year floodplain. Development includes digging, grading, filling, paving, drilling, mining, constructing or storing equipment or materials.

Floodplains are identified on Flood Insurance Rate Maps and are located in every jurisdiction within Kittitas County.

The FCZD is available to help guide you through the permitting process.

During a flood, emergency permits will be issued for temporary flood fighting measures. Any measures that remain permanent will require a regular permit.

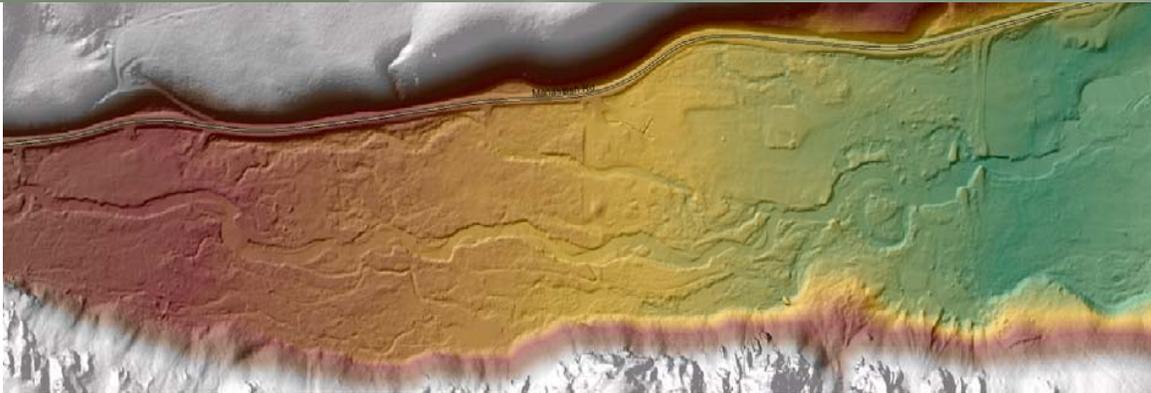
Contact your local jurisdiction for more information or visit the County's Flood Information Website at <http://www.co.kittitas.wa.us/public-works/flood>.

Hydrologic Project Approval (HPA) Permit. The Department of Fish and Wildlife issues HPAs for projects that will use, divert, obstruct or change the natural flow or bed of any rivers or streams.

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FLOOD PROTECTION & PREPARATION

- **Know your risk.** Are you located within a known flood area?
- **Check your insurance coverage.** Standard homeowners insurance doesn't cover flood related losses.
- **Prepare your property.** Ensure that items and buildings within the floodplain are elevated and anchored.
- **Minimize flood damage.** Store valuable, important documents and electronics higher.
- **Keep drainage systems clean.** Keep ditches and culverts free of debris and remove tarp dams when not in use.
- **Put together a disaster kit and disaster plan.** Keep essential items on hand and be sure your family knows who to contact in case of emergency.



DFIRMs: New Flood Insurance Rate Maps

The Federal Emergency Management Agency (FEMA) is currently in the process of updating the county's Flood Insurance Rate Maps (FIRM) and is expected to have preliminary maps available for review this summer. Kittitas County is still using the original FIRMs developed by FEMA that went into effect in 1981. The FIRMs are used to determine whether flood insurance is mandatory on a given property and whether a property lies within a floodplain.

The new maps are called DFIRMs, or Digital Flood Insurance Rate Maps, because paper maps are no longer printed. FEMA will be using the latest technology to re-study and re-delineate floodplains. The new maps will take into consideration changes to the landscape that have been made in the past thirty years and provide more accurate flood mapping.

The engineers producing the maps are using elevation technology called LiDAR. LiDAR is collected by a laser scanner

affixed to aircraft. As the aircraft flies, the scanner collects GPS position data and sends laser pulses to the ground which measure distance. The scanner used to collect data for Manastash Creek was able to send 300,000 laser pulses per second! LiDAR has a wide variety of uses and can be used to create a hillshade effect as shown in the above illustration.

Before the new maps take effect, preliminary maps will be released for the public to review. FEMA is currently working with the county and cities to ensure the Preliminary DFIRMs are as accurate as possible. After the Preliminary DFIRMs are released, the public will have a 90-day period in which they can comment on the map revisions. The review period will commence with a community meeting.

It is imperative the public be involved in the Preliminary

DFIRM review because the changes could affect your property. The new DFIRMs may cause changes including:

- 1. Removing your property from the floodplain.** If your entire home is shown outside the floodplain, FEMA will not require you to carry flood insurance.
- 2. Including your property into the floodplain.** If your home is shown in the new floodplain, your lender may require you to purchase flood insurance after the new maps take effect.
- 3. Property will remain in the floodplain.** The requirements to purchase flood insurance will not change.

Until the Preliminary DFIRMs are released, staff is unable to provide specific information on your property. As soon as more information is known, an outreach program will be announced and staff will be available to answer your questions.

Preliminary DFIRMs will be released for public review and comment prior to taking effect.

RESOURCES

Kittitas County Public Works
publicworks@co.kittitas.wa.us
509-962-7523
Office: 411 N. Ruby St, Ste. 1
Ellensburg, WA 98926

Kittitas County Community
Development Services
509-962-7506
Office: 411 N. Ruby St, Ste. 2
Ellensburg, WA 98926

Kittitas County Emergency
Management Office
509-925-9525

National Flood Insurance Program
Floodsmart.gov
1-888-379-9531

Disaster & Readiness Information
Ready.gov
3days3ways.org

City of Ellensburg Public
Works
509-962-7230

City of Kittitas
509-968-0220

City of Cle Elum
509-674-2262

City of Roslyn
509-649-3105

Town of South Cle Elum
509-674-4322

To find out if property you own or plan to purchase is located in a mapped floodplain or floodway, contact the Kittitas County Public Works Department.

FCZD Mailing List & Flood Information Website

Sign up to receive Flood Control Zone District updates and information by visiting the flood information website at:

<http://www.co.kittitas.wa.us/public-works/flood>



PROTECTING PROPANE TANKS

Propane tanks are very susceptible to damage from flood waters if not properly secured. During a flood, it's not uncommon to see propane tanks floating down the river or be shifted off their foundation. Even underground tanks can become buoyant when surrounded by saturated soils.

Above ground tanks should be either anchored to the ground or elevated on a platform above the base flood elevation. If placing the tank on the ground, it must be securely anchored using tie downs, anchor bolts or earth augurs. The type of anchoring is dependent on specific site conditions, such as the soil type and the buoyancy forces that will be exerted on the tank.

All new and existing propane tanks within the floodplain are required to be anchored or elevated. If you have questions about the secureness of your propane tank, contact your Fire Marshal or propane provider.

WHAT IS A REACH ASSESSMENT?

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The floodplain also provides habitat for animals and waterfowl.

A healthy floodplain also provides flood protection. The lack of floodplains along streams and rivers increases the severity and frequency of floods. Opening the floodplain allows streams and rivers to naturally meander without threatening houses and roads. During a flood, the amount of water in the main channel is reduced because the floodplain acts as a storage area, holding floodwaters and allowing it to seep into the ground. The reduction of water helps to slow water velocity and volume in the main channel and reduces flooding, erosion and damage to public and private property downstream.

One of the projects to be analyzed in the Yakima Reach Assessment is the setback of the Hansen Pits Levee. This levee setback is planned to correspond with the setback of the Schaake Levee just upstream of the Hansen Pits. Throughout this reach, the Yakima River is severely constrained by levees on both banks. The levees create a "chute" effect, funneling the water at a very high velocity through the channel which causes damage and erosion to the neighboring levees and riverbanks. Setting the levees back from the bank of the river will provide area for the water to spread out and slow down as well as providing year-round habitat to fish, animals and waterfowl. We expect the assessment to show that setting back the levee will provide protection and downstream benefits to homes and infrastructure including Canyon Road, Ringer Loop, the railroad, neighboring levees, Hansen Pits, Riverbottom Road and Stone Road.

Once the plan is final, we can apply for grants to complete levee setbacks and other identified projects which will provide improved habitat and protection to public infrastructure.

CALL BEFORE YOU DIG... OR CONSTRUCT... OR GRADE... OR FILL...

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The purpose of the HPA is to protect fish and fish habitat from the impacts of projects. It is the primary fish and shellfish habitat protection law in the state.

During a flood, emergency permits are required prior to undertaking flood fighting activities, such as stream bank protection, repair of bridges or dredging. More information on the HPA process is available online at <http://wdfw.wa.gov/licensing/hpa/>.

Shoreline Development Permit. The County and cities of Ellensburg, Cle Elum, and town of South Cle Elum are required to follow the State's Shoreline Management Act. Certain rivers, streams and lakes are considered to be "Shorelines of the State" and activities within 200 feet of the ordinary high water mark must be permitted. Within these jurisdictions, shorelines are regulated by the Shoreline Master Program for Kittitas County, 1975. An update is currently in process.

Activities within the shoreline will either be considered exempt or require a variance or a shoreline substantial development permit. All activities must be evaluated for compliance with the Shoreline Master Program. During a flood, all permanent flood fighting activities must be permitted. Contact your local jurisdiction for more information. General information on the Shoreline Management Act is available online at <http://ecy.wa.gov/programs/sea/shorelan.html>.

Critical Areas Ordinances. Each jurisdiction within the county has a critical areas ordinance that regulates the use of critical areas, including frequently flooded areas or floodplains. Contact your jurisdiction to determine if a review is necessary prior to beginning your project.

Army Corps of Engineers Section 404 Permit. The purpose of the Section 404 permit is to prohibit the discharge of dredged or fill material into the waters of the US, including wetlands. For more information on the Section 404 Permit visit <http://apps.ecy.wa.gov/permithandbook/permitdetail.asp?id=37>.