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| <p>Chelan County</p> <p>Comprehensive Flood Hazard Management Plan</p> <p>Annual Progress Report</p> | <p>2024</p> |
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Annual report on evaluating progress toward implementing flood hazard mitigation benefits in unincorporated Chelan County. The progress report must be submitted to the governing body, released to the media, made available to the public and will be included as part of the community's annual Community Rating System (CRS) recertification.



Chelan County Flood Control Zone District
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Prepared By
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Approved By
Eric P. Pierson, P.E. | District Administrator

Reporting Period: *January 2024 – December 2024*

Background: Chelan County developed a Comprehensive Flood Hazard Management Plan (CFHMP) to reduce risk from flooding through identified resources, information and strategies. To prepare the plan, Chelan County organized resources, assessed risks from flooding, developed planning goals and objectives, reviewed mitigation alternatives, and developed an action plan to address probable impacts from floods to public infrastructure. The plan can be viewed online:

<http://www.co.chelan.wa.us/flood-control-zone-district>

Purpose: The purpose of this report is to provide an annual update on the implementation of the action plan identified in the CFHMP. The objective is to ensure there is a continuing and responsive planning process that will keep the floodplain management plan dynamic and responsive to the needs and capabilities of Chelan County and its stakeholders. This report discusses the following:

- Flood events that have occurred within the last year
- Changes in risk exposure within the planning area
- Mitigation success stories
- Changes in capabilities that could impact plan implementation
- Review of the action plan
- Recommendations for changes/enhancements

Flood Events within the Planning Area: During the reporting period, Chelan County did not experience any high intensity rainfall events that typically would send water, mud, rock and woody debris over and on top of roadways, leading to plugged culverts, filled/eroded ditches, public and private property damage and other similar problems that are typically witnessed during flood events of this nature. As a result, the Board of County Commissioners did not have to issue any emergency flood declarations for Chelan County, and, in turn, did not have a cost-recovery reimbursement request from the Public Works Department. The FCZD Board of Supervisors did not have to approve any dollars out of the Emergency Response and Recovery budget to recover from these types of events in 2024.

Changes in Risk Exposure in the Planning Area: One forest fire occurred in Chelan County in 2024; the Pioneer Fire, near the town of Stehekin, was first reported on June 8 and burned approximately 40,000 acres before it was finally contained on Oct. 8. As with most fires of this nature, fire-damaged soils may have high root mortality and exhibit increased rates of water runoff, sediment transport and erosion. This creates a concern for roads, culverts, bridges, channels and public/private property along the drainage paths of the burned watersheds in that they may plug, be overtopped, washed away or impacted by an increase in runoff/sediment on a more frequent basis than under pre-fire conditions. However, due to the remote location of this fire, post-fire damage to public (county) infrastructure is not anticipated. Many other burn scars existing from past fires are still a concern due to the unstable landscape.

Mitigation Success Stories: Chelan County continues its efforts to better understand the exposure to risk due to flooding and to provide outreach material to the public about these risks. In 2024, these efforts included:

- Continued to update Flood Control Zone District webpage
- Continued the permitting process for development within the floodplain
- Outreach to homeowners identified in FEMA's Community Assistance Visit who had deficient flood certifications and coordinated correction requirements
- Began to develop a 2025 FCZD newsletter
- Continued to manage seven (7) rain gages as emergency alert systems linked to the National Weather Service

Several mitigation projects have begun or been completed during this reporting period:

- Twenty-Five Mile Creek Culvert Replacement, Phase 1: Chelan County received design work funding from FEMA to investigate replacing an undersized box culvert with a bridge.
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- **No. 2 Canyon Drainage Improvements, Phase 1:** As a result of the 2023 No. 2 Canyon Mitigation Strategy analysis, the FCZD applied for a Department of Ecology Flood Control Assistance Account Program (FCAAP) grant to fund the design work to improve up to eight culverts that will provide conveyance of larger peak flows beneath No. 2 Canyon Road to prevent overtopping of the roadway.
 - **Stemilt Creek Bridge #103 Scour Repair:** In 2019, a high-flow event scoured the Stemilt Creek channel and undercut both bridge abutments. The FCZD partnered with Chelan County Public Works Department to fund a project to replace the lost streambed material and protect the bridge abutments. Design work was completed in 2024, with construction anticipated in 2025.
 - **Debris Management Plan:** The FCZD developed a plan to provide an operational and administrative framework for the county to clear roadways and remove debris after a natural hazard event. This Plan identifies specific jurisdictional roles, responsibilities, and authorities and thresholds that would trigger a coordinated response. It also determines locations for and management of temporary debris storage and reduction sites.

Changes that May Impact Implementation of the CFHMP: No significant changes in the planning area in 2024 that would have a profound impact on the implementation of the CFHMP or with public outreach efforts. No technical or financial capabilities identified during the plan's development have changed. The FCZD should continue to work closely with State of Washington Emergency Management and FEMA to seek out additional grant opportunities.

A 2015 Community Assistance Visit (CAV) by the Department of Ecology identified the lack of a Flood Development Permit as a deficiency in the county's flood program and, as a result, is not in compliance with the National Flood Insurance Program (NFIP). The FCZD assisted the Chelan County Community Development Department in creating and implementing a Flood Development Permit based upon Chelan County Code chapter 3.20. On August 1, 2018, the Department of Ecology closed the CAV and found the county in compliance with the NFIP.

Following the Department of Ecology's CAV, FEMA conducted a follow-up CAV in July 2019 and found deficiencies in a number of the county's building permits issued within the special flood hazard area (i.e. 100-year floodplain). As a result of this finding, Chelan County revised internal permitting procedures; began to reach out to homeowners, alerting them of required repairs to adhere to building codes; and kept FEMA apprised of progress made toward correcting these deficiencies. FEMA has indicated it is satisfied with the progress the county is making at this time.

COMPREHENSIVE FLOOD HAZARD MANAGEMENT PLAN PROGRESS

Summary Overview of the Flood Plan's Progress: The performance period for the floodplain management plan became effective on Nov. 13, 2017, with the adoption of the CFHMP by the Chelan County FCZD Board of Supervisors. The initial performance period for this plan will be five years, with an update by November 2022. The FCZD anticipates an update in the near future when the CAV is closed out. The CFHMP has targeted 38 flood hazard mitigation actions to be pursued during the five-year performance period. As of the reporting period, the following overall progress can be reported:

- 22 out of 38 actions reported ongoing action toward completion
- 3 out of 38 actions were reported as being complete
- 13 out of 38 actions reported no action taken

The Floodplain Management Plan Steering Committee: The CFHMP steering committee, made up of stakeholders within the planning area, determined through the plan's development process that a steering committee would remain in service to oversee maintenance of the plan. At a minimum, the Steering Committee will provide technical review and oversight on the development of the annual progress report. It is anticipated there will be turnover in the membership annually, which will be documented in the progress reports. For this reporting period, the Steering Committee membership is as indicated in Table 1:

Table 1: Steering Committee Members

| Name | Title | Jurisdiction/Agency |
|------------------------------|--|--|
| Andi Zontek-Backstrum | Public Works Director | City of Leavenworth |
| Maggie Boles | Community Development Director | City of Leavenworth |
| Steve Croci | Director of Operations | City of Cashmere |
| Tom Wachholder | Public Works Director | City of Wenatchee |
| Jessica Shaw | Deputy Public Works Director - Utilities | City of Wenatchee |
| Mark Botello | Community Development Director | City of Entiat |
| Erin McCardle | Mayor | City of Chelan |
| Jake Youngren | Public Works Director | City of Chelan |
| Deanna Walter | Director | Chelan County Community Development Department |
| Christina Wollman | Consulting Floodplain Administrator | Chelan County Community Development Department |
| Mike Kaputa | Director | Chelan County Natural Resource Department |
| Jason Reinfeld | Sergeant | Chelan County Emergency Management |
| Eric Pierson | FCZD Administrator | Chelan County FCZD / Public Works |
| Jason Detamore | Environmental Manager | Chelan County FCZD / Public Works |
| Sandra Floyd | Floodplain Management Specialist | Department of Ecology |
| Ryan Williams | Director | Cascadia Conservation District |
| Jennifer Hadersberger | Trails Program Manager | Chelan-Douglas Land Trust |
| Keith Kusler | Hydraulics Engineer | WSDOT |
| Robin Fox | Service Hydrologist | National Weather Service |
| Vacant | Forest Engineer | U.S. Forest Service |
| Jennifer Burns | Environmental Coordinator | Chelan County PUD |

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| Bob Whitehall / Aaron Young / Phylisha Olin | | Citizens |
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Review of the Action Plan: Table 2 reviews the action plan, reporting the status of each initiative. Reviewers of this report should refer to the CFHMP for more detailed descriptions of each initiative and the prioritization process.

Table 2: Action Plan Matrix

| Action Taken (Yes/No) | Description | Priority | Timeline | Status (X, O, ✓) |
|-----------------------|---|----------|----------|------------------|
| 1 | Define regional flood hazard management consistency pursuant to RCW 86.12 for the planning area. This definition will strive to exceed minimum National Flood Insurance Program standards and will be developed thru a facilitated planning effort with all cities within Chelan County. | | | |
| Yes | Chapter 5 of Chelan County's Comprehensive Flood Hazard Management Plan details regional consistency and is further expanded upon within the policies (Chapter 12). Cities within Chelan County should review regional consistencies to ensure compliance. | High | Ongoing | O |
| 2 | Chelan County will continue with the Community Rating System (CRS) application and classification process and will mentor Chelan County cities that show interest in CRS participation. | | | |
| Yes | The Insurance Service Office (ISO) conducted a CRS verification visit on August 1, 2018. Joining the CRS program is anticipated to occur in future years once all deficiencies are addressed. | High | Ongoing | O |
| 3 | Define floodplain mapping criteria that take into account future flood hazard conditions and/or expected worst-case conditions to be applied to all future flood studies within the planning area. | | | |
| No | This action item has yet to begin. | Medium | Unknown | X |
| 4 | Identify alternative sources of funding to leverage Flood Control Zone District funding to perform new flood studies in identified areas of need based on risk. | | | |
| Yes | The FCZD continually seeks alternative sources of funding through agencies such as FEMA, Department of Ecology, Army Corps of Engineers, Chelan County Public Works Department and the Surface and Stormwater Management Utility. | High | Ongoing | O |

| Action Taken (Yes/No) | Description | Priority | Timeline | Status (X, O, ✓) |
|-----------------------|---|----------|----------|------------------|
| 5 | Inform all future mapping by maintaining a database on known flood risk that tracks historical flood conditions to include, but not be limited to: high water marks, recorded damages, photos, observed flood conditions, etc. | | | |
| No | The FCZD anticipates developing a protocol for mapping and maintaining a database on known flood risks. | Medium | Ongoing | X |
| 6 | Continue to implement the Stormwater Management Program, which includes facility identification, design, construction and maintenance within the stormwater utility jurisdictional authority. | | | |
| Yes | Chelan County's Stormwater Management Program was updated in 2018 and will be updated again in the near future. The County continues to improve upon asset management tracking within the utility boundary. Stormwater infrastructure continues to be added to a new GIS tracking system. | High | Ongoing | O |
| 7 | For areas outside the Stormwater Utility, clearly define the stormwater management program based on existing programs and capabilities. | | | |
| Yes | Chelan County Code chapter 13.16 – Stormwater Management for Chelan County, provides stormwater guidance on development projects throughout the county. Stormwater infrastructure data is gathered as time allows and entered into GIS as a means for asset management. | Medium | Ongoing | O |
| 8 | Develop a facility maintenance operation and maintenance protocol for Flood Control Zone District-funded facilities as they are developed. | | | |
| Yes | Since 2017, for all new facilities under the Flood Control Zone District purview, operation and maintenance protocols have been developed. | Medium | Ongoing | O |
| 9 | Investigate solutions to issues associated with modifications to the landscape that increase runoff, including sediment, to adjacent properties and infrastructure. | | | |
| No | A type of land use modification tracking system combined with new regulations may be considered in the near future as a means to minimize sediment-laden runoff leaving properties. | Medium | Unknown | X |

| Action Taken (Yes/No) | Description | Priority | Timeline | Status (X, O, ✓) |
|-----------------------|---|----------|----------------|------------------|
| 10 | When requested, the Flood Control Zone District may act as the applicant agent for mitigation grant opportunities for private property owners requesting to participate in the grant program. | | | |
| No | At this time, there hasn't been an opportunity to act as the applicant agent for a private property mitigation grant. If the opportunity presents itself, the District Administrator and Board of Supervisors may consider this opportunity. | Medium | Not Applicable | X |
| 11 | Develop a flood informational website on the Flood Control Zone District web page. | | | |
| Yes | In 2024, the FCZD webpage continued to be updated to provide useful information to the citizens of Chelan County. It can be accessed at www.co.chelan.wa.us/flood-control-zone-district | High | Ongoing | O |
| 12 | Deploy public information and outreach programs targeting at-risk properties within the planning area. | | | |
| Yes | The County continues to disseminate flood risk information through its website; support direct mailings to properties within the special flood hazard area (100-year floodplain); produce an online newsletter and press releases to local media; and provide personal interaction through phone calls, permit counter inquiries and during the permit application and/or review process. | High | Ongoing | O |
| 13 | Coordinate with FEMA Region X on deploying flood insurance workshops for agents, lenders and citizens within the performance period for this plan. | | | |
| No | At this time, coordination with FEMA Region X has not occurred. The County is attempting to correct deficiencies as a result of the CAV. Once complete, opportunities may change. | High | Not Applicable | X |
| 14 | Investigate feasible, cost-effective solutions to flood issues within No. 1 Canyon. | | | |
| Yes | Construction of four new debris basins within the drainway is complete. Additional capital improvements will be on an as-needed basis. | Low | Ongoing | O |
| 15 | Identify a feasible, cost-effective solution to Slide Ridge debris flow issues. | | | |
| Yes | In 2022, the FCZD completed construction to improve Slide Ridge and to correct debris flow issues. | Low | Complete | ✓ |

| Action Taken (Yes/No) | Description | Priority | Timeline | Status (X, O, ✓) |
|-----------------------|---|----------|----------|------------------|
| 16 | Investigate feasible, cost-effective solutions to flood issues within No. 2 Canyon. | | | |
| Yes | The FCZD received a Department of Ecology Flood Control Assistance Account Program (FCAAP) grant for this project and it was completed in 2023. This mitigation strategy summarized the hydrology in the canyon, developed capital improvements and produced a homeowner handbook. In 2024, Chelan County applied for a FCAAP grant to begin design work on replacing numerous culverts outlined in the mitigation strategy capital improvement plan. | High | Ongoing | O |
| 17 | Investigate feasible, cost-effective solutions to flood issues within Dry Gulch (south of City of Wenatchee). | | | |
| No | Work has not begun on this action item. | Low | Unknown | X |
| 18 | Investigate feasible, cost-effective solutions to flood issues within Mission Creek. | | | |
| No | Work has not begun on this action item. The FCZD may begin the process of conducting an inventory of bridge/culvert crossings within the Mission Creek drainage. | Medium | Unknown | X |
| 19 | Investigate feasible solutions to flood issues within Ski Hill Basin. | | | |
| Yes | The analysis is complete and outlines a number of solutions to minimize flooding within the Ski Hill Basin. The FCZD may proceed with the design phase of this project in 2025. | High | Ongoing | O |
| 20 | Coordinate with City of Cashmere on options for the maintenance and management of the levee system within the City and County. | | | |
| No | The Cashmere Levee Management Plan was completed in May 2018 and environmental permitting is complete. | Low | Complete | ✓ |
| 21 | Maintain a database of flood control needs within the planning area as needs become identified for incorporation into future updates and progress reporting to this plan. | | | |
| Yes | The FCZD attempts to investigate flood control needs throughout Chelan County when needed. If warranted, new information will be added to future updates and progress reporting. | High | Ongoing | O |

| Action Taken (Yes/No) | Description | Priority | Timeline | Status (X, O, ✓) |
|-----------------------|---|----------|----------|------------------|
| 22 | Mitigate flood-related risk to publicly owned county bridges. | | | |
| Yes | Chelan County maintains a robust bridge management program that includes inspection and a maintenance schedule on necessary bridges. Mitigating flood risk to county bridges is part of this program and is undertaken as funding allows. Design work was completed in 2024 for scour repairs at Stemilt Creek Bridge #103. | Medium | Ongoing | O |
| 23 | Maintain the county Critical Areas Ordinance (CAO) pursuant to the requirements of the State Growth Management Act. | | | |
| Yes | Chelan County's Critical Area Ordinance, found in Title 11 of the county code, is currently in compliance with the State Growth Management Act. | High | Ongoing | O |
| 24 | Identify feasible opportunities with like goals for natural resource protection within identified flood-risk areas based on available funding. | | | |
| No | This opportunity has not presented itself. | Medium | Unknown | X |
| 25 | Coordinate with watershed planning and program implementation to identify opportunities to leverage available funding for like goals between watershed and Flood Control Zone District plans and programs. | | | |
| No | In 2024, opportunities were lacking to coordinate with watershed planning units to leverage funding. | Low | Unknown | X |
| 26 | Utilizing the best available data, science and technology, enhance the existing flood notification program, striving to identify a notification protocol within systems with real-time flood threat recognition capability. | | | |
| Yes | Chelan County continues to maintain a series of rain gages that provide the National Weather Service with real-time data to issue emergency alerts. A stream gage was added to the Mad River drainage as a result of the Cougar Creek Fire, and a rain gage was relocated to Grouse Mountain as a result of the Twenty-Five Mile Fire. All are connected to the National Weather Service. | Medium | Ongoing | O |
| 27 | Update the County emergency response plan to reflect any changes to flood notification protocol within the County. | | | |

| Action Taken (Yes/No) | Description | Priority | Timeline | Status (X, O, ✓) |
|-----------------------|--|----------|----------|------------------|
| No | Once Chelan County Emergency Management updates the county's emergency response plan, flood notification protocols will be added. | High | Unknown | X |
| 28 | Conduct annual exercises of the County Emergency Operations Plan in compliance with National Incident Management System standards, such that flood response actions of the County are reviewed, evaluated and adapted based on observations from the exercises. | | | |
| Yes | The FCZD and its partner, the county's Public Works Department, cooperatively coordinate with Emergency Management and the Sheriff's Office in an annual tabletop exercise. | High | Ongoing | O |
| 29 | Draft a prioritized list of road segments and bridges that should be elevated above the 100-year flood hazard area and culverts that will fail under flood flow. Upgrade these structures if funding becomes available. | | | |
| No | Chelan County Public Works needs to complete a prioritized list of culverts, road segments and bridges that should be elevated above the 100-year floodplain. Once this list is complete, prioritization needs to occur to determine where funding should be obligated. The County should also continue to work with FEMA, under RiskMAP program, for assistance on flood mapping. | Medium | Unknown | X |
| 30 | Integrate the Chelan County Comprehensive Flood Hazard Management Plan into other appropriate plans and programs that can support or enhance the County's efforts to reduce flood risk as these plans and programs are updated. Examples of such plans/programs include, but are not limited to: Chelan County Hazard Mitigation Plan, Chelan County Comprehensive Plan and Chelan County Shorelines Master Plan. | | | |
| Yes | In 2024, Chelan County completed the Hazard Mitigation Plan, which utilized information found within the Comprehensive Flood Hazard Management Plan. The FCZD is an official annex or partner in the Hazard Mitigation Plan. | Medium | Ongoing | O |
| 31 | Utilizing the best available data, science and technology, maintain and enhance, as data becomes available, the Level 2, user-defined HAZUS-MH model that was constructed to support this planning effort. | | | |
| No | At this time, this action item has not been addressed. | Medium | Unknown | X |
| 32 | Establish a sediment management program that includes expanded channel monitoring, establishment of thresholds to trigger actions and analysis of sediment management action alternatives. | | | |
| No | The FCZD has not begun to address this action item. | High | Unknown | X |

| Action Taken (Yes/No) | Description | Priority | Timeline | Status (X, O, ✓) |
|-----------------------|--|----------|----------|------------------|
| 33 | As Flood Control Zone District projects are constructed, monitor projects using identified performance measures and adaptive management to track the effectiveness of completed projects to inform the design and implementation of future projects. | | | |
| Yes | Since the FCZD inception in 2014 and the adoption of the Comprehensive Plan in 2017, two capital construction projects funded by the FCZD have been completed. | Low | Ongoing | O |
| 34 | Respond to inquiries and complaints from citizens and other public and private agencies and track per Community Rating System requirements. | | | |
| Yes | The county's Community Development and Public Works Departments, in coordination with the FCZD, field and respond to questions/complaints from other public and private agencies. A standard countywide tracking system per CRS requirements will continue to be implemented. | High | Ongoing | O |
| 35 | Maximize federal, state and local funding opportunities through grant application submittals in support of capital improvement projects, technical studies and other flood-hazard management activities. | | | |
| Yes | Chelan County's FCZD staff continually seeks applicable grant opportunities. | High | Ongoing | O |
| 36 | Continue to provide flood-hazard management technical support to all Chelan County departments and cities proposing activities or projects that affect floodplain functions. | | | |
| Yes | The FCZD proactively coordinates with the necessary departments within Chelan County to provide the necessary flood hazard management technical support. Cities can contact the FCZD when activities or projects arise that may affect floodplain functions. | High | Ongoing | O |
| 37 | Continue to maintain good standing under the National Flood Insurance Program by implementing programs meeting or exceeding the minimum National Flood Insurance Program requirements. Such programs include enforcing an adopted flood damage prevention ordinance, participating in floodplain mapping updates, and providing public assistance and information on flood hazard requirements and impacts. | | | |
| Yes | Chelan County continues to meet the NFIP requirements and will work to maintain compliance. | High | Ongoing | O |

| Action Taken (Yes/No) | Description | Priority | Timeline | Status (X, O, ✓) |
|-----------------------|--|----------|-----------|------------------|
| 38 | Develop and implement a stand-alone floodplain development permit for all new development and/or substantial improvements within the unincorporated County-regulated floodplain. | | | |
| Yes | Chelan County's Flood Development Permit was implemented August 1, 2018, and is overseen by the Floodplain Administrator in the Community Development Department, with engineering support provided by the FCZD. | Low | Completed | ✓ |

Completion Status Legend:

✓ = Project completed

O = Action ongoing towards completion (These are actions that have continuing oversight, management, or are a specific task to be accomplished).

X = No progress at this time

Recommendations for Changes or Enhancements: Based on the review of this report by the floodplain management plan Steering Committee, the following recommendations will be noted for future updates or revisions to the plan:

- CFHMP expired in 2022. FCZD will investigate update requirements with FEMA once the CAV is complete.
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PUBLIC REVIEW NOTICE

The contents of this report are considered to be public knowledge and have been prepared for public disclosure. Copies of the report have been provided to the FCZD Board of Supervisors and to local media outlets and the report is posted on the FCZD website. Any questions or comments regarding the contents of this report should be directed to:

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