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DATE: August 5, 2024
TO: Wade Bryson, Chair
Public Works and Facilities Committee
FROM: Denise Koch, Engineering and Public Works Director
SUBJECT: August 2023 Jökulhlaup Flood Anniversary & Update

August 5, 2023, is a date that will be difficult to forget for many in our community. Today marks one year since the Suicide Basin glacial outburst (Jökulhlaup) and record flooding event that damaged homes and displaced families along the Mendenhall River. Many in our community continue to reconcile with the impacts of the 2023 event while trying to understand and navigate a potential new normal in the area.

Post Flood Response: Resources, Research, Protection and Preparation

On August 7, 2023, the CBJ Assembly passed [Resolution 3036\(b\)](#) confirming the declaration of local emergency and requesting state and federal assistance. In the days and months following, CBJ worked with local, state, and federal partners to respond to community needs, concerns, and questions.

Funding

- CBJ requested a state declaration of emergency which allowed for those impacted by the flood to apply for \$21,000 in individual assistance.
 - CBJ supported legislation proposed by Senator Kiehl which would increase the amount of state individual assistance and make it easier for condo associations to receive state disaster assistance. The latter part of the legislation is included in [HB 345](#), which is awaiting transmittal to the Governor.
- CBJ worked with the U.S. Small Business Administration (SBA) to connect local residents to \$2,445,000 in low-interest loans for private property owners.
- While CBJ is not able to create a disaster assistance fund, staff shared information about local private fundraising and support efforts, including the \$36,823 raised for distribution through the Juneau Community Foundation.
- To provide tax relief to property owners in the impacted area, the CBJ Assessor's Office adjusted property values for those who requested disaster relief. Without sales data but with anticipation that homeowners would experience a decrease in sales prices along the river, the Assessor's Office issued a 20% property value reduction for properties affected by the flood. This will be adjusted moving forward based on actual sales data.
- ***Federal Funding Support***
 - CBJ was a partner and subrecipient on Southeast Alaska Watershed Council (SAWC)'s application for the **NOAA Transformational Restoration and Coastal Resilience Grant**¹ program. NOAA has recommended \$1.5M in funding for the SAWC project, of

¹ <https://www.fisheries.noaa.gov/feature-story/noaa-recommends-nearly-220-million-funding-transformational-habitat-restoration-and>

- which, CBJ would receive \$52,080 for design review of an engineered log jam to help protect the west abutment of the Mendenhall River Pedestrian Bridge and the riverbank at the Dimond Park Fieldhouse. The recommendations were announced on July 18; however, it may be some time before grant awards are made and the project work begins.
- **NRCS Emergency Watershed Protection Program²** – CBJ requested and was declined this assistance from the National Resources Conservation Service (NRCS).
- CBJ requested assistance from the **NRCS Watershed Protection & Flood Prevention Operations (WFPO) Program³** for river-wide technical, planning, and implementation assistance for public and private properties. If NRCS selects CBJ for WFPO assistance, their first step would be a Phase 1 Preliminary Investigation Feasibility Report (PIFR). The results of the PIFR would determine the next steps and potential funding available, as well as potential match requirements.
 - WFPO program projects typically cost well into the tens of millions of dollars and take 7-10 years. CBJ will have the opportunity to decide whether to move forward with planning or implementation phases after the PIFR is completed.
 - CBJ also submitted a request to the **US Army Corps of Engineers (USACE) Emergency Streamline and Shoreline Protection Project (Section 14)⁴** to conduct a feasibility study related to projects designed to protect public and non-project infrastructure.

Research & Monitoring

- CBJ **increased US Geological Survey (USGS) monitoring funds** from \$7K to \$35K to fund cameras, sensors, access to Suicide Basin, data collection, and staff time.
 - The National Weather Service updated its publicly available modeling and forecasting using 2023 flood data and is now sending daily updates.
 - **Live updates are available at <https://www.weather.gov/ajk/suicideBasin>.**

Protection & Preparation

- Protecting Public Infrastructure
 - CBJ has completed the critical work to harden the bank adjacent to the **Mendenhall Wastewater Treatment Plant**.
 - CBJ has also repaired the flood damage at the lift station near the **Mendenhall Campground**.
 - The **Juneau International Airport** is working to address the bank stabilization project and other limited repairs required after the 2023 flood.
- CBJ installed eight (8) **Storm Drain Overflow Preventers** (check valves) in storm drain outfalls along the Mendenhall River previously without check valves. The installations on Rivercourt Way (1), Meander Way (5), and Marion Drive (2) were completed during the week of July 15, 2024. Five other storm drain outfalls along the river already had one-way valves.
- The CBJ Engineering & Public Works Department (EPW) conducted and supported several post-flood **cleanup efforts** both immediately after the flood and after water levels declined. EPW collected household and construction debris at no cost to the impacted neighborhoods in August and September of 2023. The CBJ Emergency Programs team coordinated a spring cleanup effort with Team Rubicon to remove remaining waste and debris from the river before it rose to summer levels. EPW is handling the disposal of these materials.

² <https://www.nrcs.usda.gov/programs-initiatives/ewp-emergency-watershed-protection/alaska/alaska-ewp>

³ <https://www.nrcs.usda.gov/programs-initiatives/watershed-and-flood-prevention-operations-wfpo-program/alaska/alaska-wfpo>

⁴ <https://www.sas.usace.army.mil/Missions/CAP/Section-14-Emergency-Stream-Bank-and-Shoreline-Protection/>

How is the community better prepared to respond to a Jökulhlaup?

Due to improved monitoring infrastructure and capabilities, we expect to have increased lead time between a basin release and any downstream flooding that may occur, allowing additional time for the community to plan and prepare.

CBJ is in close contact with our monitoring partners at the National Weather Service (NWS), USGS, and the University of Alaska Southeast. As mentioned, the NWS updated their glacial flood forecasting models and provide daily updates.

CBJ is sharing these and additional preparedness information and resources with community members via its various communications channels:

- “With water levels high, stay alert for glacial outburst floods,” (Press Release)⁵
- “Jökulhlaup season is here—stay alert to glacier conditions.” (FAQ Page)⁶

While CBJ has taken many steps to address and prepare for the potential impacts of future Jökulhlaups, many unknowns remain and our work on this issue is far from complete. We will continue to work with the Assembly, agency partners, and the community and report on the progress of the initiatives described in this memo.

⁵ <https://juneau.org/newsroom-item/with-water-levels-high-stay-alert-for-glacial-outburst-floods>

⁶ <https://juneau.org/newsroom-item/jokulhlaup-season-is-here-stay-alert-to-glacier-conditions>