



Mendenhall River Glacial Outburst Flood Update

February 12, 2024 Update

Community Questions from Nov 2023 Listening Session:

1. Can CBJ create a Natural Disaster Assistance Fund?
2. What can be done to prevent storm drain overflow?
3. Is CBJ seeking outside expertise and/or assistance to understand and mitigate future glacier outburst flooding?



Natural Disaster Assistance

- CBJ would have to create a new program with a new funding source to provide individual disaster assistance.
- The State has the programmatic infrastructure in place to distribute individual assistance through DMVA.
 - Currently up to \$21,000 for housing and property damage
- **New!** Legislature working on a bill to increase the individual assistance from \$21K - \$50K and to add flexibility for condo associations currently excluded from individual assistance.
- Recommend that CBJ support the forthcoming legislation.



Existing Culverts with Backflow Preventers

- In place during August 2023 flood event

EXISTING BACKFLOW PROTECTION ON CULVERT OUTFALLS - UPPER MENDENHALL RIVER AREA

Riverside at Melvin Park Outfall - 36" Duckbill on Outlet

Killewich Outfall - 54" - Flap Gate on Outlet

Marion Drive

Melvin Park

Riverside Dr.

Riverside Rotary Park

Thunder MT High School

Meander Way

AK 23296
City and Borough of Juneau
155 Heritage Way
Juneau AK 99801
(907)586-0800

Upper River

Lower River

EXISTING BACKFLOW PROTECTION ON CULVERT OUTFALLS - LOWER MENDENHALL RIVER AREA

Brotherhood Bridge

Meadow Lane Outfall - 54" Duck Bill on Outlet

Brandy Lane Outfall - 36" Duck Bill on Outlet

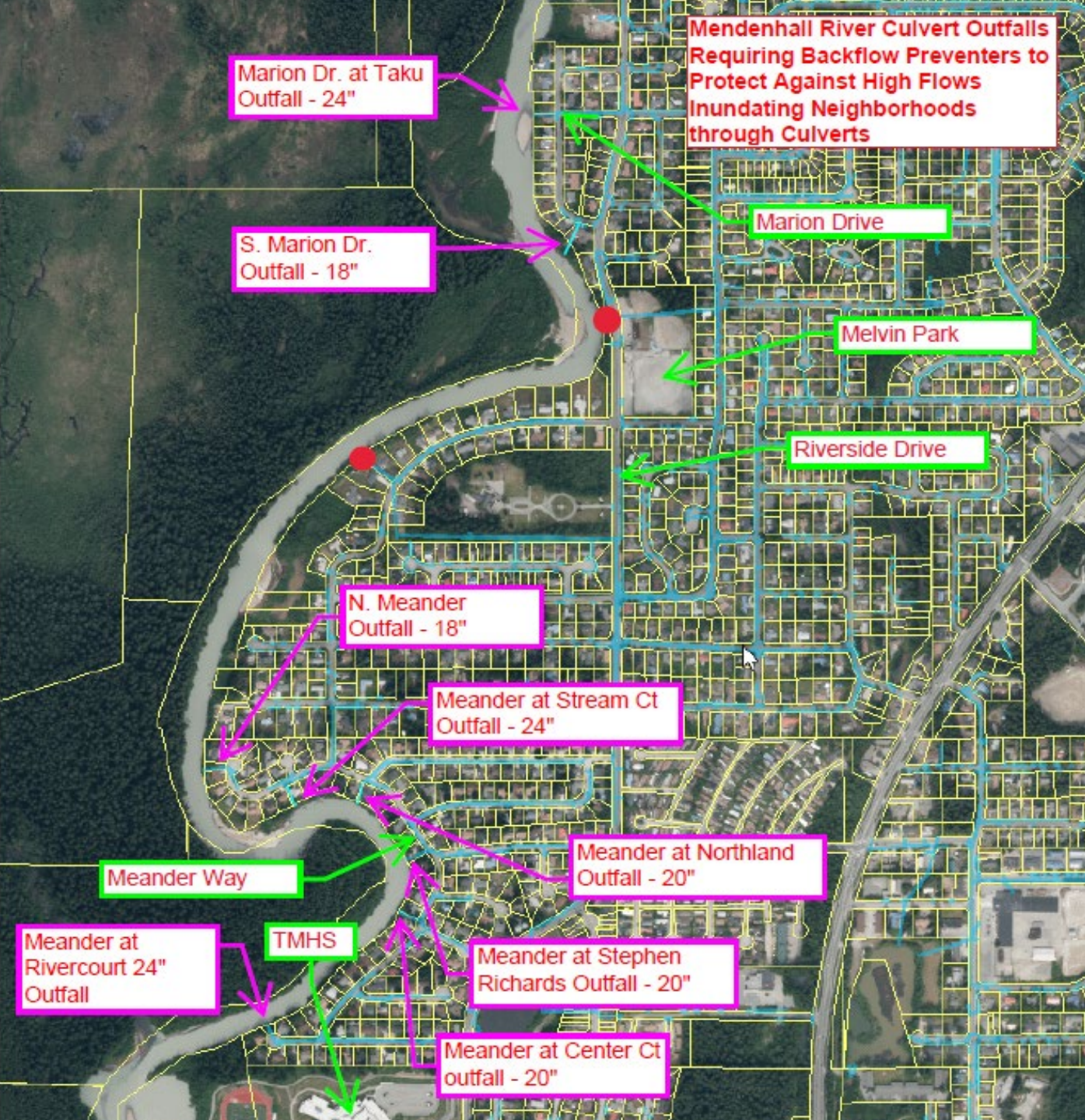
Crazy Horse Drive

Industrial Boulevard

Meadow Lane

Radcliff Road

Mendenhall Wastewater Treatment Plant



Planned Backflow Preventers

Will protect against future high flows inundating neighborhoods through culverts.

How We Got Here...



- *Summary (non-exhaustive) of CBJ and partner actions since August 5, 2023*

Action	Agency	Details
Established Incident Command	CBJ	Coordinated response to keep people safe and informed
Local Disaster Declaration	CBJ	Paved way for State Disaster Declaration
State Disaster Request + Declaration	Governor	Required for both individual and public assistance and grants from DMVA/FEMA
<ul style="list-style-type: none"> • <u>State Individual Assistance</u> 	AK DMVA	<i>Provided to \$21,000 of individual assistance for housing, and property damage. DMVA in Juneau 8/21-23. Application closed on 10/9/23.</i>
Federal Disaster Request	CBJ/DMVA/Gov	Request Denied; <i>Would have provided access to additional <u>Individual Assistance Program</u> for property owners.</i>
Advocating for UAS Research Funding	CBJ to US Congress	CBJ provided letter of support for UAS request for Congressionally Designated Spending (CDS) funds for full-time research
Increased USGS Monitoring Funds	CBJ	Increased annual appropriation from \$7k to \$35k; funding for Cameras, sensors, access, data collection, staff time
Protecting Public Infrastructure	CBJ	Pursuing actions and available funding opportunities to restore, protect, and mitigate potential future damage to impacted municipal infrastructure.

** [Benefits for private property owners in orange.](#)*

Flood Relief and Community Support Programs...



- Funding and other assistance benefitting both public and *private property owners*

Description	Agency	Applicant / Beneficiary	Status + other notes
<u>Low Interest Disaster Loan</u>	U.S. Small Business Association	Impacted Private Property Owners & Renters; Businesses & Nonprofits	Deadline to <u>apply</u> was Dec 5, 2023 35 Home, 1 Business/EIDL Loans Approved - \$2,445,000 (as of 12/26/23)
<u>Flood Insurance for Property Owners</u>	National Floodplain Insurance Program (FEMA)	All property owners	Open for enrollment. CBJ coordinated sessions Nov 1-2 in Juneau; resources available.
Curbside & Community Clean Up Efforts	CBJ	Impacted households along the flooding area	Collected household and construction debris at no cost to impacted neighborhoods
Emergency Bank Stabilization Permit Accommodations	CBJ (CDD)	Impacted property owners	Allowed property owners to protect against immediate threats to property; expedited process (Open House with state and federal agencies held on August 31, 2023)
Real Property Exemption/Reassessment	CBJ (CDD)	Impacted property owners	Allowed for reassessment of properties impacted by flood; potential tax relief (more details <u>here</u>)
Mendenhall Flood Relief Fund	Juneau Community Foundation	Impacted community members experiencing "major loss"	Application and donation period now closed. Established to address impacts from the glacial outburst flood; \$36,823.00 raised and distributed in 2023.

**Updates since Nov 2023 noted in green.*

Technical Assistance and Funding Updates...



- CBJ is pursuing outside expertise, technical assistance and funding from state and federal partners

Description	Agency	Applicant / Beneficiary	Status/Updates	Funding + other notes
✓ State Public Assistance	State of Alaska DHS&EM (DMVA)	Based on need, Governor's discretion	CBJ working with DHS on reimbursement	CBJ applying for reimbursement of emergency protection projects
✓ Transformational Habitat Restoration and Coastal Resilience Grant	NOAA	SE Alaska Watershed Council (CBJ). / Project would benefit public + private property	CBJ is partner in application and project; Application submitted	\$5.5 million request; four-year project to build flood resistance + improve fish habitat
✗ Emergency Watershed Program (EWP)	NRCS	CBJ / For work to reduce threats to life and property after disaster; may benefit public + private property	NRCS report from 9/11 visit determined no project nexus with EWP	N/A
Emergency Streambank & Shoreline Protection (Sec. 14)	US Army Corps of Engineers (USACE)	CBJ / Specific to smaller projects to protect endangered public and nonprofit infrastructure.	Request for study submitted to USACE	\$100k fed match thru feasibility study; up to \$10M max; 35-50% local match
Watershed Protection & Flood Prevention (WFPO)	National Resources Conservation Service (NRCS)	CBJ / Technical and financial assistance for watershed projects benefitting public and private properties.	Request for assistance submitted to NRCS	No cost for phase one study, future match requirements dependent on study results.
Silver Jackets Mendenhall Flood Mapping Study	US Army Corps of Engineers (interagency)	CBJ / In collaboration with ADOT, NOAA, USGS & other relevant agencies	Proposal in progress	~\$150K value, CBJ would provide in kind support for study

*Updates since Nov 2023 noted in green.

Key Federal Assistance Requests...



- **Emergency Streambank & Shoreline Protection (Sec. 14) - USACE**

Scope: Specific to smaller projects to protect endangered public and nonprofit infrastructure.

Timeline: ?

Funding: Up to \$10M in federal support (\$13M total project cost); does *not* require congressional appropriation

Potential CBJ Cost: \$100k federal contribution* to complete feasibility study (50/50 cost share after \$100k); 35% - 50% local match post-study + Operations & Maintenance for the working life of the project.

**“The first \$100,000 of study costs are paid by the federal government. Of this, \$50,000 will be allocated to perform a Federal Interest Determination (FID), the results of which will determine if a feasibility study is possible. Should the FID provide positive results and CBJ choose to move forward, the second \$50,000 in federal funding would be allocated to draft a Feasibility Cost Sharing Agreement (FCSA) and Project Management Plan (PMP). This will be the agreement that CBJ signs to initiate the actual feasibility study. The total cost of the feasibility study will be shared with the CBJ and agreed upon prior to expecting a Feasibility Cost Sharing Agreement to perform the study.*

If a Feasibility Cost Sharing Agreement is executed with the Alaska District, CBJ understands that Feasibility Study costs would be cost-shared 50/50 Federal/non-Federal. CBJ requests that the USACOE consult with us closely during the project and in advance of exceeding the \$100,000 threshold. If CBJ were to ask USACOE to proceed with identified projects, we are aware that CBJ would be required to pay 35% of the total cost of a project, with credit granted for providing lands, easements, and rights-of-way, and that the minimum cash requirement from CBJ would be 5% of the total project cost.”

- CBJ request letter to USACE

Key Federal Assistance Requests...



- **Watershed Protection & Flood Prevention (WFPO) - NRCS**

Scope: River-wide planning and implementation assistance for authorized watershed projects to benefit **public and private properties**

Timeline: Likely minimum 7+ years thru final construction

Funding: Dependent on feasibility study results initial study does not require congressional appropriation, subsequent phases would require congressional appropriation if over \$25M (likely \$25M+ for Mendenhall).

Potential CBJ Cost: No cost for first phase (*Preliminary investigation and feasibility report*) of four phase process; potential for no local match requirement for future phases if CBJ project purpose is determined as “Flood Prevention,” CBJ required to cover ineligible expenses (ROW, easements, permitting, etc.) + Operations & Maintenance after construction (More info [here.](#))

Watershed Operations Program Federal Cost-Sharing by Purpose	Engineering / Technical Assistance	Installation / Construction	Real Property Rights
Flood Prevention (Flood Damage Reduction)	100%	100%	0
<ul style="list-style-type: none"> • Structure elevation, relocation, flood proofing 			
Watershed Protection	100%	Variable	0
<ul style="list-style-type: none"> • Flood Control • Erosion and Sedimentation Reduction • Water Quality • Water Conservation • Wildlife Habitat • Woodland • Energy • Recreation Resources 			

Source:
<https://www.nrcs.usda.gov/sites/default/files/2022-10/AK%20WFPO%20Fact%20Sheet%20-%20March%202022.pdf>

LIDAR Support from ADOT&PF

Will assist with:

- Creation of new geolocated map of Mendenhall River area
- Needed for new inundation maps to assist with both disaster planning and for FEMA flood insurance purposes
- Waiting for weather window and snow to melt

**Will support the interagency flood mapping work with Silver Jackets.*



Mendenhall River Cleanup

Team Rubicon Spring River Clean Up

- **Goals:**
 - Coordinated removal and clean up of household and non-natural debris on **CBJ land** along the river while water levels are low (*before April*);
 - Volunteer recruitment and training for future disaster preparedness.
- **CBJ's role:**
 - Equipment and staff support to Team Rubicon as needed; community awareness



Team Rubicon is a veteran-led humanitarian organization, built to serve communities before, during, and after disasters and crises.

Looking Forward

CBJ will continue to investigate and present to the Assembly available funding opportunities and any local matches for those programs.

The NRCS and USACOE studies and reports – as well as community and Assembly input - will help guide these efforts.

Questions or Comments?

floodresponse@juneau.gov

