

City and Borough of Juneau and Tlingit Haida Multi-Jurisdictional Hazard Mitigation Plan Update
Mitigation Action Plan - For Public Review 07/10/2025

Source	Action ID	Mitigation Project (Action Description)	Status of 2012 Projects (Completed, Ongoing, Not Started)	Select?		Priority (H, M L)	
				CBJ	T&H	CBJ	T&H
2012 HMP	1	Continue to educate residents about Avalanche Hazard risks and area and establish regular avalanche evaluating and forecasting during winter months	Ongoing	Y	N	M	n/a
2012 HMP, 2017 Draft, General, Survey	2	Explore facilitating federal buyout programs for homes in high hazard areas	Not Started	Y	Y	M/H	M/H
2012 HMP, Survey	3	Regulate all new construction in Severe Hazard areas; maintain high hazard zone designations in CBJ parcel data; update CBJ and T&H mapping to reflect hazard areas; establish special building/zoning codes for hazard areas	Not Started	Y	Y	H	M
2012 HMP	4	Prohibit removal of vegetation in landslide areas	Ongoing	Y	N	M	n/a
2012 HMP, 2017 HMP Update Draft, General, Survey	5	Thorough geological mapping of soils and slopes to include settling and liquefaction risks.	Ongoing	Y	Y	H	M
2012 HMP	6	Require homeowners to notify renters of hazard prior to occupancy	Not Started	Y	Y	L	M
2012 HMP	7	Increase code enforcement.	Ongoing	Y	N	H	n/a
2012 HMP	8	Update downtown fire hazard zone mapping to more accurately reflect highest hazard areas	Not Started	Y	N	L	n/a
2012 HMP	9	Explore updating cigarette receptacles to prevent ashtray fires	Ongoing	Y	N	L	n/a
2017 Draft	10	Install warning signage in mapped landslide zones		Y	Y	M	M
2017 Draft	11	Conduct an inventory and inspect high occupancy buildings and critical facilities and bridges to identify those needing seismic retrofitting, prioritize public buildings for upgrades, and complete renovations to strengthen vulnerable structures against earthquakes.		Y	N	M	n/a
2017 Draft	12	Bring the DHS&EM "Quake Cottage" to Juneau for earthquake simulation and education		Y	Y	L	L
2017 Draft, Survey, Risk Assessment	13	Elevate homes, businesses, and critical facilities in floodplains through targeted projects and grant programs to reduce flood risk, protect infrastructure, and preserve vulnerable neighborhoods—while also providing funding and resources to support elevation efforts.		Y	Y	H	M
2017 Draft, Survey, Risk Assessment	14	Continue to coordinate and support USGS with installation of additional USGS telemetry gauges and real-time monitoring systems in areas like Suicide Basin and key dams, rivers, and lakes to track water levels during heavy rain and hazard events, improving early warning and flood response capabilities.		Y	Y	H	H

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2017 Draft, Survey	15	Update and improve flood mapping (annual for specific flood events; update FIRMS, coordinate with community led and federally led activities.		Y	Y	H	H
2017 Draft	16	Explore terminal doppler radar coverage to predict rainfall more accurately (wind profiler (JAWS) is not publicly available. Need to identify good location that does not conflict with mountains (northern tip of Admiralty - explore opportunities to partner w/ NWS & FAA)		Y	Y	M	M
2017 Draft, Survey, Risk Assessment	17	Upgrade and maintain bridges, culverts, and drainage systems to handle large-scale flood events, reduce stormwater runoff, and prevent street flooding and erosion, while offering support for homeowners to repair private drainage connections.		Y	Y	H	M
2017 Draft	18	Require burn permits during dry conditions		Y	N	L	n/a
2017 Draft	19	Initiate study identifying potential tsunami sources		Y	Y	M	M
2017 Draft	20	Collaborate with Tsunami Ready Community Program and NWS to make Juneau Tsunami Ready and Storm Ready and ensure that schools and public buildings have means to receive emergency warnings		Y	Y	H	H
2017 Draft	21	Explore a study to evaluate lifespan of built structure and future development along the coast (including airport and Wastewater Treatment Plant)		Y	Y	M	L
2017 Draft	22	Explore development of continuity of operations plan		Y	Y	H	M

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General	23	Provide non-digital options for and redesign CBJ website and T&H websites (to address Tribal membership) to include: Add a hazard information tab to the website where residents can find all information related to emergency preparedness and communication. Key information to include: - Final FEMA-approved HMP - Links to hazard resources (volcano activity, fire, smoke, etc.) - GIS hazard maps, including current FEMA FIRMs layer and annual river bank elevation - Emergency resource guide for residents that explains appropriate responses at the household scale and provides contact information to help ensure residents receive the care and services required before, during, and after major events - Provide information to residents for how to report hazard-related incidents and conditions to jurisdiction officials. This will include the development of a process to receive and disseminate the information to the designated jurisdiction officials. - Evacuation routes and emergency shelters - Distribute information about the need for and items included in a go-bag - Secure and disseminate information about pest and pathogen damage on tree species coupled with information on how to best control and manage the results of outbreaks. - Increase public awareness of NFIP and CRS and benefits of purchasing flood insurance by adding relevant information to the proposed hazard tab on the jurisdiction's website. - List and amounts of food/water per person for emergency kit on website - Provide information regarding ICS training for residents		Y	Y	H	M
General	24	Align local IT and Cybersecurity policies and operations with best practices such as the CISA Cybersecurity Performance Goals and the Cyber Essentials Toolkit as well as the NIST Cybersecurity Framework, and continually update current best practices. Educate public employees and contractors about email scams. Periodically send phony email scams to test CBJ employees and contractors.		Y	N	M	n/a
General	25	Evaluate assessing critical facilities for snow load and ashfall capacity. Explore funding to retrofit any facility that does not meet recommended snow load of 30 pounds/sq foot.		Y	Y	L	M
General	26	Conduct a comprehensive inventory and condition assessment of all roads, bridges, culverts, ditches & shoulders. Follow-up after inundation events to document damages and prioritize mitigation		Y	N	L	n/a

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General	27	Create a database that includes photo and condition inventory of all critical facilities and aging infrastructure to document current (pre-disaster) conditions and contents to aid in facility repair after a disaster event and prioritize for replacement or rehabilitation. Update the condition inventory annually and after a natural hazard event that causes damage. Continue to expand inventory		Y	Y	H	H
General	28	Create an education program to ensure that all properties are visibly numbered.		Y	N	L	n/a
General	29	Revise existing disaster procedure to align current procedures to best practices as they move forward in exploring development debris management plan to include private residence protocols/guidelines.		Y	N	M	n/a
General	30	Draft a debris management plan.		N	Y	n/a	H
General	31	Draft an Emergency Action/Response Plan that includes information regarding evacuation and shelter plan. Include information on procedures for road closures, livestock and pets, storage, vehicles, assistance for evacuation and establish MOUs with partners through development.		Y	Y	H	M
General, Survey	32	Encourage development and regular updates to a special needs registry for elderly and vulnerable populations (non-mobile) to ensure accurate planning for their preparedness, communication, and evacuation during emergencies.		Y	Y	M	H
General	33	Encourage utility companies to bury existing powerlines to reduce power outages caused by downed power lines and required buried power lines in new developments.		Y	N	L	n/a
General	34	Establish community heating and cooling centers to provide relief for those who do not have access to heating or cooling on their own.		Y	Y	L	M
General	35	Explore benefits of joining the Firewise program.		Y	Y	M	L
General	36	Identify vegetation/fuel types, previous burn areas, areas to mitigate, grant funding specifically to reduce/remove fuels in high wildfire/brushfire areas		Y	Y	L	M
General	37	Implement cybersecurity training for all municipal employees and elected officials.		Y	Y	M	M
General	38	Install back-up generators at all critical facilities.		Y	Y	M	H
General	39	Investigate CBJ and public interest in participating in the CRS program. If interested, coordinate with the State Floodplain Coordinator to apply. T&H to support with representative. Implement Low Impact Development, Open Space Protection Plans, and Stormwater Management Regulations, which may allow for flood insurance discounts. Evaluate no adverse impact development.		Y	Y	H	M
General	40	Investigate the benefits of the USDA NRCS mitigation programs for flood protection.		Y	Y	H	M
General	41	Notify property owners that they are located in an inundation area and provide resources on the website for notification. (NWS flash flood emergency alert system would be triggered)		Y	Y	M	M

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General	42	Perform regular backups of municipal data and store this data in a format that can be recovered in the instance of a cyber attack or other event.		Y	N	M	n/a
General	43	Pursue funding for an engineering study to identify stormwater and snowfall drainage problem areas.		Y	N	H	n/a
General	44	Pursue funding for physical security enhancements for nonprofit and faith-based organizations		N	Y	n/a	L
General	45	Conduct research to assess the potential impacts of a Mount Edgecumbe eruption on Juneau, building on evidence that a past eruption affected the area over 12,000 years ago. (Change from conduct to support and general volcano)		Y	Y	L	M
General	46	Work with ADOT to review and update high-water flood assessments of bridges with an emphasis on structures at highest risk of impacts from flood waters.		Y	Y	L	L
Survey	47	Provide opportunities for public to be involved in ongoing HMP process and create annual plan to keep HMP up to date and don't let it lapse		Y	Y	H	H
Survey	48	Establish a community response team		Y	Y	H	H
Survey	49	Explore landslide ready community; predictive warning/forecasting including Infrasound Avalanche/Landslide monitoring and detection equipment		Y	Y	M	H
Survey	50	Replicate T&H emergency text notification system to CBJ wide		Y	Y	H	H
Survey	51	Update Dam Safety Information		Y	Y	H	M
Survey	52	Warning sirens and evacuation route signs throughout CBJ (flood, avalanche, landslide, tsunami)		Y	Y	L	L
Survey	53	Educate public on GLOF scenarios to prepare		Y	Y	H	M
Survey	54	Implement green infrastructure		N	Y	n/a	L
Survey	55	Provide sandbags and instructions to residents including education on how to place sand bags around home		Y	Y	H	M
Survey & Planning Team	56	Investigate and pursue Alternative route between Douglas and Juneau for access if roads or bridge is inoperative to provide redundancy. Investigate alternative routes in isolated subdivisions.		Y	Y	H	M
Survey	57	Look at State of Iowa in addressing flood hazards		Y	Y	M	M
Survey	58	Investigate short and long term mitigation actions to protect or selectively relocate residences, businesses, and critical facilities		Y	Y	H	H
Survey	59	Explore with community foundations and T&H implementation of disaster fund		Y	Y	M	H
Survey	60	Develop areas and make available housing and property outside high hazard risk areas		Y	Y	H	H
Survey	61	Install HESCO barriers		Y	N	H	n/a

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Survey	62	Install rip rap in conjunction with HESCO barriers to reduce erosion/undercutting of banks where the barriers are placed. Complete bank stabilization projects for areas destabilizing including WWTP		Y	Y	H	L
Survey	63	Increase affordable housing		N	Y	n/a	M
Survey	64	Provide financial assistance for more heat pumps		N	Y	n/a	L
Survey	65	Update strategy and continue to upgrade emergency notification system.		Y	Y	H	M
Survey	66	Create joint CBJ/T&H flood dedicated staff member focused on GLOF and public engagement		Y	Y	H	H
Survey	67	Provide transparency in adopting future hazard area mapping & studies without political pressure due to insurance and property value.		Y	Y	H	M
Planning Team	68	Mitigate erosion damage at Mendenhall Wastewater Treatment Plant		Y	Y	H	L
Risk Assessment	69	Survey Tlingit & Haida elders about any oral history of hazard events		n/a	Y	n/a	M
Risk Assessment	70	Update and make available to public Dam flood inundation mapping on annual basis for HHPD and regular basis for Significant and Low hazard dams and document regular inspections		Y	Y	L	L
Risk Assessment	71	Explore partnership to conduct seiche/ worst case scenario study for Lower Slate Lake Tailings Dam failure.		Y	N	M	n/a
Risk Assessment	72	Conduct monthly inspections of Salmon Creek Dam.		Y	Y	H	M
Risk Assessment	73	Explore partnering with UAS to conduct seismic study to better understand fault lines in the immediate vicinity of Juneau.		Y	Y	L	L
Risk Assessment	74	Establish earthquake event exercises for schools.		Y	Y	M	M
Risk Assessment	75	Reinforce transportation infrastructure to combat riverine scour.		Y	N	L	n/a
Risk Assessment	76	Explore fish habitat protection during emergency situations by placing barriers in riverbed to provide protected fish habitat during poor water quality, extreme flows, and large quantities of debris in Mendenhall River.		N	Y	n/a	M
Risk Assessment	77	Develop team to cultivate relationships with mining industry to evaluate mining industry contributing to almost 50% of CBJ HAZMAT releases.		N	Y	n/a	H
Risk Assessment	78	Maintain and practice marine hazmat spill containment exercises and equipment.		Y	Y	H	M

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Risk Assessment	79	Conduct updated commodity flow study to better understand the hazardous materials that come into and are produced within the community, including transportation of hazardous goods in the Gastineau Channel.		Y	Y	L	L
Risk Assessment	80	Install cover/netting along coastal roadways where rock topples or falls are most prevalent, to prevent roadway blockage.		Y	N	M	n/a
Risk Assessment	81	Create publicly available tool on website to report landslide observations and symptoms.		Y	Y	H	H
Risk Assessment	82	Explore hardening/connectivity to reinforce underwater cables to be more resilient against tsunami waves and submarine landslides.		N	Y	n/a	L
Risk Assessment	83	Build upon DGGS submarine landslide study to further understand risks of identified tsunami hazards, and potentially identify previously unknown sources of submarine landslides that may cause a tsunami.		Y	Y	L	L
Risk Assessment	84	Obtain funding to create airplane mitigation "kit" to protect planes and airport operations during ashfall (plastic covering for engines, equipment to remove ash on planes, etc.)		N	Y	n/a	L
Risk Assessment	85	Broaden emergency volunteer program to distribute masks, tape windows, protect vehicles for residents including elderly and vulnerable populations.		Y	Y	H	M
Risk Assessment	86	Explore options to conduct study of local tidal and geologic shoreline conditions to better understand how a marine spill may be transported around the community.		Y	Y	L	M
Risk Assessment	87	Harden dock and boat harbor facilities as well as bridges which cross the Gastineau Channel to better withstand tsunami and other hazard impacts.		Y	Y	M	M
Risk Assessment	88	Educate homeowners on potentially hazardous materials commonly found in homes of provide sources for such information.		Y	Y	M	M
Risk Assessment	89	Study and monitor infestations in Juneau (possibly grid surveys).		Y	Y	L	M
Risk Assessment	90	Incorporate flood mitigation in local planning.		Y	Y	H	H
Risk Assessment	91	Develop a floodplain management plan and update it regularly.		Y	Y	H	M
Risk Assessment	92	Review ASCE 24-05 Flood Resistant Design and Construction (standard in the International Building Code) and consider adopting it in local building code.		Y	Y	M	L
Risk Assessment	93	Encourage the use of porous pavement, vegetative barriers, and islands in large parking areas.		Y	Y	M	L
Risk Assessment	94	Conduct NFIP community workshops to provide information and (non monetary) incentives for property owners to acquire flood insurance.		Y	Y	H	M

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Risk Assessment	95	Complete and maintain FEMA elevation certificates for pre-FIRM and/or post-FIRM buildings.		Y	Y	H	M
Risk Assessment	96	Explore offering (non monetary) incentives for building above the required freeboard minimum (code plus).		Y	Y	L	L
Facebook & Planning Team	97	Start process of identifying new landfill location and or transfer site or expansion at existing site to include evaluation of CBJ facility that accepts disaster debris.		Y	Y	H	M
Facebook	98	Educate Public on how to interact with HESCO barriers to make them more visually appealing.		Y	N	H	n/a
Facebook	99	Partner with T&H and agencies to test soil after flood events to determine if contaminated.		Y	Y	H	M
General	100	Explore including costs for post construction inspections for all private and public infrastructure development and repair and implementation of fees		Y	Y	M	L
Planning Team	101	Gold Creek Flume & Flood Control rehabilitation & improvement		Y	Y	H	M
Planning Team	102	Highlands Drainage Infrastructure (Grizzly) rehabilitation & improvement or replacement to improve drainage to protect Egan Drive & High School & residences		Y	Y	H	M
Planning Team	103	Conduct a new water source investigation to determine a secondary/redundant source for if the primary water source is damaged		Y	Y	H	M
Planning Team	104	Assess and evaluate vulnerability to water supply infrastructure		Y	Y	H	M