

DESK PACKET

(MATERIALS SUBMITTED AFTER MEETING PACKET PUBLICATION)

G. OTHER

1. Hazard Mitigation Plan Update Presentation

MEMORANDUM

TO: Jeremy Brantley, Planning Commission Chair

THRU: Brenda Ahlberg, OEM Manager

FROM: Mary Toll, HMP Update Project Manager

DATE: June 13, 2024

RE: Summary of Hazard Mitigation Plan update

Summary of Hazard Mitigation Plan update process to date

RFP issued October 11, 2023
Bids due November 1, 2023
Notice to Proceed January 25, 2024

APC meetings attended:

- May 8, 2024 Hope/Sunrise
- May 8, 2024 Cooper Landing
- May 8, 2024 Nikiski
- May 15, 2024 Anchor point
- June 6, 2024 Moose Pass

Community and other meetings attended:

- May 1, 2024 City of Seldovia administration
- May 18, 2024 Funny River Community annual meeting
- May 21, 2024 City of Seward Planning and Zoning Commission
- June 8, 2024 Kenai River Fair

Future meetings:

- June 24, 2024 Planning Commission
- July 19, 2024 LEPC
- TBD Planning Commission (for recommendation to Assembly)
- TBD Assembly (for approval)

Future Schedule:

- July 2024 Draft plan available for review and comment by public and stakeholders
- August 2024 Comments incorporated as appropriate, draft updated
- September 2024 Draft sent to State and FEMA Hazard Mitigation review personnel, with request for concurrent review

- October 2024 State and FEMA comments incorporated; plan resubmitted through State for final approval by FEMA
- November 2024 Assembly approval

FEMA requires the Hazard Mitigation Plan be updated on a 5-year cycle. Our current plan expires December 18, 2024. We are submitting the draft Mitigation Action Plan (goals and suggested actions or projects) portion of the update for your review at this time. The complete draft plan has not been submitted or reviewed by the OEM Department at this time. The draft plan is not due until July 23, 2024, 180 days from the Notice to Proceed, in compliance with the contract with Kuna Engineering.

All of the APC and community meetings were attended in-person by at least one Kuna representative and at least one OEM representative. The public process through the community and APC meetings provided staff with additional concerns and goals that have been incorporated into the draft Mitigation Action Plan that accompanies this memo. If needed, the **prior** 2019 updated Hazard Mitigation Plan is available on the OEM website at [All-Hazard Mitigation \(kpb.us\)](http://kpb.us). Information on the **current** update is also included on the OEM website, along with a link to the story map, at [KPB Hazard Mitigation Plan Update 2024 \(arcgis.com\)](http://arcgis.com).

The Borough plans to produce a full multi-jurisdictional plan in the next update cycle. The current 2024 update cycle began that multi-jurisdictional process with the inclusion of the cities of Seward and Seldovia. The remaining cities of Homer, Soldotna, Kenai and Kachemak will be included in the next update. We are also researching the potential for tribal entities to join in the next update cycle as part of the multi-jurisdictional plan update.

Although not a signatory on the plan, the Seward Bear Creek Flood Service Area (SBCFSA) has been an integral part of the update process, providing many of the proposed and completed actions for communities within their boundaries. Those communities include the City of Seward, Lowell Point and Bear Creek. The SBCFSA completed a standalone Hazard Mitigation Plan in the past; this update will ensure that their concerns and goals are incorporated into the borough's HMP now and in the future.

HAZARD MITIGATION PLAN GOALS

In developing the HMP, the planning team worked to develop goals reducing hazard risk in the borough. These goals include a variety of different examples and implementation ideas that could be developed into implementation actions. Where possible the mitigation goals associated with the category types used in the previous update in 2019 are being combined to delete repetition across the plan. The mitigation goals from past HMPs for the City of Seldovia, City of Seward, and SBCFSA were also fully integrated into this plan update.

The HMP planning team reviewed past HMP goals as well as new goals and developed eight mitigation goals that the KPB will pursue to reduce hazard risk in the borough:

Goal #1: Protect the Borough population by mitigating or lessening hazard effects.

Goal #2: Identify and expand on hazards that affect the Borough.

Goal #3: Identify and prioritize evaluations, upgrades and retrofit measures for KPB critical facilities and infrastructure that are hazard vulnerable.

Goal #4: Educate the Borough population on hazard awareness, personal responsibility, preparation and response.

Goal #5: Identify, enhance and utilize existing resources.

Goal #6: Identify hazards applicable to critical infrastructure and mitigation ideas.

Goal #7: Prioritize and implement projects to reduce risk and increase resilience.

Goal #8: Use each hazard event as an educational opportunity.

These goals have been determined to be as all-encompassing and inclusive of implementation ideas and actions as possible.

Implementation Ideas (Goals) serve as a means of conveying specific ways in which hazard mitigation strategies can be developed to reduce vulnerability to hazards.

While **Implementation Actions** (Description) serve as a means of conveying potential projects, partnerships, and collaborations that can develop into real world hazard mitigation improvements. These actions include looking at benefits that would help alleviate future hazard related issues. As well as the technical components, capabilities and needs required to get those actions developed within a specific timeframe or as an ongoing goal.

Along with these implementation ideas and actions within the plan development process, there are a number of additional items looked at that are included in the strategy for achieving these mitigation goals. They are included in the HMP update and are as follows:

Location Area: Area(s) affected by Hazard, can be borough wide.

Hazard: Identified hazards to which the implementation idea applies, this could include specific hazards or all hazards.

Responsible Department: Agency or entity in charge of implementing idea into an action that can be developed, processed and completed.

Priority Rating: The rank, either High, Medium or Low in terms of priority to implement the action.

- High priorities are associated with actions for hazards that impact the KPB on an annual or near annual basis and generate impacts to critical facilities and/or people.
- Medium priorities are associated with actions for hazards that do not typically generate impacts to critical facilities and/or people.
- Low priorities are associated with actions for hazards that have limited impact.

Cost Analysis:

- High: Existing funding will not cover the cost of the action; implementation would require new revenue (ie grants, state and federal appropriations).
- Medium: The action could be implemented with existing funding but would require a re-apportionment of the budget or a budget amendment, or the cost of the action would have to be spread over multiple years. (ie additional state or local funding).
- Low: The action could be funded under the existing budget. The action is part of or can be part of an ongoing existing program.

Benefit Analysis:

- High: Action will provide an immediate reduction of risk exposure for life and property.
- Medium: Action will have a long-term impact on the reduction of risk exposure for life and property, or action will provide an immediate reduction in the risk exposure for property.
- Low: Long-term benefits of the action are difficult to quantify in the short term.

Potential Funding Sources: Grants, assistance or agency support that can help pay for the implementation idea and action. See Funding Sources in Appendix of Plan

Timeline: The proposed time frame in which the implementation idea can be completed.

Plans Included in Development: Other plans that can be included to guide the mitigation action plan.

HMP Mitigation Goal (Ongoing, New): Whether goal is ongoing from previous plan(s) or new.

In the review and integration of plan goals from the 2019 KPB HMP, 2020 City of Seward/SBCFSA HMP, and 2018 City of Seldovia HMP the planning team removed goals that were completed, integrated into existing goals or were no longer relevant to be included in the HMP. These deleted goals and the actions taken by the planning team related to their removal are included in the mitigation strategy section of the HMP.

Goal #	Action	Description	Location Area	Hazard	Responsible Department	Priority Rating	Cost Analysis	Benefit Analysis	Potential Funding Sources	Timeframe (1-3 Years, 2-4 Years, 3-5 Years)	Other Plans to include in Development	HMP Mitigation Goal (Ongoing, New)	Public Input for Goals from Community Meetings, APCs and Outreach events
1	Identify and expand on hazards that affect the Borough	Protect Borough employees with continued and expanded hazard training and facility upgrades.	KPB Areawide	All Hazards	KPB Administration	High	Medium	Low	KPB, FEMA	3-5 Years	Comprehensive Plan	New	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024)
		Continue maintenance, upgrades and debris storage to help manage erosion and sediment accumulation. Including Lowell Creek Outfall, Lowell Point Road and culverts throughout the Borough. Also support coastal erosion mitigation along Kenai Spur Highway and Sterling Highway.	KPB Areawide, City of Seward, SBCFSA	Flooding, coastal erosion	City of Seward, SBCFSA, USACE, State DOT	High	High	High	USACE, KPB OEM, City of Seward, DOT, SBCFSA	3-5 Years	USACE Lowell Creek Flood Diversion Plan, City of Seward Hazard Mitigation Plan (2020), State Hazard Mitigation Plan (2023).	Ongoing	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Nikiski APC Meeting (May 2024)
		Partner with DGGs and USGS to establish monitoring of Lowell Point Road and Jakalof Bay Road as well as other areas in the KPB subject to landslides that can be a danger to residents and disrupt transportation.	KPB Areawide, City of Seldovia, City of Seward, SBCFSA	Landslides	KPB OEM, City of Seward, City of Seldovia, USGS, DGGs	High	Medium	Medium	USACE, KPB OEM, City of Seward, DOT, USGS, City of Seldovia	2-4 Years	USACE Lowell Creek Flood Diversion Plan, City of Seward Hazard Mitigation Plan (2020), State Hazard Mitigation Plan (2023).	New	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024)
		Obtain an exemption to the Alaska Department of Natural Resources (DNR) Material Sales Fees on navigable rivers and streams and state lands for sediment and debris management, stream channel maintenance, and flood control or other mitigation projects.	KPB Areawide, City of Seward, SBCFSA	Flooding, coastal erosion	State DNR, City of Seward, SBCFSA, KPB OEM	High	High	Low	DNR, SBCFSA, NCRS, City of Seward	2-4 Years	City of Seward Hazard Mitigation Plan (2020), State Hazard Mitigation Plan (2023),	Ongoing	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024)
		Complete a Borough-wide flood and coastal erosion assessment and evaluation, using predictive modelling tools such as USGS CoSMoS, to identify mitigation targets, including areas that threaten infrastructure such as the Sterling Highway, Kenai Spur Highway and K Beach Road.	KPB Areawide	Flooding, coastal erosion, landslides	OEM, River Center, Planning	Medium	Medium	Low	BRIC, NCRF, DGGs	3-5 Years	Comprehensive Plan, DGGs Coastal Community Erosion Assessment, Kachemak National Estuarine Research Reserve (NOAA/University of Alaska)	Ongoing	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024)
		Identify and mitigate possible levee or dam failures, in SBCFSA and the rest of the Borough. Work with residents, industry and government agencies to develop and disseminate information about areas in danger from levee or dam failure. Harden and/or retrofit existing levees per USACE guidelines. The City of Seldovia is working with NOAA on improved upper dam access for fish passage from stream, and upgrades to aging dam infrastructure.	KPB Areawide, City of Seldovia, City of Seward, SBCFSA	Flooding, Erosion, Landslide, Earthquake	USACE, State (DNR & DOT), Local Government, Utility Companies, SBCFSA	Medium	High	High	USACE, SBCFSA, FEMA, State, Municipalities	2-4 Years	City of Seward and SBCFSA Hazard Mitigation Plan (2020), State Hazard Mitigation Plan (2023), City of Seldovia Hazard Mitigation Plan (2018), City of Homer Hazard Mitigation Plan (2022)	Ongoing	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024)

		Identify and mitigate vulnerabilities in emergency transportation not on the road system. (as an example Jakolof Bay Road, which is a State road).	City of Seldovia, Tyonek, Port Graham, Nanwalek, Bear Cove, Halibut Cove, and other areas off the road system in the KPB.	All Hazards	KPB OEM, State DOT, KPB Road Service Area	Medium	High	High	State, HMGP, PDM, Tribal Governments	3-5 Years	Community Response Plans, Emergency Response Plans	Ongoing	City of Seldovia Public Meeting (May 2024),
		Pursue funding to improve and update Flood Insurance Rate Maps (FIRMs), as well as other maps and plans, such as Drainage Plans, Sediment Management Plans, or Watershed Management Plans.	KPB Areawide, City of Seldovia, City of Seward, SBCFSA	Flooding, coastal erosion	KPB River Center, KPB Planning, City of Seward, City of Seldovia, SBCFSA, FEMA	Medium	High	Low	FEMA, DCRA, SBCFSA, BRIC and NCRF	3-5 Years	Flood Insurance Studies (FIS), City of Seldovia Hazard Mitigation Plan (2018), City of Seward Hazard Mitigation Plan (2020), Comprehensive Plan, State Hazard Mitigation Plan (2023)	Ongoing	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024)
2	Protect the Borough population by mitigating or lessening hazard effects	Develop and implement a floodplain ordinance within City Code in compliance with the NFIP.	City of Seldovia	Flooding	City of Seldovia, KPB River Center	High	Medium	Low	City of Seldovia, FEMA: HMA, Flood Mitigation Assistance (FMA)	2-4 Years	City of Seldovia Hazard Mitigation Plan (2018), State Hazard Mitigation Plan (2023)	Ongoing	City of Seldovia Public Meeting (May 2024),
		Evaluate and upgrade Borough maintained roads for effects from hazards for evacuation and mitigation potential; use as basis for CIP prioritization. Access and egress to communities and if that is considered, i.e. wildfire evacuation, or evacuation route for Toklat Way subdivision through Moose Pass.	KPB Areawide	All Hazards	KPB Planning and Road Service Area, KPB OEM	High	High	Medium	KPB, BRIC	2-4 Years	Comprehensive Plan, State Hazard Mitigation Plan (2023)	New	Cooper Landing APC Meeting (May 2024), Hope APC Meeting (May 2024), Anchor Point Public Meeting (May 2024), Moose Pass APC Meeting (June 2024), Funny River Community Meeting (May 2024)
		Identify special needs, at-risk and underserved populations including building or maintaining a database of voluntary registration for special needs and underserved populations, similar to Rapid Notify registration system.	KPB Areawide, City of Seldovia, City of Seward, SBCFSA	All Hazards	State Department of Health, Department of Corrections, KPB OEM, KPB Planning	High	High	Low	DCRA, Public Assistance Mitigation, KPB	1-3 Years	State Hazard Mitigation Plan (2023), Comprehensive Plan	Ongoing	Hope APC Meeting (May 2024), City of Seward Meeting (May 2024), SBCFSA Work Session (April 2024)
		Identify and map all congregate living facilities and institutions with special needs populations, such as assisted living facilities, day care facilities, rehab facilities, senior housing, correctional facilities, halfway houses; some of this information may not be suitable for public access.	KPB Areawide, City of Seldovia, City of Seward, SBCFSA	All Hazards	State Department of Health, Department of Corrections, KPB OEM, KPB Planning	High	Medium	Low	DCRA, Public Assistance Mitigation, KPB	1-3 Years	State Hazard Mitigation Plan (2023), Comprehensive Plan	Ongoing	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024)

Identify areas of seasonal populations, such as campgrounds, RV parks, fish processing plants, dipnet areas and make a plan for their notification of an applicable hazard event. Plan for their notification and evacuation.	KPB Areawide, City of Seldovia, City of Seward, SBCFSA	All Hazards	KPB OEM, State DNR	High	High	Low	DNR, KPB, BRIC, HMGP,	1-3 Years	State Hazard Mitigation Plan (2023), Comprehensive Plan	New	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024), Hope APC Meeting (May 2024)
Identify and protect public and private resource facilities such as water sources, wastewater treatment plants, cell towers and power substations	KPB Areawide, City of Seldovia, City of Seward, SBCFSA	All Hazards	KPB Administration, State (DHSEM), Local Utility Companies	High	High	Low	State (DHSEM), Local Utility Companies, BRIC, HMGP, KPB	1-3 Years	State Hazard Mitigation Plan (2023), Comprehensive Plan, Utility Company Plans	New	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024), Funny River Community Meeting (May 2024), Nikiski APC Meeting (May 2024)
Identify, improve and maintain roads that provide public access to beaches; these accesses may be needed for evacuation following a hazard event or emergency and may need to accommodate large numbers of evacuees based on the time of year.	KPB Areawide, City of Seldovia, City of Seward	All Hazards	KPB, DNR, DOT, KPB Road Service Area	High	High	Medium	KPB, BRIC, HMGP,	1-3 Years	State Hazard Mitigation Plan (2023)	New	Hope APC Meeting (May 2024), Anchor Point Public Meeting (May 2024), Nikiski APC Meeting (May 2024)
Support ADEC's funded creation of a hazardous waste program under the Resource Conservation and Recovery Act (RCRA). This could be used to support ongoing cleanup efforts in the KPB	KPB Areawide	Human-Caused Hazard	DEC	High	High	Low	DEC	1-3 Years	Comprehensive Plan, EPA and DEC RCRA State Plans.	New	Moose Pass Meeting (June 2024), City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024)
Support the efforts of SBCFSA, City of Seward and the USACE to resolve the Lowell Creek Diversion Tunnel issues and outfall sediment.	City of Seward, SBCFSA	Flooding, Landslide	SBCFSA, City of Seward, KPB OEM	High	High	Low	USACE CWIFP, BRIC, KPB, City of Seward, SBCFSA	1-3 Years	State Hazard Mitigation Plan (2023), Comprehensive Plan, City of Seward HMP (2020)	Ongoing	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024),
Minimize workplace violence by continuing installation of secured and controlled entries to Borough and school district buildings. Adopt threat response procedures and educate all Borough employees.	KPB Areawide	Human-Caused Hazard	KPB Risk Management, KPB Human Resources	High	High	Medium	KPB	1-3 Years	State Hazard Mitigation Plan (2023)	Ongoing	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024)

Verify that all critical function structures and available fuel supplies have alternate power sources during power outages and that portable power sources are available in the event critical response resources need to be moved during or after an event. If needed, upgrade fuel tanks and storage facilities to enable storage of sufficient fuel amounts. City of Seward: install generator for AVTEC with main power distribution disconnect switch. Homer Electric Association (HEA) is pursuing a grant with Seldovia Village Tribe and the City of Seldovia to develop fiber connection between Homer and the community.	KPB Areawide, City of Seldovia, City of Seward	All Hazards	KPB OEM	High	High	Medium	HMGP, BRIC, SHSP, KPB	1-3 Years	State Hazard Mitigation Plan (2023)	New	City of Seward Community and Planning Meeting, SBCFSA Work Session, City of Seldovia Public Meeting (May 2024), Cooper Landing APC Meeting (May 2024), Hope APC Meeting (May 2024), Nikiski APC Meeting (May 2024)
Verify that all Emergency Operations Plans (EOP) are updated with current information. Update and maintain KPB EOP with reference in Hazard Mitigation Plan.	KPB Areawide, City of Seldovia, City of Seward	All Hazards	KPB OEM	High	High	Low	KPB	1-3 Years	State EOP, KPB EOP, City of Seldovia EOP, City of Seward EOP	New	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024)
Verify that potable water can be made available to responders and residents during an event, even if bottled water availability is limited. This may require an inventory of private, high-volume wells that have been tested, such as seafood processors, ice producers, restaurants, senior centers, etc.	KPB Areawide, City of Seldovia, City of Seward	All Hazards	KPB OEM	High	Medium	Low	HMGP, BRIC, KPB	2-4 Years	State Hazard Mitigation Plan (2023)	New	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024)
Provide information and support for continuity (COOP) plans for KPB departments.	KPB Areawide	All Hazards	KPB OEM, KPB Administration, KPB River Center, KPB Planning	High	High	Low	KPB	1-3 Years	Comprehensive Plan	New	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024)
Establish a retaining structure in Lowell Canyon to prevent avalanches from disrupting city water storage system.	City of Seward, SBCFSA	Landslides, avalanches	SBCFSA, City of Seward, KPB OEM, USACE	High	High	High	USACE, SBCFSA, FEMA, State, Municipalities	3-5 Years	USACE Lowell Creek Flood Diversion Plan, City of Seward Hazard Mitigation Plan (2020), State Hazard Mitigation Plan (2023)	Ongoing	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024)
Review and appropriately revise KPB development standards and requirements, including floodplain standards for permitting and construction, subdivision standards, road construction permitting and standards; adopt and implement development standards and permit requirements in hazard areas where applicable.	KPB Areawide	All Hazards	KPB Planning	Medium	Medium	Medium	KPB	2-4 Years	State Hazard Mitigation Plan (2023), Comprehensive Plan	Ongoing	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024)
Revise KPB 17.10 Borough Lands and Resources to enable or require tax foreclosure properties located in hazard zones to be classified as Preservation after foreclosure	KPB Areawide	All Hazards	KPB Land Management	Medium	High	Low	KPB	2-4 Years	Comprehensive Plan	Ongoing	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024)

Construct a road to connect Nanwalek and Port Graham; work with both communities to facilitate a cooperative situation to maximize community use of facilities and evacuation route as needed during an event	Nanwalek, Port Graham	All Hazards	State DOT, BIA, Native Village of Nanwalek, Native Village of Port Graham, Chugachmiut	Medium	Medium	High	FHWA (TTP), BRIC	3-5 Years	State Hazard Mitigation Plan (2023), Comprehensive Plan	New	City of Seldovia Public Meeting (May 2024),
Identify potentially harmful substances used or disposed of within the Borough that are inadequately regulated by government agencies to serve as a basis for future planning, monitoring, response or enforcement activity.	KPB Areawide, City of Seldovia, City of Seward,	Human-Caused Hazard	KPB, DEC Solid Waste Program	Medium	Low	Low	KPB	2-4 Years	State Hazard Mitigation Plan (2023), Comprehensive Plan	Ongoing	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024)
Conduct joint site visits with key permitting agencies to evaluate repetitively damaged roads and formulate plans for flood mitigation.	KPB Areawide, City of Seldovia, City of Seward,	Flooding	SBCFSA, KPB River Center	Medium	Medium	Low	HMGP, BRIC, NRCS, KPB	1-3 Years	State Hazard Mitigation Plan (2023), City of Seward HMP (2020), City of Seldovia HMP (2018)	New	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024)
Work with interested agencies to identify degraded floodplains and investigate the potential for restoring or improving water passage, removing repetitively damaged structures and/or acquiring land to restore or preserve floodplain function.	KPB Areawide, City of Seldovia, City of Seward,	Flooding	SBCFSA, KPB River Center, Kenai Watershed Forum	Medium	Medium	Medium	HMGP, BRIC, NRCS, WPDG, KPB	2-4 Years	State Hazard Mitigation Plan (2023), City of Seward/SBCFSA HMP (2020), City of Seldovia HMP (2018), Kenai Watershed Forum 2022 Freshwater Conservation Action Plan.	Ongoing	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024)
Create manuals for critical facilities to document AM and PM requirements; manuals to include lists of vulnerabilities that need mitigation.	KPB Areawide, City of Seldovia, City of Seward,	All Hazards	KPB OEM	Medium	Medium	Low	KPB	2-4 Years	State Hazard Mitigation Plan (2023), City of Seward HMP (2020), City of Seldovia HMP (2018)	New	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024)
Complete or update Small Community Emergency Response Plans (SCERPs) in collaboration with DHS&EM for those unincorporated communities that qualify for this program. Support community efforts to increase initial independent preparation and response, such as volunteer fire and emergency departments, community gardens, and community centers.	KPB Areawide, City of Seldovia, City of Seward,	All Hazards	KPB OEM	Medium	Medium	Low	KPB, DHS&EM	1-3 Years	Emergency Operation Plan (EOP), State Hazard Mitigation Plan (2023)	New	Hope APC Meeting (May 2024), Moose Pass APC Meeting (June 2024), City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024), Funny River Community Meeting
Promote public awareness of potential hazards associated with transporting and handling toxic and hazardous substances in the community, including response actions.	KPB Areawide, City of Seldovia, City of Seward,	Human-Caused Hazard	KPB OEM, DOT	Low	Medium	Low	DEC	1-3 Years	Comprehensive Plan, EPA and DEC RCRA State Plans.	Ongoing	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024)
Research mitigation options for electric vehicles during power outages; educate public on charging locations.	KPB Areawide, City of Seldovia, City of Seward,	All Hazards	KPB OEM, DOT	Low	Low	Medium	FHWA, PROTECT	2-4 Years	State Hazard Mitigation Plan (2023), Comprehensive Plan	New	City of Seldovia Meeting (May 2024), City of Seward Meeting (May 2024), SBCFSA Work Session (April 2024)

3	Identify and prioritize evaluations, upgrades and retrofit measures for KPB critical facilities and infrastructure that are hazard vulnerable	Perform a Peninsula-wide assessment of communication systems vulnerabilities . There is a need to register cell phones with the KPB to receive emergency alerts and all-clears. A siren is no longer used in Hope and the community needs to alert people to emergencies.	KPB Areawide	All Hazards	KPB OEM, DHSEM, City of Seldovia, City of Seward	High	Medium	Medium	HMGP, BRIC, KPB, City of Seward, City of Seldovia, DHSEM	1-3 Years	State Hazard Mitigation Plan (2023), City of Seward HMP (2020), City of Seldovia HMP (2018)	Ongoing	Hope APC Meeting (May 2024), City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024)
		Assemble prioritized lists of Borough- owned structures, City of Seldovia and City of Seward facilities to identify changes, non-structural measures, evaluations of facilities, and upgrades or retrofits needed to meet current hazard standards and State Building Code. Examples include emergency response facilities, hospitals, schools, other Borough-owned facilities. Prepare a funding plan and estimate for needed structural upgrades.	KPB Areawide, City of Seldovia, City of Seward	Earthquakes, Flooding, Severe Weather, Erosion, Wildfires, Human-Caused Hazard	KPB OEM, KPB Planning, KPB Maintenance, KPB Assessing Department, City of Seward, City of Seldovia,	Medium	Medium	High	HMGP, BRIC, KPB, City of Seward, City of Seldovia, DHSEM	3-5 Years	Emergency Operation Plan (EOP), State Hazard Mitigation Plan (2023)	Ongoing	Hope APC Meeting (May 2024), City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024), Funny River Community Meeting (May 2024)
		Work with utility companies to encourage or require underground installation in new or upgraded developments; this may require changes to KPB Codes, grant funding, reduced rates, tax incentives, etc.	KPB Areawide	Flooding, Severe Weather, Avalanches, Earthquake, Human- Caused Hazards	KPB OEM, KPB Planning, Local Utility Companies	Medium	Medium	Low	KPB	3-5 Years	Comprehensive Plan	Ongoing	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024)
4	Educate the Borough population on hazard awareness, personal responsibility, preparation and response.	Encourage residents to have a minimum 7-day emergency supply kit and a plan to address hazard impacts such as injuries, suspension or delay of emergency services, power outages, road blockages, loss of heat, frozen pipes, fallen trees, store closures, and stock emergency supplies and stock emergency supplies and provide care for animals and pets. Pursue commercial participation with promotions on hazard kit supplies from local vendors (Hazard Mitigation and Preparation month)	KPB Areawide, City of Seldovia, City of Seward,	All Hazards	KPB OEM, City of Seldovia, City of Seward, SBCFSA	High	Medium	Low	KPB, City of Seldovia, City of Seward, HMGP, BRIC	1-3 Years	State Hazard Mitigation Plan (2023), City of Seward HMP (2020), City of Seldovia HMP (2018)	Ongoing	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024), Nikiski APC Meeting (May 2024), Hope APC Meeting (May 2024), Cooper Landing APC Meeting (May 2024)
		Work with tourism agencies to provide hazard preparation and response information to seasonal populations.	KPB Areawide, City of Seldovia, City of Seward	All Hazards	KPB OEM, City of Seldovia, City of Seward, SBCFSA	High	High	Low	KPB, City of Seldovia, City of Seward, DHSEM	1-3 Years	State Hazard Mitigation Plan (2023), Comprehensive Plan	Ongoing	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024)
		With cooperation from owners, identify successful private flood-proofing projects to foster a positive view of mitigation and preparation	KPB Areawide, City of Seldovia, City of Seward	Flooding	KPB OEM, KPB River Center, City of Seldovia, City of Seward, SBCFSA	High	High	Low	KPB, City of Seward, City of Seldovia	1-3 Years	City of Seward HMP (2020), City of Seldovia HMP (2018)	Ongoing	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024), Funny River Community Meeting (May 2024)

Work with utility and fuel companies to educate customers on appropriate pre- and post-event actions and precautions	KPB Areawide, City of Seldovia, City of Seward	All Hazards	KPB OEM, City of Seldovia, City of Seward, SBCFSA	Medium	High	Low	KPB, City of Seldovia, City of Seward, Local Utility Companies	1-3 Years	State Hazard Mitigation Plan (2023), Comprehensive Plan	Ongoing	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024)
Promote Hazard Mitigation education to the public schools with a Hazard Education and Mitigation month. Support or provide avalanche awareness classes for outdoor recreationalists; work with KPBSD to provide class credits to students.	KPB Areawide	All Hazards	KPBSD, KPB OEM, City of Seldovia, City of Seward, SBCFSA	Medium	High	Low	KPB, City of Seward, City of Seldovia	2-4 Years	2022-2027 KPBSD Strategic Plan,	Ongoing	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024)
Add hazard maps to GIS public map options	KPB Areawide	All Hazards	KPB GIS	Medium	Medium	Low	KPB	2-4 Years	City of Seward HMP (2020), City of Seldovia HMP (2018)	New	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024)
Work with vendors to provide incentives to purchase safety equipment	KPB Areawide, City of Seldovia, City of Seward	All Hazards	KPB OEM, City of Seldovia, City of Seward SBCFSA	Medium	Medium	Medium	KPB, DHSEM, HMGF, BRIC	2-4 Years	State Hazard Mitigation Plan (2023), Comprehensive Plan	Ongoing	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024)
Work with fuel suppliers to monitor fuel tank conditions and provide information to the public on safe fuel storage options . As an example propane tanks are not elevated at the school in Hope, and instead should be resting on the ground.	KPB Areawide	All Hazards	KPB OEM, City of Seldovia, City of Seward, SBCFSA	Medium	Medium	Low	KPB, City of Seward, City of Seldovia, ADEC	1-3 Years	State Hazard Mitigation Plan (2023), City of Seward HMP (2020), City of Seldovia HMP (2018)	Ongoing	Hope APC Meeting (May 2024) , City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024)
Educate homeowners on potentially hazardous materials commonly found in homes or provide sources of such information	KPB Areawide	Human-Caused Hazard	KPB OEM, City of Seldovia, City of Seward, SBCFSA	Medium	Medium	Low	KPB, City of Seward, City of Seldovia, ADEC	1-3 Years	State Hazard Mitigation Plan (2023), City of Seward HMP (2020), City of Seldovia HMP (2018)	Ongoing	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024)
Provide 'Best Practices' information to homeowners, realtors and contractors	KPB Areawide, City of Seldovia, City of Seward	All Hazards	KPB Planning, KPB River Center, KPB Assessing, City of Seward, City of Seldovia	Medium	High	Low	KPB, City of Seward, City of Seldovia	1-3 Years	Comprehensive Plan, City of Seward HMP (2020), City of Seldovia HMP (2018)	Ongoing	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024)
Create electrical infrastructure redundancies to reduce the risk of prolonged power outages, such as completing the underground electrical loop on Lowell Pt. from Beach Drive to Lowell Pt. Rd., and the loop from Shady Ln. to Beach Drive. Develop distribution lines in avalanche areas.	KPB Areawide, City of Seldovia, City of Seward,	Avalanches, landslides	KPB OEM, City of Seward, City of Seldovia	Medium	High	High	Utility Companies, KPB OEM	2-4 Years	Comprehensive Plan, City of Seward HMP (2020), City of Seldovia HMP (2018)	Ongoing	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024)

		Identify businesses and institutions in high-risk areas in the Borough and verify they have plans in place for hazard response.	KPB Areawide, City of Seldovia, City of Seward,	All Hazards	KPB OEM, City of Seldovia, City of Seward, SBCFSA	Low	High	Low	KPB, City of Seward, City of Seldovia	2-4 Years	Comprehensive Plan	Ongoing	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024)
5	Identify, enhance and utilize existing resources	Consistently provide KPB comments on proposed capital improvements for State-owned resources. Encourage public and Borough participation during comment periods for infrastructure funding, construction or facility upgrades.	KPB Areawide	All Hazards	KPB OEM, KPB Planning, City of Seward, City of Seldovia	High	Low	Medium	KPB, ADOT, ADNR	2-4 Years	Comprehensive Plan, City of Seward HMP (2020), City of Seldovia HMP (2018)	New	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024)
		Fund a dedicated GIS position in OEM to enhance hazard research, response and mapping utilized by OEM and various emergency services. Position will help to identify and map (or update mapping) high hazard areas in GIS, including critical infrastructure located in those areas.	KPB Areawide	All Hazards	KPB OEM, KPB Administration	High	High	Medium	KPB Administration	1-3 Years	Comprehensive Plan, City of Seward HMP (2020), City of Seldovia HMP (2018)	New	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024)
		Update and upgrade Borough communications partnerships. Augment KPB communications and facility support to enhance interoperable communications. Perform a Borough-wide assessment of communication systems vulnerabilities. There is a need to register cell phones with the KPB to receive emergency alerts and all-clears. A siren is no longer used in Hope and the community needs to alert people to emergencies.	KPB Areawide	All Hazards	KPB OEM, FEMA, NOAA, NWS	High	High	Low	BRIC, KPB, City of Seward, DOT, SBCFSA, City of Seward	3-5 Years	Comprehensive Plan, City of Seward HMP (2020), City of Seldovia HMP (2018)	New	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024)
		Require department heads or managers to be familiar with and trained in FEMA's Incident Command System (ICS) for disaster response	KPB Areawide	All Hazards	KPB OEM, City of Seward, SBCFSA, City of Seldovia	Medium	Medium	Low	KPB Administration, City of Seward, SBCFSA, City of Seldovia	1-3 Years	Comprehensive Plan, City of Seward HMP (2020), City of Seldovia HMP (2018)	New	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024)
6	Identify hazards applicable to critical infrastructure and mitigation ideas	Evaluate evacuation routes for ability to handle possible numbers of evacuees, suitability for seasons, alternate routes, likelihood of road damage, quality of construction, etc. Add alternative evacuation routes where possible in the Borough.	KPB Areawide, City of Seldovia, City of Seward	All Hazards	KPB OEM, City of Seward, SBCFSA, USACE, State DOT, City of Seldovia	High	High	High	USACE, BRIC, KPB OEM, City of Seward, DOT, SBCFSA, City of Seward	3-5 Years	State Hazard Mitigation Plan (2023), Comprehensive Plan, City of Seward HMP (2020), City of Seldovia HMP (2018)	New	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024), Nikiski APC Meeting (May 2024), Hope APC Meeting (May 2024), Cooper Landing APC Meeting (May 2024)

		Construct vertical evacuation towers in appropriate locations if found to be a feasible alternative to traditional evacuation methods in areas at risk to Tsunami damage	KPB Areawide, City of Seldovia, City of Seward	Tsunami	KPB OEM, City of Seward, SBCFSA, USACE, NOAA, City of Seldovia	High	High	High	USACE, BRIC, KPB OEM, City of Seward, DOT, SBCFSA, City of Seward, HMGF,	2-4 Years	State Hazard Mitigation Plan (2023), Comprehensive Plan, City of Seward HMP (2020), City of Seldovia HMP (2018)	New	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024)
		Pursue mitigation and maintenance measures along shorelines in City parks and camping areas, including the rock barrier in Waterfront Park area.	City of Seward	All Hazards	City of Seward, SBCFSA, USACE, State DOT	High	High	High	USACE, BRIC, KPB OEM, City of Seward, DOT	2-4 Years	City of Seward HMP (2020)	Ongoing	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024)
		Encourage local governments and the State to work together on projects that mitigate or minimize hazard effects, with coordinated priorities, funding, and/or work efforts where possible to increase efficiencies and reduce costs.	KPB Areawide, City of Seldovia	All Hazards	KPB OEM, City of Seward, SBCFSA, DHSEM, City of Seldovia	Medium	Low	Medium	BRIC, City of Seward, DHSEM, SBCFSA, City of Seward, HMGF	1-3 Years	State Hazard Mitigation Plan (2023), Comprehensive Plan, City of Seward HMP (2020), City of Seldovia HMP (2018)	Ongoing	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024)
7	Prioritize and implement projects to reduce risk and increase resilience	Provide informational signage in areas subject to specific hazards such as avalanches, landslides and tsunamis or in areas of public access or use for information purposes.	KPB Areawide, City of Seldovia, City of Seward,	All Hazards	KPB OEM, ADOT, KPB RSA, City of Seward, City of Seldovia	High	Medium	Medium	KPB, BRIC, HMGF	2-4 Years	State Hazard Mitigation Plan (2023), Comprehensive Plan, City of Seward HMP (2020), City of Seldovia HMP (2018)	Ongoing	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024)
		Verify that procedures exist for local provision of response operations during an event, in the event that State, federal or other sources of help are not available. Include information on SCERP where it is applicable.	KPB Areawide, City of Seldovia, City of Seward,	All Hazards	KPB OEM, City of Seward, City of Seldovia	High	High	Low	KPB	1-3 Years	Emergency Operation Plan (EOP), Comprehensive Plan, State Hazard Mitigation Plan (2023)	Ongoing	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024)
		Encourage the state and KPB to include pedestrian and non-motorized travel ways on bridge upgrades or replacements.	KPB Areawide, City of Seldovia, City of Seward,	All Hazards	KPB OEM, KPB RSA, ADOT, City of Seward, City of Seldovia	Medium	Medium	Medium	EMPG, EOC, KPB	3-5 Years	Emergency Operation Plan (EOP), Comprehensive Plan, State Hazard Mitigation Plan (2023)	Ongoing	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024)
		Provide consistent infrastructure inspection and maintenance.	KPB Areawide, City of Seldovia, City of Seward,	All Hazards	KPB OEM, KPB RSA, ADOT, City of Seward, City of Seldovia	Medium	High	Medium	EMPG, EOC, KPB	3-5 Years	Emergency Operation Plan (EOP), Comprehensive Plan, State Hazard Mitigation Plan (2023)	Ongoing	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024)
		Create, update, implement and exercise COOP plans to mitigate effects of hazards to Borough operations and departments. Require department heads or managers to update and maintain COOP plans for all KPB Departments.	KPB Areawide, City of Seldovia, City of Seward,	All Hazards	KPB OEM, City of Seward, City of Seldovia	Medium	High	Low	KPB	3-5 Years	Emergency Operation Plan (EOP), Comprehensive Plan, State Hazard Mitigation Plan (2023)	Ongoing	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024)

8	Use each hazard event as an educational opportunity	Take advantage of public interest immediately following an event by expanded public awareness and outreach programs.	KPB Areawide, City of Seldovia, City of Seward,	All Hazards	KPB OEM, City of Seward, City of Seldovia	High	High	Low	EMPG, EOC, KPB	1-3 Years	State Hazard Mitigation Plan (2023), Comprehensive Plan	New	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024), Hope APC Meeting (May 2024)
		Provide information about potential effects of severe weather and provide mitigation ideas – power outages, road disruptions, roof collapses, health risks of shoveling snow, etc.	KPB Areawide, City of Seldovia, City of Seward,	Severe Weather	KPB OEM, City of Seward, City of Seldovia	High	High	Low	EMPG, EOC, KPB	1-3 Years	State Hazard Mitigation Plan (2023), Comprehensive Plan	New	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024), Hope APC Meeting (May 2024)
		Continue to refine and expand as needed, after-action information reporting/submittal procedures and training with targeted outreach to those affected or involved in response.	KPB Areawide, City of Seldovia, City of Seward	All Hazards	KPB OEM, City of Seward, City of Seldovia, DHSEM	Medium	Medium	Low	EMPG, EOC, KPB	1-3 Years	State Hazard Mitigation Plan (2023), FEMA ICS Training Plan	New	City of Seward Community and Planning Meeting (May 2024), SBCFSA Work Session (April 2024), Seldovia Community Meeting (May 2024)

Past HMP Goals/Projects Description	Reason for Deletion from 2024 HMP Update	Plan
Improve KPB hazard mapping and identify other effective tools or methods to assist with hazard assessment	This goal has been completed with updated state, federal and KPB GIS hazard maps	2019 KPB HMP
Maintain or redesign riprap barriers along Lowell Point Road.	Added to existing goal for Lowell Point Road and Diversion Project Improvements	2019 KPB HMP
Dredging operations to remove debris and fill at the head of Resurrection Bay near the airport.	Added to existing goal for Lowell Point Road and Diversion Project Improvements	2019 KPB HMP
Harden culvert entrance bottoms with concrete, rock, or similar material to reduce erosion or scour.	Added to existing goal for Lowell Point Road and Diversion Project Improvements	2019 KPB HMP
Audit and improve development permit databases for content and compliance; create new databases as needed	Part of standard KPB department procedure	2019 KPB HMP
Work with the State and NWS to enhance weather monitoring and warning systems	Part of standard KPB department procedure	2019 KPB HMP
Review and appropriately revise KPB development standards and requirements, including floodplain standards for permitting and construction, subdivision standards, road construction permitting and standards	Added to existing goal for floodplain standards in the KPB	2019 KPB HMP
Survey Borough shorelines to project rates of erosion and identify littoral zones	Added to USGS COSMOS goal	2019 KPB HMP
Build or maintain a database of voluntary registration for special needs and under-served populations, similar to Rapid Notify registration system.	Added to existing goal regarding under-served populations in the KPB	2019 KPB HMP
Adopt threat response procedures and educate all Borough employees	Deleted and added to existing goal regarding response procedures in the KPB	2019 KPB HMP
Prepare a funding plan and estimate for needed structural upgrades	Deleted added to existing goal regarding retrofit and structural upgrades	2019 KPB HMP
Purchase and install generator for AVTEC with main power distribution disconnect switch.	Added to existing goal discussing alternative power.	2019 KPB HMP
Support community efforts to increase initial independent preparation and response, such as volunteer fire and emergency departments, community gardens, and community centers	Combined with existing SCERP Goal	2019 KPB HMP

Pursue commercial participation with promotions on hazard kit supplies from local vendors (can happen during a Hazard Mitigation and Preparation month as an example)	Added to existing goal regarding hazard mitigation promotion and outreach	2019 KPB HMP
Support or provide avalanche awareness classes for outdoor recreationalists; work with KPBSD to provide class credits to students	Added to existing goal regarding KPBSD emergency response education	2019 KPB HMP
Encourage cleanup sites to meet standards and/or regulations for all reportable hazard materials quantity.	Work is already being done by ADEC or EPA with limited input from KPB	2019 KPB HMP
Identify, map and evaluate all State-owned and private airstrips	This has been completed and is available via KPB GIS Department	2019 KPB HMP
Alternate evacuation route in City of Seward.	Added to existing goal regarding evacuation routes in the KPB	2019 KPB HMP
Conduct joint site visits with key permitting agencies to evaluate repetitively damaged roads and formulate plans for flood mitigation upgrades	Not feasible at this time due to staff shortages and lack of funding; SBCFSA does some of this already.	2019 KPB HMP
Work with interested agencies to ID degraded floodplains and investigate the potential for restoring or improving water passage, removing repetitively damaged structures and/or acquiring land to restore or preserve floodplain function	Partially completed, other portions may not be feasible at this time due to staff shortages and lack of funding; consider reinserting as a goal when feasible	2019 KPB HMP
Determine the areas of highest hazard and implement appropriate development standards in those areas: Standards may be in the form of guidance or setback requirements for high-hazard areas	Difficult to codify additional development restrictions at this time due to public resistance, staff shortages and lack of funding; consider reinserting as a goal when feasible	2019 KPB HMP
Ensure accuracy of BFEs calculated and modeled by FEMA	Calculated and modeled by FEMA	2019 KPB HMP
Protect existing public use facilities	Vague and idea contained in numerous other projects carried forward in 2024 update	2019 KPB HMP
Identify oil and gas producing facilities that pose a risk to the KPB due to their proximity to active faults	Not a KPB function, companies cooperate and share data with State and federal agencies	2019 KPB HMP
Augment KPB communications and facility support	Vague description and contained in numerous other projects carried forward in update	2019 KPB HMP

Minimize damage to residential structures in the unincorporated areas of the KPB	Not feasible at this time due to low staffing, lack of funding and public resistance to building codes in unincorporated areas of the KPB	2019 KPB HMP
Promote earthquake insurance through education – provide sample coverages and policy costs to be included with educational material for the public	State function through their HMP and AK Seismic Hazards Safety Commission	2019 KPB HMP
Construct and maintain a database of local businesses and institutions that are located in mapped hazard areas, such as oil and gas facilities, hospitals, extended care facilities, senior housing and correctional facilities. Database should include emergency contacts, hazard plan, special hazards.	Not feasible for KPB at this time due to staff shortages, lack of funding; should be conducted as a State function, State licenses and regulates all or most of these businesses and institutions	2019 KPB HMP
Engage in partnerships to educate realtors, contractors, developers and owners in areas of high hazard risk by making maps, links to Borough websites and links to FEMA information easily accessible	Not feasible at this time due to staffing shortages and lack of funding; consider adding to existing goal during next HMP Update	2019 KPB HMP
Evaluate need for additional weather stations and instrumentation	Not a KPB function, carried out by NWS	2019 KPB HMP
Add more weather stations and cameras in the Borough	Not a Borough function, carried out by State and NWS	2019 KPB HMP
Develop or adopt an alert system for ash cloud warning	Not a Borough function, carried out by AVO, FAA	2019 KPB HMP
Contact landowners in volcano vicinities (for example State OTE subdivision at base of Redoubt), provide them with hazard information	Not feasible at this time due to staffing shortages, lack of funding and minimal number of residents that would benefit; may be a State function	2019 KPB HMP
Annual or semi-annual mailouts to property owners in avalanche hazard zones	Unnecessary, State and AVO conduct numerous public awareness campaigns	2019 KPB HMP
Support the efforts to maintain, upgrade or build protective infrastructure to protect from sudden flooding	Already carried out by SBCFSA and River Center	2019 KPB HMP
Install and maintain “panic buttons” in appropriate locations and provide annual training	Too specific, idea contained in existing goals.	2019 KPB HMP
Purchase and install generator for AVTEC with main power distribution disconnect switch.	There is a generator at the First Lake Facility.	2020 Seward HMP

Identify non-buildable sites in City Land Use Plan and Zoning Map.	the City of Seward zones undevelopable or problematic lands they own as Resource Management with specific details provided in the City's Municipal Lands Inventory.	2020 Seward HMP
Conduct a structural assessment of the Fourth of July Creek dike.	The dike was assessed as in good condition; however, ongoing maintenance to remove alders is required.	2020 Seward HMP
Cover electric line with concrete.	Project not feasible for the City to complete	2020 Seward HMP
Develop mitigation initiatives for erosion protection.	Project too vague, already a part of existing mitigation goals	2020 Seward HMP
Get streamflow and rainfall monitoring gages.	USGS has stream flow gages installed in SBCFSA along	2020 Seward HMP
Design and develop a new generation of diversion structures and flexible transmission poles to bend with the snow impact.	Not possible with current available staff or as part of future planned projects	2020 Seward HMP
Create electrical infrastructure redundancies to reduce the risk of prolonged power outages by completing , he following projects: underground circuit from the South Harbor expansion to Jefferson along Ballaine Blvd., SMIC electrical loop along Sorrel Rd., electrical loop along	Projects completed	2020 Seward HMP
Install AWS NOAA radios in public buildings.	Function of NOAA in Seward	2020 Seward HMP
Acquire permission to clear hazard, and potentially hazardous trees beyond the permit area for the transmission line from Dave's Creek to Grouse Lake from the State and the USFS.	This was for a specific project area and has been completed.	2020 Seward HMP
Identify vulnerabilities in emergency transportation routes out of Seldovia – air, land, water	Added to KPB Goal #1	2018 Seldovia HMP
Develop emergency e-mail list in conjunction with KPB emergency cell phone list	Completed as part of updates to emergency response plans such as EOPs, EAPs, COOPs.	2018 Seldovia HMP
Characterize secondary Upper Dam and Reservoir water source – is this source usable during a disaster	Added to KPB Goal #2	2018 Seldovia HMP
Evaluate Seldovia (Susan B. English) School as emergency shelter/evacuation facility, possibly upgrading generator to the point where the school can completely function under its own power.	Added to KPB Goal #2	2018 Seldovia HMP
Investigate alternative airport access from the north	Added to KPB Goal #1	2018 Seldovia HMP
Coordinate emergency response planning between City of Seldovia and Seldovia Village Tribe Barabara Heights VFD.	Added to KPB Goal #4	2018 Seldovia HMP
Develop a community information brochure/disaster preparedness pamphlet or other informational resources.	Added to KPB Goal #4	2018 Seldovia HMP

Distribute personal disaster kits or facilitate group ordering of disaster supplies	Added to KPB Goal #4	2018 Seldovia HMP
Distribute public information about keeping personal fuel storage/supply safe and disaster-ready	Added to KPB Goal #3	2018 Seldovia HMP
Conduct a disaster response exercise	Added to KPB Goal #5	2018 Seldovia HMP
Develop a strategy to ensure that the fuel truck, ambulance, and fire trucks are moved to safe location before/during disaster.	Removed, Normally contained in EOP not HMP	2018 Seldovia HMP
Upgrade or replace the fuel storage facility to maximize its security and utility during disasters.	Added to KPB Goal #2	2018 Seldovia HMP
Improve Jakalof Road to make it less vulnerable to landslides triggered by weather or earthquake.	Added to KPB Goal #1	2018 Seldovia HMP
Install manual power controls for HEA generators.	Generators were upgraded in 2017, this is a function of HEA not the City	2018 Seldovia HMP
Include a discussion of weather- related emergencies on public outreach/emergency preparedness information.	Added to KPB Goal #8	2018 Seldovia HMP
Determine water usage levels and filtration limits of current system, to determine whether water rationing may be necessary in the event ashfall impacts drinking water supply.	Added to KPB Goal #8	2018 Seldovia HMP
Determine water usage levels and filtration limits of current system, to determine whether water rationing may be necessary in the event ashfall impacts drinking water supply.	Added to KPB Goal #8	2018 Seldovia HMP
Develop public outreach materials regarding electric discharge, fuel, engines.	Added to KPB Goal #2	2018 Seldovia HMP
Improve water supply infrastructure to reduce need for rationing or other measures during ashfall (based on V1 study)	Added to KPB Goal #2	2018 Seldovia HMP
Ensure a local supply of ash masks and store at evacuation facility.	Added to KPB Goal #2	2018 Seldovia HMP
Ensure preparedness to assist those with respiratory illnesses that might be exacerbated by ashfall.	Added to KPB Goal #4	2018 Seldovia HMP
Revise tsunami inundation mapping for Seldovia as current maps are not accurate.	Completed, Remove	2018 Seldovia HMP
Assess the hazard posed by a subduction zone tsunami coming from the area around the Shumagin Islands	Completed, Remove	2018 Seldovia HMP
Include information about tsunami evacuations in emergency preparedness/outreach information.	Added to KPB Goal #4	2018 Seldovia HMP
Develop and post tsunami evacuation signs/routes.	Added to KPB Goal #7	2018 Seldovia HMP

Improve tsunami siren activation system so as to minimize false alarms.	Removed, KPB completed tsunami siren upgrades	2018 Seldovia HMP
Conduct a geologic study of possibly active faults in Seldovia area	Removed, not City function, work performed by DGGS.	2018 Seldovia HMP
Assess seismic engineering of critical infrastructure.	Added to KPB Goal #3	2018 Seldovia HMP
Include a discussion of earthquake preparedness in public outreach/emergency preparedness information.	Added to KPB Goal #4	2018 Seldovia HMP
Determine whether retrofits may make fuel facility more seismically sound.	Added to KPB Goal #4	2018 Seldovia HMP
Conduct a slope stability study to assess the vulnerability of city water supply to landslide, and identify any mitigation measures.	Added to KPB Goal #2	2018 Seldovia HMP
Include a discussion of potential risks to city water supply in public outreach/emergency preparedness information.	Removed unneeded to discuss with public.	2018 Seldovia HMP
Undertake improvement or infrastructure projects to mitigate landslide risks to water supply as indicated by slope stability study.	Added to KPB Goal #2	2018 Seldovia HMP
Develop public information regarding fire prevention – target schools/children.	Removed already implemented.	2018 Seldovia HMP
Promote household fire safety to reduce risk of conflagration fires.	Added to KPB Goal #8	2018 Seldovia HMP
Install fire carts and pumps at Jakalof Dock	Added to KPB Goal #3	2018 Seldovia HMP
Install appropriate size culverts along Jacklof Bay Road near where flooding washes out the road.	Added to KPB Goal #1	2018 Seldovia HMP
Develop a floodplain ordinance within City Code to comply with participation in the NFIP.	Added to KPB Goal #2	2018 Seldovia HMP
Develop a Memorandum of Understanding with the Kenai Peninsula Borough for NFIP enforcement.	Added to KPB Goal #2	2018 Seldovia HMP

HAZARD MITIGATION PLAN STORY MAP & COMMUNITY SURVEY

The HMP Update planning team has developed a hub site that includes a story map and community survey:

[https://hazard-mitigation-plan-kpb.hub.arcgis.com/.](https://hazard-mitigation-plan-kpb.hub.arcgis.com/)

We encourage those members of the planning commission and public that are interested to utilize this hub site for information related to the HMP Update process and to provide feedback when possible.

Kenai Peninsula Borough Hazard Mitigation Plan 2024

KPB Planning Commission Meeting – June 24th

Update of 2019 KPB Hazard Mitigation Plan (HMP)



Planning Support provided by Kuna Engineering



Meeting Agenda

1

Plan
Update
Overview

2

Plan
Update
Process

3

Local
Participation

4

Comments

1. PLAN UPDATE OVERVIEW



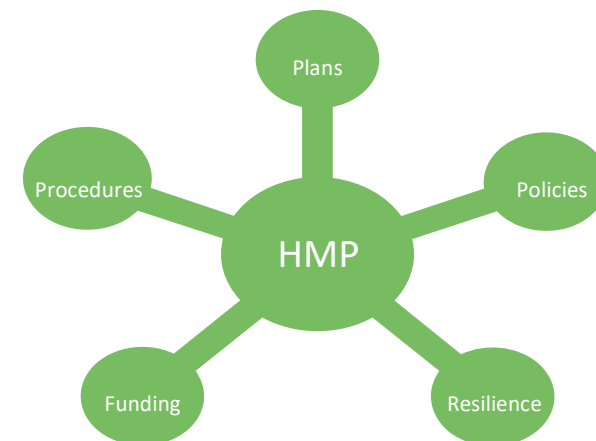
What is new with the Hazard Mitigation Plan in 2024?

- The Kenai Peninsula Borough (KPB) is adding the cities of Seward and Seldovia to this multi-jurisdictional update. Additionally, the specific recommendations, concerns and goals of the SBCFSA have been incorporated into this update.
- The Borough will develop a full multi-jurisdictional plan during the next update cycle to include the remaining incorporated cities: Homer, Kenai, Soldotna, and Kachemak.
- Updated requirements from DHS&EM and FEMA.



Why we maintain the Hazard Mitigation Plan

- Opportunity for plan integration and stakeholder/interagency coordination
- Part of eligibility for FEMA mitigation grants
- Increased focus on what actions will move towards long-term resilience to hazard risk
- Required to be updated every five years as part of planning and grant funding cycle





Hazards Identified in KPB:

- Flooding and Erosion
- Wildfires (covered in CWPP)
- Earthquakes
- Severe Weather
- Tsunamis/Seiches
- Volcanoes
- Avalanches & Landslides
- Human-Caused Hazards

Future climate conditions have been evaluated for each hazard

2. PLAN UPDATE PROCESS

February 2024

Planning Team Coordination & Project Kick Off Meetings.

March-April 2024

Data Collection, Analysis, Mitigation Goals and development of Mitigation Strategy.

May-June 2024

Public Outreach with Communities, Advisory Planning Commissions (APC) and KPB Planning Committee.

July 2024

Draft Plan available to the public for review and comments.

August 2024

Draft Plan completed with public and stakeholder feedback.

September 2024

Plan sent to State of Alaska Hazard Mitigation Office for review.

October 2024

State Hazard Mitigation Office Review Completed
Plan Sent to FEMA for Review.

November 2024

Final approval of plan and adoption by Borough Assembly.

HMP Update/Maintenance Schedule

- Plan Update will be completed by the December 18, 2024, expiration date. The City of Seldovia HMP has expired and this update will provide coverage until next update is required. The City of Seward HMP will be included in this update as well.
- The KPB Local Emergency Planning Committee (LEPC) reviews plan development and conducts an annual review to monitor plan actions between updates.
- Once updated Plan is finalized, KPB will seek to identify funding sources and seek funding for prioritized mitigation projects



Kenai Peninsula Borough Hazard Mitigation Plan (2024)

Story Map - Update of 2019 Hazard Mitigation Plan

Kenai Peninsula Borough - Office of Emergency Management

February 6, 2024

Online KPB HMP Update Resources

- Used to provide the public with information on the HMP update process.
- Updated as needed and with plan draft.
- Provides feedback opportunity when the draft plan is available.
- Used to show hazard risk in the KPB and areas most in need of mitigation actions.
- KPB HMP Update Hub: <https://hazard-mitigation-plan-kpb.hub.arcgis.com/>
- Story Map: [KPB Hazard Mitigation Plan -2024 \(arcgis.com\)](#)
- HMP Questionnaire: [Kenai Peninsula Borough HMP Update - Public Survey -2024 \(arcgis.com\)](#)

3. LOCAL PARTICIPATION



The importance of participation in the process

- Incorporate local community input into the HMP development to ensure it accurately reflects their needs and insights.
- Helps to develop projects that can reduce risk from hazards.
- Having the Seward and Seldovia City plans included in the Borough plan increases their access to Borough resources and increases city efficiency while reducing their burden when updates are due.



3. PUBLIC MEETINGS & OUTREACH

Gathering public and APC input for plan development.

- Meetings and Outreach events to look for input through community surveys, review of mitigation actions initiated since last plan was developed.
- Review of mitigation goals and actions and community input for revisions or new goals and actions.
- Public input for hazards that most affect their community or region, including all areas of the Borough is an important part of plan update process.

Online Survey Link



Community/Meeting Type	Date/Time	Meeting Location
Seldovia Community Meeting	May 1, 12:00 pm	Sea Otter Community Center (SOCC)
Cooper Landing APC Meeting	May 8, 6:00pm	Cooper Landing Community Hall
Hope/Sunrise APC Meeting	May 8, 7:00pm	Hope Library
Nikiski APC Meeting	May 9, 6:30pm	North Peninsula Recreation Center
Anchor Point Community Meeting	May 15, 6:00pm	Anchor Point Senior Center
Funny River Community Meeting	May 18, 7:00pm	Funny River Community Center
Seward Planning and Zoning Commission/ Community Meeting	May 21, 6:00-7:00 pm	Seward City Hall
Moose Pass APC Meeting	June 6, 6:00-pm	Moose Pass Sportsman Club
Kenai River Fair	June 8, 11 am – 5:00 pm	Soldotna Creek Park
Kenai/Planning Commission	June 24, 7:30 pm	KPB Assembly Chambers

4. COMMENTS



Contact Us:

Mary Toll, OEM Project Manager

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Project Consultant

Kuna Engineering

Phone: 907-339-6500

Email: jrolfzen@kunaeng.com

Additional Comments

- Ongoing processes to obtain community input for plan development:
 - Online comment/questionnaire
 - Review and input regarding Mitigation Plan Goals.
 - Review of draft HMP online, scheduled for July 2024 with 30 day review process.
 - Contacting project team members with additional questions or comments.
 - Planning Commission will be provided the final draft in August 2024 for an approval recommendation to the Assembly before the final draft is sent to State and FEMA for review.

PUBLIC MEETING NOTICE

Kenai Peninsula Borough 2024 Hazard Mitigation Plan Update

The Kenai Peninsula Borough Office of Emergency Management is updating the existing 2019 Hazard Mitigation Plan. Earthquakes, floods, wildfire, volcanic eruptions, and tsunamis are just a few of the hazards to be addressed in the Plan update. While hazards like these cannot be prevented, the KPB Hazard Mitigation Plan forms the foundation for our community's long-term strategy to reduce disaster losses by breaking the repeated cycle of disaster damage and reconstruction.

Members of the public are invited to participate in the planning process by assisting in the identification of community concerns related to hazards, locations of concern, hazard mitigation opportunities, and hazard mitigation goals. The Borough is conducting a series of meetings to receive this input from community members. Area residents and others are encouraged to attend one of the upcoming public meetings.

If you are unable to attend the meeting in-person, we encourage participation and providing comments through the following methods:

Complete a questionnaire online at [Community Hazard Awareness and Mitigation Questionnaire](#). Hard copies of the questionnaire are available in each community and at the KPB Planning Department office.

Completed questionnaires may be mailed to the KPB Office of Emergency Management or returned to the pickup location.

KPB OEM, 253 Wilson Lane, Soldotna, AK 99669

Please provide feedback on the Draft Hazard Mitigation Plan when it is available online and in your community in July 2024.



Questionnaire
Link



Monday, June 24, 2024

7:30 pm

KPB Planning Commission

KPB Assembly Chambers

Or join us via Zoom at:

[https://us06web.zoom.us/
j/9077142200](https://us06web.zoom.us/j/9077142200)

ID: 907 714 2200

For more information on this Plan update and how to participate in the planning process, contact Mary Toll or Joe Rolfzen at:

Mary Toll, OEM Project Manager
Phone: (907) 714-2686
Email: MToll@kpb.us

Joe Rolfzen, Project Consultant,
Kuna Engineering
Phone: (907) 339-6500
Email: jrolfzen@kunaeng.com

View more information on the HMP on the project hub and story map at: <https://hazard-mitigation-plan-kpb.hub.arcgis.com/>

**HELP YOUR COMMUNITY
BE HAZARD READY!**



Kenai Peninsula Borough
Office of Emergency Management
253 Wilson Lane
Soldotna, Alaska 99669
<https://www.kpb.us/emergency-mgmt>