

2021 Seattle All-Hazards Mitigation Plan Update

Draft Plan Review

Send us your comments by Jan 29, 2021



WE WANT YOUR INPUT!

Here's what you can do:

1. Review the updated plan at <http://bit.ly/SeattleHMPDraft>
2. Look at the proposed mitigation actions and projects
3. Consider if risks to your community are addressed
4. Provide your comments through this survey form:
<https://www.surveymonkey.com/r/SeattleHMP>

Or email us your comments by **Jan 29** at
HazardMitigationPlanUpdate@seattle.gov



DO YOU KNOW?

- What hazard mitigation is and how it benefits the city?
- Which hazards pose the greatest risk to Seattle?
- What actions the city has already taken to reduce risk?
- What are some of the actions included in this plan?
- What the City wants to hear from you?



WHAT IS HAZARD MITIGATION?

- Actions to minimize risks to people, property and the environment
- Caused by natural or man-made disasters.
- Mitigation helps create a more disaster-resistant and sustainable community.



MITIGATION VS. PREPAREDNESS

Mitigation Actions

- planning and zoning, floodplain protection, property acquisition and relocation, or public outreach projects.

Preparedness Actions

- installing disaster warning systems, purchasing radio communications equipment, or conducting emergency response training.

WHY IS HAZARD MITIGATION IMPORTANT?

Mitigation planning allows the city to:

- Better understand and reduce the impact of identified hazards
- Protect people, property and the environment
- Remain eligible to receive federal mitigation grants
- Strengthen relationships through planning together
- Improve coordination of hazard mitigation with comprehensive planning and zoning
- Develop more sustainable and disaster resistant communities
- **Save lives and money!**



WHAT IS THE ALL-HAZARDS MITIGATION PLAN (HMP)

- Comprehensive document
- Detailed information about the types of hazards we face (SHIVA)
- Actions we can take before disaster strikes
- Approved by Federal Emergency Management Agency
- Keeps Seattle eligible for FEMA mitigation grants



MITIGATION PROGRAM GOALS

1. Protect life and safety and promote community resiliency.
2. Safeguard critical infrastructure and ensure continuity of service.
3. Protect public and private property.
4. Protect the natural environment and cultural and historic resources.
5. Promote a resilient economy.
6. Promote a collaborative and integrated mitigation program.



A UNIQUE COMMUNITY ...

A large Ferris wheel is the central focus, set against a sunset sky with warm orange and yellow tones. The wheel's structure is silhouetted against the bright light. In the foreground, the dark blue water of a harbor or bay is visible, with some lights reflecting on its surface. The overall scene is a classic view of a coastal city at dusk.

Economically

- Seattle is the hub of the Pacific Northwest 747,300 residents and 602,000 jobs

Geographically

- Built on a series of hills, Seattle is surrounded by water

Culturally

- Seattle is a vibrant, diverse city whose populace is committed to a more resilient community

...WITH UNIQUE HAZARDS

The city's top 10 hazards are:

Ranking determined by a hazard's frequency and level of expected impact to the community

1. Earthquakes
2. Snow & Ice Storms
3. Windstorms
4. Power Outages
5. Cyber-attack/Disruption
6. Landslides
7. Disease Outbreaks
8. Flooding
9. Excessive Heat Events
10. Tsunamis and Seiches

TYPES OF HAZARDS

1. **Climate Change** rising temps, sea level rise, less snowpack and stream flow
2. **Geologic Hazards** earthquake, landslides, volcanic, tsunamis, seiches
3. **Biologic Hazards** disease/ pandemic, bioterrorism
4. **Intentional Hazards** social unrest, attacks, cyber attack
5. **Infrastructure Hazards** transportation incidents, fire, hazmat incidents, infrastructure/ structural failure, power outages
6. **Weather Hazards** snow and ice, excessive heat events, water shortages, windstorms

EARTHQUAKES



- Earthquakes are Seattle's top hazard. The Seattle fault is the most dangerous source from earthquake events
- Seattle experienced damaging earthquakes in 1941, 1965 and 2001
- The city is actively preparing to reduce its risk through a number of actions including enhancing building standard, retrofitting bridges, libraries, dams and educating the public.

SNOW AND ICE STORMS



- Snow and ice are Seattle's 2nd ranked hazard.
- Seattle's weather is generally mild, but snow events can be large and have major impacts.
- Hilly terrain and limited snow removal equipment increase Seattle's vulnerability.
- Extended snow events can create safety issues and affect transportation.

WIND STORMS

- Windstorms are Seattle's 3rd ranked hazard.
- Puget Sound Region experiences storm windstorms from cyclones, Pineapple Express storms. Tornadoes are rare.
- Power outages are the most widespread problem, but structural damage is the costliest.
- People have died from falling trees and branches.
- Seattle's floating bridges are vulnerable to wind and wind-driven waves.

WHAT HAVE WE DONE?

Studies and Assessments

- Unreinforced masonry (URM) building inventory, assessment, policies
- Seismic assessment of community centers and pools
- Food security planning

Infrastructure/ Capital Projects

- Seismic upgrades to key City facilities
- Partnership with Community Roots Housing on seismic retrofit of affordable housing building
- Design of seismic retrofit for SCL operations center
- Separation of rail and arterial road for S. Lander St.

Non-Structural

- Emergency generators in key City facilities
- Upgraded technology and procedures to reduce vulnerability to cyber attacks

Natural Systems Protection

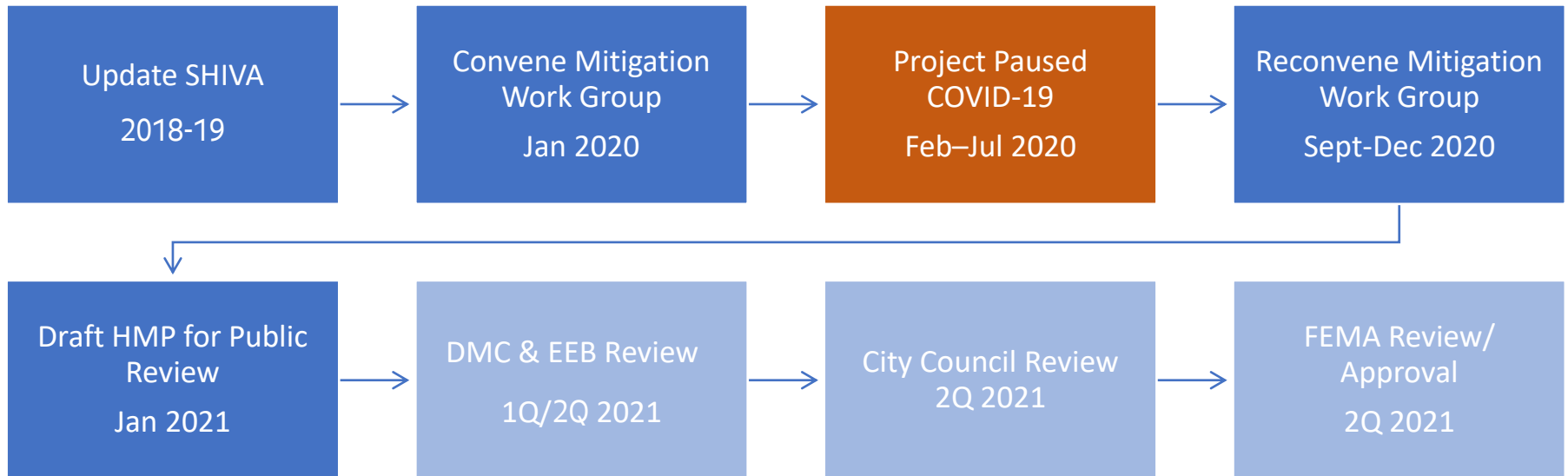
- Improved Thornton Creek confluence

WHAT DO WE PLAN TO DO IN THE FUTURE?

Some of the mitigation projects in the updated plan:

- Seismic retrofits of bridges and dams
- Seismic retrofit of three Carnegie branch libraries
- Integrate hazard mitigation policies into the next Comprehensive Plan update
- Design multi-purpose infrastructure to protect South Park from sea level rise
- Replace the seawall on N Northgate Way
- Seismic upgrades for the Riverton and Eastside reservoirs

PLANNING PROCESS SO FAR



WE WANT TO HEAR FROM YOU!!

- What mitigation projects would you like to see completed?
- What opportunities do you see to collaborate or coordinate on mitigation actions?
- What questions do you have about the City's mitigation program that the HMP doesn't answer?
- Review the HMP at www.seattle.gov/emergency_management
- Send comments by January __ to: HazardMitigationUpdate@seattle.gov



THANK YOU FOR HELPING US BUILD A MORE RESILIENT SEATTLE

Jan 2021

Seattle Office Of Emergency Management



City of Seattle