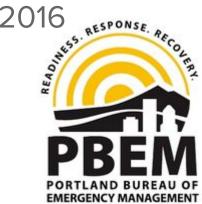
# **Portland Mitigation Action Plan Update**

Resilience in Portland and MAP Update 2016



## Introduction

We are here today to talk about the Mitigation Action Plan (MAP) Update , but we will be talking more broadly about resilience work

#### Jonna Papaefthimiou, Interim Director, Portland Bureau of Emergency Management



Beth Gilden, Collaborative Projects Manager, Institute for Sustainable Solutions

### What is mitigation

Hazard mitigation reduces disaster damages and is defined as sustained action taken to reduce or eliminate the long-term risk to human life and property from hazards.

### **The Mitigation Action Plan**

The Mitigation Action Plan meets FEMA requirements for a "Natural Hazard Mitigation Plan". It is Portland's plan that focuses most specifically on what we can do now to build resilience to natural disasters.

Updates are required every 5 years.

### What's included in the plan?

- A description of Portland and our risk to natural hazards
- Update--what development changes have taken place since 2016
- A description of the risks from each hazard
- Mitigation Action Strategy: what we are doing to mitigate the risk

The planning process is as important as the plan--opportunity for coordination, collaboration and outreach to the community.

# What's new for the update?

- No major development changes
- New experiences with natural hazards
- Planning during Covid-19

#### Updated goals

- Protect life and reduce injuries.
- Engage and build capacity for the whole community.
- Minimize public and private property damage.
- Protect, restore, and sustain natural systems.
- Minimize the disruption of essential infrastructure and services.
- Integrate mitigation strategies into existing plan and programs.
- Prioritize multi-objective actions that can further sustainability and equity goals during "ordinary times"
- Build on collaborations and lessons learned from resilience work that has occurred since 2016
- Incorporate community voice and reflect the priorities of frontline and underserved communities

### Approach

Iterative work, with each piece moving at the same time.

Three areas of focus:( 1) Risk Assessment Team (2) Community Engagement Team (2) and Steering Committee. The planning team brings them all together.

The Steering Committee makes big decisions about the hazards we will cover, the plan mission, vision and goals.

The Steering Committee will also guide development of the Mitigation Action Strategy.

**Planning Team:** Beth Gilden, Jonna Papaefthimiou, Rica Perez

**Steering Committee:** 21 members from BES, PPR, PBEM, OEHR, Fire, Police, PWB, PBOT, BDS, Multnomah Cty and Clackamas Cty

**Risk Assessment:** Dr. Peter Dusicka, Dr. Yu Xiao and student Zachary Boyce

**Community Engagement:** Dr. Amy Lubitow and students with PBEM collaboration



#### Each team has different stakeholders and goals for engagement

- Planning team: partners, key stakeholders, communities of interest, public information etc.
- Steering committee: works their bureau, colleagues and leadership
- Risk assessment: works with stakeholders who have technical expertise
- Community engagement team: works with existing PBEM networks (JVIC), reporting on past PBEM community engagement efforts, and direct outreach in parks

### **Natural Hazards**

- 1. Earthquake
- 2. Flooding and Dam Failure
- 3. Landslides
- 4. Wildfires and Smoke
- 5. Extreme Heat
- 6. Winter Storms (Snow, Ice, Cold)
- 7. Drought
- 8. Volcanos
- 9. Windstorms



The Portland area has experienced numerous earthquakes in the past, ranging from Magnitude 4.5 to 9.0. Portland is certain to experience seismic events in the future. Many of Portland's buildings were built before seismic design requirements were included in building codes, or before modern codes were adopted. Over 13,000 of Portland's buildings are in areas with high liquefaction susceptibility, and during a Cascadia Subduction Zone earthquake, nearly 6,000 people in Portland may be displaced from their homes.

Example mitigation project: A plan or policy that encourages seismic retrofits of buildings on emergency transportation routes.



Portland is at the confluence of two major rivers, and has many smaller creeks and streams that flow within the city limits. The city is susceptible to flooding from the rivers and streams, as well as urban flooding from overwhelmed or blocked storm drains and runoff from impervious surfaces. There are 2,925 structures in the 1-percent-annual-chance flood hazard area, and over 9,500 people who live in these areas. FEMA flood maps do not take into account the residual risk for properties protected by a flood-control levee, so there may be a misperception that the flood risk in these areas is zero.

Example mitigation project: Work with the Federal Emergency Management Agency (FEMA) to remap all City of Portland streams to identify changes in peak flows and flood extents due to climate change.



Hundreds of landslides have occurred in Portland in the past 20 years, and the City can expect many more in the future. Landslides are most likely on steep slopes when the ground is saturated from rainfall or poor drainage. More than 89,000 people in Portland live in landslide hazard areas, along with over \$20 billion worth of buildings and contents.

Develop design guidelines that limit impervious surface in areas with landslide risk.

### **Developing good projects/actions**

#### ALL ACTIONS MUST

- Reduce risk and adverse impacts of one of the hazards described in our plan
- Fit into one of the FEMA defined mitigation action categories
- Consider equity

#### GOOD ACTIONS

- Respond to multiple hazards
- Reduce risk and impacts for frontline and underserved communities
- Include an implementation plan
- Reflect existing plans and programs

#### THE BEST ACTIONS

- Have immediate benefits for the community
- Foster collaboration, and include a plan for working collaboratively to address interdependencies and coordination
- Include an engagement point for underserved and frontline communities in implementation via process, decision making, workforce development, contracting etc.
- Respond to all hazards



### Contract with local minority owned business to add solar plus storage to key critical facilities.

Example "best" project

# What projects and priorities would you like to see in the plan?

How can we make the plan a living document?

### Resilience work in Portland

The MAP is just one piece of the resilience work. The work we are doing here feeds into our larger resilience goals

### **RIPE and DRRAG**

RPE Interviews, Surveys and Workshop		Disaster Resilience a Group	Disaster Resilience and Recovery Action Group	
ISS worked with CAMG to consider interdepend infrastructure; and what during and after an Eart Year Flood.	encies in critical would happen	Interested RIPE partic keep momentum goin consider how to mak more resilient.	ng and continue to	
2017	•	2018	•	
	RIPE Report		DRRAG continues today	
	ISS worked with key	RIPE participants to	DRRAG continues to meet they have	

develop a report based on our interviews,

survey and workshops.

DRRAG continues to meet: they have focused various projects like, a "resilient island" at the East Portland Community Center, a structure for resilience planning, governance, recovery planning and more.

DRRAG was included in the Climate Emergency declaration--a need for a city-wide resilience strategy

### **Major findings from this experience**

Confirmed: resilience and recovery investments pay off

Revealed: significant interdependencies across bureaus

Major focus: need for a unified vision and working collaboratively across bureaus

### **Status of work today**

#### Current areas of work

Supporting collaboration, and communication across bureaus

Testing a "resilient island" concept at the East Portland Community Center

Working with ISS and researchers to consider recovery governance

Drafting a city-wide resilience strategy

#### Needs

Champions in leadership

Engagement from other key stakeholders--including BPS

Collaborative and dedicated resources

Unified work, especially related to engaging with community

# How can PSC help us move this resilience work forward?