

CITY OF BELLEVUE NATURAL HAZARD MITIGATION PLAN

Steering Committee Meeting #1

July 10, 2024

1


 Decorative background with blue and orange curved shapes and a white stylized logo.

TODAY'S DISCUSSION

Hazards of Concern

 PERTEET logo with tagline "Better communities, by design"

2




King County HMP


King County Regional Hazard Mitigation Plan (2020) Risk and Probability Summary:

| Community Name | Earthquake | | Flood | | Landslide | | Weather | | Volcano | | Wildfire | |
|--------------------|------------|--------|--------|--------|-----------|--------|---------|--------|---------|------|----------|--------|
| | Prob | Risk | Prob | Risk | Prob | Risk | Prob | Risk | Prob | Risk | Prob | Risk |
| Auburn | Yellow | Red | Red | Yellow | Yellow | Yellow | Red | Yellow | Blue | Red | Blue | Blue |
| Beaux Arts Village | Yellow | Yellow | Blue | Blue | Blue | Blue | Red | Yellow | Blue | Blue | Yellow | Yellow |
| Bellevue | Yellow | Red | Yellow | Blue | Blue | Blue | Red | Blue | Blue | Blue | Blue | Blue |

(High, Medium, or Low)




3




Risk Assessment Comparison

| Plan | Earthquake | Landslide | Severe Weather | Flood | Avalanche | Dam Failure | Tsunami/ Seiche | Volcano | Wildfire | Drought |
|-----------------------------|------------|-----------|----------------|-------|-----------|-------------|-----------------|---------|----------|--------------|
| WA Enhanced HMP 2023 | ✓ | ✓ | ✓ | ✓ | | Not rated | | | | |
| King County 2020 | ✓ | | | | | Not rated | Not rated | | | Not included |
| Bellevue Annex 2009 | ✓ | ✓ | ✓ | ✓ | X | ✓ | X | X | ✓ | ✓ |
| NRI (Expected Annual Loss)* | High | Low | Low** | Low | N/A | X | X | High | Low | Not rated*** |

* As compared nationally
 ** Average of all weather risks
 *** Based on agricultural risk only




4




Selected Hazards for 2025 HMP

| Plan | Earthquake | Landslide | Severe Weather | Flood | Avalanche | Dam Failure | Tsunami/ Seiche | Volcano | Wildfire | Drought |
|----------------------------|------------|-----------|----------------|-------|-----------|-------------|-----------------|---------|----------|---------|
| Bellevue Annex 2009 | ✓ | ✓ | ✓ | ✓ | X | ✓ | ✓* | ✓ | ✓ | ✓ |

* Will include in earthquake chapter



5



Sources


- National Risk Index
- <https://hazards.fema.gov/nri/map>
- King County HMP
- <https://kingcounty.gov/en/dept/executive-services/governance-leadership/emergency-management/plans/regional-hazard-mitigation>
- Washington State Enhanced Hazard Mitigation Plan
- <https://mil.wa.gov/enhanced-hazard-mitigation-plan>

NRI Expected Annual Loss

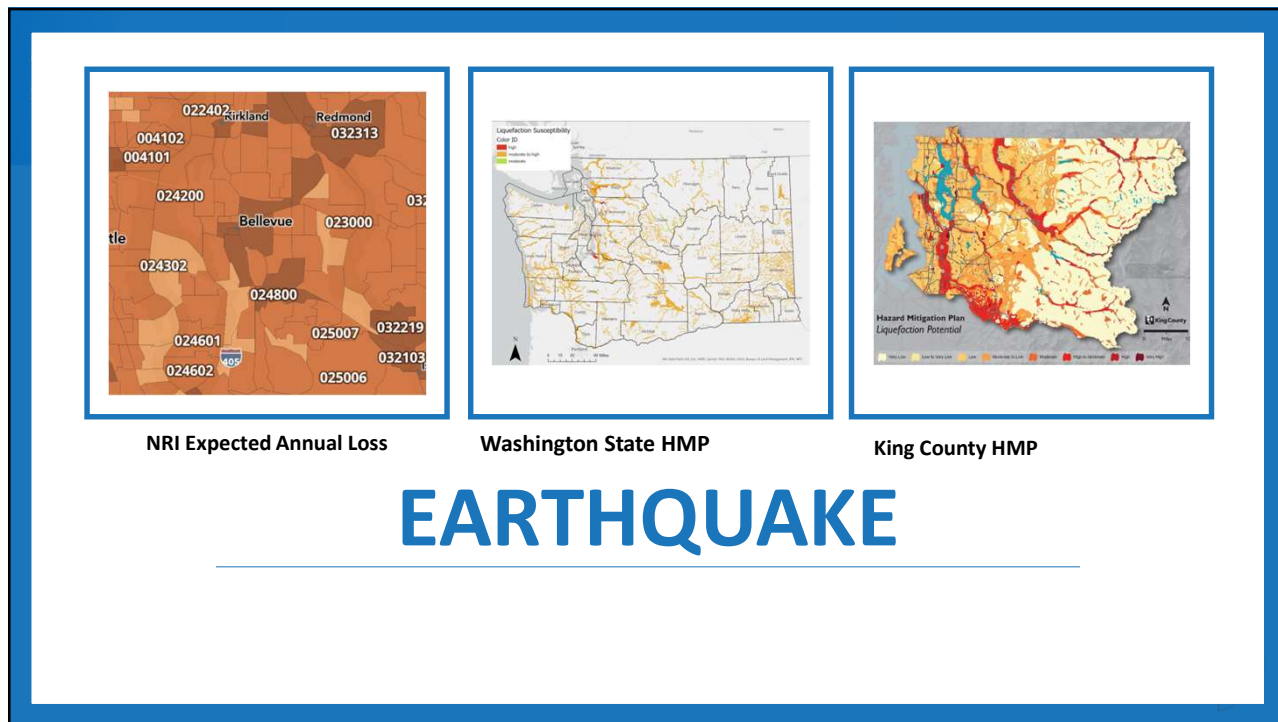
Legend

- Expected Annual Loss
- Very High
- Relatively High
- Relatively Moderate
- Relatively Low
- Very Low
- No Expected Annual Losses
- Not Applicable
- Insufficient Data

Exposure
x Annualized Frequency
x Historic Loss Ratio
= Expected Annual Loss

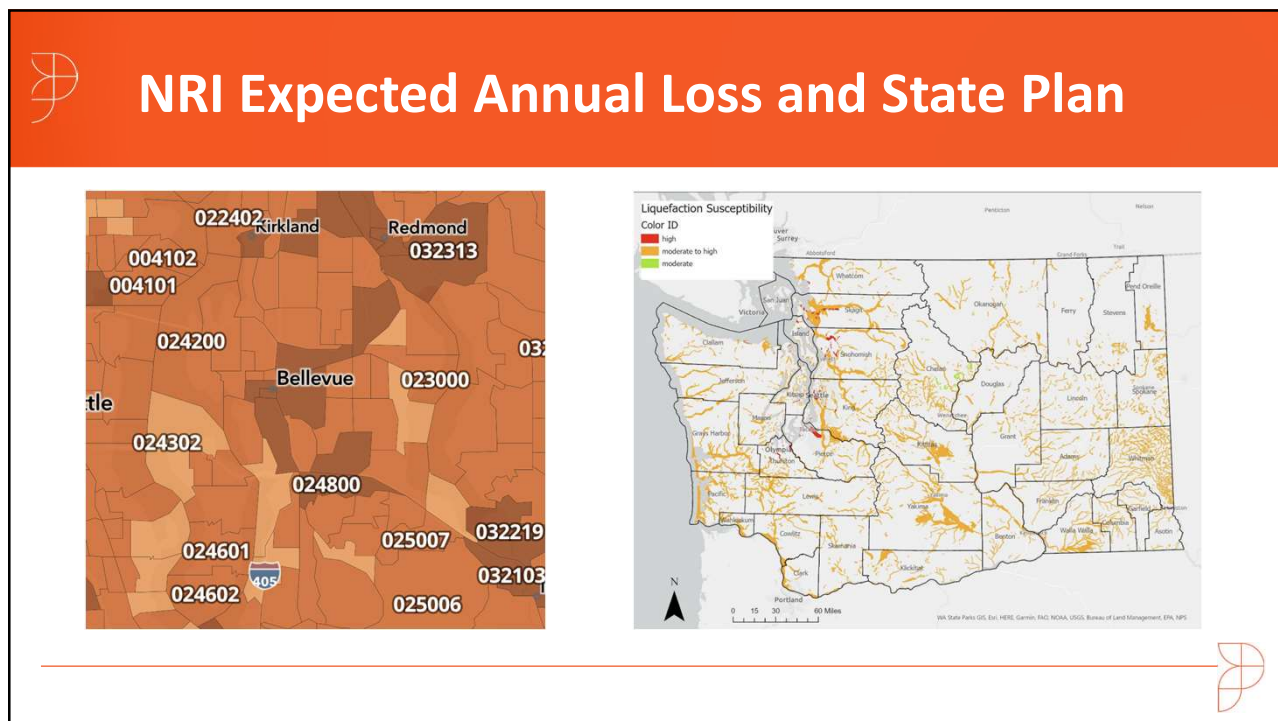


6



EARTHQUAKE

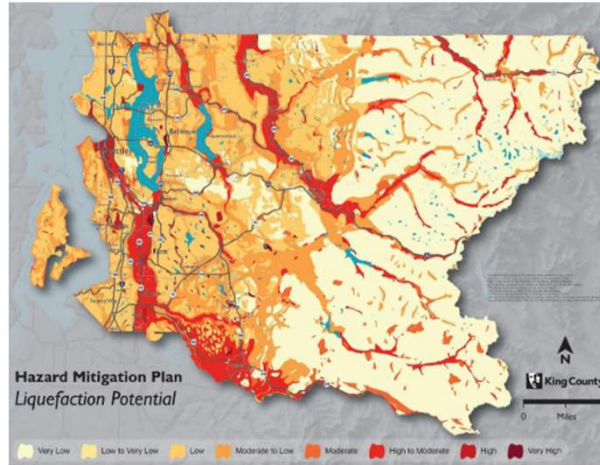
7



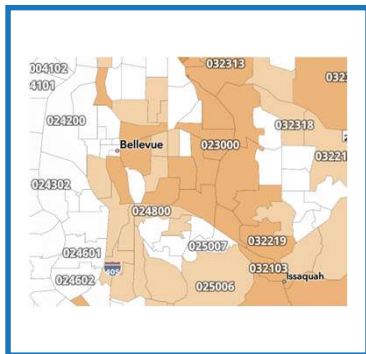
8



King County HMP



9



NRI Expected Annual Loss



Washington State HMP



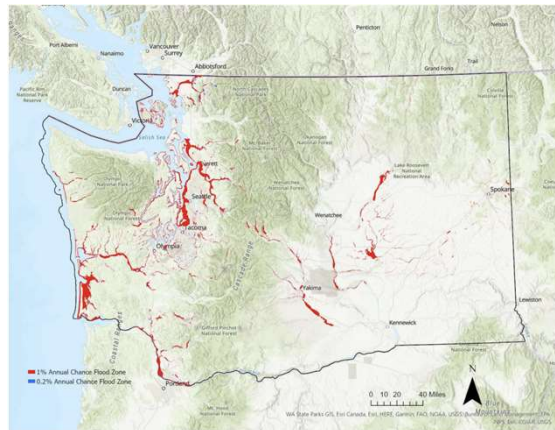
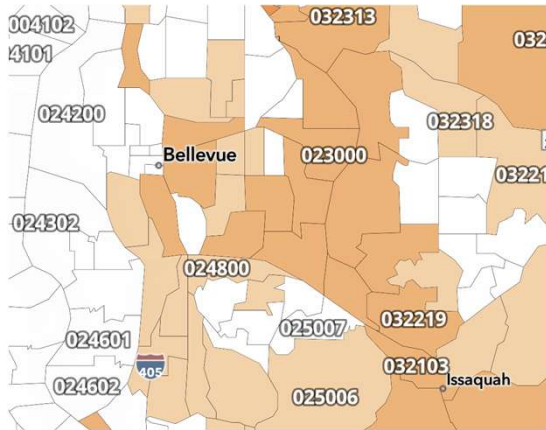
King County HMP

FLOODING

10



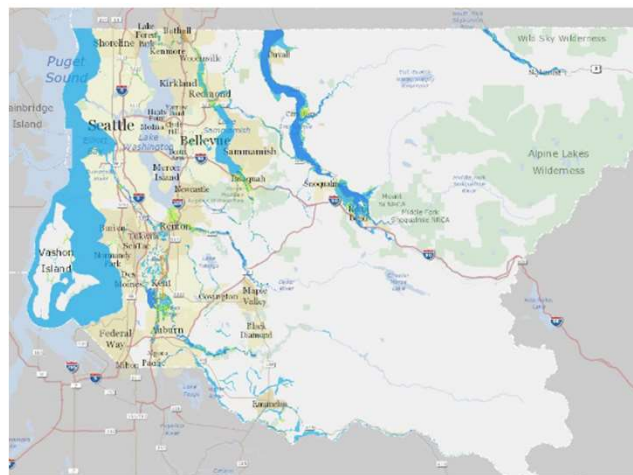
NRI Expected Annual Loss and State Plan



11



King County HMP



1% Annual chance floodplain and flood zone



12

NRI Expected Annual Loss **Washington State HMP** **King County HMP**

LANDSLIDE

13

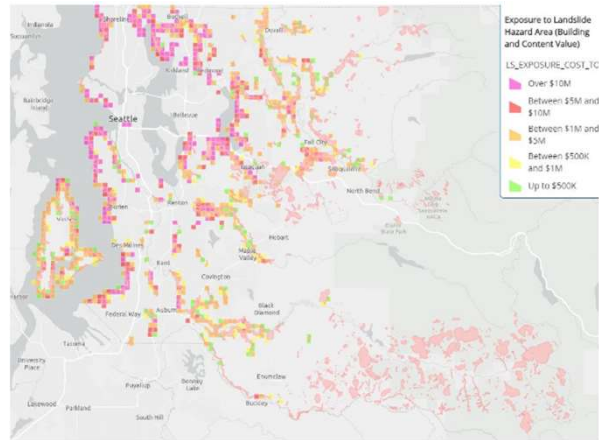
NRI Expected Annual Loss and State Plan

Previous landslide footprints

14



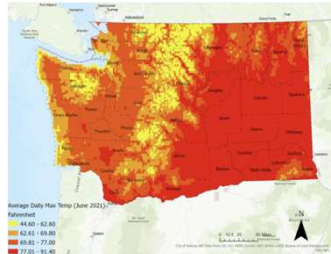
King County HMP



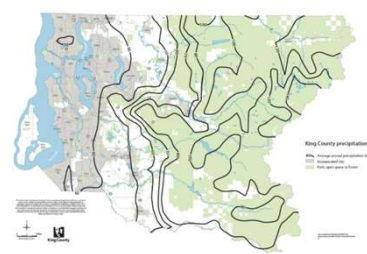
15



Washington State HMP



Washington State HMP



King County HMP

SEVERE WEATHER



16



NRI Severe Weather Ratings

| Weather hazard | NRI |
|----------------|----------------|
| Cold Wave | Not Rated |
| Hail | Very Low |
| Heat Wave | Relatively Low |
| Ice Storm | Very Low |
| Lightening | Very Low |
| Strong Wind | Very Low |
| Tornado | Very Low |
| Winter Weather | Very Low |



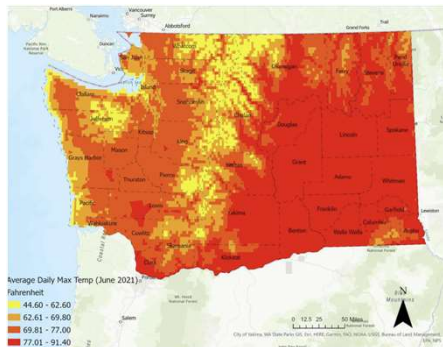
17



State Hazard Mitigation Plan



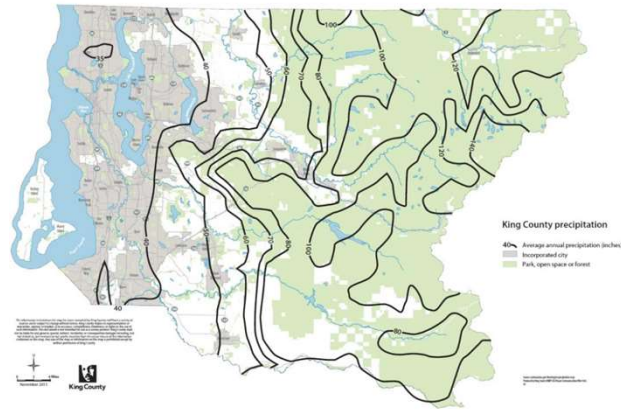
Areas in the 75th percentile for weather-related disasters since 1980.



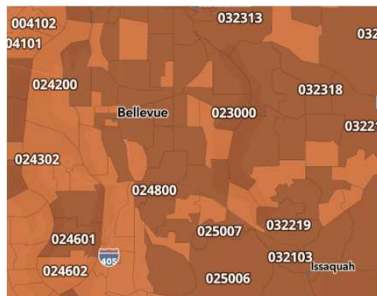
18



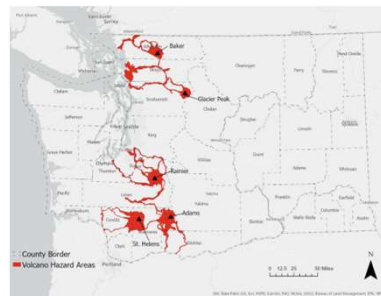
King County HMP



19



NRI Expected Annual Loss



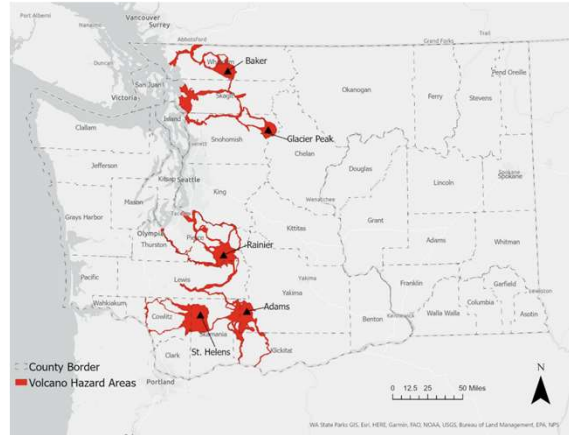
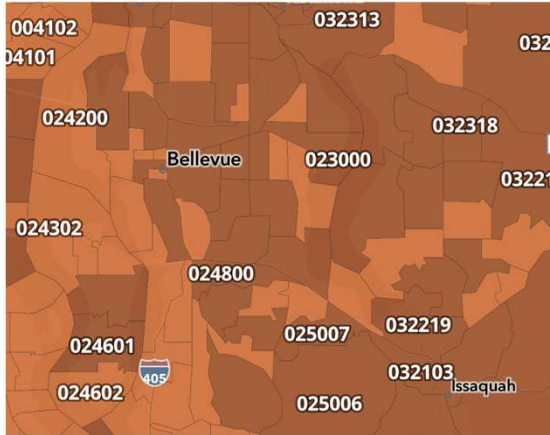
King County HMP

VOLCANO

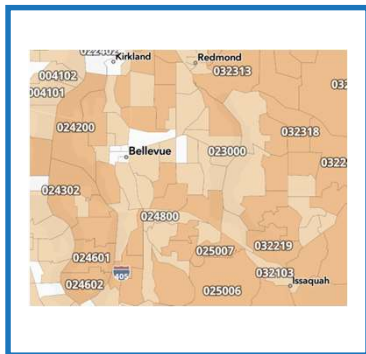
20



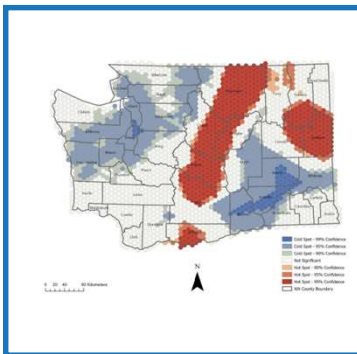
NRI Expected Annual Loss and State Plan



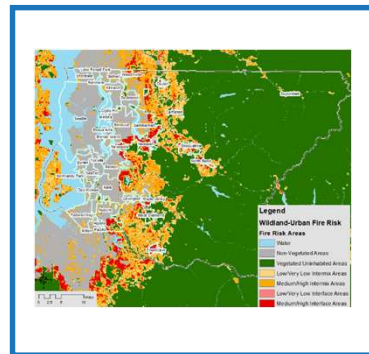
21



NRI Expected Annual Loss



Washington State HMP



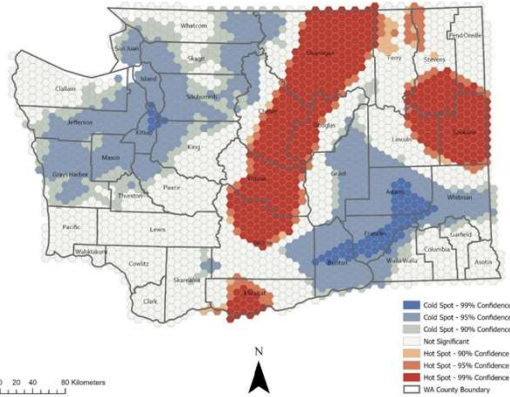
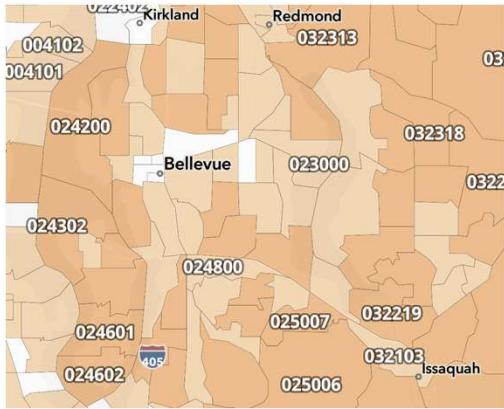
King County HMP

WILDFIRE

22



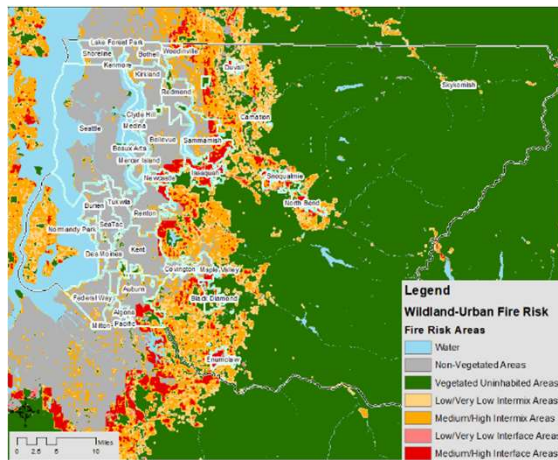
NRI Expected Annual Loss and State Plan



23



King County HMP



24



Questions?

