

SPU's Risk and Resiliency Assessment and Framework

December 10, 2019

Council Report

In 2017, Seattle City Council requested that SPU “prepare a risk and resiliency management assessment.”

SPU’s RISK AND RESILIENCY ASSESSMENT AND FRAMEWORK

2019 Final Report



Resiliency is:

- the capacity to plan, respond, and adapt to disruptions, changes, and opportunities
- reducing long-term risks and improving capabilities
- sustaining vital public services through stresses and shocks

Resiliency and Equity

- Working with the Environmental Justice and Service Equity team at SPU to advance both resiliency and equity together.
- Applied SPU Equity Toolkit with internal SPU stakeholders from all the lines of business focused on different risk focus areas.
- Presenting to branch equity teams (BETs) about equity and resiliency.



Resiliency and Affordability

**Every \$1 Invested in Disaster
Mitigation Saves \$6**

Spending to reduce risk saves lives and creates jobs, key study finds

Risk Focus Areas

- Climate Change
- Disasters
- Investment Priorities
- Economy
- Market Forces
- Technology
- Workforce



Natural and Human caused Hazards		Financial	Operations
Earthquake	Climate Change	Investment Priorities	Workforce
Loss of services Broken infrastructure Damaged facilities Islanding	Drought Extreme downpours Sea level rise Wildfires Air quality degradation Temperature rise	Aging / Substandard Regulatory requirements Projects by other agencies	Retirements Knowledge loss Skill availability Competition
Cyberattack	Extreme Weather	Economy / Markets	Technology
Loss of IT systems Stolen information	Rain, snow, wind	Affordability Debt / Revenue loss Population growth Siting facilities Recycling markets Materials markets	Emerging Decentralized New treatment
	Volcanic eruption		
	Dam Failure		
	Terrorism		
<i>Integrating Equity and Empowerment</i>			



Northridge 1994



Loma Prieta 1989



Kobe 1995



Nisqually 2001

Example: Earthquake Resilience Work

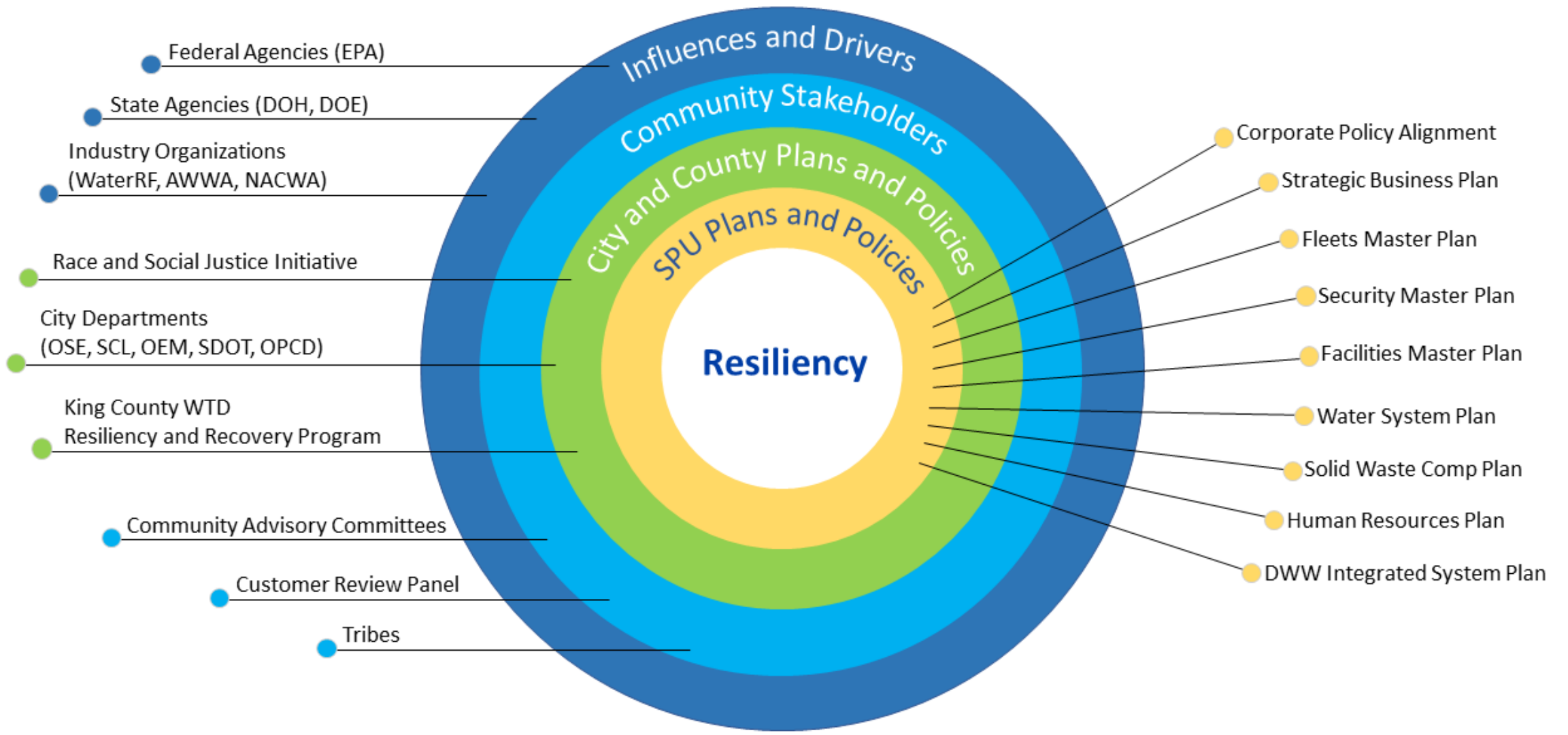


- 2018 Water System Seismic Study
- \$100 million in seismic investments since 1990 study
- Replacement pipe/material stockpiles
- Emergency Management Training and Exercise Program
- Disaster Debris Management Plan

Example: Climate Resilience Work

- Climate Equity (South Park sea level rise)
- Water Management Adaptation (DWW & Water)
- Waste Pollution Mitigation (Plastics)
- Operational Footprint Mitigation (Fleets, Buildings)
- Community of Practice (Action Agenda, Partnerships)





Resiliency Work Underway



- America's Water Infrastructure Act (AWIA)
- Climate Action Agenda
- Drainage and Wastewater Integrated System Plan
- Leadership forum on drivers and innovations
- Risk Management Framework development
- Embed R+R into the Strategic Business Plan
- Resiliency Planning Manual

Questions

