Risk Management and Resilience
Customer Review Panel
Overview

• Integration into Strategic Business Plan
• Respond to questions about risk and resilience
  • October exercise
• Rate path and financial impact
Defining Risk and Resilience

• What is risk?
• What is resilience?
• How do risk and resilience impact our customers?
Risk Management Framework
Risk Management Evolution

Traditional
- React to events
- Focused on hazards/operations
- Silo approach
- Risk Manager is insurance buyer

Advanced Risk Management
- More proactive about reducing risk
- Integrates claims, audit, loss control, risk transfer techniques
- More collaboration
- Risk Manager provides oversight

Comprehensive Risk Management
- Aligned with mission and values
- Integrated with resilience, forward-looking
- Wide range of risks covered (reputational, strategic, compliance)
- Includes “upside risks” (opportunities)
- Risks are owned by all
- Risk appetite and tolerance are specifically addressed

Risk is bad - transfer
Risk is an expense – reduce cost of risk
Risk and resilience optimized to increase value and achieve goals
Risk Management Steps

- Identify
- Learn
- Monitor
- Implement
- Assess
- Develop

Seattle Public Utilities
## Assessing Risk Levels

<table>
<thead>
<tr>
<th>Likelihood</th>
<th>Minimal</th>
<th>Minor</th>
<th>Moderate</th>
<th>Major</th>
<th>Extreme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Almost Certain</td>
<td>M</td>
<td>M</td>
<td>H</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>Likely</td>
<td>M</td>
<td>M</td>
<td>H</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>Possible</td>
<td>L</td>
<td>M</td>
<td>M</td>
<td>H</td>
<td>H</td>
</tr>
<tr>
<td>Unlikely</td>
<td>L</td>
<td>L</td>
<td>M</td>
<td>H</td>
<td>H</td>
</tr>
<tr>
<td>Rare</td>
<td>L</td>
<td>L</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
</tbody>
</table>

- **L**: Low
- **M**: Medium
- **H**: High
- **C**: Critical
Risk Response Options

• Pursue Opportunities
• Transfer
• Avoid
• Remove
• Reduce
• Accept
• Ignore
Interactive Exercise

Instructions:
• Break into 3 groups
• You have 10 minutes for this exercise
• Each group will report back for 2 minutes
• Focus on 6-year timeframe (the “now”)
• Think about balancing short, medium, long term risk
Critical SPU Risks
# SPU Risk Table - Major Risks

<table>
<thead>
<tr>
<th>Natural and Human caused Hazards</th>
<th>Financial</th>
<th>Operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earthquake</td>
<td>Climate Change</td>
<td>Infrastructure</td>
</tr>
<tr>
<td>Loss of services</td>
<td>Drought</td>
<td>Aging / Substandard</td>
</tr>
<tr>
<td>Broken infrastructure</td>
<td>Extreme downpours</td>
<td>Regulatory requirements</td>
</tr>
<tr>
<td>Damaged facilities</td>
<td>Sea level rise</td>
<td>Projects by other agencies</td>
</tr>
<tr>
<td>Public health impacts</td>
<td>Wildfires in watershed</td>
<td>New capacity for growth</td>
</tr>
<tr>
<td>Cyberattack</td>
<td>Extreme Weather</td>
<td>Economy / Markets</td>
</tr>
<tr>
<td>IT systems disabled</td>
<td>Floods</td>
<td>Affordability</td>
</tr>
<tr>
<td>Stolen information</td>
<td>Snow</td>
<td>Siting facilities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Claims and lawsuits</td>
</tr>
</tbody>
</table>

*Integrating Race and Social Justice into all of the above categories*
Technology

Cyber Security
- Assessments
- Penetration testing
- Cyber insurance

Risk Level: High
Financial Impact: Minimal

Technological Change
- Trenchless slurry removal
- UAS survey in watersheds
- Robotic inspections
- Envision the Future Workshop Q1 2020

Financial Impact: Positive
Legal Risk: Claims and Lawsuits

Damage and recovery claims

- Recovery Program: $1.3 million in 2019
- Claims Investigation Team
- Risk Reduction Program

Risk Level: Low-medium

Financial impact: Positive
Workforce

Impacts
- Retirement and succession planning
- Attracting talented staff
- Retaining skilled workforce

Progress:
- Succession planning
- Skills and knowledge transfer
- Apprenticeship programs
- Recruitment strategy + youth engagement

Risk Level: High
Progress and Resilience

- Risk Register: Identified top risks
- June report to City Council
- Create risk tools to help teams assess risks and develop solutions.
- Integrate risk into planning
- Stay ahead of regulatory requirements and find innovation opportunities.
- Increase communication inside and outside SPU.
Feedback and Questions

Contact Information:
Denise.Leung@seattle.gov
Danielv.Ward@seattle.gov