DROUGHT
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Global Risk Landscape

- Spread of infectious diseases
- Failure of financial mechanism or institution
- Unmanageable inflation
- Deflation
- Large-scale involuntary migration
- Cyber attacks
- Profound social instability
- Extreme weather events
- Water Crises

Adapted from: Global Risks Perception Survey, 2014 as reported by the World Economic Forum
A National Problem
Impacts of Drought

Economic
- Agriculture
- Industry
- Energy

Social
- Health
- Financial Hardship
- Public Safety
- Recreation Loss

Environmental
- Fish and Wildlife Harm
- Water Quality
- Wildfires/Dust

Droughts even contribute to more severe floods

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Solution Strategies

Diversification and Re-use should be emphasized
Potable Reuse is Happening Worldwide

It’s a sustainable practice with locally controlled, renewable water supplies
Public Perception is Changing

2011 San Diego Public Opinion Poll – Using Full Advanced Treatment of Recycled Water

- Strongly Oppose: 45% (2011), 9% (2004)
Policy

• Urban areas are using risk-based approaches to improve resilience and improve competitiveness

• Urban water independence requires diversified portfolio for resilience

• Current regulatory structure may not always be aligned with urban resiliency drivers

• Drought resilience can be incorporated into other projects

Wastewater is governed by the Clean Water Act (CWA) and drinking water by the Safe Drinking Water Act (SDWA)

We should incentivize innovation and collaboration
Policy

- Federal, state and local investment in water reuse and storage
- Regional integrated water management
- Facilitate the distribution of federal cost shares for local projects
- Investment towards information systems
- Facilitate Water trading

Upgrading water supply utilities may be a more cost effective alternative over the long term
THANK YOU!
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