

Southeastern Connecticut Regional Resilience **Solutions Workshop**

November 15, 2016

33 Gallows Lane, New London, CT

The Southeastern Connecticut Enterprise Region, The Southeastern Connecticut Council of Governments, and The Nature Conservancy are pleased to invite you to the second of two regional resilience vision workshops to be held during the fall of 2016. Building from the challenges identified in the first workshop, participants will generate solutions to threats posed to the region's economy, food systems, water supply, ecological assets, power infrastructure, and transportation networks. Drawing upon the diverse expertise and perspectives of participants,



At September's Challenge Workshop, participants identified the top challenges facing regional resilience.

facilitators will help the group explore collaborative and creative responses to extreme weather events, a changing climate, and fluctuating socio-economic conditions.

~ Solutions Workshop Objectives ~

- Identify collaborative solutions that communities and organizations can pursue to address regional challenges.
- Provide a venue for participants to form connections and to hold dialogs with a diverse range of stakeholders and decision makers from their region.
- Develop a context for regional collaboration that is informed by the concept of resilience.

Top Challenges

The following top challenges were identified by participants during the September workshop. These will form the basis for the discussion of solutions at the workshop in November.

Water

- Nonpoint source pollution
- Overburdened/outdated stormwater systems
- Storm surge threats to infrastructure.
- Salt water intrusion into coastal wells and septic systems.
- Planning for water shortages.

Ecosystems

- Effects of reduced water quantity and quality on natural systems.
- Reduction in ecosystem services for coastal protection and water purification.
- Conflicts between built environment and ecosystem function.

Food

- Regulatory hurdles faced by producers
- Limited processing and distribution infrastructure.
- Competition for farmland with other more profitable land-uses.
- Limited food access for some communities.
- Uncertain future environmental conditions.

Transportation

- Vulnerability of New London transportation center to storm impacts
- Vulnerability of primary arterials roads to storm impacts.
- Ageing infrastructure.
- Emergency transportation for transit-dependent communities.

Energy

- Energy infrastructure and storm damage.
- Communications disconnect between energy consumers and providers.
- Uncertainty regarding the future of local energy production.

Economy

- Short and long-term effects of flooding and power outages on business continuity and resource recovery.
- Post-storm transportation complications limit access to businesses and employees.
- Preparedness training for municipals, businesses, social service organizations.
- Effects of coastal hazards on municipal grand lists.
- Negative effects of natural resource degradation on economy.

Guiding Questions

The following guiding questions were used to facilitate the challenges workshop discussions.

Water

How and What:

- How might drinking water volume, quality, and distribution be affected by extreme weather and climate change today and in the future?
- Is the current availability of water influencing development patterns? Given current trends, will future availability of water have bearing on standards of living and development?
- Are there any costly water infrastructure projects on the horizon that the region's communities and/or utilities may need to consider?
- How do water quality issues impact the region? What coastal and inland uses (aquaculture, fishing, recreation, etc.) are most vulnerable to upstream water contamination?
- What are the current and anticipated challenges presented by inland flooding, coastal storm surge, and sea level rise?

Where and Which:

- Where are the critical drinking water supply areas? Today and in the future (if different)?
- Where are the challenges greatest for water availability? Today and in the future (if different)? Where are drinking water shortages already an issue?
- Where are there currently water quality issues that prevent access and use? Where does this impact tourism if at all?
- Which neighborhoods with wells and septic fields may be vulnerable to sea level rise and salt water intrusion?
- Where might the region see more common flooding due to intense rain events, storm surge, and/or sea level rise?

Food

How and What:

- What are the region's agricultural assets?
- What is currently limiting food production in the region?
- What are the greatest threats facing farming, fishing, and aquaculture in the region? Are these threats anticipated to increase or escalate in the future given current trends and changes in climate?
- Will these changes in the climate present opportunities for new crops and food production strategies?
- What are the greatest threats to a reliable and equitable food distribution network?

Where and Which:

- Where is prime farmland available for use? Where has it been converted to other land uses and where will it continue to be converted across the region?
- From where is food generally coming into the region? Other local sources in CT or from outside of the state?
- Where are the key retailers and distributors of locally produced food? Are these sources generally well supported?

Ecosystem Services

How and What:

- What different kinds of value do the ecosystems of southeastern CT provide to the region's human communities and infrastructure? How have past alterations of these ecosystems impacted their ability to provide this value?
- How are these ecosystem services threatened today and in the future?

Where and Which:

- Which particular natural areas are most important for protecting human communities and infrastructure from extreme weather?
- Which natural areas are most important for absorbing excess nutrients and other contaminants?
- Which natural areas have the highest aesthetic and recreational values?
- Which natural areas have the highest habitat values?

- Which natural areas have the highest tourism value.

Transportation

How and What:

- How reliable will evacuation routes be under current and future flooding scenarios?
- How well prepared are regional roads and interstates to deliver goods and services in an emergency?
- What would be the impact on the region's communities if the main transportation services (I-95, Amtrak, Groton New London Airport, etc.) were compromised from an extended period of time?
- How might lack of vehicle access disadvantage residents in certain areas?

Where and Which:

- Which residential and commercial areas in the region are most accessible by existing transportation networks? Which are least accessible?
- Where might storm surge have the greatest impact on transportation networks?
- Where might sea level rise have the greatest impact transportation networks?
- Where might inland flooding have the greatest impact on transportation networks?
- Where is increased public transportation most needed?

Energy

How and What:

- What are the greatest threats to the reliability of the regional power supply?
- How might the regional power supply be compromised by extreme weather?
- What are the threats to people, businesses, and institutions from large-scale power outages? What factors may affect the ability of power to come back after a large-scale outage?
- Are there any costly power infrastructure projects on the horizon that the region's communities and utilities may need to consider?

Where and Which:

- Where is the region most vulnerable to disruptions in power supply and distribution?
- Where are the region's assets for local power generation?



- Where can the region increase and diversify local power production?

Regional Economy

How and What:

- What are the greatest threats to the region's businesses and major employers?
- What are the greatest threats facing the region's employees?
- What are the greatest financial challenges facing municipal governments?
- How would the region be impacted economically if vulnerable coastal communities were lost?
- How prepared is the region's economy to accommodate displaced populations and/or climate refugees?

Where and Which:

- Where are the economically important villages that are most vulnerable to extreme weather, inland flooding, and sea-level rise?
- Where are the residential neighborhoods that are most vulnerable to extreme weather, inland flooding, and sea level rise?
- Where are the businesses and major employers located that are most vulnerable to extreme weather, inland flooding, and sea-level rise?
- Where are there opportunities to build in flood-protected areas? What challenges exist for building in these areas?