

Meeting of the
Governor's Council on Climate Change
**Adaptation Planning and
Implementation Working Group**

March 5, 2020
9:30-11:30 a.m.

10 Franklin Square, Hearing Room 2
New Britain, CT



Agenda

Welcome and Introductions	(10 minutes)
Overview of GC3 and Working Group Structure	(5 minutes)
Deliverables and Timeline	(15 minutes)
Roles and Expectations	(20 minutes)
Overview of 2011 Climate Change Preparedness Report	(15 minutes)
Proposed Table of Contents	(10 minutes)
Overview from CIRCA	(10 minutes)
Public comments	(15 minutes)
Next Steps and Adjourn	(20 minutes)



Introductions



Meeting Objectives

1. Develop understanding of why we're here and what we need to accomplish
2. Clarify structure and process
3. Agree on WG general meeting schedule
4. Clarify roles and participation in theme areas
5. Establish what we need to get done before next meeting



Overview of GC3 and Working Group Structure

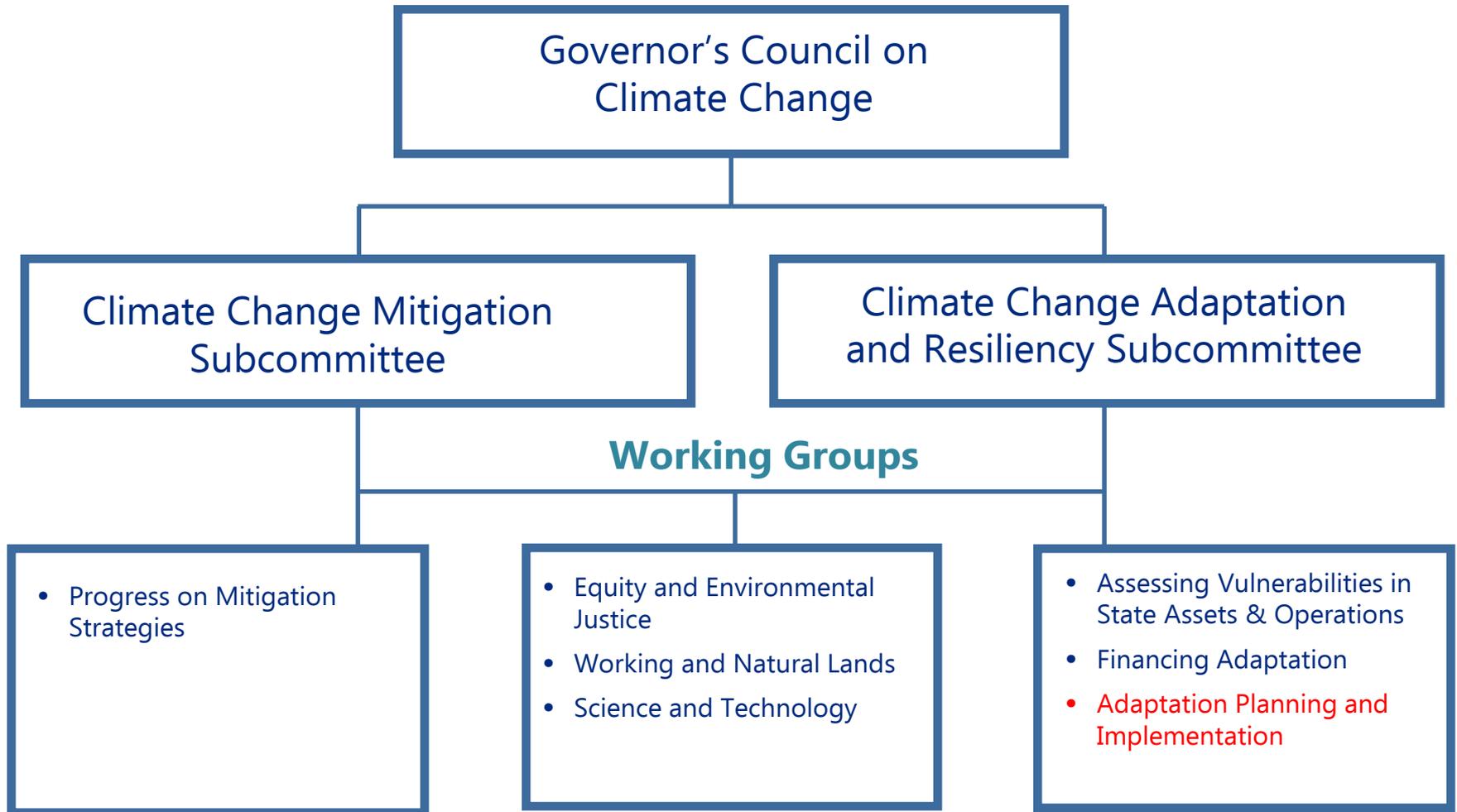
Executive Order 3 Objectives

Develop and implement adaptation strategies to assess and prepare for the impacts of climate change in areas such as infrastructure, agriculture, natural resources, and public health. This includes tasks such as:

- developing framework for conducting an **inventory of vulnerable assets and operations**;
- **revising and updating the statewide Adaptation and Resilience Plan**; and
- reporting on the **alignment of climate change adaptation** strategies incorporated into **state agency planning processes and documents**.



GC3 Structure



Deliverables

January 15, 2021 report to the Governor the state's progress on the implementation of the recommendations outlined in the report *Building a Low Carbon Future for CT: Achieving a 45% reduction by 2030*;

January 15, 2021, report to the Governor on a revised statewide Adaptation and Resilience Plan for Connecticut that encompasses the most current and locally scaled scientific information and analysis available with respect to the effects of climate change, including sea level rise, changes in precipitation and temperature patterns, and storm preparedness in the context of the State's changing land use and demographics.

December 31, 2021, compile a comprehensive State Agency Climate Change Adaptation and Resiliency report on the alignment of climate change adaptation strategies incorporated into each state agency's relevant planning processes and documents

Establish a framework, in consultation with the state's Chief Data Officer and in coordination with CIRCA's ongoing vulnerability assessment, for state agencies to compile and maintain an inventory of vulnerable assets and operations



Overall Timeline



Key Questions

- How much progress has been made in response to strategies identified in the 2011 Plan?
- What strategies from 2011 should be pursued further, modified or dropped? What are the gaps in the strategies from 2011?
- What tools or information are needed to improve characterization of vulnerabilities to climate change and develop solutions?
- What are the critical infrastructure assets in need of protection? How should protection and adaptation needs be prioritized?
- Are there changes in land use practices and policies that would increase resilience and reduce risk?
- How might natural resources affected by implementation of strategies to protect or increase the resiliency of human uses?
- How will potential actions benefit or impact vulnerable populations and communities?



Working Group Proposed Timeline

First Meeting, March 5: Overview of structure, objectives, deliverables, tasks and milestones; review strategies from 2011 report; presentation from CIRCA.

Meeting Late-April (4/23, tentative): Discussion of problems, needs, gaps. Begin brainstorming Indicators and Targets, Outcomes and Objectives

Meeting Early-June (6/5, tentative): Prioritize Outcomes, Objectives and Strategies.

Meeting Mid-July (7/16, tentative): Refine Indicators and Targets, Outcomes, Objectives and Strategies. Discuss and prioritize Implementation Actions.

Meeting August (8/20, tentative) Meeting: Finalize Recommendations for Indicators and Targets, Outcomes, Objectives, Strategies and Implementation Actions.



Working Group Proposed Tasks

March - April

- Review 2011 recommendations; update progress-to-date; prioritize for further action
- Compile existing local and regional plans; identify key elements for consideration
- Identify problems, gaps and needs

April - June

- Identify Key Indicators and Targets
- Identify Priority Outcomes and Objectives
- Develop Strategies to achieve Outcomes and Objectives

June - July

- Refine Indicators and Targets, Outcomes, Objectives and Strategies
- Develop Implementation Actions
- Start Report Drafting

July - September

- Final Draft of Indicators and Targets, Outcomes, Objectives and Strategies
- Refine Implementation Actions
- Complete Draft Report



Roles & Expectations

DEEP Lead: Brian Thompson

CIRCA: John Truscinski/Alex Felson/Joanna Wozniak-Brown

Co-Chairs: Matt Fulda, Metro COG, and George Kral, Town of Guilford

Theme Area Leads

Transportation: Robert Bell, DOT and Matt Fulda

Utility Infrastructure: Chairman Marissa Gillett, PURA

Public Health & Safety: Deputy Commissioner Heather Aaron, DPH

Land Use & Buildings: Matt Fulda, George Kral



Roles & Expectations

- Work will need to be conducted between meetings and input provided at meetings for each theme area
- Theme area leads will guide work and meeting discussion for each theme area
- WG composition was established to provide a representation and balance across the four theme areas based on known areas of expertise
- Members will be asked to participate in one or two theme areas



Recommendations in 2011 Plan – Adaptation Examples

Public Health & Safety

- Develop educational materials concerning poor air quality
- Continue to monitor health ailments caused by ozone non-attainment levels
- Develop a database of morbidity and mortality caused by climate change
- Intensify vector associated disease monitoring
- Educate other sectors of state government about public health climate change impacts and adaptation
- Increase airborne pollen monitoring
- Evaluate ozone non-attainment alert systems
- Evaluate current early extreme weather events warning system and emergency response plans

Utility Infrastructure

- Assess the impact of climate change on wastewater treatment facilities, and encourage the development of facility-specific adaptation plans
- Develop water reuse guidelines for industry
- Develop decision tools to evaluate replacement, modification, and design life for infrastructure

Land Use & Buildings

- Encourage land management behaviors that support ecosystem services
- Continue to support regional cooperation on climate change adaptation through involvement in regional planning activities
- Perform a comprehensive modeling assessment of the extent of inland migration of tidal marshes essential for directing adaptation actions
- Engage and educate private landowners to manage their lands to minimize risk from climate change
- Encourage adaptation strategies, including natural habitat conservation, Low Impact Development (LID) Best Management Practices (BMPs), agriculture water BMPs and drinking water treatment standards that will ameliorate the effects of water inundation
- Encourage sustainable water capture and storage by homeowners, municipalities, businesses, and industries, and the agriculture sector with incentive programs to supplement capture and storage infrastructure



Draft Table of Contents

PART III: Climate Change Adaptation and Resilience

Working and Natural Lands (*Working and Natural Lands – all subgroups*)

- Background and Context
- Importance
- Impact Assessment and Vulnerability
- Progress
- Indicators and Targets
- Outcomes, Objectives and Strategies
- Implementation Actions
- Assessment of Impacts to Vulnerable Communities

Infrastructure and Developed Lands (*Adaptation Planning and Implementation – Transportation, Utility Infrastructure, and Land Use and Buildings subgroups*)

- Background and Context
- Importance
- Impact Assessment and Vulnerability
- Progress
- Indicators and Targets
- Outcomes, Objectives and Strategies
- Implementation Actions
- Assessment of Impacts to Vulnerable Communities

Public Health and Safety (*Adaptation Planning and Implementation – Public Health and Safety subgroup*)

- Background and Context
- Importance
- Impact Assessment and Vulnerability
- Progress
- Indicators and Targets
- Outcomes, Objectives and Strategies
- Implementation Actions
- Assessment of Impacts to Vulnerable Communities

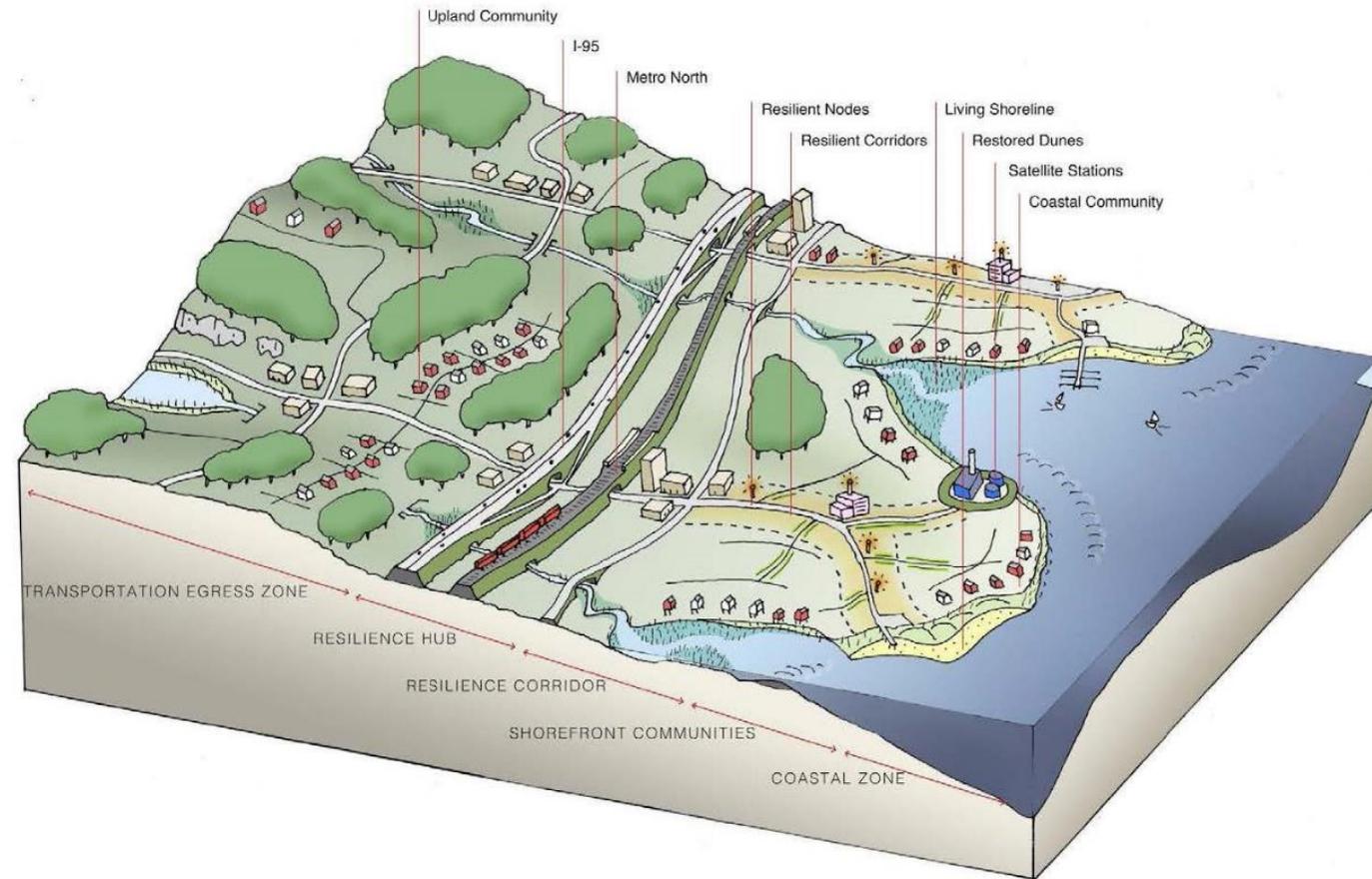


Overview from CIRCA



Resilient Connecticut

- Identify climate impacts that towns can't address alone
- Assess regional infrastructure challenges & opportunities
- Identify “resilience corridors” & resilient TOD opportunities
- Develop implementable plans & pilot projects with broad co-benefits



Resilient Connecticut

Planning



- Resilient Connecticut Planning Framework
- Regional Resilience Planning
- Implementation Planning for Pilot Projects

Technical Support



- Flood Risk and Vulnerability Assessment
- Climate Impact Modeling
- Adaptation Option Evaluation & Data Collection

Capacity Building

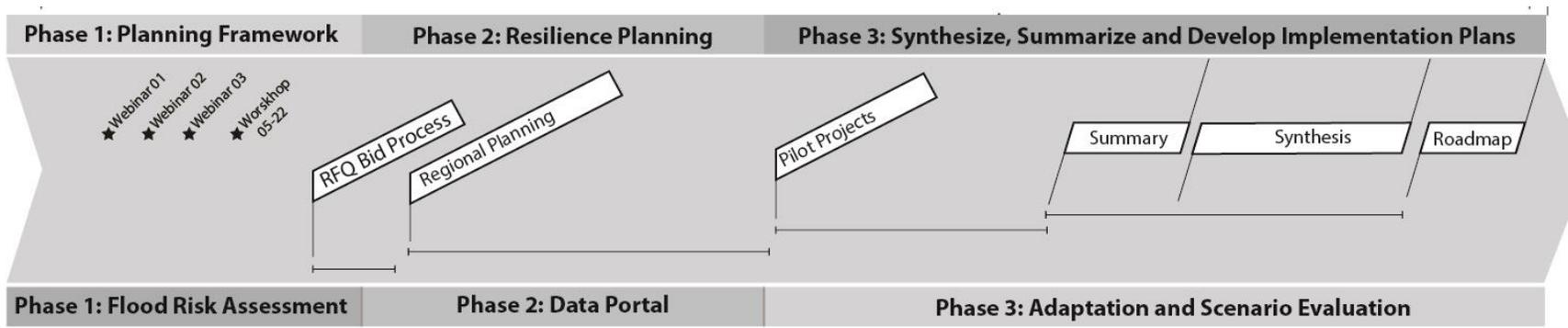


- Applied Field Research
- Climate Impacts to Public Health in CT
- Economics & Cost/Benefit Development
- Legal & Policy Recommendations

Engagement



- Resilient Connecticut Annual Summit
- Monthly Webinar Series
- Resilient Connecticut Collaborative and Working Groups
- Workshop Series

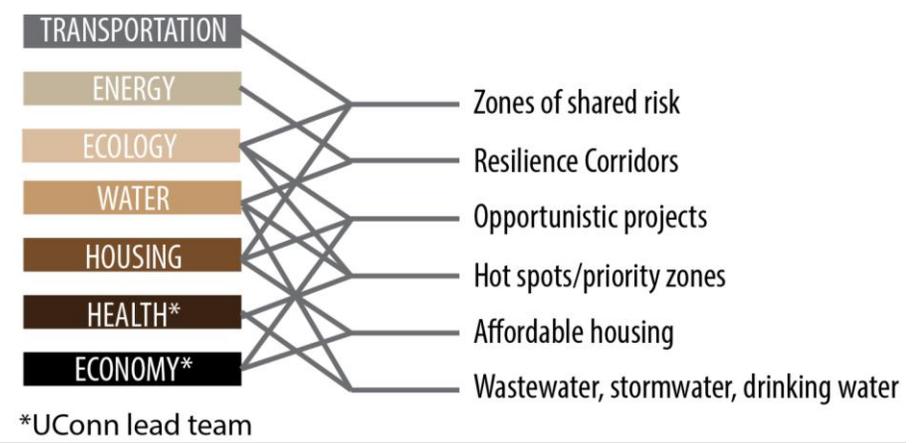


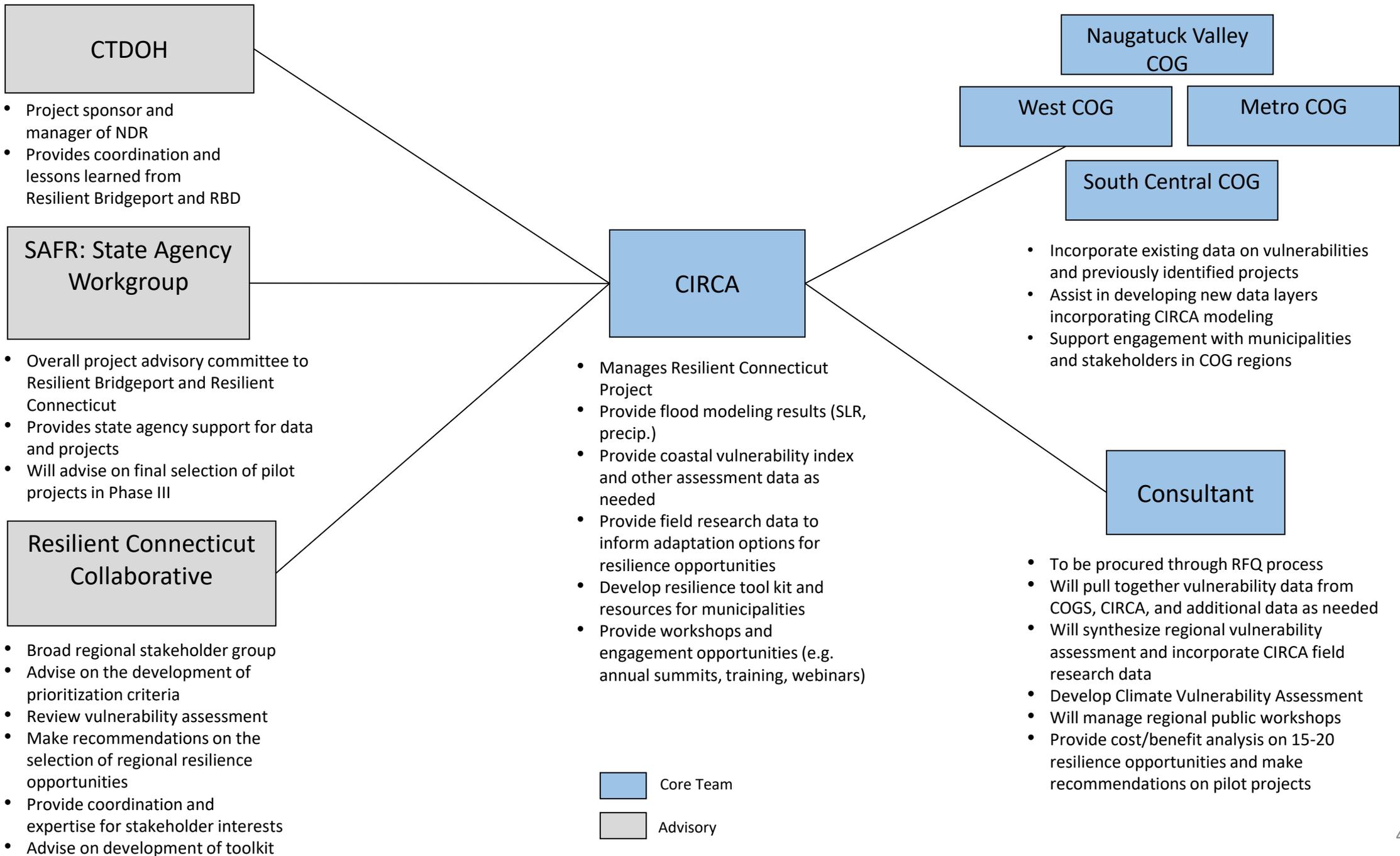
Phase II: January 2020 – February 2021

- Regional Analysis
- Regional Engagement

Phase III: February 2021 – May 2022

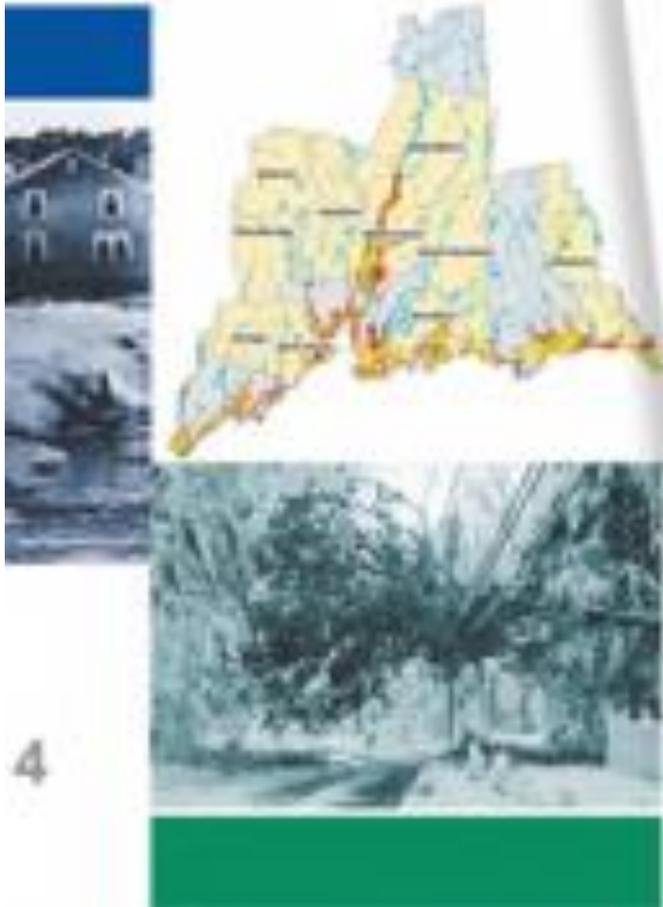
- Develop Pilot Projects
- Implementation Planning





“Build on previous planning..”

CENTRAL REGIONAL
-JURISDICTION
MITIGATION PLAN



CONSERVATION & DEVELOPMENT
POLICIES: THE PLAN FOR
CONNECTICUT



2013-2018

Prepared by the Office of Policy and Planning
in collaboration with Connecticut General Assembly
Adopted June 5, 2013

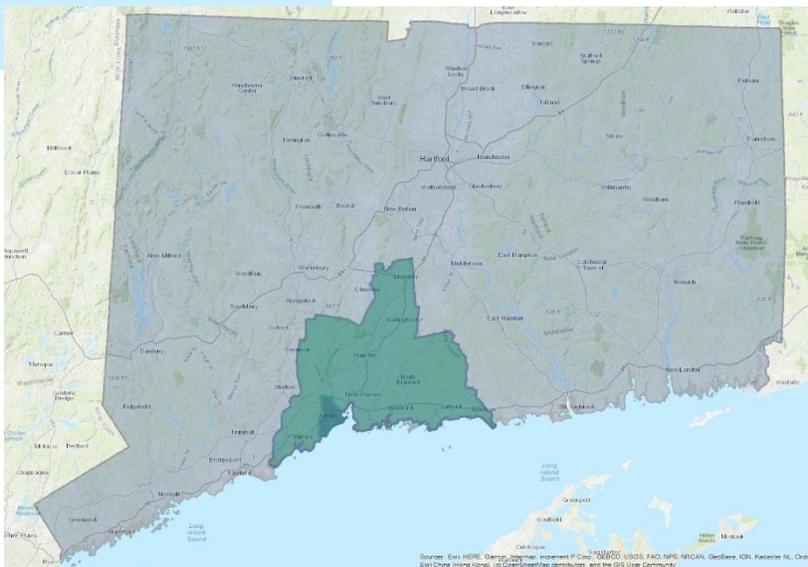
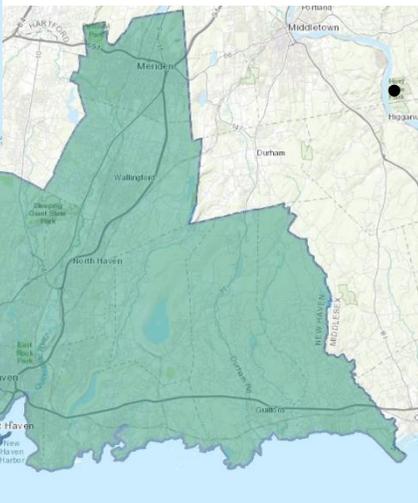
SOUTHERN CONNECTICUT REGIONAL FRAMEWORK
FOR
COASTAL RESILIENCE

FINAL REPORT
JUNE 2017



UConn





- Plan of Conservation & Development
- Natural Hazard Mitigation Plan
- Municipal Resilience Plans and Workshops
- Coastal Zone Management

- Plan of Conservation & Development (regional)
- Natural Hazard Mitigation Plan (multi-jurisdictional)
- Metropolitan Transportation Plan (Long-range Transportation Plan)
- Transportation Improvement Plan/Regional Transportation Plan
- Comprehensive Economic Development Strategy

- Plan of Conservation & Development (entire state)
- Statewide Transportation Improvement Plan
- Long-range Transportation Plan
- Natural Hazard Mitigation Plan (entire state)
- Coastal Zone Management Program

MUNICIPAL

REGIONAL

STATE



Grantee	West Haven
Lat	41.27
Long	-72.93
Project Name	Community Coastal Resilience Plan & Wastewater Treatment Facility Outfall Feasibility Study
Funding Amount	\$277,999.70
Tranche	Tranche Two
Project Type	Resilience or adaptation planning
Report Link	More info
Zoom to	

Community Development Block Grants-Disaster Recovery Program



Regional Resilience Projects

Symbolize Projects By

All **Type** Objective Strategy Town

Show Projects Where

Pick a Field ✕

Selected Project Attributes

Overview	Project Scope	Site Characteristics	Supplementary Info
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Project Name: Kings Highway Potential GI with Bank Stabilization Projects
Address: 35 Kings Highway
Description: The Kings Highway potential GI project would incorporate GI techniques and green street concepts such as, bioswales, rain gardens, bioretention areas, tree box plantings, vegetation, and curb bump-outs to mitigate future erosion and flooding.
Funding:
Green Infrastructure: Yes

[Strategy Definitions](#) [Project Type Definitions](#)



	A	B	C	D	E	F	G
1	Fairfield County	Coastal Resilience Plan	Plan of Conservation and Development	Municipal Natural Hazard Mitigation Plan	COG Natural Hazard Mitigation Plan	Floodplain Management Plan	The Nature Conservancy Regional Framework
2	Bethel		2007	2015			
3	Bridgeport	2016	2019 (draft)		Metro COG - 2014	2016 (stormwater management plan)	2016
4	Brookfield		2015	2014			
5	Danbury		2013	2017			
6	Darien		2016		WestCOG - 2016		
7	Easton		2018		Metro COG - 2014		
8	Fairfield		2016		Metro COG - 2014	2014 (Metro COG Hazard Mitigation Plan)	2016
9	Greenwich	2013	2009		WestCOG - 2016		
10	Monroe		2010		Metro COG - 2014		
11	New Canaan		2014		WestCOG - 2016		
12	New Fairfield		2014	2011			
13	Newtown		2014	2015			
14	Norwalk	2018	2019		WestCOG - 2016		
15	Shelton		2017				
16	Sherman		2013	2017			
17	Stamford	2018	2014 (master plan)		WestCOG - 2016		
18	Stratford	2016	2014		Metro COG - 2014		2016
19	Redding		2008	2015			
20	Ridgefield		2010	2015			
21	Trumbull		2014		Metro COG - 2014		
22	Weston		2017		WestCOG - 2016		
23	Westport		2017		WestCOG - 2016	2016 (West COG Hazard Mitigation Plan)	
24	Wilton		2019		WestCOG - 2016		



Resilient Connecticut Workshop Summary

May 22, 2019
UConn Stamford Campus
Stamford, Connecticut

https://resilientconnecticut.uconn.edu/wp-content/uploads/sites/2761/2019/05/Workshop-summary-final_May-22-2019.pdf

UConn



How has CT been planning for climate change?



Session A

State and regional scale resilience planning case studies

Session B

Municipal scale issues and coastal resilience plans, challenges, and barriers – case studies from New Haven and Fairfield Counties

Session C

Breakout Sessions – facilitated discussion for input and feedback on a Connecticut resilience planning framework

10 Things About Resilience in CT

1. Lots of planning, not much implementation.
2. Prioritization of issues and projects is needed.
3. Cost/benefit analysis or methodology for performing cost/benefit is needed.
4. Even if B/C is positive, who benefits and who pays costs?
 - *How do we incorporate equity and EJ into public investments for adaptation?*
5. Strong desire to protect things as they are: Resilience vs. Adaptation
6. Education of public and stakeholders has been repeatedly cited as an urgent need.
7. Move beyond the coast
 - *Heat impacts, stormwater management, drinking water quality, human health*
8. Who has capacity to push projects to implementation?
 - *Continued, and committed public dialogue about projects at scale for decision making is needed*
9. Diverse sources and coordination of funding
10. Breakdown silos and work together

GC3 and Resilient Connecticut Coordination

- Resilient Connecticut team interested in identifying and piloting approaches in our project area that would help to move specific issues forward for GC3.
 - E.g. vulnerability assessment of state assets, operations, infrastructure, etc.
 - Approach can be developed in RC project area in 2020 and expanded 2021
- Identify areas where other organizations or working groups have done work or will do so under EO3.
 - Prevent duplication of effort
 - We'd like to incorporate that work into our planning process to improve the outcomes for stakeholders.
 - E.g. Climate and Health working group, Energy, Infrastructure, etc.
- Coordinate on meetings, events, and engagement.
 - Spring workshop on climate and public health (May 13th, 2020)
 - Resilient Connecticut Annual Summit (November 20th, 2020)

Resilient Connecticut Schedule next 12 months

Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	
SAFR State Agency Workgroup monthly meetings															
CIRCA Coastal Vulnerability Index and Flood Model Dev							CIRCA Field Research								
Collaborative							Collaborative		Collaborative			Collaborative			
				CIRCA Climate and Health Workshop						2nd Annual Summit					
dev. COG Scope		Inventory COG vulnerability data					Phase II Contractor				Develop Pilot Projects with Team			Project Prioritization	
RFQ		Vulnerability Assessment					Develop Regional Resilience Opportunities					Prioritization of Pilot Projects			
					Regional Workshop 1					Regional Workshop 2		Regional Workshop 3			
CIRCA		COGs		Contractor		Public Meetings									

Public Comments

DEEP.ClimateChange@ct.gov

Next Steps

Actions Needed

1. Agree on meeting schedule

DEEP will follow up to confirm date availability

2. Identify theme area participation

DEEP will follow up with request to self select

3. Before next meeting

A. Review 2011 recommendations; update progress-to-date; prioritize for further action

B. Identify problems, gaps and needs

DEEP will provide formats and instructions

