

# HARBORS OF BLACK ROCK AND BRIDGEPORT

Founded upon a Trigonometrical Survey

under the direction of F.R.HASSLER Superintendent of the

**SURVEY OF THE COAST OF THE UNITED STATES**

Triangulation by J.FERGUSON Assistant

Topography by C.M.EAKIN Assistant

Hydrography by the party under the command of

Lieutenant G.S.BLAKE U.S.Navy

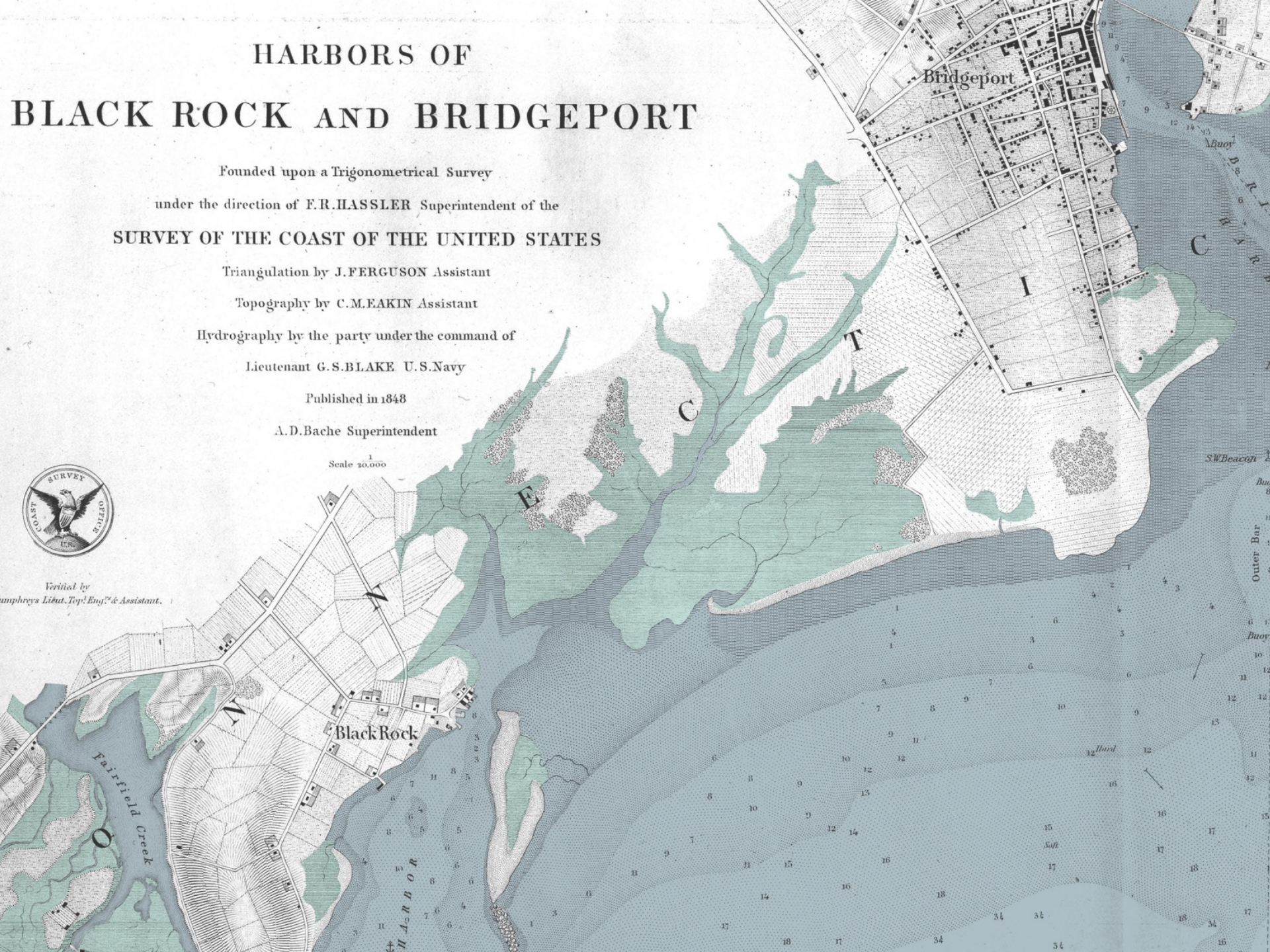
Published in 1848

A.D.Bache Superintendent

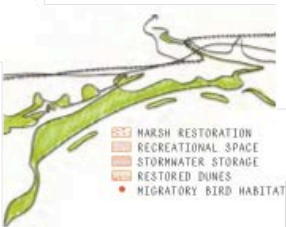
Scale 20,000



Verified by  
Humphreys Lieut. Top. Eng. & Assistant.







### Restore the Edge: Strengthen and Provide Access to the Coast

Preserves historic Seaside park and enhances its ability to buffer the adjacent neighborhood from wave energy; restores ecological habitats on and offshore; leverages waterfront for economic productivity; creates new spaces for a balanced approach to the water's edge.

RESTORE THE EDGE GENERATES THE MOST ENVIRONMENTAL BENEFITS.



### Adapt to Rising Seas: Provide Surge Protection

Integrates flood protection infrastructure into the neighborhood fabric providing co-benefits for connectivity, redevelopment, and ecological restoration, while protecting against flooding from Long Island Sound and Cedar Creek.

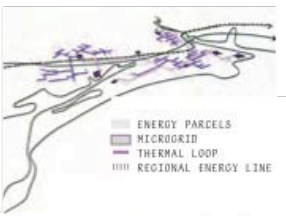
ADAPT TO RISING SEAS AVOIDS THE MOST ECONOMIC LOSSES



### Delay and Convey Stormwater: Enhance Stormwater Capture and Discharge

Addresses chronic flooding from normal to heavy rainfall events, and reduces contributing stormwater volume to Bridgeport's combined sewer system, potentially separating systems where possible.

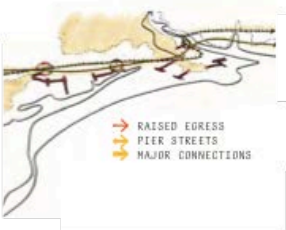
DELAY AND CONVEY GENERATES THE MOST WATER QUALITY BENEFITS



### Make Power Locally: Create Distributed Utility Networks

Supports the creation of neighborhood-scale microgrids and district heating/cooling to provide backup power for critical facilities; support renewable and low-carbon energy production; leverage regional energy assets for local benefit.

MAKE POWER LOCAL AVOIDS THE MOST DISRUPTION AND REDUCES THE MOST EMISSIONS



### Access & Egress: Transportation and Development

Provides residents with dry egress out of high risk flood areas, with the intent of spurring development and economic activity by enhancing connections between people, businesses, and the coast.



## Resilience Design Strategies

The resilient strategies are a comprehensive, multi-layered approach to reduce flood risk, enhance quality of life, and inspire economic revitalization. The five strategies work together, addressing distinct aspects of acute and chronic flood risk. The Restore the Edge strategy creates or enhances natural systems that provide natural flood protection and other ecosystem services. Adapt to Rising Seas is an integrated flood protection system that will guard against storm surge and sea level rise. Delay and Convey Stormwater addresses chronic flooding. Access and Egress provides Bridgeport's residents with dry egress out of high risk flood areas, and is intended to spur redevelopment and economic activity by enhancing connections between people, businesses, and the coast from frequent rain events. Make Power Locally supports the creation of district scale microgrids to provide backup power for critical facilities and support sustainable energy production. The goal is to ultimately develop, prioritize, and implement a long-term flood protection strategy for Bridgeport through these five primary layers.

Each idea is designed to be adaptable and flexible in its implementation, in recognition of information gaps and dynamic conditions. The strategies will be presented as adaptations to existing systems that can be completed in three phases: short term, medium term, and long term. Far enough out to anticipate bigger changes, while near enough to be predicated on existing technologies and best practices, this vision for resilience will require updating over time.



RAILROAD

1-96

PARKFIELD AVE

PINE ST

HOLLYWOOD BL

TO DOWNTOWN

SEADORSKY SITE

SEASIDE PARK

1

2

2

3

2

2C

4

2B

2A

5





# The Development of the Connecticut Connections Coastal Resilience Plan

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UConn CIRCA  
Yale UED Lab  
CT DEEP

# Goals of Resilience Plan

- Establish a framework for creating the Statewide Resilience Roadmap that includes regional resilience and adaptation planning, policy consideration, and actionable priorities
- Make recommendations on how to incorporate resilience to climate change into the State Plan of Conservation and Development, State Natural Hazard Mitigation Plan, the Comprehensive Energy Strategy, and local plans of Conservation and Development and Natural Hazard Mitigation
- Serve as a framework for coordinating resilience and adaptation planning, policy, and actions with the US DHS Security National Incident Management System (“NIMS”)
- Provide capacity building for resilience planning and projects in Connecticut
- Provide engagement activities on the impacts of climate change and innovative adaptation solutions for the public and stakeholders in resilience across local and state government, non-profits and the private sector

# Elements of Resilience Plan

1. Develop Resilience Planning Framework,
  2. Conduct Resilience Planning in New Haven and Fairfield counties, and
  3. Synthesize, prioritize and develop implementation plans.
- Supporting Activities
  - Capacity-building Activities
  - Engagement



# Phase 1: Develop Resilience Planning Framework

- Bring together the stakeholders;
  - State Agency Workgroup and Citizens Advisory Committee
- Assess the current planning efforts in the state; and
- Build a resilience framework for planning efforts going forward

## Town of Branford Coastal Resilience Plan


June 2016



### Prepared by:

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### With assistance from:

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 Dewberry

Under the direction of the  
Town of Branford



This plan was prepared under a Community Development Block Grant Disaster Recovery (CDBG-DR) grant awarded to the Town of Branford, Connecticut for coastal resilience planning in Branford, Madison, and Milford, Connecticut.

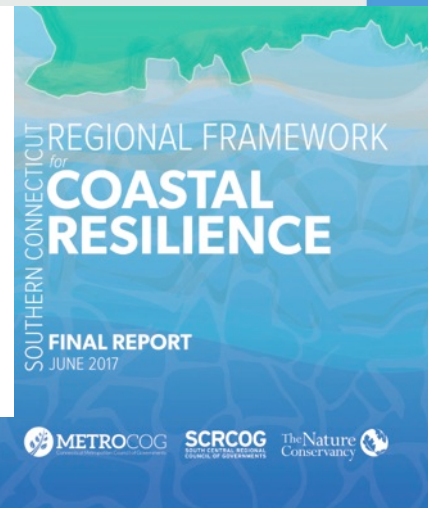


CIRCA Municipal Resilience Grant and  
Matching Funds Program Summary

March 2017

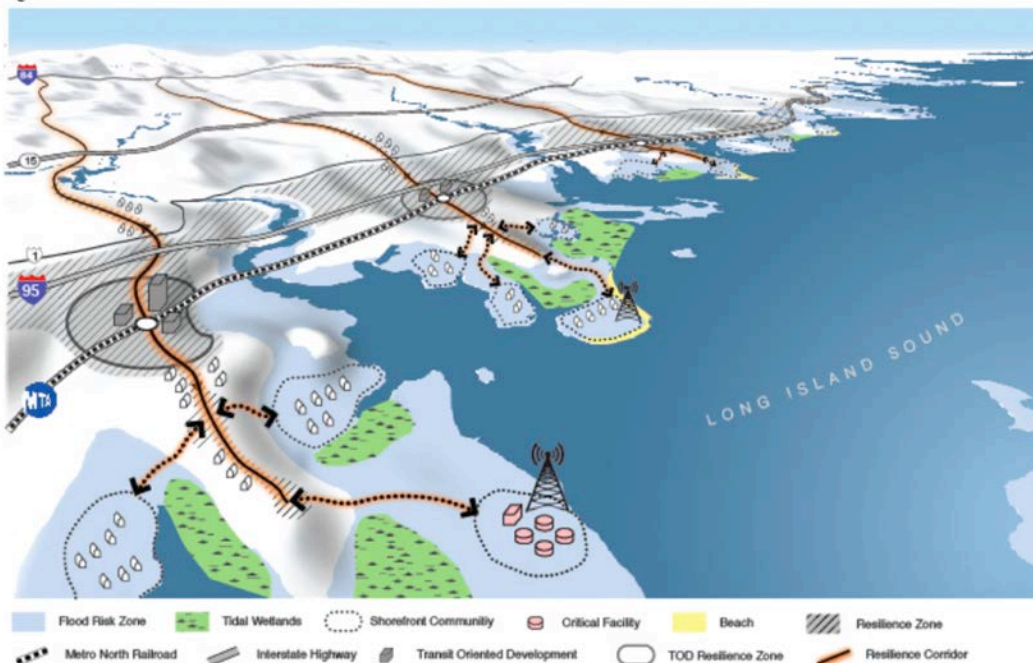


Connecticut Institute for Resilience and Climate Adaptation, University of Connecticut

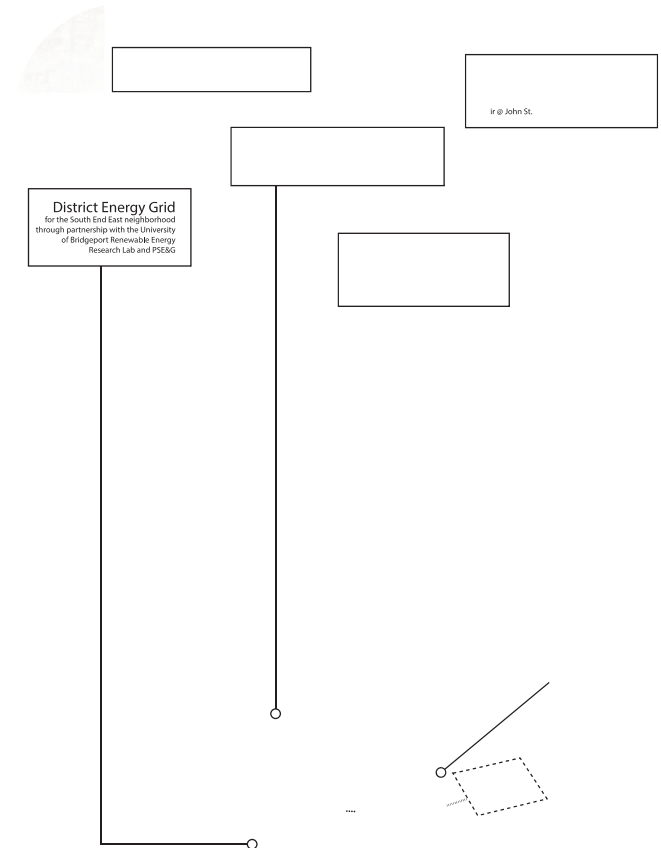




# Phase 2: Conduct Resilience Planning in New Haven and Fairfield counties



- Regional
- Municipal
- Regional engagement, coordination across plans and initial synthesis



# Phase 3: Synthesize, prioritize and develop implementation plans

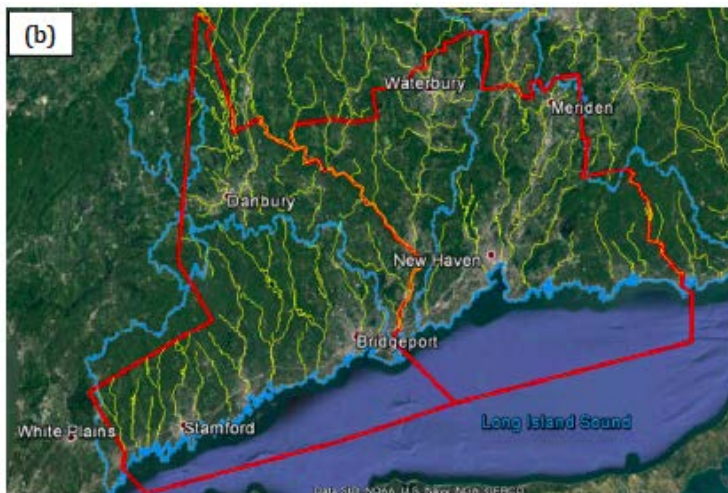
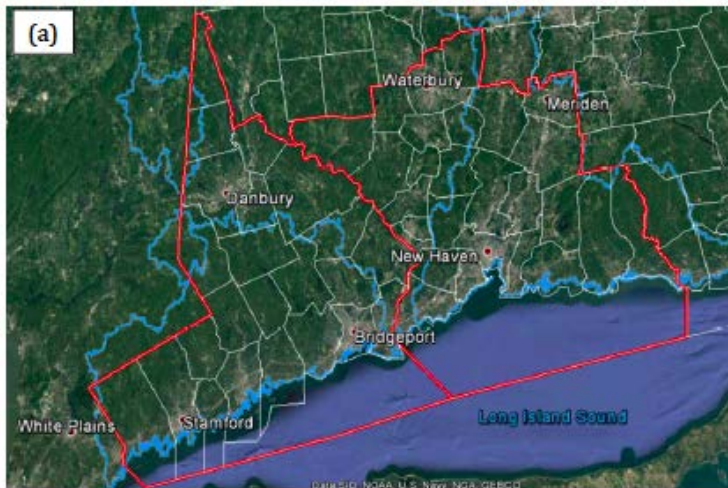
- Site plan development
- Funding site plan projects
- Resilience Roadmap Recommendations





# **SUPPORTING ACTIVITIES**

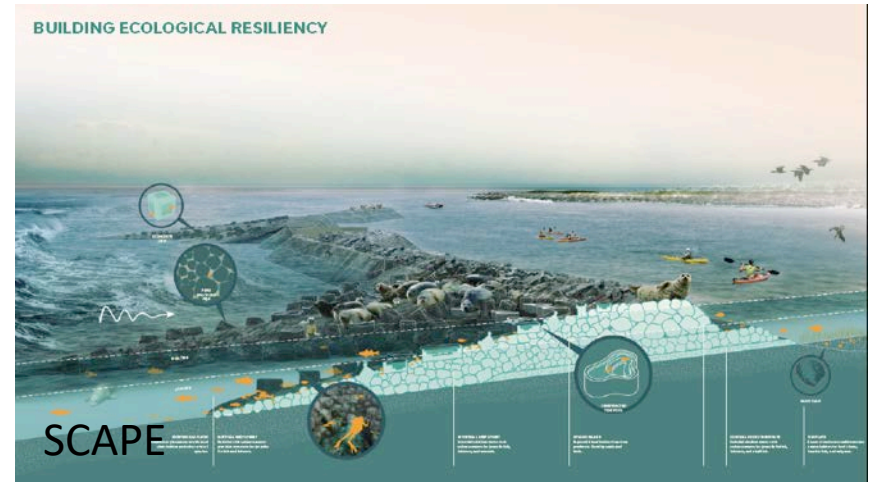
# Flood Risk Assessment



- Input from municipalities on subdomains to determine areas of high concern
- Coupled modeling of 5 subdomain regions to determine coastal and riverine flood risk with incorporation of small scale flow control structures (e.g. culverts and tide gates)
- 2050 and 2100 Flood Risk Maps



# Adaptation Option Evaluation



# Capacity-building Activities

- Legal & Policy Analysis
- Economic Modeling





# Engagement

- Science translation: climate science consensus
- CIRCA Resilience Toolkit and Public Engagement Program
- Policy analysis and case studies
- Innovative design training
- Engineering for coastal resilience training

