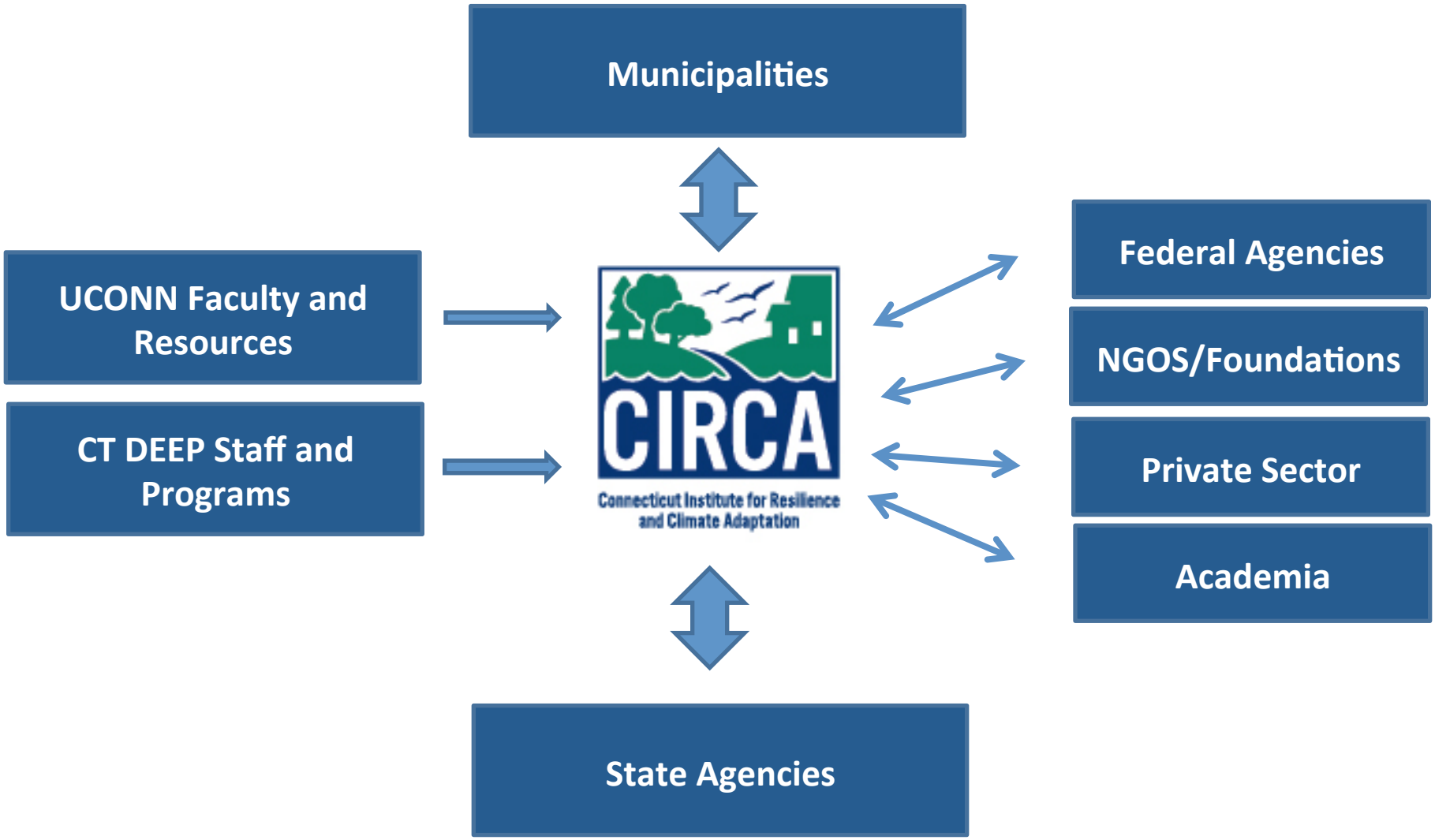
The Connecticut Institute for Resilience and Climate Adaptation (CIRCA)

Mission

Increase the resilience and sustainability of vulnerable communities in Connecticut's coastal and inland areas to severe storms and the growing impacts of climate change on the natural, built, and human environment in response to critical, identified needs and priorities.

Strategy

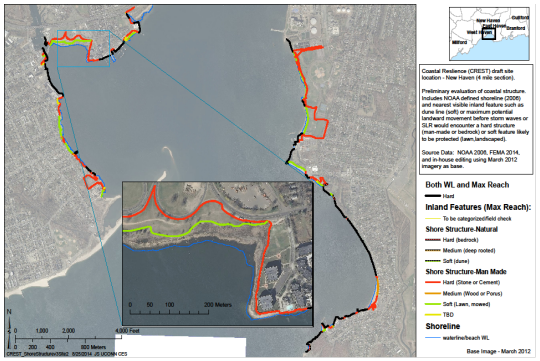

Municipalities
UCONN Faculty and Resources
CT DEEP Staff and Programs
CIRCA
Connecticut Institute for Resilience and Climate Adaptation
Federal Agencies
NGOS/Foundations
Private Sector
Academia
State Agencies

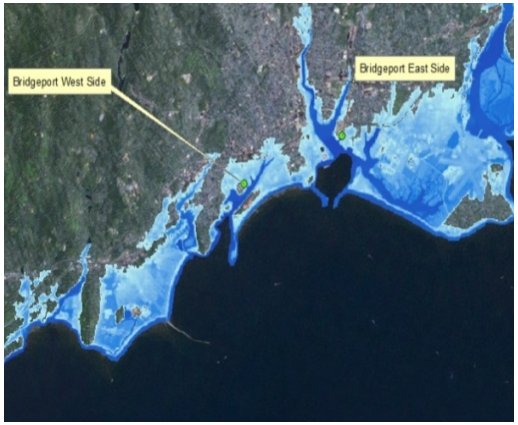
Priorities

- Environment, Climate and Coasts
- Infrastructure Resilience
- Policy Analysis and Design

Program Areas

- Research and Engagement Projects
- Matching Funds Program
- Municipal Resilience Grants Program





Municipal Resilience Grant Program

Overview, Process, and Resources

Presentation Outline

I. High level overview of grant program
II. First round awards
III. Resources to help you write a strong application
IV. Review FAQs

Break for questions

V. Detailed explanation of the grant program

(repeat information from fall round 1 webinar)

Final Q & A

Municipal Resilience Grant Program
up to $100,000 available

- Project proposals should develop knowledge or experience that is transferable to multiple locations in Connecticut and have well-defined and measurable goals.
- Preferable projects will be implemented in no more than an 18-month time frame.
- Preference will also be given to those projects that leverage multiple funding sources and that involve collaboration with CIRCA to address at least one of the following priority areas:

  – Develop and deploy natural science, engineering, legal, financial, and policy best practices for climate resilience;
  – Undertake or oversee pilot projects designed to improve resilience and sustainability of the natural and built environment along Connecticut's coast and inland waterways;
  – Foster resilient actions and sustainable communities – particularly along the Connecticut coastline and inland waterways – that can adapt to the impacts and hazards of climate change; and
  – Reduce the loss of life and property, natural system and ecological damage, and social disruption from high-impact events.

Applications are Due April 15, 2016 by 5pm

MRGP ROUND 1 AWARDEES

Selection Criteria

- Does the proposed project enhance community resilience to the impacts of climate change and extreme weather?
- Does the proposed project have transferable results?
- Does the proposed project involve collaboration with CIRCA?
- Does the proposed project have measurable goals?
- Will the proposed project be completed in an 18-month timescale?
- Does the proposed project have multiple funding sources?
- Does the proposed project emphasize implementation?

Past Recipients

- City of Milford: “Developing and Implementing a Restoration and Management Plan to Combat Threats and Challenges to Coastal Dune Resiliency in Urban Landscapes”
- City of New Haven: “New Haven Industrial Toolbox”
- Northwest Hills Council of Governments: “Building Municipal Resilience and Climate Adaptation through Low Impact Development”
- Town of Waterford: “Waterford Municipal Infrastructure Resilience Project”
- Western Connecticut Council of Governments: “Regional CRS Program”
- More information: http://circa.uconn.edu/recipients-muni.htm

RESOURCES FOR A STRONG APPLICATION

Definitions

- "**resilience**" means the ability to anticipate, prepare for, and adapt to changing conditions and withstand, respond to, and recover rapidly from disruptions.
- "**adaptation**" means adjustment in natural or human systems in anticipation of or response to a changing environment in a way that effectively uses beneficial opportunities or reduces negative effects.

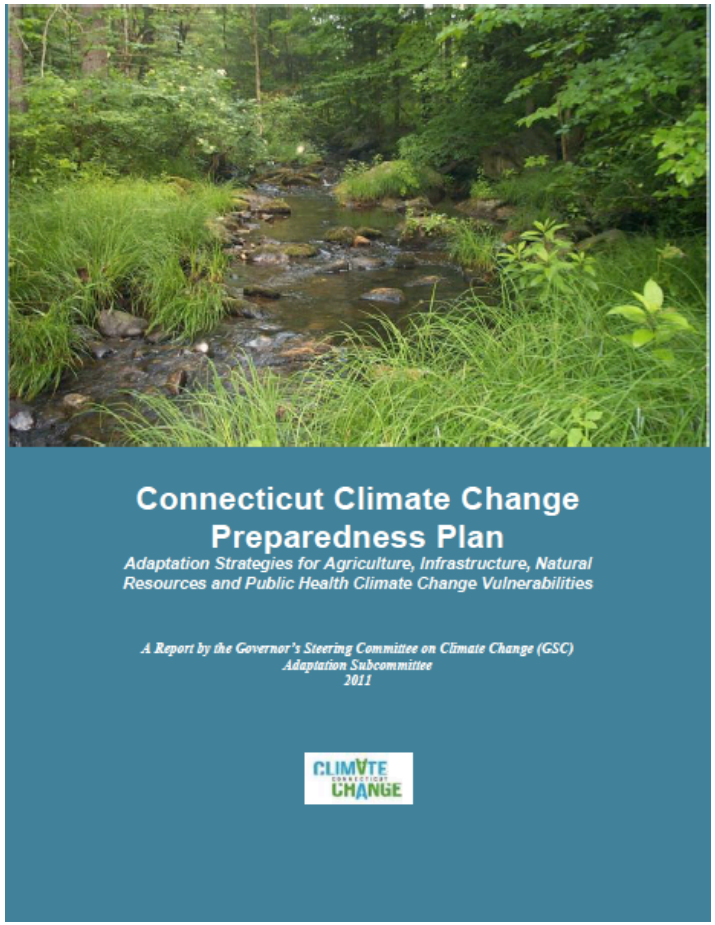
Federal Executive Order 13653

How do I identify “transferable” problems?

- Connecticut Climate Preparedness Plan
- Connecticut Natural Hazard Mitigation Plan
- State Plan of Conservation and Development
- Regional NHMPs and POCDs
- Town NHMPs and POCDs
- Town Coastal Resilience Plans
  - Guilford and Old Saybrook
  - List of grants awarded to municipalities from Sandy Recovery

Connecticut Climate Change Preparedness Plan

- Covers areas of agriculture, infrastructure, natural resources, and public health (including vulnerable populations and emergency preparedness)
- Read Summary Recommendations pages 5-8
  - Best Management Practices
  - Research, Monitoring and Education
  - Policy, Legislation, Regulation and Funding



How do I identify "transferable" problems?

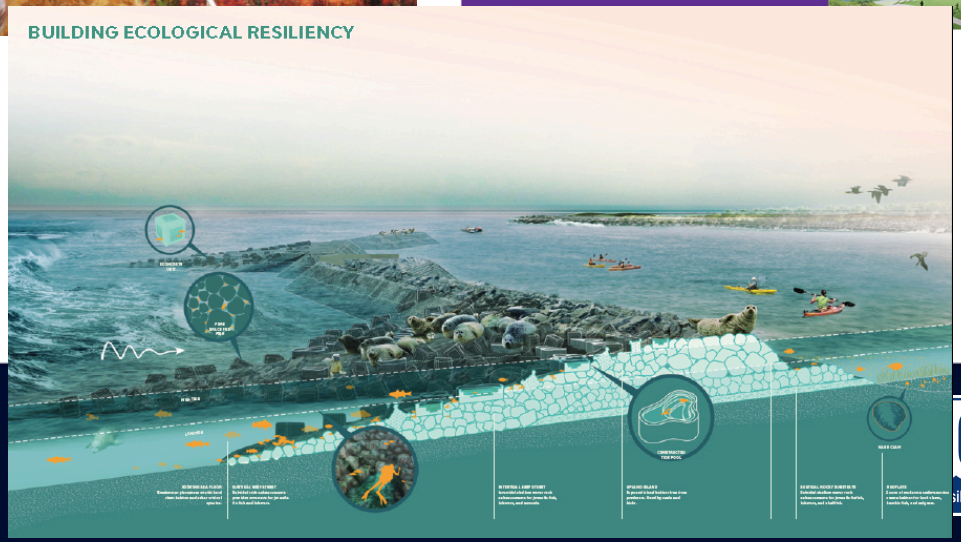
- **Two-storm Panel Report**
  - CIRCA priority: "loss of life and property…and social disruption"

- **Shoreline Preservation Task Force Report**
  - CIRCA priority: "Develop and deploy natural science, engineering, legal, financial, and policy best practices for climate resilience;"

  - Municipalities and Land Use Regulation
    - increasing financial assistance to municipalities and nonprofit land conservation groups to acquire open space and watershed land for passive or active recreation, tidal wetland preservation, conservation of coastal marine habitats, flood control, and adaptation to climate change and sea level rise;
    - requiring local zoning codes to reflect the "new realities" of sea level rise and new flood elevations, and provide for staged adaptation to them, and allow municipalities and the state to consider sea level rise as it may impact a site or site access, as a factor in making decisions regarding natural resources in coastal site plan or public health permit reviews for sub-surface sewage disposal;
    - including detailed assessments of shoreline town's evacuation and sheltering capabilities in municipal Hazard Mitigation Plans to ensure there are mechanics and facilities to handle future emergency and storm crises;

What's hot in resilience and adaptation

- Design competitions: Rebuild by Design competition



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ilience and Climate Adaptation

CONNECTICUT ENERGY ENVIRONMENT

Connecticut Wins the National Disaster Resilience Competition

The regional adaptation approach for Connecticut is in the near-term to adapt the low-lying coast areas and connect them through resilience corridors to the high ridgelines to allow for safe egress and access for evacuation and emergency response.

In the long-term these resilience corridors are the connection to increased development around the transportation network. Connecticut's future is communities with resilient transit oriented development that increase both the State's resilience to the environmental impacts of climate change and economic resilience.

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CIRCA
Connecticut Institute for Resilience and Climate Adaptation

CONNECTICUT ENERGY ENVIRONMENT

Connecticut Wins the National Disaster Resilience Competition

- **Bridgeport Resilience Corridor Network.**
- Redeveloping key streets in South End East neighborhood to form a network of resilient corridors. These corridors are multi-purpose. They serve as complete streets that provide multi-modal transportation options for residents, while protecting against future flooding from inland or tidal waters during 50-, 100- and 500- year storms. Elements include:
  - Improving lateral access to the high ridgeline at Park Avenue from the east by raising the major east-west streets out of the 100-year floodplain
  - Earthen berm construction at the outer edge of neighborhood with multi-use path connecting to train station
  - Private building-level retrofits with new flood design guidelines and green infrastructure improvements along roads

Rebuild by Design illustrative plan of South End showing catalytic development potential and NDRC Projects

The State of Connecticut's South End East Resilience Network

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CONNECTICUT ENERGY ENVIRONMENT

Green Infrastructure, Living Shorelines – Using Nature to Adapt

- Living Shorelines webinar – March 10 *(will send slides when they are posted)*
- Connecticut Sea Grant and CLEAR Climate Adaptation Academy workshop videos
- Restore America's Estuaries Reports

What about inland? Rivers flood too! Just ask Vermont

Planning for Flood Recovery and Long-Term Resilience in Vermont ***(EPA, 2014)***

- **Overall Strategies for Flood Resilience and Disaster Recovery**
  - Update and integrate comprehensive plans and Hazard Mitigation Plans.
  - Conduct thorough policy and regulatory audits.
  - Amend zoning, subdivision, and stormwater policies and regulations to match plans.
  - Consider participating in the National Flood Insurance Program Community Rating System.
- **Local Land Use Policy Options and Strategies to Improve Flood Resilience**
  - River Corridors: Conserve land and discourage development in particularly vulnerable areas along river corridors such as flood plains and wetlands.
  - Vulnerable Settlements: Where development already exists in vulnerable areas, protect people, buildings, and facilities to reduce future flooding risk.
  - Safer Areas: Plan for and encourage new development in areas that are less vulnerable to future floods.
  - The Whole Watershed: Implement enhanced stormwater management techniques to slow, spread, and infiltrate floodwater.

Partnerships are Encouraged

- Partners can do everything related to the grant, <u>except</u> be the applicant
  - Only municipalities and councils of government are eligible applicants
- Example Partners: NGOs, universities, private sector, member organizations

American Red Cross

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Resources Websites

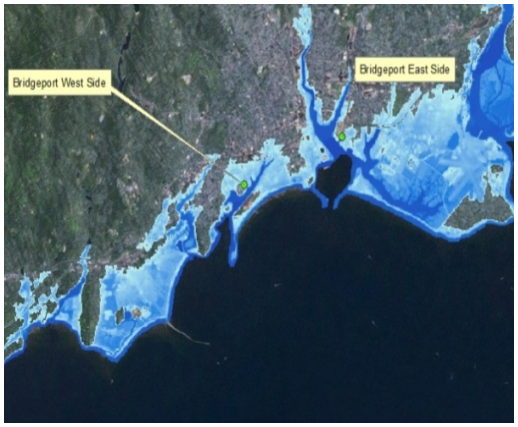
- circa.uconn.edu (circa blog on home page)
- National Disaster Resilience Competition CT Phase 1 Application
  - circa.uconn.edu/ndrc
- CT Climate Preparedness Plan
  - http://www.ct.gov/deep/lib/deep/climatechange/connecticut_climate_preparedness_plan_2011.pdf
- CT Natural Hazard Mitigation Plan
  - http://www.ct.gov/deep/cwp/view.asp?A=2720&Q=325652
- OPM Plan of Conservation and Development
  - http://www.ct.gov/opm/cwp/view.asp?a=2990&q=383182&opmNav_GID=1807
- Guilford Coastal Resilience Plan
  - http://cakex.org/virtual-library/town-guilford-community-coastal-resilience-plan
- Old Saybrook Sea Level Rise and Climate Adaptation Committee, *Report of Findings*
  - http://www.oldsaybrookct.org/Pages/OldSaybrookCT_CC/slrcac2/SLRCAC_Resources/SLRCAC%20Report%20of%20Findings.pdf
- CT Department of Housing CDBG-DR grants January 15
  - http://www.ct.gov/doh/lib/doh/sandy_planning_grants2.pdf

Resources Websites

- Boston Living with Water
  - http://www.bostonlivingwithwater.org/
- Rebuild by Design
  - https://www.hudexchange.info/training-events/courses/design-innovation-in-resilience/
- Living Shorelines
  - https://www.estuaries.org/living-shorelines
  - http://clear.uconn.edu/climate/
- Floods in Boulder, CO – inland flooding resilience
  - http://i-s-e-t.org/resources/case-studies/floods-in-boulder.html
- Planning for flood recovery and resiliency in Vermont
  - http://www2.epa.gov/smartgrowth/planning-flood-recovery-and-long-term-resilience-vermont
- Two Storm Panel report
  - http://portal.ct.gov/Departments_and_Agencies/Office_of_the_Governor/Learn_More/Working_Groups/two_storm_panel_final_report/
- Shoreline Preservation Task Force Report
  - https://www.cga.ct.gov/2012/rpt/2012-R-0513.htm

CIRCA-identified area of interest: Environment, Climate, and Coasts

- Simulation of the characteristics of regional climate change and sea level rise
- Simulations of regional impacts of climate change and sea level rise
- Development of inland and coastal flooding maps at high resolution and improved visualization capability
- Maps of coastal and inland vulnerability to severe storms
- Evaluation of coastal protection strategies for the natural and built environment
- Stormwater infrastructure (including green infrastructure)



CIRCA Report to Joint Standing Committee on Environment
Connecticut General Assembly

CIRCA-identified area of interest: Energy and Infrastructure

- Resilient design and hardening of public utility infrastructure (electric systems, natural gas, pipelines, water distribution, wastewater treatment plants, cell towers, etc.)
- Microgrids and energy storage
- Resilient design and hardening of transportation infrastructure (roads, bridges, culverts, train tracks, etc.)
- Resilient building designs
- Sustainable shoreline construction engineering (docks, seawalls, etc.)
- Living shorelines and natural habitat protection
- Green infrastructure

CIRCA Report to Joint Standing Committee on Environment
Connecticut General Assembly

CIRCA-identified area of interest: Policy Analysis and Design

- Planning and zoning law in flood-prone areas
- Insurance law and policy in flood-prone areas
- Financing for improvements in resiliency (investments in resilient roofs and windows, raising structures above the flood zone, etc.)
- Flood zone buyout programs
- Decision support tools / web portals for targeted audiences (e.g., contractors, homeowners, businesses, zoning boards, etc.)
- Risk communication

CIRCA Report to Joint Standing Committee on Environment
Connecticut General Assembly

REVIEW FAQs

BREAK FOR QUESTIONS

EXPLANATION OF GRANT PROGRAM

Municipal Resilience Grant Program (MRGP)
CIRCA Roles

- Award decisions are made by the Executive Steering Committee
- Director of Community Engagement and Program Manager do not make funding decisions for the MRGP
- Disclaimer: All words in blue on the following slides are the work of the CIRCA staff to assist applicants. They do not reflect what types of projects will be selected by the Executive Committee and they are not an exhaustive list. The language in the RFP is what will be used to guide award decisions.
- All words that are italicized are direct quotes from the RFP

MRGP Basics

- Amount of funding available: *$100,000* total for all awards together
- Eligible Applicants: *Municipalities and Councils of Government*
  - *Partnerships are encouraged*
- Proposal Deadline: *April 15, 2015 by 5 pm*

MRGP Goals

- *advance resilience, including*
  - *the creation of conceptual design, construction (demonstration projects or other) of structures,*
    - Examples: Innovative design -- Rebuild by Design, Boston's Living with Water, Inland flooding – Boulder, Vermont; (see CIRCA subtopic areas)
    - Resource: USGS review of mapping tools, CIRCA blog on mapping tools
  - *or the design of practices and policies that increase their resilience to climate change and severe weather.*
    - Examples: legal, finance, policy (see CIRCA subtopic areas)
- *focus on implementation*

MRGP Goals

- *Project proposals should develop knowledge or experience that is transferable to multiple locations in Connecticut and have well-defined and measurable goals.*
  - Transferable = replicable, shared problems/risks, regional, statewide
  - Resources for finding shared challenges: Climate Preparedness Plan, State and Regional Natural Hazard Mitigation and POCD Plans, State Phase 1 NDRC application, Two Storm Panel report, Shoreline Preservation Task Force Report
- *Preferable projects will be implemented in no more than an 18-month time frame.*
- *Preference will also be given to those projects that leverage multiple funding sources*
  - No required match, but preference for applications that bring other funding for projects

MRGP Goals

- *Preference will also be given to those projects … that involve collaboration with CIRCA to address at least one of the following priority areas:*
  - *Develop and deploy natural science, engineering, legal, financial, and policy best practices for climate resilience;*
  - *Undertake or oversee pilot projects designed to improve resilience and sustainability of the natural and built environment along Connecticut's coast and inland waterways;*
  - *Foster resilient actions and sustainable communities – particularly along the Connecticut coastline and inland waterways – that can adapt to the impacts and hazards of climate change; and*
  - *Reduce the loss of life and property, natural system and ecological damage, and social disruption from high-impact events.*

How to Apply

- There are two parts to the Municipal Resilience Grant Program that need to be completed:
  - Part 1: Complete the form online: http://circa.uconn.edu/funds-muni.htm
  - Part 2: Email the required information to CIRCA_MunicipalFunds@uconn.edu

Required Information

- *Any entity that is funded must provide a detailed budget and budget justification.*
- *Please **provide a detailed budget and budget justification**. Responses should be limited to 2-3 pages in length. CIRCA reserves the right to request additional information.*

Required Information

Please ***provide a detailed project description and workplan - Please format your project description and workplan with the following sections****:*

1. *Project description (include project name and project address);*
2. *Workplan (including major phases, deliverables, project dates, permitting process (if applicable), project team members and roles);*
3. *Resumes for team members;*
4. *Permits required and plan for acquisition, if applicable, including all drawings and plans to be submitted during the permitting process;*
5. *Partner roles and responsibilities (if applicable);*
6. *Sources of leverage and amounts (if applicable);*
7. *How project will advance mission of CIRCA;*
8. *Define collaboration with CIRCA (if applicable);*
9. *Description of how project satisfies a priority area of CIRCA, indicating which priority area(s);*
10. *Description of acknowledgement; and*
11. *Letters of support (if applicable).*

Required Procedures

The University of Connecticut Process:

- ***UConn award procedures must be followed by all <u>entities selected to receive funds</u>.*** The below information will be required if you are selected to receive funds. You do not have to submit the following as part of your application.
- *If an entity is not currently a Vendor within the University system a W-9 form must be completed prior to any distribution of funds. When determining your project timeline, please allow 10-14 business days to process once submitted to the University.*
- *Any entity awarded funds greater than $3,000 will be required to complete a Personal Service Agreement (PSA). This is a contract for professional or technical services between the University and individuals, partnerships, or corporations. Please allow up to eight weeks to process the contract once it is submitted to the University.*

Final Report

- *All awards are required to provide a final report to the Institute that will include:*
  - *Project overview and summary;*
  - *Project goals and methods;*
  - *Project outcomes;*
  - *Explanation of how project advanced CIRCA mission and priority areas (if specified in application);*
  - *Final project schedule & budget; and*
  - *Copies of final project documentation and/or maps and photos of completed project.*
- *CIRCA reserves the right to edit the final report in its entirety for publishing on the CIRCA website and/or including in print materials.*
- *The University will withhold the final 10% of funding until submittal and approval of a final report (as required below).*

Questions?

Send questions to:
circa_municipalfunds@uconn.edu

Contact the CIRCA office at:

rebecca.french@uconn.edu
jessica.leclair@uconn.edu
circa.uconn.edu