

Welcome!

- Please **mute your mic when not speaking**.
 - You are more than welcome to unmute if you have something to say!
- **Enter your name, agency, and division/office in the chat** as you arrive
- Use the chat to comment, ask questions, or share information.
- The presentation slides, meeting notes, and recording will be available afterward.
- Virtual attendees: Open the Worksheet <https://bit.ly/CT-HMP-Worksheet>
 - The link will also be placed in the chat.



Connecticut Natural Hazard Mitigation Plan 2023 Update

Kick-Off Meeting

March 28, 2023 | 1:00 – 3:00 PM

Introductions

Core Planning Team - DEMHS

- Ken Dumais, State Hazard Mitigation Officer
- Gemma Fabris, DESPP/DEMHS
- Ian Alexander, DESPP/DEMHS
- Danielle Moyer, DESPP/DEMHS
- Kendall Bobula, DESPP/DEMHS
- Brenda Bergeron, DESPP/DEMHS
- William Turner, DESPP/DEMHS
- Stephanie Zessos, DESPP/DEMHS
- Douglas Glowacki, DESPP/DEMHS
- Kimberly Zigich, DESPP/DEMHS
- Diane Ifkovic, NFIP State Coordinator
- Karen Michaels, DEEP

Dewberry Team

- Scott Choquette, Project Manager
- Jade Payne, Deputy Project Manager & Resilience Planner
- Hanna Rush, Plan Development Lead & GIS Analyst
- Ashley Gordon, HIRA Lead & Resilience Planner
- Emily Mills, Resilience Planner
- Jamie Caplan, Jamie Caplan Consulting
- & others

Hazard Mitigation Planning Team (HMPT)

- Everyone on the call!

AGENDA

- Plan Update Process Overview
- Updating the HIRA
- Evaluating 2019 HMP
 - Breakout groups
- Next Steps



Hazard Mitigation Plan Update

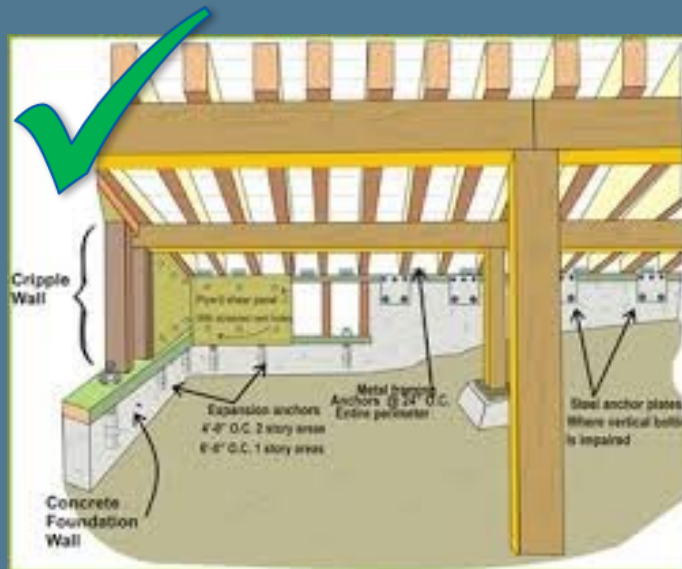
Overview

What is hazard mitigation?

Any **sustained action** taken to reduce or eliminate long-term risk to human life, infrastructure, and the environment from hazards.



Mitigation
Defensible Space for
Wildfire Mitigation



Mitigation
Earthquake Retrofit



Preparedness & Response
purchase of a police
command vehicle

A Hazard Mitigation Plan...



- Identifies risks and solutions in a pre-disaster environment
- Reduces the need to respond (lessens resource burden)
- Supports decision-making
- Makes the state more disaster resilient
- Promotes data sharing between different levels of government and academia.
- Creates eligibility for pre- and post-disaster mitigation funds from FEMA.
- Should be incorporated into other existing planning mechanisms.

A Hazard Mitigation Plan is Not...



A regulatory document

*It does not create new
steadfast “rules”*



A binding commitment

*Not everything in it will get
done*

Planning Process

Integrating Best Practices



Coordinate & Collect Data

State Critical Facilities
CCVI 2.0 Data
Social Vulnerability



Analyze Capabilities

Policies & Programs
Executive Order
Local HMP Integration



Assess Risks

Climate & Hazard Data
Social Vulnerability
Local HMP Integration



Develop Mitigation Strategy

Mitigation Actions
Plan Integration
Equity



Decide Implementation Procedures

Public Involvement
Plan Integration
Priority Actions



Review & Adopt Plan

Public Involvement
FEMA Review



Public & Stakeholder Outreach

Outreach Strategy



Stakeholder Engagement



Project Website



Public/Stakeholder Meetings



Online Survey & Draft Plan Review



Meeting Recordings



StoryMap

Hazard Mitigation Plan



Project Milestones

We are here



- 2019 plan review
- Initial research and online data collection

- Data collection
- Outreach website
- Compile stakeholder list

- Public survey
- Capability assessment
- Hazard ID & risk assessment

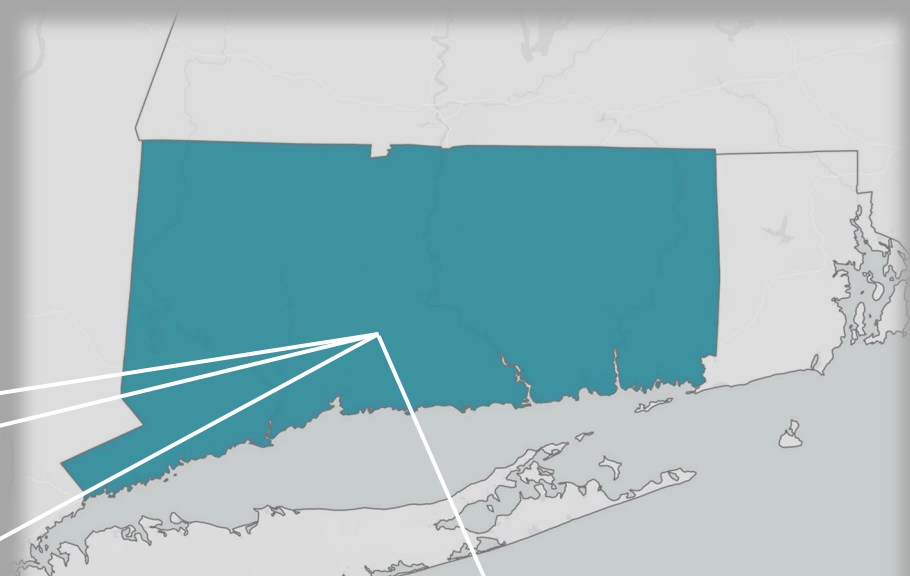
- Goals & objectives
- Mitigation strategy
- 1st public meeting

- Plan maintenance procedures
- Draft HMP
- 2nd public meeting

- FEMA review
- State adoption

Planning Process

Participant Expectations



Dewberry Team

- Facilitate the process
- Provide technical expertise and consultation
- Do the heavy lifting

Core Planning Team

- Key decision-makers
- Participate in Hazard Mitigation Planning Team (HMPT)

HMPT

- Choose actions
- Provide input, information, and feedback
- Attend 3 HMPT meetings & 1-2 virtual agency meetings

Stakeholders

- Respond to surveys, review HMP, attend public meetings, provide input
- Ex: FEMA Region 1, COGs, other state/federal agencies

Guiding Regulations & Documents

- **Disaster Mitigation Act of 2000** – requirements and procedures to implement hazard mitigation planning to receive certain types of non-emergency disaster assistance
 - Grants with HMP eligibility requirements: BRIC, HMGP, HMGP Post Fire, FMA, PDM, PA, FMAG, Rehabilitation of HHPD program
- **FEMA State Mitigation Planning Policy Guide** (April 19, 2023)
- HMA Program & Policy Guide (March 2023)
- CT Executive Orders (No. 3, No. 21-3) & Public Act No. 21-115 – An Act Concerning Climate Change Adaptation
- Other CT plans, policies, & programs

Plan Update Requirements

Per 2022 FEMA State Mitigation Planning Policy Guide

Reflect changes in development:

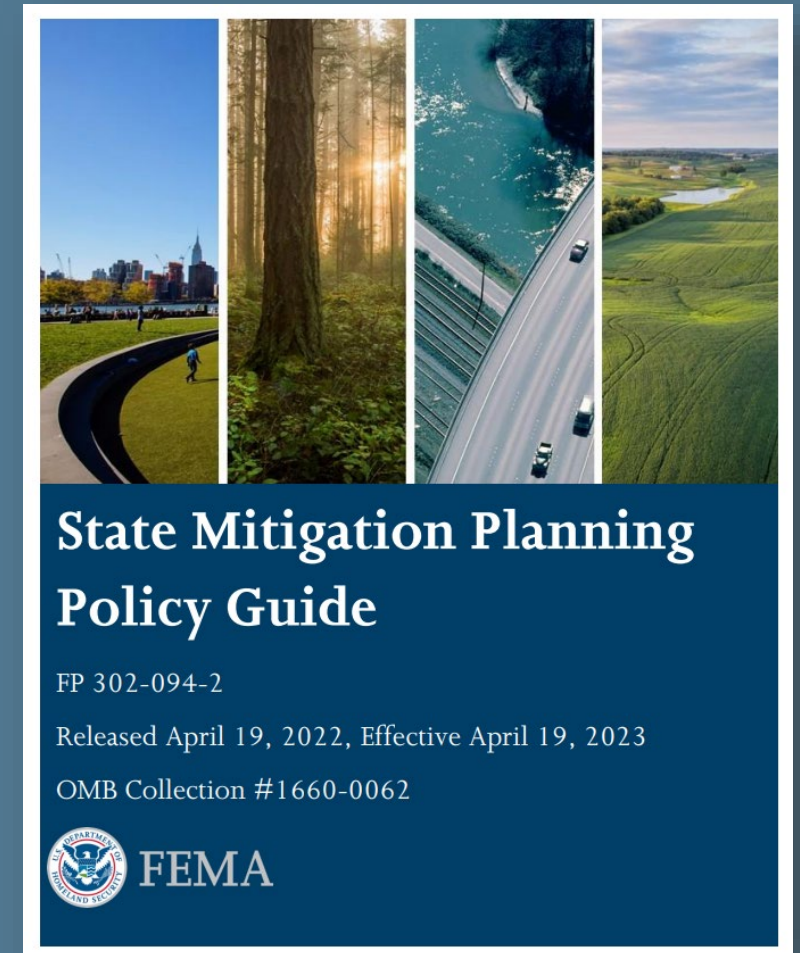
- Increases or decreases in hazard vulnerability, changes in social vulnerability, changes in capabilities
- New construction, planned development
- Climate change, population changes, policy/regulatory changes

Reflect changes in participants in the planning process:

- Involves a broad range of state and other partners
- Includes community lifelines, climate change experts, & agencies that support underserved communities

Include & describe related program requirements:

- Building codes, land use, NFIP/flood risk mapping
- HHPD grant program & FMAG program



Executive Order 21-3

Worksheet Q1

EXECUTIVE
ORDER 21-3



Document updates on Participant Worksheet

- Action 1 – Improve the resilience of the state’s energy sector to extreme weather events (**DEEP**)
- Action 2: – Consider impacts of climate change in building codes, consult resilience experts, consider best-available resilience standards, train code officials, etc. (**DAS**)
- Action 5 – Ensure state buildings are capable of withstanding wind and flood risks (**DAS**)
- Action 9 – Establish a Connecticut Community Climate Resilience program (**DEEP**)
- Action 10 – Work with partners, including UConn, to help municipalities and COGs implement climate resilience actions (**DEEP**)

Executive Order 21-3

Worksheet Q1

EXECUTIVE
ORDER 21-3



Document updates on Participant Worksheet

- Action 11 – Assess the vulnerability of state government assets and operations to the impacts of climate change and create a list of priority assets and infrastructure for climate resilience projects for each agency (OPM, DAS, DEEP, DESPP)
- Action 12 -- Update the design criteria for stormwater management systems (DEEP) and identify culverts that need to be repaired or replaced (DOT)
- Action 13 – Maintain a list of state and local critical facilities (OPM, DAS, DEEP, DESPP)
- Action 14 – Ensure working lands and soils in Connecticut continue to be resilient to the impacts of climate change (DAG)
- Action 22 – Develop guidance for state agencies to use nature-based solutions (DEEP) and utilize this guidance for capital project planning and design (all agencies)

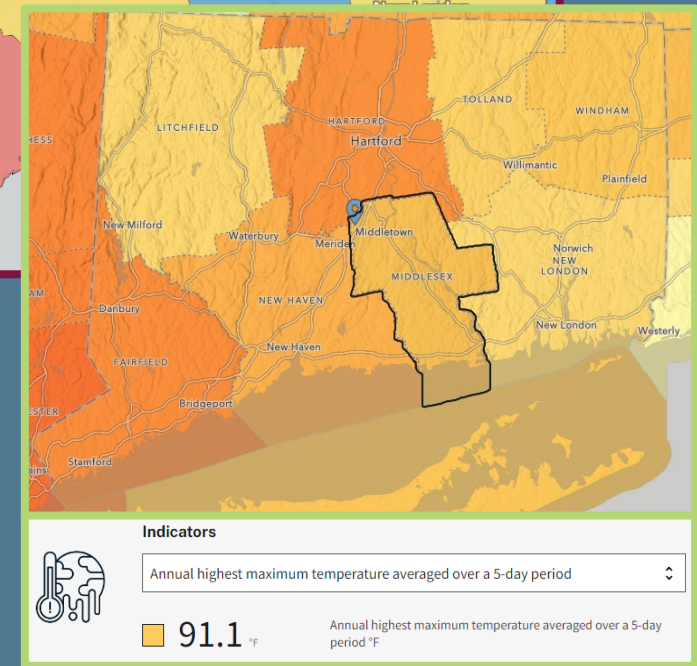
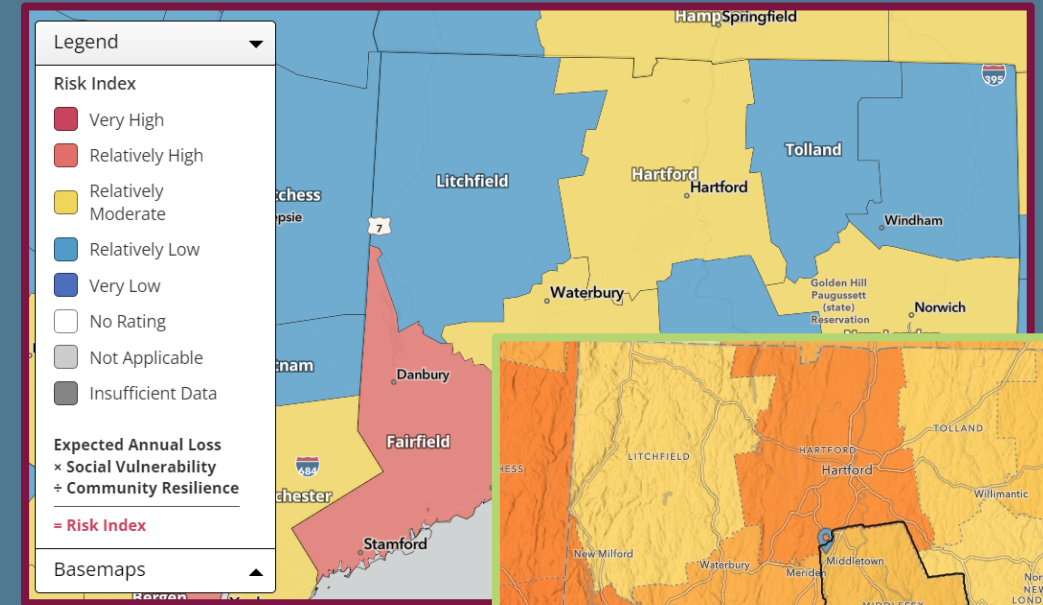
Hazard ID & Risk Assessment

Overview

Hazard ID & Risk Assessment

Overview

- **Purpose:** Provides a factual basis for prioritizing hazard mitigation activities
- **Steps:**
 1. Identify and describe hazards
 2. Identify assets
 3. Assess risk
 4. Summarize vulnerability



Hazard ID & Risk Assessment Components



Hazard Ranking



Hazard Profiles



**Climate Change
Impacts**



**Hazard History (Locations,
Extents, Occurrences)**



**Vulnerability, Exposure,
and Loss Estimations**



**Probability of Future
Events**



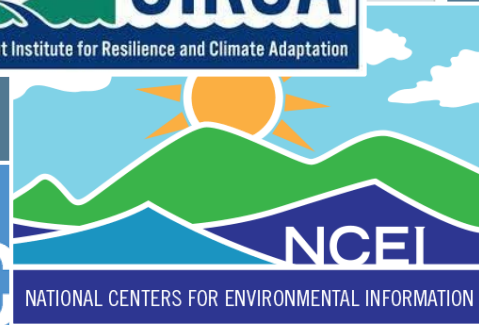
Potential Impacts



**Integration of Local
Hazard Mitigation Plans**

Hazard ID & Risk Assessment

Data Highlights



- Hazus MH v6.0 (just released!)
- State owned/operated facilities & assets
- CIRCA CCVI
- CDC SVI 2020
- NCEI Storm Events Database
- IPCC 6th Assessment Report
- U.S. Climate Mapping for Resilience & Adaptation (CMRA)
- FEMA National Risk Index
- EPA Environmental Justice Tool

Hazard ID & Risk Assessment

Data Needs

Worksheet Q2 & Q3

- **State-owned or -operated critical facilities/assets**
- **Repetitive Loss/Severe Repetitive Loss Properties data**
- State-Owned dam inundation zones
- Hazard-specific data – areas at risk from natural hazards
- Data discrepancies from previous HMP – what can be improved?
- Hazard history – costs & impacts
 - e.g., repairs, NFIP claims, grants issued
- Pictures & videos of hazards, damages, and mitigation projects

2019 Natural Hazard Rankings

County	Dam Failure Hazard Ranking	Drought Hazard Ranking	Earthquake Hazard Ranking	Flood Hazard Ranking	Sea Level Rise Hazard Ranking	Thunderstorm Hazard Ranking	Tornado Hazard Ranking	Tropical Cyclone Hazard Ranking	Wildland Fire Hazard Ranking	Winter Weather Hazard Ranking
Fairfield	Medium	Medium-Low	Medium	High	Medium-High	High	High	Medium-High	Medium-Low	High
Hartford	Medium-Low	Medium	Medium	High	Medium-Low	High	High	Medium-High	Low	High
Litchfield	Low	Medium	Medium-Low	Medium-High	Low	High	Medium-High	Medium	Medium-Low	Medium-High
Middlesex	Low	Medium-Low	Medium-Low	Medium	Medium-High	Medium	Medium	Medium-High	Medium-Low	Medium
New Haven	Medium-Low	Medium-Low	Medium	Medium-High	High	High	Medium-High	Medium-High	Medium-Low	High
New London	Low	Medium-Low	Medium-Low	Medium-High	Medium-High	Medium-High	Low	Medium-High	Medium-Low	Medium
Tolland	Low	Medium	Medium-Low	Medium	Low	Medium	Medium-Low	Medium	Medium-Low	High
Windham	Low	Medium	Low	Medium	Low	Medium	Medium-Low	Medium	Medium-Low	Medium-High

Changes in **hazard concern rating** or **new hazard additions**?



Discussion

Hazard Ranking Priority



Local Hazard Mitigation Plan Incorporation

- Survey of plans
 - Hazard identification terminology
 - Vulnerability and risk assessment methodologies & results
 - Types of mitigation actions
- Incorporate ranking and loss estimates into state HMP hazard risk rankings
- Include actions in state mitigation strategy based on local needs

Evaluating 2019 HMP

& Mitigation Strategy Discussion

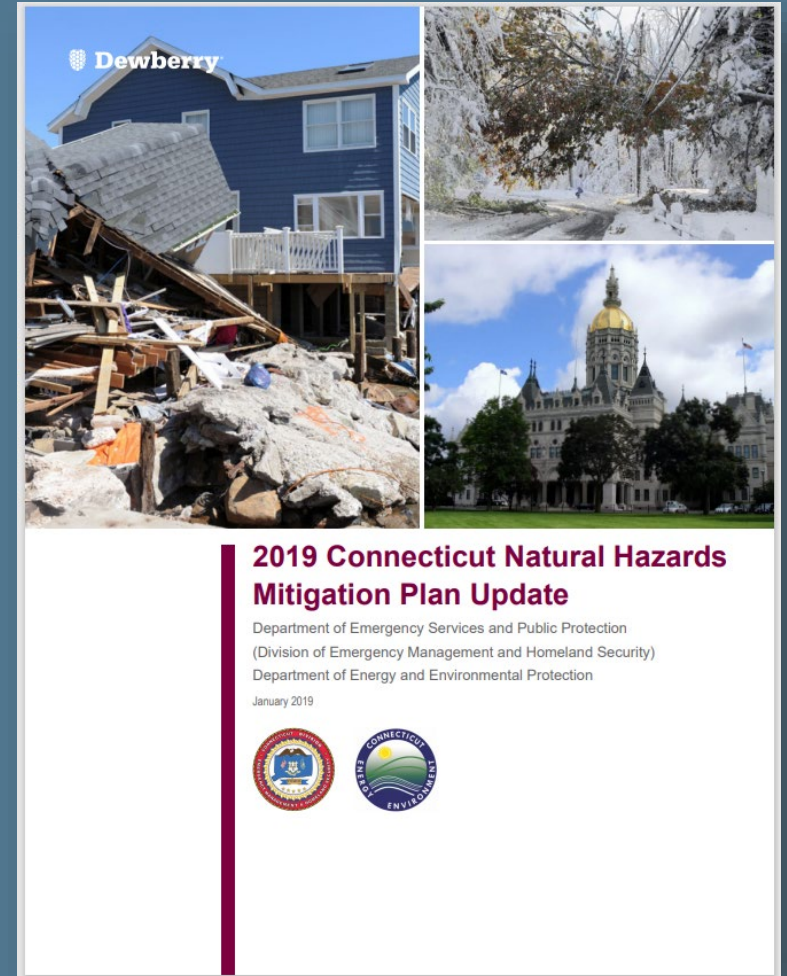
2019 HMP Improvements

✎ Worksheet Q4, Q5, & Q6



Document comments on Participant Worksheet

- What do you like about the current HMP?
- What do you want to see changed?
- What are your **current priorities**?
- How can we make the HMP **more useful**?
- Notable out-of-date information?
- What **plans/programs/funding opportunities** should we integrate?



Mitigation Goals & Objective Development

Potential Changes

2019 Goals

1. Promote implementation of sound floodplain management and other natural hazard mitigation principles on a state and local level
2. Implementation of effective natural hazard mitigation projects on a state and local level
3. Increase research and planning activities for the mitigation of natural hazards on a state and local level

+ Executive Orders & State Priorities



+ 2023 FEMA Mitigation Planning Guidance

Strategic Categories



Encourage Local Physical Projects



Capability and Capacity Building



Public Awareness and Education



Forward-Looking Policy and Planning

Mitigation Strategy

What do you want CT to focus on?

- Integrate actions from related state plans, studies, and reports
- Emphasize future conditions in the STAPLE/E activity prioritization method
 - Climate projections, social vulnerability, community lifelines, and future development
- **Start thinking about what actions you want to see happen over the next 5 years**



Break

Please return in 10 minutes

Agency Breakout Groups Activity!

- **Task:** Review 2019 mitigation activities & provide status updates
- If the status is unknown, provide contact information for who can provide update.

Table 5-1: Recommended Hazard Mitigation Activities, 2019–2024

Activity #	Goal/Strategy	Activity Description	Lead Agency	Support Agencies	Estimated Cost*	Potential Funding Sources	Timeframe for Completion	Hazard(s) to be Addressed										Priority Level	
								Tropical Cyclone	Tornado	Thunderstorm	Winter Storm	Flood	Dam Failure	Wildland Fire	Drought	Earthquake	Climate Change		
1	1.1	Review model ordinances and samples of higher standards language that communities can adopt into existing floodplain ordinances and building codes.	DEEP - Land and Water Resources Division / DCS	COGs	Staff time	Agency Operating Budgets	Evaluate annually						X					X	High
2	1.1	Conduct technical transfer and training associated with current extreme rainfall data.	USDA / Natural Resources Conservation Service		Staff time	Agency Operating Budgets	1-2 years						X	X				X	Low
3	1.1	Conduct technical transfer and training associated with available LIDAR data.	USDA / Natural Resources Conservation Service	DEEP / LWRD	Staff time	Agency Operating Budgets	1-2 years						X						Low
4	1.1	Encourage municipalities to adopt local water use restriction ordinances to ensure that proper water conservation measures are implemented during periods of severe to extreme drought and other water emergencies, in line with the Connecticut Drought Preparedness and Response Plan. Expand the local focus on drinking water vulnerability, with a particular emphasis on private wells.	DPH / Drinking Water Section	Water Planning Council / COGs	Staff time; minimal expense for outreach materials	Agency Operating Budgets	During onset of drought conditions										X		High
5	1.1	Launch an outreach campaign to promote FEMA's Community Rating System (CRS) as a means for local communities to soften the likely increase in many flood insurance policy rates resulting from new reforms to the National Flood Insurance Program (NFIP) enacted by Federal Legislation.	DEEP - Land and Water Resources Division	USACE / Silver Jackets	Staff time; minimal expense for outreach materials	Agency Operating Budgets	1 Year						X						High

Status Update Options:

- **Not Started:** Work has not begun
- **In Progress:** Work has begun but is not completed
- **Annual Implementation:** Ongoing with no end date
- **Completed:** Activity finished
- **Cancelled:** No longer relevant/circumstances have changed

Next Steps

Schedule & Action Items

	March	April	May	June	July	August	September	October	November
HM Plan Milestone	Kick-Off			Workshop		Review Mtg	Send to FEMA		Adoption
Review 2019 HMP									
Data Collection									
Risk Assessment									
Capability Assessment									
Revise Goals + Objectives									
Mitigation Strategy Development									
Public Engagement									
HMP Writing/Revising									
DESPP/DEMHS Review									
FEMA Review/ Approval									
Plan Adoption									

Project Schedule

Action Items & Next Meeting

- Share data, plans, & reports:
<https://bit.ly/CT-HMP-Data>



- Submit mitigation activity ideas:
<https://bit.ly/CT-HMP-Ideas>



- Next Meeting:
 - Review initial HIRA results
 - Finalize mitigation goals & objectives
 - Brainstorm mitigation action ideas
 - Prioritize actions for Mitigation Strategy

Questions?



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