



## 8 Coventry

### Community Overview

Coventry has a total area of 38.1 square miles (24,388 acres). The 2010 Census population count was 12,435 persons, an 8.1% increase from 2000 (11,504). Mainly rural with some agriculture, Coventry is about 11% developed and approximately 65% forested. Coventry has concentrations of people in the vicinity of Coventry Lake and at the condominium complex off Merrow Road. Water bodies include Upper Bolton Lake and Coventry Lake. Coventry's elevation ranges from about 230 feet in the southeast corner of town at the Willimantic River to 934 feet at the peak of Grant Hill in the north/northwest section.

Little new development has occurred since adoption of the former WinCOG's 2015 Hazard Mitigation Plan Update ("2015 HMP"). Most development activity has related to improvements and has not increased the community's risk profile.

### Critical Facilities

Critical Facilities throughout the Capitol Region are listed in Appendix B. In Coventry, critical facilities and cultural resources include two North Coventry Volunteer Fire Department stations, two Coventry Volunteer Fire Association stations, the elementary school on Wright's Mill Road, the elementary school on Cross Street, the middle school, the high school on Ripley Hill Road, the police department off Route 31, the equine hospital off Flanders Road, the historic Nathan Hale Homestead, the historic Strong Porter House, one elderly housing community off Route 31, two shopping plazas off Route 44 and off Route 31, the telephone switch station off South Street, the sewage treatment plant off Route 31, two pump stations and a drinking water well, and two high potential loss dams.

**Table 8-1: Critical Facilities, Coventry**

Facility	Shelter	Generator
Police Department		X
Coventry Town Hall		X
North Coventry Volunteer Fire Department Route 31 station		X
North Coventry Volunteer Fire Department Merrow Road station		X
Coventry Volunteer Fire Association Judd Road station		X
Coventry Volunteer Fire Association Route 31 station		X
Coventry High School (Ripley Hill Road)	Primary	X
Wright's Mill Road elementary school		
Cross Street elementary school		
Middle School		
Coventry Senior Center	Secondary	X
Equine Hospital		
Historic Nathan Hale Homestead		
Historic Strong Porter House		
Elderly Housing Community		(1)
Two shopping plazas		

Facility	Shelter	Generator
Telephone Switch Station		
Sewage Treatment Plant		X
Two pumping stations		X
Water supply wells		X
Two high potential loss dams		

1. For water pressure only

Coventry High School is the primary shelter, but its new gym was not built to seismic code. The school’s old gym is able to be used until this issue is resolved.

### Capabilities

Coventry’s Plan of Conservation and Development includes policies on open space preservation designed to preserve natural resources and functions. The Town has received a Bronze certification within the SustainableCT program.

Coventry has implemented a Reverse 9-1-1 system to contact residents in cases of emergency conditions. The Town also uses its website, email-blasts, and social media outlets to communicate hazard information to residents.

The Town of Coventry has limited policies, programs, and resources dedicated to dam failure since most of these efforts are performed at the State level. The Town owns Lake Waumgumbaug Dam, which was reconstructed in 2017 and has a DEEP classification of Class A. The Town of Coventry expends a small amount of resources each year to maintain and monitor the Lake Waumgumbaug Dam. Maintenance and repair work was performed on the Roman Pond Dam since 2010 and the dam is no longer considered a significant hazard by the Town’s standards.

The Town of Coventry has consistently participated in the National Flood Insurance Program (NFIP) since June 4, 1980. Coventry’s current zoning regulations include limitations in the flood zone. The flood regulations were last revised on June 15, 2012. Proposed structures must meet elevation requirements and strict construction demands. Structures may be required to be constructed with certain materials, elevated, flood proofed, watertight or anchored. It must be shown that any activity in the 100-year flood plain will not significantly alter the flood levels. These regulations are posted on the Town website.

Town staff inspect the three “scour bridges” following flood events larger than a 10-year flood event. The Town has also implemented a series of drainage improvements at the western end of Avery Shore to reduce flood damages in the area. The Town has a formalized inspection and upgrade program for faulty culverts and catch basins, with inspections of areas conducted annually and faulty areas added to the capital improvement list.

The Town maintains shelter facilities and performs debris management through Public Works with the assistance of the local electrical utility when necessary. The State building code has been updated and locally adopted, and the Town’s sheltering resources and emergency



communications have been expanded. The Town notifies the public when severe thunderstorms are to occur. The Town’s capability to mitigate thunderstorm damage is relatively limited to town-owned facilities and rights-of-way. The local electrical utility performed intensive trimming near electrical lines following the severe storms in 2016 and ruggedized a main circuit around Wangumbaug Lake.

Plowing services are provided through the Town Public Works Department.

The Town uses a variety of regulatory, preparedness, and public information programs to mitigate the effect of wildfires, including the Open Burning Program, maintenance of dry hydrants and cisterns, and educational programs on fire safety. The Town has also installed additional dry hydrants and cisterns to improve overall fire protection capabilities and implemented a public education program. Coventry annually inspects dry hydrants.

### New Capabilities

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A recent FEMA floodplain remapping effort has expanded the mapped floodplains around Coventry Lake, improving the Town’s understanding of hazards in this area. A map modernization effort by FEMA is currently underway for Tolland County, but its full extent, and how much of Coventry it will cover, is unknown.

Coventry has replaced a number of bridges since adoption of the 2015 HMP, an effort that has included elevating and floodproofing bridge approaches.

The Town has recently initiated work on improvements to the DeCew Dam property, including improvements to trails and amenities, and erosion and sediment control. This project is expected to improve the state of that dam.

Coventry was awarded the Bronze Certification level within the SustainableCT program in October 2018.

### Challenges

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#### Challenges Overview

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Coventry is predominantly forested with large wooded areas, including the Nathan Hale State Forest. This large, wooded area is a potential wildfire or brushfire site, but given the widespread forestation throughout the town, no one area is considered more vulnerable to this threat than another. Despite this vulnerability, Town staff report that wildfires are a minimal problem and do not require additional expenditures outside of normal operating budgets. Town staff feel additional dry hydrants and a forestry truck are needed to boost wildfire-fighting capabilities.

There are 24 dams in Coventry ranging from Hazard Class AA (negligible hazard) to Hazard Class B (significant hazard). The failure of the Roman Pond Dam (Class B) could cause serious damage and is of greatest concern in the town. Lake Waumbaug dam, identified by DEEP in 2010 as



a low hazard dam, was later identified by engineers as a high hazard after significant analysis and inspection. Eagleville Lake Dam, a Class C dam located on the eastern edge of town, has the potential of causing damage within the town if it were to fail.

The risk to Coventry from drought and from earthquakes is considered to be low.

The risk to Coventry from flooding is considered to be moderate. Flood sources include the Willimantic River, Skungamaug River, Ash Brook, Hop River, and Mill Brook. The town also has three “scour bridges” which, by CTDOT standards, may be undermined by soil erosion during certain rainfall or stream flow events, thus affecting their stability and safety. Two structures cross the Willimantic River, one on Brigham Road and another on Depot Road. The third crosses the Mill Brook on Depot Road. Flood damages have been relatively minor in recent years; no public assistance reimbursements were received for flooding in October 2005, April 2007, or October 2010, and no specific damage areas were reported. A clogged culvert has caused flooding of hay and corn fields during spring rain events in recent years.

The risk of Coventry to hurricanes is considered to be high. The Town received public assistance reimbursements following Hurricane Irene and Hurricane Sandy.

The risk of Coventry to severe winter storms is considered to be high. The Town received a public assistance reimbursement following heavy snow in January and February 2011, Winter Storm “Alfred” in late October 2011, and Winter Storm “Nemo” in February 2013. The heavy snows of January and February 2011 resulted in major damage to the roof of an equestrian riding center resulting in the building needing to be demolished and rebuilt.

The risk of Coventry to thunderstorms is considered to be moderate. The risk from tornadoes is considered to be low. The Town reported experiencing an EF-1 tornado on July 10, 2013 that traveled near the Wastewater Treatment Plant. One privately-owned building received roof damage and numerous trees were uprooted. Cleanup by town staff occurred during normal business hours within the regular budget.

### Hazard Losses

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The economic losses faced by Coventry from natural hazards can be estimated by reviewing historic, and modeling future, loss figures. Loss estimates are summarized below.

### Historic FEMA Payments

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FEMA reimburses communities for hazard losses through programs including Public Assistance (PA) and the National Flood Insurance Program (NFIP). Combining PA and private flood insurance payments can give an estimate for total losses to a community.

The NFIP has paid 13 property damage claims in Coventry totaling \$56,412 to-date. The Town of Coventry does not have any repetitive loss (RL) or severe repetitive loss (SRL) properties.

Total PA reimbursements to the community were as follows:



- Flood Events: \$47,846 (\$2,518 annually)
- Hurricane Events: \$137,775 (\$7,251 annually)
- Winter Storm Events: \$620,174 (\$32,641 annually)

These are summarized in the tables below.

**Table 8-2: Flood Event PA Reimbursements, Coventry**

<b>Incident</b>	Oct 2005
<b>Declaration</b>	12/16/2005
<b>Disaster No.</b>	1619
<b>Entity</b>	<b>FEMA PA Reimbursement</b>
<b>State</b>	\$1,808
<b>Municipal</b>	\$46,038
<b>Nonprofit</b>	\$0
<b>Total</b>	<b>\$47,846</b>
<b>Annualized</b>	<b>\$2,518</b>

**Table 8-3: Hurricane Wind Event PA Reimbursements, Coventry**

<b>Incident</b>	Aug - Sep 2011 (T.S. Irene)	Oct - Nov 2012 (Storm Sandy)
<b>Declaration</b>	9/2/2011	10/30/2012
<b>Disaster #</b>	4023	4087
<b>Entity</b>	<b>FEMA PA Reimbursement</b>	<b>FEMA PA Reimbursement</b>
<b>State</b>	\$800	\$3,742
<b>Municipal</b>	\$92,869	\$40,364
<b>Nonprofit</b>	\$0	\$0
<b>Total</b>	<b>\$93,670</b>	<b>\$44,106</b>
<b>Annualized</b>	<b>\$4,930</b>	<b>\$2,321</b>

**Table 8-4: Winter Storm PA Reimbursements, Coventry**

<b>Incident</b>	Mar 2003	Dec 2003	Jan 2005	Feb 2006	Jan 2011	Oct 2011	Feb 2013	Jan 2015
<b>Declaration</b>	3/11/03	1/15/04	2/17/05	5/2/06	3/3/11	11/17/11	3/21/13	4/8/15
<b>Disaster #</b>	3176	3192	3200	3266	1958	4046	4106	4213
<b>Entity</b>	<b>FEMA PA Reimbursement</b>							
<b>State</b>	\$12,626	\$13,060	\$18,665	\$16,992	\$21,258	\$3,256	\$17,705	\$34,262
<b>Municipal</b>	\$29,992	\$26,531	\$46,723	\$37,431	\$49,542	\$51,295	\$109,087	\$131,750
<b>Nonprofit</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>\$42,618</b>	<b>\$39,591</b>	<b>\$65,388</b>	<b>\$54,423</b>	<b>\$70,799</b>	<b>\$54,551</b>	<b>\$126,792</b>	<b>\$166,011</b>
<b>Annualized</b>	<b>\$2,243</b>	<b>\$2,084</b>	<b>\$3,441</b>	<b>\$2,864</b>	<b>\$3,726</b>	<b>\$2,871</b>	<b>\$6,673</b>	<b>\$8,737</b>



### National Centers for Environmental Information Losses

The table below summarizes events in the National Centers for Environmental Information (NCEI) severe storm database that were specifically noted as having impacted the community since 2012.

**Table 8-5: NCEI Database Losses since 2012, Coventry**

Date	Event	Property Damage
8/10/2012	Thunderstorm Wind	\$4,000
9/18/2012	Thunderstorm Wind	\$5,000
6/11/2013	Thunderstorm Wind	\$15,000
7/10/2013	Tornado	*\$17,000
2/25/2016	Thunderstorm Wind	\$5,000
8/2/2017	Hail	\$0
<b>Total</b>		<b>\$46,000</b>

\*damages from storm divided between multiple communities

NCEI losses under other event categories (such as drought, high wind, flooding, and winter storms) were not specifically noted as impacting this community, though they did impact Tolland County and nearby towns. NCEI losses are reported in Section II of this Plan.

### HAZUS-MH Losses

CRCOG used FEMA’s Hazus-MH model to analyze the risks that the Town of Coventry might face from flooding, hurricanes, and earthquakes. The model estimates economic losses to the town due to damage to buildings and building contents, as well as other economic disruptions. Both residential and commercial structures are addressed. Losses from different hazards are summarized below.

**Table 8-6: Estimated Damages to Coventry from a 1% Annual-Chance Flood**

Loss Type	2018 Results
Households Displaced	147
People Needing Shelter	101
Buildings at Least Moderately Damaged	0
<b>Economic Losses</b>	
Residential Building & Content Losses	\$13,184,428
Other Building & Content Losses	\$6,895,584
<b>Total Building &amp; Content Loss</b>	<b>\$20,080,012</b>
<b>Total Business Interruption Losses</b>	<b>\$276,509</b>
<b>TOTAL</b>	<b>\$20,356,521</b>



**Table 8-7: Estimated Damages to Coventry from a 1% Annual-Chance Hurricane**

Loss Type	2018 Results (1% track)
Buildings at Least Moderately Damaged	1
Buildings Completely Damaged	0
Total Debris Generated (tons)	12654
Truckloads (at 25 tons/truck) of building debris	506
<b>Economic Losses</b>	
Residential Building & Content Losses	\$5,172,547
Other Building & Content Losses	\$164,496
<b>Total Building &amp; Content Loss</b>	<b>\$5,337,043</b>
<b>Total Business Interruption Losses</b>	<b>\$308,622</b>
<b>TOTAL LOSSES</b>	<b>\$5,645,665</b>

Losses were calculated from a modeled probabilistic earthquake (1% annual-chance of occurrence), as well as for four specific scenarios with epicenters around Connecticut.

**Table 8-8: Estimated Damages to Coventry from a Probabilistic Earthquake**

Loss Type	2018 Results
Wage Loss	\$665
Rent Loss	\$734
Relocation Loss	\$1,673
Income Loss	\$539
Inventory Loss	\$98
<b>Total Business Disruption</b>	<b>\$3,709</b>
Structural Loss	\$3,473
Non-Structural Loss	\$13,053
<b>Total Building Loss</b>	<b>\$16,525</b>
<b>Total Content Loss</b>	<b>\$5,049</b>
<b>TOTAL LOSSES</b>	<b>\$25,283</b>

**Table 8-9: Estimated Damages to Coventry from Modeled Earthquake Scenarios**

Epicenter Location	Magnitude	Estimated Total Losses
East Haddam	6.4	\$202,863.52
Haddam	5.7	\$38,524.25
Portland	5.7	\$55,306.21
Stamford	5.7	\$2,208.68

*Average Annualized Losses*

Average Annualized Loss (AAL) figures are useful tools for comparison of the risks faced from different hazards with different likelihoods of occurring in a given time period. AAL estimates were prepared for Coventry based on the methodologies discussed in Section II of the Multi-Jurisdictional HMP. Dam failure, drought, tornado, and wildfire losses were sourced from the 2014 Connecticut Natural Hazard Mitigation Plan Update, with dam failure data supplemented by the National Performance of Dams Program and the Connecticut Department of Energy &



Environmental Protection. Earthquake and hurricane losses were calculated in HAZUS-MH. Losses for flooding came from NFIP claims, for winter storms from Public Assistance Reimbursements, and for thunderstorms from the NCEI database. These are presented in the table below in dollars per year. Note that Hurricanes and Tropical Storms represent the largest share of total annualized losses.

**Table 8-10: Average Annualized Losses, Coventry**

Dam Failure	Drought	Earthquakes	Flooding	Hurricanes and Tropical Storms	Severe Winter Storms	Thunderstorms	Tornadoes	Wildfires	Total
\$764	\$0	\$25,283	\$4,003	\$842,675	\$32,641	\$4,526	\$3,614	\$4,930	\$918,436

### Losses Summary

A review of the above loss estimates demonstrates that the Town of Coventry has experienced significant expenses as a result of natural hazards and is at risk for additional losses if some of the less-frequent events were to occur. These actual and potential losses justify hazard mitigation actions to reduce losses in the future.

### Mitigation Strategies and Actions

#### Noted Hazard Mitigation Needs

During the course of this Plan development, multiple hazard mitigation needs of Coventry were noted, including:

- Complete a Regional Sheltering Plan.
- Assess the needs, and develop a cost-estimate, for retrofitting the new portion of the High School (specifically the new gym) so that it is up to seismic code.
- Pursue development of a micro-grid to encompass Town-owned facilities around, and including, the Town Hall.
- Work with FEMA to map Mill Brook in the Village.
- Replace culvert at Jones Crossing over Clark Brook, which drains to the Willimantic River. Town has approved funding for this project. Flooding here is an access problem.
- Determine whether it is more preferable or cost effective to replace the culvert that is contributing to flooding of hay and cornfields or to acquire the at-risk land.
- Install additional dry hydrants in areas not served by public water, as well as a water tower to feed hydrants in Coventry Village.
- Acquire a tanker truck to assist with fighting fires in areas remote from water sources.
- Complete an inventory and vulnerability analysis of trees along municipal rights-of-way (ROW), with a particular focus on tree death due to invasive pests and blight.





## Status of Previous Mitigation Strategies and Actions

The Town of Coventry reviewed the mitigation actions proposed in the 2015 HMP and determined the status of each. That information is included in the table below.

**Table 8-11: Status of Previous Mitigation Strategies and Actions, Coventry**

Action #	Action	Notes	Status
<b>GOAL: TO REDUCE THE LOSS OF LIFE AND PROPERTY AND ECONOMIC CONSEQUENCES AS A RESULT OF NATURAL DISASTERS.</b>			
<b>Objective 1: To reduce the likelihood of flooding by improving bridge conditions.</b>			
1.1	Update single-lane Pucker Street bridge to a double-lane bridge with increased water capacity. Under design as of March 2014.	Action complete.	Complete
<b>Objective 2: To reduce the likelihood of wildfire hazards by improving water availability.</b>			
2.1	Seek grant for large 2,000 gallon tanker fire apparatus. Current largest capacity truck is 1000.	Action complete (Town now has 3,000-gallon truck).	Complete
<b>Objective 3: To reduce the likelihood of flooding and icy conditions by improving existing road conditions.</b>			
3.1	Improve the intersection of South Street, Swamp Road and Swamp Road Extension, where there are drainage problems.	Concepts underway – plan to apply for state and federal funding	Carry Forward with Revisions
3.2	Improve roads around the lake area where there are flash flooding issues.	Maple Road has been upgraded, other projects are ongoing.	Carry Forward with Revisions
<b>Objective 4: To reduce the likelihood of flooding by improving existing natural and artificial drainage systems.</b>			
4.1	Substantially change the collection of stormwater and improve redistribution through silted-in ponds along Mill Stream in the village from Coventry Lake to the Willimantic River.	Partially complete. From 275 down to Bradbury and Woods Lane some drainage improvements have been done (phase 1).	Carry Forward with Revisions
<b>Objective 5: Reduce costs associated with providing emergency services and other public services in the event of a natural disaster.</b>			
5.1	Upgrade all town plows to salt/slurry mixture spreaders.	Action complete. The Town now uses ClearLane (treated salt).	Complete
<b>Objective 6: Reduce the amount of debris from severe storms through preventative tree management.</b>			
6.1	Based on the results of the hazardous tree survey, remove dead, dying, dangerous or diseased trees. Focus on the Ash tree, which is suffering a massive regional die-off due to insect infestation.	Budget was increased from \$22k to \$35k. Carry forward with goal of removing 25-30 trees per year.	Carry Forward with Revisions
<b>Objective 7: Expand activities related to emergency preparedness and improve natural hazard response capabilities.</b>			
7.1	Upgrade town-wide communication systems.	Installed voting receivers, including additional transmission sites. Added additional town-wide frequency. Lightning protection needs to be addressed in the plan update.	Carry Forward with Revisions
<b>Objective 8: Continue to educate the public in areas of natural disasters, mitigation activities, and preparedness.</b>			



Action #	Action	Notes	Status
<b>Objective 9: Educate the public in the areas of natural disasters, mitigation activities and preparedness.</b>			
9.1	Educate the public on tree planting around power lines.	Multiple measures put in place: articles in newspaper, "America The Beautiful" grant, 25 trees planted per year, require demonstration of proper species selections related to power lines.	Capability
9.2	Visit schools and educate children about the risks of floods and other natural hazards and how to prepare for them.	Fire Department goes in and talks about fires.	Capability
9.3	Make available literature on natural disasters and preparedness at Coventry Town Hall and at the Booth & Dimock Memorial Library.	Complete. Town will update literature on annual basis.	Capability
9.4	Make available information on natural disasters and preparedness on Coventry's website with links to state and federal resources.	Complete. Town will update literature on annual basis.	Capability
<b>Objective 10: To reduce the likelihood of flooding, evaluate property prone to flooding.</b>			
10.1	Conduct a study and acquire property in the floodplain through grants and donations.	Actively pursuing two additional riverfront properties.	Carry Forward with Revisions
<b>Objective 11: To reduce the likelihood of catastrophic loss as a result of dam failure.</b>			
11.1	Design and improve Coventry Lake Gate, as it is currently compromised.	Action complete.	Complete
<b>Objective 12: Update Flood Insurance Rate Maps (FIRMs) and Floodway Maps based on an engineered study.</b>			
12.1	Urge FEMA to conduct an engineered study of the town to develop more accurate FIRMs and floodway maps (ex. Coventry Village area).	Continue to inquire with FEMA on needing improved mapping.	Carry Forward with Revisions

**Active Mitigation Strategies and Actions**

The Town proposed to initiate several new mitigation actions for the upcoming five years. Additionally, a number of actions from the previous planning period are being carried forward or replaced with revised actions. These are listed below.

Each of the following actions has been prioritized based on FEMA guidelines, listed from highest to lowest priority, and numbered.

<b>Action #1</b>	
<b>Work with FEMA to map the Mill Brook floodplain in Coventry Village.</b>	
<b>Goal</b>	3. Improve institutional awareness and understanding of natural hazard impacts and mitigation within municipal governments and other decision-making bodies
<b>Category</b>	Prevention
<b>Lead</b>	Planning
<b>Cost</b>	\$0 - \$10,000
<b>Funding</b>	CT DEEP / DEMHS / FEMA
<b>Timeframe</b>	07/2019 - 06/2020
<b>Priority</b>	High



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**Action #2**

**Develop a dry hydrant maintenance plan to guide hydrant cleaning, dredging, and replacement.**

<b>Goal</b>	7. Improve the emergency response capabilities of the region and its communities
<b>Category</b>	Prevention
<b>Lead</b>	Fire Department
<b>Cost</b>	\$10,000 - \$25,000
<b>Funding</b>	CT DEEP
<b>Timeframe</b>	07/2019 - 06/2021
<b>Priority</b>	High

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**Action #3**

**Develop a process, to be built into DPW operations, to identify, evaluate, and address bridges with scour problems.**

<b>Goal</b>	5. Improve the resilience of local and regional utilities and infrastructure using strategies including adaptation, hardening, and creating redundancies.
<b>Category</b>	Structural Projects
<b>Lead</b>	Public Works
<b>Cost</b>	\$10,000 - \$25,000
<b>Funding</b>	Grants
<b>Timeframe</b>	07/2019 - 06/2021
<b>Priority</b>	High

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**Action #4**

**Complete an inventory and vulnerability analysis of trees along municipal rights-of-way (ROW), with a particular focus on tree death due to invasive pests and blight.**

<b>Goal</b>	5. Improve the resilience of local and regional utilities and infrastructure using strategies including adaptation, hardening, and creating redundancies.
<b>Category</b>	Prevention
<b>Lead</b>	Public Works
<b>Cost</b>	\$10,000 - \$25,000
<b>Funding</b>	Town Operating Budget
<b>Timeframe</b>	07/2019 - 06/2021
<b>Priority</b>	High

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**Action #5**

**Develop a prioritized list of needed road improvements around the lake area where flash flooding is an issue.**

<b>Goal</b>	5. Improve the resilience of local and regional utilities and infrastructure using strategies including adaptation, hardening, and creating redundancies.
<b>Category</b>	Structural Projects
<b>Lead</b>	Public Works
<b>Cost</b>	\$25,000 - \$50,000
<b>Funding</b>	Town Operating Budget / Grants
<b>Timeframe</b>	07/2020 - 06/2021
<b>Priority</b>	High

**Action #6**

**Complete upgrade of town-wide communications system.**

<b>Goal</b>	7. Improve the emergency response capabilities of the region and its communities
<b>Category</b>	Preparedness & Emergency Response
<b>Lead</b>	Emergency Management
<b>Cost</b>	\$50,000 - \$100,000
<b>Funding</b>	Town Operating Budget
<b>Timeframe</b>	07/2021 - 06/2022
<b>Priority</b>	High

**Action #7**

**Develop a micro-grid for municipal facilities around, and including, the Town Hall. Ideally the microgrid will service the high school (shelter), middle school, fire department, town hall, fueling station, and elderly housing complex.**

<b>Goal</b>	5. Improve the resilience of local and regional utilities and infrastructure using strategies including adaptation, hardening, and creating redundancies.
<b>Category</b>	Structural Projects
<b>Lead</b>	Public Works
<b>Cost</b>	\$50,000 - \$100,000
<b>Funding</b>	Grants / CT DEEP PURA
<b>Timeframe</b>	07/2021 - 06/2022
<b>Priority</b>	High



**Action #8**

**Complete the stormwater collection system improvements along Mill Stream in Coventry Village.**

<b>Goal</b>	1. Minimize the impact of natural hazards on physical buildings and infrastructure
<b>Category</b>	Structural Projects
<b>Lead</b>	Public Works
<b>Cost</b>	\$50,000 - \$100,000
<b>Funding</b>	Grants
<b>Timeframe</b>	07/2021 - 06/2022
<b>Priority</b>	High

**Action #9**

**Assess the needs, and develop a cost-estimate, for retrofitting the new High School gym to ensure it is up to seismic and wind code and can be used as an emergency shelter.**

<b>Goal</b>	7. Improve the emergency response capabilities of the region and its communities
<b>Category</b>	Structural Projects
<b>Lead</b>	Public Works
<b>Cost</b>	More than \$100,000
<b>Funding</b>	Grants / Bonding
<b>Timeframe</b>	07/2022 - 06/2023
<b>Priority</b>	High

**Action #10**

**Construct a water tower or cistern to serve Coventry Village to improve firefighting capacity in that area.**

<b>Goal</b>	7. Improve the emergency response capabilities of the region and its communities
<b>Category</b>	Preparedness & Emergency Response
<b>Lead</b>	Public Works
<b>Cost</b>	More than \$100,000
<b>Funding</b>	Grants
<b>Timeframe</b>	07/2022 - 06/2023
<b>Priority</b>	High



**Action #11**

**Replace culvert at Jones Crossing over Clark Brook, which drains to the Willimantic River.**

<b>Goal</b>	1. Minimize the impact of natural hazards on physical buildings and infrastructure
<b>Category</b>	Structural Projects
<b>Lead</b>	Public Works
<b>Cost</b>	More than \$100,000
<b>Funding</b>	Grants / Bonding
<b>Timeframe</b>	07/2022 - 06/2023
<b>Priority</b>	High

**Action #12**

**Complete improvements to the DeCew Dam park property, considering dam safety.**

<b>Goal</b>	1. Minimize the impact of natural hazards on physical buildings and infrastructure
<b>Category</b>	Structural Projects
<b>Lead</b>	Public Works
<b>Cost</b>	More than \$100,000
<b>Funding</b>	Grants
<b>Timeframe</b>	07/2022 - 06/2023
<b>Priority</b>	High

**Action #13**

**Increase funding to identify and address bridge scour problems.**

<b>Goal</b>	5. Improve the resilience of local and regional utilities and infrastructure using strategies including adaptation, hardening, and creating redundancies.
<b>Category</b>	Prevention
<b>Lead</b>	Public Works
<b>Cost</b>	More than \$100,000
<b>Funding</b>	Town Operating Budget / Grants
<b>Timeframe</b>	07/2022 - 06/2023
<b>Priority</b>	High



**Action #14**

**Conduct outreach to local small businesses with the aim of preventing the accidental release and pollution from chemicals stored and used at their facilities during or following natural hazard events.**

<b>Goal</b>	6. Improve public outreach, education, and warning systems
<b>Category</b>	Education & Awareness
<b>Lead</b>	Planning, in coordination with DEEP
<b>Cost</b>	\$0 - \$10,000
<b>Funding</b>	Materials & Resources Provided by CT DEEP
<b>Timeframe</b>	01/2019 - 12/2019
<b>Priority</b>	Medium

**Action #15**

**Participate in EMI courses or the seminars and annual conference held by the Connecticut Association of Flood Managers.**

<b>Goal</b>	3. Improve institutional awareness and understanding of natural hazard impacts and mitigation within municipal governments and other decision-making bodies
<b>Category</b>	Education & Awareness
<b>Lead</b>	Planning
<b>Cost</b>	\$0 - \$10,000
<b>Funding</b>	Town Operating Budget
<b>Timeframe</b>	07/2019 - 06/2024
<b>Priority</b>	Medium

**Action #16**

**Coordinate with NEMO and CRCOG to share resources and gain technical support for hazard mitigation actions involving stormwater management and public outreach, which have parallel benefits related to MS4 stormwater permit compliance.**

<b>Goal</b>	1. Minimize the impact of natural hazards on physical buildings and infrastructure
<b>Category</b>	Prevention
<b>Lead</b>	Public Works
<b>Cost</b>	\$0 - \$10,000
<b>Funding</b>	Town Operating Budget
<b>Timeframe</b>	07/2020 - 06/2021
<b>Priority</b>	Medium



**Action #17**

**Review the LID Manual developed by the Northwest Hills Council of Governments and determine whether LID can be incorporated locally to increase rural resiliency.**

<b>Goal</b>	1. Minimize the impact of natural hazards on physical buildings and infrastructure
<b>Category</b>	Prevention
<b>Lead</b>	Planning
<b>Cost</b>	\$10,000 - \$25,000
<b>Funding</b>	Town Operating Budget
<b>Timeframe</b>	07/2021 - 06/2022
<b>Priority</b>	Medium

**Action #18**

**Conduct a wildfire vulnerability and needs assessment to guide construction of additional dry hydrants and/or cisterns.**

<b>Goal</b>	3. Improve institutional awareness and understanding of natural hazard impacts and mitigation within municipal governments and other decision-making bodies
<b>Category</b>	Prevention
<b>Lead</b>	Fire Department
<b>Cost</b>	\$25,000 - \$50,000
<b>Funding</b>	Town Operating Budget / Grants / CT DEEP
<b>Timeframe</b>	07/2021 - 06/2023
<b>Priority</b>	Medium

**Action #19**

**Develop a plan for implementing lightning protection for the town-wide communication system.**

<b>Goal</b>	5. Improve the resilience of local and regional utilities and infrastructure using strategies including adaptation, hardening, and creating redundancies.
<b>Category</b>	Preparedness & Emergency Response
<b>Lead</b>	Emergency Management
<b>Cost</b>	\$25,000 - \$50,000
<b>Funding</b>	Town Operating Budget / Grants
<b>Timeframe</b>	07/2021 - 06/2023
<b>Priority</b>	Medium





**Action #20**

**Remove 100 to 150 hazardous trees, as identified in the hazardous tree survey completed prior to the previous HMP, over the next five years.**

<b>Goal</b>	5. Improve the resilience of local and regional utilities and infrastructure using strategies including adaptation, hardening, and creating redundancies.
<b>Category</b>	Prevention
<b>Lead</b>	Public Works
<b>Cost</b>	\$25,000 - \$50,000
<b>Funding</b>	Town Operating Budget
<b>Timeframe</b>	01/2021 - 12/2023
<b>Priority</b>	Medium

**Action #21**

**Increase funding for Right of Way tree removal.**

<b>Goal</b>	5. Improve the resilience of local and regional utilities and infrastructure using strategies including adaptation, hardening, and creating redundancies.
<b>Category</b>	Prevention
<b>Lead</b>	Public Works
<b>Cost</b>	\$25,000 - \$50,000
<b>Funding</b>	Town Operating Budget / Grants
<b>Timeframe</b>	07/2021 - 06/2023
<b>Priority</b>	Medium

**Action #22**

**Develop an Open Space Plan to guide acquisition and preservation; ensure hazard mitigation is considered in plan development.**

<b>Goal</b>	4. Increase the use of natural, "green," or "soft" hazard mitigation measures, such as open space preservation and green infrastructure.
<b>Category</b>	Natural Resources Protection
<b>Lead</b>	Planning
<b>Cost</b>	\$50,000 - \$100,000
<b>Funding</b>	Town Operating Budget / Grants
<b>Timeframe</b>	07/2023 - 06/2024
<b>Priority</b>	Medium



**Action #23**

**Apply for State and Federal funding for drainage improvements to the intersection of South Street, Swamp Road, and Swamp Road Extension.**

<b>Goal</b>	1. Minimize the impact of natural hazards on physical buildings and infrastructure
<b>Category</b>	Structural Projects
<b>Lead</b>	Public Works
<b>Cost</b>	More than \$100,000
<b>Funding</b>	Town Operating Budget / Grants
<b>Timeframe</b>	07/2022 - 06/2024
<b>Priority</b>	Medium

**Action #24**

**Upgrade all town plows to have magnesium chloride tanks.**

<b>Goal</b>	7. Improve the emergency response capabilities of the region and its communities
<b>Category</b>	Preparedness & Emergency Response
<b>Lead</b>	Public Works
<b>Cost</b>	More than \$100,000
<b>Funding</b>	Grants
<b>Timeframe</b>	07/2022 - 06/2024
<b>Priority</b>	Medium

**Action #25**

**Acquire a forestry truck with a water tank to assist with fighting fires in areas remote from water sources.**

<b>Goal</b>	7. Improve the emergency response capabilities of the region and its communities
<b>Category</b>	Preparedness & Emergency Response
<b>Lead</b>	Fire Department
<b>Cost</b>	More than \$100,000
<b>Funding</b>	Town Operating Budget / Grants
<b>Timeframe</b>	01/2022 - 12/2024
<b>Priority</b>	Medium



**Action #26**

**Acquire all-terrain firefighting trucks and open accessways to fight fires in forested areas.**

<b>Goal</b>	7. Improve the emergency response capabilities of the region and its communities
<b>Category</b>	Preparedness & Emergency Response
<b>Lead</b>	Fire Department
<b>Cost</b>	More than \$100,000
<b>Funding</b>	Grants
<b>Timeframe</b>	07/2022 - 06/2024
<b>Priority</b>	Medium

**Action #27**

**Determine whether it is more preferable or cost effective to replace the culvert on Pucker Street that is contributing to flooding of hay and cornfields or to acquire the at-risk land.**

<b>Goal</b>	3. Improve institutional awareness and understanding of natural hazard impacts and mitigation within municipal governments and other decision-making bodies
<b>Category</b>	Prevention
<b>Lead</b>	Public Works
<b>Cost</b>	\$0 - \$10,000
<b>Funding</b>	Town Operating Budget
<b>Timeframe</b>	07/2021 - 06/2022
<b>Priority</b>	Low

**Action #28**

**Coordinate with CT SHPO to conduct outreach to historic property owners to educate them on methods of retrofitting their properties to be more hazard-resilient while maintaining historic character.**

<b>Goal</b>	8. Ensure community character and social equity are addressed in mitigation activities
<b>Category</b>	Education & Awareness
<b>Lead</b>	Planning, in coordination with SHPO
<b>Cost</b>	\$0 - \$10,000
<b>Funding</b>	SHPO
<b>Timeframe</b>	01/2021 - 12/2022
<b>Priority</b>	Low



**Action #29**

**Make progress with the hazard mitigation goals associated with SustainableCT certified actions.**

<b>Goal</b>	8. Ensure community character and social equity are addressed in mitigation activities
<b>Category</b>	Prevention
<b>Lead</b>	Planning
<b>Cost</b>	\$0 - \$10,000
<b>Funding</b>	Town Operating Budget / CT DEEP
<b>Timeframe</b>	07/2021 - 06/2022
<b>Priority</b>	Low

**Action #30**

**Coordinate with CT SHPO to conduct historic resource surveys, focusing on areas within natural hazard risk zones (such as flood or wildfire hazard zones and areas near steep slopes), to support identification of vulnerable historic properties and preparation of resiliency plans across the state. This action leverages existing resources and best practices for protection of historic and cultural resources through an ongoing statewide initiative by CT SHPO.**

<b>Goal</b>	8. Ensure community character and social equity are addressed in mitigation activities
<b>Category</b>	Property Protection
<b>Lead</b>	Planning, in coordination with SHPO
<b>Cost</b>	\$10,000 - \$25,000
<b>Funding</b>	SHPO
<b>Timeframe</b>	07/2021 - 06/2023
<b>Priority</b>	Low

**Action #31**

**Complete the Regional Sheltering Plan.**

<b>Goal</b>	7. Improve the emergency response capabilities of the region and its communities
<b>Category</b>	Preparedness & Emergency Response
<b>Lead</b>	Emergency Management
<b>Cost</b>	\$25,000 - \$50,000
<b>Funding</b>	Grants
<b>Timeframe</b>	07/2023 - 06/2024
<b>Priority</b>	Low



**Action #32**

**Acquire the Schmidt and Streude-Decew parcels, which are flood-prone.**

<b>Goal</b>	4. Increase the use of natural, "green," or "soft" hazard mitigation measures, such as open space preservation and green infrastructure.
<b>Category</b>	Property Protection
<b>Lead</b>	Planning
<b>Cost</b>	More than \$100,000
<b>Funding</b>	Town Operating Budget / CT DEEP / DEMHS
<b>Timeframe</b>	07/2023 - 06/2024
<b>Priority</b>	Low






# Capitol Region Natural Hazards Mitigation Plan Update











## Coventry, Connecticut

Flood Plains, Dams & Critical Facilities



### Dam Hazard Class

-  BB, A, AA OR Unclassified
-  Class B - Significant Hazard
-  Class C - High Hazard

### Critical Facilities

-  Fire Station
-  Police Station
-  School
-  Healthcare Facility
-  State Facility
-  Town Facility
-  Waste Water Facility
-  Emergency Center
-  NRHP Buildings/Sites
-  NRHP Districts/Areas

### FEMA Flood Hazard Area

-  100 Year Flood Zone
-  500 Year Flood Zone

Data Sources: FEMA, National Register of Historic Places, CT DEEP, CRCOG, ESRI



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