

Natural Hazard Mitigation Plan Update



Town of Dalton
June 12, 2018

Hazard Mitigation – What and Who?

Hazard Mitigation Plan Update:

- Assesses the vulnerability of a community to the natural hazards / disasters
- Describes activities that can be done to mitigate the hazards before they occur
- Mitigation Plan 5-Year Update is a requirement to maintain eligibility for some FEMA funds
- Consider weather pattern observations and climate change projections

Dalton Emergency Management Advisory Council

- Town officials, Water Dept., first responders, business sector

Natural Hazards Evaluated for Dalton

Most Dangerous Disasters in Berkshire County:

- TORNADOS (7 deaths, 60 injuries W. Stock. & Gt. Barrington)
- Dam failures (10 deaths, 2 since 1968)
- Floods (2 deaths, many injuries)

Hazards Evaluated	
Flood	Tornado
Dam Failure	Extreme Temperature
Hurricane / Tropical Storm	Drought
Nor'easter	Wildland Fire
Snow & Blizzard	Major Urban Fire
Ice Storm	Earthquake
Thunderstorm	Landslide
High Winds	Ice Jam
Beaver Activity	

Ice Storm December 2008

- Loss of electricity for 1+ million customers
- >500,000 lost power during peak of storm, some for > 2 weeks
- FEMA obligates >\$32 million in Mass.
 - + State costs >\$7 million
 - + Municipal costs >\$5 million
 - + National Grid claims damages of >\$30 million
 - + Small businesses without electricity
“lose tens of millions of dollars”*



T.S. Irene 2011

- 500,000+ MA residents without electricity
- >100-year flood in Hoosic River
- **50-year storm on the Housatonic River**
- Dubbed the “costliest Category 1 storm” (\$15.8 billion in damages)
- Fed. Disaster in MA: FEMA \$5.6 million to households, \$30 million for public assistance
- Fed. Highways: \$46 million for roads and bridges, much of it for Rt 2



Irene @ Rt. 2 and Shelburne Falls



Dalton Emergency Events

- **2005 Mobile home evacuations off Wahconah Falls Road**
- **2011 T.S. Irene was most recent serious flood event**
 - Flooding and evacuations at Pomeroy Manor
 - Threatened several homes in the Town
 - River threatened to overtop bridges
 - Was a 50-year storm in Dalton

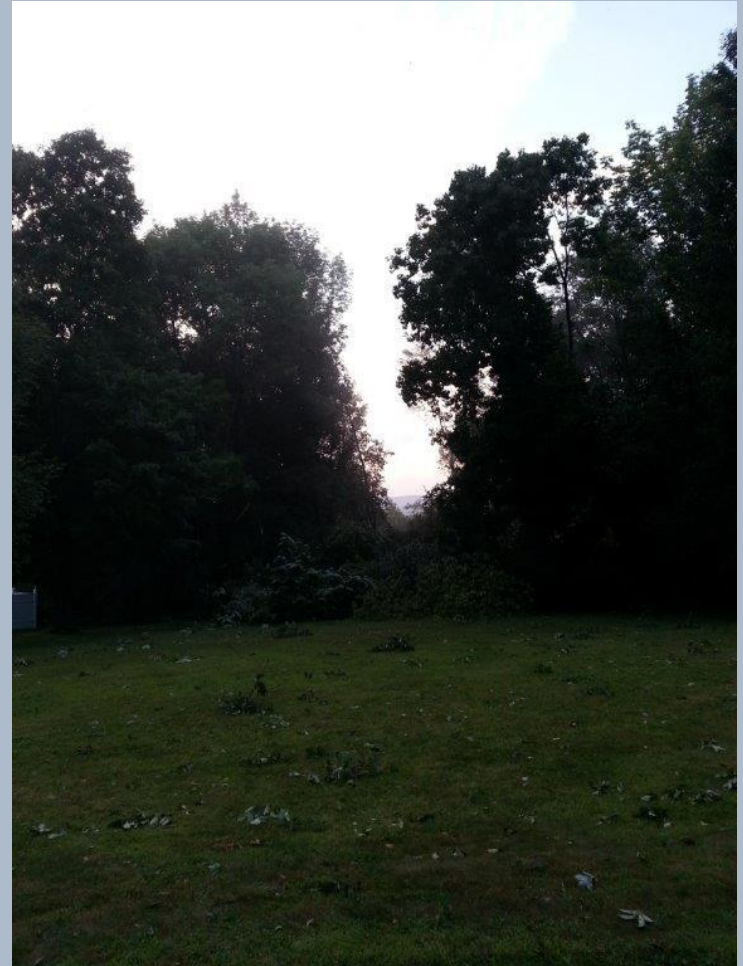


T.S. Irene 2011



Tornado 2014

F/EF Category 1 (86-100 mph winds)



Flood Concerns around Dalton

- Flooding is the most common and widespread natural hazard
- Approx. 4 miles of roadway travel through floodplain
- Some bridges with low clearance carry water, sewer, gas lines
- Center Pond flooding threat to Pomeroy Manor, Main St. Bridge
- Walker Brook persistent flood risk
- Some Crane Co. buildings in floodplain
- Flooding on Wahconah High School fields



Floodplain Vulnerability in Dalton

- 58 acres of floodplain are developed = ~12% of total floodplain
- 90 Buildings in Dalton are in the 100-yr floodplain (BRPC 2017)
- 83 are residential homes, many found around Center Pond and its associated tributaries and wetlands
- There are 2 repetitive flood insurance claims in town since 1978
- Only 8 properties have active flood insurance policies
- Estimated \$48 - \$150 million in damages in 100-yr flood event*

**Does not include loss of business operation, layoffs, unemployment*

Flood-plain Mapping



Other Concerns around Dalton

Power outages:

- Vulnerable populations scattered

Sheltering:

- Nessacus is main shelter but just outside floodplain boundary
- Regional shelter at BCC – accessible in 100-yr storm?

Dam Failures:

- Low risk of occurrence, but high degree of loss of life, injury and property

Other Concerns around Dalton

Power outages:

- Vulnerable populations scattered

Sheltering:

- Nessacus is main shelter but just outside floodplain boundary
- Regional shelter at BCC – accessible in 100-yr storm?

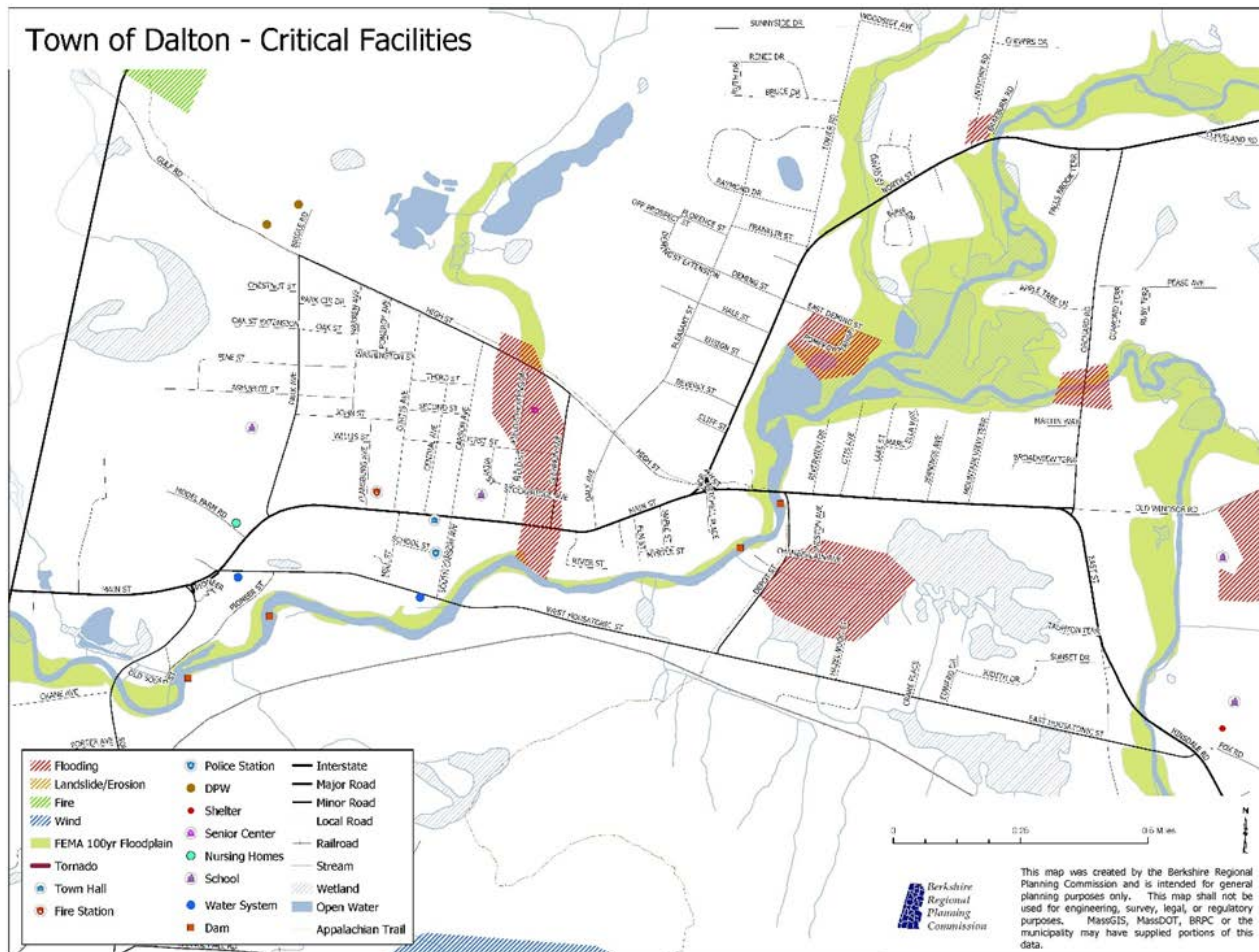
Dam Failures:

- Low risk of occurrence, but high potential loss of life, injury and property



Where are Greatest Risks?

Town of Dalton - Critical Facilities



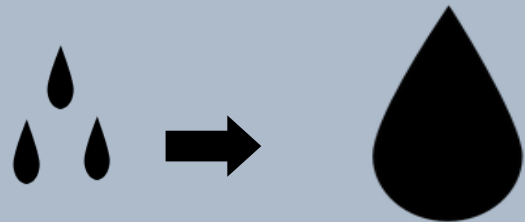
Key Observed Climate Changes in MA

Strong Storms:



71%

Since 1958

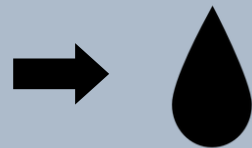


Growing Season:



10 Days

Since 1950



Temperature:

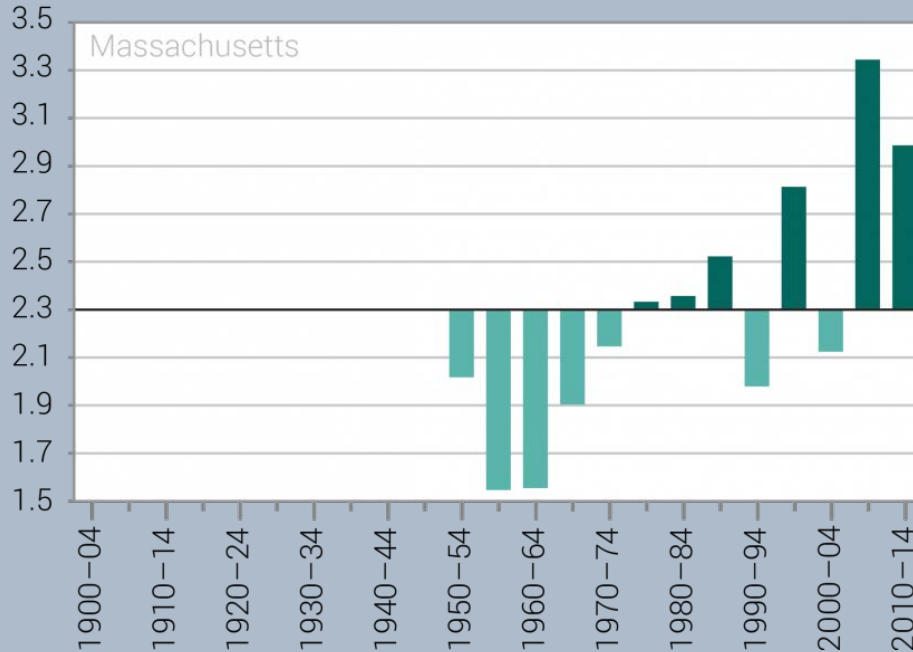


2.8°F since 1895 (7-10°F by 2100)

Berk. temp. up 1.7°F since 1960

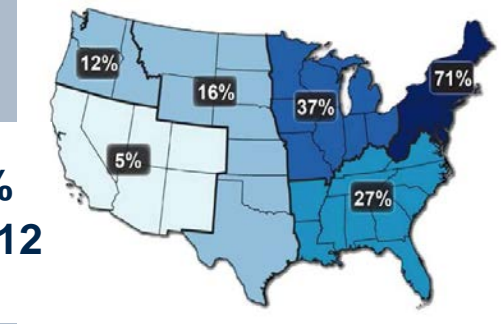
Observed No. Extreme Precip. Events

- Number of Events w/ Precipitation $> 2''$ in 1 day
“Stepped Increase” in 1970-80s, and continues



<https://statesummaries.ncics.org/ma>

↑ 71%
1958-2012



Draft Actions to Reduce Risk

- Continue pursuit of Walker Brook solution – *in progress*
- Protect residents at Pomeroy Manor
 - Investigate berms or other structural options
 - Conduct preparedness exercises with residents
- Pursue flood reduction risks at Center Pond
 - Pursue options for increased storage capacity
- Assess condition of bridges and their infrastructure for risk; prioritize improvement projects – *in progress*

Draft Actions to Reduce Risk

- Secure adequate sheltering – *in progress*
 - Finalize formal MOUs for all shelters
 - Investigate feasibility of sheltering at Craneville Elem. School
 - Retrofit Senior Center for back up power
- Increase enrollment in Code Red
- Reduce water demand by promoting conservation incentives

Now it's Your Turn!

Review the Plan Here:

WHERE?

Provide comments to:

Lauren Gaherty, Berkshire Regional Planning:
lgaherty@berkshireplanning.org

Dan Filiault, Dalton Emergency Management
Dir: EM@dalton-ma.gov



Now it's Your Turn!



Provide comments to town officials and first responders:

- Did we get it right?
- Are we missing anything?
- Which actions should be prioritized?