

MA State and Local Public Health Partnerships – Responding to Natural Disasters in 2011 and Today??

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Weather Related Disasters in 2011

- MA experienced a large number of weather related disasters in 2011
- Portions of Western MA were seriously affected, taxing local resources
- MDPH, Bureau of Environmental Health (MDPH/BEH) responded to requests for assistance from Local Health partners. (Now the Office of Local and Regional Health)
- Climate Change related weather events may have increase the likelihood of challenges to public health capacity

Some of the Challenges Facing Local and State Public Health

- Assessing the extent of the damage
- Addressing immediate public health threats
- Filling gaps in local capacity
- Following up on the long term public health hazards

Public Health Concerns

- An unsafe residential structure is a condition deemed to endanger and can mean that a residence is no longer fit for habitation until repaired. (105 CMR 410.000) Condemnation and alternative housing issues
- Damage to food establishments necessitates inspections to establish food safety
- Stress can worsen chronic disease and mental health issues
- Power outages put people, water, and food at risk

Groundhog Day Storm

February 2, 2011

- Massive nationwide blizzard dumped 10-20 inches of new snow in MA on top of an already large snow burden
- Numerous residential and commercial buildings experienced roof collapses and structural damage from the weight of the snow piled on roofs.
- In the first 48 hours after the snow started falling, over 80 reports of roofs collapses and buildings with structural weaknesses, wall buckling, were reported to the Massachusetts Emergency Management Agency

Greenfield Mud Slide



Greenfield Mud Slide

- Prolonged rains started melting the snow pack, causing significant flooding in Western MA
- Water pooled behind and then collapsed a ridge at the Green River Cemetery in Greenfield
- The Health Department was called in to check the structure of affected houses, but also needed to determine if graves were disturbed



We have a Cemetery that
has become a mud slide
that has poured into Town!





Good news, No bodies were discovered.

Tornado June 1st.



FOUR TORNADOES CONFIRMED ON JUNE 1 2011

- The National Weather Service in Taunton, Massachusetts has confirmed an ef3 tornado from Westfield to Charlton.
- This storm will be noted not only for its intensity...But also for the length of the continuous damage path...Approximately 39 miles. The tornado was also very wide at some points...Reaching a maximum width of one-half mile.

Tornado Overview

- The tornado crossed through approximately 20 communities in Western and Central MA
- Tragically, three people died and many were injured
- Extensive structural damage
- Damaged and overwhelmed communities needed multi-jurisdictional assistance

The Response

- Federal responders from FEMA with disaster teams and USDA food programs.
- State response included staff from MDPH, Bureau of Environmental Health, Community Sanitation and Food Protection Programs
- DEP response teams for public water supply, sewage disposal and chemical release.

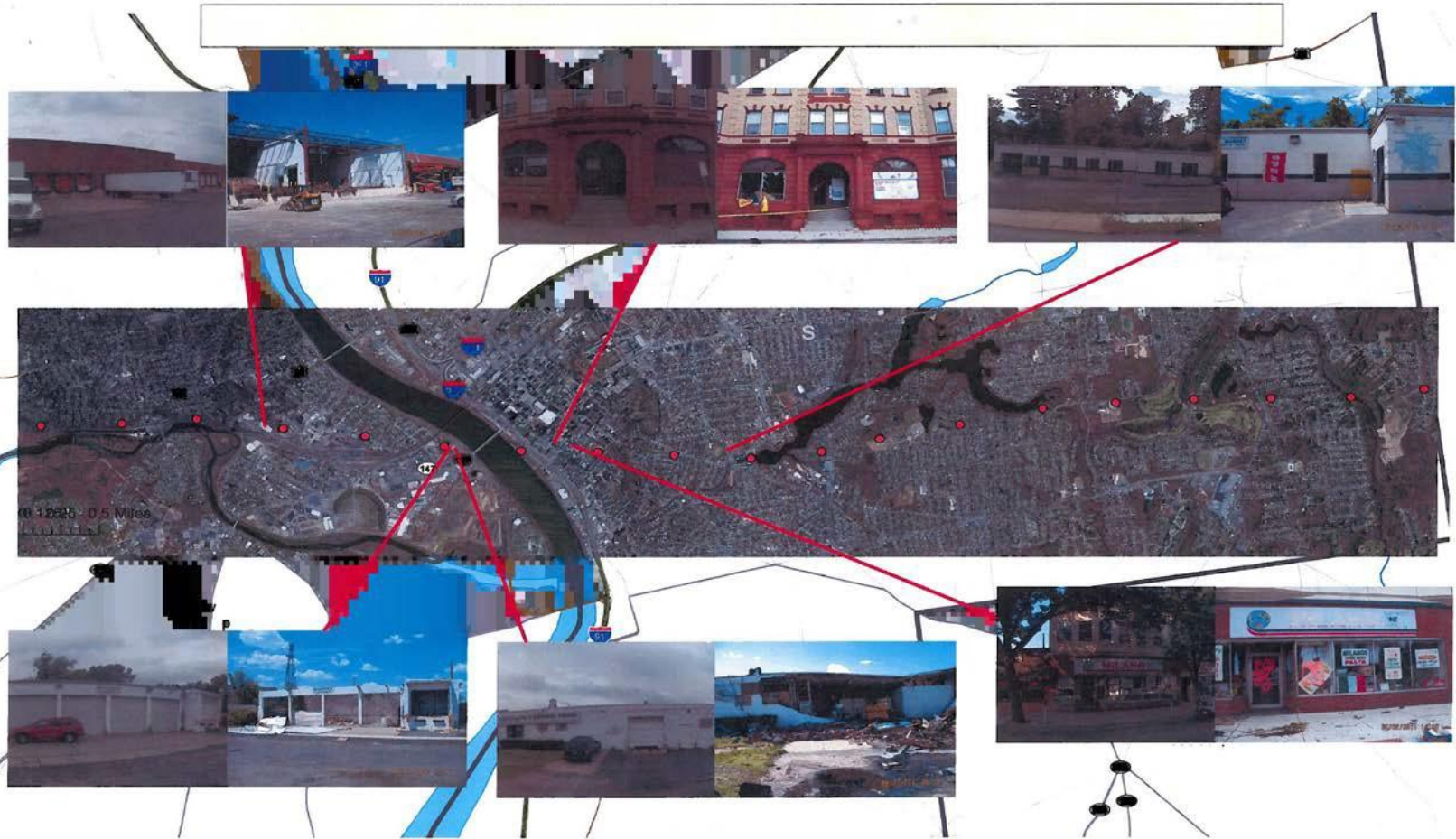
Damaged Housing

- Springfield - 263 Homes needed to be Condemned. 25-35 Structures were demolished by June 11th.
- Monson - 51 homes were condemned and another 67 had restricted entry. Town Hall suffered a direct hit!
- West Springfield - 70 homes were condemned and another 20 homes deemed uninhabitable
- Brimfield - 39 homes were condemned and 67 were restricted entry
- Westfield, one condemned residence

Damaged Food Establishments

- USDA and the MDPH/BEH, Food Protection Program assessed wholesale food operations and storage facilities that were in the path of the tornado.
- Local health assessed retail food facilities in each of the Cities/Towns
- The Food Protection Program assisted with retail food inspections in four communities

Damaged food facilities along the path of the tornado







Chuck Kaniecki & Paul Halfmann





Assessment

Using the housing code 105 CMR 410.00 to conduct exterior “fast paced” inspections.

Does it have a roof, walls, windows, doors.

Mark for further evaluation. This information will be needed at the shelters.

You have over 100 homes to inspect!

You have to walk.. Roadways that are blocked

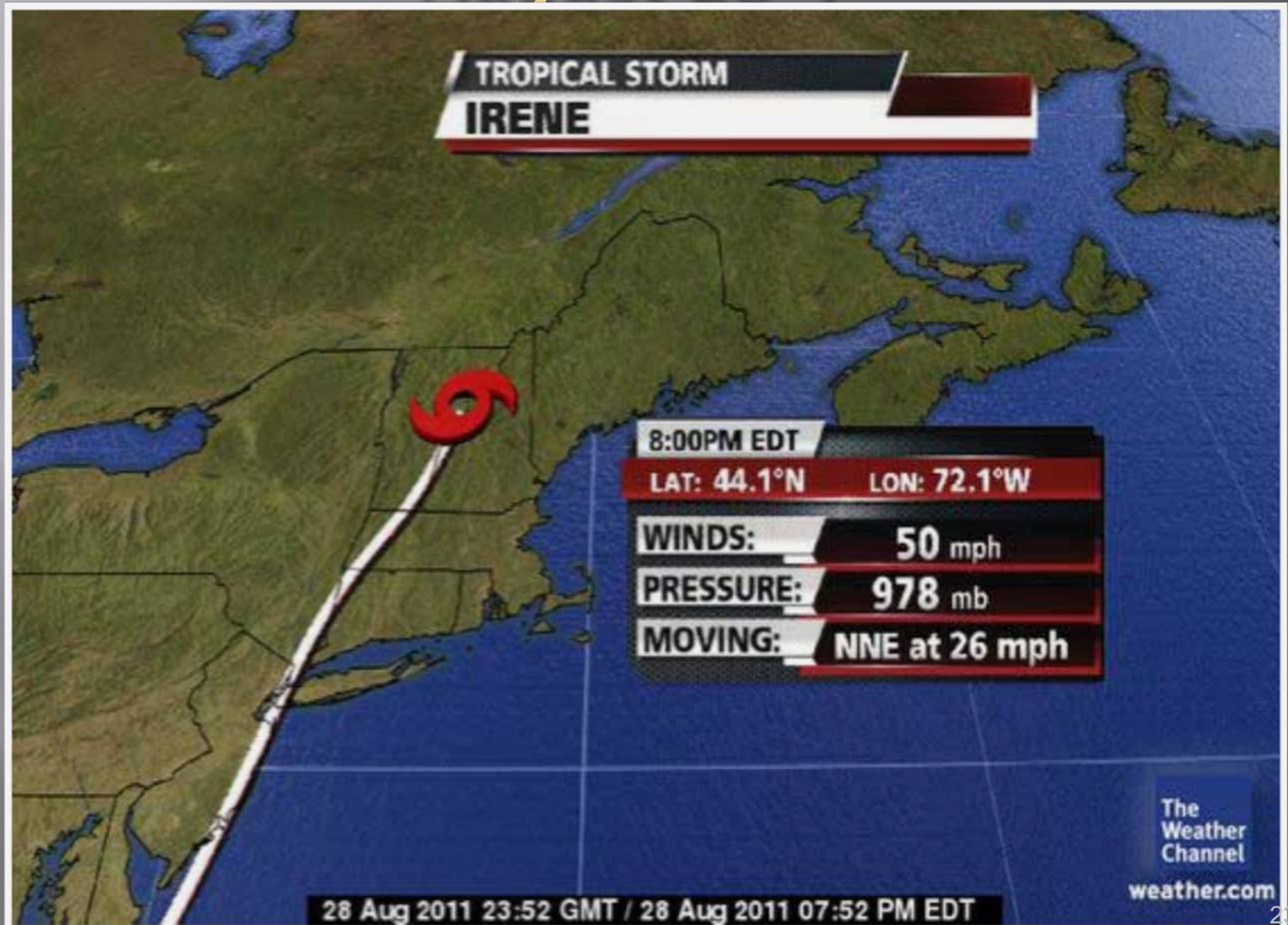
Communication is difficult at best.

Are you safe?



Hurricane Irene

August 28th.

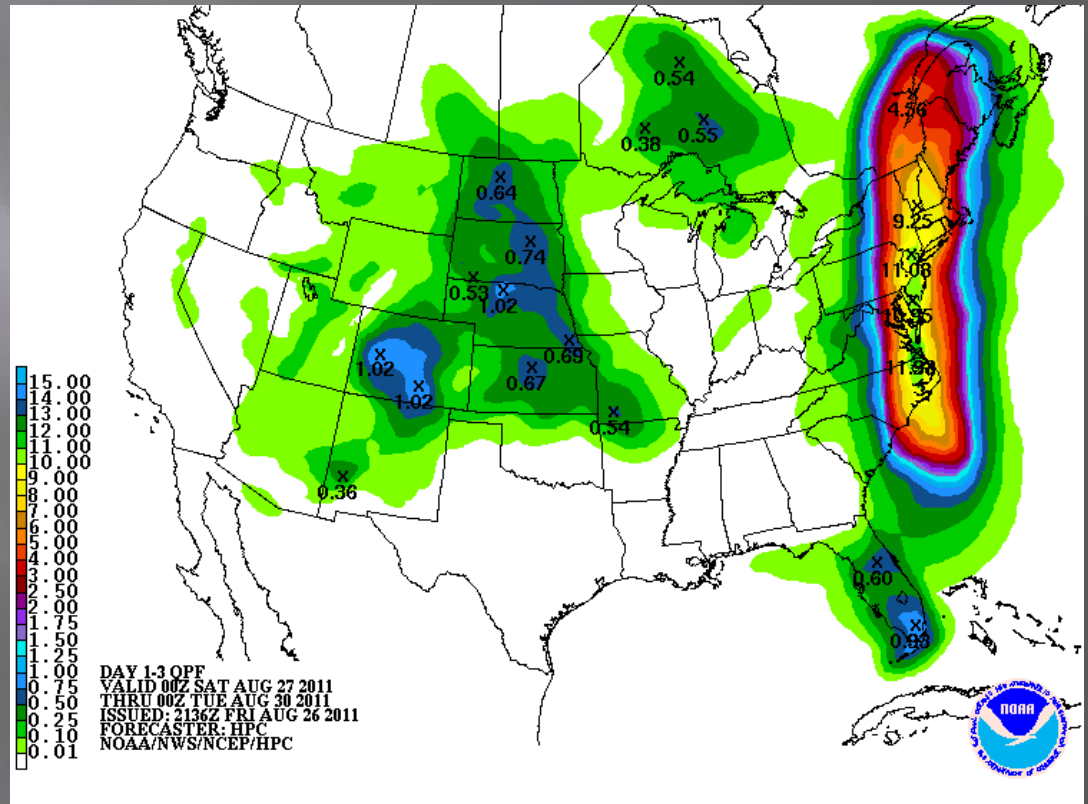


This began as a slow motion disaster.
Widespread flooding continued over several days

The storm stalled over the northern Berkshire/Franklin County areas of the state.

Calls started coming in from communities indirectly.

BEH response was to break up into teams to assist this wide region.



- BEH received calls from local health to help with a multitude of issues ranging from housing to food concerns like:
 - Flooded crop land from river water (Is the food safe?)
 - Flooded parks and school grounds.
 - How do you clean up a house?
 - “I think I have mold!”
-
- BEH teams responded to local communities to help conduct direct assessments and provide technical advice.









Flood in Williamstown August 29th.



Flood in Williamstown

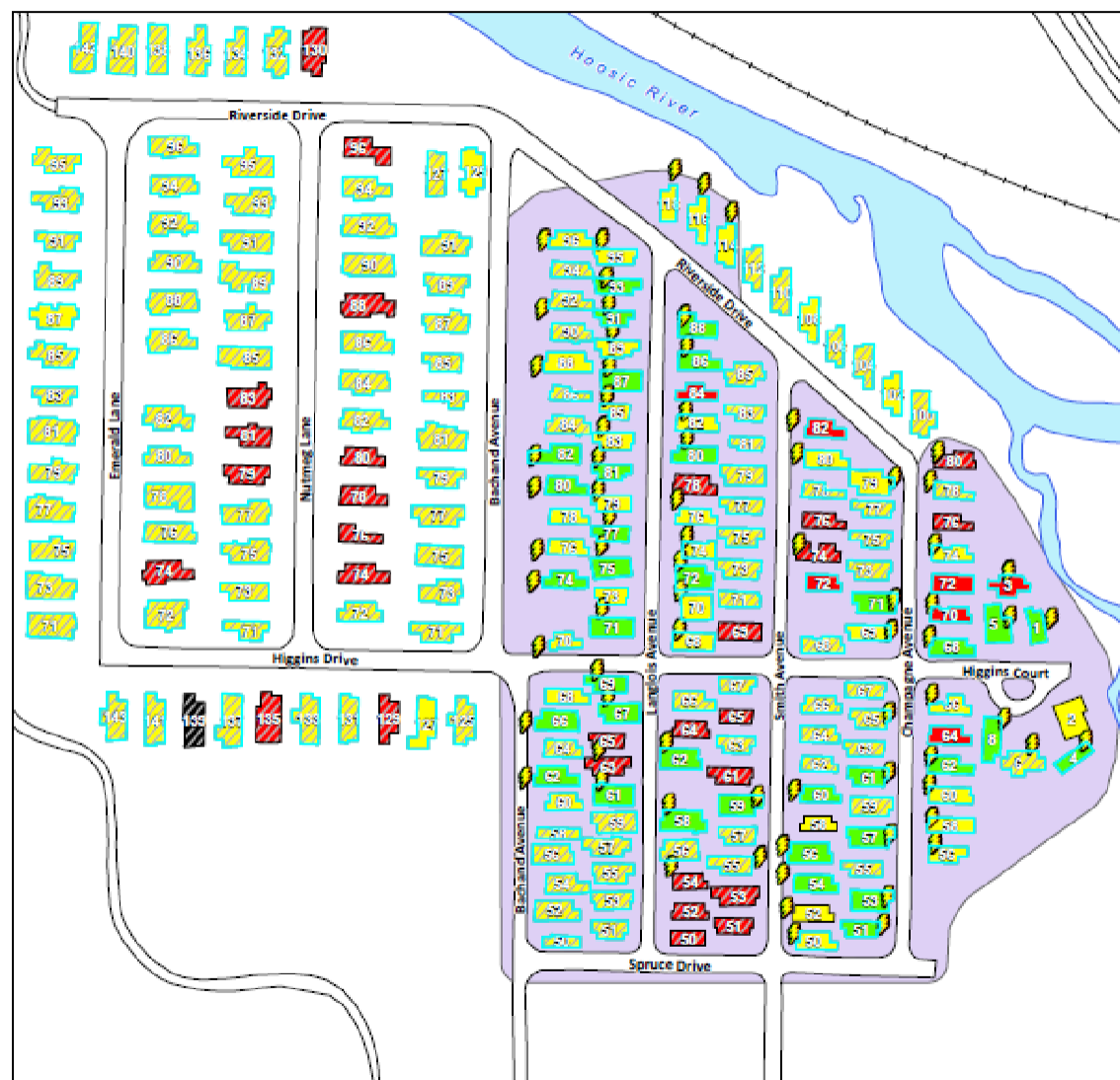
August 29th.







Water Line



The Spruces Mobile Home Park Building Status October 6, 2011

Total Units: 225

	Safety Inspections	Health Inspections	Electrical Power
MAY BE OCCUPIED	36	36	36
RESTRICTED USE	152	35 114	23 8
UNSAFE	36	7 29	2 5
OFF LIMITS	1		

Health Inspections

	Condemned
	Not Condemned

A condemned dwelling has been found by the Board of Health to be unfit for human habitation as a result of damage caused by flood water. Occupants may enter to retrieve possessions in accordance with building inspection guidelines, but may not reoccupy the building without the permission of the Board of Health.

Electrical Power

	ON
	Power Available

The lighting bolt denotes where the wiring inspector has authorized restoration of electrical service to individual units. The shaded area denotes the area where Morgan Management has restored the electrical infrastructure.

Spruces Mobile Home Park

- Total housing units 225
- Current occupancy 41
- Total that can be occupied 64
- Only 28% of the park is habitable

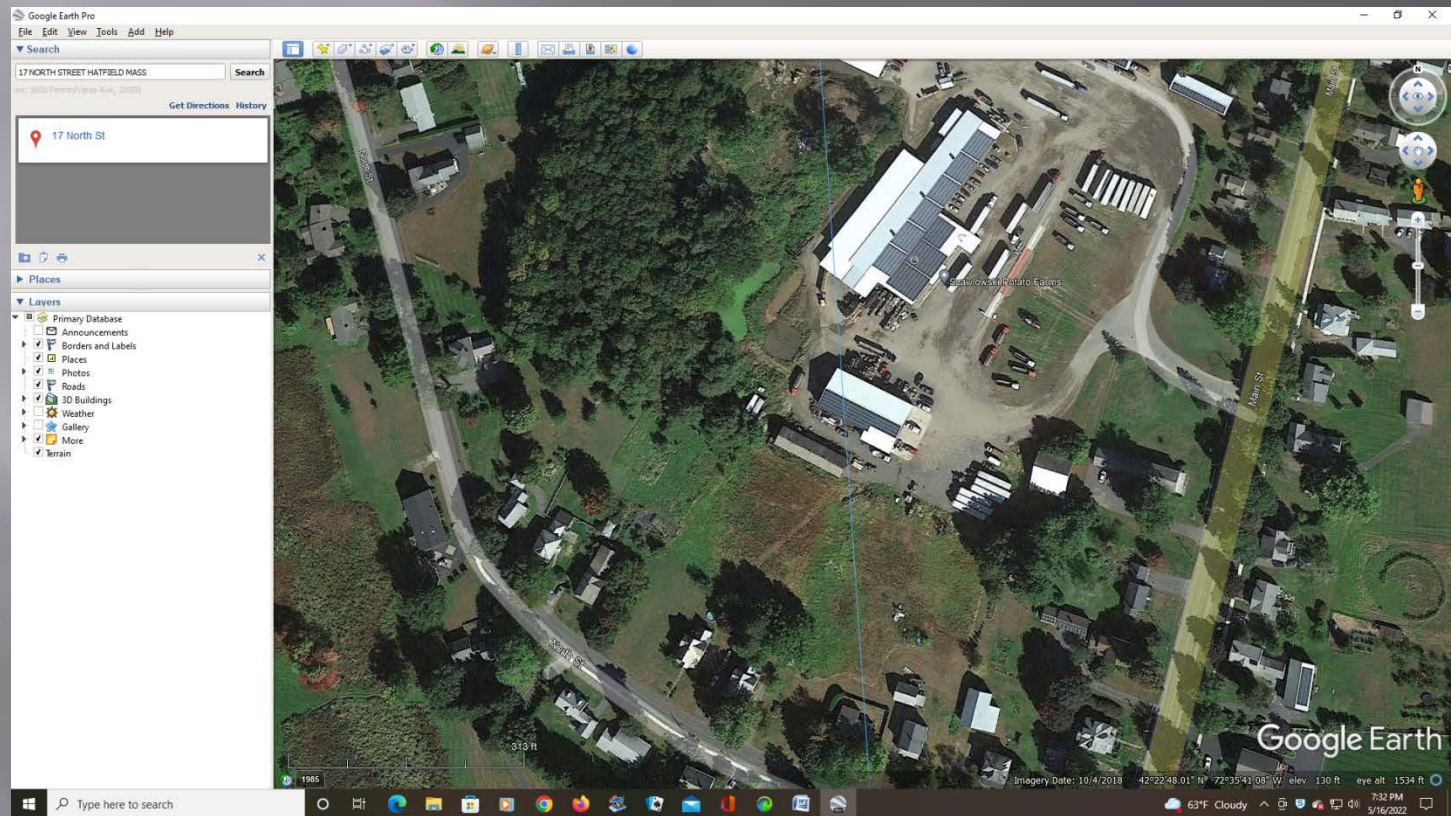
Ongoing Issues at the Park

- Abandoned trailers decaying
- People, who might otherwise be homeless, are living in the condemned trailers
- Trailer Park does not have enough occupancy to keep it viable or to make necessary repairs

2023 Agricultural Flooding Guidance & Resources

- Many farms across Massachusetts have been impacted by the July 2023 storms. Federal, state, and private institutions have a range of resources to assist with relief and recovery. For farms with impacted crops MDAR's Produce Safety Division has developed this guidance to help farmers navigate the decisions that need to be made when dealing with flood impacts.

To many potatoes



Oct 29th snow storm No power for up to a week!

An unusually early and powerful storm dumped heavy snow along the US east coast on Saturday, knocking out electricity to more than 2 million homes

Western Massachusetts Electric Co. spokeswoman Sandra Ahearn told The Republican of Springfield that people could be without power for days. Just two months ago, Irene knocked out power to hundreds of thousands of people and some remained in the dark for a week, prompting complaints about how utilities responded.

As of Saturday evening, the National Weather Service reported that 14.3 inches of snow had fallen in Plainfield, 12 inches in Chester and 6.9 inches in Worcester.



Summary

- Extreme weather conditions may become more frequent or of longer duration as the climate changes.
- Local Public health will have challenges to their capacity, especially if faced with multiple disasters each with long term complications.
- As flood waters receded, residents struggled with mold problems; increased mold can worsen chronic diseases, such as asthma.

Summary

- Blocked roads, power outages and damaged infrastructures create problems for people to get needed food, water, shelter and medicines.
- It's useful to think through these events to assist us in evaluating gaps and building capacity for future events.



Questions?