

# **3 Big Floods in 13 Years**

## **impacts, responses, lessons**

**perspective of a vegetable and berry specialist**

Vern Grubinger

February 28, 2025



**University of Vermont**

Extension

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College of Agriculture and Life Sciences

[Member Farms List & Map](#)

[Commercial Member Directory](#)

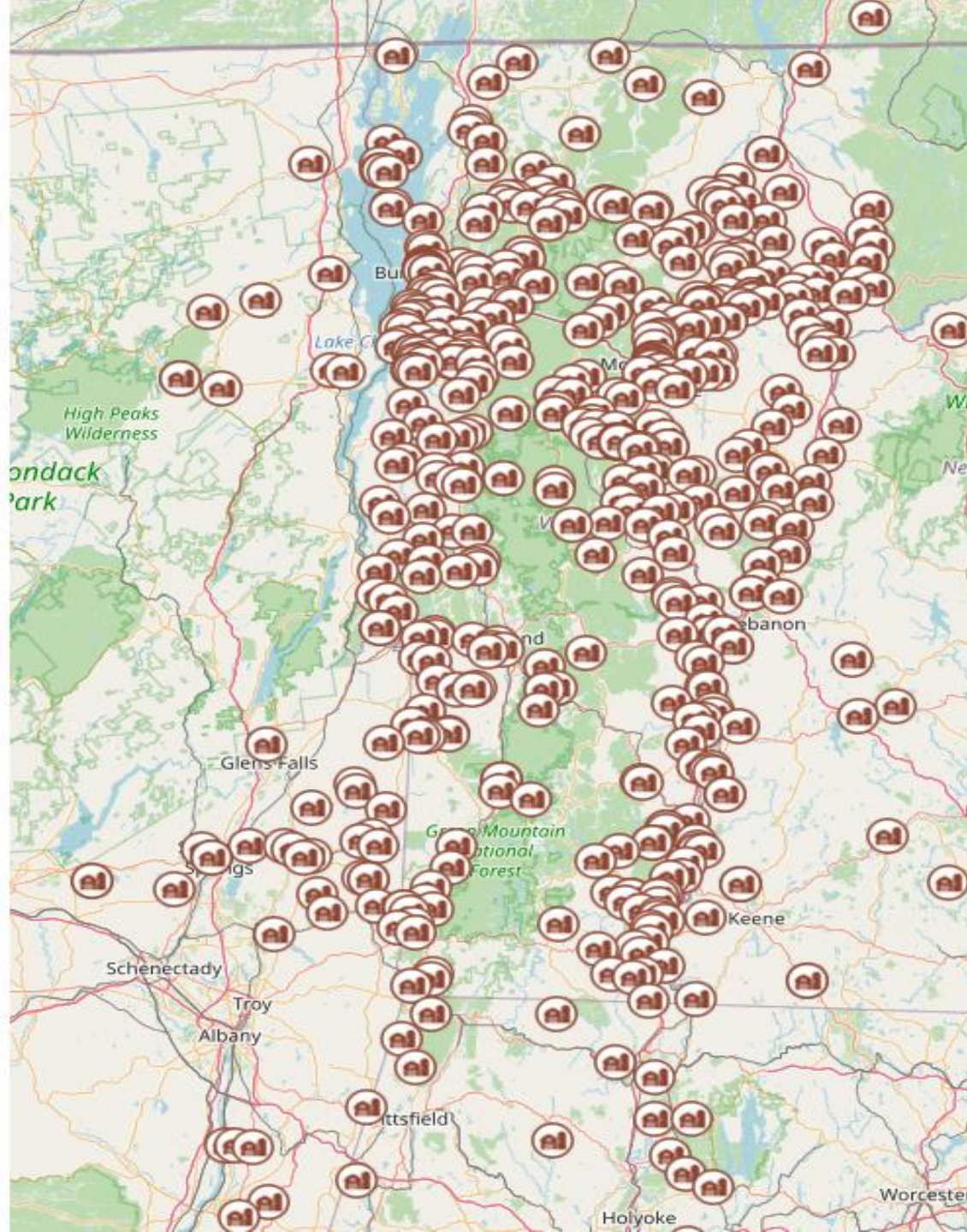
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**400+ farms**



**2011**

Statewide

Surprising

Late August

**2023**

Statewide and beyond

Early July

Preceded by freeze, followed by lots of rainfall

**2024**

A swath across northern VT

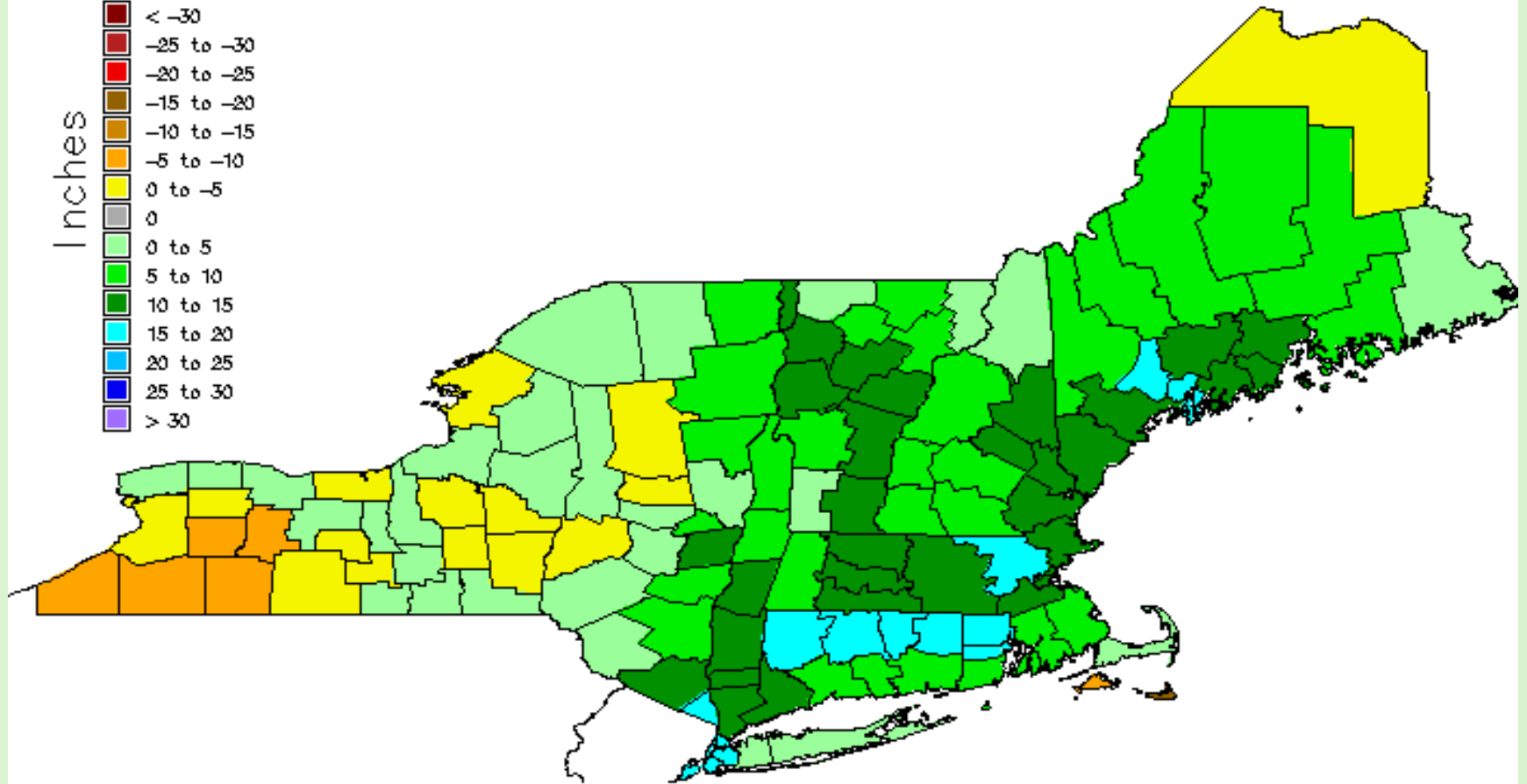
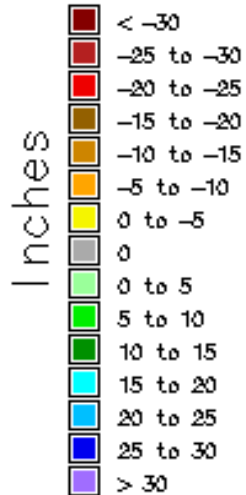
Early July

**Much of the Northeast had excessive rainfall in 2023.  
Dark green counties had rainfall of 10” to 15” above normal.**



# Precipitation Departures from Normal 365 Day

Ending 2024-01-17



Source: NOAA Northeast River Forecast Center, Norton, MA

## 2011

**476 farms** reported crop losses to FSA of 7200 acres of hay, 6000 acres of corn, 1750 acres of pasture, 1400 acres of sugarbush, 600 acres of vegetables and fruits, and 225 acres of soybeans. Damage to 9100 acres of land.

(Under-) estimated aggregate losses of **\$20 million**.

## 2023

**264 farms** reported aggregate losses of **\$16.1 million** with 27,318 acres impacted in a survey. BEGAP applications reported **\$44.7 million in farm losses**

## 2024

**86 farms** reported aggregate losses of **\$5.4 million** with 3379 acres impacted in a survey, BEGAP applications reported **\$13 million in farm losses**.

# damaged transportation infrastructure



**Rt. 100 after tropical storm Irene in 2011**

**interrupted energy supply**



# loss of farm soil





**loss of farm land**



**Lots of silt in some fields**

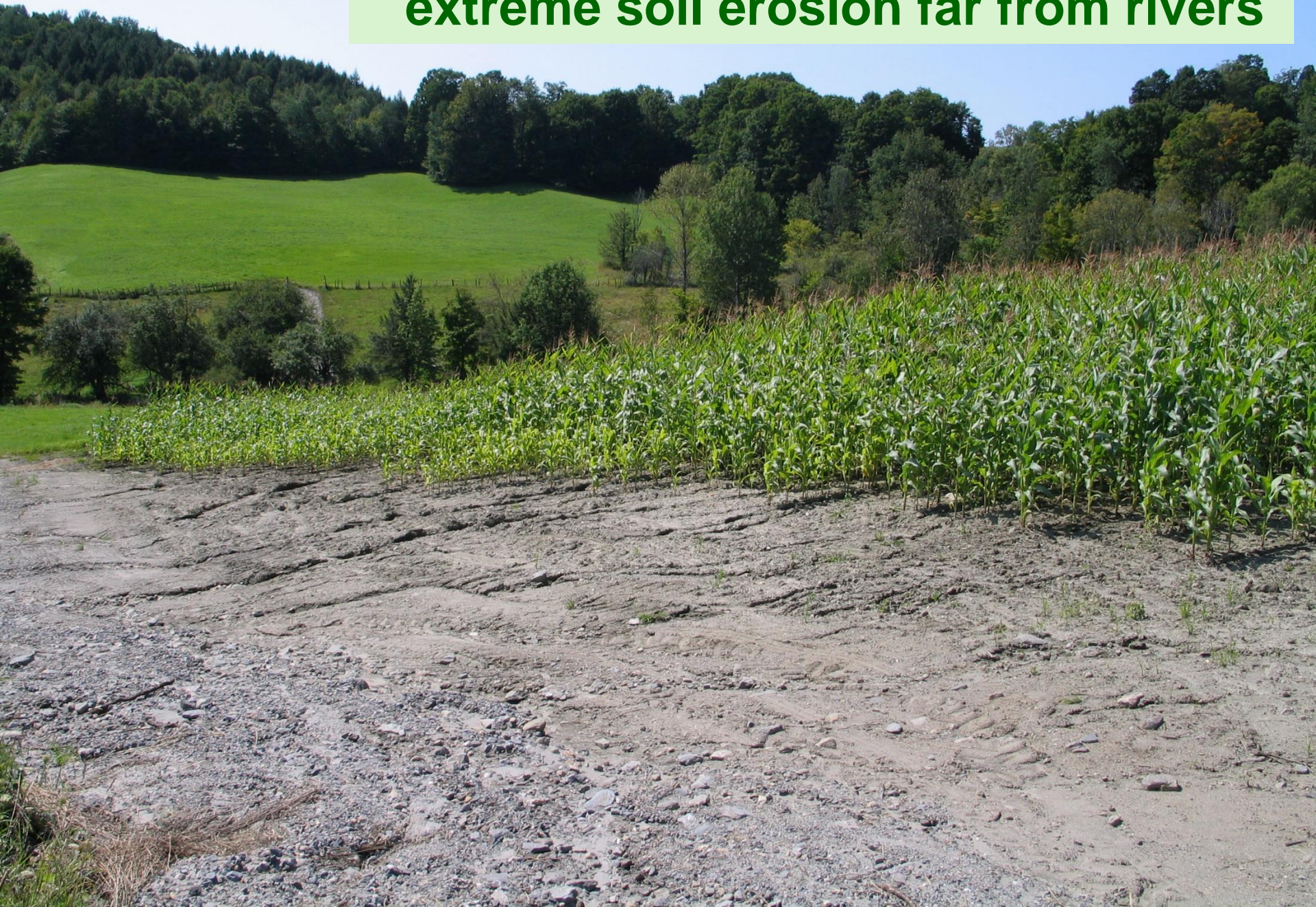


Photo from Justin's Instagram

**loss of an entire farm – had been there 200 years**



# extreme soil erosion far from rivers



**loss of livestock feed**



09/03/2011 14:23

**loss of feed quality**



09/03/2011 14:40

**loss of food quality**



**increased food safety risks**





# Need to rescue livestock



**infrastructure damage**



**Some flood plain fields typically go underwater**



Photo from Seven Days

**Some flooding was unusual – in 2024, a vegetable field at 1,600 ft. elevation in a “mountain bowl”**



## Impacts varied with timing, product, etc.

- Irene came in August; veg farms had already made some money; livestock farms lost most of their feed.
- In 2023 floods came in July, there were a lot of “stranded costs” in the field. It kept raining, which caused as much or more damage than flooding.
- In 2024 the geographic scope was smaller, but the rain was more intense, and focused.

**A few farms were hit by all 3 events**

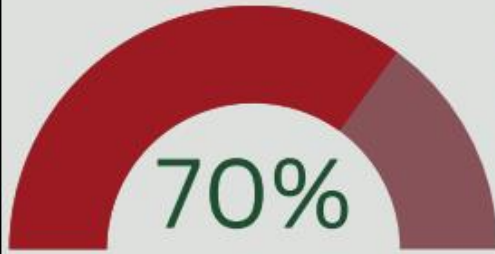


# Emergency financial support

- State (BEGAP) reimbursements were a financial lifeline for many flooded farms, even if payments took a while to arrive.
- NOFA-VT provided fast, but small (\$5k) emergency grants.
- Intervale farms have their own modest flood recovery fund.
- After Irene in 2011 the Vermont Community Foundation raised and gave out \$1.2 m quickly in \$10k grants. By 2023, institutional knowledge of that process had to be rebuilt. Awarded \$1.5 million to 157 farms in 2023.
- Most VT farms do not have crop insurance, or NAP, and those that do typically get very modest payments; some are still waiting for payments from 2023.

# Uninsured Producers

2023 n=264



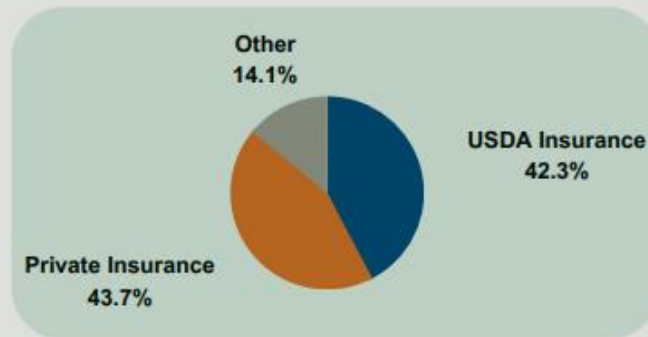
of respondents have no crop or livestock insurance

One of the most important metrics measured by the survey is the percentage of respondents without crop or livestock insurance. A huge majority, 70%, have no crop or livestock insurance.



of respondents are enrolled in the Noninsured Crop Disaster Assistance Program (NAP)

Of those who are insured, an almost equal number are insured through the USDA or private insurance.



**Crop insurance programs are generally not working well for Vermont farms.**

**It's a longer conversation but in a nutshell, payments are low, take a long time, and are not predictable.**



# Farmers support each other. Seedling donations in 2023



# Supporting flooded field soil health – UVM Extension program with VAAFAM support



# Some immediate farmer responses

- **Saving what can be saved before, and right after, flood**
- **Making payroll**

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- **Navigating and applying for funding**
- **Calculating and reporting losses**
- **Communicating with customers and GoFundMe's**
- **Dealing with publicity**
- **Pivoting to new markets**
- **Finding new suppliers (e.g. seedlings, livestock feed)**

# Support Joe's Brook Farm After Devastating Flood

The public wants to help after a flood, but not all farms have the direct relationships needed.



Share

Donate now



This fundraiser is located near you



Daniel Deatrck  
\$100 · 5 mos

# How are farmers responding longer term?

- **Changing crops/rotation/grazing on floodplains**
- **Seeking to add some higher ground land**
- **More high tunnels (out of flood plain) on vegetable farms**
- **Improving communication with customers**
- **Reconsidering markets that require use of at-risk land**
- **Rethinking equipment and infrastructure risk**
- **More receptive to disaster planning, insurance**

# Contamination?

**This is another longer conversation but in summary we have sampled flooded and unflooded fields and found no “red flags”**

# A few key recommendations

- **Use a unified disaster loss reporting form**
- **Establish a permanent farm emergency fund**
- **Fix / simplify crop insurance if possible**
- **Coordinate (to reduce) communications to farmers**
- **Support disaster and resilience planning!**

Farm resilience checklist developed after Irene

<https://www.uvm.edu/vtvegandberry/factsheets/FarmResilienceChecklist.html>

Thank you

