



# When Disaster Becomes the Norm

Climate Risk and the Future of Northeast Agriculture

A WHITE PAPER BY THE

**NORTHEAST CLIMATE DISASTER RELIEF NETWORK**

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## About the Network

The Northeast Climate Disaster Relief Network is a coalition of agricultural service providers, advocates, and farmers working to ensure that farmers and workers in the Northeast are equitably and effectively resourced before, during, and after climate disasters. Our theory of change is simple: if farmers have a strong, accessible support network at every stage of a disaster, the region retains more farms, strengthens local food security, and builds long-term climate resilience. We are calling on state governments and the nonprofit sector to work together to build the funding pipelines, tools, and support systems that farmers need to withstand a rapidly changing climate so that, ultimately, they can continue to nourish us.

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# Executive Summary

## A Region Under Pressure

Climate disasters are reshaping agriculture in the Northeast faster than existing systems can adapt: floods, heat, drought, and sudden storms are arriving more often and with greater force. Meanwhile farmers lack adequate insurance, reliable federal aid, or timely state support to respond to these pressures. Small and diversified farms—the backbone of local and regional food systems—as well as rural communities and economies are especially exposed.

The United States now averages 19 disasters costing more than a billion dollars each year, up from just three per year in the 1980s (Climate Central, 2025). In the Northeast, record floods, heatwaves, and rainfall are causing mounting losses and compounding vulnerabilities.

### Compounding Impacts Across the Food System

- **Economic fallout:** Crop destruction, infrastructure damage, and higher insurance costs are eroding farm finances and rural economies.
- **Unrecorded losses:** Many smaller, locally devastating events never meet federal disaster thresholds, leaving farms ineligible for aid despite severe damage.
- **Land and labor stress:** Farmers face impossible choices between farming fertile but flood-prone soils or abandoning them altogether. Farmworkers contend with extreme heat, unstable hours, job loss, and rising health risks.
- **Supply chain disruption:** Floods and contamination damage crops, facilities, and storage infrastructure, rippling through markets and impacting consumers.
- **Mental health crisis:** Repeated climate-related losses, financial strain, and uncertainty are driving high levels of stress, self-harm, and suicide risk among farmers and farmworkers.

## A Safety Net That Leaves Too Many Behind

### Federal safety nets have not kept pace with these realities.

- **Crop insurance gaps:** The United States Department of Agriculture's (USDA) Whole Farm Revenue Protection and Noninsured Disaster Assistance Program (NAP) do not adequately meet the needs of the Northeast's diversified and small farms.
- **Slow, uneven disaster response:** Federal Emergency Management Agency (FEMA) declarations and USDA relief processes are inconsistent, delayed, and often inaccessible to small producers.
- **Ad hoc programs:** Temporary USDA disaster programs can take months to deploy and often restrict eligibility to insured farms, leaving many producers without help.
- **Socioeconomic and racial disparities in disaster vulnerability:** Disasters deepen longstanding socioeconomic and racial inequities in agriculture, as historic and ongoing discrimination, limited land and capital access, and systemic barriers to USDA programs leave lower-income, resource-constrained, and Black, Indigenous, and people of color (BIPOC) farmers less prepared for, able to respond to, and able to recover from climate-related disasters.

## Emerging Solutions

### States and nonprofit organizations are showing what responsive, farmer-centered relief can look like.

- **State programs:** Vermont's Business Emergency Gap Assistance Program (BEGAP) and state-level implementation of the federal Farm Recovery and Support Block Grant (FRSBG) represent promising steps toward faster, more flexible state-level recovery.
- **Community-based models:** Network-led relief efforts in Oregon and New England demonstrate that trusted local organizations can deliver targeted assistance quickly and equitably.
- **Prevention and resilience:** Investing in conservation, technical assistance, climate mitigation practices, and farm infrastructure reduces future losses, but agencies such as the USDA's Natural Resources Conservation Service (NRCS) and Farm Service Agency (FSA) that have a mandate to enable such investments face serious staffing shortages that limit impact. Massachusetts' Climate Smart for Agriculture Program grant is one example of a state climate resilience program filling in some of these gaps.

## From Analysis to Collective Action

Building a more durable disaster response system for Northeast agriculture will require coordinated action across government, philanthropy, and civil society. This paper calls on stakeholders to work together to:

- Establish predictable, state-level disaster funding that complements federal programs and can be deployed quickly.
- Design flexible relief and resilience programs that reflect the diversity of farm size, crop mix, and labor arrangements in the region.
- Reduce administrative barriers through simpler applications, faster payments, and clearer communication.
- Ensure meaningful participation by farmers and farmworkers, particularly those from BIPOC-led and frontline communities, in program design and oversight.
- Pair disaster relief with long-term resilience and mitigation investments so farms are better prepared for both acute shocks and slow-moving climate stressors.
- Address structural inequities in disaster preparedness and relief potential by expanding equitable access to land, capital, credit, and technical assistance—prioritizing BIPOC and economically marginalized farmers through targeted funding, non-predatory lending, and culturally relevant, community-led programs that strengthen long-term resilience and recovery capacity.

The future of farming in the Northeast depends on disaster programs that reflect today's realities: smaller farms, diverse crops, socioeconomically and racially diverse current and aspiring farmers, and a volatile climate. The framework is emerging across a variety of sectors, but lasting resilience will require sustained coordination, shared learning, and steady investment.

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## Introduction

Weather patterns that farmers in the Northeast once understood and incorporated into their planning are changing. Precipitation events that used to be rare are now common. Heavy rains arrive when fields are most vulnerable. Short bursts of hail destroy an entire season's work in minutes. Frequent and intense heat exposes outdoor workers to conditions that are unsafe. Floods submerge fields that never used to flood at all. Pests and diseases may no longer die off during our increasingly warm winters, but linger to start the next season stronger. The scale and speed of these changes have left farmers, rural communities, state agencies, and nonprofits throughout the region struggling to keep pace.

This paper begins with an overview of what these shifts look like on the ground, and why farmers are feeling new levels of risk. Long-term national weather and climate trends are examined, with a sharp focus on the Northeast, where rises in extreme rainfall, heat, and storms are already reshaping agriculture. While official national disaster records undercount much of the damage that smaller, diversified farms experience, it is clear that the severity and frequency of climate-related natural disasters have steadily increased since 1980, and that these disasters are impacting land use, labor, farm finances, rural economies, our food supply, and mental health.

The following sections examine why current disaster support systems fail so many farms. The paper explores gaps in federal aid, the limited reach of crop insurance, the mixed record of ad hoc disaster programs, and the shrinking capacity of the United States Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) and Farm Service Agency (FSA) to provide timely assistance. Together, these stories show that the region needs a more reliable and accessible safety net for farm recovery and climate resilience, and that farmers and communities are already creating models to build upon. Climate impacts and disaster response systems do not affect all farmers equally, as longstanding structural inequities leave Black, Indigenous, and other people of color (BIPOC) and economically marginalized farmers disproportionately vulnerable to risk and less able to access the resources needed for recovery and resilience.

The sections that follow outline practical steps that states, agencies, and farm organizations can take to strengthen this foundation. Highlighting promising paths already emerging across the Northeast, they offer a starting place for shaping a disaster response system that reflects the scale of today's climate risks and the needs of the farms that feed our communities. The solutions needed to protect our farms and communities can no longer wait. It is time to take the next steps together.



## FARMER FOCUS:

# 14 Minutes

**Kirsten Marra, Muddy Roots Farm** Wallingford, CT

**K**irsten Marra farms on land that has been in her family since the 1700s. She raises one acre of vegetables and between four and nine acres of pork and poultry, depending on the year. For her farm, diversified enterprises are an important sustainability practice. However, weather continues to be increasingly—sometimes staggeringly—unpredictable.

In August of 2024, she lost more than \$18,000 due to a 14-minute hailstorm unlike any she'd ever experienced. A neighboring farmer lost his entire crop during the same storm. That farmer only grows vegetables and was not able to recoup any of his losses, but Kirsten was able to recover about \$12,000 after ordering two more flocks of meat chicks. August is particularly daunting for farms because they are too busy growing, harvesting, and selling to focus on replanting.

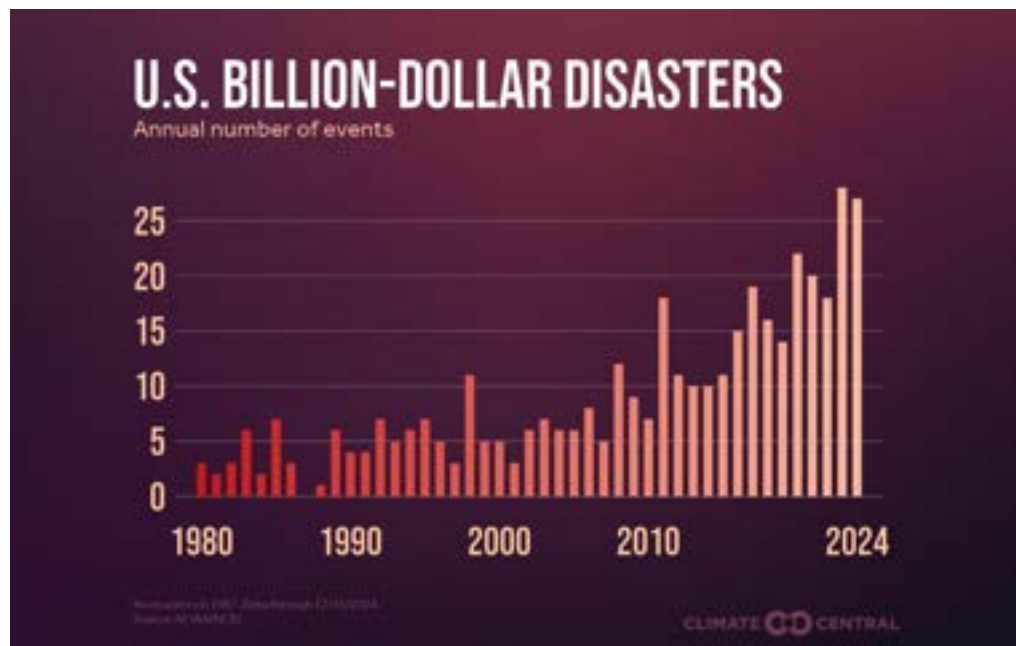
Avian flu is also a big risk for Kirsten's farm, and that also has a tie-in to climate change, which impacts migratory patterns of the disease's primary vector, wild birds. The government, Kirsten says, needs to start seeing farmers as essential.

*“We provide one of the basic things that we all need to survive, which is food...We don't have the money to put into lobbyists' pockets or elected officials' campaign coffers...We need to be seen as higher value than we're seen. Because what we're doing is feeding our local community.”*

# Climate-Related Weather Events in the Northeast: Trends and Impacts on Agriculture

## Increasing Frequency and Intensity of Disasters in the Northeast

Climate change is driving more frequent, intense, and diverse weather disasters in recent decades. Nationwide, the average number of billion-dollar disaster events (adjusted for inflation) jumped from about three per year in the 1980s to roughly 19 per year in the 2015–2024 period. In 2023 and 2024, 28 and 27 such events occurred.



**FIGURE 1. U.S. Billion-Dollar Disasters**

**NOTE.** Number of U.S. weather/climate disaster events over \$1 billion (CPI-adjusted) by year. The frequency has surged from an average of ~3 major events per year in the 1980s to 19 per year in the last decade, reflecting more frequent extreme weather in a warming climate (Climate Central, 2025).

This trend holds in the Northeast U.S., where states are experiencing unprecedented weather impacts on farming. New York, for example, saw an average of more than six billion-dollar disasters per year in 2020 through 2024, compared to approximately two per year on average since 1980 (National Oceanic and Atmospheric Administration, 2025).

Heatwaves, heavy rainfall/floods, droughts, tropical storms, and even out-of-season frosts are all occurring more frequently and with greater severity. According to the latest National Climate Assessment, the Northeast is already warmer and wetter than a century ago, with average temperatures over 2°F higher than in the early 1900s and a significant rise in extreme precipitation events (Cornell University Northeast Regional Climate Center, 2023). Not only has the Northeast seen roughly a 60% increase in the number of days with extreme precipitation, but the downpours themselves have grown more intense. Summers are bringing more frequent and longer heatwaves, while winters have fewer deep cold snaps. These shifts contribute to a greater diversity of climate-related disasters from record heat and drought to historic floods and storms—sometimes even within the same season—hitting farms in the region.

## Climate Disasters Below the \$1B Threshold and Underreporting

Federal tracking of “billion-dollar” disasters overlooks many smaller events that can be devastating at the local level. The National Oceanic and Atmospheric Administration’s (NOAA) database, while authoritative for large-scale disasters, excludes regional floods, hailstorms, and frosts that cause hundreds of millions in damage. By understating the true frequency and impact of weather-related losses affecting rural communities and Northeast farms, NOAA is understating the severity of the climate change crisis we are collectively facing. NOAA itself acknowledges that its 403 recorded billion-dollar disasters since 1980 are conservative estimates, as they exclude indirect losses and the many damaging events that fall below the \$1 billion threshold.

Though a climate event does not have to hit the \$1 billion threshold in damages in order for it to be declared a disaster and qualify for federal funding, there have been numerous smaller climate-related disasters that have not been officially declared as such by state or federal officials. This underreporting has real consequences: if a governor or the USDA does not declare a disaster, farmers often cannot access relief programs, even if their losses are catastrophic. Northeast farmers point to events like isolated hailstorms or microbursts that wipe out an entire farm’s crops but fail to trigger federal aid.

**For Northeast policymakers, recognizing and tracking sub-threshold events is crucial, since they add up to billions in damage over time and often fall through the cracks of federal disaster aid.**

## Slow-Moving and Cumulative Climate Impacts

Not all climate impacts arrive as discrete disasters. Many of the most pervasive changes facing Northeast farmers unfold gradually, season by season, with fewer headlines and little formal recognition. These slow-moving impacts often affect more farms—for longer periods of time—than even the largest acute events.

Changing precipitation patterns are a central example. Farmers increasingly contend with longer dry spells followed by intense rainfall, sometimes within the same growing season. Soils must now withstand both prolonged drought and sudden saturation, stressing soil structure, reducing infiltration, and increasing erosion. Fields that once drained reliably are slower to dry, delaying planting, cultivation, and harvest. Fields that rarely needed irrigation now require supplemental water. Over time, these conditions reduce crop resilience and increase production costs, even in years without a declared disaster.

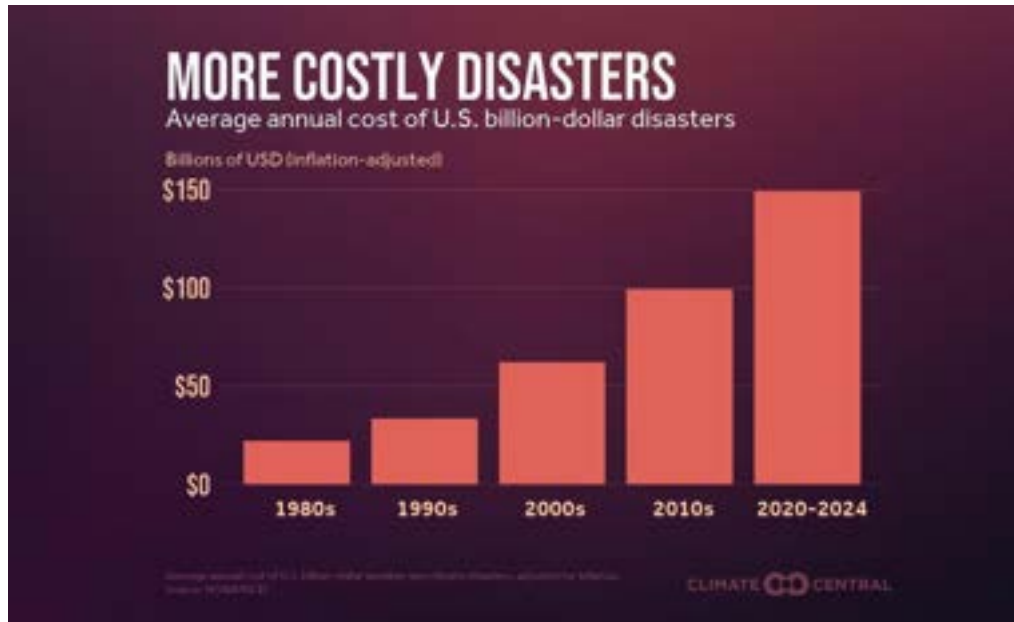
Farmers are also spending more time managing persistent disease, pest, and pathogen pressures. Warmer winters allow insects and pathogens to overwinter more successfully, while wetter growing seasons create ideal conditions for fungal and bacterial diseases. These pressures rarely cause total crop failure, but they steadily erode yields, increase labor and input costs, and limit crop choices. For many farmers, disease management has become a constant, time-consuming challenge rather than an occasional concern.

Because these impacts accumulate gradually, they fall outside existing disaster and insurance frameworks—yet they shape farm viability over the long term. For policy-makers, recognizing slow-moving climate impacts is essential. Without systems designed to address cumulative stress, farmers are left to absorb ongoing losses that rarely qualify for relief but increasingly define the reality of farming in the Northeast.

## Inflation- Adjusted Costs and Changing Exposure

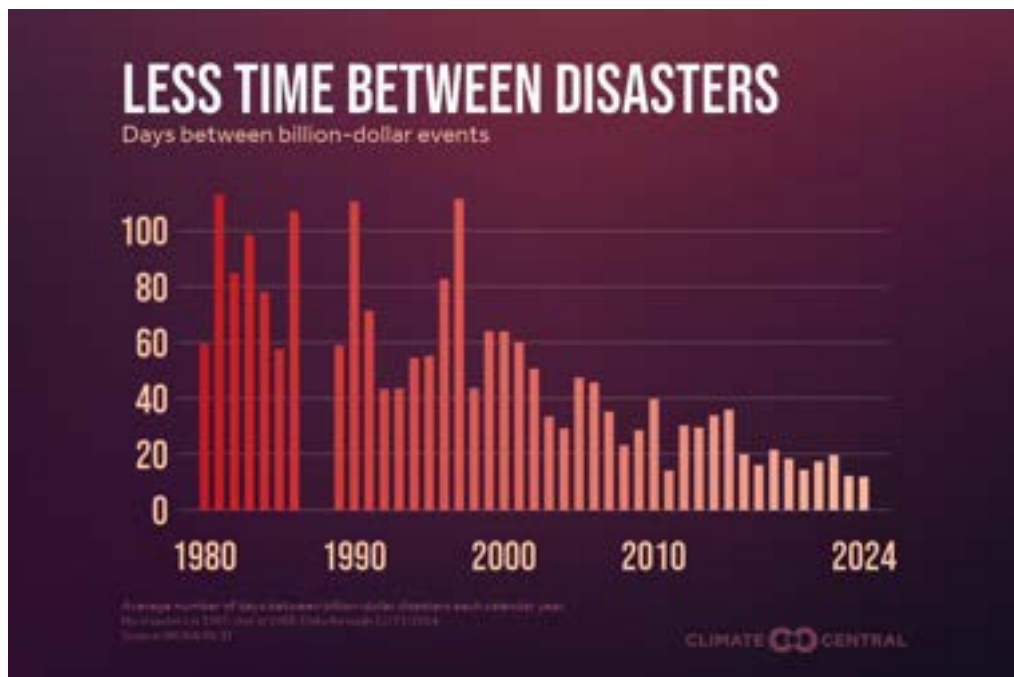
According to NOAA's data, rising disaster costs do not just simply reflect increased development over time (more infrastructure at risk), but also a true increase in climate extremes. Even with figures inflation-adjusted to current dollars, there is a clear, sharp upward trend in the number and cost of disasters. The average annual direct cost of U.S. billion-dollar disasters quadrupled from ~\$22 billion in the 1980s to \$99.5 billion in the 2010s. In 2020 to 2024, the average jumped again to \$149 billion per year (Climate Central, 2025).

At the same time, climate scientists have documented that many types of extremes (heatwaves, heavy rainfall, hurricanes) are stronger or more frequent now than in the past. In the 1980s, the U.S. went approximately 82 days between billion-dollar disasters on average, but in recent years we averaged just 19 days between such events (Climate Central, 2025). In 2023–24 it was down to 12 days.



**FIGURE 2. More Costly Disasters**

NOTE. Average annual cost of U.S. billion-dollar disasters (adjusted for inflation) from the 1980s through to 2024. The costs have increased drastically over the years, reflecting both increasing disasters as well as increased development (Climate Central, 2025).



**FIGURE 3. Less Time Between Disasters**

NOTE. Days between billion-dollar disasters from 1980–2024; shows an overall trend of fewer days between billion-dollar disasters. In the 1980s, the U.S. went about 82 days on average between billion-dollar disasters; in recent years we averaged just 19 days between such events (Climate Central, 2025).

## Impacts on Farms, Rural Economies, and Food Supply Chains

Climate disasters in the Northeast are exacting heavy tolls on farm operations and rural communities. The impacts range from direct economic losses and altered land use to downstream effects on farm labor, food security, and mental health.

### Agricultural Economic Losses

Farmers across the region have suffered major financial hits from extreme weather. In 2023 alone, a year of prolific storms and floods, U.S. crop and rangeland losses from major disasters topped \$21.9 billion—about a quarter of that year’s disaster costs (American Farm Bureau Federation, 2024). Though nearly \$12 billion of those losses were covered by federal crop insurance, about \$10 billion in losses were uninsured or uncovered, falling on producers and communities.

The Northeast’s share was significant: extreme floods in July of that year inundated thousands of acres of crops. In Connecticut alone, flooding in that month destroyed over 1,500 acres of farmland and led to more than \$21 million in crop sales losses (Ghimire & Lentz, 2025). Statewide surveys in Connecticut tallied over \$50 million in weather-related farm losses in 2023–24.

One Connecticut farmer, Tony Botticello, watched the Connecticut River swallow 115 of his 120 acres of vegetables during the floods—an almost total loss. “I’m done... I have maybe 5% of my crop left,” Botticello said as he assessed the damage (Goode, 2023). Even after insurance payouts, he expected to be out \$500,000 and had to lay off many of his 20 farm employees.

In Vermont, the same July 2023 storm system caused catastrophic flooding during peak harvest season, devastating vegetable and berry farms—many of which lacked insurance for such losses.<sup>1</sup> Massachusetts also experienced flooding in July, followed by persistent heavy rains into the fall. Even fields that did not flood suffered crop losses as wet conditions increased disease and weed pressure and limited access to plant, manage, or harvest them.

Beyond floods, droughts and heatwaves have also caused multimillion-dollar losses. A flash drought in 2020 and regional droughts in 2016 and 2025 severely decreased yields of field crops and hay across parts of New York and New England, forcing many farms to buy expensive feed. Extreme temperature fluctuations are also more common. In Connecticut and Massachusetts, 2023 was marked not only by flooding but by freeze events in February and May that led to extensive losses of fruit crops and more limited losses in vegetables.

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**1 Refer to the section on federal disaster response to understand why many specialty crop growers lack crop insurance.**

Crop insurance data highlights the sharp rise in weather-related losses. From 2001 to 2022, total indemnity payments for the five primary weather-related causes (drought, excess rain, hail, heat, and freeze) reached \$118.7 billion nationwide. As shown in Table 1, these payments have increased far faster than inflation, reflecting both expanded participation in crop insurance and the growing frequency and severity of extreme weather events (Environmental Working Group, 2023).

**TABLE 1. Increase in Insurance Payouts by Cause**

CAUSE OF LOSS	INCREASE IN INSURANCE PAYOUTS 2001 vs.2022
DROUGHT	690%
FLOODING	123%
HAIL	204%
HEAT	1,012%
FREEZE/COLD	771%

### Land Use Changes and Floodplain Farming

A troubling consequence of recurring disasters is the pressure on where and how farming occurs. Many Northeast farms are situated on river bottoms and floodplains, historically prized for their fertile soils and irrigation water but increasingly risky as floods worsen. Some, unable to absorb repeated losses, are abandoning low-lying fields or entire farms (often reluctantly, as those lands may be their most productive in typical years). Others continue farming on floodplains but face an untenable cycle of rebuilding after floods. BIPOC farmers, who are more likely to operate on smaller parcels and marginal or flood-prone lands due to historic inequities in land access, face heightened exposure to these risks and fewer viable options to relocate or invest in protective measures (Ackoff et al., 2022).

**In New England, what used to be “100-year floods” now strike much more often, and even fields that have never flooded in living memory have been inundated in recent years (Ghimire & Lentz, 2025). Experts are urging a reassessment of floodplain use: “All land adjacent to waterways should now be considered at risk,” warns a 2025 UConn Extension report.**

That report notes that the number of annual flood days along the Northeast coast has doubled since 2005 and produced the region’s wettest 12-month period

on record from July 2023 to June 2024. Despite this, the lack of alternative farmland options means farmers often have no choice but to replant in the same vulnerable areas, hoping next season will be kinder.

Some adaptation strategies are emerging. For instance, farmers can plant more perennials or early-maturing crops in flood zones, but structural solutions, like improved river management and designated agricultural floodplain easements, require government investment and support and thus lag behind. The result is that farms and local food systems remain in the path of destruction, and each new disaster threatens farm viability and erodes a bit more of the region's agricultural land base.

## **Workforce Implications and Labor Conditions**

Farm owners and farmworkers alike are feeling the strain of climate extremes on multiple levels. Disasters can cause immediate job and income losses. Farmworkers often depend on seasonal harvest work. When storms destroy a crop, those jobs vanish overnight, hurting immigrant and local labor communities. Existing disaster relief programs provide support to farm owners, but do not recognize or compensate for job loss or reduced hours for workers. Climate-related labor disruptions also disproportionately impact BIPOC, immigrant, and undocumented workers—who make up a large share of the agricultural workforce—by compounding existing vulnerabilities such as limited labor protections, reduced access to healthcare, and exclusion from disaster relief programs.

Day-to-day farming conditions are also growing more challenging. Heat and humidity are rising in the Northeast, leading to more days when outdoor work is dangerous (Warren & Yi, 2023). Farmworkers are 35 times more likely to die of heat-related illness than workers in other sectors, according to a recent study (Gil, 2025). Even with more frequent breaks, increased hydration, and adjusted schedules to avoid midday heat, cases of heat exhaustion are climbing.

Storm disruptions can mean unpredictable work hours: workers may suddenly be tasked with emergency trenching or crop salvage in a flood, or face weeks of lost work after a disaster. Wildfire smoke, once rare and localized in the Northeast, is now a regular occurrence and also affects outdoor workers.

Labor shortages, already an issue in agriculture, are exacerbated when climate instability makes farm work even less tenable. Farmers also face higher labor costs for emergency overtime and mitigating measures like providing cooling stations during heatwaves and protective gear against smokey air.

In sum, climate change is amplifying occupational hazards and employment instability in Northeast agriculture, adding both economic and physical stress that ripple throughout local economies.



#### FARMER FOCUS:

# Made for Growing

**Hilary Martin, Diggers' Mirth** Burlington, VT

**D**iggers' Mirth is a collectively owned and operated farm on 15 acres at the Intervale Center in Burlington specializing in salad and cooking greens and herbs.

The Intervale is situated on a flood plain at the mouth of the Winooski River where it empties into Lake Champlain. Because of that, the soil is a well-drained, highly fertile, silty loam—ideal for growing food. The area has been in agricultural production as far back as records go, and Hilary Martin believes it always will be, until it “becomes a lake.”

Recent extreme flooding conditions have impacted the farmers' decision on their crop mix. They have switched from long season crops to faster-growing ones, so that if a flood knocks out their crops, they can replant and have harvestable products in a few weeks. The Intervale's location in a flood plain is not a coincidence; many of the most productive soils are in locations most vulnerable to climate change. Hilary reminds us that “if it is important to grow food domestically and locally, we have to figure out how to use these spaces despite their vulnerabilities.”

The Diggers' Mirth farmers are trying to figure out how to save money to create a cushion for years when disaster hits. Hilary would like to see some kind of tax incentives for farmers on earnings in good years so that it can support a bad year.

*“If it is important to grow food domestically and locally, we have to figure out how to use these spaces despite their vulnerabilities.”*

## Food Access, Safety, and Supply Chain Security

The cascading effects of regional disasters extend to food supply and food security. When multiple farms lose crops, local wholesalers and grocery chains face shortages of regionally grown produce. This was evident after the 2023 floods, when consumers and food co-ops in parts of Vermont and Connecticut saw empty farmers market stalls and higher prices for certain vegetables that had been wiped out. Distributors and specialty foods producers that prioritize local sourcing suffered losses and were rarely eligible for relief funds where those existed. In some cases, disasters force reliance on more distant suppliers, raising costs and reducing the freshness of foods in local stores.

Food safety is also a concern: floodwaters can carry sewage, chemicals, and pathogens onto cropland. According to U.S. Food and Drug Administration (FDA) guidelines, crops exposed to flood contamination are often considered adulterated and cannot be sold for fresh consumption. Thus, a flood can ruin the current harvest as well as jeopardize food safety in the region. Farmers must undertake costly soil remediation and testing before replanting to ensure there are no lingering contaminants.

Extended power outages following severe storms can spoil produce, dairy, and meat in cold storage, reducing both farm income and local food availability. Damage to roads and bridges can also disrupt critical food supply routes. When rural roads are washed out by flooding, milk trucks and produce deliveries may be unable to reach markets, forcing farmers to dump milk or lose perishable crops. This all underscores how community food security is intertwined with disaster resilience on and off farms.

**When farms struggle or fail due to disasters, the ripples are felt from dinner tables to restaurant kitchens, especially in rural areas where fresh food access is already a challenge.**

Investing in both robust local distribution networks and resilient on-farm practices such as diversified crops, backup power, and protected storage can help buffer these shocks. Yet the scale and frequency of recent events are testing the limits of those adaptations.

## Farmer and Farmworker Mental Health

Perhaps the most profound—yet hardest to quantify—impact of these increasing pressures is the psychological toll on the farming community. Agriculture has always been a high-stress occupation, but climate instability is introducing a new level of anxiety and “climate grief” for farmers who feel their livelihoods now depend on forces beyond their control (Godin, 2024).

**“[The] lengths we’ve gone to collect and store water are simply not enough to shield us from climate collapse. We are left with existential dread and anxiety,” said one producer, describing the emotional toll of an unrelenting drought (Powell, 2023, as cited in American Farmland Trust, 2024).**

American Farmland Trust reported that farmers and ranchers are uniquely susceptible to climate stress because they work so closely with natural weather patterns; they witness climate impacts firsthand and often feel powerless as decades-old weather norms shift unpredictably. Tragically, the U.S. suicide rate for farmers is already higher than the general population, and extreme weather may be worsening this crisis. Research shows links between climate events and mental health outcomes: a 2022 University of California, Berkeley study found farmer suicide rates rose in tandem with extreme heat in California, and a Colorado study tied increased drought severity to higher suicide risk among ranchers (Godin, 2024).

Farm Aid’s crisis hotline has seen significant increases in calls during natural disasters. Counselors report that a bad flood or drought can be the “last straw” that pushes an already stressed farmer to a breaking point. “When climate disaster strikes... the toll on farmer mental health is high,” explains Farm Aid program manager and farmer Caitlin Arnold-Stephano, noting that a single disaster can push a farm “over the already-thin margin” of viability (Godin, 2024).

Despite clear warning signs, mental health services in rural areas remain limited. The 2018 Farm Bill took an initial step by funding the Farm and Ranch Stress Assistance Network (FRSAN), and additional support is under consideration. At the same time, organizations such as American Farmland Trust are calling for farmer mental health programs that explicitly acknowledge the emotional toll of climate-related losses, including grief, anxiety, and chronic stress.

This recognition matters because emotional distress can directly affect a farmer’s ability to plan, make decisions, and adapt. Stress and trauma can impair focus, memory, and learning, making it harder to implement new practices or recovery strategies after a disaster (Eccleston, 2023, as cited in Powell, n.d.). A more holistic

approach to resilience recognizes that farmers must adapt not only physically—through infrastructure and management changes—but also emotionally and cognitively as they navigate an increasingly uncertain future. BIPOC farmers and farmworkers in particular may face compounded mental health impacts due to systemic inequities, financial insecurity, and limited access to culturally responsive counseling and support services.

## **Disaster Impacts on Vulnerable Farming Communities**

Disasters exacerbate existing disparities between white and BIPOC farmers. These disparities include land and capital access as well as access to the resources necessary to prepare for and respond to climate disasters.

The USDA has a history of racial discrimination against Black farmers, which has directly contributed to the disparities we see in land ownership, farm-generated wealth, and the number of BIPOC farm operators today. For much of the agency’s existence, the USDA delayed and denied loan requests and crop disaster payments to Black farmers on the basis of race. Systemic denial of credit and agricultural benefits to Black farmers put them out of business and off their land over the course of the 20th century. In 1999, the *Pigford v. Glickman* lawsuit alleged racial discrimination of the USDA’s farm loan program. At the time the lawsuit was settled, it was the largest civil rights lawsuit in history (Cowan & Feder, 2011). Due in large part to the USDA’s discriminatory policies, the number of Black farmers in the U.S. fell from its peak in 1920 of almost 950,000 to about 45,000 in 2022, and Black farmers lost more than 90% and \$326 billion worth of acreage during that time (Swell, 2019; USDA National Agricultural Statistics Service [NASS], 2022.). An additional contributing factor to this trend are “heirs’ property” cases, where land has been passed down without a will, meaning owners are unable to access credit and farm resources and are vulnerable to involuntarily losing their land through sale or seizure (Union of Concerned Scientists & HEAL Food Alliance, 2020).

Consequently, 95% of farm operators and landowners in the U.S. today are white and 98% of farmland is owned by white people. Only 1.4% of American farmers are Black, 2% are Indigenous, 3% are Hispanic or Latino, and 0.8% are Asian (USDA NASS, 2022). This disparity persists despite the foundational and ongoing contributions of these communities to U.S. agriculture, both through generational knowledge and their direct labor. In New England, there are 24 white farmers for every one BIPOC farmer (USDA NASS, 2022). The number of Black farmers in the U.S. continues to face challenges: Black-owned and rented farms fell by 6.4% and 17.3%, respectively, between 2017 and 2022 (USDA NASS, 2022).

Despite lawsuits like *Pigford*, access to the USDA’s important conservation and funding programs remains challenging for BIPOC farmers. According to National

Young Farmer Coalition’s survey report from 2022, BIPOC farmers reported challenges engaging with the USDA at higher rates than white farmers. BIPOC farmers also reported being denied access to federal programs and ignored by local or state USDA staff. In addition, they said that a local or state USDA employee acted in ways that were unwelcoming to them based on their race at higher rates than white farmers (Ackoff et al., 2022).

BIPOC farmers also have less access to capital in general due to barriers in loan and grant programs. They also have lower net cash incomes as well as fewer direct market sales compared to white farmers, while receiving a disproportionately small share of federal USDA loans (Union of Concerned Scientists & HEAL Food Alliance, 2020). In 2022, 55% of Black-operated farms had sales and government payments of less than \$5,000 per year, compared to 12% of all farms (USDA NASS, 2022). In addition, 54% of surveyed young BIPOC farmers reported having trouble accessing capital (Ackoff et al., 2022). Lower capital access means BIPOC farmers are less prepared financially for disasters and are less able to invest in climate adaptation measures, which often require capital-intensive infrastructure or disaster recovery costs.

Indigenous farmers face compounded challenges stemming from centuries of land dispossession, forced relocation, and the legacy of broken treaties that disrupted their access to climate-resilient ancestral territories. Historical land theft and displacement often relegated Indigenous communities to areas that are less suitable for adaptive agriculture and more vulnerable to climate hazards, reducing their capacity to prepare for or recover from disasters. These ongoing structural injustices have restricted Indigenous farmers’ access to secure land tenure, capital, and technical resources, limiting their ability to implement resilience and adaptation practices, even though Indigenous land-based management has been shown to support environmental stewardship and adaptive strategies in the face of climate change (Datta et al., 2024; Norton-Smith et al., 2016).

Because of financial and land inequities, people of color are not only underrepresented among farmers, but also overrepresented in farm labor, where 70% of workers are non-white (USDA Economic Research Service, 2025). Farmworkers face unique vulnerabilities from climate disasters; when landowners are impacted, they still retain ownership of the land, but farmworkers may lose their jobs if business owners can’t make payroll or have to close their business. Farmworkers also have little ability to shift or delegate their work when air quality or weather conditions become unsafe.

BIPOC farm operators are also more likely to be tenants and to generate less farm-related income per person than their white counterparts—statistics that are evidence and legacy of racial and ethnic disparities in agriculture (Horst & Marion, 2019). Forty-three percent of young BIPOC farmers lease their land,

versus 36% of young white farmers (Ackoff et al., 2022). This lower rate of land ownership and potentially tenuous lease agreements impact farmers' ability to successfully recover from disasters or access mitigation or prevention resources. For instance, NRCS requires proof of land tenure in order to access its cost-share conservation programs, which can be hard to acquire for operations leasing their land. BIPOC farm operators also tend to own less land; nationally, as of 2022, the average Black-operated farm size is 163 acres, compared to the national average of 463 acres (USDA NASS, 2022). Because the majority of Black farmers are smaller-scale, specialty crop, or dairy growers, they are less likely to be insured. They are also more likely to farm on marginal lands, which are more vulnerable to climate disaster (Minkoff-Zern, 2025).

Many BIPOC farmers seek to practice methods proven to fortify resilience to climate change and severe weather effects. Despite the focus of some farm advisors and technical assistance providers on soil health practices, there continues to be a distinct lack of farm advisors that reflect both the diversity of farmers in the Northeast and the full range of research and technical assistance that might support farmers' capacity to enact such measures. Existing training programs often fail to meet the needs of or enable access for BIPOC farmers seeking BIPOC-led, culturally relevant training in regenerative agriculture.

The delivery structures for climate disaster prevention and recovery-related outreach, education, and technical assistance are less accessible to BIPOC farmers and often do not reflect the unique historical context and needs faced by BIPOC land stewards. For example, BIPOC farmers have less internet access than white farmers (only 69% of Black-operated farms have internet service), while immigrant and refugee farmers face language and cultural barriers to accessing farm programs and resources (Union of Concerned Scientists & HEAL Food Alliance, 2020).

For BIPOC farmers who have been impacted by disasters, there can be issues accessing trauma recovery services that may affect the viability of their farms going forward. On top of existing barriers to mental healthcare access for farmers and rural communities, Black people are 1.5 times more likely to be uninsured than white people. And though health outcomes are improved when care is provided by a professional with an understanding of a patient's situation and cultural background, only 4% of mental health professionals are Black (National Alliance on Mental Illness, 2022).

To overcome these inequities, policy and resource distribution solutions must have embedded mechanisms for addressing the inherent disparities in access, capacity, land tenure stability, capital, technical support, and much more related to disaster relief for all communities of farmers.

## From Impact to Response: The State of Public Support

Together, these impacts show how weather-related disasters are reshaping nearly every aspect of agriculture and food systems in the Northeast, from farm finances and land use to labor conditions, food access, and mental health. Losses are no longer isolated or occasional. They are recurring, compounding, and often arrive faster than farms can recover. For many producers, a single severe event can threaten the long-term viability of the business.

These realities raise a central question: are existing public support systems equipped to meet the scale, speed, and complexity of the risks farmers now face? Federal insurance programs, disaster assistance, and conservation support are intended to serve as a safety net. Yet many of these programs remain difficult to access, slow to deploy, or poorly aligned with the structure of Northeast agriculture. No permanent, readily accessible federal safety net currently exists for Northeast farmers impacted by climate disasters. This is especially true for farmers at small and mid-sized operations and for farmers growing diverse crops.

**Understanding how public systems function—  
and where they fall short—is essential to building a more  
reliable and equitable response to disasters.**



## FARMER FOCUS:

# The Insurance Gap

**Seth Kroeck, Crystal Spring Farm Brunswick, ME**

**S**eth Kroeck manages 187 acres of certified organic carrots, wild blueberries, Brussels sprouts, and small grains, as well as hay and pastureland. Seventy-two acres are planted in wild blueberries, a critical cash crop for his business, representing \$40,000 in profits per year.

Because of the importance of this crop, he insures it, but has experienced significant issues with the risk management system as a specialty crop grower. Among the biggest issues is that specialty crop growers can only claim losses two years in a row—they then have to demonstrate two average production years before they are eligible for insurance again. This requirement doesn't exist for commodity crop growers.

Seth's crop has been lost multiple years in a row due to freezes, which is a tight cycle by historical standards. In years where he is unable to insure his blueberry crop, he must rely on federal disaster relief programs like the Supplemental Disaster Relief Program. Because these programs require congressional action, payments often take more than 14 months to reach farmers.

During the 2025 government shutdown, Seth had to wait even longer for disaster relief, and his business almost went under. He has since gotten involved in policy advocacy to make the crop insurance program more equitable for specialty crop growers.

## Federal Disaster Response

Federal disaster assistance is essential for sparsely populated rural regions impacted by disasters, as these communities do not have the tax base to fund disaster relief or mitigation projects, which can cost millions of dollars. Federal disaster response can include financial support for individuals and communities following disasters. The Federal Emergency Management Agency (FEMA) works to respond to and prepare for disasters. In order for FEMA to respond to a disaster, a disaster declaration request must first be made by local or state governments. A federal declaration of disaster is then made by the president, making states or local governments eligible for disaster relief or mitigation funding in order to make payments to individuals and nonprofits. Under the current administration, FEMA has undergone staffing cuts, hindering its response capacity. Disaster declarations are taking longer than ever before, if they are even granted.

It took an average of two weeks for disaster declaration requests to be granted in the 1990s through the early 2000s, and three weeks prior to January 2025. Since then, average approval times have extended to more than a month (Lieb et al., 2025). These delays are partly due to both the increased complexity of FEMA's process for assessing disasters and the increased frequency of disasters. Delays in disaster declarations mean longer wait times for federal aid to help individuals with daily expenses, infrastructure repairs, and reconstruction.

Once a non-partisan issue, disaster relief is now being applied less consistently across states. In the first 14 months of his term, President Trump approved only 23% of disaster declarations from Democratic-led states, versus 89% of Republican-led state requests (Frank, 2026). The July 2025 flooding in Vermont was denied a disaster declaration, as were disaster declaration requests for severe storms and flooding in Maryland and Illinois (Gottlieb, 2025; FEMA, 2025). The motivation and decision-making behind these denials is unclear, as damages in some counties were 10 times the qualifying threshold for public assistance. Applications for hazard mitigation funding, which can be used to protect infrastructure from future disasters, have also been denied (DeCesaro & Labowitz, 2025).

## Federal Crop Insurance Programs

Federal crop insurance is authorized under Title XI of the Farm Bill and is a public-private partnership where farmers pay a premium to purchase insurance policies offered by private sector insurance companies. The USDA’s Risk Management Agency (RMA) runs the federal crop insurance program and regulates these policies and uses taxpayer dollars to subsidize farmers’ premiums and crop insurance companies’ costs of selling and servicing policies. Farmers enrolled in federal crop insurance can file claims and receive indemnity payments when they experience crop or revenue loss, depending on what type of insurance they have. Availability of insurance policies varies by county and by crop and relies on USDA data to determine coverage.

Nationally, only 15% of specialty farms crop farms were insured in 2022, but in the Northeast, those numbers were far lower (Table 2). Small farms tend not to have insurance; nationally, only 32% of farms 180 to 499 acres have insurance, 23% of farms 50 to 179 acres have insurance, and a mere 9% of farms less than 50 acres have insurance (National Sustainable Agriculture Coalition, 2025a). In the Northeast, where average farm size is 213 acres or less, the vast majority of farmers are uninsured.

**TABLE 2. Number of Farms, Farm Size, and Percentage of Farms Insured in Northeast States**

STATE	NUMBER OF FARMS	AVERAGE FARM SIZE (ACRES)	PERCENTAGE OF FARMS INSURED
CONNECTICUT	4,900	76	7%
MASSACHUSETTS	6,900	68	11%
MAINE	7,000	171	7%
NEW HAMPSHIRE	3,850	109	5%
NEW JERSEY	9,900	71	8%
NEW YORK	30,500	213	11%
PENNSYLVANIA	48,800	145	11%
RHODE ISLAND	1,000	60	8%
VERMONT	6,300	190	9%

NOTE. Data in Table 2 is from National Sustainable Agriculture Coalition (2025a) and U.S. Department of Agriculture National Agricultural Statistics Service (2025).

## **Traditional Crop Insurance**

Traditional crop insurance policies are designed for large-scale, monoculture operations and do not work well for smaller-scale and diversified producers. Crop-based insurance provides coverage for individual crops, but coverage varies by county. Small and diversified farmers typically grow a wide variety of crops on a relatively small scale (sometimes fractions of an acre for each crop) and would have to purchase a policy for each individual crop, as well as file a claim for each individual crop if one weather event impacted their farm.

The administration of crop insurance is another barrier. Insurance agents are incentivized to sell higher premium policies because insurance companies get higher subsidies for these policies. Meanwhile, many agents aren't trained to provide policies for diversified operations or to write tailored policies for smaller, specialty crop operations, who tend to have lower premiums. These policies are labor and time intensive, providing both agents and insurance companies with a much lower financial return (National Sustainable Agriculture Coalition, 2024).

Traditional crop insurance is also at odds with adoption of climate-resilient growing practices. Insurance policies stipulate strict guidance on when and how cover crops can be terminated, as well as strict planting dates for crops. The rigidity of such stipulations often conflicts with the ecological-based practices of many small and diversified specialty crop producers. Consequently, crop insurance and disaster insurance programs are mostly inaccessible to small and diversified specialty crop farmers, contributing to a disproportionate number of these operations lacking coverage.

## **Whole Farm Revenue Protection**

Small and mid-sized diversified producers have limited options when it comes to crop insurance, but one option is Whole Farm Revenue Protection (WFRP), a crop-neutral revenue insurance policy that provides protection for an entire operation, rather than individual types of crops. Unlike yield-based insurance (which provides indemnity payments when a crop yield drops below an insured amount for an insured reason) or revenue insurance (which insures against price and yield drops), WFRP protects a farmer's whole operation in the event of loss.

WFRP rewards risk management practices and farm diversification through offering premium subsidies when two or more crops are grown. It's suitable for diversified operations because it offers replanting coverage and inclusion of some incidental processing coverage (such as trimming, washing, and packaging). WFRP includes a Micro Farm policy for producers of up to \$350,000 in annual

revenue, which offers simplified record keeping requirements and flexibility of reporting requirements for farmers who lack yield data. One important drawback to WFRP is its 35% limit to annual revenue expansion for non-organic growers, which limits large expansion of planted acres—a common occurrence in the first years of farming operations.

Despite the benefits of WFRP, only 1,967 of producers nationally purchased a policy in 2023, highlighting the barriers of its complicated enrollment process, farmers' lack of awareness of the program, and the disinterest of insurance agents in selling these policies (National Sustainable Agriculture Coalition, 2022).

### **Noninsured Crop Disaster Assistance Program**

Another alternative to traditional crop insurance is the Noninsured Crop Disaster Assistance Program (NAP), which provides coverage for crops that aren't covered under the federal crop insurance program's crop-specific policies by county and is intended for farmers who are unable to enroll in WFRP. NAP is a permanent disaster program that covers crop loss due to natural disasters. It provides basic coverage for new farmers without production history in counties where other coverage is not available. Farmers can enroll in NAP to receive payouts in the event of a disaster that causes crop loss or inability to plant crops, but they must be enrolled in NAP before the disaster to receive payments. NAP provides payments to help pay for lost crops and expenses due to crop loss, with payout limits of \$125,000 or \$300,000, depending on coverage.

Administered by the FSA, NAP offers free, basic coverage for beginning, limited resource, and socially disadvantaged farmers and ranchers, with an option for additional coverage with a premium. Despite this benefit, NAP has very high paperwork requirements and its basic catastrophic coverage is inadequate in the case of disasters. The program's reputation for being difficult to navigate and receive payment from has earned it the nickname "Not A Penny" among farmers. NAP applications dropped from 95,000 to 54,000 from 2017 to 2022 (National Sustainable Agriculture Coalition, 2025a).

## **Ad Hoc Disaster Relief Programs**

In place of a permanent federal disaster relief program, ad hoc disaster relief programs have been created by the USDA in response to events like droughts, wildfires, and flooding. Though these programs provide some funding to Northeast states, they are not proactive protection against disasters, which are becoming more regular and severe. Additionally, there have been issues with these programs.

Historically, ad hoc disaster relief programs have required farms to have prior enrollment in federal crop insurance or NAP or to enroll in coverage within two years of receiving assistance, which many farmers do not want or fail to do (National Sustainable Agriculture Coalition, 2024). Ad hoc programs require an act of Congress and take time to create and implement, usually providing relief months or even years after the initial disaster. In the case of the New England Block Grant Program, it's evident how much lag time there can be for uninsured producers; as of this writing in December 2025, the USDA is still working to refine the program that is supposed to provide relief to farmers who suffered crop losses from disasters in 2023 and 2024. Farmers cannot afford to wait over two years for financial assistance following a disaster.

In recent ad hoc programs, states have not been given leeway to determine how funding is spent or how programs can best serve their agricultural industries. Uninsured farmers—the majority of small and diversified operations and Northeast farmers—are often at a disadvantage for receiving funding from these programs.



## FARMER FOCUS:

# Creating a More Resilient Sector

**Ian Jerolmack, Stonecipher Farm Bowdinham, ME**

Ian Jerolmack owns and runs Stonecipher Farm, a five acre organic vegetable farm. He purchased the land in 2008 and has invested in a number of production systems and practices to make the farm more resilient, including no-till, irrigation, and high tunnels.

No-till has essentially eliminated weed issues and increased his production dramatically while shrinking the size of his farm, which peaked at 18 acres prior to the no-till conversion. His irrigation system has made his farm much more resilient to drought conditions, a major issue for Northeast farmers the past two seasons, although dealing with irrigation in a drought year increases his labor costs substantially. His irrigation system was expensive to install and is a long-term sustainability investment in terms of reduced water usage; he uses about half the water he used before installing it because he is not watering non-productive land.

High tunnels have been his most impactful resiliency practice by far. Farming in high tunnels is much more reliable because farmers are able to control almost every condition; they keep diseases and pests out and help farmers control water and wind.

Ian believes that federal and state governments should make it much easier for farmers to build high tunnels on their farms by covering the cost entirely, paying for them up front (rather than reimbursing farmers), and supporting the labor to build the tunnel.

## **Federal Disaster Response and the Role of FSA and NRCS**

Another challenge in federal disaster response is the Trump administration's changes to the USDA's Farm Service Agency (FSA) and Natural Resource Conservation Service (NRCS)—the two agencies in charge of administering disaster aid and helping farmers implement mitigation practices.

FSA administers loans and payments to farmers, including disaster recovery and other financial support programs, primarily via its county offices. However, staff levels and the ability to fully service farmers have been a struggle for the agency for decades. Between 2005 and 2025, FSA staff levels have dropped by 43%, which includes 22% of local county-level staff. In 2025 alone, FSA lost at least 1,200 more employees through the Deferred Resignation Program. Low staffing levels have led to farmers' inability to access FSA programs and to challenges administering disaster programs, such as the Supplemental Disaster Relief Program of 2025 (National Sustainable Agriculture Coalition, 2025b).

NRCS provides technical assistance and financial support for conservation practices for farmers and landowners, including support and services to help farmers address issues like flooding, drought, and soil and water quality—all of which are at increased risk due to climate change. Some of the conservation programs administered by NRCS include the popular Conservation Stewardship Program (CSP) and Environmental Quality Incentives Program (EQIP), which help farmers to implement conservation practices. Since January 2025, 25% of NRCS staff have been lost; as of November 2025, staff levels are at about 9,000—the lowest since 2019—with plans to cut a further 1,000 staff in 2026 (USDA, 2026). Even before the Trump administration's federal staff cuts, NRCS has struggled to maintain staffing levels to meet farmer demand for technical service and financial assistance. This impacts farmers; there are documented ties between low NRCS staff levels and lack of conservation practice implementation (Morris et al., 2021). Conservation practices are an essential aspect of farm resilience in the face of climate challenges and a lack of access to conservation programs and assistance hurts farmers who are trying to implement resilience practices and prepare for weather disasters before they happen. It can be prohibitively expensive to implement new conservation practices and farmers don't always know how to change practices without NRCS support and staff expertise.



#### FARMER FOCUS:

# Turning Pain Into Advocacy

**Willie Dellacamera, Cecarellis Harrison Hill Farm**

**Northford, CT**

The same 14-minute August 2024 hailstorm that hit Kirsten Marra’s farm obliterated Willie Dellacamera’s entire crop on his 120-acre Connecticut farm. Because this hyper-local disaster wasn’t part of a larger declared event, traditional assistance was lacking. Insurance only covered a fraction of losses, and federal programs offered little relief.

Willie drove his tractor from Connecticut to Washington, D.C., to draw attention to the plight of small farms hit by such “invisible” disasters. “Farmers like me do not receive enough support from federal programs and crop insurance,” he lamented, after suffering a total wipeout (Fahy, 2024).

Willie’s advocacy helped spur a new \$220 million Farm Recovery and Support Block Grant in late 2024 to aid small and mid-sized farms in New England hit by 2023 floods and 2024 hailstorms.

*“Farmers like me do not receive enough support from federal programs and crop insurance.”*

## Current Block Grants and Supplemental Disaster Relief Program

In December 2024, Congress authorized Farm Recovery and Support Block Grants (FRSBG) for eight states with fewer than 8,000 farms, average farm sizes under 1,000 acres, and net farm income below \$250 million: Alaska, Connecticut, Hawaii, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont. FRSBG funds were intended to help producers recover from crop, livestock, and infrastructure losses specifically caused by the extreme weather of 2023 and 2024.

By directing the USDA to allocate flexible block grants without the typical restraints of traditional disaster relief programs, Congress acknowledged that small agricultural states face different risks and administrative realities.

The USDA offered eligible states two paths to implementation: to join the federally managed Supplemental Disaster Relief Program (SDRP) or to administer its own program through the FRSBG. Under SDRP, the USDA would make direct payments to producers based on existing crop insurance or NAP data. This approach required less state involvement but limited eligibility to what the federal formulas already covered. The alternative bespoke model gave states the flexibility to define eligibility, set priorities, and decide how funds would be used—subject to USDA approval.

States had to choose one path or the other to prevent overlap in coverage. Four states (Connecticut, Maine, Massachusetts, and Hawaii) chose to create their own block grant programs. The others (Vermont, New Hampshire, Rhode Island, and Alaska) remained within SDRP.

For states that opted for block grants, flexibility was the main attraction. Connecticut's Department of Agriculture said it wanted a program that reached small and specialty producers who often miss out on federal assistance. Maine cited similar reasons and highlighted the chance to cover aquaculture, timber, and infrastructure losses. Massachusetts used lessons from a previous state relief effort to guide its new block grant program design.

States that chose SDRP appeared motivated by administrative efficiency and risk management. Vermont had already raised substantial private funds after flooding in 2023 and may have seen less need for a new system. Rhode Island, which lacks a dedicated agriculture department, has limited capacity to run its own program.

As of April 2026, SDRP is active in most participating states, with the first stage of payments underway for producers who experienced crop, tree, or vine losses in 2023 or 2024. Meanwhile, FRSBG remains delayed, with states yet to finalize agreements with the USDA. The combination of administrative complexity and the October–November 2025 government shutdown slowed delivery of disaster relief funds to farmers in those states.

This legislation held real promise for New England, offering a path toward disaster assistance that fits its smaller, more diversified farms. Whether that promise is realized will depend on how quickly implementation resumes and how well programs meet the needs of local producers.

## Beyond Federal Programs: State, Nonprofit, and Philanthropic Responses

Federal disaster programs form the backbone of agricultural recovery in the United States, but they are rarely sufficient on their own. As climate disasters become more frequent and localized, gaps in timing, eligibility, and coverage have prompted states, nonprofit organizations, and philanthropic actors to step in with their own responses.

The sections that follow document how these actors have responded in practice, highlighting a range of approaches that complement, extend, or attempt to improve upon federal disaster assistance. Together, they illustrate both the promise and the limitations of sub-federal disaster relief in the absence of a durable, coordinated system.

### State Level

States have played an increasingly important role in responding to agricultural losses from extreme weather, particularly where federal assistance has been slow, incomplete, or poorly aligned with local farm structures. Across the Northeast and the country, state governments are testing ways to adequately respond to the growing challenges.

The examples on the following pages illustrate three distinct models: Vermont's rapid-response business relief following catastrophic flooding; Massachusetts' move toward a permanent disaster relief and resiliency fund; and Oregon's use of a nonprofit intermediary to administer public disaster and resilience funding.



**FARMER FOCUS:**

# Little Farm, Little Access

**Gene Jonas, Hungry Bear Farm** Mason, NH

**G**ene Jonas started Hungry Bear Farm 16 years ago. The farm is 16 acres of diversified organic vegetables sold primarily through a CSA. Since 2020, they've either had a drought or too much water—it's been an extreme in either direction. Prior to that, the weather was more predictable.

New Hampshire relief programs are biased toward large growers; most farms in the state gross less than \$25,000 and most are ineligible for relief funding. Gene applied for federal climate resiliency support through the NRCS and secured cost-share assistance in 2025 for a propagation house.

The previous year, he had applied for a rain catchment system that was not awarded even though he believes that project had better climate mitigation impacts. He suspects the application was unsuccessful because the practice was less familiar to the NRCS. Annual fluctuations in NRCS funding levels, priorities, and eligible practices can also strongly influence which projects are supported in a given year.

## **Flooding in Vermont and State Disaster Response**

In July 2023, Vermont experienced catastrophic flooding that impacted thousands of residents, including farms and other businesses around the state. In response, the Vermont Agency of Commerce and Community Development (VACCD) rolled out a new relief program about a month later to support businesses impacted by flooding called the Business Emergency Gap Assistance Program (BEGAP). BEGAP was administered primarily by VACCD in partnership with the Vermont Agency of Agriculture, Food & Markets (VAAF), which received and processed applications from farmers. In 2023, \$3.7 million of the program's \$20 million in funding was granted to farm businesses.

Unfortunately, BEGAP was needed again in July 2024 when Vermont experienced more flooding on the anniversary of the previous year's floods. In 2024, the state granted just under \$4 million to support farmers and other impacted businesses.

BEGAP provided meaningful support for many farmers impacted by flooding in 2023 and 2024 and was essential in collecting data regarding farmers' needs and financial losses. In 2023, farmers reported a total of \$44,678,570 in losses. In 2024, farmers reported a total of \$13,236,142 in losses—a combined total of just under \$58 million over two years.

The state of Vermont demonstrated its ability to provide nimble and responsive funding to farmers and other businesses impacted by climate disasters. Farmers reported that the BEGAP payments they received provided meaningful support in a time of crisis. At the same time, BEGAP provided an opportunity for collectively learning how the system could be improved to better meet farmers' needs as extreme weather continues to impact the farming community.

## **Massachusetts Disaster Relief and Resiliency Fund**

In 2023, Massachusetts farmers experienced three significant climate-related weather disasters. In February, following a warm winter, a sudden cold snap destroyed the state's peach crop. In late May, unseasonably freezing temperatures caused significant damage to apples, blueberries, and vegetables. Months of heavy rain caused widespread, catastrophic flooding in July, limited flooding in December, and extensive losses even in fields that did not flood.

By August 1, Governor Maura Healy had signed legislation providing \$20 million in disaster relief funds for farmers. The Natural Disaster Recovery Program for Agriculture was administered by the Massachusetts Department of Agricultural Resources and made payments to 347 farms before the end of 2023. The governor also played a key role in a public-private partnership program, administered by

the United Way of Central Massachusetts, that raised and distributed \$3 million dollars to farms in early fall.

Recognizing the need for a permanent climate disaster relief program, the state legislature established the Disaster Relief and Resiliency Fund in FY25. Eligible recipients include municipalities, businesses, nonprofits, and individuals following a natural disaster. The legislature appropriated \$14.5 million for the fund in FY25 and an additional \$15 million in FY26.

Important questions still to be resolved include establishing a permanent funding mechanism sized to meet the needs of the very large pool of potential recipients and creating application processes that recognize the different needs of farmers, municipalities, and other possible recipients.

### **Oregon Community Food Systems Network**

While Vermont and Massachusetts offer examples of state-administered disaster relief within New England, Oregon demonstrates how public funds can be deployed through trusted nonprofit intermediaries.

Throughout 2021, farmers in Oregon were impacted by multiple, often overlapping climate disasters, including extreme heat, drought, wildfires, and hail. Although state disaster relief funds were made available as reimbursable loans (with stipulations), many small and beginning farmers were ineligible and unable to take that financial risk. Gaps in trust between farmers and state agencies further limited uptake. The Oregon Community Food Systems Network—a nonprofit coalition of organizations, farmers, and allies working to strengthen local food systems—worked with farmers and the state to find a solution.

Network members successfully advocated for the coalition to administer \$1.5 million of the state's disaster relief budget to distribute as direct aid for farmers and ranchers otherwise excluded from the program. The Network designed an accessible application, rubric, and review and reporting process with membership input to disperse these funds to producers ineligible for the state disaster relief reimbursable loans. Applicants described their losses, outlined plans for future resilience, and submitted photo documentation. Across three rounds of funding, 108 farmers received direct assistance.

In the years that followed, this work evolved into formal resilience programming. The Oregon legislature funded two rounds of disaster resilience grants administered through the Network, totaling \$2.65 million and supporting on-farm infrastructure and adaptation measures. Unfortunately, despite strong demand and demonstrated impact, the program was not continued after the second round due to state budget uncertainties in 2025.

**The discontinuation of both direct relief and resilience funding underscores a core vulnerability: time-limited, discretionary programs can leave farmers exposed even when need remains clear and ongoing.**

## The Role of Nonprofits

In many states across the country, nonprofit farmer-serving organizations have established disaster relief programs to support farmers impacted by severe weather events. Often, this is a reaction to a lack of farmer support from the state or federal government, though in some cases, a nonprofit organization might administer a state's disaster relief funds.

In many cases, the nonprofit organization may not have a strategy or existing program design that seamlessly facilitates this type of new program adoption. Rather, organizations deploy rapid response when their farmer community is faced with a crisis and there is a gap in resources, launching into new program development while maintaining core operations.

Often, disaster relief programming can lead to new relationships with farmers who had not previously interacted with the organization. Organizations should and do seek to maintain outreach to farmers impacted throughout the longer-term recovery process and facilitate peer-to-peer support, network building, and resource sharing. A trusted relationship can be established, leading to collaboration and community-building among farmers in the area.

Many organizations deploy resources beyond financial support, including physically checking in on farmers to identify needs; deploying volunteers for relief and recovery efforts; and administering supply distribution, such as hay, fencing, and other urgent needs. The relative nimbleness of farmer-serving organizations allows for quick response and meaningful relief (in some cases within a week of receiving an application), while generating a strong sense of community and support for farmers across a region. At the same time, developing and implementing a disaster relief program is a significant undertaking and can push an organization to, or beyond, its funding and capacity limits.

**Adequate, timely, and unrestricted support to organizations fulfilling this vital role for farmers is essential. Having funds available prior to weather events occurring is crucial, and altogether too uncommon.**

## Common Nonprofit Disaster Relief Models

**Across regions, nonprofit disaster response for farmers tends to fall into several recurring and often overlapping models:**

- Relationship-based outreach, prioritizing trusted messengers and culturally responsive engagement to reach marginalized communities
- Emergency grant funds, offering rapid, flexible cash assistance for immediate needs such as lost income, repairs, or inputs
- Mutual aid and volunteer coordination, including labor support, material distribution, and peer-to-peer assistance
- Technical assistance and navigation, helping farmers understand eligibility, complete applications, and access public or private aid
- Intermediary administration, where nonprofits are contracted or authorized to distribute public funds to hard-to-reach producers
- Bridge financing, such as no- or low-interest loans, to stabilize farms while longer-term assistance is pending

These models often operate simultaneously and evolve rapidly in response to unfolding conditions.

## Northeast Nonprofit Disaster Response in Practice

In the wake of widespread flooding in Massachusetts in July 2023 (see above), a coalition of philanthropic and community partners launched the The Natural Disaster Recovery Program for Agriculture to provide rapid financial support to affected farms. The fund was administered by the United Way of Central Massachusetts, with planning support from Community Involved in Sustaining Agriculture and the Community Fund of Western Massachusetts and brought together state leaders, government officials, philanthropists, businesses, and individual donors. The application process for the program was intentionally simple, and the fund distributed a total of \$3 million to 294 farms through two rounds of payments: up to \$10,000 in September and up to \$30,000 in October. This staged approach allowed the program to deliver fast, initial support to farmers while fundraising was in progress, allowing farmers to cover immediate needs like meeting payroll for employees.

## Limits and Constraints

While nonprofit-led disaster responses can be effective and trusted, they are also resource-intensive and may be challenging to sustain.

Building trusted relationships takes time, yet farmers impacted by disaster face urgent and immediate needs. Farmers who do not have a pre-existing relationship with the organization administering the funding may experience lower participation rates. Organizations should activate networks to ensure that available funds equitably reach farmers in need. Farmers should know that the funds have been raised for them and that no unnecessary information (such as Social Security numbers) is being requested.

Fundraising itself is an ongoing strain. Farmer-serving nonprofits must raise money while simultaneously administering grants, supporting applicants, and responding to evolving conditions on the ground. Reviewing applications without a clear sense of total available funds can slow decision-making and increase stress for both staff and applicants. These pressures are compounded when organizations take on entirely new programming in response to disasters, layering administrative responsibilities onto already stretched teams.

Operational barriers can also affect delivery. Disasters may disrupt postal service, banking access, or communication infrastructure, complicating efforts to get funds to farmers quickly. At the same time, staff may be supporting farmers through application processes during periods of power outages, limited internet access, or personal crisis.

Taken together, these dynamics underscore an important reality: nonprofit organizations can be essential partners in disaster response, but they cannot and should not be expected to carry this work alone. Their growing role reflects both innovation and a gap in the broader disaster support system. Yet without predictable funding, shared infrastructure, and stronger alignment with public programs, even the most effective nonprofit responses remain fragile. Sustaining this work at the scale required will demand deeper coordination across nonprofits, governments, and philanthropy, and a clearer commitment to treating disaster response as core infrastructure rather than an ad hoc, crisis-by-crisis effort.

## Philanthropic Responses to Climate Disasters

Because climate disasters are often localized to a state- or county-level region, the impacts can be felt by the immediate community, galvanizing support for impacted farmers. Climate disasters may gain the attention of funders who have not historically supported agricultural programming, providing an opportunity to introduce these funders to the vital role that farmers play in maintaining community health and well-being, as a pillar of local economic development, and as stewards of environmental responsibility.

However, when funding from private foundations comes with restrictions during times of crisis, program administration challenges are exacerbated. Geographic restrictions, such as a community foundation restricting use of their dollars to benefit farmers in one specific county during a state-wide disaster, create accounting hurdles for the administering organization. Funds restricted to one type of disaster prevent support delivery when farmers face other crises, as was the case with California's drought-specific relief program and Massachusetts' United Way fund, which was limited to flooding in a year when farmers also faced significant losses due to two extreme temperature events earlier in the year.

The Center for Disaster Philanthropy (CDP) states that philanthropy provided \$1.7 billion toward global disaster relief in 2022, but that need is continuing to rise given the increase in quantity and impacts of disasters, and in long-term recovery needs. The largest 1,000 funders in the U.S. provided over \$860 million toward global disaster relief (including epidemics) in 2022, a 672% increase from 2012 (Center for Disaster Philanthropy, 2024).

Disaster recovery and response was by far the most funded strategy (66.1% of funding) within disaster funding in 2022, compared to resilience and mitigation, preparedness, reconstruction and recovery, and other strategies. The need for further philanthropic funding toward recovery efforts is clear, particularly with the financial tolls of disasters increasing. The Center specifically names "changes in the insurance industry" as a major factor contributing to persistent needs for recovery funds, corroborating calls for improved insurance for farmers (Center for Disaster Philanthropy, 2024).

While approximately 20% of the U.S. population lives in rural areas, including Indigenous communities, only about 7% of philanthropic disaster funding is directed to those communities (The Chronicle of Philanthropy, 2024). Furthermore, 35% of people living in FEMA's Community Disaster Resilience Zones live in rural areas, demonstrating a higher risk of disaster. Rural communities also face compounding vulnerabilities, including higher poverty rates, aging infrastructure, and limited access to services, all of which intensify disaster impacts (FSG, 2025).

Sadly, impacted rural communities often receive less public and media attention than their urban counterparts, which may impact the overall level of public support (FSG, 2025). Adding to these challenges, the majority of philanthropic funds entering rural communities are either restricted by use or are in the form of loans, further complicating relief efforts (Aspen Institute, 2023).



#### FARMER FOCUS:

# The Importance of a Safety Net

**Andy Jones, Intervale Community Farm** Burlington, VT

**T**he Intervale Community Farm is a 20-acre vegetable farm located at the Intervale Center, a nonprofit, land-based farming organization where six farms operate and share infrastructure and equipment. Started in 1990, Intervale Community Farm is the largest of the six farms. Andy Jones has been the farm manager there since 1993.

One of the farm's strengths is that they are owned cooperatively by community members. Additionally, 90% of the farm's harvest is sold through their CSA, which feeds up to 675 households during the summer and 300 in the winter. Members are deeply invested in the long-term viability of the farm; they have helped the farm get through severe weather events (such as Hurricane Irene in 2011 and flooding events in 2023 and 2024) with less economic disruption than many of the other farms that were impacted. Although they offered their CSA members a refund during years where the farm suffered crop loss, most did not take it, and they were also able to raise funds through GoFundMe campaigns.

Intervale Community Farm is able to create a community safety net through their relationships and members, but this strategy doesn't work for everyone—especially for farmers who sell primarily into wholesale markets. In this situation, a public safety net that farmers are able to access immediately and without barriers is critical in sustaining farm businesses during weather events that threaten their survival.

## Building a Durable Disaster Response System

We've seen how climate-related disasters are affecting farmers and where current systems fall short. This section turns from diagnosis to action, outlining practical steps that policymakers, funders, and nonprofit partners can take to build a more reliable, equitable disaster response and recovery system for Northeast agriculture.

### Actions for Elected Officials

State legislators, governors, and agriculture officials should move beyond ad hoc disaster responses and work with farmers and farm advocates to establish durable, state-level climate impact recovery funds for agriculture. As climate-related losses become more frequent and less predictable, disaster relief systems must be standing, adequately capitalized, and ready to deploy when extreme weather occurs—not rebuilt after each crisis.

While farms and farmers have widely varying needs in recovering from climate disasters, rapid financial relief is almost always needed to replace lost revenue, repair or replace damaged equipment or infrastructure, keep employees on payroll, and more.

To effectively address gaps left by existing federal and philanthropic sources of farm disaster relief, state climate impact recovery funds should be simple to access and quickly able to deploy to farmers following extreme weather impacts. Administration of dedicated funding should be responsive to farmer needs, equitably distributed, proportional to the diverse needs of the farming community—with programs predictably and sustainably funded over time.

In addition, state legislators and agriculture officials should proactively work with local farmers and farm advocates to identify additional programmatic and funding resources to assist farms in increasing the climate resilience of their operations and recovering when disasters occur.

## Shaping Effective State Disaster Relief

### Future state-level disaster relief for farmers can and should:

- Be standing programs available year-round and not depend on a state or county disaster declaration
- Respond to different types of extreme weather and climate impacts
- Ensure fast payment turnaround, ideally within 30 days
- Be administered by farmer-serving agencies and/or community-based organizations, including and especially those serving historically marginalized communities
- Include farmers and farm stakeholders in the review process
- Ensure equitable participation by historically marginalized communities

### SPOTLIGHT: Vermont Farm Security Fund

In August 2024, following two consecutive years of catastrophic flooding and other climate emergencies, a diverse coalition of Vermont farming organizations came together to advocate for the Farm Security Fund at the state level. The Farm Security Fund (Bill S.60) would provide rapid response financial relief to farmers who experience losses due to climate disasters and extreme weather. It would be administered by the Vermont Agency of Agriculture, Food & Markets in collaboration with a review board made up of farm stakeholders. Payments from the fund would reimburse a farm for up to 50% of uninsured or otherwise uncovered losses due to an extreme weather condition or event, up to a maximum of \$150,000 per qualified application. Farmer organizations are actively working in coalition and organizing in communities to get the bill passed and funded in 2026.



**F**unders should provide increased unrestricted funding to nonprofit organizations leading climate disaster response and resilience efforts. **The CDP’s Advancing Rural Disaster Philanthropy: Barriers and Opportunities report suggests three approaches for funders interested in supporting effective disaster response in rural communities (FSG, 2025):**

- When determining grant recipients capable of deploying effective disaster response programs, prioritize “local leadership and equity.”
- In reviewing organizations’ strategies and approaches to disaster response, look for and prioritize “capacity, coordination, and the full disaster cycle.”
- Especially for disaster relief grants, modify and rebuild grantmaking operations to prioritize “equity and impact” to ensure that the funds can be effectively and quickly deployed to reach the most vulnerable, impacted communities that may otherwise be disconnected from relief efforts. For example, when designing grantmaking programs, funders should “design for the margins,” intentionally creating processes that result in those organizations or communities that are least resourced accessing philanthropic dollars.

Finally, the opportunity for funding institutions to effectively support rural communities during disaster preparation, response, and recovery is clearly stated by nonprofits and communities in need, as is the opportunity for philanthropy to bolster local leadership in strategy development. Investments in infrastructure and capacity building would support disaster mitigation. Mutual aid efforts that are determined by the communities impacted are noted as an explicit opportunity for funders to be in solidarity with such communities, as long as support is provided in ways that uphold intentions around community control, autonomy, and nimbleness.

United Way’s involvement in disaster relief in Massachusetts demonstrates that philanthropic organizations have the ability to provide vital resourcing and support in times of crisis, particularly with support from key public figures such as the governor. Funders and philanthropic organizations across issue areas should see themselves as capable of—and responsible for—ensuring that financial resources are reaching communities in need during times of crisis. Relying on specific issue-area funders (e.g., agricultural or food systems funders) may not garner the level of resources needed as climate disasters continue to impact the bedrocks of our communities and society—the producers who tend to our land, provide us all with nutritious food, play a crucial role in economic activity, and often represent the most under-resourced in our individual states.

**N**onprofits and grassroots networks are critical partners in climate disaster response, but their role should be clearly defined, adequately supported, and integrated into broader public systems. Farmer-serving organizations should be empowered to contribute where they are strongest, without being expected to carry long-term disaster response alone.

### **Communicate Need and Ground Truth**

Nonprofits should continue to serve as early-warning systems by documenting losses, barriers, and emerging needs as disasters unfold. Because they often hear first from farmers and farmworkers who are less connected to government agencies, nonprofits are well positioned to surface impacts that may not yet appear in official data or trigger disaster declarations. This includes aggregating farm-level information, identifying patterns across regions, and communicating those realities to policymakers in clear, timely ways.

### **Advocate for Practical and Equitable Solutions**

Nonprofits should help shape disaster programs by bringing farmer experience directly into policy design. This includes translating policy into plain language, elevating practical fixes, and advocating for programs that are faster, simpler, and more accessible. Convening power is especially important here; nonprofits can bring farmers, agencies, and allies together to ensure that those most affected by disasters help design solutions rather than being consulted after decisions are made.

### **Fill Short-Term Gaps in Service**

In moments when federal or state systems are slow, incomplete, or inaccessible, nonprofits should be resourced to provide short-term gap support. This can include mutual aid, emergency funds, volunteer coordination, supply distribution, and technical assistance. These efforts are most effective when they complement, rather than substitute for, public programs and when funding is available before disasters occur.

### **Deliver Targeted, Trust-Based Assistance**

Where appropriate, nonprofits can administer direct financial assistance, either through privately raised funds or as intermediaries for public dollars. Their ability to conduct rapid outreach, offer simplified applications, and allow flexible use of funds makes them well suited to reach farmers who may be ineligible for or wary of other relief programs. These efforts can also serve as entry points to longer-term relationships and recovery support.

At the same time, no single organization can meet the scale of need alone. The Northeast region needs stronger collaboration across governments, nonprofits, and farmer networks to share tools, templates, data, and best practices for common challenges such as rapid payment systems, equitable outreach, mitigation education, and reduced paperwork. Coordinated learning and shared infrastructure can help avoid reinventing systems after each storm and strengthen the case for durable funding that matches the scale and persistence of today's climate risks.

## Why Loans Are Not Disaster Relief

Most farmers begin each growing season already carrying financial risk. Up-front operating costs—seed, feed, fertilizer, labor, equipment, and land payments—are typically covered either through personal savings or short-term operating loans. In both cases, farmers enter the season in the red, with repayment dependent on a successful harvest.

When disaster strikes and crops, livestock, or markets are lost, that income disappears. In this context, a loan is not a lifeline—it is additional debt layered onto existing obligations, often without a clear path to repayment. For farms already operating on thin margins, taking on new debt after a disaster can delay recovery, increase financial stress, and in some cases, push a farm closer to closure.

Loans are often attractive to funders because they preserve capital and can be recycled over time. In some situations, such as longer-term investments or bridge financing, loans may play a role. But for immediate disaster response, loans keep the risk on farmers at the moment they are least able to bear it.

Effective disaster relief requires grants that stabilize farms first. Debt-based tools, if used at all, should come later and only alongside clear income recovery pathways. Treating loans as a substitute for relief misunderstands how farm finances work and can undermine both recovery and long-term resilience.



## FARMER FOCUS:

# Farming for the Long Term

**Stephen Leslie, Cedar Mountain Farm Hartland, VT**

Stephen Leslie operates a small dairy farm in the Connecticut River Valley that produces farmstead cheese, beef, milk, and produce. After reading the 2018 Global Warming Report from the United Nations International Panel on Climate Change that underscored the dire severity of the issue and its impacts, Stephen started to rethink the way he was farming. He wanted to implement agro-ecology and agro-forestry practices on his farm to both mitigate and adapt to the impacts of climate change.

In 2020 he incorporated perennials into his farmscape, planting hundreds of trees in silvopasture and alley cropping systems and installing riparian buffers, windbreaks, and pollinator hedgerows. He also uses no-till practices and identifies and fences off micro-wetlands. These practices help retain moisture in the soil during dry years, prevent erosion, keep animals cool, and encourage biodiversity—including native predator insect populations—while also sequestering more carbon.

If all the farmers in the Connecticut River Valley were to implement systems like this, not only would the amount of rainflow into the river significantly decrease and drastically minimize flooding, but the soil would also retain more water during dry years.

However, these practices do not guarantee an increased income stream and in fact cost money to implement. Programs through the USDA's Natural Resources Conservation Service are important to support farmers, but more support is needed, as these programs don't cover all the costs or all practices in a given county. Investing in farmers to implement these practices will benefit all of us in the long-term.

## Why Loans Are Not Disaster Relief

Disaster relief is essential, but it cannot be the sole response to a changing climate. As extreme weather becomes more frequent, more expensive, and more disruptive, reactive systems alone will continue to fall short. Long-term farm viability depends on pairing disaster relief with sustained investment in mitigation and resilience. Examples of these strategies are outlined in Appendix C.

Some resilience measures can reduce losses from acute disasters such as floods, heatwaves, or storms. Raised infrastructure, backup power, improved drainage, and protected storage can help farms recover more quickly when an event occurs. These investments matter, but no amount of preparation can fully offset the impacts of a catastrophic flood or a once-in-a-generation storm.

Resilience strategies are especially effective for slow-moving, cumulative disruptions that increasingly shape farm viability. Shifts in temperature, altered precipitation patterns, and rising disease and pest pressure affect far more farms over longer periods of time. These changes strain soils, crops, and labor systems year after year, often without triggering disaster declarations or relief programs.

Farmers across the Northeast are already adapting by diversifying crops, adjusting planting schedules, improving soil health, and investing in water management. These changes reduce vulnerability, but they require time, capital, and technical support. Many resilience investments pay off over multiple seasons, making them difficult to finance without public and philanthropic support.

Effective disaster policy must therefore treat resilience as a core component of agricultural support, not an optional add-on. Relief helps farms survive the last disaster. Resilience helps them withstand the next one—and the many slow changes in between.

## Conclusion

With extreme weather events in the Northeast becoming more frequent, severe, and damaging to agriculture businesses, it is crucial that adequate support systems for impacted farmers are developed and made available. There is no time to waste. The Northeast region's farmers are already struggling with barriers to crop insurance, difficult to navigate and delayed federal aid, and unpredictable seasons. The consequences on the agricultural sector are clear: our food system is being impacted, with ripple effects throughout local economies, farmers experiencing mental health crises, and our region's agricultural lands increasingly under threat.

Elected officials, nonprofit farmer support groups, funders, and other allies must work together to create comprehensive public and private programs that begin to create a safety net for farmers. To be truly effective, these support systems must address not only the physical and financial impacts of disasters, but also the disproportionate vulnerabilities faced by BIPOC and economically marginalized farmers, farmworkers, and those farming on high-risk lands. We have the knowledge and tools at our disposal and evidence that extreme weather events will continue to impact farmers. Waiting until disaster strikes is no longer acceptable.

The Northeast Climate Disaster Relief Network is proud to be a voice advocating for action and real solutions. Through collaboration, putting farmers' needs first, and creating a strong and durable safety net, we can ensure that agricultural producers are cared for and supported before, during, and after extreme weather events.

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## Appendix A

### Existing Climate Relief Grant Programs for New England Farmers

STATE/REGION	PROGRAM	SPONSOR/AGENCY	AWARD	NOTES
MA, NY, CT	Emergency Resilience Grant	Berkshire Agricultural Ventures	Up to \$2,500	Berkshire County (MA); Columbia & Dutchess Counties (NY); Litchfield County (CT)
NEW HAMPSHIRE	Farmer Resilience Grant	NOFA-New Hampshire	Up to \$3,000	Closed for 2025
VERMONT	NOFA-VT Farmer Emergency Fund	NOFA-Vermont		Ongoing since 1997
REGIONAL (NEW ENGLAND)	Farm Credit East Cares	Farm Credit East	Up to \$500	For personal emergency expenses
NATIONAL	Brighter Future Fund—Emergency Grants	American Farmland Trust	Up to \$10,000	National reach, includes New England
REGIONAL/NATIONAL	Rapid Response Fund	Black Farmer Fund	Up to \$10,000	For Black farmers and food-system actors
CT, MA, ME	Farm Recovery and Support Block Grant Program	State Depts. of Agriculture and USDA FSA	TBD	Covers 2023–2024 crop, timber, livestock, and infrastructure losses

## Appendix B

### Existing Climate Relief Loan Programs for New England Farmers

STATE/REGION	PROGRAM	SPONSOR/ AGENCY	LOAN AMOUNT	NOTES
MASSACHUSETTS	Emergency Farm Fund	Community Involved in Sustaining Agriculture (CISA)	Up to \$25,000	Zero-interest; Franklin, Hampshire, Hampden Counties only
VERMONT	VT Farm Fund Emergency Loan Program	Center for an Agricultural Economy	Up to \$15,000	Zero-interest; 36–48 month term; fast turnaround

## Appendix C

### Examples of On-Farm Mitigation and Resilience Strategies

STRATEGIES THAT REDUCE IMPACTS FROM ACUTE DISASTERS (FLOODS, STORMS, HEATWAVES):	STRATEGIES THAT BUILD RESILIENCE TO SLOW-MOVING CLIMATE IMPACTS:	STRATEGIES THAT SUPPORT BOTH ACUTE AND SLOW-MOVING CHALLENGES:
<p>Raised electrical systems and elevated equipment pads</p> <p>Backup power generation and fuel storage</p> <p>Flood-resistant storage for feed, seed, and harvested crops</p> <p>Improved field drainage, culverts, and swales</p> <p>Protected wash/pack and cold storage facilities</p> <p>Windbreaks and storm-resistant greenhouse structures</p>	<p>Soil health practices (cover cropping, reduced tillage, compost application)</p> <p>Diversified crop rotations and intercropping</p> <p>Heat- and drought-tolerant crop varieties</p> <p>Expanded irrigation efficiency and water capture systems</p> <p>Shade structures and cooling strategies for livestock and workers</p> <p>Integrated pest and disease management as pathogen pressures shift</p>	<p>Crop and enterprise diversification to spread risk</p> <p>Flexible infrastructure that can be adapted over time</p> <p>On-farm water storage and management systems</p> <p>Perennial plantings and agroforestry where appropriate</p> <p>Financial buffers and reserve mechanisms for bad years</p>

