Food-System Stress in the Mid-Atlantic

A Curated Report on Climate, Agricultural Inputs, Supply Disruptions, and Implications for Montgomery County, Maryland

Audience: policymakers, farmers and other producers, consumers, food-system organizations, and planners

Evidence reviewed through July 12, 2026

Prepared as a practical resilience briefing, not a prediction of imminent food-system collapse.

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Purpose and Scope

This report assembles a deliberately selected set of recent news stories, government notices, extension updates, and climate assessments most relevant to food production and food availability in Montgomery County and the surrounding Mid-Atlantic region. It is not a comprehensive global catalogue. It concentrates on events and trends that can directly affect local producers or indirectly affect local consumers through regional and national supply chains.

The report uses “food-system stress” to describe pressures that reduce production, increase costs, disrupt distribution, narrow farmer margins, or make food prices and availability less predictable. A drought does not automatically create a shortage, and one high-cost season does not by itself signal a crisis. Concern arises when several stresses occur together or recur before farms, households, and institutions have recovered.

The central finding is that Montgomery County faces a dual exposure. First, its own producers are experiencing more erratic weather and rising operating costs. Second, the county imports most of its food and therefore remains vulnerable to disruptions in Pennsylvania, New Jersey, Delaware, Virginia, the Southeast, the Midwest, the West, and global commodity markets.

How the Material Was Curated

Sources were selected for geographic relevance, source quality, distinctiveness, and practical significance. Preference was given to local reporting, University of Maryland and neighboring land-grant extension services, state agriculture agencies, NOAA, USDA, and established news organizations. Duplicate coverage of the same event was limited unless a second source added a distinctly local or economic perspective.

Headlines are reproduced or lightly shortened for readability. Publication dates are shown in YYYY-MM-DD format when available. A few standing research pages and current projects do not display a conventional publication date; these are clearly labeled. Each entry includes a concise summary and an explanation of why the item matters for Montgomery County.

Key Findings for Montgomery County

- Mid-Atlantic agriculture is increasingly exposed to rapid swings between drought, extreme rainfall, heat, and late freeze events.
- Nearby states that help supply the Washington-Baltimore market often experience the same regional hazard at the same time, limiting their ability to compensate for Maryland losses.
- Fertilizer, diesel, feed, machinery, credit, and transportation costs can transmit distant geopolitical shocks directly into local farm budgets.
- Small, diversified, and specialty-crop farms—important to local-food strategies—often have thin margins and weaker insurance coverage than major commodity operations.
- Food resilience requires viable producers, water and soil capacity, processing, storage, distribution, markets, labor, and emergency coordination—not farmland preservation alone.
- Greater local and regional production will not eliminate dependence on national food systems, but it can add redundancy, shorten some supply chains, and strengthen emergency response.

Executive Summary

Montgomery County is not facing a single, clearly bounded food emergency. It is facing a more consequential planning challenge: the gradual accumulation of production, cost, and distribution risks that can overlap and recur. Recent Mid-Atlantic experience includes severe drought, intense rainfall, late freezes, hurricane damage, coastal salinization, and unusually high heat. At the same time, farmers face volatile prices for fertilizer, diesel, feed, machinery, labor, insurance, and credit.

The county has substantial agricultural assets, especially the Agricultural Reserve, but it imports most of the food consumed by its more than one million residents. Local consumers therefore experience stress through two channels. Weather and cost pressures affect Montgomery County farms directly; disruptions elsewhere affect wholesale availability and prices through supermarkets, restaurants, schools, hospitals, and food-assistance organizations.

The most important implication is not that Montgomery County can or should become self-sufficient. Rather, the county should build greater redundancy. A stronger network of local farms, nearby regional suppliers, aggregation and cold storage, institutional purchasing, emergency food providers, and informed households can absorb shocks better than a system dependent on long, concentrated supply chains alone.

Farm viability is the foundation of this strategy. Preserving land is necessary but insufficient when producers cannot afford water systems, equipment, labor, inputs, insurance, or access to reliable markets. Programs should therefore treat farmers, skills, infrastructure, and market relationships as essential resilience assets.

The report recommends a county food-system risk and resilience plan; expanded farm water security; increased diversified table-crop production; shared processing, storage, and distribution; stronger institutional markets; improved risk finance; monitoring of input and wholesale indicators; farmer training and succession; consumer preparedness; and formal cooperation across the Mid-Atlantic foodshed.

Recommended Reading Strategy

Readers seeking a rapid overview should read this Executive Summary, the opening synthesis for each section, and Section 6. Producers may wish to focus on Sections 1 and 2; planners on Sections 4–6; and consumers and food-access organizations on Sections 3–5.

What Montgomery County Should Watch

Seasonal moisture. Drought intensity, groundwater and stream conditions, planting delays, irrigation demand, and periods of excessive rainfall.

Temperature extremes. Heat waves during pollination and harvest, warm winters followed by late freezes, and heat stress affecting farm labor and livestock.

Farm input prices. Nitrogen and phosphate fertilizer, diesel, feed, seed, equipment, utilities, interest rates, and insurance.

Regional crop conditions. Fruit and vegetable production in Maryland, Pennsylvania, New Jersey, Delaware, Virginia, and the Southeast; grains and feed in the Midwest.

Farm viability. Unplanted acreage, emergency-loan applications, producer exits, succession problems, and reductions in labor or capital investment.

Distribution capacity. Cold storage, trucking, river and rail disruptions, wholesale-market conditions, and backup power for refrigeration.

Household and institutional stress. Food-bank demand, school and hospital purchasing costs, retail price changes, and shortages of particular fresh or staple foods.

Response capacity. Availability of emergency grants, crop insurance, technical assistance, mutual aid, public communication, and procurement flexibility.

These indicators should be reviewed together. A moderate drought may be manageable in a year of low input costs and strong inventories; the same drought can become far more disruptive when fertilizer, fuel, credit, and transportation costs are already elevated.

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1. Confirmed Impacts on Mid-Atlantic Agriculture

Recent reporting and official assessments show that Mid-Atlantic producers are already contending with drought, excessive heat, intense rainfall, late freezes, hurricanes, and coastal salinization. These events affect field crops, fruits, vegetables, pasture, livestock, and farm infrastructure. The most important local pattern is not one single hazard, but rapid alternation between too dry, too wet, too hot, and unexpectedly cold conditions.

2026-06-16 — USDA approves disaster declaration for Maryland farms over late spring freeze

Maryland Matters. Read the source

A late-April freeze caused extraordinary losses in Maryland orchards. Preliminary Farm Service Agency reports cited losses of up to 94% of apples, 99% of peaches, and 98% of wine grapes in affected areas, prompting a federal disaster designation and access to emergency assistance.

Why it matters here: Montgomery County has orchards, vineyards, vegetable farms, nurseries, and diversified operations that are vulnerable when warm early-season conditions are followed by a damaging freeze. The event also illustrates how climate variability can undermine high-value crops in a matter of hours.

Stressors: Freeze • Fruit • Farm income • Disaster assistance

2026-06-09 — Flower farm turns to climate-smart solutions amid changing weather

Montgomery Community Media. Read the source

A Montgomery County flower and vegetable farm installed rainwater storage and solar-powered irrigation to cope with unpredictable weather and rising operating costs. The farm nevertheless suffered losses during the late-April freeze, showing both the value and limits of farm-level adaptation.

Why it matters here: This is a direct Montgomery County example of producers investing in resilience while remaining exposed to weather extremes. It supports local programs for water storage, efficient irrigation, renewable energy, and flexible emergency assistance.

Stressors: Montgomery County • Water • Freeze • Adaptation

2026-04-28 — Spring drought conditions in southcentral and eastern Pennsylvania

Penn State Extension. Read the source

Penn State Extension reported drought concerns in southcentral and eastern Pennsylvania during spring 2026. Dry soils and low moisture reserves threatened crop establishment and placed pressure on forage and livestock systems.

Why it matters here: Pennsylvania is a major supplier of dairy, livestock products, mushrooms, grains, and produce to the Washington-Baltimore region. Drought just north of Maryland can affect both regional production and feed availability.

Stressors: Drought • Pennsylvania • Forage • Regional supply

2025-09-02 — 2025 Crop Conditions Tour Summary

Penn State Extension. Read the source

Penn State agronomists found highly uneven conditions: some areas received extreme rainfall over a few days while others received almost none. Such variability complicated crop management and created sharply different yield prospects even within the same state.

Why it matters here: This “too much and too little” pattern is increasingly familiar in the Mid-Atlantic and is difficult to manage with conventional planting calendars and infrastructure.

Stressors: Extreme rainfall • Dry spells • Pennsylvania • Yield variability

2025-06-19 — What's the Deal with the Drought?

Rutgers Cooperative Extension. Read the source

Rutgers reported that New Jersey experienced a record-setting drought in fall 2024, including the driest October in records dating to 1895. The drought persisted into 2025, affecting soil moisture and water supplies.

Why it matters here: New Jersey is an important nearby source of vegetables, fruit, and nursery products. Its sandy soils and specialty-crop economy make drought there relevant to Mid-Atlantic produce supply and prices.

Stressors: Drought • New Jersey • Specialty crops • Water

2025-05-05 — Dangers of a Drought

Chesapeake Bay Foundation. Read the source

The Chesapeake Bay Foundation noted that most of Maryland was in extreme drought in spring 2025 and that nearly the entire state had been at least abnormally dry since fall 2024. The article linked drought to ecological stress and water-management concerns across the watershed.

Why it matters here: Long-duration drought affects wells, streams, irrigation, pasture, planting decisions, and the ecological systems on which farms depend.

Stressors: Maryland • Drought • Water supply • Chesapeake

2025-04-17 — Building Drought Early Warning Capacity in the Mid-Atlantic

NOAA/NIDIS. Read the source

NOAA reported that heat and lack of rainfall produced widespread drought across Delaware, Maryland, New Jersey, Pennsylvania, Virginia, West Virginia, and the District of Columbia in 2024. In some locations it was the worst drought in more than two decades.

Why it matters here: This region-wide event demonstrates that Montgomery County cannot assume neighboring areas will compensate when local production falls; the same hazard can affect much of the regional foodshed simultaneously.

Stressors: Regional drought • Heat • Early warning • Mid-Atlantic

2024-08-09 — Crop Viability At Risk Amid Drought Conditions

Montgomery Community Media. Read the source

Montgomery County farmers reported serious drought damage during the 2024 growing season. One apparently normal cornfield represented an estimated $400,000 loss because kernels failed to develop sufficiently for market.

Why it matters here: The story provides unusually concrete local evidence that visual impressions can understate economic loss and that crop insurance and emergency support are central to farm survival.

Stressors: Montgomery County • Corn • Drought • Economic loss

2024-07-17 — Managing Crops During a Severe Drought: Q and A

Penn State Extension. Read the source

Penn State specialists described how drought and high temperatures affect corn, soybeans, small grains, forage, and other field crops, and advised producers on harvest, feed, and crop-management decisions.

Why it matters here: The guidance is directly applicable to Maryland's similar cropping systems and underscores the cascading effects of drought on both crops and livestock feed.

Stressors: Drought • Heat • Field crops • Feed

2024-02-16 — More than 60 Virginia localities eligible for USDA emergency loans after drought

Virginia Department of Agriculture and Consumer Services. Read the source

USDA disaster designations covered 23 primary Virginia localities and 39 contiguous localities following widespread 2023 drought impacts. Eligible farmers could apply for emergency loans through the Farm Service Agency.

Why it matters here: Virginia is part of Montgomery County's broader regional foodshed. Repeated disaster assistance across adjoining states signals systemic rather than isolated production risk.

Stressors: Virginia • Drought • Farm finance • Disaster

Undated; current project — Coastal Farming Challenges: Flooding, Salt, and Land Loss

Maryland Sea Grant. Read the source

Maryland Sea Grant documents how coastal flooding and saltier soils are reducing the productivity of farms and woodlands in Maryland and Virginia. Producers face difficult choices about drainage, crop selection, land use, and eventual retreat.

Why it matters here: Although Montgomery County is inland, Eastern Shore agriculture supplies the state and supports poultry, grain, vegetables, and processing. Coastal land loss reduces Maryland's total productive capacity and can shift demand onto other farmland.

Stressors: Flooding • Salinity • Eastern Shore • Land loss

2. Rising Costs and Vulnerability of Agricultural Inputs

Montgomery County producers operate within national and global markets for fertilizer, diesel, machinery, feed, credit, seed, and crop-protection products. Even farms that sell locally remain exposed to global energy and trade shocks. These pressures can reduce planted acreage, delay investment, raise retail prices, and make small and diversified farms especially vulnerable.

2026-04-09 — Rising fuel and fertilizer costs are hitting U.S. producers differently, with smaller operations feeling the squeeze

Brownfield Ag News. Read the source

Brownfield reported a national diesel average of $5.68 per gallon and warned that producers who had not locked in inputs faced much higher-than-expected costs. Smaller operations were described as particularly exposed because they have less purchasing power and fewer ways to spread costs.

Why it matters here: Montgomery County's diversified and direct-market farms often operate at small or moderate scale. Fuel and fertilizer shocks can quickly erase margins and raise the cost of local food.

Stressors: Diesel • Fertilizer • Small farms • Operating costs

2026-03-18 — Maryland farmers face spiking fertilizer costs from Iran war

The Banner. Read the source

Maryland farmers reported sharp increases in nitrogen fertilizer costs, including liquid urea rising from roughly $350 to $450 per ton. The increase arrived near planting season, when farmers had limited ability to delay purchases.

Why it matters here: This is direct evidence that Maryland agriculture is exposed to distant geopolitical events through fertilizer markets. The result can be reduced application, lower yields, or higher prices.

Stressors: Maryland • Fertilizer • Natural gas • Geopolitics

2026-02-02 — 2026 Field Crop Budgets

University of Maryland Extension. Read the source

University of Maryland Extension estimated 2026 production costs per acre at about $675 for no-till corn, $747 for conventional corn, $439 for soybeans, $497 for wheat, and $744 for a wheat-soybean double-crop system, all above 2025 estimates.

Why it matters here: These budgets show the scale of capital at risk before a crop is harvested. Weather losses and input-price spikes are magnified when baseline costs are already high.

Stressors: Maryland • Cost of production • Corn • Soybeans

2026-05-07 — Diesel prices squeeze US farmers 'barely getting by' amid tariffs and drought

The Guardian. Read the source

The article described diesel prices approaching $5–$6 per gallon in some areas while farmers also faced drought, tariffs, and higher fertilizer costs. Producers reported cutting expenses and reconsidering planting and equipment decisions.

Why it matters here: Fuel powers field work, refrigeration, delivery trucks, and regional distribution. Higher diesel costs affect both farm viability and the price of moving food into Montgomery County.

Stressors: Diesel • Tariffs • Drought • Margins

2026-06-01 — The Iran war is jacking up fertilizer prices and forcing farmers to make tough calls

MarketWatch. Read the source

MarketWatch reported fertilizer increases exceeding 60% for some producers and described farmers substituting manure, reducing applications, cutting labor, and delaying investment. A New Jersey farmer said fertilizer expenses had more than doubled.

Why it matters here: The New Jersey example is particularly relevant to the Mid-Atlantic specialty-crop sector. When producers reduce fertilizer or labor, impacts can appear later as lower yields, quality problems, or reduced acreage.

Stressors: Fertilizer • New Jersey • Labor • Yield risk

2026-03-25 — American farmers struggle with higher prices from Iran war, tariffs: 'Double whammy'

New York Post. Read the source

The report described simultaneous increases in fertilizer, diesel, and feed costs alongside weaker export markets. Some producers considered leaving acreage unplanted, while livestock producers faced rising feed expenses.

Why it matters here: The combination matters more than any one price increase. Compound economic stress can reduce regional supply and accelerate farm exits.

Stressors: Fertilizer • Diesel • Feed • Farm exits

2026-04-07 — Epic winter drought creates a bleak situation for farmers — and your food

The Washington Post. Read the source

The Washington Post linked widespread U.S. drought and heat with rising beef prices, reduced cattle numbers, irrigation concerns, and higher fertilizer and fuel costs. It warned that prolonged stress could reshape production and food availability.

Why it matters here: Montgomery County consumers depend on national cattle, grain, and produce systems. Rising input costs amplify climate-related shortages and transmit them rapidly through grocery prices.

Stressors: National supply • Beef • Irrigation • Food prices

2026-03-09 — Brazil farmers face diesel cost jump as Middle East conflict lifts oil prices

Reuters. Read the source

Reuters reported that higher oil prices sharply increased diesel costs during Brazil’s soybean harvest and corn planting season. Because Brazil is a leading soybean and corn exporter, operational disruption there can affect global feed and commodity markets.

Why it matters here: Maryland livestock and poultry systems are sensitive to feed prices. Global diesel shocks can reach Montgomery County indirectly through grain, meat, dairy, and processed-food prices.

Stressors: Diesel • Brazil • Feed grains • Global markets

Current survey — Farm Bureau survey reveals real impact of fertilizer availability and price

American Farm Bureau Federation. Read the source

A Farm Bureau survey found fertilizer affordability especially difficult in the South and Northeast, with roughly 70% of respondents unable to afford all the fertilizer they needed. It also reported a 46% increase in farm diesel prices over a short period.

Why it matters here: The Northeast finding directly includes the Mid-Atlantic context. Affordability constraints may reduce yield even when fertilizer remains physically available.

Stressors: Fertilizer • Diesel • Northeast • Affordability

3. Seriously Threatened Producing Regions That Supply the Mid-Atlantic

Montgomery County does not feed itself. Its consumers depend heavily on food produced elsewhere, including vegetables and fruit from the Southeast, West, and New Jersey; grains and feed from the Midwest; dairy and livestock products from Pennsylvania and the broader region; and imports moving through national distribution systems. Stress in these supplying regions can reach local shelves through higher prices, reduced availability, and lower quality.

2026-07-08 — Specialty farmers adapt harvests, protect crops in face of extreme heat

Associated Press. Read the source

AP described small fruit, vegetable, and flower farms coping with heat domes, drought, flooding, pests, and shortened harvest windows. Farmers shifted work hours, added shade and ventilation, and relied on crop diversity and community-supported agriculture.

Why it matters here: Montgomery County's direct-market growers face similar labor, crop-quality, and insurance challenges. The article also shows that diversified farms can be resilient but are not immune to extreme heat.

Stressors: Specialty crops • Heat • Small farms • Insurance

2026-04-07 — Epic winter drought creates a bleak situation for farmers — and your food

The Washington Post. Read the source

Nearly 60% of the United States was reported in drought at the end of March, affecting winter wheat, cattle pasture, rice, peanuts, and irrigated produce. The article connected these stresses to beef and grocery prices.

Why it matters here: The breadth of the drought means consumers cannot count on one producing region to offset another. Montgomery County's food system is exposed through national wholesalers and supermarkets.

Stressors: Breadbaskets • Drought • Cattle • Produce

2026-06-23 — 2026 Wheat Tour Predicts Low Yields and Vom [vomitoxin contamination]

Penn State Extension. Read the source

Penn State's wheat tour anticipated low yields in 2026, although grain quality looked better than in the wetter 2025 season. The assessment demonstrates how both dry and wet conditions can create different but serious production problems.

Why it matters here: Pennsylvania wheat and feed grains contribute to regional supply. Variable yields can affect flour, feed, and farm profitability across the Mid-Atlantic.

Stressors: Pennsylvania • Wheat • Yield • Weather variability

2025-07-30 — Virginia announces recovery grants for farmers hit by Hurricane Helene

WJLA/7News. Read the source

Virginia created a recovery grant program for farmers and forest landowners who suffered commodity and infrastructure losses from Hurricane Helene. The program reflected the scale of damage across southwestern Virginia.

Why it matters here: Virginia supplies livestock, produce, apples, grains, and other foods to the regional market. Storm damage can remove both current production and future capacity by damaging land and infrastructure.

Stressors: Virginia • Hurricane • Infrastructure • Recovery

2025-03-31 — New Jersey counties eligible for emergency loans

Rutgers Cooperative Extension. Read the source

USDA designated multiple southern New Jersey counties for emergency assistance after drought beginning in 2024; adjacent counties were also eligible because of drought and excessive heat in Delaware.

Why it matters here: Southern New Jersey and Delaware are important vegetable and fruit producing areas close to Montgomery County. Simultaneous drought across the Delmarva-New Jersey corridor threatens nearby seasonal supply.

Stressors: New Jersey • Delaware • Drought • Emergency loans

2025-08-13 — State of the Climate: New Jersey 2024

New Jersey Climate Change Resource Center. Read the source

The state climate report found that 2024 was unusually warm and that drought developed during the second half of the year. It also reviewed projections for more extreme heat, intense rainfall, and drought risk.

Why it matters here: New Jersey's specialty-crop sector is among the nearest major sources of produce for the Washington-Baltimore market. Its climate trajectory is a useful analogue for Maryland.

Stressors: New Jersey • Climate trend • Drought • Heat

2026-05-12 — State of the Climate: New Jersey 2025

New Jersey Climate Change Resource Center. Read the source

New Jersey's 2025 precipitation was about 8.8 inches below average, and much of the state remained under drought watch or warning through the year and into 2026.

Why it matters here: Multi-year moisture deficits can affect groundwater, irrigation reliability, perennial crops, and farmer investment, with consequences for regional produce supply.

Stressors: New Jersey • Multi-year drought • Groundwater • Produce

4. Disruptions to Supply, Distribution, and Farm Viability

Climate shocks do not stop at the farm gate. They damage roads, rail lines, rivers, ports, storage facilities, power systems, and processing capacity. At the same time, thin farm margins and inadequate insurance can drive producers out of business. For Montgomery County planners, preserving farmland without preserving viable farm businesses and regional infrastructure is not enough.

2026-04-07 — Epic winter drought creates a bleak situation for farmers — and your food

The Washington Post. Read the source

The article described reduced cattle inventories, impaired pasture, water shortages, and risks to irrigated vegetables, while noting that higher fuel and fertilizer prices compound weather losses.

Why it matters here: A supply disruption can be biological, logistical, or financial. Montgomery County emergency planning should track all three rather than focusing only on physical food stocks.

Stressors: Supply • Cattle • Vegetables • Prices

2026-05-07 — Diesel prices squeeze US farmers 'barely getting by' amid tariffs and drought

The Guardian. Read the source

Farmers described operating with extremely thin margins as diesel and fertilizer costs rose. Some delayed work, cut spending, or questioned whether continuing to farm was financially possible.

Why it matters here: Loss of producers is a long-term supply disruption. Once land, skills, equipment, and market relationships disappear, rebuilding capacity is difficult and slow.

Stressors: Farm viability • Diesel • Margins • Capacity loss

2025-07-30 — Virginia recovery grants address Hurricane Helene agricultural losses

Virginia Department of Agriculture and Consumer Services. Read the source

Virginia's recovery program provided direct aid to producers and timber owners in 27 localities affected by Hurricane Helene. Covered losses included commodities and farm infrastructure.

Why it matters here: Regional resilience requires disaster finance that restores production quickly, not merely compensation years later. Montgomery County should pre-plan local recovery mechanisms.

Stressors: Disaster finance • Infrastructure • Virginia • Recovery

2024-12-19 — American Relief Act provides agricultural disaster and economic assistance

U.S. Congress / WJLA document archive. Read the source

Federal legislation authorized billions of dollars for crop, livestock, and infrastructure losses from drought, flood, hurricanes, wildfire, excessive heat, freeze, and other disasters in 2023–2024. It also recognized cases where expected crop returns fell below production costs.

Why it matters here: The scale of federal relief indicates that weather and economic losses are no longer exceptional. Local planners should assume periodic disruptions and design complementary county-level support.

Stressors: Federal relief • Disasters • Production costs • Policy

2025-04-17 — Building Drought Early Warning Capacity in the Mid-Atlantic

NOAA/NIDIS. Read the source

NOAA described efforts to improve drought monitoring and communication after the severe 2024 Mid-Atlantic drought. The initiative aims to help agriculture, utilities, and other sectors act earlier.

Why it matters here: Montgomery County could connect agricultural producers, water utilities, emergency management, and food-system organizations to a shared early-warning protocol.

Stressors: Early warning • Drought • Coordination • Planning

2025-07-25 — Farm Production Expenditures 2024 Summary

USDA National Agricultural Statistics Service. Read the source

USDA's annual summary documents the broad range of farm expenses, including feed, fertilizer, fuel, labor, repairs, transportation, utilities, insurance, and financing. These costs collectively shape whether farms remain viable.

Why it matters here: A local-food strategy must address business economics and infrastructure, not only access to land. High fixed and variable costs can prevent new growers from entering and established farms from surviving.

Stressors: Farm expenditures • Business viability • Transportation • Insurance

5. Anticipated Near- and Medium-Term Effects on Food Supply

Regional assessments project more hot days, heavier downpours, greater summer soil-moisture deficits, stronger rain-producing storms, and continued sea-level rise. These trends increase the likelihood of simultaneous disruptions to production and distribution. The likely local effects are greater price volatility, more variable seasonal supply, higher public costs, and increased pressure on food-assistance organizations.

2026-02-11 — Climate, Extreme Weather, and New Jersey Agriculture

Rutgers / New Jersey Climate Change Resource Center. Read the source

Rutgers summarized projected agricultural conditions: more hot days, fewer cold days, heavier intense rainfall, reduced summer soil moisture, stronger and wetter hurricanes, and a longer severe-thunderstorm season.

Why it matters here: These projections closely match Maryland's climate setting. They imply greater need for irrigation, drainage, heat protection, soil organic matter, protected cultivation, and flexible planting schedules.

Stressors: Projection • Heat • Heavy rain • Soil moisture

2025-04-17 — Building Drought Early Warning Capacity in the Mid-Atlantic

NOAA/NIDIS. Read the source

NOAA's assessment concluded that the 2024–2025 drought caused significant impacts across agriculture, water utilities, public health, and managed landscapes. The event exposed gaps in preparedness and communication.

Why it matters here: Food resilience planning should be integrated with water planning, public health, and emergency management because the same drought affects all of them simultaneously.

Stressors: Compound impacts • Drought • Water utilities • Public health

2026-05-12 — State of the Climate: New Jersey 2025

New Jersey Climate Change Resource Center. Read the source

The report documents continued drought warnings and a substantial annual precipitation deficit, while placing these events in a longer warming trend.

Why it matters here: Repeated dry years increase the probability that temporary adaptations become permanent costs and that marginal farms leave production.

Stressors: Climate trend • Drought • Farm exits • Water

Undated; current project — Coastal Farming Challenges: Flooding, Salt, and Land Loss

Maryland Sea Grant. Read the source

Research with Maryland and Virginia landowners shows that flooding and salinity are already changing land-management decisions. Some land may transition away from conventional agriculture.

Why it matters here: Loss of productive coastal acreage increases the value of protecting and productively using inland farmland, including Montgomery County's Agricultural Reserve.

Stressors: Sea-level rise • Salinity • Land capacity • Maryland

2026-06-16 — USDA approves disaster declaration for Maryland farms over late spring freeze

Maryland Matters. Read the source

The near-total losses reported for some fruit crops show the vulnerability of perennial and high-value agriculture to a single poorly timed event. Recovery can take longer than one season because orchards and vineyards require long-term investment.

Why it matters here: The county should treat crop diversity, protected growing, insurance access, and emergency grants as components of critical economic resilience.

Stressors: Fruit • Freeze • Perennial crops • Recovery

6. Implications and Priority Actions for Montgomery County

The evidence supports a resilience strategy that combines protection of existing farms with expansion of diversified local production, water security, regional processing and distribution, emergency planning, and stronger markets for local growers. The aim is not self-sufficiency. It is to reduce avoidable exposure and build enough redundancy to function during recurrent disruptions.

What the evidence suggests

Montgomery County should plan for recurrent disruption rather than a single catastrophic scenario. The most credible risk is a sequence of smaller and medium-sized shocks—drought, freeze, high input costs, transportation problems, and price spikes—that compound over time and disproportionately affect low-income households and financially fragile farms.

The appropriate objective is not county self-sufficiency. It is a more diverse and redundant foodshed in which local production, regional suppliers, national distribution, institutional purchasing, emergency food providers, and household preparedness reinforce one another.

Priority actions

Create a county food-system risk and resilience plan. Assign responsibility for regular assessment of production, water, farm economics, processing, distribution, institutional procurement, emergency food, and vulnerable populations. Integrate this work with emergency management and climate adaptation.

Protect productive land and increase its productive use. Continue farmland preservation while addressing access, affordability, succession, leasing, and infrastructure. Identify public, institutional, and faith-community land suitable for incubator farms, community production, and training.

Invest in farm water security. Expand cost sharing and technical assistance for ponds, cisterns, rainwater harvesting, efficient irrigation, soil-water retention, drainage, and backup power. Coordinate agricultural drought communication with WSSC Water, municipalities, and emergency management.

Strengthen diversified table-crop production. Support incubator farms, shared equipment, high tunnels, wash-pack facilities, cold storage, aggregation, food hubs, and market development. Give particular attention to growers serving low-income communities and culturally important markets.

Build reliable local and institutional markets. Use county purchasing, schools, colleges, hospitals, senior programs, and food-assistance organizations to create predictable demand. Develop realistic procurement standards that smaller farms can meet through aggregation and shared logistics.

Improve farmer risk management. Expand outreach on crop insurance and noninsured crop disaster assistance, while recognizing that existing products may not fit diversified farms. Explore county emergency grants, revolving funds, and rapid bridge financing after declared events.

Track input and supply-chain exposure. Monitor fertilizer, fuel, feed, transportation, and wholesale-market indicators. Establish trigger points for outreach to farmers, food banks, schools, and emergency planners when costs or availability change rapidly.

Preserve and develop people and skills. Support farmer training, apprenticeships, mentorship, business planning, bilingual technical assistance, and land-access pathways. The loss of experienced producers is an infrastructure loss.

Prepare consumers without creating alarm. Provide practical information on seasonal purchasing, local farm markets, household food planning, community-supported agriculture, and emergency reserves. Frame resilience as prudent preparation and community investment.

Create a Mid-Atlantic foodshed partnership. Coordinate with neighboring counties, Maryland agencies, Washington, D.C., and organizations in Pennsylvania, Virginia, Delaware, and New Jersey on production data, procurement, logistics, and mutual aid.

Suggested indicators

- Acres in active table-crop production and acres available to new producers
- Number and financial health of farms selling into local and regional markets
- Irrigated acreage, on-farm water-storage capacity, and drought contingency coverage
- Local aggregation, cold-storage, processing, and refrigerated-transport capacity
- Share of county and institutional food purchases sourced from the Mid-Atlantic
- Participation in crop insurance and disaster-assistance programs
- Food-bank purchasing costs, client demand, and days of reserve inventory
- Wholesale and retail price volatility for selected staple and fresh-food categories
- Farmer age, succession status, training participation, and new-farmer retention

Appendix A. A Montgomery County Resilience Agenda

The following phased agenda translates the report's evidence into an implementable local program.

Within 12 months

- Formally empower the Office of Food Systems Resilience to coordinate countywide food-system resilience across departments. Create a Food System Resilience Coordinating Committee, chaired by OFSR.
- Create a producer advisory group representing commodity, livestock, specialty-crop, urban, immigrant, and beginning farmers.
- Map existing production, irrigation, storage, processing, food hubs, institutional buyers, food assistance, and critical transportation links.
- Establish a seasonal drought and extreme-weather briefing for producers and food-system organizations.
- Identify immediate grant and procurement opportunities for water storage, cold storage, high tunnels, and shared equipment.

Within 1–3 years

- Launch or expand an incubator farm and coordinated farmer-training pathway.
- Develop aggregation and refrigerated distribution capacity serving small and medium farms.
- Set attainable county and institutional local-purchasing targets.
- Create rapid-response financial assistance for farm losses not adequately covered by federal programs.
- Develop mutual-aid agreements with regional food hubs and neighboring jurisdictions.

Within 3–7 years

- Increase the share and diversity of food grown for regional human consumption.
- Establish permanent funding for agricultural adaptation and food-system infrastructure.
- Integrate food resilience into land-use, water, climate, public-health, and emergency plans.
- Measure progress annually and publish a public Montgomery County Food Resilience Dashboard.

Appendix B. Source Notes and Limitations

This document is a curated evidence brief, not a statistical meta-analysis. The inclusion of multiple stories does not by itself establish a quantified trend; the report uses authoritative regional assessments to provide context for individual events.

News coverage is uneven. Some counties, crops, and farm types receive more attention than others. Loss estimates are often preliminary and may change. Official disaster designations indicate eligibility for assistance, not necessarily that every farm in a designated area suffered the same damage.

Links were active during preparation. Publishers may later move articles, impose subscription requirements, or change access. Headlines and summaries should be rechecked before quotation in formal testimony or legal documents.

The report intentionally excludes many severe global food-system stories that have no clear pathway to Mid-Atlantic production or supply. Global events were included only when they materially affect fertilizer, fuel, feed, commodity markets, or foods commonly consumed in Montgomery County.

The report should be updated at least annually and after major regional events. A future edition could add county-level production data, crop-loss and insurance data, wholesale-price indicators, maps of infrastructure, and interviews with Montgomery County producers and food distributors.

Closing observation

Montgomery County possesses unusual assets: a nationally significant Agricultural Reserve, strong public institutions, a large and diverse consumer market, extensive civic capacity, and proximity to multiple producing regions. The evidence in this report argues for using those assets now—not because distant food supplies will disappear, but because a more productive, connected, and adaptive regional food system is a prudent response to increasingly variable conditions.

Appendix C

New Developments Since the July 12, 2026 Edition

(Updated 2026-08-06)

I. Confirmed Impacts on Agriculture

NEW — 2026-08-06

Strong El Niño Expected to Push Millions More Into Food Insecurity

Source: Reuters

Article

https://www.reuters.com/sustainability/strong-el-nino-rising-food-insecurity-2026-08-06/ (Reuters)

Summary

The World Food Programme warns that a strengthening El Niño, combined with conflict and high input costs, could push an additional **49 million people** into acute food insecurity by the end of 2027. The article highlights deteriorating cereal harvests in several regions and warns of continued upward pressure on food prices.

Why it matters to Montgomery County

Much of Montgomery County's food originates outside Maryland. Large-scale global disruptions increase price volatility for imported grains, fruits, vegetables, and processed foods that local consumers rely upon. (Reuters)

NEW — 2026-07-31

Farmers Across Europe Say Climate Impacts Are Accelerating Faster Than Adaptation

Source: The Guardian

Article

https://www.theguardian.com/environment/2026/jul/31/speed-of-climate-crisis-devastating-crops-say-farmers (The Guardian)

Summary

Farmers in the United Kingdom, France, and elsewhere describe repeated heat waves, drought, and water shortages that are reducing yields and making irrigation increasingly difficult. Many report that climate conditions are changing more rapidly than farms can adapt.

Why it matters

Europe is an important supplier of specialty foods, wine, fruits, vegetables, and seed stock used throughout the United States. Persistent production problems contribute to price increases and supply uncertainty. (The Guardian)

II. Mid-Atlantic Conditions

NEW — 2026-07-16

Mid-Atlantic Drought Update

Source: U.S. Drought.gov

Article

https://www.drought.gov/drought-status-updates/drought-status-update-mid-atlantic-2026-07-16 (Drought.gov)

Summary

Although early July storms brought localized relief, nearly half of the Mid-Atlantic remained abnormally dry or in drought. The report notes crop stress, low groundwater, reduced streamflow, dry wells, water restrictions, and expanding severe drought in parts of Maryland, Virginia, Delaware, and New Jersey. Farmers in Delaware reported relying heavily on irrigation, and examples of crop loss were documented in **Frederick County, Maryland**. (Drought.gov)

Why it matters

This is among the most directly relevant updates for Montgomery County. It shows that drought impacts are not confined to the western United States—they are affecting the broader Mid-Atlantic foodshed on which the county depends. (Drought.gov)

III. Agricultural Inputs

NEW — 2026-08-05

FAO Warns World Faces Another Food Price Surge

Source: Reuters

Article

https://www.reuters.com/world/middle-east/world-faces-fresh-food-price-surge-fao-warns-2026-08-05/ (Reuters)

Summary

FAO warns that higher oil prices, fertilizer shortages, diesel costs, conflict, and weather-related production losses are likely to push food prices upward later in 2026 and into 2027. Farmers in several countries are already shifting away from fertilizer-intensive crops because of input costs. (Reuters)

Why it matters

Maryland farmers face many of the same input markets. Even when local weather is favorable, higher fertilizer and diesel costs can reduce profitability and increase food prices. (Reuters)

IV. Supply Chains

NEW — 2026-07-31

El Niño Expected to Compound Existing Supply Chain Pressures

Source: Reuters

Article

https://www.reuters.com/sustainability/climate-focus-counting-el-ninos-costs-around-world-2026-07-31/ (Reuters)

Summary

Reuters reviews how El Niño is expected to affect agricultural production across Latin America, Africa, Asia, and Europe while interacting with ongoing disruptions to fertilizer and energy supplies. The article emphasizes that overlapping shocks—not individual disasters—pose the greatest risk to food systems. (Reuters)

Why it matters

This reinforces one of the report's central themes: Montgomery County's food system is exposed not only to local weather but also to disruptions occurring simultaneously in multiple producing regions. (Reuters)

V. Extreme Weather

NEW — 2026-07-17

Smoke, Fire, and Floods Strike Different Parts of the United States Simultaneously

Source: Reuters

Article

https://www.investing.com/news/world-news/smoke-fire-floods-us-faces-triple-extreme-summer-weather-threats-4798952 (Investing.com)

Summary

Reuters reports concurrent wildfire smoke across the eastern United States, severe flooding in Texas, and expanding wildfires in the Pacific Northwest. The story illustrates how multiple climate-related hazards are occurring at the same time across different regions of the country.

Why it matters

Simultaneous disruptions reduce the nation's ability to shift production or transportation from one region to another, increasing risks to agricultural supply chains and emergency response capacity. (Investing.com)

VI. Emerging Pattern

Compared with the version of the report completed about a month ago, several themes have become more pronounced:

- **NEW:** Greater emphasis by the FAO and WFP on the interaction of climate, conflict, energy, and fertilizer constraints rather than viewing these as separate issues. (Reuters)
- **NEW:** More evidence that the Mid-Atlantic itself is experiencing meaningful agricultural stress, including crop losses and groundwater depletion. (Drought.gov)
- **NEW:** Continued warnings that food price increases lag production and input shocks by several months, suggesting additional price pressures later in 2026. (Reuters)
- **NEW:** Increasing recognition that compound events—heat, drought, floods, wildfire smoke, supply-chain disruption, and input shortages occurring simultaneously—represent a more significant threat than any single event alone. (Reuters)

VII. Food Safety and Produce Supply

NEW — 2026-08-06

Cyclospora Outbreak Expands to 15 States; Iceberg Lettuce Implicated

Source: Associated Press

Article

https://apnews.com/article/4756baaeb23a5f222a01ab43c89b3485

Summary

The CDC reports that a major multistate outbreak of **cyclosporiasis** linked to iceberg lettuce has expanded to **15 states**. Investigators have linked the outbreak to lettuce supplied through Taylor Farms de Mexico, prompting recalls and continued traceback investigations. Cyclospora is a microscopic parasite that causes prolonged gastrointestinal illness, and the outbreak has become one of the largest foodborne produce investigations in recent years. (AP News)

Why it matters for Montgomery County

Montgomery County imports a substantial share of its fresh produce from national distribution networks. Large multistate recalls can temporarily reduce availability, increase prices, and undermine consumer confidence in fresh vegetables. The outbreak also illustrates the dependence of Mid-Atlantic consumers on produce grown and processed far from the region.

NEW — 2026-07-24

FDA Expands Cyclospora Investigation to Nine States

Source: U.S. Food and Drug Administration

Article

https://www.fda.gov/food/outbreaks-foodborne-illness/investigation-9-state-outbreak-cyclospora-illnesses-iceberg-lettuce-july-2026

Summary

FDA expanded its investigation after additional epidemiological and traceback evidence linked shredded iceberg lettuce from central Mexico to illnesses in **nine states**. Nearly **2,000 confirmed illnesses** and almost **100 hospitalizations** had been identified within the investigated outbreak, and officials cautioned that case counts would likely continue to rise because of reporting delays. (U.S. Food and Drug Administration)

Why it matters

The event demonstrates how rapidly a single point of contamination can affect consumers across multiple states through centralized produce distribution systems.

NEW — 2026-08-05

Salmonella Outbreak Linked to Imported Jalapeño Peppers Sickens Hundreds

Source: Reuters

Article

https://www.reuters.com/business/healthcare-pharmaceuticals/cdc-says-345-sickened-salmonella-outbreak-tied-jalapeno-peppers-2026-08-05/

Summary

CDC and FDA linked a multistate **Salmonella** outbreak affecting **345 people in 27 states** to jalapeño peppers imported from Mexico. The peppers were distributed through Coast Citrus Distributors, resulting in recalls and supply changes by restaurant chains including Chipotle and QDOBA. (Reuters)

Why it matters for Montgomery County

This outbreak illustrates how quickly imported produce can affect restaurants and consumers throughout the United States. It also demonstrates the economic ripple effects of recalls on distributors, restaurants, and growers.

NEW — 2026-07-16

FDA Opens Investigation into Cyclospora Outbreak Linked to Shredded Iceberg Lettuce

Source: U.S. Food and Drug Administration

Article

https://www.fda.gov/food/outbreaks-foodborne-illness/investigation-5-state-outbreak-cyclospora-illnesses-iceberg-lettuce-july-2026

Summary

FDA and CDC initially identified a five-state outbreak associated with shredded iceberg lettuce served at Taco Bell restaurants. Epidemiological evidence quickly converged on a common supplier, leading to traceback investigations and eventual recalls. (U.S. Food and Drug Administration)

Why it matters

The speed with which investigators identified a common supply source demonstrates both the strengths of modern outbreak surveillance and the vulnerability created by highly centralized produce supply chains.

Emerging Pattern

Although these outbreaks are different from droughts or floods, they reinforce another important aspect of food-system resilience:

- **NEW:** Fresh produce supply chains are increasingly interconnected, allowing contamination events to spread rapidly across many states. (AP News)
- **NEW:** Imported fresh produce remains an important source of seasonal fruits and vegetables for Mid-Atlantic consumers, increasing the importance of strong traceback systems and diversified sourcing. (U.S. Food and Drug Administration)
- **NEW:** Food safety events can temporarily shift consumer demand toward locally grown produce, particularly when shoppers have confidence in local growers and direct-market sales. (Axios)

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