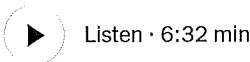


Most People Don't Think About Culverts. Their Failure Can Be Deadly.

Scientists simulated what happens when the pipes and tunnels that divert rainwater fail. In one scenario, 30 percent of local residents couldn't reach an E.R.



By Alexander Nazaryan
Published Sept. 13, 2026 Updated Sept. 15, 2026

Sign up for Science Times Get stories that capture the wonders of nature, the cosmos and the human body. [Get it sent to your inbox.](#)

Culverts aren't nearly as inspiring as bridges. Looking for the Golden Gate Culvert? Well, it doesn't exist. Neither do any romances about the culverts of Madison County, or tender folk songs about culverts over troubled water. These utilitarian tunnels or pipes that divert or direct streams and storm runoff under roadways don't enjoy much public affection.

But if a culvert doesn't do its job, it can mean catastrophe: Failed culverts leave people stranded and cut off from emergency services. And failures are looking more likely. Almost two-thirds of the nation's six million culverts "were built to standards insufficient for today's storms," according to Headwaters Economics, a nonprofit research organization.

That's why Jessica Boakye, an assistant professor of civil and environmental engineering at the University of Massachusetts at Amherst, decided to undertake an unusually thorough case study of simulated culvert failures, the results of which were recently published in the journal Risk Analysis.

Dr. Boakye and her co-authors studied a section of Franklin County, in western Massachusetts, called the Deerfield River watershed, which has 783 culverts, 1,350 miles of road and a single hospital.

She created a geospatial model of the region, with 5,881 nodes, such as population centers, and 7,039 road segments. She then used existing county data to calculate the probability that each culvert would fail during a catastrophe.

Assigning failure probabilities of these culverts was only possible because county staff members had looked at the condition of each one. Those observations, as well as existing hydrologic and other data, were combined into “risk of failure” scores.

“Culverts are that unseen hero of our infrastructure,” said Megan Rhodes, a planner for the Franklin Regional Council of Governments, who started the project about a decade ago. “Once you start looking for them, it’s all you see.”

Franklin County was settled by English colonists in the 17th century; the region’s infrastructure can show evidence, in places, of a way of life that has changed less quickly than in other parts of the country. One culvert that seemed an unusual shape, for instance, turned out to be “designed tall enough and just wide enough for cows to be able to pass through,” Ms. Rhodes said.

“A lot of them are 100 years old,” she said. “They’re made up of stacked stone that local people did with their hands.” Another culvert she and her team documented used old train parts.



Emergency workers clearing a clogged culvert in Ludlow, Vt., following catastrophic flooding in 2023. Richard Beaven for The New York Times

Her work was partly precipitated by the region's experience with Tropical Storm Irene, which slammed into New England 15 years ago. But it's not just large, named storms that are a problem. "A lot of what's been happening lately is these kind of small microbursts that just dump an immense two inches an hour," Ms. Rhodes said. "These old things just can't deal with it anymore."

Take, for example, a 78-foot-long culvert known to be in poor condition that failed in 2021 in Addison, Maine. As a result of the failure, an ambulance trying to reach a person experiencing a medical emergency was forced to take a detour, and a response that should have taken 15 minutes instead took an hour, with what one report described as "tragic" results. (Maine is now replacing the culvert.)

In the simulations for the Deerfield River watershed, Dr. Boakye found that 242 culverts were crucial connectors: When only one failed, at least one population node would be completely disconnected (in that scenario, there was also no option for residents to leave the area).

When the simulated storm rose to five on a one-to-10 scale, more than 10 percent of the population was unable to reach the hospital; if the intensity reached a rating of seven, an average of about 350 culverts failed and roughly 30 percent of the study area's population would be thwarted trying to reach the only nearby E.R.

The study comes as many other counties and states are evaluating their own culverts, especially in the wake of catastrophic collapses. Throughout the summer, culverts have collapsed in Georgia, Florida and Kentucky because of heavy rain. A culvert failure on the Tulalip Indian Reservation in Washington State left two dozen residents stranded in 2024. "Frustrated residents," a local outlet reported, were "forced to use ladders and makeshift walkways."

"As we get more intense rainfalls, we're going to have more failures," said Robert G. Traver, a professor of civil and environmental engineering at Villanova and the former and founding director of its Center for Resilient Water Systems, who was not involved with the study.

Adam D. Matteo, the state structure and bridge engineer for Virginia, criticized the focus of Dr. Boakye's study, however. "We have more concerns, at least here in Virginia, with bridges," he said in an interview, later adding, "That's not to say it has no merit."

Municipal funds for infrastructure repair may be chronically tight, but Dr. Boakye said she wasn't trying to shift priorities. "I would never argue that we should neglect bridges or even larger culverts. I'm more arguing here that even small-scale infrastructure can

cause large damage,” Dr. Boakye said of Mr. Matteo’s criticism.

Many states are starting to take their culverts seriously. New York University researchers are now evaluating some 80,000 small culverts across the state; VT Culverts documents the condition of the more than 114,000 culverts around Vermont.

Because the number of aging culverts in any one county or state can be so overwhelmingly large, studies like the one conducted by Dr. Boakye can help local and state governments order their priorities. “There’s just so many, and it’s so expensive to do it properly,” Ms. Rhodes said. “This will really allow us to plan for which ones need to get replaced first.”

A version of this article appears in print on , Section D, Page 4 of the New York edition with the headline: Aging Culverts Are Tested Against Today's Storms

TOWN OF HEATH COMMUNITY CHOICE POWER SUPPLY PROGRAM STATUS REPORT Q2 2026

Prepared September 2026

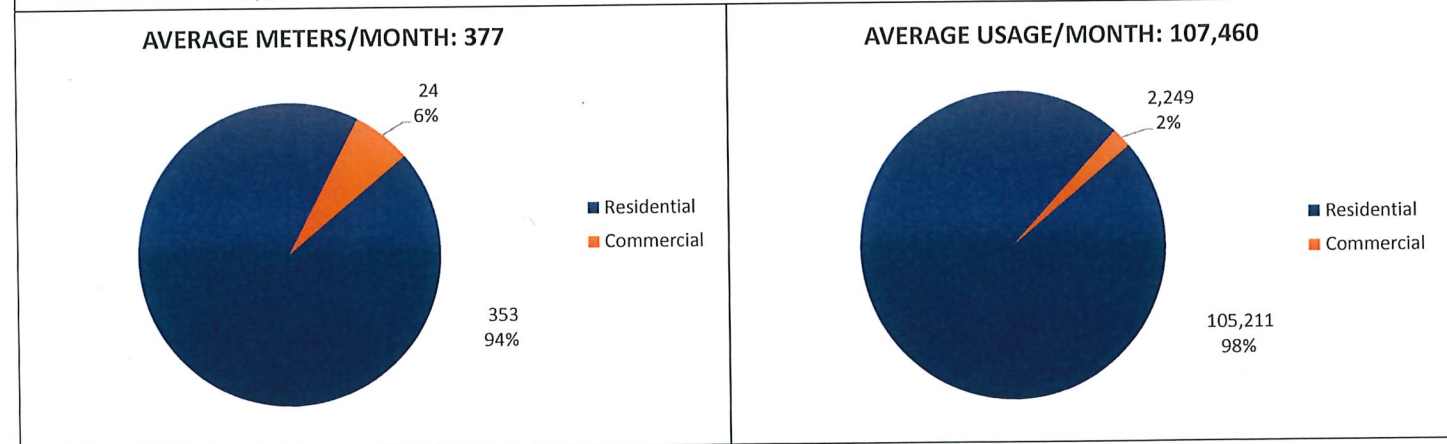
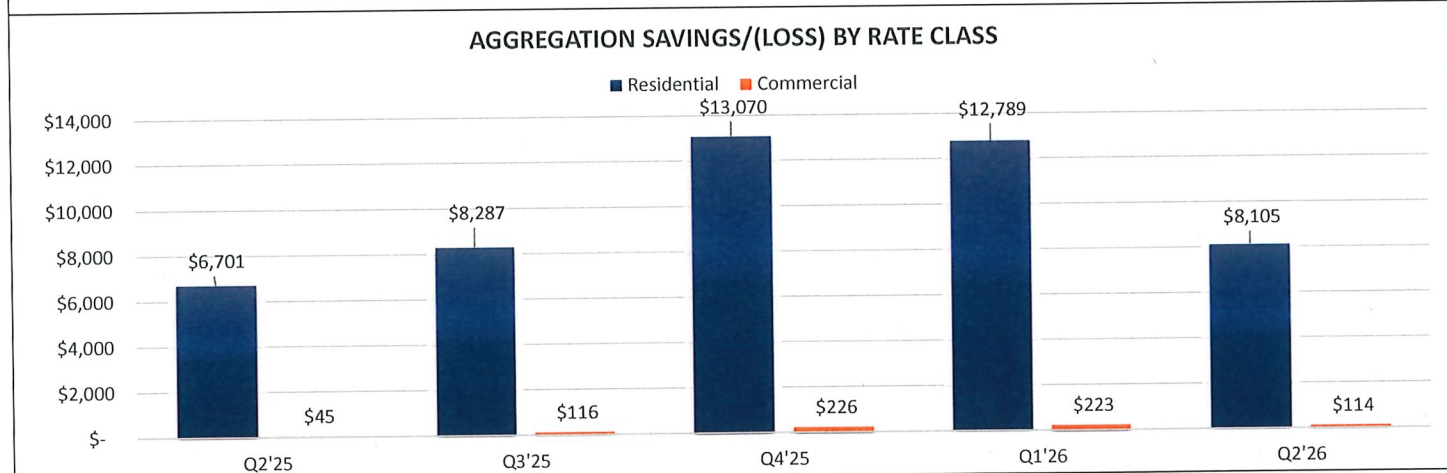
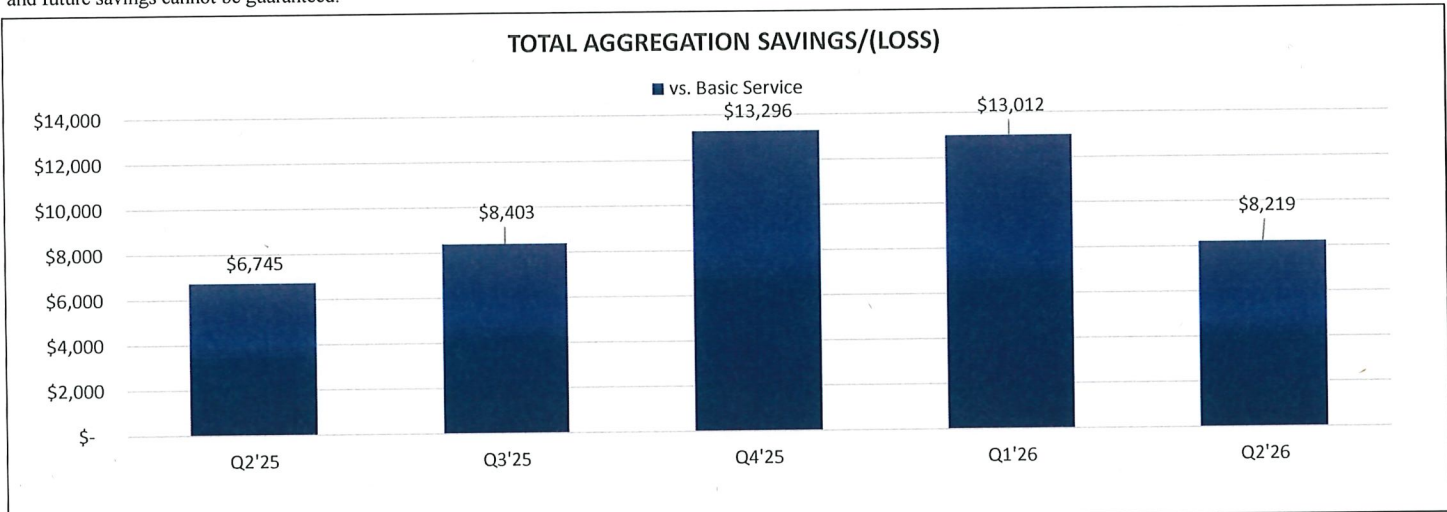
This report has been prepared by Colonial Power Group with information/data being provided by the Competitive Supplier and National Grid. The purpose of the report is to provide information about the Town of Heath's Community Choice Power Supply Program, which currently provides competitive power supply to approximately 400 customers in the Town. The data provided by the Competitive Supplier is not available until three months after the month it is used. For example, power is Used in January, Invoiced in February, Paid in March and Reported in April.

[Click here for more information about the Program](#)

PROGRAM RATES		
Term	December 2021 - December 2024	December 2024 - December 2026
Competitive Supplier	Dynegy Energy	Dynegy Energy
All Rate Classes	\$0.10560 / kWh Meets MA Req	\$0.12804 / kWh Meets MA Req

COMPARISON TO NATIONAL GRID RATES

The Town's aggregation savings are directly tied to the margin of savings between the Program's rates and National Grid's corresponding Basic Service rates as well as the level of consumption by participating consumers. Basic Service rates change twice a year or more, depending on utility and rate class. As a result, the aggregation rate may not always be lower than the Basic Service rate. The goal of the aggregation is to deliver savings over the life of the Program against the Basic Service rate. However, such savings and future savings cannot be guaranteed.



September/October 2026 Update

Mohawk Trail / Hawlemont Regional School Districts Sustainability Study

Contact: H. Jake Eberwein, Project Manager (jakeeberwein@gmail.com)

Work on the Mohawk Trail–Hawlemont Sustainability Initiative continued throughout September, with increasing attention focused on preparing communities for the decisions that may come during the next phase of the Massachusetts School Building Authority (MSBA) process.

At its September 24 meeting, the Steering Committee reviewed the MSBA Eligibility and Feasibility process, possible approaches to funding the local share of feasibility, educational visioning, updated financial modeling, communications and community outreach, and other work underway. The Committee has also continued discussions with Select Boards and other community groups throughout the eight towns.

What We're Hearing

Why continue this work if the state may provide more funding for rural schools?

The Steering Committee strongly supports increased state funding for rural schools. District leaders have been actively engaged in statewide advocacy around rural aid, Chapter 70 reform, regional transportation reimbursement, and other funding initiatives. That work should—and will—continue.

But additional state funding and long-term local planning are not competing strategies.

State aid to Mohawk Trail is expected to increase in FY27. Across Chapter 70, circuit breaker, regional transportation, and rural aid, state-provided revenues are projected to increase by approximately \$500,000 over FY26. At the same time, however, FY27 town assessments increased by approximately \$1.12 million. In other words, even with additional state assistance, a growing share of the cost of operating our schools continues to fall on local communities.

Enrollment remains an important part of that challenge. Elementary enrollment has declined approximately 17.7% over the past decade and approximately 51% since 1997. While the pace of decline has slowed considerably, there has not yet been a sustained reversal of the long-term trend. As enrollment declines, maintaining strong educational programming and meeting the increasingly diverse needs of elementary students becomes more challenging when a smaller number of students are dispersed across four schools.

There are encouraging statewide developments, including a new review of the Chapter 70 school funding formula. Our ongoing advocacy has helped ensure that rural perspectives will be represented in that work, with two rural education advocates—Julie Kelly and Kristen Smidy—named to the Foundation Budget Review Commission. Still, the process will take time. The Commission is not expected to issue its recommendations until late 2028, and any resulting changes would then require legislative action.

Our communities therefore need to do both: continue advocating aggressively for fairer state support for rural schools while also examining how our local educational system can become more sustainable over the long term.

Does moving into feasibility mean the single-campus plan has already been decided?

No.

After nearly two years of research and discussion, the Steering Committee has identified a unified PreK–12 district and single campus at Mohawk Trail as its preferred [long-term vision](#). That recommendation is intended to preserve and expand educational opportunities for students while creating a more sustainable system for the eight communities.

But the purpose of MSBA feasibility is to test and refine that vision—not simply approve a predetermined building plan.

During feasibility, the districts, MSBA, and professional design team would examine enrollment, educational goals, the existing Mohawk Trail campus, space and facility requirements, and costs. From that work, multiple options would be developed and compared. These could include renovation, new construction, or combinations of both, as well as different configurations of grades and educational spaces.

In simple terms, **feasibility is how we get specific answers to questions that cannot yet be answered responsibly:** What should be built? What should be renovated? How much space is actually needed? What would different options cost? How much would the MSBA reimburse? And what approach best supports students while remaining financially practical for our communities?

A vote to fund feasibility would therefore **not be a vote to build a school or final approval of a single-campus model**. It would fund the professional planning and design work needed so residents can ultimately make those decisions with substantially better information.

Other Project Updates

Educational Visioning. The Educational Visioning process is nearing completion following nearly a year of research, community conversations, educator input, surveys, and committee work. The final vision, available [HERE](#), describes the educational opportunities the communities want to provide students and will help inform future planning, including detailed educational visioning work that is a part of the MSBA feasibility study process.

Financial Analysis. Updated financial modeling continues with BERK12 and the Abrahams Group. This work is updating earlier projections using current financial and staffing information and examining

potential operating savings, staffing changes, capital costs, the financial implications of district consolidation, and other considerations. Updated analysis is targeted for November. A separate analysis of Other Post-Employment Benefits (OPEB) is also being prepared.

Community Outreach and Communications. Meetings with Select Boards and other community groups are underway across the eight towns. Paul Robbins Associates is also assisting the Steering Committee with communications materials designed to make the increasingly complex information surrounding the project more understandable and accessible. Additional materials, community conversations, and regular updates will continue over the coming months.

Research. Hanover Research has completed interviews and research examining the experiences of other rural communities that have considered or implemented school consolidation. Additional case studies examining economic, enrollment, demographic, and community impacts are nearing completion. This work is intended to help the eight towns learn from communities that have confronted similar decisions.

MSBA Eligibility. Work continues on the requirements of the MSBA Eligibility Phase. The Steering Committee has also begun examining different approaches for allocating the eventual local share of feasibility costs among the eight communities. These discussions remain preliminary; the final cost and structure of a feasibility study will depend upon the MSBA process.

Looking Ahead

The coming months will bring more information—and undoubtedly more questions. Updated financial analysis, additional research, MSBA planning, and continued community conversations will all help clarify the choices ahead.

Reasonable people can and will disagree about what the future of our schools should look like. The purpose of the 2D8T process is not to eliminate that debate. It is to make sure that when communities ultimately make decisions, they do so with the best information available about educational opportunities, enrollment, finances, facilities, transportation, community impacts, and the alternatives available to them.

The goal remains the same: **to preserve high-quality educational opportunities for students while creating a system that our eight communities can sustain for the future.**

Community participation remains essential to this effort. Updates, reports, one-page summaries, including a [project overview](#), and other resources are available at 2Districts8Towns.org.

WCAG project update with a couple quick requests

From Mark Maloni <MMaloni@frcog.org>

Date Wed 9/23/2026 11:57 AM

To townadmin@ashfield.org <townadmin@ashfield.org>; lbordeaux@townofbernardston.org <lbordeaux@townofbernardston.org>; twndadmin@town.buckland.ma.us <twndadmin@town.buckland.ma.us>; Administrator@townofcharlemont.org <Administrator@townofcharlemont.org>; bos@colrain-ma.gov <bos@colrain-ma.gov>; townadmin@conwayma.gov <townadmin@conwayma.gov>; administrator@erving-ma.gov <administrator@erving-ma.gov>; administrator@gillmass.org <administrator@gillmass.org>; info@townofhawley.com <info@townofhawley.com>; BOS <bos@townofheath.org>; pmcgahan75@gmail.com <pmcgahan75@gmail.com>; selectboard@leverett.ma.us <selectboard@leverett.ma.us>; towncoord@townofleyden.com <towncoord@townofleyden.com>; townclerk@townofleyden.com <townclerk@townofleyden.com>; towncoordinator@newsalemma.org <towncoordinator@newsalemma.org>; scloutier@newsalemma.org <scloutier@newsalemma.org>; taadmin@townoforange.org <taadmin@townoforange.org>; townclerk@townoforange.org <townclerk@townoforange.org>; townadmin@townofshelburnema.gov <townadmin@townofshelburnema.gov>; townadmin@shutesbury.org <townadmin@shutesbury.org>

Cc Droznin, Vadim <vadim.droznin@umassmed.edu>; Linda Dunlavy <lindad@frcog.org>

 1 attachment (14 KB)

WCAG Project Contact List.xlsx;

Hi all, checking in as we begin to build out plans and schedules for the UMass Index Program and the municipal website WCAG trainings.

Initial Training

- The first training, Accessibility 101 is an existing self-paced online module offered by the UMass Index Program; **we ask program participants to please take this training in the month of October**. This training requires access assignment by Index Program staff, and requires an email-based login; Vadim and his staff will soon start adding all contacts in this email to the training system and will be in touch with instructions for accessing the self-paced module (approx. 90 minutes total).
 - I have attached my current contact sheet for review; if additional people from your town offices (be they paid staff or volunteers) should take this training, **please provide me their email contact information by Wednesday, October 7th**.

Future Trainings

- In the later fall, the Index Program will convene two live, virtual training sessions focused on document hosting on municipal websites, and the creation of accessible documents. Current thinking is these will focus on Word and PDF document accessibility. A couple asks of you all in regard to this:
 - Please consider if there are other programs or tools you use frequently to create documents hosted on your website, and if so, what (e.g., Publisher, Canva, etc.), and **let me know if there are additional programs we should be thinking about to inform training design around accessible document creation**.

- o These will be virtual, live trainings, and while we will records them so any who can't make the training time can access them, the Index Program would like to see as many people attending the trainings in real-time as possible; please **let me know if there are preferred days of the weeks or chunks of time that are best for you** as we look to schedule these trainings later in the fall.

Website Audits

Website audits will begin in earnest in the late fall/early winter after trainings have been completed and we all share a common language and operating picture around web content accessibility guidelines (WCAG).

That's all for now, you will hear back from either Vadim or myself with instructions on accessing the Accessibility 101 training soon.

Many thanks!

Mark Maloni

Communications Manager



Franklin Regional
Council of Governments

12 Olive St., Greenfield, MA 01301

413-774-3167 X 154

www.frcog.org

Pioneer Valley MCD Weekly Surveillance Report

Surveillance Summary for EPI Week 36

Week Ending: 9/12/26

EPI Week 36 Target Species Surveillance Summary

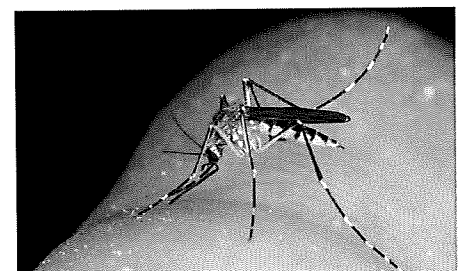
Species	# Collected	Pools	WNV+	EEEV+	Cumulative Collected	Cumulative Pools	Cumulative WNV+	Cumulative EEEV+
<i>Cx. pipiens/restuans</i>	22	2	1	0	3896	151	3	0
<i>Cq. perturbans</i>	6	1	0	0	6281	116	0	0
<i>Cs. melanura</i>	1	1	0	0	13	9	0	0
<i>Oc. canadensis</i>	70	2	0	0	380	16	0	0
<i>Oc. japonicus</i>	52	4	0	0	1115	57	0	0
<i>Ps. ferox</i>	107	3	0	0	12	0	0	0
<i>An. quadrimaculatus</i>	1	0	0	0	322	6	0	0
<i>Oc. triseriatus</i>	19	0	0	0	151	3	0	0
<i>Ae. vexans</i>	94	3	0	0	46	1	0	0
<i>Ae. albopictus</i>	0	0	0	0	2	0	0	0
<i>Cx. salinarius</i>	13	1	0	0	217	13	0	0
<i>An. punctipennis</i>	25	0	0	0	752	2	0	0
<i>Cx. erraticus</i>	0	0	0	0	8	1	0	0
<i>Ur. sapphirina</i>	1	0	0	0	1	0	0	0
<i>Cs. morsitans</i>	1	1	0	0	1	1	0	0
Totals	412	18	1	0	28046	699	36	0

Positive Mosquito Samples in the Pioneer Valley Region

There was one WNV-positive sample confirmed during EPI Week 36 in Pioneer Valley. The positive mosquito sample was collected from Amherst..

Most Abundant Species in Pioneer Valley

Among the species of most concern, *Oc. canadensis* were the most prevalent, with a total of 70 specimens collected during EPI Week 36. *Oc. canadensis*, is a bridge vector for EEE and WNV. They are an aggressive mammal-biting species that breed specifically in temporary and semi-permanent woodland pools lined with leaf litter.



Oc. canadensis adult female. Image credit: Judy Gallagher.

EPI Week 36 Summary by County

Franklin County

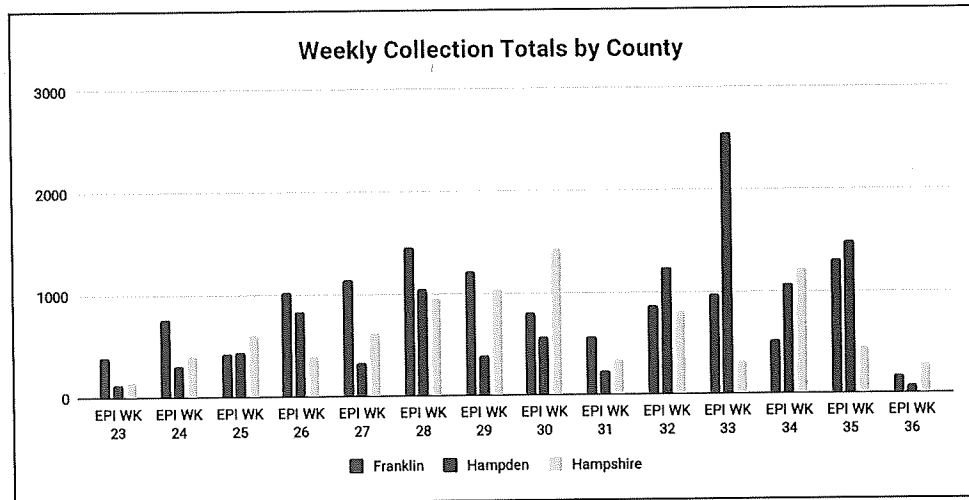
- Pools Tested: 8
- Positive Samples: 0
- Most Abundant: *Oc. japonicus* (34)
- Total Mosquitoes Collected: 180

Hampden County

- Pools Tested: 4
- Positive Samples: 0
- Most Abundant: *Ps. ferox* (43)
- Total Mosquitoes Collected: 76

Hampshire County

- Pools Tested: 6
- Positive Samples: 1
- Most Abundant: *Oc. canadensis* (62)
- Total Mosquitoes Collected: 285



Total Mosquitoes Collected in All Counties: 541 (Total Includes Non-Target Species)

Cumulative Arbovirus Positives Throughout The Commonwealth for 2026

Virus	Positive Mosquito Samples	Animal Cases	Human Cases
EEE	21	0	0
WNV	327	0	8

Onset	County	Age Range	Sex	Illness
8/3/26	Middlesex	60-69	Male	Meningoencephalitis
8/14/26	Middlesex	90-99	Male	Meningoencephalitis
8/17/26	Middlesex	80-89	Male	Encephalitis
8/18/26	Suffolk	70-79	Male	Meningoencephalitis
8/19/26	Suffolk	60-69	Male	Meningitis
8/26/26	Suffolk	70-79	Male	Encephalitis
8/26/26	Worcester	60-69	Male	Other neuroinvasive
9/6/26	Middlesex	30-39	Female	Fever

Weather Summary

With cooler nighttime temperatures, it is expected that mosquito activity will begin to taper off.

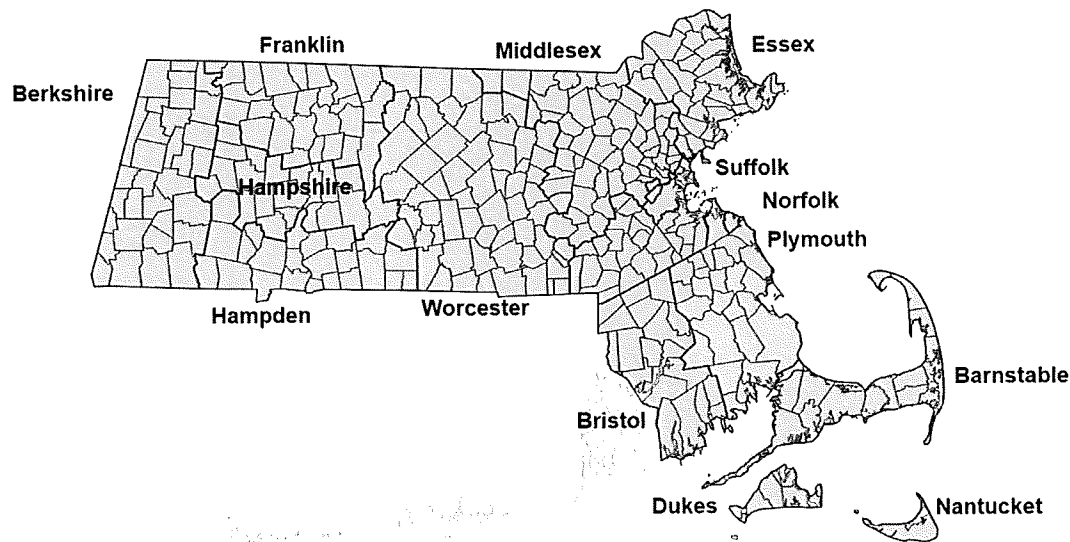
Weekly Changes in Weather

Station ID	Location	EPI Week	Dates	PRCP Total (in.)	TMAX AVG (°F)	TMIN AVG (°F)
USC00190120	AMHERST, MA	22	5/31/26 to 6/6/26	0.28	75.43	44.57
USC00190120	AMHERST, MA	23	6/7/26 to 6/13/26	0.00 (-100%)	84.29 (+11.74%)	57.57 (+29.17%)
USC00190120	AMHERST, MA	24	6/14/26 to 6/20/26	0.85	80.25 (-4.79%)	54.5 (-5.33%)
USC00190120	AMHERST, MA	25	6/21/26 to 6/27/26	1.24 (+45.88%)	79.38(-1.08%)	55.13 (+1.16%)
USC00190120	AMHERST, MA	26	6/28/26 to 7/4/26	1.34 (+8.06%)	90 (+13.38%)	63.43 (+15.06%)
USC00190120	AMHERST, MA	27	7/5/26 to 7/11/26	1.53 (+14.18%)	81.57 (-9.37%)	63 (-0.68%)
USC00190120	AMHERST, MA	28	7/12/26 to 7/18/26	0.06 (-96.08%)	85 (+4.20%)	58.57 (-7.03%)
USC00190120	AMHERST, MA	29	7/19/26 to 7/25/26	0.55 (+816.67%)	79.43 (-6.55%)	53.86 (-8.04%)
USC00190120	AMHERST, MA	30	7/26/26 to 8/1/26	2.83 (+414.55%)	80.43 (+1.26%)	58.71 (+9.00%)
USC00190120	AMHERST, MA	31	8/2/26 to 8/8/26	2.09 (-26.15%)	86.14 (+7.10%)	63.86 (+8.77%)
USC00190120	AMHERST, MA	32	8/9/26 to 8/15/26	0.18 (-91.39%)	84.83 (-1.52%)	59.5 (-6.83%)
USC00190120	AMHERST, MA	33	8/16/26 to 8/22/26	0.32 (+77.78%)	80.71 (-4.86%)	59.14 (-0.61%)
USC00190120	AMHERST, MA	34	8/23/26 to 8/29/26	0.24 (-25%)	77.86 (-3.53%)	56.71 (-4.11%)
USC00190120	AMHERST, MA	35	8/30/26 to 9/5/26	1.11 (+362.5%)	77.14 (-0.92%)	57.71 (+1.76%)
USC00190120	AMHERST, MA	36	9/6/26 to 9/12/26	0.48 (-56.76%)	78 (+1.11%)	51.71 (-10.4%)

Climate Data Source: <https://www.ncei.noaa.gov/cdo-web/search?datasetid=GHCND>

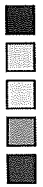
Arbovirus Risk Maps as of 9/18/26

EEE Risk Level by Town



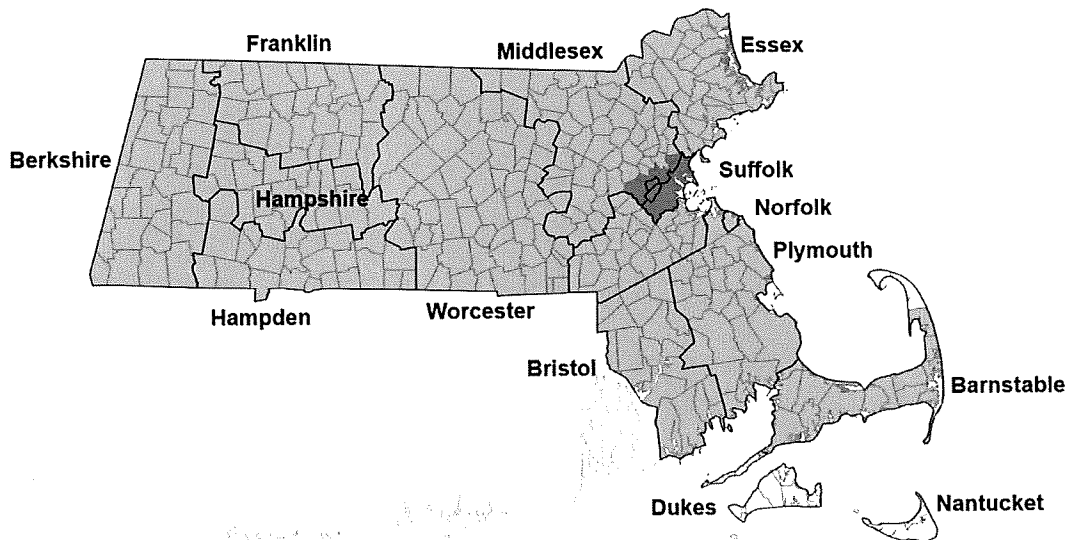
EEE Risk Level

Remote
Low
Moderate
High
Critical



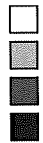
© 2026 Mapbox © OpenStreetMap

WNV Risk Level by Town



WNV Risk Level

Low
Moderate
High
Critical



© 2026 Mapbox © OpenStreetMap

Current Risk Maps from: <https://www.mass.gov/info-details/massachusetts-arbovirus-update>

Bite Prevention – Mosquitoes and Ticks

Mosquitoes and ticks can transmit serious diseases, but taking protective measures can go a long way in preventing bites from these common vectors.

Personal Protection Tips

- **Use insect repellent:** Use EPA approved insect repellent with one of the following ingredients: DEET, picaridin, or oil of lemon eucalyptus to keep bugs off.
- **Be mindful of timing and environment:** Mosquitoes are busiest at dawn and dusk, while ticks hide in brushy areas all day. During the colder months, ticks will overwinter in mostly leaf litter and will seek out a blood meal on a warm winter day.
- **Wear proper clothing:** Long sleeves, pants, and shoes help prevent mosquito bites. Although it's not much of a fashion statement, tucking your pants into your socks prevents ticks from migrating up your leg and biting you.
- **Treat your clothes:** Spray gear and clothing with permethrin for extra protection against ticks. Note, permethrin is a pesticide and should be used with caution. Read all product labels before use.
- **Tick check:** Look over your skin, clothes, and pets carefully after spending time outside.
- **Dry your clothes on high heat:** Ticks can survive a wash cycle, but 10 minutes in a hot dryer will kill them.
- **If possible, take a shower within two hours:** It helps wash off unattached ticks before they can latch on. This is also a good opportunity to look over your skin again.

Around the Home

- **Prevent artificial habitat:** Mosquitoes will seek out water-filled containers to lay their eggs in, so empty buckets, birdbaths, kiddie pools, tarps, etc. Clear gutters of debris regularly and dispose of old tires to prevent mosquito breeding.
- **Fix doors and screens:** Keep mosquitoes out by inspecting and repairing window screens.
- **Make a tick-safe yard:** Maintain short grass, remove leaf litter, and place a barrier of gravel between wooded areas and the edges of your lawn.

PE Poster Printouts and Helpful Links

- Mosquito Bite Prevention Poster
- Arbovirus Transmission Cycles
- Reducing Mosquito Breeding Sites
- CDC Dengue Fever Information
- DPH Mosquito PE Materials: <https://www.mass.gov/lists/mosquito-borne-disease-educational-materials>
- DPH Tick PE Materials: <https://www.mass.gov/info-details/tick-borne-educational-materials>

Targeted Mosquito Species

Species Name	Description	Habitat	Months Active
<i>Aedes albopictus</i>	An invasive species that is an aggressive and relentless day-biter. <i>Ae. albopictus</i> prefer to feed on humans and can transmit chikungunya, dengue, and Zika.	Discarded tires and other containers.	June-October Peak: July
<i>Aedes vexans</i>	An aggressive biter that falls within the "flood water" species. <i>Ae. vexans</i> is a bridge vector for EEE and will feed on both birds and mammals.	Temporary freshwater pools such as flood meadows, retention ponds, and vernal pools.	May-October Peak: Varies and is dependent on precipitation.
<i>Culiseta melanura</i>	<i>Cs. melanura</i> mosquitoes are a primary vector for EEE. <i>Cs. melanura</i> feed mainly on avian species and are responsible for amplifying the virus to the point that it spills over into bridge vectors.	Tree root cavities or "crypts" covered by peat moss in red maple and cedar swamps.	May-December Peak: July-August and mid-September
<i>Culex pipiens and restuans</i>	These two mosquito species are abundant in Massachusetts and can amplify WNV in the bird population and infect humans. While <i>Cx. pipiens</i> is more implicated in WNV transmission, both <i>Cx. pipiens</i> and <i>restuans</i> are grouped together because differentiating between the two species with 100% reliability is very difficult.	Artificial containers such as "green" swimming pools, catch basins, discarded tires, buckets, etc.	May-October Peak: July-August
<i>Coquilleltidia perturbans</i>	<i>Cq. perturbans</i> is one of the most abundant mosquitoes in Massachusetts and are considered a competent bridge vector for both EEE and WNV. <i>Cq. perturbans</i> will feed on both birds (reservoir for EEE) and mammals.	Permanent bodies of water with emergent vegetation such as cattails.	May-September Peak: July
<i>Ochlerotatus canadensis</i>	<i>Oc. canadensis</i> , is a bridge vector that can transmit both EEE and WNV to humans.	Woodland pools.	May-October Peak: June
<i>Ochlerotatus japonicus</i>	An invasive species that is a potential bridge vector for WNV and EEE.	Discarded tires and other containers	May-October Peak:
<i>Culex salinarius</i>	<i>Cx. salinarius</i> are considered bridge vectors for both EEE and WNV, readily feeding on mammals.	Brackish and freshwater swamps.	May-November Peak: August
Other species	There are many other species that PVMCD staff will submit to the Arbovirus Surveillance Laboratory at DPH for testing. These species are considered potential vectors in transmitting arboviruses.		

Pioneer Valley MCD Weekly Surveillance Report

Surveillance Summary for EPI Week 38

Week Ending: 9/26/26

EPI Week 38 Target Species Surveillance Summary

Species	# Collected	Pools	WNV+	EEEV+	Cumulative Collected	Cumulative Pools	Cumulative WNV+	Cumulative EEEV+
<i>Cx. pipiens/restuans</i>	1	0	0	0	8448	291	32	0
<i>Cq. perturbans</i>	0	0	0	0	8645	147	0	0
<i>Cs. melanura</i>	1	1	0	0	28	20	0	0
<i>Oc. canadensis</i>	9	1	0	0	1252	22	0	0
<i>Oc. japonicus</i>	28	2	0	0	3025	132	2	0
<i>Ps. ferox</i>	4	0	0	0	1330	18	0	0
<i>An. quadrimaculatus</i>	0	0	0	0	442	5	0	0
<i>Oc. triseriatus</i>	9	1	0	0	694	4	0	0
<i>Ae. vexans</i>	30	2	0	0	1832	40	0	0
<i>Ae. albopictus</i>	0	0	0	0	55	4	0	0
<i>Cx. salinarius</i>	0	0	0	0	649	34	2	0
<i>An. punctipennis</i>	4	0	0	0	1397	2	0	0
<i>Cx. erraticus</i>	0	0	0	0	960	8	0	0
<i>Ur. sapphirina</i>	4	1	0	0	91	1	0	0
<i>Cs. morsitans</i>	0	0	0	0	1	1	0	0
<i>Ae. cinereus</i>	4	0	0	0	565	1	0	0
Totals	94	8	0	0	29414	730	36	0

Positive Mosquito Samples in the Pioneer Valley Region

There were no positive samples confirmed during EPI Week 38 in Pioneer Valley.

Most Abundant Species in Pioneer Valley

Among the species of most concern, *Ae. vexans* was the most prevalent, with a total of 30 specimens collected during EPI Week 38. They are an aggressive biter that falls within the "flood water" species. *Ae. vexans* breed in temporary freshwater pools such as flood meadows, retention ponds, and vernal pools. They are a bridge vector for EEE and will feed on both birds and mammals.

EPI Week 38 Summary by County

Franklin County

- Pools Tested: 2
- Positive Samples: 0
- Most Abundant: *Oc. japonicus* (10)
- Total Mosquitoes Collected: 33

Hampden County

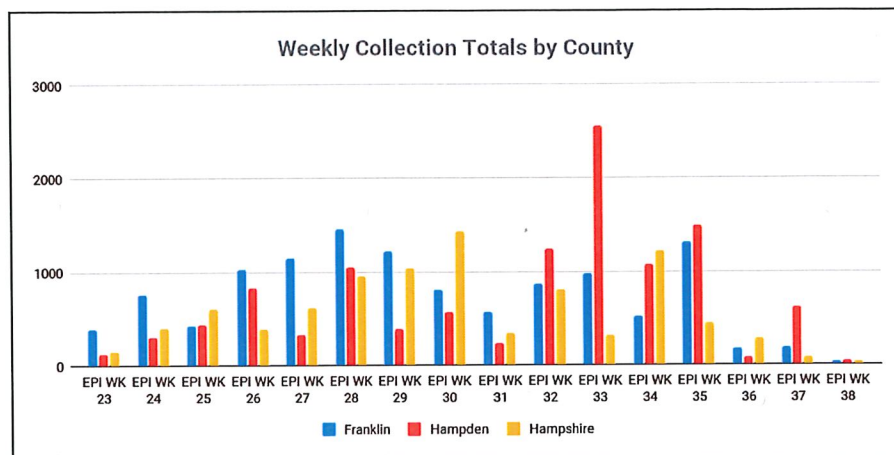
- Pools Tested: 3
- Positive Samples: 0
- Most Abundant: *Ae. vexans* (17)
- Total Mosquitoes Collected: 41

Hampshire County

- Pools Tested: 3
- Positive Samples: 0
- Most Abundant: *Oc. japonicus* (18)
- Total Mosquitoes Collected: 32

Total Mosquitoes Collected in All Counties:

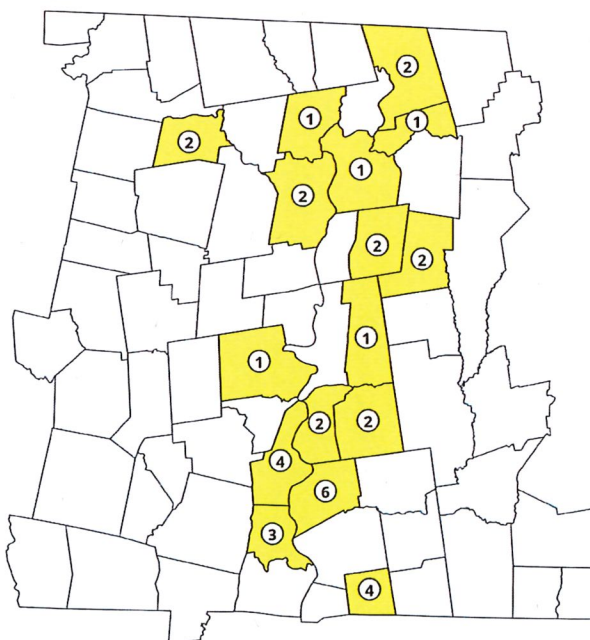
106 (Total Includes Non-Target Species)



(No change in WNV activity)

West Nile Virus Activity in Pioneer Valley

Updated: 9/18/26



Positive Mosquito Samples: 36
Bird-biting Species: 32
Mammal-biting Species: 4

Cumulative Arbovirus Positives Throughout The Commonwealth for 2026

Virus	Positive Mosquito Samples	Animal Cases	Human Cases
EEE	27	0	0
WNV	339	0	11

Onset	County	Age Range	Sex	Illness
8/3/26	Middlesex	60-69	Male	Meningoencephalitis
8/14/26	Middlesex	90-99	Male	Meningoencephalitis
8/17/26	Middlesex	80-89	Male	Encephalitis
8/17/26	Middlesex	90-99	Male	Meningoencephalitis
8/18/26	Suffolk	70-79	Male	Meningoencephalitis
8/19/26	Suffolk	60-69	Male	Meningitis
8/24/26	Suffolk	Unknown years	Male	Meningoencephalitis
8/26/26	Suffolk	70-79	Male	Encephalitis
8/26/25	Worcester	60-69	Male	Other neuroinvasive
8/29/26	Suffolk	60-69	Male	Meningoencephalitis
9/6/26	Middlesex	30-39	Female	Fever

Weather Summary

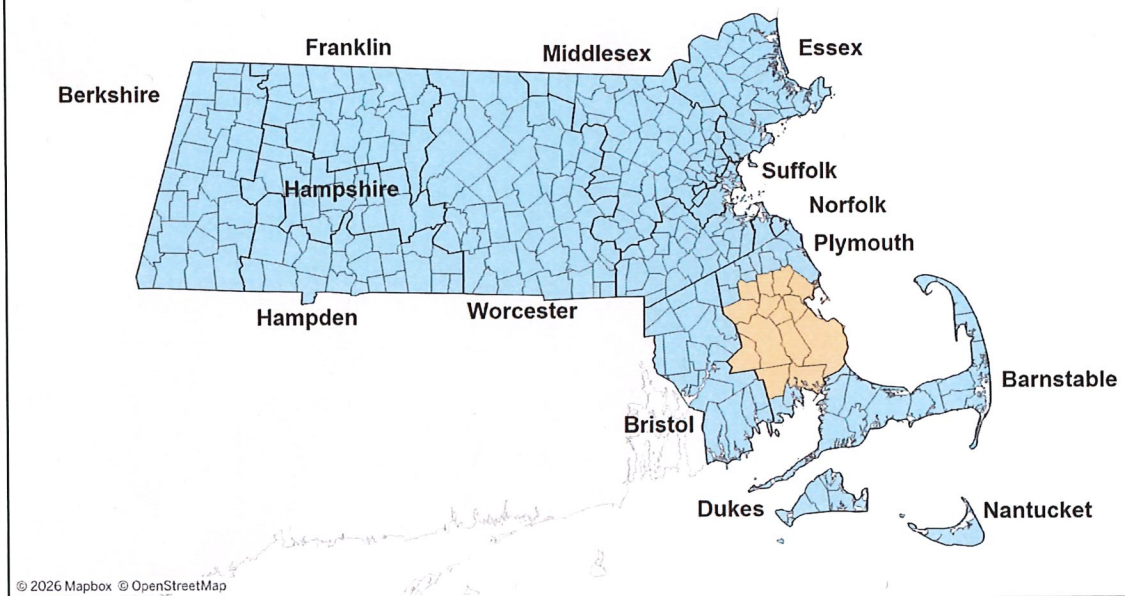
The current weather conditions continue to support mosquito activity.

Weekly Changes in Weather

Station ID	Location	EPI Week	Dates	PRCP Total (in.)	TMAX AVG (°F)	TMIN AVG (°F)
USC00190120	AMHERST, MA	22	5/31/26 to 6/6/26	0.28	75.43	44.57
USC00190120	AMHERST, MA	23	6/7/26 to 6/13/26	0.00 (-100%)	84.29 (+11.74%)	57.57 (+29.17%)
USC00190120	AMHERST, MA	24	6/14/26 to 6/20/26	0.85	80.25 (-4.79%)	54.5 (-5.33%)
USC00190120	AMHERST, MA	25	6/21/26 to 6/27/26	1.24 (+45.88%)	79.38(-1.08%)	55.13 (+1.16%)
USC00190120	AMHERST, MA	26	6/28/26 to 7/4/26	1.34 (+8.06%)	90 (+13.38%)	63.43 (+15.06%)
USC00190120	AMHERST, MA	27	7/5/26 to 7/11/26	1.53 (+14.18%)	81.57 (-9.37%)	63 (-0.68%)
USC00190120	AMHERST, MA	28	7/12/26 to 7/18/26	0.06 (-96.08%)	85 (+4.20%)	58.57 (-7.03%)
USC00190120	AMHERST, MA	29	7/19/26 to 7/25/26	0.55 (+816.67%)	79.43 (-6.55%)	53.86 (-8.04%)
USC00190120	AMHERST, MA	30	7/26/26 to 8/1/26	2.83 (+414.55%)	80.43 (+1.26%)	58.71 (+9.00%)
USC00190120	AMHERST, MA	31	8/2/26 to 8/8/26	2.09 (-26.15%)	86.14 (+7.10%)	63.86 (+8.77%)
USC00190120	AMHERST, MA	32	8/9/26 to 8/15/26	0.18 (-91.39%)	84.83 (-1.52%)	59.5 (-6.83%)
USC00190120	AMHERST, MA	33	8/16/26 to 8/22/26	0.32 (+77.78%)	80.71 (-4.86%)	59.14 (-0.61%)
USC00190120	AMHERST, MA	34	8/23/26 to 8/29/26	0.24 (-25%)	77.86 (-3.53%)	56.71 (-4.11%)
USC00190120	AMHERST, MA	35	8/30/26 to 9/5/26	1.11 (+362.5%)	77.14 (-0.92%)	57.71 (+1.76%)
USC00190120	AMHERST, MA	36	9/6/26 to 9/12/26	0.48 (-56.76%)	78 (+1.11%)	51.71(-10.4%)
USC00190120	AMHERST, MA	37	9/13/26 to 9/19/26	1.55 (+222.92%)	74.14 (-4.95%)	50.86 (-1.64%)
USC00190120	AMHERST, MA	38	9/20/26 to 9/26/26	0.72 (-53.55%)	66.43 (-10.43%)	46.71 (-8.16%)

Arbovirus Risk Maps as of 9/30/26

EEE Risk Level by Town

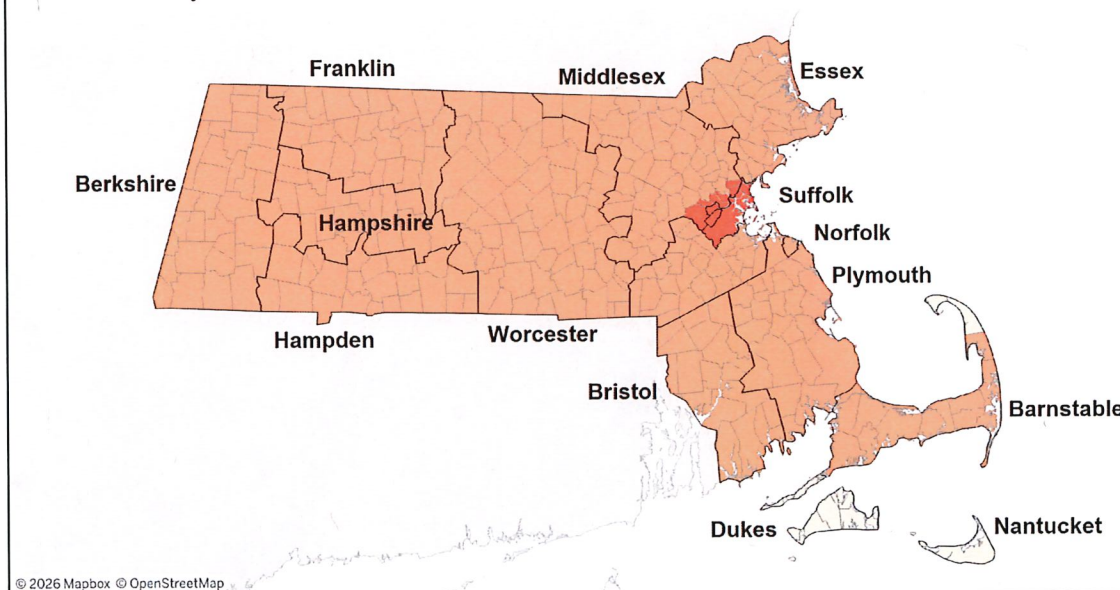


EEE Risk Level

Remote
Low
Moderate
High
Critical



WNV Risk Level by Town



WNV Risk Level

Low
Moderate
High
Critical



Current Risk Maps from: <https://www.mass.gov/info-details/massachusetts-arbovirus-update>

Bite Prevention – Mosquitoes and Ticks

Mosquitoes and ticks can transmit serious diseases, but taking protective measures can go a long way in preventing bites from these common vectors.

Personal Protection Tips

- **Use insect repellent:** Use EPA approved insect repellent with one of the following ingredients: DEET, picaridin, or oil of lemon eucalyptus to keep bugs off.
- **Be mindful of timing and environment:** Mosquitoes are busiest at dawn and dusk, while ticks hide in brushy areas all day. During the colder months, ticks will overwinter in mostly leaf litter and will seek out a blood meal on a warm winter day.
- **Wear proper clothing:** Long sleeves, pants, and shoes help prevent mosquito bites. Although it's not much of a fashion statement, tucking your pants into your socks prevents ticks from migrating up your leg and biting you.
- **Treat your clothes:** Spray gear and clothing with permethrin for extra protection against ticks. Note, permethrin is a pesticide and should be used with caution. Read all product labels before use.
- **Tick check:** Look over your skin, clothes, and pets carefully after spending time outside.
- **Dry your clothes on high heat:** Ticks can survive a wash cycle, but 10 minutes in a hot dryer will kill them.
- **If possible, take a shower within two hours:** It helps wash off unattached ticks before they can latch on. This is also a good opportunity to look over your skin again.

Around the Home

- **Prevent artificial habitat:** Mosquitoes will seek out water-filled containers to lay their eggs in, so empty buckets, birdbaths, kiddie pools, tarps, etc. Clear gutters of debris regularly and dispose of old tires to prevent mosquito breeding.
- **Fix doors and screens:** Keep mosquitoes out by inspecting and repairing window screens.
- **Make a tick-safe yard:** Maintain short grass, remove leaf litter, and place a barrier of gravel between wooded areas and the edges of your lawn.

PE Poster Printouts and Helpful Links

- Mosquito Bite Prevention Poster
- Arbovirus Transmission Cycles
- Reducing Mosquito Breeding Sites
- CDC Dengue Fever Information
- DPH Mosquito PE Materials: <https://www.mass.gov/lists/mosquito-borne-disease-educational-materials>
- DPH Tick PE Materials: <https://www.mass.gov/info-details/tick-borne-educational-materials>

Targeted Mosquito Species

Species Name	Description	Habitat	Months Active
<i>Aedes albopictus</i>	An invasive species that is an aggressive and relentless day-biter. <i>Ae. albopictus</i> prefer to feed on humans and can transmit chikungunya, dengue, and Zika.	Discarded tires and other containers.	June-October Peak: July
<i>Aedes vexans</i>	An aggressive biter that falls within the "flood water" species. <i>Ae. vexans</i> is a bridge vector for EEE and will feed on both birds and mammals.	Temporary freshwater pools such as flood meadows, retention ponds, and vernal pools.	May-October Peak: Varies and is dependent on precipitation.
<i>Culiseta melanura</i>	<i>Cs. melanura</i> mosquitoes are a primary vector for EEE. <i>Cs. melanura</i> feed mainly on avian species and are responsible for amplifying the virus to the point that it spills over into bridge vectors.	Tree root cavities or "crypts" covered by peat moss in red maple and cedar swamps.	May-December Peak: July-August and mid-September
<i>Culex pipiens and restuans</i>	These two mosquito species are abundant in Massachusetts and can amplify WNV in the bird population and infect humans. While <i>Cx. pipiens</i> is more implicated in WNV transmission, both <i>Cx. pipiens</i> and <i>restuans</i> are grouped together because differentiating between the two species with 100% reliability is very difficult.	Artificial containers such as "green" swimming pools, catch basins, discarded tires, buckets, etc.	May-October Peak: July-August
<i>Coquilleltidia perturbans</i>	<i>Cq. perturbans</i> is one of the most abundant mosquitoes in Massachusetts and are considered a competent bridge vector for both EEE and WNV. <i>Cq. perturbans</i> will feed on both birds (reservoir for EEE) and mammals.	Permanent bodies of water with emergent vegetation such as cattails.	May-September Peak: July
<i>Ochlerotatus canadensis</i>	<i>Oc. canadensis</i> , is a bridge vector that can transmit both EEE and WNV to humans.	Woodland/vernal pools.	May-October Peak: June
<i>Ochlerotatus japonicus</i>	An invasive species that is a potential bridge vector for WNV and EEE.	Discarded tires and other containers	May-October Peak:
<i>Culex salinarius</i>	<i>Cx. salinarius</i> are considered bridge vectors for both EEE and WNV, readily feeding on mammals.	Brackish and freshwater swamps.	May-November Peak: August
Other species	There are many other species that PVMCD staff will submit to the Arbovirus Surveillance Laboratory at DPH for testing. These species are considered potential vectors in transmitting arboviruses.		



Outlook

Consolidated Permitting Starts Tomorrow!

From Finn, Doug (ENE) <Doug.Finn@mass.gov>

Date Wed 9/30/2026 11:10 AM

Dear Colleagues,

As you are aware, tomorrow is October 1, which marks the date municipalities must start offering the new consolidated local permitting process to anyone looking to build a small clean energy infrastructure facility.

In order to be considered in compliance, municipalities just have to offer the permitting pathway as spelled out in **225 CMR 29.00** and related guidelines. It's up to the developer to decide whether to take advantage of this new permitting pathway, or seek permits through the traditional process.

Local Government Representative

The only step your municipality should take in the coming days, if you haven't already, is to decide who will serve in the **Local Government Representative** role.

This role is responsible for four main actions:

- Certifying that the applicant has fulfilled their pre-filing outreach activities
- Determining that the consolidated local permit application is complete
- Considering whether any proposed mitigation and minimization efforts sufficiently offset any project impacts, as determined by the site suitability score
- Issue a final decision on the consolidated local permit application

Currently, your municipality's Chief Administrative Officer serves in this position. But they also have the discretion to assign another municipal employee – or employees – to handle these tasks in their stead.

Mass. Energy Siting Hub

Unfortunately, the new application portal -- the Massachusetts Energy Siting Hub, or MESH -- will not be available for use as of Oct. 1. Creating the Commonwealth's first permitting portal for clean energy infrastructure capable of handling multiple permitting routes has been a complex undertaking. Rather than rush out a flawed portal, DOER and EFSB have made the difficult decision to delay the launch until certain critical site features are complete.

This means any project seeking to use the consolidated local permitting pathway will initially file PDF versions of all required documents with your municipality. These documents, which can all be found **on the DOER website**, include the Pre-filing Completeness Checklist, Consolidated Local Permit Application, and Site Suitability Scoring Report.

DOER will provide training sessions on MESH -- including how to create accounts, upload documents, navigate through projects, and set up notifications – in the coming weeks.

RESOURCES:

We appreciate everyone who has attended one of the training sessions we've conducted in recent months through your regional planning agency, through the Mass. Association of Conservation Commissions, or some other organization. We will continue to make ourselves available in the coming weeks and months to answer questions or provide clarifications.

Here are a few resources you can refer to:

[Site Suitability Guidance](#)

[Site Suitability Mapping Tool](#)

[FAQ For Municipalities - First Steps to Take](#)

[FAQ for Municipalities -- Understanding the Role of the Local Government Representative](#)

If you have questions, please reach out to your Regional Coordinator. Their contact information can be found here: **[Contact Siting & Permitting Regional Coordinators | Mass.gov](#)**

Rick Collins
Director, Clean Energy Siting & Permitting Division
Department of Energy Resources