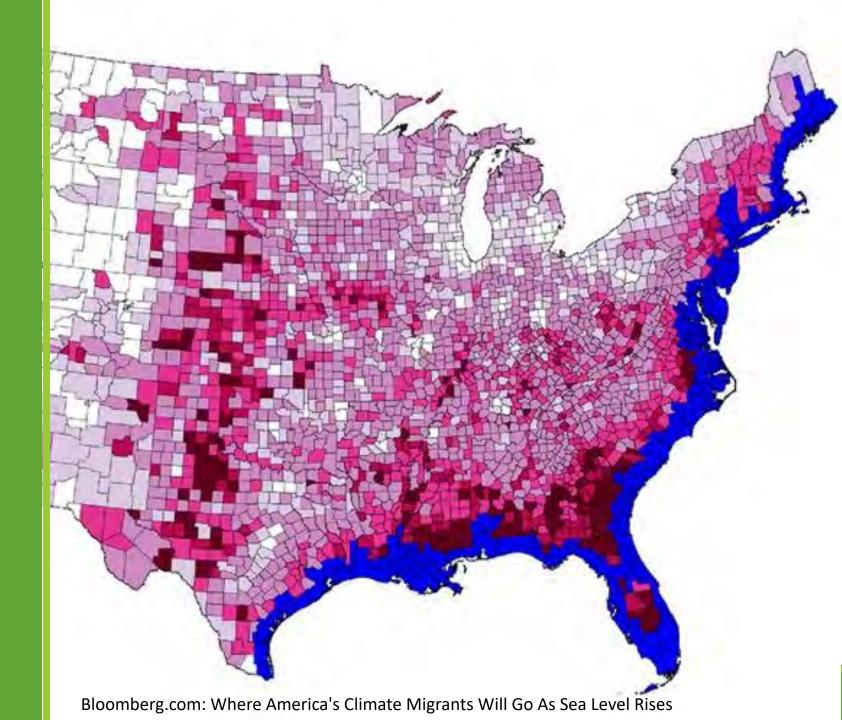
### Exploring climate migration in coastal Maine and New Hampshire

VANESSA LEVESQUE, PHD, UNIVERSITY OF SOUTHERN MAINE

DAVE REIDMILLER, PHD, GULF OF MAINE RESEARCH INSTITUTE

JULIA PETERSON, NH SEA GRANT AND UNH COOPERATIVE EXTENSION



## What is climate migration?

The movement of people to a new areas because of stressors exacerbated by climate impacts (Van Berkel et al, 2022)

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The movement of people to a new areas because of stressors exacerbated by climate impacts (Van Berkel et al, 2022)

Regions can lose or gain population due to climate migration (Marandi & Main 2021)



Vulnerable city (southern Louisiana)



Recipient city (Orlando, FL)



Climate destination city (Buffalo, NY)

## Recent Migration to Maine

Since July 2020, an estimated 34,200 people have migrated to Maine — including 30,642 domestic migrants and nearly 3,600 international migrants (US Census).

## Most Maine counties have grown thanks to in-migration

New census figures for April 2020 to July 2021 show growth in 14 of 16 counties, driven by in-migration that was strong enough to offset a natural decrease in population.

Share 🛐 🍑 💿 🛅 🖂 🖨 🍟

54 COMMENTS

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The New Hork Times https://www.nytimes.com/2023/02/03/us/maine-population-housing.html

## In Maine, a Rare Influx of New Residents, and a Housing Crunch

New arrivals over the last few years have fueled hopes of population growth, but workers increasingly struggle to find housing in a market gone wild.

#### By Jenna Russell

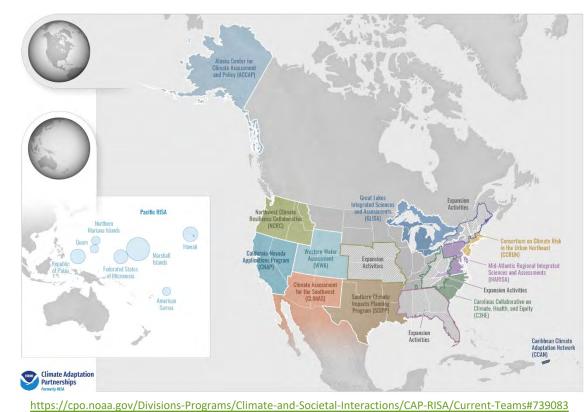
Feb. 3, 2023

SEARSPORT, Maine — In 2019, when Celine Kelley's daughter was born, there were 13 births and 31 deaths in the coastal town of Searsport — a familiar phenomenon in a state where deaths had outpaced births for more than a decade.

But the pandemic brought a countervailing force. Maine, Vermont and New Hampshire have seen an uptick in new residents arriving from other states, more than 50,000 across the three states since April 2020, even as other Northeastern states — and especially large metro areas — have experienced a surge in out-migration. While experts say it is unclear if the blip will become a lasting trend in largely rural northern New England, Ms. Kelley already sees both good and bad effects.

## Northeast Safe and Thriving for all (NEST)

- NOAA-funded planning grant to scope a potential new Climate Adaptation Partnership (formerly called "RISA") for the Upper Northeast region
- Thematic focus is on this region serving as a destination for migration as climate change makes other parts of the country and the world less habitable
  - Broaden adaptation planning beyond risk mitigation and infrastructure resilience.
  - Consider how class and race, governance, and other factors affect preparedness for future demographic change
- Three sub-regional teams:
  - $\circ\,$  Coastal Maine and NH
  - $\,\circ\,$  Upper Valley of Vermont and NH
  - $\circ~\mbox{Rustbelt}$  cities in upstate NY



## **Research Questions**

**RQ 1:** Is there interest in understanding climate migration in this region?

**RQ 2:** What are the potential implications of climate migration?

**RQ 3:** What do we need to do to be more prepared for climate migration in the future?

#### <u>Co-hosted by</u>:

- Northeast Safe and Thriving for All (NEST) sub-regional team
- $\circ$  NH Coastal Adaptation Workgroup (CAW)
- ME Climate Change Adaptation Providers Network (CCAP)
- An opportunity to learn about and discuss human migration in and around the region and what it may mean for communities over the coming decades.

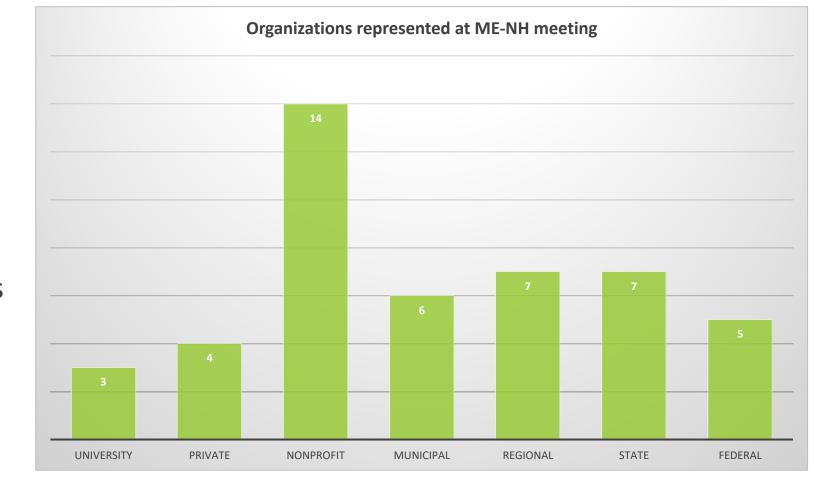


FMI:

https://www.nhcaw.org/2023-nh-me-climate-networks-exchange/

### 75 Participants

- ✓ Municipal Planners
- ✓ Climate change experts
- $\checkmark$  Housing services
- ✓ Immigrant communities
- $\checkmark$  Conservation



#### <u>Agenda</u>

 $\odot$  Presentations on migration in the region

 Panel of professionals who are seeing the impacts of migration in their work (e.g., housing, land use planning, coastal planning)

 O World Café – small group interactive tables focused on how our communities can prepare for climate migration

 $\circ$  Networking

 $\odot$  Reflection on the day's themes and next steps

#### <u>Agenda</u>

o Presentations on migration in the region

o Panel of professionals who are seeing the impacts of migration in their work (e.g., housing, land use planning, coastal planning)

 World Café – small group interactive tables focused on how our communities can prepare for climate migration

o Networking

o Reflection on the day's themes and next steps

## World Cafe

- Each table was a community that was either increasing or decreasing their population
- Participants discussed:
- 1. What challenges arise in this scenario?
- 2. What opportunities arise in this scenario?
- 3. What does a prepared community look like in this scenario?
- 4. What plans, policies and programs do we need to be more prepared?



What are the implications of climate migration to a community **decreasing in** population?

- Cascading effects where the loss of people results in:
  - $\circ\,$  reduced tax base for the municipality
  - $\,\circ\,$  reduced planning capacity in the municipality
  - $\circ$  loss of services (education, medical, EMS)
  - loss of amenities (restaurants, libraries)
  - $\,\circ\,$  loss of community connection and morale
- More housing becomes available and more affordable
- More opportunities to protect environmental resources
- If prepared, a municipality can leverage their assets and intentionally plan for de-growth while building resilience to climate change



Photo: A. Sherwin, Tides, Taxes and New Tactics

# What are the implications of climate migration to a community **increasing in** population?

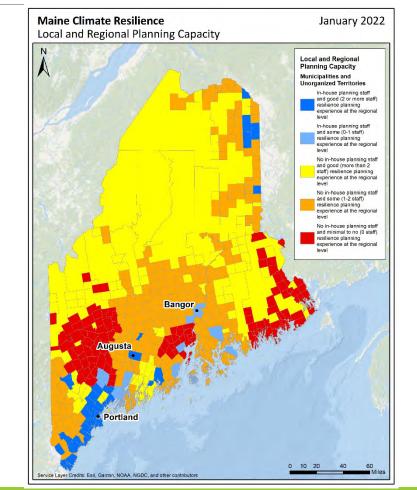
- Rental vacancy rates are extremely low
- Housing prices increase no longer affordable to ME/NH residents
- Stress on infrastructure (e.g., roads, sewer, water)
- Stress on natural environment
- Culture clashes; social inequities get larger
- Expectations for of services

   (e.g., education, broadband, health care, transit, child & elder care)
- Municipal capacity to respond may be limited
- If prepared, a municipality could bring in youth, more diversity, improved services, robust workforce, fresh perspectives and innovation.



# What do we need to do to be more prepared for climate migration in the future?

- Increase municipal capacity
- Increase density in municipal growth zones
- Plan for climate migration impacts in comprehensive plans and/or community resilience plans
- More regional partnerships, planning and capacity building
- State support for planning for climate migration
- Break down silos between environmental and other groups like housing; do intersectional planning
- Build and use social capital

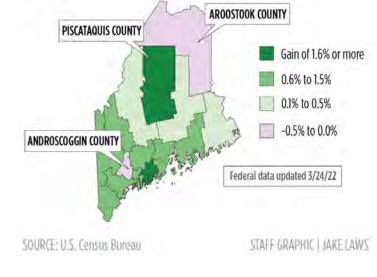


## What additional challenges exist?

- Data:
  - Who is moving where and why, including at a hyperlocal level
  - Who is most impacted and how
- Community-based training in addressing systemic inequities
- Affordable housing

#### Maine population change by county

All but two Maine counties experienced net population growth from 2020 to 2021, according to new U.S. Census data released Thursday. Piscataquis County saw the highest growth rate among counties in Maine.



#### Portland Press Herald

## Participant Survey Results

## What aspects of climate migration concern you most?



"Adequate housing, conservation of natural resources, and strains on infrastructure" <text>

"Everyone!"

What gaps in data, policy, programs or practice are priorities to fill?



"More forward-looking land-use planning...we will have to be OK with planning under uncertainty"

## Participant Survey Results

What aspects of climate migration or how it's being addressed do you feel most optimistic about?

texter develop environment environment network decrease totaligination finance index solution decrease texter as a solution decrease texter feel total SSUE conversation treate total decrease texter feel conversation treate total texter feel total texter feel total texter feel total texter field texter

> "That the conversation has started!"

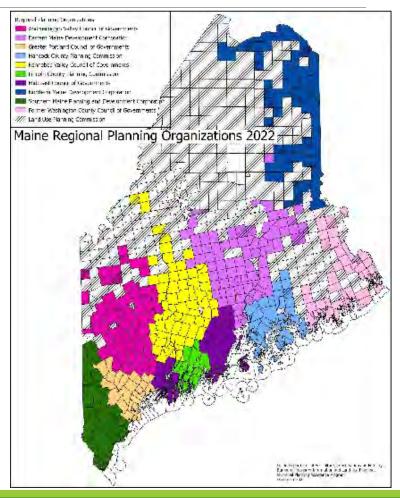
What are the most important steps for a network like this to take next?



"Integrate new data as it comes in—and keep the conversation going"

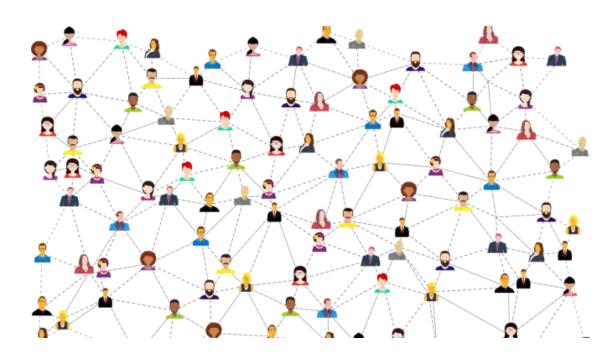
## **Overarching Themes**

- Complexity intersection of social, environmental & economic factors
- Intentionality & preparedness is key in the face of uncertainty
- Need for proactive state efforts to provide support and guidance to local preparedness
- Regional collaborations will be essential
- Community cohesion/social capital maintaining and building it will be very important
- Work on inequities now before they get exacerbated by migration



## Meeting Outcomes

- Elevated the concept of climate migration onto the broader public agenda in the region
- Began to develop a systems understanding of climate-related migration impacts
- Fostered a stronger, more inclusive network of partners interested in municipal-, regional- and state-level preparedness for climate migration



## Next Steps for NEST

- Obtain resources to continue these conversations and determine our niche in addressing migration
- Identify and reach out to those missing from the March 9<sup>th</sup> meeting (e.g., youth, indigenous, natural resourcebased industries, etc.)
- Strategic meetings at local, regional and state levels to proactively plan for climate-induced migration
- Scale up: Local Solutions Conference (New England wide) – focus on climate migration
  - Each of the three NEST regional teams to share outcomes and find common themes



https://communityresilience-center.org/conferences/ 2023-local-solutions-climate-migration/

## References

- Marandi, A., & Main, K. L. (2021). Vulnerable City, recipient city, or climate destination? Towards a typology of domestic climate migration impacts in US cities. *Journal of Environmental Studies and Sciences*, *11*(3), 465–480. <u>https://doi.org/10.1007/s13412-021-00712-2</u>
- Van Berkel, D., Kalafatis, S., Gibbons, B., Naud, M., & Lemos, M. C. (2022). Planning for Climate Migration in Great Lake Legacy Cities. *Earth's Future*, *10*(10), 1–6. <u>https://doi.org/10.1029/2022EF002942</u>

## Thank you! Questions?

Vanessa Levesque, University of Southern Maine, vanessa.r.levesque@maine.edu

Dave Reidmiller, Gulf of Maine Research Institute, <u>dreidmiller@gmri.org</u>

Julia Peterson, NH Sea Grant and UNH Cooperative Extension, julia.peterson@unh.edu