



Building resilient communities

This work is supported by the National Science Foundation under Grant Number 2314180 to the Space Science Institute. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.





Building Resilient Communities



Exploring how libraries and community-based organizations can work together to mitigate environmental and health-related concerns due to climate change

Project Focus

Strengthening partnerships between public libraries and community organizations to take locally relevant climate action and address environmental change.

Goal

Empower libraries and community partners to co-create resilient, thriving environments through teamwork and action.

Impact

Public libraries, alongside their partners, are leading efforts to help communities prepare for changing environments, unexpected disruptions, and new challenges—ensuring they can thrive no matter what lies ahead.

Today's Presenters



Kate Gomes

Library Director, Holbrook
Public Library (MA)



Brenda Harrington

Adult Services Librarian,
Belfast Free Library (ME)



Sarah Kirn

Participatory Science
Strategist, NASA, Gulf of
Maine Research Institute

Blue Marble Librarians

A thick, hand-drawn style orange line that spans the width of the title text below it.

How to implement climate initiatives at your library

Who are the Blue Marble Librarians?

In 2018, a group of climate-minded librarians attended a program at the Boston Public Library. This program focused on how libraries can foster community reliance in times of climate change. In the months following this gathering, librarians from all over the Commonwealth wondered how they could keep up the momentum and continue this work. From this passion the Blue Marble Librarians group was born.

Through their partnership with CREW (Communities Responding to Extreme Weather), the BML's have inspire climate programming across Massachusetts.

What do the Blue Marble Librarians do?

- Hold quarterly meetings to share ideas and foster collaboration
- Publish a frequently updated blog filled with ideas on climate related programming for libraries of all sizes and resources
- Organize and promote Climate Prep Week
- Share resources and promote ideas via a listserv
- Maintain a libguide filled with resources that is available to everyone

How can you
support your
community's
climate resilience?

Program
ideas and
resources
for
libraries of
all sizes!

Become a CREW Hub – it's free!

- CREW library hubs can be found all over the country from Texas to Florida to Virginia and Massachusetts.
- Level 1 Hubs provide resources to their community for how to be prepared for extreme weather and must do one climate related program per year.



Provide Climate Resilience Programming

Some of our favorite library programs include:

- Fix It Clinics
- The Climate Ribbon Project
- Free Winter Coat Rack
- Nature Scavenger Hunts
- Library Gardens



Image provided with permission from Plymouth Public Library

Fix It Clinics at the Brewster Ladies' Library

- Brewster Ladies' Library in Brewster, MA serves a population of 10,456
- Local repair experts teach others how to fix items. This encourages self-reliance and fights against disposable consumerism.
- Great community event for patrons of all ages!



Image provided with permission from Plymouth Public Library

The Climate Ribbon Project

- In this program, participants use a piece of discarded ribbon or scrapes of old fabric and write on them the answer to one question, “What do you love and hope to never lose due to climate chaos?”
- These ribbons are added to a tree, fence, whatever.
- It is a way to share in and alleviate climate anxiety.



Free Winter Coat Rack

- Libraries ask for donations of winter coats in the months leading up to the cold season
- Coats are placed on racks in the library in a place where patrons are able to browse the selection
- All unclaimed coats are donated at the end of the season



Image provided with permission from Plymouth Public Library

App Based Scavenger Hunt

- Have patrons download iNaturalist or the Merlin Bird ID
- Encourage them to “collect” species all over town
- Set a benchmark for when patrons are eligible for a prize
- Can be tied in with speakers to discuss the local nature





Install a Library Garden

Putting in a library garden is a great way to educate the public. This allows for continuing education programming opportunities and passive learning as well.

Gardens can be maintained with the help of volunteers or local garden clubs.

Sturgis Library Rain Garden

- Sturgis Library in Barnstable, MA serves a population of 6,656
- The installation of this garden was funded through multiple grants including the US Environmental Protection Agency
- Rain Gardens promote water conservation



Terryville Public Library Pollinator Garden



- The Terryville Public Library located in Terryville, CT serves a population of 4,998
- This garden was put in with the help of a local landscaping company
- Pollinator gardens raise awareness of the importance of pollinators in our ecosystem

Pottsboro Library Community Garden

- Pottsboro, TX is a community of 2,756 people; the library is open 28 hours a week
- From 2013-2021, received over \$500,000 in grants which helped them install a 100 plot community garden among many other services
- Vegetable gardens increase awareness of food cycles and foster a sense of community



Image: Pottsboro Community Garden, still from [video by Texas Water Smart on YouTube](#)

Potential Local Community Partners

Garden Clubs

Town or County Emergency Management

County Extension Office

Local Agriculture schools

Master Gardeners

State Department of Environmental Protection

Additional Resources

- [ALA Resilient Community Programming Guide](#)
- [Environmental Justice Grants, Funding and Technical Assistance](#)
- [US Climate Resilience Toolkit-Funding Opportunities](#)
- [APHA ECO Bookworms](#)

BUILDING COMMUNITY IN A CHANGING CLIMATE

Inspiration and lessons learned from **All of Belfast Climate
Dialogues**

November 21, 2024

Brenda Harrington, Adult Programming/ Assistant Director at the Belfast
Free Library

Sarah Kirn, Participatory Science Strategist, NASA at the Gulf of Maine
Research Institute*

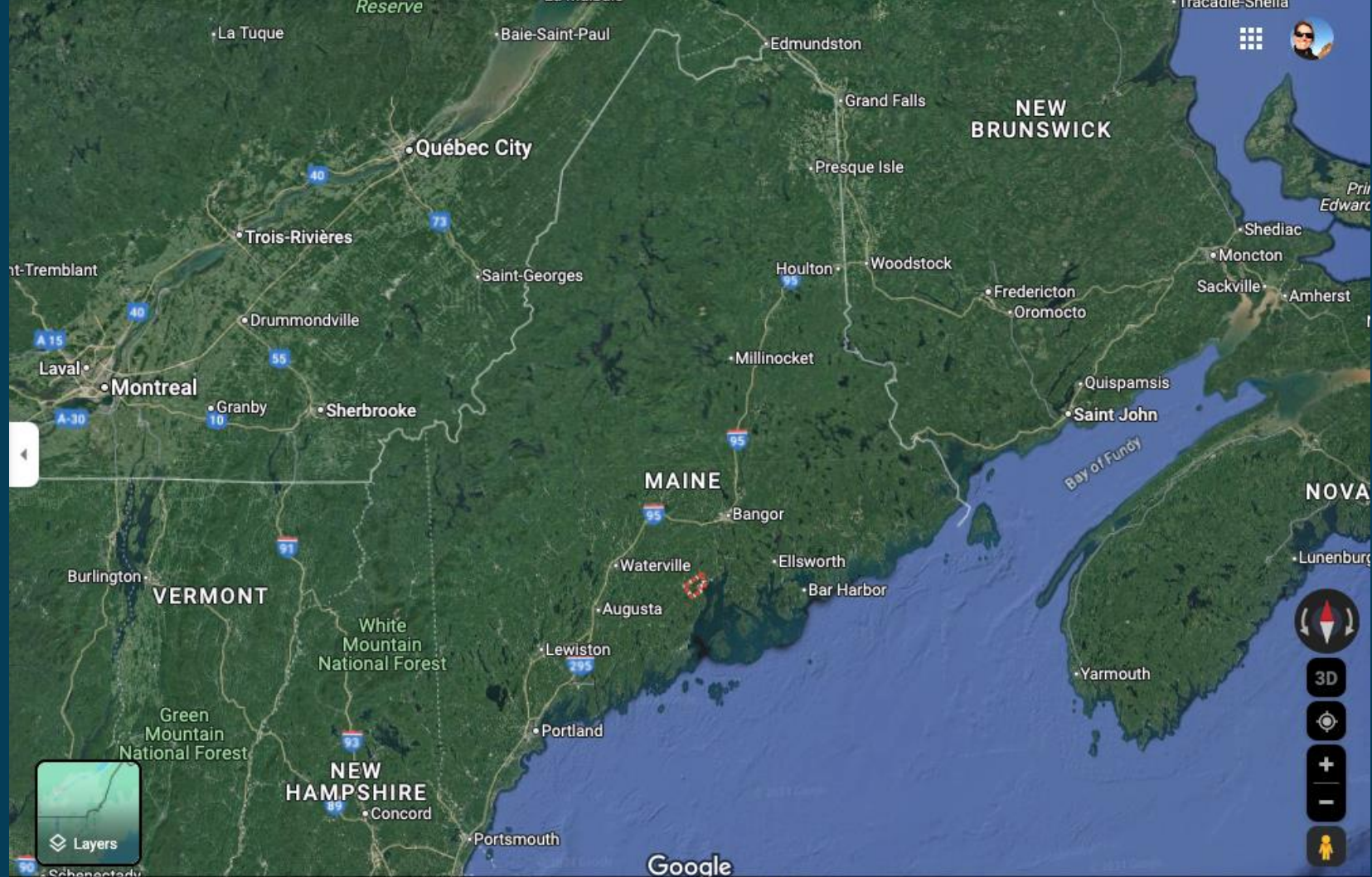
*Sarah did this work as an independent contractor

Outline

1. Orientation to Belfast, Maine
2. Background of All of Belfast: Climate Dialogues (ABCD): impetus, goals
3. What we did through the project
4. Reflections on what worked for us in Belfast, ME in 2020-2023.



Orientation to Belfast, Maine




All data from Wikipedia unless otherwise noted	US	Maine	Belfast
Population size (2023)	334,914,895	1,395,722	6,953
Median age (2022, from Visual Capitalist website)	38.3 years	45 years - Maine is the OLDEST state in country	<u>60.3 years</u> (<u>2010 census</u> said <u>46.9 years</u>)
Education Attainment % population with HS diploma % population with advanced degree	89.3% 13.7%	94% 12-14%	93.79% 22.34%

Genesis of All of Belfast Climate Dialogues (ABCD)

2018, GMRI partnered with Belfast Climate Crisis Committee to study coastal flooding using citizen science method.

[←](#) [→](#) [🔄](#) [investigate.gmri.org/project/coastal_flooding](#) [☆](#) [🔍](#) [📄](#) [👤](#) [⋮](#)




Gulf of Maine
Research Institute

Ecosystem
Investigation
Network

[Projects](#) [About](#) [FAQ](#) [Partners](#)

[🔍](#) [Log in](#) [Register](#)



Individual


Coastal Flooding: Storms and Sea Level Rise

What weather and water level conditions are associated with coastal flooding in our community?
What areas of our shoreline are most vulnerable and critical to our community?

Why this matters

Sea levels are rising which is causing us to experience more flooding along our coastlines. The goal of this project is to help coastal communities gather data to understand their unique flooding impacts and begin to identify priorities for building resilience.

Partners	Season
National Weather Service, Gray Gulf of Maine Research Institute	Year-round during high tides and coastal storms



[Project Overview](#) [Prep & Collect](#) [Contribute](#) [View Data](#) [Discussion](#)

https://investigate.gmri.org/project/coastal_flooding

Project inspirations

"The most important thing you can do to fight climate change: talk about it."

- Katharine Hayhoe, Climate Scientist

A Climate Scientist Makes the Case for Talking

Watch this 17-minute video to hear what [climate scientist Dr. Katharine Hayhoe](#) suggests.



BELFAST FREE LIBRARY

ALL OF BELFAST CLIMATE DIALOGUES

Funded by the Institute of Museum and Library Services 2020-2023, Accelerating
Promising Practices for Small and Rural Libraries;
A Community Memory Project



<https://belfastlibrary.org/all-of-belfast-climate-dialogues/>

ABCD PROJECT GOALS

ENGAGE

Engage broad cross-section of Belfast in talking about climate

EDUCATE

Curate high-quality education materials regarding climate change

DISCUSS

Develop programs to normalize conversation on climate

DOCUMENT

Archive Belfast residents' ideas and priorities regarding climate change

ABCD In Action: Highlights of what we did

For complete archive, visit



ENGAGE



"The Art of Re-climation" April/May 2022



Images courtesy Brenda Harrington, ABCD Project

EDUCATE

BELFAST FREE LIBRARY

Serving the community of Belfast since 1887

ABOUT RESOURCES KIDS & TEENS EVENTS ALL OF BELFAST: CLIMATE DIALOGUES SERVICES SUPPORT THE LIBRARY



Climate Change Basics

Watch Dr. Katharine Hayhoe's PBS Global Weirding series



[Just how long have we known about climate change anyways?](#)
Learn some surprising things about the history of climate change science.



[All the extreme weather we've had lately isn't anything new, right?](#)
Learn the key differences between climate change and weather, and learn more about why scientists are concerned.



[I Live in the Eastern US - Does Climate Change Matter to Me?](#)
Climate change will not impact all regions of the globe in the same ways. Learn how climate change is expected to impact the East coast of the U.S.



Image courtesy Brenda Harrington, ABCD Project

Maine's Climate Future: The Role of Carbon Management in Farms and Forests with Dr. Ivan Fernandez



Tuesday, January 25th
6:30 PM on Zoom



Browntail Moth & Emerald Ash Borer in Waldo County

Tuesday, February 1st
6:30 PM on Zoom



Finding Hope in the Face of Climate Change

Tuesday, November 30th
6:30 PM on Zoom



A presentation by Susan B. Reiter, author of *Missing: Journeys of Environmental Change: Gather Your Power and Take Action*



Celebrating Our Adventures on Earth: Fireside Chat



Wednesday,
April 20th
7:00 PM at
Waterfall Arts



Deep Woods: How Climate Change Impacts Forests & How Forests Slow Climate Change



Tuesday, March 22nd
6:30 PM on Zoom



Community Composting: Panel Discussion

Tuesday, February 28th
6:30 PM on Zoom



Landscape of Change with Catherine Schmitt, Schoodic Institute

Tuesday, January 24th
6:30 PM on Zoom

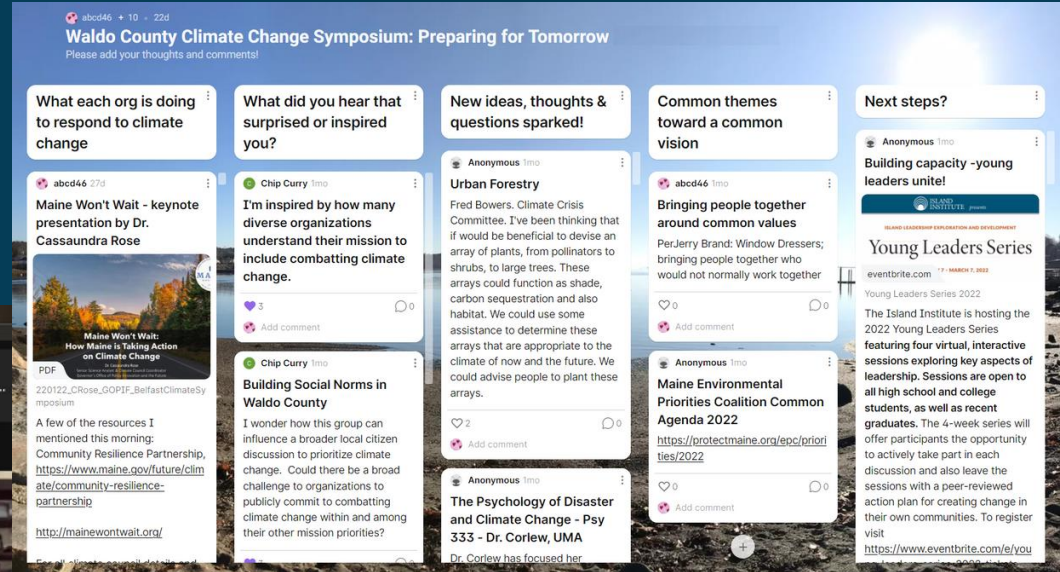


Rain Gardens and Other Water Management Techniques for Your Property

Thursday, February 2nd
6:00 PM on Zoom



TALK ABOUT IT



“The more I hear people acknowledge their struggles, the less alone I feel” - Naomi

Promising practices emerged

COLLABORATE

When possible,
partner with other
organizations.



SEIZE OPPORTUNITIES

When possible, say
yes. Follow the
energy.



Image courtesy Misty Mallar

SEEK MODELS, MENTORS

Don't reinvent the
wheel!



TALK ABOUT IT: Community Climate Conversations

City of Belfast
Climate Crisis Committee



What should be in Belfast's Climate Action Plan?

ALL OF BELFAST: CLIMATE DIALOGUES

[Browse Items](#)[Browse Collections](#)[Browse Exhibits](#)[Share Your Story](#)[About](#)[Contact Us](#)

Browse Items (102 total)

[Browse All](#)[Browse by Tag](#)[Search Items](#)

Sort by: [Title](#) [Creator](#) [Date Added](#)

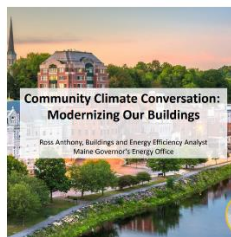
Community Climate Conversations



Community Climate Conversation: The Future of Transportation in Belfast & Waldo County.

ABCD Team, Belfast Pedestrian, Biking & Hiking Committee, Belfast Climate Crisis Committee, February 9, 2023

<https://abcbdelfast.omeka.net/items/browse>



Community Climate Conversation: Modernizing Our Homes & Buildings

ABCD Team, Belfast Climate Crisis Committee, December 8, 2022

"Waldo County - Engaging the Community on Climate Action" Brown Bag Lunch Discussions

Part of the "Season of Creation: An Invitation to Celebration & Community Conversations" series, sponsored by St. Francis of Assisi Catholic Church & St. Margaret's Episcopal Church, in collaboration with the Greater Bay Area Ministerium.

Tuesday, September 20
12:00 Noon
at Belfast Free Library



"Waldo County - Engaging the Community on Climate Action" Brown Bag Lunch Discussion

St. Francis of Assisi Catholic Church, St. Margaret's Episcopal Church, Greater Bay Area Ministerium, September 12, 2022



Community Climate Conversation: Building Resilience for Big Storms and Flooding

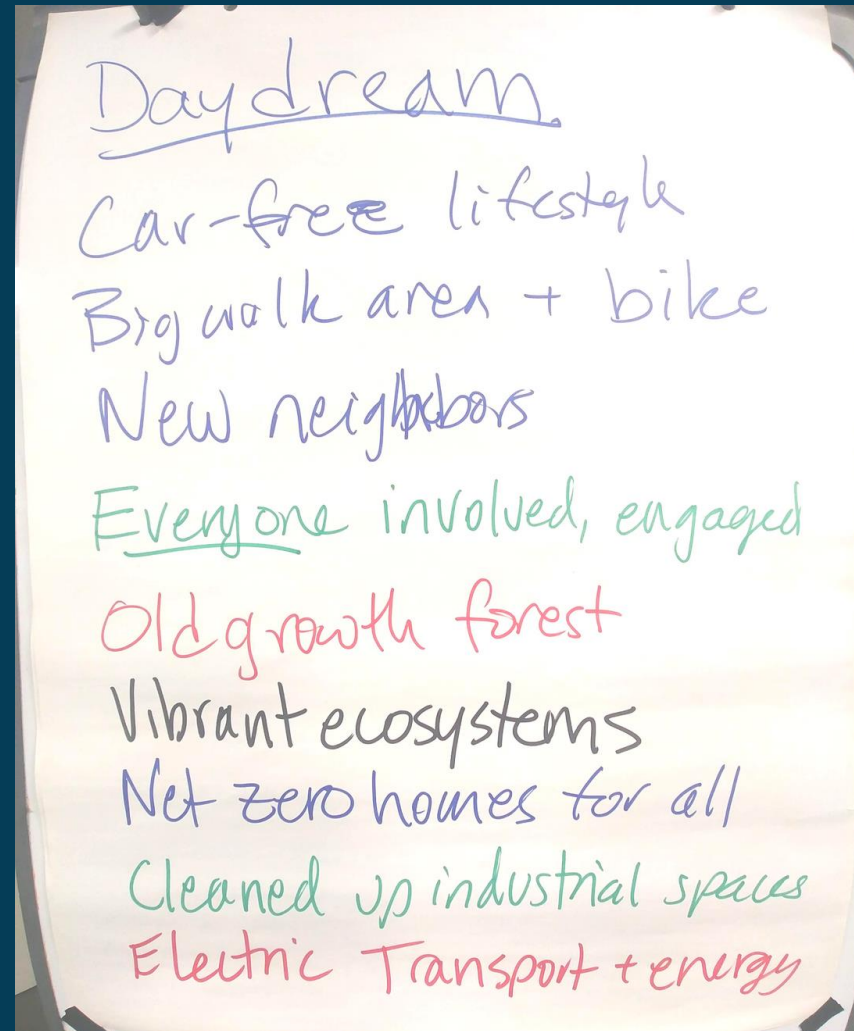
Belfast Climate Crisis Committee, ABCD Team, October 18, 2022

Four Public Discussions on Belfast Climate Action Plan ~ June 14, 2022



50+ people, established guiding principles:

- **balance** human and environmental needs
- think in **systems** - up & down stream, other networks with whom we can connect
- **equity** - solutions must serve and be accessible to everyone



Brainstorming Ideas for Action

1. Things individuals can do themselves
2. Things people can work on together
3. Things that need policy change and/or significant fundraising to accomplish.



Example topic: Building Resilience for Big Storms & Flooding

- What individuals can do: Rain barrels, resurface driveways
- What we can do together: Build a functional and educational rain garden; be a good neighbor
- What we need municipality/grant to do: Complete municipal stormwater drainage system study that was underway
- Who is responsible for stormwater?



Image courtesy Eric Sanders, Belfast Mayor

Who has the power?

We live in a democracy. "...by the people, for the people...."

ARCHIVE

Community Climate Conversation: The Future of Transportation in Belfast & Waldo County



Community discussion highlights

After Cara's presentation, attendees largely focused on the concept she outlined, "active transit" (defined as "any mode of human powered transportation" - walking, biking, wheelchair or other ability device, skateboarding, etc.). We talked about rethinking our expectations and habits about how we get around, and how we might work toward a "diversity of mobility options" to serve different populations.

Here are some highlights from the engaged attendee discussion (which begins at approximately 46:00 in the [recording](#)). Photos of our community discussion flip chart notes are also included on this page.

- **Boating** - transport by water! Please give your input on the [Belfast Harbor Small Boat Survey](#) - planning for small boat access & tie-ups for commuters
- Looking back on the **community layouts of 100 years ago**, with clustered patchwork of "service nodes" within a certain distance, meeting people's needs for stores, milling, etc. (Think of all the place names like "___ Mill", or "___ Corner"). Could some version of this have a place in current day zoning - perhaps "mini cities" within 15 minutes walking distance of each other?
- **Municipalities can support year-round active transportation (not just car-centric)**: Adjust road care regimen to include ped/bike transportation (e.g. not plowing snow into ped/bike lanes)
- Think about transportation for us... and transportation for tourists. Take note of the "Slow tourism / slow travel" trend.
- **Idea to close some city streets to car traffic in summer?** Maybe closing one of the parallel streets? Experiment with temporary setups / demonstrations to see what works. Help tourists get around with



Members of the Belfast Climate Crisis Committee talk to two people who came to the introduction. A initiative in October 2021. Credit: Abigail Curtis / BDN

"The world can't wait for climate action": Letter to the editor from Unitarian-Universalist Church of Belfast
June 25, 2022



Where Are All the Bees?
Misty Mallar, July 2021

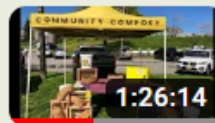
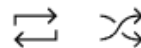
"We live with Earth's catastrophe - but remain undepressed."

[Untitled]
David Thanhauser, April 19, 2022



ABCD

Belfast Free Library - 1 / 20



Community Compost Panel Discussion

Belfast Free Library

2



Community Climate Conversation: Future of Transportation in Belfast ...

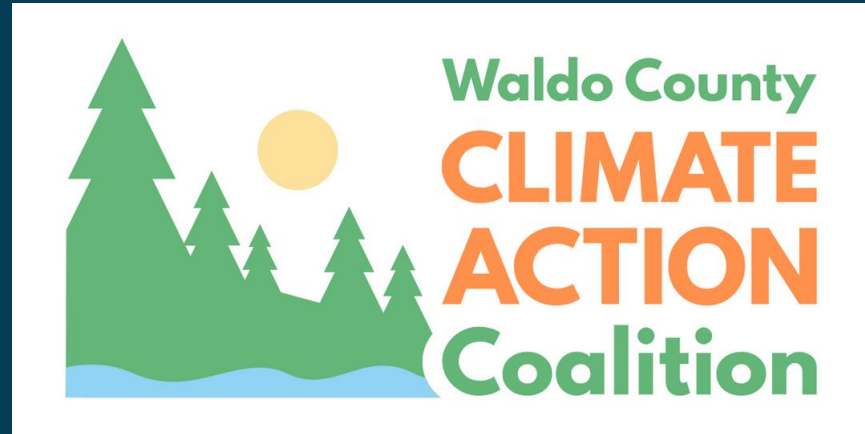
Belfast Free Library

**Following ABCD: What's
happened since**

WALDO COUNTY CLIMATE ACTION COALITION

AT THE final ABCD presentation, many participants expressed an interest in continuing to work together for community climate action.

ABCD was the springboard for COMMUNITY ORGANIZATIONS AND INDIVIDUALS to come together as a coalition.



CONTINUING THE WORK OF ABCD WITH FEWER RESOURCES

(Grant funding - even modest - is really helpful)



The screenshot shows the homepage of the Waldo County Climate Action Coalition. The header features the organization's logo on the left, which includes a stylized green tree and the text "Waldo County CLIMATE ACTION Coalition". To the right of the logo is a navigation menu with links: HOME, ABOUT, OUR FOCUS AREAS, NEWS & EVENTS, CONTACT, and JOIN US. The main content area has a large background image of a forest with autumn foliage under a cloudy sky. Overlaid on this image is the text "Reducing the impacts of climate change & building sustainable communities" in a large, white, sans-serif font. Below this text is a white rectangular button with the text "LEARN ABOUT OUR WORK". At the bottom of the page, there is a dark blue rectangular button with the text "GET INVOLVED" in white.

Waldo County
CLIMATE ACTION Coalition

HOME ABOUT OUR FOCUS AREAS NEWS & EVENTS CONTACT JOIN US

Reducing the impacts of
climate change & building
sustainable communities

LEARN ABOUT OUR WORK

The Waldo County Climate Action Coalition (WCCAC) is a coalition of organizations whose mission is to **collaborate to reduce impacts of climate change and build sustainable communities in Waldo County**. We are focused on amplifying our respective organizational efforts by working together on renewable energy transition, weatherization, land restoration and conservation, food insecurity, transportation, public health and other impacts of climate change.

GET INVOLVED

<https://www.waldoclimateaction.org/>

SUCCESSFUL GRASS ROOTS CLIMATE INITIATIVES INSPIRED BY ABCD PROGRAMS:



Community composting is live in Belfast!



Plastic Pollution Solutions focused on removing single-use plastic utensils, straws, etc. from the waste stream.



Downtown refillable water bottle stations - St. Margaret's Church raised the funds

What contributed to our success?

Follow QR code to “What made ABCD work?” reflection in ABCD’s Omeka collection



<https://abcbdelfast.omeka.net/items/show/158>

1. We had **funding** (thank you, IMLS!) for our team to work for **3 years**.
2. We had a **team** with: local knowledge, outside perspective, and communication/ organization talent



Image courtesy Belfast Free Library, ABCD Project

3. We **collaborated**, co-hosted, convened, connected, and facilitated.
4. We used **all the tools** we had: social media, Zoom, email, newsletters, campfires, cookies, website, in-person meetings, art, poetry, tabling, etc.



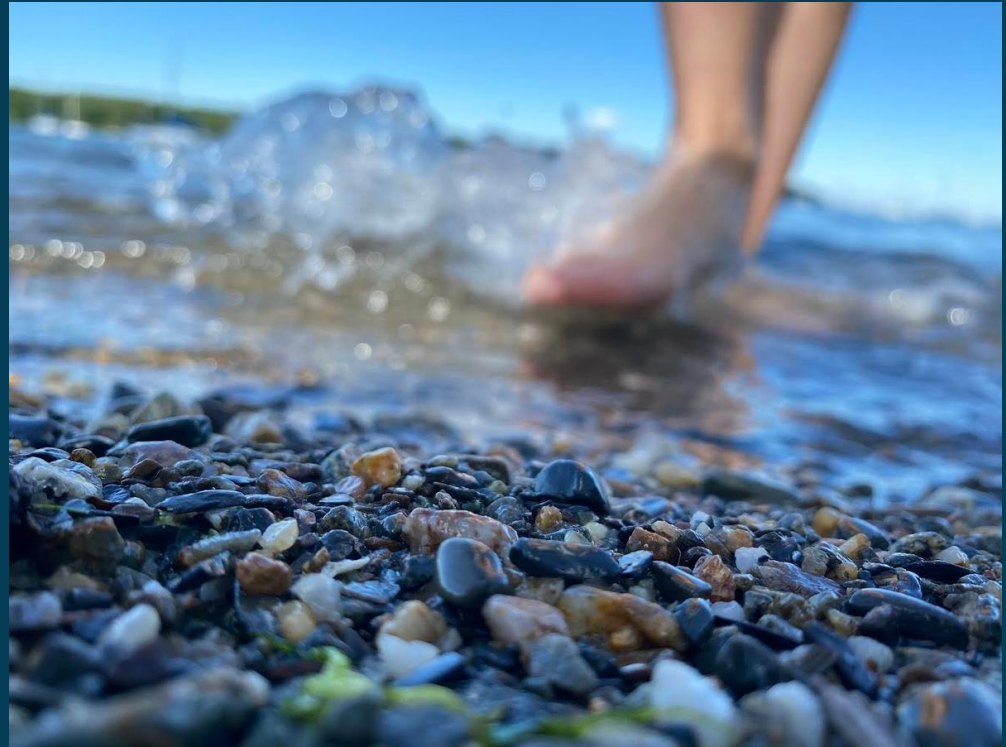
THANK YOU

Brenda Harrington
Sarah Kirn

bharrington@belfastlibrary.org

sarah@gmri.org

<https://belfastlibrary.org/all-of-belfast-climate-dialogues>



*Photo: Grace Murdock, ABCD Photo Contest Winner:
1st Place, "Play" category: "Walking on the Beach"*



Questions?



Kate Gomes

Library Director, Holbrook
Public Library (MA)

kgomes@holbrook.ocln.org



Brenda Harrington

Adult Services Librarian,
Belfast Free Library (ME)

bharrington@belfastlibrary.org



Sarah Kirn

Participatory Science
Strategist, NASA, Gulf of
Maine Research Institute

sarah@gmri.org



**Building
Resilient
Communities**



Exploring how libraries and community-based organizations can work together to mitigate environmental and health-related concerns due to climate change

Learn more about how you can take action with your community partners in these webinars

Upcoming: Climate change communication: How and why to do it in libraries (December 5, 2024)

Gain practical strategies to effectively communicate about climate issues and inspire meaningful local action.

Recording: Sustaining ecosystems for climate learning and action (October 24, 2024)

Learn how public libraries can play a role in climate education and action by collaborating with other sectors and organizations. [Recording and resources from this October 2024 webinar](#) available on WebJunction.

<https://www.webjunction.org/news/webjunction/building-resilient-communities.html>