

VNRC

Published
by the
Vermont
Natural
Resources
Council, Inc.

Vermont

Environmental Report

A photograph of a person with long dark hair, wearing a blue long-sleeved shirt, dark pants, and a purple backpack, walking across a wooden bridge. The bridge is made of wooden planks and has a railing made of wooden posts and diagonal braces. Below the bridge is a stream with mossy rocks. The background is a dense forest with green trees and foliage.

What's Next, Vermont?

Summer
2020



Do you love
Vermont and
want to give
back?
**Join us
today!**

Help us ensure that all communities in Vermont have clean water, green energy, healthy forests, and thriving downtowns. Our work is more essential than ever in these unprecedented times.

For a limited time, become a new member of VNRC when you contribute just \$10 or more. Your contribution will be *triple-matched* by a generous donor!

As a VNRC member, you'll receive:

- A copy of this publication, the *Vermont Environmental Report*, mailed to your home every season. The *VER* goes in-depth on the latest efforts to conserve our natural resources and promote healthy communities, and how Vermonters like you are engaging in this work.
- A subscription to our monthly e-newsletter, full of the most pressing environmental news in Vermont and around the country.
- An exclusive invitation to VNRC's Annual Meeting, held in beautiful locations across the state, with local food and drink. (Please note: the 2020 Annual Meeting will be held virtually.)
- Advance notice of webinars and lectures focused on climate change, wildlife habitat, environmental justice, conservation and town planning, and much more.
- Invitations to film screenings and festivals, including feature films, that explore local and global environmental issues.
- Special opportunities to learn from VNRC experts about environmental science, policy, planning, and law, and guided opportunities to engage directly with legislators at the State House on issues that matter to you.

Join us today at vnrc.org/join

With questions about VNRC membership, please contact Colin Keegan, Membership and Outreach Coordinator, at ckeegan@vnrc.org. For inquiries about planned giving or gifts of stock, please contact Stephanie Mueller, Development Director, at smueller@vnrc.org.



Your contribution will be triple-matched by a generous donor!

VNRC Advisory Committee

Maude Barlow
Bill McKibben
Will Raap
Gus Speth

VNRC Board of Directors

Kelly Coleman, *Chair*
Elizabeth Courtney
Lindsay DesLauriers
Judy Dow
Chad Farrell
Carolyn Finney
Don Hooper
Scott Johnstone
Will Lintilhac
Ira Marvin
Amy Seidl
Darren Springer

VNRC Staff

Brian Shupe, *Executive Director*
Alex Connizzo, *Office Assistant*
Karina Dailey, *Ecological Restoration Coordinator*
Nancy Davila-Groverman,
Finance and Operations Director
Jamey Fidel, *General Counsel/
Forest and Wildlife Program Director*
Stephanie Gomory, *Communications Director*
Shelden Goodwin, *Vermont Conservation Voters
Outreach Coordinator*
Jon Groverman, *Policy and Water Program Director*
Lauren Hierl, *Vermont Conservation Voters
Executive Director*
Ian Hitchcock, *Community Organizer*
Colin Keegan, *Membership and Outreach Coordinator*
Kate McCarthy,
Sustainable Communities Program Director
Johanna Miller, *Energy and Climate Action Program
Director/VECAN Coordinator*
Stephanie Mueller, *Development Director*

Publications

Stephanie Gomory, *Editor*
Tim Newcomb, *Design*



Through research, education, collaboration and advocacy, VNRC protects and enhances Vermont's natural environments, vibrant communities, productive working landscapes, rural character and unique sense of place, and prepares the state for future challenges and opportunities.

VNRC is the Vermont affiliate of the National Wildlife Federation.

VNRC membership includes a subscription to the *Vermont Environmental Report*. Join VNRC in protecting Vermont with your membership of \$40.

Copyright © 2020, VNRC

The Inside Word

Parallel Pandemics



By Brian Shupe, *Executive Director*

As the pandemic continues, I have told many colleagues and friends that I am grateful to be weathering the crisis in Vermont, where easy access to wide open spaces, clean lakes and rivers, and supportive, tight knit communities have made these months of social distancing easier.

As grateful as I am to be hunkered down in this great state, it's important to recognize that not everyone enjoys the same bearable experience. Black people and other people of color are bearing the brunt of the COVID-19 crisis, due in part to disproportionate exposure to pollution, while facing another, centuries-old, pandemic: institutionalized harassment and violence.

VNRC's commitment to clean air and water; green, affordable energy; accessible open spaces; and sustainable communities reflects our desire for all people to be healthy and safe. But not everyone can be healthy and safe if we do not confront the realities faced by people of color in Vermont and nationwide. That is why we are in solidarity with the many individuals and organizations calling for justice, accountability, and an end to racist violence, and are committed to understanding how our work can help achieve those goals.

I encourage you to consider supporting organizations that are working to dismantle systemic racism in Vermont, such as the Vermont Racial Justice Alliance, Black Lives Matter of Greater Burlington, and the Rutland Area NAACP.

It can be hard to be optimistic in times like these, but it is more important than ever to imagine a better tomorrow, for the people who live here and for the natural environment we all call home. This issue of the *Vermont Environmental Report* explores ways we can prepare for an uncertain future, drawing on the diverse perspectives of a variety of experts in green energy, planning, farming, education, and much more.

Thank you for your support during these challenging times, and stay well. 🍀

It can be hard to be optimistic in times like these, but it is more important than ever to imagine a better tomorrow, for the people who live here and for the natural environment we all call home.

Table of Contents

- | | |
|---|--|
| 2 ... Introduction | 10 ... Protecting Biodiversity in Vermont
(Curt Lindberg) |
| 3 ... Going Through the Narrows
(Judy Dow) | 12 ... Voting in a Pandemic (Lauren Hierl) |
| 4 ... Pandemic Rush to Vermont Highlights
<i>Future Climate Migration Issues</i>
(Kate McCarthy, Elena Mihaly) | 13 ... Growing Food Sovereignty, Equity, and Social Capital (Amber Arnold, Lydia Clemmons, Naomi Doe Moody) |
| 6 ... Here's What a Green Recovery Looks Like (Johanna Miller, Darren Springer) | 16 ... Member Profile: Don Schramm |
| 8 ... Shared Streets are a Healthy Choice
(Laura Jacoby, Karen Yacos) | 18 ... Recent Highlights of Our Work |
| | 20 ... News & Notes |

INTRODUCTION

What's Next for Vermont?

Over the past several months, the COVID-19 pandemic has brought unprecedented challenges to Vermont and to the people who live here. Many of us know someone who has fallen ill or died. We continue to watch in horror as people with lower incomes and people of color are disproportionately affected by the virus and the economic fallout that has accompanied it.

We know that this is not the only global crisis we will face in our lifetime. Climate change is sure to bring — among other things — rising sea levels, harsher and deadlier storms, and the disruption of water supplies. It, too, will be a public health crisis.

Luckily for us, Vermont is and can continue to serve as a safe haven. We have an abundance of fresh water, increasingly temperate weather, healthy and productive forests, and high quality agricultural land. Our ample access to open spaces and natural areas is one of the ways Vermonters have coped with the challenges of sheltering in place. We are also blessed by the human scale of our communities and the institutions that serve them. Our strong ties to our neighbors have allowed Vermonters to look after and care for each other in this time of sacrifice and need. Our strength resides in our communities.

In this issue of the *Vermont Environmental Report*, we report on ways Vermont can move on from COVID-19 to address ongoing environmental and human challenges. We explore how rebuilding our economy comes with the silver lining of prioritizing a green, resilient recovery, and how in-migration to Vermont during the pandemic can teach us how to best accommodate climate migrants in future years.

We write about promoting equity in conservation work, cultivating interdependence, protecting biodiversity, and more. We are thankful to the many partners and experts who contributed their voices, which may not entirely reflect VNRC's position on all issues but are important to a broad perspective on Vermont's future.

We hope that when you're reading these essays, you'll think about how many of the institutions we rely on can be re-imagined and restructured to serve everyone living in this state, from how we vote to how we get around our cities and towns. And that you'll reflect on how to truly support communities in Vermont (and nationwide) who lack the resources to fulfill their full potential. 🌱



Bob LoCicero

Going Through the Narrows

Judy Dow is an educator who serves as the director of Gedakina, a non-profit multigenerational endeavor to strengthen and revitalize the cultural knowledge and identity of Native American youth and families from across New England. She is also a VNRC Board member.

As of writing, Gedakina has provided rapid response funding to 48 Native families in New England to help them pay for food, heat, fishing poles, and seeds during the health crisis. Learn more at www.Gedakina.org.



Judy Dow has lived her whole life in N'dakinna, currently called Vermont. While she was growing up, her family spent seven months in South Hero and five months in Burlington. Dow learned to observe the place where Lake Champlain narrowed between two islands, which she calls the narrows. That's where she'd watch the currents changing, the winds switching directions, and the seagulls shifting their flying patterns with the seasons. If you knew how to read the narrows, you'd know where fish were spawning and when it was the right time to go fishing. The narrows made transitions visible.

Dow no longer lives on South Hero, but the narrows are still in her mind. She sees them as a metaphor for the advancing climate crisis and the monumental changes it will bring, exacerbated by the COVID-19 pandemic. We are going through the narrows now, she says, into a world that will be totally foreign to us. How can we prepare?

A lifelong educator, Dow often asks children what they will bring through the narrows when the time comes. There's one ground rule: All systems they currently know and understand will be broken. There will be no WiFi, no electricity, and no fossil fuels. It can't even be assumed that clean air and water will be waiting on the other side.

After repeated attempts to preserve their current way of life in an imagined future, Dow's pupils eventually stop insisting that their candy and computers are essential. They opt instead for basic needs: clean air and water, seeds to grow food. They say they'll take teachings, tradition, and family with them.

"These are the things that will get us through the narrows," Dow explains. She believes that the rich might buy what they need to rebuild what has been destroyed, but money alone will not ensure long-term survival. "Those who survive in the long run will be people with the skills to understand the difference between a want and a need."

Climate change has been a long-looming threat, and COVID-19 an unprecedented, more sudden one. But from Dow's perspective drawing from the traditions she grew up with, neither of these crises are fully unexpected, in terms of the destruction

they are poised to bring. She refers to the Seven Fires prophecies, a spiritual teaching shared among many Indigenous people living in what is now called North America.

According to Dow, the prophecies predict a fork in the road where people can decide to travel down a burnt path of destruction or a green, lush path of health and harmony with all peoples. "We've always known that this fork in the road would be coming and we'd have to make a decision on which way to go. Going through the narrows is deciding the ultimate path," she says.

To Dow, one of the most devastating parts of the COVID-19 pandemic has been its decimation of the elderly. In addition to their vulnerability to contracting and dying from the virus, older individuals have been overlooked or under-prioritized by virtue of their advanced age when medical professionals are forced to make decisions about who to treat, due to the limited resources available to them.

And yet, in Native communities, Elders are the people who might hold the ancient traditional ecological knowledge needed to cross through the narrows. They can be the last surviving speakers of a language. They know how to cultivate resilience and



Bob LoCicero

make use of ancient food systems, and how to use plants to create medicine. This includes species that many modern conservationists consider to be invasive — even if they have been in the land for many decades and their surrounding ecosystems have adapted.

Dow remembers her grandfather “just knowing” how to fish in Lake Champlain. He knew that the night crawlers he used as bait were not native to the land around him, and yet the fish and the people had adapted to them during generations of coexistence. She conjectures that many plants considered invasive today might actually hold the cure to new illnesses or threats. (Japanese Knotweed, for instance, has been used as a treatment for Lyme Disease.) Instead of strategically destroying an invasive, Dow says, we might consider waiting patiently for it to find its balance on the land.

Dow encourages us to think about who in our conservation and scientific communities are given authority to make decisions about which plants, fish, or animals are considered “invasive” and

which are not, which lends itself to a larger question about the dominant power structures that undergird the work we all do on behalf of the environment and its people.

One thing is certain: When we talk about climate change and protecting the environment, we must center public health and equity. There is no hope to save our natural world without working together and supporting people who have been taken from and left behind. This includes Black, Indigenous and People of Color (BIPOC) communities who have been disproportionately exposed to toxic pollution, and any people struggling with poverty and other disadvantages.

“Someone is deciding the Elders are not going to make it through this pandemic. And someone will decide, too, who is going through the narrows and who won’t make it through,” says Dow. “We need to change this mentality. We need to collaborate and show solidarity so that as many people as possible make it through.” 🌱



Pandemic Rush to Vermont Highlights Future Climate Migration Issues

Elena Mihaly is a Senior Attorney working in the Clean Air and Water Program and Community Resilience Program at the Conservation Law Foundation (CLF). Kate McCarthy is Sustainable Communities Program Director at VNRC.



Elena Mihaly



Kate McCarthy

Have you thought much about climate migration, sometimes called “climigration”? The term describes a future influx of “climate migrants” to places like Vermont — which has so far been shielded from hazards like sea level rise, wildfires, and widespread drought — as climate impacts begin to make other parts of the country uninhabitable.

The Green Mountain State is desirable for many reasons. It is close to major cities and the East Coast, with relatively inexpensive land. It has abundant surface and groundwater, and mountains, lakes, and rivers are easily accessible. Vermont’s low population density offers newcomers, many from cities or suburbs, ample outdoor space and the potential to grow their own food, or access fresh food from local farms.

Elena Mihaly, a Senior Attorney working in the Conservation Law Foundation’s Clean Air and Water Program and Community Resilience Program, has been analyzing trends around climate

migration for several years in collaboration with Kate McCarthy, VNRC’s Sustainable Communities Program Director. Together, they led a discussion on climate migration at the Resilient Vermont Conference at Norwich University last summer, urging participants to expect a future population boom as the result of climate disasters elsewhere in the country, and gathering the group’s perspectives on how to manage this change.

This spring, Mihaly and McCarthy worked with a group of Antioch University graduate students to compile a literature review of climate migration research and conduct an initial analysis around which types of migrants may come to Vermont and where they may locate. (Results from this work are forthcoming.)

When the COVID-19 pandemic hit, these considerations reached a new level of relevancy. Within weeks of the virus beginning to spread, many people fled from nearby urban areas to their vacation homes in Vermont, where infection rates were lower and it was easier to comply with social distancing measures.

In May, *VTDigger* reported that realtors were selling homes in Vermont — sight-unseen, and above asking price — to clients from New York, Massachusetts, Connecticut, Florida, and even from out West. The last time something similar occurred was after the September 11 attacks in 2001. This more recent sudden influx due to COVID-19 gives us a preview into how population increases due to climate migration may impact Vermont’s culture, natural resources, and communities — and into the tangible ways we can begin preparing.



For instance, Vermont already has a housing problem, caused in part by supply, somewhat by second homeownership (of which the state has the second highest rate in the nation, after Maine), and in part by the condition of the existing housing stock. Add to this an increase in demand for land from what is expected to be a largely affluent first wave of newcomers, and an existing limited housing stock, and we can imagine an exacerbation of Vermont's affordable housing crunch for people who already live here.

In addition to building more — and more affordable — housing, Vermont would need to make deliberate investments in infrastructure like sewer and water in villages to comfortably accommodate growing populations. “Vermont has strong policies that promote smart growth, as well as a shared appreciation for our downtowns and villages,” says McCarthy, “but continued and increased investment is really necessary to make sure that these areas have the housing and services, like high-speed internet, to attract newcomers — not to mention to support people who are already here.”

Vermont would also need to strengthen policies that better manage development outside of town centers. “If we don't pair smart growth investment with policies for development in our rural areas that preserves our natural resources, the default is going to be rural sprawl that fragments forests and farmland,” McCarthy points out. She explains that people seeking rural refuges in anxious times can put new pressure on struggling Vermont farmers and forest landowners, for whom selling land may be a timely opportunity, though certainly not an easy or painless option. If land costs go up, so too would the pressure to subdivide parcels. All these factors could cause an explosion in sprawl along with new residents, while displacing people and

The Vermonter Poll

The Vermonter Poll, a statistically representative statewide poll taken annually by the University of Vermont's Center for Rural Studies, asks a question every other year that relates to rural sprawl. The question supposes one's income is high enough to purchase a home and provides two options to choose from: buying a home in a compact area close to public transportation, work, and shopping; or purchasing a larger, single-family home of equivalent value in an outlying area, with longer commutes but more yard space.

In 2020, 35% of Vermonters chose living in town, which is a somewhat higher proportion than in 2018 (32.5%), but still far below the proportion of Vermonters who chose to live in an outlying area (60.7% in 2020 and 64.1% in 2018). And while the 2020 and 2018 percentages of aspiring village-dwellers are up from 1998-2003, they are the same or lower than the rate from surveys taken in 2004 onwards. The Poll is also showing that since 2005, people have been demonstrating decreasing interest in acting to stop sprawl.

Furthermore, the 2020 poll results were logged before the coronavirus took root. “With increased flexibility in working remotely during the pandemic, more people may want rural living, whether they are new to the state or already living in Vermont. But they are not likely to think of it as sprawl, which makes our farm and forest land vulnerable,” says Kate McCarthy, Sustainable Communities Program Director at VNRC.

communities built around farms and the forest products industry.

“The rate of homes being bought online by out of staters is a good indication of how eager people are to access land in Vermont and benefit from the state’s natural resources and open space,” says Mihaly. In light of this demand, she says it’s worth thinking through whether disaster in-migration would cause harm or benefit to any particular group of current Vermonters, any particular town or region, or any particular natural resources, which includes determining where developments might occur and where amenities might be placed.

Mihaly says it’s also worth examining Vermonters’ attitudes towards those who are newly seeking to reside in Vermont, or who are spending more time at their vacation homes. On one hand, some newcomers have been praised for their role in buoying local businesses. But others have not been made to feel welcome. In May, for instance, a Black man reported to local news outlets that he and his young son had been harassed while driving a car with New York State license plates near their vacation home in Hartford. Disturbingly, a white man had told them to leave, saying they were not wanted in Vermont.

“If we benefit from a more diverse population as a result of climate migration, this would provide yet another reason to reckon with racism that is embedded in our culture and systems, though that work really needs to happen as soon as possible,

regardless,” says McCarthy. “Mihaly says that planning can help alleviate some of these pressures, municipal and cultural. “Work at the town level to get people primed for newness can stave off nativism. If communities take time to sketch out a vision of who they are and how they want to develop — and do that in a truly inclusive way — they can cultivate an openness for welcoming change.”

COVID-19, like Tropical Storm Irene before it, demonstrates that the disparities we see in times of crisis are reflective of the disparities that already existed in times of relative prosperity. Mihaly says that if we work to reduce structural inequities now, by making housing more affordable, improving access to amenities, and demonstrating a commitment to racial justice, then “when newcomers arrive, we’ll have more equitable systems already in place.” Mihaly and McCarthy believe that the actions that could best prepare us for climate migration are things we should be doing anyway, from a climate resiliency perspective, a community development perspective, and an equity perspective. “It’s about making intentional decisions about growth,” says Mihaly.

Vermont now has the opportunity to ready itself for an inevitable change that can either place a major strain on our resources or enhance the state for everyone. “We can handle it, if we plan for it,” says McCarthy. 🌱



Here’s What a Green Recovery Looks Like

Darren Springer is General Manager of the Burlington Electric Department and a VNRC Board member.

Johanna Miller is Energy & Climate Action Program Director at VNRC and coordinates the Vermont Energy and Climate Action

Network (VECAN). They weighed in on two ways Vermont can start to transition to a clean energy economy while rebuilding after COVID-19.



Darren Springer



Johanna Miller

A Green Stimulus

In early April, Burlington Mayor Miro Weinberger announced a green stimulus package to jump start the Burlington economy after the COVID-19 pandemic, in a way that would help accomplish the City’s long-term goals of achieving net zero energy by 2030.

Since then the Burlington Electric Department, a municipally-owned utility led by Darren Springer, has been taking the lead on

the initiative. Burlington Electric and the City of Burlington are among very few utilities and communities nationwide to launch a green stimulus as part of their COVID-19 response efforts.

“The goal is to make access to clean energy technologies as affordable as possible,” says Springer. Burlington Electric is now partnering with local credit unions on a new Home Energy Loan program that will provide interest rates as low as zero-percent, based on household income, to residential customers who install heat pumps, heat pump water heaters, and/or new Energy Star home appliances.

Another active Burlington Electric initiative is an electric bicycle incentive program that significantly reduces the barriers to owning an e-bike. Thanks to a partnership with Old Spokes Home — a non-profit bicycle shop in Burlington’s Old North End — and a local credit union, lower-income Burlington Electric customers will be able to buy an e-bike at cost with a \$200 rebate, financing at zero-percent interest over a 36-month period.

Burlington Electric received the necessary regulatory approvals for the green stimulus proposals from the Vermont Public Utility Commission in late May, and the full suite of programs are described at burlingtonelectric.com/greenstimulus. Springer sees immense potential in this moment. He says that



Bob LoCicero



Bob LoCicero

economic recovery efforts are the most fruitful way Vermont can take immediate climate action, all while putting people to work and saving them money.

Since 2014, Burlington Electric has powered the City on 100% renewable energy and Springer thinks Burlington can do the same for thermal and ground transportation, achieving net zero by 2030. According to a 2019 report from the Energy Action Network (EAN), electricity generation in Vermont accounts for just over 8% of the state's greenhouse gas emissions, whereas the thermal sector accounts for nearly 30%, making it ripe for innovations in weatherization, heat pumps, advanced wood heating, and more.

Springer believes that a green stimulus can provide a major push in the right direction. "We now have an opportunity to take technologies like heat pumps and electric vehicles that will significantly help with emissions reductions, and make them more affordable and accessible. We want to get money out into the community and make these things happen," he says.

Consider, too, the importance of investing locally. Over the last decade, Vermont has spent an average of \$2 billion a year on imported fossil fuels, with about 75% of those dollars draining right out of state, reports EAN. In contrast to fossil fuels, renewable energy for thermal, electricity, and transportation can be generated right here in Vermont, creating local jobs.

"As an electric utility we are very much a local energy provider, in that more than half of every dollar our customers spend stays in the state economy," explains Springer, who has been appreciative of the ways even his personal energy use has gone more local since the pandemic began. He's driving a lot less — and because he drives a plug-in hybrid, he rarely goes to

the gas station at all. (As of writing, Springer told VNRC he had filled up just twice in the last sixteen months.)

"If you spend a buck at a gas station, less than a quarter of it stays in the state economy. My gas station is a plug that goes into the wall," says Springer. "Everything about 'electric' is a little more local."

Accountability to Climate Action: The Global Warming Solutions Act

The World Health Organization has recognized climate change as an urgent public health threat, which the pandemic has further emphasized. We know that communities exposed to air pollution over long periods of time are more likely to suffer from asthma, respiratory diseases, and other adverse health impacts — and as a result have been significantly harder hit by COVID-19. These communities consist primarily of low-income people and people of color.

"The pandemic has made clear to us that our communities and our health systems are not ready to deal with crises of this magnitude: not COVID-19, and not the climate emergency," says Johanna Miller, VNRC's Energy and Climate Program Director. "As our state begins work on crisis recovery, we have an unparalleled opportunity to ensure it is a resilient, equitable recovery that helps us reach our climate goals."

Miller believes the Global Warming Solutions Act, or GWSA, can help get us there. Passed 105-37 by the Vermont House of Representatives in February 2020 and by a vote of 23-5 in the Senate in late June, the bill lays out an accountability and planning framework and a process for Vermont to strategically reduce greenhouse gas emissions to net zero by 2050. Framed

around vital principles for action — adaptation and resilience, equity and justice, job creation and economic development, and more — the policy offers a powerful opportunity to support long-term investments in strategies that will also improve public health, such as decarbonizing our transportation sector.

GWSA's multi-pronged framework establishes a Climate Council and four subcommittees, focused on resilience and adaptation, mitigation, equity and justice, and the role that our farms and forests play in this essential transition to a more resilient state. GWSA creates a framework for strategic, essential action on climate and would build on Vermont's strengths, like harnessing our local food economy, farms, and forests to work together to reduce pollution and create more resilient communities.

This legislation is not unique to Vermont. Neighboring states already have comparable laws in place, establishing mandatory pollution reduction requirements and deadlines for climate action. It's time for Vermont to catch up. Our climate pollution has actually increased by 13% since 1990, according to the

Vermont Greenhouse Gas Emissions Inventory and Forecast. Neighboring states, meanwhile, have seen declines (13% in New York, 7% in New Hampshire, and 22% in Massachusetts, according to those states' data).

The Legislature is expected to take final action on the bill when it reconvenes in August and, after that, GWSA will move to Governor Scott's desk. Miller asks Vermonters who understand the need for this policy to contact the Governor and urge him to sign the bill into law. "It's the framework we need to make investments in clean energy innovation solutions, like efficiency, renewables, transportation transformation, and more. In doing so, we can put people to work, cut carbon pollution, help families save money, and (re)build communities," she explains.

"Instead of doubling down on imported fossil fuels that drain our economy, tie us to a global market, degrade public health, and exacerbate global warming, we have the chance to invest in a recovery that makes Vermont stronger, more equitable and more self-reliant," says Miller. "Why wouldn't we take it?" 🌱



Shared Streets are a Healthy Choice

Karen Yacos is Executive Director of Local Motion, a statewide organization working to make biking and walking a way of life in every corner of Vermont. Laura Jacoby is Executive Director of Old Spokes Home, a nonprofit bike shop and transportation advocate in Burlington's Old North End.



Karen Yacos



Laura Jacoby

Did you find yourself walking or biking more often, and driving less in the early days of the COVID-19 pandemic? If so, you probably found yourself taking up more of the road in order to maintain a safe distance from your neighbors, due to packed sidewalks and a decrease in car traffic.

"When traffic volumes decrease, speeds tend to increase. And when there are people on parts of the roadway where drivers don't expect them to be, there's an increased risk for crashes," wrote transportation and safe streets advocate Local Motion in a blog post, *A Vermont Guide to Shared Streets during COVID-19*.

These concerns are what drove the City of Burlington to launch its Shared Streets for Social Distancing campaign in April, prompted in part by crowding on the Burlington bike path. Adjustments have included designating certain streets as available to local traffic only; designating others as "shared," with

reminders for motorists to drive carefully; and implementing temporary restrictions on others that widen key walking and biking corridors. In June, the initiative added a fourth part: temporary cone-protected bike lanes on North Ave, in partnership with community volunteers who will be maintaining the cone barriers.

Karen Yacos, Executive Director of Local Motion, is encouraged by these modifications. She knows firsthand that when people see physical changes in action and experience the benefits that result — for instance, fearing less for your family's safety when a bike lane is added to your high-traffic street — they're more likely to be in favor of implementing them on a lasting basis.

Meanwhile, Local Motion is busy engaging Vermonters around the use and care of their bicycles. Its school curriculum went online in April, and so did its mechanic and safety training courses. Jonathon Weber, the organization's Livable Streets Program Manager, held tune-up workshops via Facebook Live, broadcasting from his basement. VNRC asked Yacos how she thinks Local Motion's work will change post-pandemic. "I don't think we're going back to 'normal,'" she told me. "I think we're going



Bob LoCicero



somewhere else. Our goal is to determine how our programming can support new ways of thinking about transportation and community.”

Yacos thinks the COVID-19 crisis will cause many to imagine a Vermont where driving is not a daily necessity; where people can take public transit or feel empowered to get on their bike and commute to work. She thinks, too, that coming out of a socially-distanced climate where many simply crave being around others, we will demand a higher quality of life that includes a greater freedom of mobility.

For many, of course, better transportation infrastructure is not just a preferred option; it’s a necessity. Laura Jacoby is Executive Director of Old Spokes Home. The nonprofit bike shop is located in the Old North End, a diverse and mixed-income Burlington neighborhood where many households rely on bicycles and public transport to get to work and school.

Burlington’s “Shared Streets” program currently includes many streets in the Old North End but Jacoby knows we can’t take for granted that any permanent safe streets modifications Burlington adopts in the core downtown area will extend to the Old North End or to other areas. “Bike routes need to be accessible from all neighborhoods, and connect to places of work where our customers — many of them shift workers — are going,” she says.

With a Small Grant for Smart Growth from VNRC, in addition to other funding, Old Spokes Home is creating a Transportation Equity Coalition to ensure sustained representation of the carless in policy-making discussions about transportation infrastructure and services in Chittenden County. As of this writing, coalition representatives have helped draft comments about the proposed redesign of Burlington High School, urging better infrastructure for multiple modes of transportation at the new facility. They will also help inform a Mobility Audit in the Old North End, which Old Spokes Home will undertake in partnership with the Chittenden County

Regional Planning Commission (CCRPC) this fall to better determine the community’s transportation needs and desires.

Local Motion, meanwhile, is thinking about ways it can improve Vermonters’ lives in the wake of the COVID-19 crisis. Says Yacos, “We may not be on the front lines of the response effort, but being able to get around on a bike and being able to walk in your community is also important. Being healthy matters.”

Chronic lung disease, serious heart conditions, and diabetes are among the health factors that put people at higher risk of severe illness from coronavirus, according to the Centers for Disease Control (CDC). All of these are endemic in Vermont, making up (along with cancer) three of the four diseases that resulted in more than 50% of deaths in the state, before the coronavirus even struck.

For many, pursuing a personal exercise routine can seem like a simplistic way to ward off vulnerability. The threats of environmental racism, a lack of affordable healthcare, and disparities in living conditions have compounded health problems among low-income communities and communities of color, who are suffering most from the COVID-19 crisis nationwide.

Still, the impulse to lead a healthier lifestyle resonates with many in these challenging times. Both Yacos and Jacoby have observed more people in their orbits who are citing their health and underlying health conditions as a reason to ride their bicycles and walk outside more often as part of an active lifestyle.

A recent study by the Vermont Department of Health quantifies how meeting the transportation goals in Vermont’s Comprehensive Energy Plan by 2050 could yield dramatic health benefits, like saving 2,000 lives due to more physical activity, cleaner air, and safer roads. Burlington’s Shared Streets for Social Distancing program is just a start, but it has the potential to catalyze big improvements in the Queen City, and ultimately across the state. Says Yacos: “People make change based on experiences. And this pandemic is a big change for everybody.” 🌱

Protecting Biodiversity in Vermont

Curt Lindberg is a founder of the Vermont Alliance for Half-Earth. He brings to his passion for biodiversity an extensive background in complexity science and healthcare improvement.



For many, being able to get outside — in the garden, for a hike or a paddle, or sitting around a campfire with friends — has made the past months of social distancing far more bearable than they would have been without the access to nature that we enjoy here in Vermont. However, having the good fortune to live in close proximity to open spaces, large tracts of forestland, and clean, swimmable lakes and rivers feels tenuous as the global phenomenon of forest and habitat fragmentation occurs at a significant pace.

The ongoing loss of natural areas and degradation of surface waters is a global crisis. In a study prepared for the Center for American Progress, it was estimated that between 2001 and 2017, the United States lost an area equivalent to a football field (slightly more than an acre) of natural area to development every thirty seconds. In other parts of the world, the trend is

worse. For example, deforestation in the Amazon Rainforest is occurring at a rate of one and a half acres per second.

Depleting our natural areas threatens the very existence of as many as one million animal species. It will exacerbate global warming, and increases the likelihood of experiencing additional pandemic diseases, such as the current coronavirus.

Fortunately, there is a movement at the federal level to address that trend, and a group of Vermont educators, conservationists, business leaders, and public officials, co-founded by Curt Lindberg, is working on a similar effort in the Green Mountain State. The Vermont Alliance for Half-Earth draws inspiration from the global Half-Earth Project, founded by famed naturalist E.O. Wilson, whom Lindberg knows personally.

Wilson's 2016 book *Half-Earth: Our Planet's Fight For Life* proposes devoting fully half of the Earth's surface to nature in order to preserve the biodiversity of the planet, and thus the human race. Describing the challenge in the *New York Times*, Wilson explains that “the only way to save upward of 90 percent of the rest of life is to vastly increase the area of refuges, from their current 15 percent of the land and 3 percent of the sea to half of the land and half of the sea.”



Bob LoCicero

The Vermont Alliance for Half-Earth is initially focused on the Winooski watershed, which covers much of Central Vermont and surrounding areas. The group's goal is to raise public awareness around the global biodiversity crisis to promote both individual action and public policy, ranging from re-wilding a portion of your backyard to promoting more forest conservation.

Lindberg hopes this regional approach to an Earth-wide effort can serve as a template for other parts of the state, country, or the world. "On the global level, it's Half-Earth," Lindberg says. "In Vermont we can talk about half-yard, half-town, half-valley, half-state."

In 2019 the Alliance organized a "bioblitz," an event focused on finding and identifying as many species as possible in a specific area over a short period of time, in collaboration with North Branch Nature Center and the Vermont Center for Ecostudies. The activity introduced students from 10 schools to the role of biodiversity in healthy ecosystems and engaged them on how their school grounds could better support Vermont species.

The success of that event sparked the three partners to hold a backyard bioblitz this spring that helped families stave off cabin fever during quarantine by observing living things in their backyards or on nearby public lands. Even with no element of public gathering, the endeavor generated 10,300 observations, logging sightings of more than 1,300 species of plants and animals across the state, which participants submitted digitally. The Vermont Center for Ecostudies is now working on mapping those results.

In partnership with the University of Vermont's Field Naturalist Program, the Alliance recently researched and e-published a collection of stories by Eric Hagen that showcases what Vermonters are already doing to enhance biodiversity in their yards, farms and forests. Find the stories at <https://arcg.is/uaymH>.

The Vermont Alliance for Half-Earth is part of a larger, and growing, national effort. Last fall, U.S. Senators Tom Udall and Michael Bennet, together with several co-sponsors, introduced a resolution calling on Congress to move toward the conservation of 30% of the nation's land and water by 2030, an initiative they named 30x30. The Udall-Bennet resolution calls on the federal agencies to work with "local communities, Indian Tribes, States, and private landowners to conserve natural places and resources under their control," with an emphasis on addressing climate change and preventing species extinction. This is a critical step toward achieving Wilson's Half-Earth vision.

"In the short term, it is difficult to envision the most anti-environment administration and U.S. Senate in 120 years to take action on the 30x30 effort, despite the urgent need. There is, however, a reason for optimism," says VNRC's Executive Director Brian Shupe, who is also supporting the Vermont Alliance for Half-Earth.

In a bipartisan vote this summer, Congress passed the Great American Outdoors Act, which allocates funds to improve infrastructure in our national parks and authorizes permanent funding for the Land and Water Conservation Fund (LWCF). The President signed this bill into law on August 4. Securing funding for LWCF, the nation's primary land conservation

program, has been an elusive goal since it was created in 1964.

Meanwhile, the power of hyper-local actions to address a great global need has resonated deeply with Lindberg during the pandemic. In particular, he watched with admiration as the Washington Northern Orange County Regional Response Command Center (WNOC-RRCC), a mutual aid network in Central Vermont, came together seemingly overnight to protect vulnerable populations. (VNRC lent one of our employees, Ian Hitchcock, to work on this operation during the initial height of the coronavirus emergency. The network demobilized in mid May.)

Lindberg hopes that as more Vermonters come to terms with the climate crisis and the threat of catastrophic biodiversity collapse, they will turn to each other with more urgency to rally around land conservation and species protection as well. And when that happens, the Vermont Alliance for Half-Earth will be there to help. 🌱



Bob LoCicero

Voting in a Pandemic

Lauren Hierl is Executive Director of Vermont Conservation Voters, a partner organization to VNRC. VCV works to elect environmentally-friendly candidates to public office, and then holds elected officials accountable for the decisions they make affecting our air, water, wildlife, land, communities, and health. Learn more at www.vermontconservationvoters.org.



In April, many people watched with concern as voters in Wisconsin lined up for hours at limited polling places — at a time when most of the country was still on lockdown due to the COVID-19 crisis — after the conservative Wisconsin Supreme Court refused to postpone the state’s elections.

“People were literally forced to choose between their right to vote and putting their health at risk,” says Lauren Hierl, Director of Vermont Conservation Voters (VCV). After the elections, the Wisconsin Department of Health reported dozens of cases of COVID-19 linked to people who had voted in person that day.

In Vermont, as in other states, we’ve had to make important decisions about how to ensure safe voting in the November 2020 elections. Vermont Secretary of State Jim Condos, who oversees our state elections, was authorized this spring by the Vermont Legislature to develop new procedures to protect the health and safety of voters, election workers, and candidates during the pandemic.

While initially the Legislature sought agreement on the Secretary’s election plans from Governor Phil Scott, Scott failed to endorse a vote-by-mail program and instead called for a wait-and-see approach. Knowing the state must act swiftly to put in place the systems and contracts needed for a successful and secure voting program in 2020, in June the Vermont Legislature passed a bill giving Condos the unilateral authority to implement vote-by-mail during the pandemic.

Secretary Condos’s plan includes sending each registered voter their ballot in the mail for the November elections, which will allow as many Vermonters as possible to cast their votes from the safety of their own home. Condos has also mailed active

registered voters a postcard for the August Primary elections, letting them know they can request an absentee ballot and vote at home.

Vermont is building on strong progress in recent years to make voting more accessible. Approximately 30% of Vermonters already cast their ballots using no-excuse absentee voting, where anyone can request and return their ballot through the mail. We have automatic voter registration through the Department of Motor Vehicles (DMV), which increases registration rates and helps us maintain an accurate voter database. Vermont also has same-day voter registration, meaning you can show up at the polls, register to vote, and cast your ballot — all on Election Day.

“This year, given the uncertainties and health risks around COVID-19, we’re excited that the state is moving forward with implementing a universal vote-by-mail system for the November elections,” says Hierl. There are already five states with these

Given the uncertainties and health risks around COVID-19, we’re excited that the state is moving forward with implementing a universal vote-by-mail system for the November elections.

Shelden Goodwin



systems in place: Utah, Oregon, Washington, Colorado, and Hawaii. A number of other states, including Massachusetts and Rhode Island, are starting to commit to expanded vote-by-mail programs this year. “Vermont election experts have been able to learn from these states’ experience to structure a program that will be safe and secure,” Hierl adds.

There are multiple benefits to vote-by-mail in addition to avoiding risks of exposure to COVID-19. Notably, vote-by-mail states have higher than average voter turnout. And by having their ballot at home, people have the time and opportunity to do research, making them more likely to vote on every item on their ballot. This increases participation in important races up and down the ballot that are not as well publicized.

Sending all Vermonters their ballot, while also maintaining

in-person voting options, will ensure that as many people are able to vote as possible, including voters with disabilities, voters who need interpretation services for their ballots, and even voters experiencing homelessness. In Oregon, for instance, a voter can provide any address where they can pick up their ballot: a shelter, a church, or even the county clerk's office.

In April, VCV learned this and more through a webinar it co-hosted with VNRC featuring Lindsey Scholten, Political Director at Oregon League of Conservation Voters. The program informed Vermonters about the type of system our state could expect to adopt, and lessons learned from Oregon's twenty years of experience with its vote-by-mail program, for which it is nationally renowned. Find the recording of the webinar at vermontconservationvoters.org.

Despite extensive evidence to the contrary, the Trump

Administration and its allies have been calling into question the security of vote-by-mail. But as the *New York Times* Editorial Board noted in March, states that use vote-by-mail have encountered essentially zero fraud. Oregon has sent out more than 100 million mail-in ballots since 2000, and has documented only about a dozen cases of proven fraud.

Vermont has already been recognized as having one of the most secure election systems in the country. We can continue that tradition by successfully implementing a vote-by-mail option for the November 2020 elections, and beyond.

"Frankly, I love going to the polls on Election Day, seeing local candidates and showing my children how democracy works," says Hierl. "But during this pandemic, we are much better off committing to — and preparing for — safer and more accessible ways for people to vote." 🌱



Growing Food Sovereignty, Equity, and Social Capital

Amber Arnold and Naomi Doe Moody lead the SUSU Healing Collective in Brattleboro, Vermont. Learn more about the BIPOC Land and Food Sovereignty Fund at gofundme.com/f/bipoc-healing-foods-fund.

Lydia Clemmons, PhD, MPH, is President of Clemmons Family Farm, Inc. in Charlotte, Vermont, a 501c3 nonprofit organization (where Arnold also serves as a K-12 curriculum content developer). Learn more at www.clemmonsfamilyfarm.org.



Amber Arnold



Naomi Doe Moody



Lydia Clemmons

Clara Lenora Jenkins Sherard

important than ever, especially for vulnerable populations.

That's when SUSU got the idea to purchase Community Supported Agriculture (CSA) farm shares for people of color in their area. In just one week, with donations from a GoFundMe campaign, they provided 23 families in Brattleboro with fresh food

from local farms. It wasn't easy, as the group struggled to find farms that had not yet sold out of their CSA inventories. But after they managed to secure full shares from two nearby farms (one in Vermont, the other in Western Massachusetts), other local businesses chipped in what they could: meat, herbs, flowers, gift cards, and more.

"On top of all the trauma of dealing with being a Black person in America, you shouldn't also have to worry about finding food to take care of your body," says Arnold. While for many white Americans, the murder of George Floyd, a Black man, by a white police officer in Minneapolis struck a fresh chord around reckoning with racism in this country, Arnold says that for Black people, "George Floyd, police brutality, and systemic racism are a normal part of our everyday experience. With the CSAs, we wanted to send the message to our communities that they deserve to be nourished; they deserve to be healed."

It didn't end there. "There are only so many shares you can actually purchase. People were looking to change a system," says Moody. So the team at SUSU launched the BIPOC Land and

When COVID-19 arrived in Vermont, food access and availability emerged front and center. A University of Vermont survey found that food insecurity in the state rose 33% during the early stages of the pandemic. Meanwhile, it became clear that Black, Indigenous, and People of Color (BIPOC) were bearing the brunt of the virus in Vermont as they were nationwide, due to compounded disparities in health, housing, and employment that stem from systemic racism.

In May, the BIPOC-led SUSU Healing Collective in Brattleboro, which offers instruction in spiritual and plant-based healing, thought about ways to help its community. Amber Arnold, Naomi Doe Moody, and Lysa Mosca watched as food flew off the shelves in grocery stores and food pantries. They knew that much of the food relief being handed out at various sites around the state was processed or non-perishable. They thought about how during a pandemic, healthful food was more

Courtesy of SUSU Healing Collective

Food Sovereignty Fund, invoking the idea that all people should have the right and means to define their own food and agriculture system. SUSU's vision is to purchase farmland in southern Vermont where farmers of color can learn about and honor their ancestors' sustainable growing practices, and begin healing from a painful history of land-based oppression. SUSU names Soul Fire Farm in Grafton, NY as a model for what it hopes to accomplish, as well as a 2019 book called *Agricultural Resistance and the Black Freedom Movement*.

As of this writing, the SUSU Healing Collective has raised nearly \$105,000 of its \$400,000 goal. When it manages to purchase farmland, it will be an anomaly. Census data from 2017 tells us that just 36 of a total 6,808 farms in Vermont are either owned or co-owned by Black people, and only 17 are owned by Black people alone. According to data from the United States Department of Agriculture (USDA), of the 1.2 million acres of farmland in Vermont, only 3,960 acres (0.33%) are Black-owned or principally operated.

Some of this data was relayed to VNRC by Lydia Clemmons, President of Clemmons Family Farm, Inc. in Charlotte, Vermont, whose mission includes conserving and stewarding the physical 148-acre farm, which is one of just 0.4% of Black-owned farms in the nation. After more than 50 years growing organic hay, alfalfa, and a variety of organic food crops, the Clemmonses recently established a hoop house that produces organic vegetables that are part of African-American and African culinary heritage, with plans to foster food sovereignty from this perspective.

The culinary heritage program is implemented in part through



Naomi Doe Moody at SUSU's CSA pick-up spot in Brattleboro

"And Still I Rise," a new collaboration with Krista Scruggs of Zafa Wines, who planted a new 75-tree apple orchard on the Clemmons farm this Spring and who also recently purchased her own farm in Isle la Motte, Vermont.

Clemmons Family Farm also operates a cultural center on the physical farm to celebrate the arts and heritage of the African diaspora. The farm is one of the 22 official landmark sites on the State of Vermont's African-American Heritage Trail.

"Nationwide, African Americans have lost 93% of their land assets since the time that my parents were infants," Clemmons told VNRC, referring to the elder Lydia and Jack Clemmons, who bought the property in 1962 and are now both 97 years old. In June, the Clemmons family was featured in an educational video produced by the Office of Senator Bernie Sanders about the low number of Black farmers in the United States, and the dearth of equity that persists as a result.

"A people with no land is a people with no future, no leverage point, no equity," says Clemmons (daughter) in the film. She told VNRC that an important part of furthering racial equity in a majority-white state is creating social capital for Black farmers and farmers of color, and BIPOC leaders of all types of organizations in Vermont, and helping them to own and steward their own land.

Clemmons' parents farmed their land and refurbished their six historic buildings while pursuing medical careers at the University of Vermont. They enjoyed strong, longstanding ties to their



Courtesy of Clemmons Family Farm

A culinary heritage talk at the historic Barn House at Clemmons Family Farm, 2017



The Big Barn at Clemmons Family Farm is the future site of the African-American and African Diaspora Visual and Performing Arts Center

Courtesy of Clemmons Family Farm

community, and Clemmons and her four siblings all received higher education whose costs were covered in part by the farm's commercial hay crop (Clemmons herself holds a PhD in medical anthropology and a Master of Public Health). Still, Clemmons recalls watching white peer organizations in Vermont build their farms and futures with greater ease, receiving substantial agriculture grants simply because they knew the right people at the right organizations who were offering help and keeping them in the loop when the requests for grant applications were open.

"White farmers and landowners somehow were accessing these agriculture grants easily, but when we inquired, we felt we were being run in circles. It took me finally making a recent phone call to the Black Family Land Trust in North Carolina to ask for help. When they got on the phone with other organizations in Vermont, the agriculture grant opportunities, technical assistance, and technical information that had evaded us for years suddenly opened up to us. We are now starting to receive the kind of support we'd been watching white farmers and landowners receive for years," says Clemmons.

Outright discrimination, of the kind where the USDA routinely denies loans or grants to Black farmers, has been well documented. But Clemmons is equally concerned with favoritism, its less visible, and perhaps more insidious companion. It's basic human behavior: We tend to help people we know, people who are known to our friends or colleagues, or people who look like us. In a predominantly white conservation system, operating in a predominantly white state, it follows that white-led institutions would be more likely to share information and support through established networks of white farmers and conservationists, and in doing so — intentionally or unintentionally — deprive people of color, who are not in the

same networks, of those same opportunities.

"Equity does not mean 'equal,'" says Clemmons. "It means we need to seek out and invest more in BIPOC-led organizations, to bring their capacity to a level where they can do the work they want to do." Clemmons says organizations hoping to support diverse groups of Vermonters should not assume that everyone is accessing the information and opportunities they offer, even if they are publicly available. "Many of the people seeing your website know to look there because people have told them about you, or have already connected them with other resources that brought them there," she notes. "Do not assume that BIPOC-led groups or individuals have that same connectivity."

Arnold of the SUSU Healing Collective says that grants from white-led institutions are often well-intentioned, but the guidelines they impose can be limiting. What Black and Brown-led organizations need most is to be trusted to create the spaces that they need, "which only we know how to do," she explains. Similarly, Clemmons recommends that white-led organizations give resources directly to BIPOC-led organizations to determine their own endeavors, and then step back as advisers.

The Clemmons Family Farm began its story in Chittenden county nearly 60 years ago, and the SUSU Healing Collective's dreams of a BIPOC-centered farm in southern Vermont is still in the works. But Clemmons and Arnold, two generations of African-American Vermonters, are optimistic. "If we are able to have this platform, it lets the generations coming after us know that if we can do it, so can they. We want to create a little space so the generations after us can create bigger things, just like our ancestors did for us," says Arnold. 🌱

Don Schramm

Don Schramm is a founder and resident of Burlington Cohousing on East Village Drive. Don's lifetime hobby has been co-ops of all sorts – parents', workers', housing, and food. Aside from cohousing, he is best known for helping to create City Market/Onion River Co-op in Burlington. Don answered many of these questions with the help of his cohousing neighbors. Learn more about Burlington Cohousing at www.bcoho.org.

Why are you a member of the Vermont Natural Resources Council?

I love that VNRC works from visioning where we want our state to be in the future and keeping that vision close while working on individual problems. VNRC tackles the complexities of enhancing our natural environments while remaining cognizant of the human activities making demands upon it, and the role of community in fostering our interactions with the natural world. What VNRC does at the state level, our cohousing community is trying to do at our neighborhood level.

You helped found Burlington Cohousing in 2002, after thinking about that kind of arrangement for decades. What first attracted you to the idea of cooperative housing?

I grew up with two brothers and two sisters and counted on them to support and guide me. Then I worked as a teacher in East Africa for three years and spent some time living in traditional compounds there, where multi-generational families lived around shared amenities and a communal gathering place. That's when I saw how much easier and more meaningful it can be living collaboratively with other people.

In 1988 a friend introduced me to a book called *Cohousing: A Contemporary Approach to Housing Ourselves*, and a year later we organized a meeting of 70 people who had read the book. The idea to build something in Vermont originated there, but it wasn't until 2007, after various financial and location hurdles, that we were finally able to realize the idea in Burlington.

My neighbors say that they were involved in various kinds of communities: churches, artists' groups, communes, and large families. They, as I did, wanted community to become the main focus of their lives.

Claire Knight

Tell me about some of the ways Burlington Cohousing has reduced its environmental footprint.

Our community was designed with sustainability in mind and our residents are environmentally conscious in their daily activities. On our five acres of property, we have consolidated 32 residential units into six buildings. Individual units are modest in square footage, reducing residents' energy use. We have passive solar, extra wall and window insulation, a shared laundry facility, and a common heating and hot water system.

Because of our central location in Burlington, our residents often choose to walk, bike, or take public transportation in lieu of driving. When we do drive, we often share cars and have two level-2 electric car charging stations to accommodate hybrid and electric vehicles.

Our conservation efforts are a work in progress, and we are always looking to do more. Still, we are discouraged by the immense amount of CO₂ emissions generated by the F-35 planes in Vermont. We have reason to believe that an entire year of CO₂ emissions reductions (more



Don Schramm and his wife Barbara Nolfi in front of their home.

than 80 tons) at Burlington Cohousing is wiped out by a single F-35 flight.

*What has it been like to weather a pandemic in cohousing?
What has it taught you about mutual aid?*

If you have to live during a pandemic, cohousing with some green space is the place to be. We were “locked down” early and yet were able to socialize in our larger common spaces indoors and outdoors in gardens and yards — all with proper social distancing. However, we still suffer from not being able to easily see and communicate with our cohousing neighbors.

Mutual aid has been a part of our community from the onset. Nine of our units are perpetually affordable through the Champlain Housing Trust, and we are trying to raise money to convert seven additional units to this level of affordability. We shop for each other; we share cars; we check in on neighbors who are sick or in the hospital. Extra vegetables from our gardens go to the local food shelf. For several years we have made dinners for a homeless shelter in downtown Burlington.

The pandemic has taught us who our “essential workers” are and how important they are all the time, not just in this moment of distress. We have also learned that we can ask for help from outside, as well as offering it. For example, some of my neighbors receive aid from Age Well, a Vermont organization that sends volunteers to pick up groceries for older Vermonters, among other services.

People might know you because you ran for State Treasurer multiple times. What was your biggest motivator for seeking that office?

There were two main things that drove me to run for State Treasurer: Educating citizens and building pressure for the State to divest from all fossil fuel stocks and create a State Bank. I believe these are still good ideas for Vermont.

Currently, almost all of the State’s money is invested outside our state. A State Bank would provide a means for us to significantly invest in ourselves: in childcare services, food cooperatives, solar and wind companies, and bringing fiber-optic connectivity to every home in Vermont. Especially now, the ability to work and learn at home demands excellent internet service throughout the state. There are so many ways we could invest in ourselves if given the opportunity.

What else is in your “vision” for Vermont?

I would like to see cohousing communities everywhere. Let’s start with existing condominiums. Folks could get out, meet their neighbors, and envision together how they could make their condo association better for all.

I think we all need to find ways of helping each other out, exploring ways to spend time together, and building community. It’s good for all of us all the time, not just in a pandemic. 🌱



Angela Manno

Residents at Burlington Cohousing.

Recent Highlights of Our Work

Energy and Climate Action



Advances conservation, efficiency, renewable energy, and transportation solutions that reduce fossil fuel usage and save Vermonters money.

- Worked with partners to support a Global Warming Solutions Act for Vermont, which would turn our long-held climate goals into requirements and help facilitate a resilient recovery from COVID-19. GWSA passed by 105-37 in the House in February and 23-5 in the Senate in late June.

Another small but important climate policy priority passed the Vermont Senate in March and awaits action in the House. This bill (S.337) creates a pilot program to enable Efficiency Vermont — our energy efficiency utility — to reduce fossil fuel use for heating and transportation.

- Participated in the northeast regional coalition, Our Transportation Future, to advance the Transportation and Climate Initiative (TCI), though the original timeline for a decision on whether Vermont will sign the MOU to join the program was pushed back until after the 2020 election.
- Continued our work to support and start town energy committees by coordinating the Vermont Energy and Climate Action Network (VECAN), including hosting a virtual conversation with Congressman Peter Welch and town energy committees, and launching a statewide listserv to directly connect local energy leaders.
- Hosted and participated in several webinars, including “Out of Crisis, Into (Climate) Resilience,” which

explored ways Vermont can move out of the COVID-19 crisis into a resilient recovery that facilitates a strong, equitable economy.

- Held weekly broadcasts of our Climate Dispatch, providing live updates on climate policy, mutual aid, and more during the pandemic.

Forests and Wildlife



Maintains and enhances the ecological and economic vitality of Vermont’s forests, including promoting healthy wildlife populations.

- Continued advocacy in the Vermont Legislature to advance legislation building off the House-passed H.926 to address forest fragmentation and wildlife connectivity through new criteria and jurisdictional changes to Act 250, including reviewing long incursions from roads and driveways in intact rural lands.
- Convened an online Forest Roundtable meeting, bringing diverse interests together to discuss the status of conservation and management programs and funding challenges in light of COVID-19. The meeting included updates from the Vermont Agency of Natural Resources and federal Congressional delegation staff to discuss statewide policies and legislative updates, including Roundtable support for the Great American Outdoors Act.
- Partnered with Audubon Vermont and Dr. William Keeton of the University of Vermont Forestry Program, as a private consultant, to provide detailed recommendations to the U.S. Forest Service on the draft Environmental Assessment (EA) for the 71,000-

acre Somerset Integrated Resource Project in southern Vermont, focused on identifying areas and strategies for reducing new road construction, increased buffering of wetlands and streams, lessening the amount of old forest slated for harvest, and using ecological forestry principles to support identified management objectives.

Smart Growth



Promotes and protects Vermont’s smart growth development pattern of compact settlements — with options for transportation, housing, and employment — surrounded by farms, forests, and natural areas.

- In light of the Legislature’s need to focus on COVID-19 legislation, Act 250 was on hold until June, when the Senate Natural Resources Committee took up the bill. VNRC testified on key priorities — including promoting downtowns, reducing forest fragmentation, and promoting clean water — and urged lawmakers to adopt a balanced package.
- Coordinated the Transportation for Vermonters (T4VT) Coalition to monitor and advance our four legislative priorities: creating a strong Transportation and Climate Initiative (TCI), promoting the expansion of transit, reinforcing our smart growth communities to provide better transportation choices, and promoting adoption of electric vehicles. The coalition is currently considering how to adjust our vision and activities in order to be responsive to COVID-19 and additionally responsive to issues of equity and access.



Johanna Miller
Energy and Climate Action Program Director/VECAN Coordinator
jmiller@vnrc.org



Jamey Fidel
Forest and Wildlife Program Director
jfidel@vnrc.org



Kate McCarthy
Sustainable Communities Program Director
kmcCarthy@vnrc.org



Jon Groveman
Policy and Water Program Director
jgroveman@vnrc.org



Karina Dailey
Ecological Restoration Coordinator
kdailey@vnrc.org

- Continued work on the Smart Growth Report Card, a tool to hold our state's decision makers accountable for putting our money where our policies are when it comes to smart growth and working lands. In light of COVID-19, the Report Card will highlight the importance of using any recovery funding to bolster our smart growth efforts, much like Vermont did after Tropical Storm Irene in 2011 by investing in the state offices in Waterbury.
- Awarded Small Grants for Smart Growth to the Town of Hinesburg, to plan the creation of a town green; to the South Hero Land Trust for continued coordination of a community trail network; and to Canaan Naturally Connected, to collect public input about usage of a community forest in the Northeast Kingdom.
- Served on the Advisory Committee for an I-89 Corridor Study, to ensure that any proposed changes don't lead to sprawl, and to make sure that non-driving options — rather than just road expansions — will be fully integrated into the process.

Clean Water

Protects and enhances the quality of Vermont's streams, rivers, lakes and ponds, wetlands, and groundwater.



- Hired Karina Dailey as VNRC's Ecological Restoration Coordinator, to run our dam removal program and contribute scientific knowledge and expertise to policy issues around the conservation and restoration of Vermont's natural resources.
- Worked with partner groups to advocate for federal and state funding for water programs in Vermont that face potential



Lauren Hierl
Vermont
Conservation Voters
Executive Director
lhierl@vermontconservationvoters.org

cuts due to the financial fallout from the COVID-19 pandemic.

- Supported H.833, a bill that would help ensure that surface water withdrawals do not harm water quality and fisheries habitat, which passed the House in the first two readings and is awaiting a third reading so it can move on to the Senate for review.
- Commented in support of new dam safety rules in the rulemaking process and provided outreach on the proposed rules, relative to national dam safety issues. Continued supporting the removal of at least one dam in 2020 with many more queued up for 2021 and later.
- Provided comments and preliminary scientific review in support of water quality related to forest management on federal (Somerset IRP) lands.
- Conducted public education and outreach (webinar) regarding Vermont's Act 64, the Clean Water Act. Currently working with partners and DEC to follow the progress of Act 76, which establishes a water quality project delivery framework to support Vermont's clean water goals.
- Participated in ANR's renewed effort to amend the Vermont Wetland Rules. With partners, proposed adopting a net gain wetlands policy and streamlining the process for designating wetlands as Class I.

Toxic-Free Environment

Advocating for policies that protect Vermonters' health by reducing exposure to hazardous chemicals, holding toxic polluters accountable for the harms they cause, and ensuring our waters are clean and safe.



- Secured a unanimous vote out of the Senate on a bill (S.295) to restrict toxic PFAS chemicals from firefighting foam, food packaging, carpets and rugs, and children's products. We will continue to advocate for progress

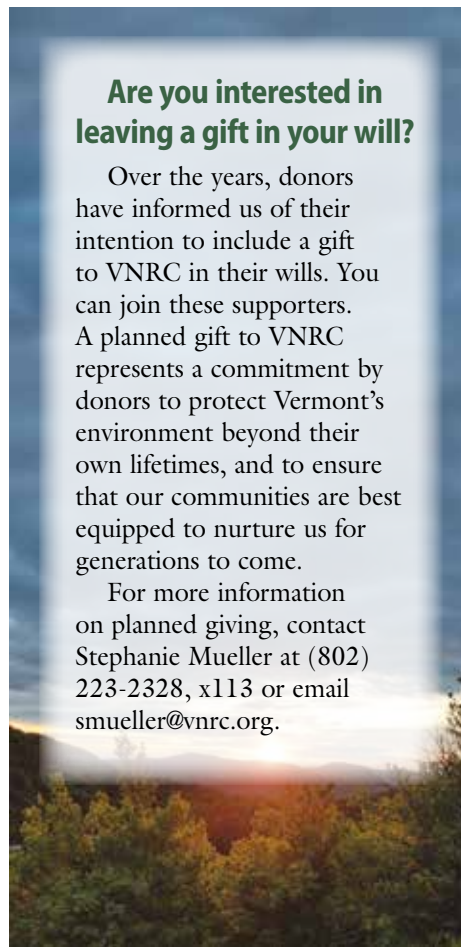
when the bill is taken back up by the House in August.

- Advocated for federal stimulus ideas to simultaneously spur Vermont's economy and address the ongoing climate crisis, PFAS contamination, clean air and water, and other priorities. Joined Vermont environmental, social, and racial justice organizations to demand legislators address equity issues in COVID-19 response and recovery.
- Advocated for continued progress on plastic pollution, building on the Single Use Products Working Group, by supporting a bill (S.227) that restricts some single-use plastic products and sets up ongoing progress on "extended producer responsibility," which would make manufacturers responsible for managing the waste from their products.

Are you interested in leaving a gift in your will?

Over the years, donors have informed us of their intention to include a gift to VNRC in their wills. You can join these supporters. A planned gift to VNRC represents a commitment by donors to protect Vermont's environment beyond their own lifetimes, and to ensure that our communities are best equipped to nurture us for generations to come.

For more information on planned giving, contact Stephanie Mueller at (802) 223-2328, x113 or email smueller@vnrc.org.



News & Notes

A Wild & Scenic Success

2020 marked VNRC's 12th year screening the Wild & Scenic Film Festival in Vermont. In partnership with Patagonia Burlington, we offered a virtual line-up of short films highlighting the importance of equitable access to our open spaces and public lands. Thank you to the 300+ people who tuned in, and to those who donated and entered our raffle. Many of you watched with others, so we estimate that our program reached more than 500 people!

Though we all viewed the films remotely, we felt your presence and enthusiasm through the live chat and post-event feedback. We hope the films left you feeling hopeful and inspired.

Prioritizing Equity and Environment

VNRC and partner organization Vermont Conservation Voters (VCV) were among eight environmental and public health advocates who sent a letter in April to Governor Phil Scott, thanking him for his efforts to address the unprecedented COVID-19 emergency and urging him to uphold environmental and public health protections during the crisis, along with public accessibility and transparency. The letter came on the heels of the federal Environmental Protection Agency (EPA)'s relaxation of environmental rules designed to keep polluters in check and protect public health.

VNRC and VCV also participated in a May letter asking Vermont legislators to proactively address equity issues in COVID-19 response and recovery, given the intersection of the pandemic with persisting racial, economic, and other inequities in Vermont. Find both letters at vnrc.org.

Rethinking Engagement

Though COVID-19 has caused us to cancel all in-person events this summer, we have continued to offer webinars on topics like water quality, Act 250, and biodiversity loss. And we are always thinking of new virtual workshops and films to bring your way. If you have suggestions, let us know.

We're also interested in how VNRC members are adapting to life during the pandemic, whether in their work or their personal lives. What has changed for you, and where do you hope to see things go from here?

If you would like to share your perspective and are interested in being featured in a future Member Profile, or on our website, please email Colin Keegan at ckeegan@vnrc.org.

VECAN Launches Listserv for Town Energy Committees



This spring, the Vermont Energy and Climate Action (VECAN), which VNRC coordinates, launched an online discussion forum to improve direct connectivity between town energy committees around the state. Powered by Google Groups, the forum is a place for local energy and climate activists to share successes, discuss challenges, and collaborate on initiatives responding to climate change in Vermont. To subscribe to the group, send a blank email to vtenergyclimateaction+subscribe@googlegroups.com.

Small Grants for Smart Growth

Our most recent Small Grants for Smart Growth went to the Town of Hinesburg, the South Hero Land Trust, and Canaan Naturally Connected.

The Town of Hinesburg will use its grant to hold a community design charrette that will inform the creation of a conceptual improvement plan for a town common. The South Hero Land Trust will continue coordinating a community trail network, building off a project it began with the aid of a Small Grant in 2018. Canaan Naturally Connected will collect public input about usage of the Canaan Community Forest in the Northeast Kingdom.

Stay tuned for updates on these projects and learn how to apply for your own Small Grant for Smart Growth at vnrc.org/small-grants-for-smart-growth/.



Guy Maguire and Emily Alger of the South Hero Land Trust

Act 250 Update

For many years, VNRC has been working to modernize Act 250, Vermont's 50-year-old development review law. In 2019 we began tracking and providing testimony on a bill (H.926) that passed the House in February 2020 and will be taken up in the Senate when the Legislature returns from summer recess.

This legislation would enact measures to prevent forest fragmentation; create new exemptions in downtown areas to encourage smart growth; update criteria to account for issues like climate change that were not at the forefront when Act 250 first came into existence; and much more.

We believe this bill presents a reasonable, balanced approach to ensuring that Act 250 adequately protects Vermont's environments and communities, culminating decades of VNRC's work with partners to this goal. Stay tuned for further updates on Vermont's landmark land use law at vnrc.org/act-250/.

Welcome, Alex Connizzo

Alex Connizzo joined VNRC in August as our new part-time Office Assistant. After earning a BA in history from Boston College, Alex worked in publishing, construction, and childcare, among other fields, while nurturing a longtime interest in environmental issues. Originally from northern New Jersey, Alex moved to Vermont in 2016. He is an avid hiker (favorite hike: Mount Hunger) and basketball player.

Alex is excited to work on behalf of Vermonters to preserve our shared resources. We are thrilled to have him at VNRC!



Welcome, Karina Dailey

In April we welcomed Karina Dailey as our new Ecological Restoration Coordinator. In this position, Karina is responsible for running VNRC's dam removal program and contributing her scientific knowledge and expertise to policy issues around the conservation and restoration

of Vermont's waters and natural resources.

Karina's scientific background, practical experience, and personal commitment to protecting Vermont's natural resources make her an important addition to our policy and dam removal work. We're thrilled to have her on the team!



Peter Gregory Selected to Receive 2020 Arthur Gibb Award

Peter Gregory, AICP, Executive Director of Two Rivers-Ottawaquechee Regional Commission (TRORC), is this year's recipient of the 2020 Arthur Gibb Award for Individual Leadership. VNRC presents this honor annually to a Vermont resident who has made a lasting contribution to their community, region or state in advancing smart growth policies.

Over the past three decades, Gregory's work and leadership have led to thoughtful, comprehensive approaches to planning for transportation, water quality, energy, and emergency management in Vermont and beyond. Under his leadership, TRORC was the first regional planning commission in Vermont to join the National Organization of Development Organizations (NADO), in which Gregory took a leadership role. He testified in Congress and visited the White House to amplify Vermont's voice in rural issues at the national level.

Among these and other accomplishments, Gregory is known for his steadfast ability to work towards consensus and get things done; his drive to innovate; his humble demeanor; and his strong ethic of service to towns. VNRC is looking forward to honoring him with the 2020 Arthur Gibb Award. Congratulations!



Thank you, Interns Kail Romanoff, Addison Keilty, and Ashley Lederman

Kail Romanoff joined VNRC and VCV early this year as our Legislative Intern, tracking legislation at the State House and remaining nimble as the Legislature went virtual. Thank you, Kail, for your hard work in an uncertain time!

Addison Keilty, a student at Vermont Law School, joined VNRC in May as our Mollie Beattie Intern. Ashley Lederman, a student at Cornell University, is a summer intern for VNRC. Both helped with research on the status of wildlife considerations in local land use planning over the last decade. Thanks, Addison and Ashley, for your great work!

Farewell, Kelsey Gibb

Our Operations Coordinator Kelsey Gibb left VNRC in June to pursue graduate school studies. For nearly two years, Kelsey managed office and administrative projects while contributing greatly to event planning and membership outreach in valuable, creative ways. Thank you, Kelsey, for all your great work! We wish you the best of luck in your next chapter.





9 BAILEY AVENUE
MONTPELIER VT 05602

Email: info@vnrc.org

Web: www.vnrc.org

Twitter: @VNRCorg

NONPROFIT ORG
U S POSTAGE
PAID
THE MAILING CENTER
05641

The *Vermont Environmental Report* is printed on recycled paper with soy-based ink,
by a digital printing process that does not flush polluting chemicals into our waters.

This issue can be recycled wherever you recycle paper. You can also re-use it by sharing it with family and friends!

Visualize Vermont Art Contest

How have you been visualizing Vermont lately? We want to hear from young people! VNRC invites Vermont kids and teens to submit original artwork for a chance to win prizes and appear in our 2020 year-end brochure. Age categories: 8 and under, 9-12, 13-17. Deadline is August 30, 2020. Find the prompts and learn more at vnrc.org/artcontest.



VNRC 2020 Annual Meeting

Normally we'd welcome you to a beautiful location to review our year in advocacy over local food and drink. Though we're sorry we won't see you in person this year, we're looking forward to convening virtually! Stay tuned for details on date, time, and how you can access the online event.

VNRC's 2019 Annual Meeting was held on a sparkling September evening at Shelburne Farms



Our first priority during the COVID-19 crisis is ensuring the health and safety of VNRC staff, supporters, and our communities. But we are also still hard at work advocating for your environmental priorities.

Keep up to date on our efforts at vnrc.org and on Facebook and Twitter.

vnrc.org