The past year has been a trying one for the staff and students of the Clinic, as it has been for so many other people around the country and around the world. Most tragically, Professor Wendy Jacobs, the Clinic’s founder and director, passed away in February. It is difficult to express the magnitude of this loss for the Clinic, the law school, and the environmental community at large. The Clinic’s staff and students also faced a variety of challenges during the COVID-19 pandemic, including the disruptions of remote teaching and working, illnesses and job loss among family and friends, and a national reckoning with racial injustice.

Through it all, there were some bright spots. One was welcoming two new Fellows to our team, Leah Cohen and Tommy Landers. While we were sad to see previous Clinical Fellow Lynne Dzubow go, she has moved on to a great opportunity practicing energy law at McDowell Rackner Gibson in Portland, Oregon.
It was also an inspiration to see the remarkable resilience and dedication demonstrated by our students. As described further below, the Clinic maintained a broad yet deep portfolio of projects that included participating in environmental rulemaking and associated litigation at the federal level as well as assisting municipalities, tribes, and other government entities in developing novel strategies for addressing both climate change mitigation and adaptation. This difficult year only redoubled our commitment to fighting climate change, promoting environmental justice, and training the next generation of environmental lawyers.

IN MEMORIAM: WENDY B. JACOBS
1956-2021

Wendy B. Jacobs, the Emmett Clinic’s founder and director since its inception in 2008, passed away on February 1, 2021 after a long illness.

Wendy built the Emmett Clinic to be unlike any other environmental law clinic in the country—one that addressed the full range of cutting-edge energy and environmental issues, with a special focus on climate resilience, environmental justice, and the role of science. She also built relationships with faculty and students across the university and beyond, developing a variety of interdisciplinary projects—a process she took to new lengths with her groundbreaking Climate Solutions Living Lab course.

Her proudest professional achievement, however, was to have helped launch the careers of her students. Wendy loved to teach and to mentor young lawyers, and she was dedicated to giving her students an enriching and comprehensive academic experience. She made a lasting impact on the law school’s clinical and environmental law programs. We were all so fortunate to have known Wendy and to have been able to work, teach, and learn with her.

The Clinic has created a website in tribute to Wendy. In addition, the Law School has also set up the Wendy B. Jacobs Environmental Law Fund to honor Wendy’s memory.
ADVOCATING FOR STRONG FEDERAL ENVIRONMENTAL PROTECTIONS

Over the last four years, the Clinic has worked hard to preserve federal environmental protections in response to an onslaught of rollbacks from the Trump administration. Much of this work has focused on preserving the role of science in federal environmental decisionmaking and pushing back against actions that were inconsistent with the scientific record before the agency. With the change of administration, the Clinic will continue advocating for strong, science-based federal environmental protections, with a special focus on protecting environmental justice communities from the harmful effects of air and water pollution.

LEAD IN DRINKING WATER

Over several semesters, the Clinic has worked on developing strategies for reducing exposure to lead in drinking water. Clinic students previously drafted white papers on identifying best practices for water sampling protocols and on the authority of water utilities in 13 key states to use ratepayer funds to pay for complete lead service line replacements.

In February 2020, the Clinic submitted comments focused on the health equity, environmental justice, and civil rights aspects of the EPA’s proposed revisions to its Lead and Copper Rule (LCR), the primary federal regulation addressing lead in drinking water. This year, the Clinic is working with partners at the Environmental Defense Fund (EDF) to explore strategies for addressing discriminatory lead service line replacement practices under Title VI of the Civil Rights Act of 1964.

AMICUS BRIEFS

_Sierra Club, et al. v. U.S. Department of the Army Corps of Engineers, et al. (1st Cir. No. 20-02195; filed February 9, 2021):_ The Clinic filed a brief on behalf of eleven clinical law professors arguing that the First Circuit should adopt the “serious questions” test for preliminary injunctions in a suit claiming that the U.S. Army Corps of Engineers failed to conduct a proper National Environmental Policy Act (NEPA) analysis of environmental harms caused by a proposed transmission line bringing power from Canada to New England.

“Everyone, regardless of their income or race, deserves to drink water that isn’t coming from a lead pipe.”
--Tom Neltner, Chemicals Policy Director at Environmental Defense Fund

Image Source: Skitterphoto, Pexels
AMICUS BRIEFS (cont.)

Competitive Enterprise Institute, et al. v. National Highway Traffic and Safety Administration, et al. (D.C. Cir. No. 20-1145; filed January 21, 2021): The Clinic’s brief on behalf of a group of eminent climate scientists and economists argued that the Environmental Protection Agency (EPA) and National Highway Traffic and Safety Administration (NHTSA), in promulgating the Safer Affordable Fuel Efficient Vehicles Rule (SAFE Rule), ignored decades of science and their own conclusions regarding the perils of climate change, and urged EPA and NHTSA to take action immediately to prevent additional compliance costs, avoid a climate catastrophe, and allow the transportation sector to continue to innovate and adopt technologies that will reduce emissions and reliance on fossil fuels.

Conservation Law Foundation v. U.S. Environmental Protection Agency (D. Mass. No. 20-cv-10820; filed December 17, 2020); South Carolina Coastal Conservation League v. Regan (D.S.C. 20-cv-0168; filed May 28, 2021): The Clinic’s brief on behalf of the National Parks Conservation Association (NPCA) challenged the so-called Navigable Water Protection Rule, arguing that the rule violates the Administrative Procedure Act because the agencies failed to conduct an adequate analysis of the rule’s adverse impacts on the scope of protected waters, thus making the rule is inconsistent with the CWA’s primary goals to prevent, reduce, and eliminate pollution in the nation’s waters. The brief highlighted in particular the ways that the rule would harm waters in national parks.

Wild Virginia v. Council On Environmental Quality (W.D. Va. No. 3:20-CV-00045-JPJ-PMS; filed November 30, 2020): The Clinic’s brief in this case challenging the Council on Environmental Quality’s (CEQ) revisions to its NEPA regulations, filed on behalf of several Members of Congress, argued that the revisions are inconsistent with Congress’ intent in enacting NEPA. In particular, the brief argued that four changes in the rule—elimination of the requirement to evaluate indirect and cumulative environmental impacts, limitations on the scope of alternatives to be analyzed, restrictions on public participation, and authorization of some project implementation before agencies have finished analyzing their effects—were inconsistent with statutory text, legislative history, and case law.

United States Fish and Wildlife Service, et al. v. Sierra Club, Inc. (U.S. 19-547; filed August 3, 2020): The Clinic’s brief filed on behalf of former federal agency officials urged the U.S. Supreme Court to affirm a Ninth Circuit decision in a case involving the application of the Freedom of Information Act (FOIA) to Biological Opinions prepared under Section 7 of the Endangered Species Act (ESA), arguing that the disclosure of draft Biological Opinions would not harm the interests protected by the deliberative process privilege and was important for ensuring transparent and accountable decisionmaking under the ESA.
**COMMENT LETTERS**

**Revised Draft Human Health Risk Assessment for Chlorpyrifos (February 5, 2021):**
The Clinic submitted comments on behalf of scientific and medical experts urging EPA to reverse its proposed registration decision for chlorpyrifos, an organophosphorus pesticide linked to long-term adverse neurodevelopmental impacts in children, and to revise the underlying Human Health Risk Assessment (HHRA), arguing that the HHRA’s refusal to rely on the findings of a key epidemiological study is irrational and contrary to EPA’s longstanding commitment to using on the best available science.

**Transparency in Considering Benefits and Costs in the Clean Air Act Rulemaking Process (August 3, 2020 & June 14, 2021):** The Clinic’s comments on behalf of the Chesapeake Bay Foundation and NPCA urged EPA to withdraw its proposed rule on the use of cost-benefit analyses in Clean Air Act rulemakings because it was unnecessary and would undermine environmental protections and the existing regulatory programs that are essential to public health, protection of ecosystems and wildlife, and local economies. The letter also addressed the proposal’s effect of pushing additional compliance obligations onto states and private parties, and failure to identify or assess how these impacts would affect environmental health and safety risks in vulnerable populations. In June 2021, the Clinic filed a comment letter in support of the Biden Administration’s rescission of the regulation.

**National Ambient Air Quality Standards (NAAQS) for Particulate Matter (June 26, 2020):** The Clinic’s comments on behalf of researchers at the Harvard T.H. Chan School of Public Health and the Boston University School of Public Health argue that EPA’s proposed NAAQS rule for particulate matter disregards substantial evidence that fine particulate matter causes serious, adverse health effects at levels below the current NAAQS, and emphasized that evidence is emerging that fine particulate matter pollution may be exacerbating the effects of the COVID-19 pandemic.

**Strengthening Transparency in Regulatory Science Supplemental Notice (May 18, 2020):** The Clinic filed comments on behalf of Harvard President Lawrence Bacow and other leaders in science and medicine from Harvard University arguing that EPA’s supplemental notice for its so-called Transparency Rule still failed to identify any need for dramatic change in EPA decision-making. In addition, the letter argued that the proposal’s basis for determining the reliability of scientific studies is inconsistent with scientific best practices and EPA’s prior practice; the proposed alternatives are vague, not within EPA’s legal authority, and present the same problems as the initial proposal; its partial approach to advancing transparency treats academic and industry research differently; multiple aspects of the supplemental notice are incomplete, ambiguous, or otherwise fail to provide adequate notice; and the proposal violates multiple statutory and executive order requirements.
In May 2020, the Clinic released a guidance paper with a model green building ordinance entitled *Strategies for Massachusetts Municipalities to Implement Net Zero Building Mandates*. The guidance paper examines legal complexities that Massachusetts towns and cities must navigate when mandating reductions of greenhouse gas emissions from the building sector, evaluates a range of municipal options, concludes that several are viable with existing authority, and then provides an annotated model ordinance for approach. Although the focus is on mandatory actions, the paper also briefly outlines ideas for voluntary and incentive-based approaches to promoting net zero building (“NZB”) goals. The paper also highlights decision points for regulators, regulated communities and advocates to consider in the design of NZB programs.

The Clinic worked with several municipalities to develop community-specific laws to address greenhouse gas emissions from, and promote energy efficiency in, both new and existing buildings and rental stocks. These projects include assessing legal authority for and limitations on local action, drafting bylaws and ordinances and developing implementation plans. Cities and towns interested in exploring net zero building and related programs are welcome to contact the Clinic to discuss the issue.

The Finch building in Cambridge, Massachusetts was built to meet the energy efficient "Passive House" building standard. Image Source: Stephanie Arnett, MIT Technology Review.
**Stormwater Permits and Climate Change:** Working with Chesapeake Legal Alliance, a regional NGO advocating for changes to Clean Water Act general permits for stormwater associated with industrial activities, the Clinic analyzed strategies for requiring the incorporation of climate change adaptation into such permits. Stormwater from industrial sites can carry toxic material that endangers public health, waterways and marine life, and may be disproportionately concentrated in neighborhoods that are overburdened by pollution sources and associated health hazards.

**Monetizing Climate Change Adaptation:** As state and local governments experience and learn more about current and projected impacts of climate change, they are increasingly integrating climate adaptation and resilience measures into public and private development. The Clinic is working to develop tools to help public entities demonstrate the financial benefit of climate change adaptation and resiliency projects and design public procurement processes to best advance these goals.

**Zoning and Environmental Justice:** Developing zoning tools that advance climate change mitigation and adaptation goals while protecting and improving the health and resilience of residents and environmental justice communities. Drawing lessons from zoning initiatives across the country, Clinic students draft ordinances and outline policy and legal support for the proposals.

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*Image Source: Jonathan Sloane, iStock Photos.*
TRANSITIONING TO A CARBON-FREE ENERGY SYSTEM

The Clinic is engaged in several projects that address the future of energy systems in Massachusetts in light of the Commonwealth’s mandate to reduce greenhouse gas emissions by at least eighty-five percent by 2050. This work includes developing strategies to reduce the use of fossil fuels and support the implementation of alternative energy sources through mechanisms that promote public health and equity. Examples of this work include:

- Working with local organizations to (i) analyze financing mechanisms for transitioning natural gas systems to non-greenhouse gas emitting sources and (ii) draft legislation that advances funding, reporting and planning tools and prioritizations to support the evolution of natural gas systems for a carbon constrained world. Working with the Gas Leaks Allies, the Clinic helped draft and present the Future of Heat bill.

- Prepared a letter on behalf of municipalities in DPU 20-80, an investigation before the Massachusetts Department of Public Utilities regarding the role of gas companies as the Commonwealth achieves its climate goals. The letter highlights the critical role that local governments must play in planning for an orderly transition to decarbonize the gas and building sectors and recommends several framing principles for the process to support municipal greenhouse gas mitigation goals.

- Promoting Equity in Offshore Wind Procurement: Working with the Environmental League of Massachusetts, the Clinic researched mechanisms to integrate equity-based objectives into the procurement process for new offshore wind projects in Massachusetts. The Clinic’s analysis focused on equity issues related to participation in and access to the economic opportunities presented by offshore wind development.

- Developing material to promote energy literacy and support greater participation in regulatory, ratemaking and other proceedings regarding the future of energy systems in Massachusetts.
LAND-BASED CARBON STRATEGIES

Preserving and expanding the sequestration of carbon in soils and in biomass is a key component of strategies to reach net zero GHG emissions by 2050. The Clinic has worked with tribes, state agencies, and other legal clinics to promote carbon sequestration on both protected and working lands.

Farm Bill Recommendations: The Clinic is continuing its collaboration with the Farm Bill Legal Enterprise, a consortium of several other law school clinics and academic research programs (led by the Harvard Food Law and Policy Clinic) to analyze the Farm Bill and develop policy recommendations for reforms in advance of the legislative debate over the next Farm Bill. This year, the Clinic’s work is focusing on the Farm Bill’s impact on climate change mitigation and resilience.

Increasing Carbon Sequestration on Natural and Working Lands: Preserving and increasing the role of nature-based systems, such as forests and wetlands, to sequester, store and/or remove greenhouse gases will be an important component in meeting federal and state climate change goals. The Clinic is working on several projects that examine regulatory and market mechanisms, such as offset programs and conservation restrictions, that public and private entities can use to increase the role of nature-based solutions in advancing climate change goals, while also supporting rural livelihoods and advancing tribal sovereignty.
ADVANCING TRIBAL SOVEREIGNTY ON ENERGY AND ENVIRONMENTAL ISSUES

The Clinic is engaged in several projects to advance tribal sovereignty on environmental issues and support energy justice for tribal members:

**Supporting ancestral land reacquisition via Forest Carbon Credits:** The Clinic is working with the Yurok Tribe to evaluate opportunities to evolve its Forest Carbon Program to support ancestral land reacquisition and advance tribal sovereignty.

**Advancing electrification and energy resilience in wildfire-prone communities:** The Clinic is also working with the Yurok Tribe to support implementation of its Strategic Energy Plan, Energy Paths for the Yurok People. These efforts include electrification of tribal member households on the reservation via off-grid solar installations, development of an on-grid solar program, and design of a clean energy microgrid to support the Tribe’s new Emergency Services District. The Clinic analyzed regulatory and funding issues associated with implementation.

**Defending Water and Subsistence Rights in Alaska Native Communities:** The Clinic also worked with the Native American Rights Fund (NARF) on two Alaska-based projects. One project involved issues related to tribal sovereign immunity, water rights, and the reservation of water for instream flows under state law. In the other, the Clinic helped analyze the state administration of fish and game resources to investigate potential discrimination against Alaska Natives. Subsistence plays a fundamental role in the well-being and cultural traditions of Native communities throughout the United States. Climate change, development, and systemic racism are jeopardizing the ability of Alaska Natives to rely on these traditional sources of nutrition.
CITIZEN SCIENCE

The Clinic has, over several semesters, worked on a variety of initiatives related to the promotion of community-based environmental citizen science. For example, the Clinic developed a comprehensive manual to guide and empower citizen scientists to collect data about environmental conditions in their communities and use these data to advocate for legal and policy change. The manual incorporates a 50-state survey of laws relevant to environmental citizen science. The Citizen Science Manual is now a free, online resource available at https://citizenscienceguide.com/homepage.

This year, the Clinic carried on this work by continuing to provide responses to citizen scientists’ legal and policy questions submitted through the Citizen Science Association (CSA) Law & Policy Working Group’s “Ask a Legal Question” tool. All of the Clinic’s answers to date are available here. In addition, in May 2021, Acting Director Shaun Goho and Senior Clinical Instructor Aladdine Joroff presented on how citizen scientists can submit written comments to influence agency policy and permitting decisions in a workshop during the CSA biannual meeting, “CitSciVirtual 2021.”

WHITE PAPERS

The Clinic published a guide in August 2020 entitled Legal Issues in Dam Removal: A Guide for Massachusetts Dam Owners, which provides information on some common legal questions for private dam owners in Massachusetts. The Clinic’s guide covers legal issues and questions such as the liability risk a dam owner faces for harms caused by dam failure; whether a dam owner has the unilateral legal right to remove the dam; whether a dam owner has a legal responsibility to mitigate harms to existing uses of the river that would be affected by the dam removal; who owns the land exposed in the former impoundment once the dam is removed; what responsibility the dam owner bears for contaminated sediment in the impoundment behind a dam; and how liability is allocated among engineers, contractors, and the dam owner for a dam removal project.
Leah Cohen graduated with a joint degree in law and policy from HLS and HKS in 2010, where she was a student at the Clinic. She has worked in and for City, State, and Federal Government, International Development institutions, as well as the private sector on issues related to cities and climate change. For example, she worked at the U.S. Environmental Protection Agency (EPA) on development of the Agency’s first climate adaptation plan. She also served as Director of Climate Analysis for Mayor Bloomberg’s Special Initiative for Rebuilding and Resiliency following Hurricane Sandy. In this capacity, she worked with New York City’s Panel on Climate Change, FEMA, and other federal agencies to develop the climate risk information that was used to inform the City’s rebuilding efforts and advocate for changes to federal disaster policy. In the Clinic, she works on issues such as land-based carbon removal, the future of clean heat, and energy justice in Native American communities.

Tommy Landers graduated from Georgetown University Law Center in 2018 as a Public Interest Law Scholar. After graduating, he clerked for Judge Robert N. McDonald on the Maryland Court of Appeals and then for Judge D.P. Marshall Jr. on the U.S. District Court for the Eastern District of Arkansas. Before law school, Tommy directed the advocacy organization Environment Maryland, and he was the Maryland & D.C. Policy Director for Chesapeake Climate Action Network. Tommy’s advocacy focused on the Chesapeake Bay, climate change, and clean energy.
supervised legal practice has helped me learn and develop as a lawyer, contribute to meaningful projects that make the world a better place, and carve a law school path that serves my personal and professional aspirations.

My first semester in the clinic, in the fall of 2020, I advised a California tribe on designing and implementing an on-grid/off-grid solar program that would connect Reservation homes to clean and reliable electricity. At first, I felt overwhelmed grappling by the intricacies of federal Indian law. But the degree of supervision I received through the Clinic--far exceeding anything I’ve experienced in previous jobs or internships--allowed me to parse out the important legal issues. More than that, my supervisors pushed me to step past my inclination to treat the world like an issue spotter, stopping after I had identified the issues and analyzed potential risk, into the lawyer’s role of translating legal constraints into an actionable path forward.

During that semester, I mentioned my interest in climate policy and my disappointment that my law school courses hadn’t provided much insight into the lawyer’s role in legislative and regulatory processes. When a friend at a grassroots environmental advocacy organization asked me if I knew anyone who could help with the drafting of an environmental justice bill for introduction in the Rhode Island legislature, Shaun Goho supported me to package the project as a January Term advanced clinical.

And in the spring, when a Clinic project arose that was particularly well-tailored to my interest in energy regulation, Shaun, Aladdine Joroff, and Leah Cohen reached out and worked with me to structure the project to fit my schedule. This is a level of engagement with mentors and instructors that I have not found anywhere else at the law school. And again, this project gave me exposure to a different kind of advocacy than I saw in my doctrinal courses, writing a comment for a group of municipalities to guide equitable and orderly decarbonization of the gas heating sector in Massachusetts.
The Emmett Environmental Law and Policy Clinic at Harvard Law School offers students the opportunity to practice environmental law through work on a variety of litigation, administrative, legislative, and policy projects. The Clinic works with scientists, medical professionals, nonprofit and public interest organizations, and government clients on environmental and energy issues at the federal, state, and local level. The work includes writing briefs and comment letters, drafting climate change mitigation and adaptation regulations and policies for municipalities, preparing guidance documents and manuals for non-lawyers, drafting model legislation, and preparing policy papers. The Clinic develops novel strategies to address thorny environmental problems; investigates new cases; works with scientific, economic, and policy experts to help them present their views about the impacts of legal reforms; advises citizen scientists; and convenes meetings of policy-makers and regulators. Some students work off-campus with government agencies and nonprofit organizations, while others work on-campus on cutting-edge projects and case work under the supervision of the Clinic’s faculty and staff.

ABOUT THE CLINIC

These experiences have been a uniquely affirming part of my law school education. The opportunity that the Clinic has provided to me to build substantive experience after quickly exhausting related doctrinal offerings has helped me to craft my own professional candidacy, stay grounded, and resist the pull of the law school current when I’ve felt stressed about grades or prestigious extra-curriculars. The Clinic has empowered me to create the law school experience I came here to pursue. I feel extraordinarily fortunate to have found it.