

Directions

Journal of the Association of Nature Center Administrators, Spring 2025

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WITH PURPOSE**

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CHANGE**

**CONSERVATION
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CONTENTS

- 1-2 **Leading with Purpose**
- 3-4 **Updates on ANCA Operations**
- 5-7 **Building a Climate-Resilient Future**
- 9-12 **Conservation Civics**
- 13-16 **Solar Energy Journey**

The *Directions* journal contains news and trends in the nature & environmental learning center profession, as well as relevant resources and stories of innovative leadership.

If you are part of the nature center profession and wish to receive more resources like *Directions*, see [ANCA membership levels](#).

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Cover photo: A view of the Nature Preschool at the Environmental Nature Center in Newport Beach, California.

About ANCA

The Association of Nature Center Administrators is a private nonprofit organization dedicated to promoting and supporting best leadership and management practices for nature and environmental learning centers. Serving more than 700 members, ANCA is the leader in the profession.

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Leading with Purpose: Build a Strong Foundation, Choose Wisely, and Stay Focused

Jen Levy, ANCA Executive Director

How do you lead when everything feels uncertain and the landscape changes unexpectedly?

During my tenure with ANCA, there have been some significant times of uncertainty including the 2008 global financial crisis, the COVID-19 pandemic, and most recently, major disruptions in federal programs and funding coupled with the possibility of a recession. As leaders, we have to stay strong and keep moving in the right direction. Several years ago, I heard Bill Rose, retired President and CEO of the Kalamazoo Nature Center in Michigan, say that our job as leaders is to *build a strong foundation, choose wisely, and stay focused*. I have repeated this advice countless times over the years, no matter the challenge.

Leading an organization is as much about clarity and conviction as strategy and innovation. With ever-evolving challenges, competing priorities, and limited resources, effective leadership requires intentionality.

MAINTAIN A STRONG FOUNDATION

Every organization needs a clear sense of who it is and what it values. This foundational identity — its mission, vision, and core values — grounds the organization through growth, change, and crisis periods.

A strong foundation is not static. It should be nurtured, clarified, and reinforced over time. A strong foundation includes investing in the people and systems that carry out the organization's work: a well-trained staff, a healthy culture, responsible financial and fund development practices, and effective governance. Leaders who overlook the foundational aspects in favor of short-term wins may find themselves building on unstable ground.

For example, it's tempting to chase new programs

or funding opportunities that seem exciting, even if they don't align with core priorities. However, when programs match mission and core values, long-term success becomes more achievable and sustainable.

CHOOSE WISELY

Leadership is full of decisions, big and small. What programs should we invest in? Who should we hire? Where should we spend our limited time and energy? These choices shape not only what the organization does, but who it becomes.

Wise choices do not mean avoiding risk or change — it means making informed, values-aligned decisions that support the organization's goals and capacity. Wise choices reflect both urgency and intentionality. They're rooted in good data, diverse perspectives, and the courage to say no when something isn't a fit.

A common challenge for leaders is the temptation to try to do everything. It's easy to fall into a reactive mindset in a world of constant need and opportunity. But wise leaders set priorities and boundaries. They know that saying "yes" to everything ultimately dilutes impact. Making wise choices means recognizing trade-offs and aligning actions with long-term vision — not just immediate pressure.

STAY FOCUSED

In today's fast-paced environment, distractions abound. External trends, internal politics, or shiny new ideas can pull leaders off course. Staying focused requires discipline.

Focus doesn't mean inflexibility. Strong leaders adapt to changing conditions but do so without losing sight of their core purpose. They constantly ask: "Does this move us closer to our goals? Does this serve our mission?" And they're willing to change course or pause when the answer is no.

One of the best ways to maintain focus is through clear communication — internally and externally. When everyone on the team understands what mat-

ters most, decision-making becomes easier and more consistent. It also builds trust. A focused organization sends a strong message to staff, the board, stakeholders, funders, and the communities it serves: We know who we are and where we're going.

Focus also protects well-being. Leaders who stay clear about their priorities are more likely to avoid personal and organizational burnout. In a culture that prizes busyness, focus permits leaders to slow down and do what matters most.

PUTTING IT ALL TOGETHER

Maintaining a strong foundation, choosing wisely, and staying focused are not once-and-done tasks. They are ongoing practices that require reflection and a commitment to continuous learning. Together, they create a leadership framework that is steady but responsive, bold yet grounded. Consider these three actionable steps:

- 1. Assess your foundation.** Take the time to review your organization's core elements: mission, vision, values, and internal systems. Are these still relevant and clearly understood across the team? Do your programs and decisions reflect these foundations? A brief staff or board survey can help surface areas of alignment or drift.
- 2. Clarify priorities and boundaries.** Identify your top three organizational priorities for the next 6-12 months. Then ask what activities or opportunities don't align with these goals? Where do you need to say "no" or scale back? This helps ensure you're choosing wisely and protecting focus.
- 3. Schedule a strategic review.** Hold a leadership meeting or retreat focused on reflection and alignment. Use this time to revisit your strategic plan, reaffirm key goals, and discuss how to stay mission-aligned when responding to external pressures.

For leaders who embrace these principles, the reward is not just a more resilient organization — it's a deeper sense of purpose and clarity in the work. And in times of uncertainty or change, that clarity is not a luxury — it's a necessity. 🌱

Sustaining Leadership

When you give to ANCA, you help strengthen our network of nature center professionals and ensure the impact of our field.

Giving monthly is the most powerful way to donate.

Please consider becoming a monthly donor through the **ANCA Sustaining Leadership Program.**

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From the ANCA Team: Updates on ANCA Operations

ANCA's [Core Values](#) hold that we are a welcoming community and that we value learning and sharing. With these values in mind, we want to share operational updates to keep you informed about what's happening behind the scenes at ANCA and how we're working to support our mission. We hope this glimpse into our work helps you feel more connected — and maybe even gives you ideas for your own operations.

New "Ways to Give" Content

The donation process should be easy for anyone who wants to give to a nonprofit. We recently reviewed our materials on giving, looking at how to simplify [our Donate page](#) while also sharing information about the various ways donors can give.

As a result, we developed a new [Ways to Give page](#), which shares how donors can give beyond a cash donation. This new content links to individual pages about:

- Donor-advised funds
- Planned giving
- The ANCA Nature Nerd Campaign
- Vehicle donations
- Tax-wise approaches to giving

We want this new content to clarify giving options and raise awareness about donation methods that ANCA donors may not have considered. Leaving a bequest, for instance, is a simple way for donors to make a significant impact on ANCA — and we want all donors to know that this is a possibility.

Making the information available on our website was the first step. Moving forward, we will regularly share these giving methods in our communications.

We're excited to make giving to ANCA more accessible to our community. Whether someone wants to support us today or leave a legacy for the future, we want them to have clear information to guide their decision. We invite you to [explore these ways to give](#) and consider how you might deepen your impact through one of these options.

Updates to ANCA Website

In February we updated [the ANCA website](#) with new content and a fresh look. These updates enhance the accessibility of our content while creating an engaging online presence for ANCA.

One of the goals with this update is to communicate the collective impact of nature centers and related organizations. You can see this on our home page — stay tuned for more, as we'll be adding more content about this soon.

ANCA Adjusts Holiday & PTO Policies

In recent years the ANCA staff has grown — now to three full-time positions — and we plan to build upon this in the future. In the context of this growth, last year we decided to review our personnel policies, identifying areas for improvement and making updates to support our team and reflect our values.

We began with our holiday and paid time off (PTO) policies. We chose a new direction for time off by implementing a flexible PTO policy, so that employees are personally accountable for managing and scheduling their PTO. We now offer:

- 25 days of PTO for full-time employees.
- 15 days of PTO for part-time employees who work 20 hours or more per week.
- 13 standard holidays, in addition to business days between Christmas and New Year's Day.

Employees may also request additional paid time off and additional holidays for religious observances. We maintain guidelines for the use of PTO, which include advance notice for planned PTO and approval for continuous PTO beyond five days.

As the policy states, "ANCA believes that trust should be inherent in all aspects of the organization." This flexible approach allows employees to operate with trust and autonomy, and ensures that ANCA offers a healthy workplace that attracts and retains talented professionals.

Cultivating Effective Governance: ANCA's Board & Committee Interest Form

In August 2022, we introduced a new process in ANCA's governance: [a form inviting ANCA members to express interest](#) in serving on an ANCA committee or the board of directors. We have since regularly shared this form in our member communications.

This process has successfully engaged passionate, qualified leaders who align with ANCA's mission and strategic priorities — to date, 28 ANCA members have completed the form and joined a committee or the board. The approach has strengthened our leadership pipeline, contributing to more dynamic, effective governance. By providing a clear, accessible path for members to express interest, we are cultivating a dedicated, mission-driven community.

Sharing the form embodies our core value: we believe that the collective wisdom and diversity of our peer network is our greatest resource. By creating an open, accessible pathway for members to engage in leadership, we draw on our community's rich experiences, backgrounds, and perspectives.

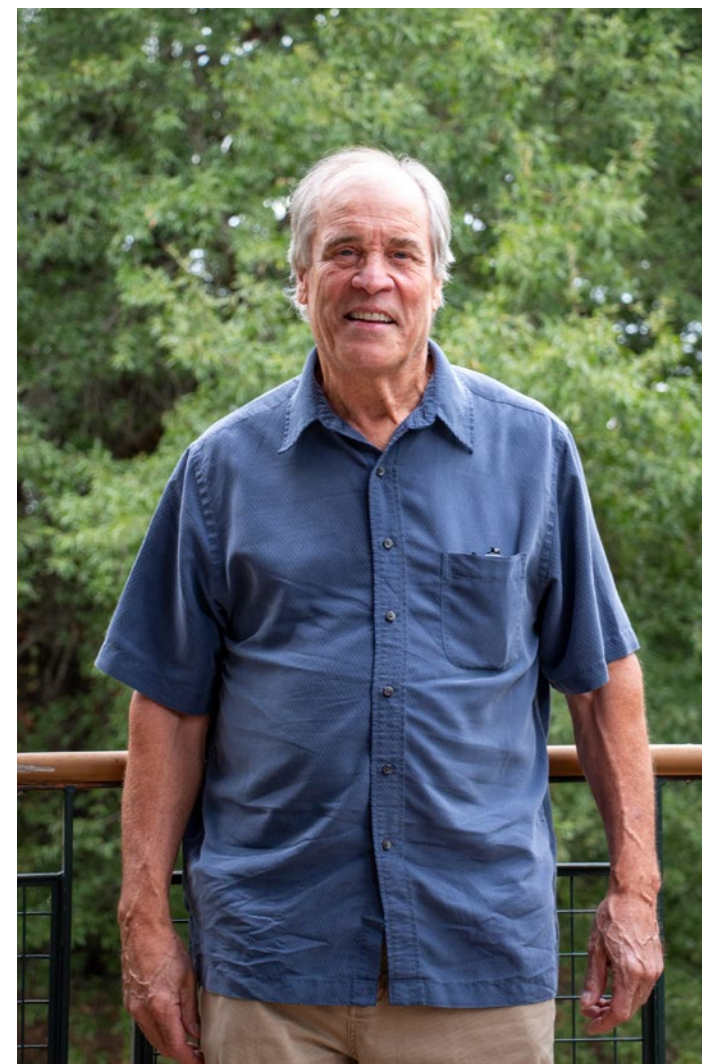
[See the form and learn more about this process here.](#)

ANCA Earns Credentials in Human Resources and Marketing & Communication

In recent months, ANCA earned the Utah Nonprofits Association (UNA) credential badges in both human resources and marketing and communication, demonstrating that we are dedicated to best practices within these topics.

To earn these badges, ANCA staff attended two-day intensive trainings in each subject; ANCA Executive Director Jen Levy completed the training in human resources and ANCA Director of Marketing & Communications Asa Duffee completed the training in marketing and communication. Following the trainings, we submitted content for subject experts to review, including samples of our work and organizational policies.

UNA offers nine credentials for nonprofits to strengthen operations and demonstrate commitment to organizational excellence. ANCA has previously earned the UNA credential badge in advocacy in civic engagement. 🌱



Planned Giving with ANCA

"I'm making a planned gift to ANCA because of what ANCA meant to my career and life. I attended the first ANCA Summit in 1995 when I was a newly minted nature center director and really felt that I had 'found my people.' This experience and many others confirmed how helpful and important ANCA was to me professionally and personally with many lifelong friends resulting. Giving a planned gift is a small way that I can thank ANCA for all that they did for me and thousands of other environmental leaders."

— Tim Sandsmark, ANCA Donor

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Building a Climate-Resilient Future

*Naomi Heindel, Executive Director
North Branch Nature Center
in Montpelier, Vermont*

In July of 2023 — and then again, a year to the day, in July 2024 — central Vermont’s rivers and streams filled to overflowing, and North Branch Nature Center (NBNC) flooded.

While our buildings were high and dry through both floods, our meadow and forest were submerged to the 100-year flood mark each time, our trails and parking lot and farm road washed away, and our surrounding communities suffered devastating losses to homes and businesses.

It is clear that this was climate change, quite literally lapping at our doorstep. According to Vermont’s state climatologist in an interview with Vermont Public, New England now sees 55% more extreme rain events than it did in 1958.

A month after the July 2024 flood, NBNC Education Director Ken Benton and I facilitated a session at the ANCA Annual Summit about climate change and nature centers. While it was floods that forced this question at NBNC, listening to our colleagues we came to realize that between low snowpack, uncer-

Above: flooding at North Branch Nature Center.

tain and extreme weather events, wildfire, changing phenology, and susceptible infrastructure, climate change is on the mind of staff at every nature center today. And it should be, not just because we’re seeing impacts today and will certainly see impacts into the future, but because we have a role to play in increasing our landscapes’ and our communities’ climate change resilience.

CLIMATE CHANGE’S IMPACTS ON NATURE CENTERS

Simply put, inconsistent weather makes outdoor programming challenging, and extreme weather makes outdoor programming dangerous. At the Summit, participants shared stories of extreme snow, hail, wind, rain, and drought, and the resulting tree fall, storm damage to conserved habitat, and trail washouts across their properties. NBNC was not the only nature center with flooding on our minds: one Midwest nature center had to stop doing public canoe trips after the river jumped one foot — while participants were on the water! At NBNC, we have also found that the river, which used to be a common spot for summer camp programming, is now too uncertain, with high flows and high erosion rates, making it no longer safe for us to use for much of the year.

Low snowpack is one aspect that is drastically

changing our work at northern nature centers. Erik Keisler, Executive Director at Beaver Creek Reserve in Fall Creek, Wisconsin, shared that they are looking for entirely new winter programming to bring in visitors. In 2015, Beaver Creek invested \$18,000 in new cross-country ski equipment. “Ten years later and we are lucky to be able to groom a trail for more than a week,” Erik reflected.

Erik has his staff looking to southern states to see what kind of programming they do in the winter with no snow, but shared that the financial impact is significant: “We have seen our first quarter have less visitation due to extreme variations in weather.”

At the Summit session, we heard about programming in mud, about walking programs instead of snowshoeing programs, about the need to invest in micro spikes instead of snowshoes, and about signature programs like tracking and maple sugaring that are disappearing.

Because phenology is changing rapidly, Summit attendees shared that they are losing connections to natural and human history. Program timing is changing, and traditional education themes and seasonal changes are not lining up any more. When our programs rely on flora, fauna, and natural processes on the landscape around us, this matters a lot. Scheduling is hard, community science becomes tricky to coordinate, and staff need to be ready to pivot programs quickly, sometimes even at a moment’s notice, as in the case with power outages, flash floods, and violent storms. As program staff feel their connection to the natural world shifting and changing beneath them, they need increasingly flexible curricula, and a bigger bag of programmatic tricks than usual.

Unsurprisingly, leaders at the Summit also brought up impacts

on infrastructure, especially for the sustainable buildings that many nature centers have or are trying to move towards. How does storm damage, resilient winter infrastructure, severe weather changes, or things like sewer overflow fit into sustainable nature center operations? Safety concerns were also paramount, including unsafe traveling conditions for staff and participants, extreme heat, and air quality.

Perhaps the most sobering message came from California leaders: have your fire ecology curriculum ready, they told us. Lori Whalen, Assistant Director at the Environmental Nature Center (ENC) in Newport Beach, California reflected, “Just last year, we had to evacuate our ENC Tucker Wildlife Sanctuary due to a nearby fire. While our property was spared, the devastation caused by wildfires across California and beyond has been disastrous for both people and ecosystems.”

NATURE CENTERS AND CLIMATE RESILIENCE

Why does all of this matter? Here’s how Lori put it: “These extreme conditions don’t just impact the land — they also disrupt our ability to serve the community. When we have to close due to fires or severe weather, program participants miss out on valuable learning experiences, and the loss of revenue makes it even harder to maintain and restore these vital spaces.”

Amid our uncertainty and questions, there’s a critical role that nature centers can and should play in increasing our communities’ and landscapes’ climate resilience. We can put energy towards youth climate leadership. We can include climate change education in all our programs. We can build climate resilience into our strategic plans, facilities plans, and land management and stewardship plans.



A view of the Environmental Nature Center’s Nature Preschool play area.

Here at NBNC, the two floods reminded us of something essential: one of the most important roles we play is as a conserved, functional floodplain. Not only does our floodplain slow and absorb the water of the North Branch River and decrease the flooding in downstream Montpelier, but it also has public trails, meaning that community members can see, ask questions about, and learn in our floodplain. In NBNC’s new 2025-2029 Strategic Plan, we are planning all sorts of ways that we

can highlight our role as a floodplain, be a demonstration site for thoughtful land management, maybe get rid of all our lawns in a really visible way, and increase community connection to the land as a climate solution in and of itself.

Part of the work we can do as nature centers is to not just teach climate science, but also to teach and create climate resilience. We can use our power as conveners to become community hubs, offering education around climate change responses and solutions. We can be places where folks build community support and hope around what can be a gloomy topic. At NBNC, we've done this through tree planting, and also through a climate change book club. Joining a nature center is a first step in the climate change movement — that is a message that we should be shouting from the rooftops and making sure our communities understand. We've long known that the type of nature connection we offer at nature centers is a need to have (not a nice to have) in education and mental well-being; now we need to see it as equally necessary for climate resilience.

In doing this important work, Summit participants made it clear that we'll need to expand our communities and reach beyond the choir. We'll need to form



A fallen tree as a result of Hurricane Tucker in 2023 at the Environmental Nature Center.

and strengthen partnerships and alliances so that our work is stronger and reaches farther. We'll need strong nature center leaders to move the world of environmental education towards climate resilience, and we'll need diverse voices to make sure that marginalized communities, often at higher risk in the climate crisis, are centered in this work. We need field building, logistical support, funding support, and social-emotional support for our staff.

As Lori said, "Every loss — whether from fire, wind, or drought — is a stark reminder of the urgent need for climate action. We remain committed to restoring and protecting these spaces, but addressing the root causes of climate change is critical for ensuring a more resilient future."

After two floods, I can confidently say that nature centers need to be at the center of this, for the sake of the landscapes that we steward and for the sake of the communities we hold together. Those of us with water access can (when safe!) quite literally help people cool down on hot days; we can also help combat eco-anxiety through nature connection. But I think we can do a whole lot more. We should be thinking of ourselves, every single nature center, as critical components of a climate-resilient future. 🌱

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Beyond Wishful Thinking: Conservation Civics at Cincinnati Nature Center

Connie O'Connor, Director of Applied Learning
Cincinnati Nature Center in Milford, Ohio

MOST NATURE CENTERS WANT PEOPLE TO ENJOY, UNDERSTAND AND PROTECT NATURE. But how do we successfully motivate our visitors and members to develop the personal, public, and political will needed for systemic change?

At [Cincinnati Nature Center](#) (CNC), we've developed a plan to empower people to connect with their communities and local leaders, with the idea that their positive impact will ripple out from there. We continue to pilot and refine our work and are almost ready to offer our course to other nature centers. Our hope is that the next time an anxious guest or member asks one of your naturalists, "Should I choose paper or plastic?" or "Do my actions really matter?", they will be able to say "It's complicated, but why don't you join me in a course that will help answer that question." We provide course content and also guidance on how local nature center staff can use the material to deepen their connection to their own members, volunteers, and guests.

A FLAWED THEORY OF CHANGE

Many nature centers were founded in the early 1970s, riding a wave of bipartisan good vibes best reflected in the many environmental policies and agencies that sprung up around the first Earth Day. Examples include the Endangered Species Act, Clean Water Act, Clean Air Act, and the Environmental Protection Agency. The term "environmental education" was used to describe ways we would prepare citizens to solve current environmental problems and prevent new ones. And the theory of change was often explained using a quote that, at its best, is an incomplete theory of change:

*In the end, we protect what we love;
We love what we understand;
We understand what we're taught.*

This quote makes educators feel great but is mostly wishful thinking. Protecting what we love is often not simple nor easy, and therefore nature center guests are usually given simple suggestions like making better consumer choices or using less resources. Most people suspect that their private lifestyle choices cannot address the scope of environmental problems, but don't know what else to do. And even the most well-intended nature lover is limited by real and imagined barriers to action, with perhaps the biggest barrier being a resistance to talking to others who have different opinions and priorities.

When we do manage to talk with others who see things differently, we might choose to "hold our ground," "dig in our heels," "speak our truth" and "take a stand." But this is often counterproductive. It's nothing new to see people dogmatically stating their opinions as if they were facts, pointing fingers, passing judgements, and making assumptions about one another's motives, values, and character. So much more can be accomplished when we start from a place of common ground, and in fact many

Americans tend to overestimate the difference in ideology between their side and their opponents'.

Complex environmental and social problems can trigger people, since most of us tend to dislike ambiguity and uncertainty. We humans prefer to rush toward closure rather than remain open to new information. It takes self-awareness and intellectual humility to be willing to change one's mind or compromise, and if we expect that from others, we need to practice it ourselves. This is how we stay connected when considering thorny issues.

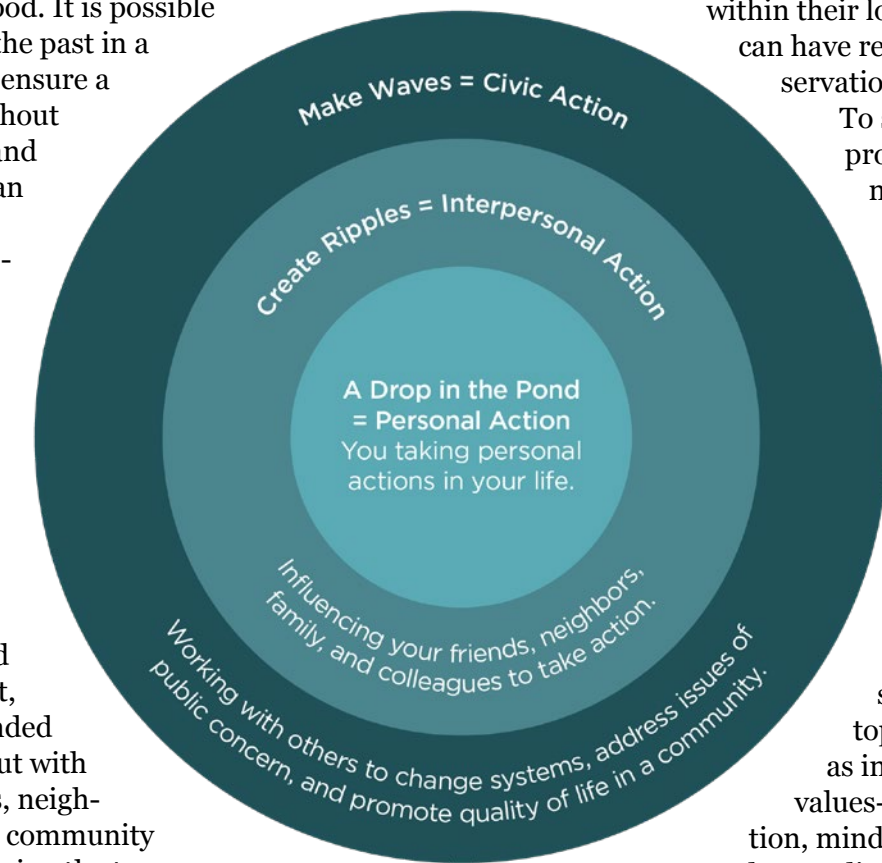
TO PROTECT NATURE, WE MUST CONNECT WITH ONE ANOTHER

In his 1981 farewell address, President Jimmy Carter expressed concern that Americans were losing faith in their government's ability to solve the country's problems. He worried that citizens were turning to single-issue groups and special interest organizations to ensure that whatever else happened, their own views and private interests would be protected. When this happens, nobody wins.

At a time when the burden of trying to protect our country's natural resources falls largely to "environmental" groups, Cincinnati Nature Center is working to help people assert that the environment is not a "special interest," but a universal one. We all need clean air, water, soil, and food. It is possible to unify as we did in the past in a nonpartisan effort to ensure a thriving economy without poisoning ourselves and our loved ones. We can preserve the natural beauty of our communities and country while also enjoying a high quality of life.

To help people do so, our nature center has spent the past few years developing and piloting programs that give participants the knowledge, skills, and motivation to connect, not just with like-minded nature enthusiasts, but with local decision makers, neighbors, businesses, and community institutions. We are using the term "conservation civics" to describe the efforts of citizens to understand and work within the social, political, and economic structures of their communities to protect local natural resources. We are seeing how this approach empowers citizens to build bridges in divided times, healing both our environment and our communities.

Above: Levels of action, as covered in Cincinnati Nature Center's "The Ripple Effect" course.



NOW MORE THAN EVER, WE THE PEOPLE MUST STEP UP

While some people debate the efficiency of government-led programs to solve environmental problems, the need for solutions is undebatable. Pollution doesn't stay put, but moves through air, water, and soil, making it everyone's problem. Microplastics in our lungs, chemicals in our food and water, and heat-trapping gases in our atmosphere have deadly consequences. As citizens connect with one another to discuss ways to improve the quality of their communities, part of the conversation must focus on a healthy environment and sustainable use of natural resources. And citizens who engage with and/or serve within their local political system can have real influence on conservation.

To solve environmental problems and prevent new ones, citizens need the knowledge and motivation to address conservation in their communities through better relationships, respectful discussions, community organizing, and collective problem solving. Public schools seldom teach these topics, nor things such as intellectual humility, values-based communication, mindfulness or even an understanding of municipal political structures. Adults at our nature center often say they feel unprepared to engage in civic life, and this barrier prevents them from effectively advocating for nature.

THE POWER OF THE RIPPLE EFFECT

One of CNC’s primary programs in conservation civics is *The Ripple Effect*, a six-week course where students watch video lectures and do their readings on a digital learning platform before meeting live on Zoom or in person. The students are adults, many in their 50s and older, but some as young as 25. They often arrive curious, confused, frustrated, or scared. They graduate determined, hopeful, and ready to engage for the greater good. The material is presented as a series of actions and behaviors that ripple outward from personal to public to political will.

BUILDING PERSONAL WILL AND GROWING PUBLIC WILL

In our course, we begin by examining what it takes to maintain the personal will to do hard things on a regular basis. We focus on values and identities and examine barriers to action. We look at the top personal lifestyle and consumer actions that **Project Drawdown** and the **United Nations** emphasize to address both climate change and loss of biodiversity, and participants discuss what stands in their way.

We then move on to examine ways to mobilize others to join us. We discuss what is not helpful (fact dumping, judging, preaching to the choir) and what is helpful (seeking first to understand and appeal to the other person’s motivations and barriers, offering assistance, storytelling, making change fun and social). We explore the power of social diffusion and why we should make our actions visible.

Participants in “The Ripple Effect” discussing content from the course.



INFLUENCING POLITICAL WILL

Through civic engagement, we can move the needle toward more pleasant, healthy, and life-affirming communities. We might want to walk or bike to work, but there are no sidewalks or bike lanes. We want less development and more greenspace but have no right to tell others what to do with their land. We want downward-facing lights to protect dark skies, native plants along roadsides, or an aggregated price for green-sourced electricity, and aren’t sure how to help decision makers prioritize these things.

The trustees, commissioners, mayors, administrators, planners, and/other decision makers in our communities are real people doing their best and giving their time for the common good, or at least we hope they are. While national politics feels out of reach, local politics is absolutely within reach. We invite course participants to attend public meetings, volunteer for committees and advisory councils, and help out at elections and other municipal events. We explain that as they start to reliably and respectfully show up and offer help, they’ll meet new people and become known as someone who cares and can be trusted. People, even those in public office, are more likely to be influenced by those they know and trust.

As they discover the complexity of local issues and the various perspectives needed to address

them, course participants start to question the common narrative of polarization and mistrust. They come to have less moral outrage and more empathy, because most folks are doing their best— often with different priorities and life experiences.

While helping make their communities an economically and environmentally healthy place to live, play, and work, we remind students that they might also come to experience a stronger sense of belonging, connection, and purpose. Nature and people may thrive as goodwill ripples out to state and eventually national decision makers. The “ripple effect” describes our theory of change about how to influence big improvements for the environment and society by moving the needle locally.

WE’RE ALL IN THIS TOGETHER

So far, Cincinnati Nature Center has offered *The Ripple Effect* online for use at two organizations beyond our own, and will soon make it available for nature centers everywhere. Feedback from participants includes, “If you can only take one course this

year – take this one!” and “This course was so engaging and empowering – just what I needed!” There is a fee to host the course on our digital learning platform, and you can pass this fee directly to the students themselves. The live follow-up can be done with or without CNC involvement, depending on your budget and preferences. In other words, the course is flexible in how it can be used. Please contact me directly if you have an adult audience that might benefit from your nature center’s use of this course.

Together, we can help people strengthen and broaden social networks, adopt an attitude of intellectual humility, and use their words carefully to build bridges for better conservation outcomes. As we help people rediscover the skills of civil discourse, collective action, and civic engagement that made the first Earth Day successful, we might find that our daily lives are enhanced not only by our connections to nature, but also to one another. Join us! 🌱

Connie O’Connor can be reached at cocconnor@cincynature.org.

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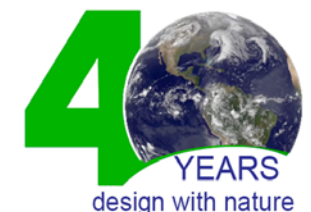


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Osprey Wilds: A 100% Solar Energy Journey Case Study

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ANYTHING WORTH ACHIEVING IS HARD. It requires dedication, focus, and perseverance — and sometimes a little luck. [Osprey Wilds Environmental Learning Center's](#) clean energy focus began 20 years ago. Yet, it wasn't until last fall with the addition of a 716 kilowatt (kW) solar photovoltaic system that we reached our goal of producing 100% of our electricity on-site through renewable sources.

At our core, we believe it is our responsibility to model sustainable environmental practices for others to learn from. We strive to create environmental ripple marks, and we achieve that through our mission of instilling a connection and commitment to the environment in people of all communities through experiential learning.

The path down our clean energy focus began in 2004, when we secured a federal Housing & Urban Development grant to install a 65-ton geothermal ground-source heat pump system to cool and heat our two main buildings. This eliminated our usage of propane to heat the two buildings, and shifted our energy needs to run the heat pumps on electricity. With the realization that our overall energy usage was lower, but our electricity needs were now higher, we sought out adding renewable energy sources to produce the electricity we used.

From 2005 to 2015, we were successful in obtaining grants and federal appropriations to add over 39 kilowatts (kW) of solar photovoltaic arrays to supply about 20% of our electricity needs. During that time, we also added 29 solar hot water panels for domestic use in heating the water used for our dormitory showers and sinks, and our commercial kitchen, made a campus-wide LED lighting upgrade, added blown cellulose insulation to improve the R-value of our buildings, and upgraded our HVAC control systems. But to cover the remaining 300,000 kilowatt hours of electricity we were still using annually, we knew we needed to do something big to achieve our goal of becoming carbon neutral.

CHARTING A FINANCIAL PATH FORWARD

In 2019, we reached out to a solar company to help us achieve that goal. Over the next several months, I worked with them on a plan of adding 248 kW of solar photovoltaic arrays that would produce the kilowatts needed to cover our annual energy usage. We worked with our local bank to secure terms for a loan that would finance the system, and met with our local electric cooperative, [East Central Energy](#), about how this could work.

However, this proposed system would put us well over 40 kW, the threshold in Minnesota for net-metering, which credits solar array owners for the electricity they add to the grid. Coming to the realization that this proposal wouldn't allow for net metering meant ultimately it wouldn't work economically for Osprey Wilds, as we would have been reliant on the net-metered income for the months we overproduced to cover the project's loan expenses. It was a learning process, and whetted my appetite to see if there was another way we could collaborate with East Central Energy to achieve our energy goals and theirs.

Ideas of collaboration were put on hold due to the pandemic. Then, in 2022 we resumed conversations with

East Central Energy and their CEO Justin Jahnz to see what might be possible. Those talks led to an idea: a three-party power purchase agreement among Osprey Wilds, East Central Energy, and a solar provider, with the solar provider owning and operating the system on Osprey Wilds property and selling the electricity to East Central Energy — who then would sell it to Osprey Wilds.

For it to work, we needed a solar provider to sell the solar electricity at rates that would make financial sense for East Central Energy to purchase, while still being high enough that it was profitable for the solar provider — yet also low enough that Osprey Wilds could afford the electricity from East Central Energy. In other words, it would require threading a needle to find financial terms that could work for all parties.

FINDING THE RIGHT SOLAR PROVIDER

During this time period, Osprey Wilds also completed a conservation easement that permanently protects over 460 acres of our campus. Throughout this process, I wanted to leave the ability to add a large solar photovoltaic system. For an optimal solar capacity location, as well as a visually strong first impression, we landed on a three-acre exclusion in our tallgrass prairie, noticeable as soon as you pull into Osprey Wilds' driveway. The exclusion was large enough for a 250 kW system, capable of supplying all of our electricity needs.

But as we began working with East Central Energy on the request for proposal (RFP) for the solar project at Osprey Wilds, I learned that this was a small space to work with, as providers would be interested in a larger system to reach the economies of scale necessary to lower the cost of the project. Examining the size of the exclusion, it was determined that the largest a system could be was approximately 700 kW. While this seemed very large to me, many commercial solar installers are looking at systems with production levels two to ten times that size to make projects financially viable.



Right: An aerial view of Osprey Wilds Environmental Learning Center.



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In the spring of 2023, we received proposals from multiple solar companies. Somewhat predictably, all the numbers were far higher than what we could afford. With that deflating realization, we talked openly with the company that had been the closest in their proposal, Soltek, Inc., about our desire to find a way with this project. We shared the benefits we saw for their company to be able to partner with East Central Energy and an environmental learning center that hosts and educates thousands of participants each year, and the impact they could have on those individuals with this inspiring project. Shawn Markham, Soltek's CEO, took that passion of ours to heart, and over the ensuing months kept trying to find ways to reduce the cost of the project.

INDUSTRY SHIFTS MAKE THE DREAM POSSIBLE

In March of 2024, I got a message from Shawn that we should talk. Conditions had shifted dramatically within the solar industry in the past 12 months. [Changes made by the California Public Utilities Commission](#) were reducing the daytime compensation for rooftop solar for homeowners by about 75%, making it much less affordable for individuals to add solar. As a result, the solar industry was struggling. Shawn now had access to materials and equipment that he could get for half the price he could a year prior, dramatically lowering the cost of the proposed Osprey Wilds system. With the help of a [Rural Energy in America Program grant](#) through the USDA, he could offer a rate that fit for East Central Energy and Osprey Wilds. The solar dream was going to happen!

Soon materials and panels were being delivered to Osprey Wilds, and all three parties worked on crafting power purchase and land lease agreements for project terms to become

official. The end result would be a win-win-win. Soltek would own and operate the system, selling affordable electricity to East Central Energy, while creating a 30-year source of guaranteed income. East Central Energy would expand their ability to purchase affordable, clean, and locally sourced electricity for their members. Lastly, Osprey Wilds would achieve its carbon goals, and save money with favorable electricity rates secured for the next 30 years.

Installation of the eventual 716 kW prairie solar garden began late July and was completed in just three weeks. East Central Energy is currently in the final stages of installing their transfer station next to the system, which will feed into their phase three line only a few hundred feet away. The system went live in October and will produce 1,000,000 kWh (1,000 megawatt hours) annually, more than three times Osprey Wilds' current electricity demands. The large production level of the system sets us up for future campus expansions that can remain carbon neutral. In the meantime, the majority of the generated electricity goes to our neighbors, providing them with clean, locally



produced electricity at no increased expense to them.

The prairie solar garden is nestled within prairie grasses and wildflowers, allowing native ecosystems to coincide with energy production. In addition, the solar garden is bordered by a woven wire fence perimeter, which will allow us to partner with local sheep producers to add pastured livestock and agriculture into the mix, creating three sustainable land uses simultaneously.

DREAMING BIG

There were many times I thought that this project was merely a pipe-dream, but achievement comes from vision, and vision comes from having a dream. So allow yourself to dream, and dream big. Several years back, I knew our goal – to produce 100% of our energy needs from onsite clean energy. I didn't know how we'd get there, but I knew for anything to happen, I needed to try.

To other organizational leaders: I encourage you to deepen your relationship with your local utility provider. Invite them out and show

them what you do, and allow them the opportunity to be inspired by the important work you do, and begin a dialogue around what might be possible for your energy goals. Perhaps there are ways to make a project happen that you aren't aware of through funding opportunities, or power purchase agreements. This project worked because we had put in the groundwork with our utility, and they understood our values, and why this was important to us, and what we hoped to achieve. Their CEO told us that that made all the difference for them to make this work for us as one of their members. They were willing to write the RFPs for the project, and review them with us, and while we didn't know it, we had discovered our solar partner in Soltek, who came through when opportunities arose in the solar landscape. All three organizations were ready. So much of life is timing, and making your own luck. We've all heard that luck is when preparation meets opportunity, and you miss 100% of the shots you don't take. So prepare for when the time presents itself, and take the shot.

This project is a tangible example of what can happen when you work with others — you are able to achieve something greater than you could on your own. A rising tide lifts all boats, and it is our hope that this project demonstrates our commitment to the planet, and that it inspires others to pursue ways they can reduce their carbon footprint and climate change impact. We share a beautiful planet, one of unimaginable beauty that is worth fighting for. When you love something, you take care of it, and at Osprey Wilds, this prairie solar garden is our latest pledge to the Earth that we are doing what we can to take care of it. 🌱

Left: Solar panels being installed at Osprey Wilds.



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