



What would life in 2070 be like if we collectively shift our values toward community, connections with nature, and sustainable living?

hen I was your age, this merganser would have had trouble finding a place to nest on Lake Monona," whispered Rosa to Emilia, as they watched a female hooded merganser leading her troop of chicks along the shoreline. Emilia took her eyes off the birds for a moment to give her grandmother a wordless impressed expression. Twelve-year-old Emilia adores her grandmother. Even as her adolescent annoyance for her parents emerges, Emilia keeps Rosa on a pedestal.

When Rosa was Emilia's age, in 2013, the Yahara Watershed was quite different. The restored marsh, where the mergansers reside, is but one indicator of the ways things have changed. In fact, indicators lay scattered throughout the watershed—around its lakes, its neighborhoods, its cityscapes, and its landscapes. But what underlies these visible changes is something invisible, and it is the real change that unfolded.

Rosa reflected on this as she watched her granddaughter scribble notes in her journal. Emilia journals avidly about her experiences in nature, usually recording observations and musings about birds. Her affinity for birds has earned her the term of endearment "my bird" from her grandmother. To Rosa, Emilia's connection with birds is another manifestation of the intangible changes whose unraveling

she has witnessed over the course of her life. These intangibles, which have reaped tangible outcomes, used to belong to a more peripheral worldview. But over the decades since Rosa's youth, they have ventured from the edge and spread across the cultural landscape, eventually catalyzing the Great Transition.

In her granddaughter, Rosa sees the reflection of her own youth. Back then, she possessed a sense of kinship with nature that not everyone seemed to share. She used to grapple with how to make more people feel connected with the natural world, a connection that, to her, seemed so plain. What she learned, however, is that changing people is no plain and simple feat.

The sun was rising higher, so Rosa and Emilia paddled onward toward home. Abutting the marsh is Bastian's Beach, where Rosa spotted and waved to the Meiers, who sat reading with the beach to themselves. The elderly couple frequents this beach on early mornings, even when the air is chilly, like on this particular April morning. Many years ago, the marsh and beach had been the neatly mowed turf of people's backyards. Now, reeds and trees obstruct the view of the lakefront houses. The conversion is a product of the Transition, and of the efforts of a coalition led by Rosa's husband, Sebastian. Monona had passed citywide legislation to restore natural



Rosa and Emilia frequently canoe on Lake Monona to nurture their connection with nature. Decades ago, Rosa's community came together to restore the shoreline and create Bastian's Beach and Marsh Preserve.

shorelines around the lake to reduce the risk of flooding and create more wildlife habitat. In recognizing their connection with wildlife, residents understood that harmonious cohabitation meant being sensitive to each other's needs and, sometimes, giving each other space.

"Grandma, tell me again why this beach is named after Grandpa," inquired Emilia, snapping Rosa out of her reflective trance. Rosa paused for a moment before reciting the story she has told Emilia many times before. Emilia loves hearing the story, but the storytelling is bittersweet to Rosa. While it allows her to relive the excitement of the Great Transition's

beginnings, it also reminds her of how much she misses Sebastian, who died last year. The commemoration of the beach in his nickname was a well-deserved honor. With a deep, centering sigh, Rosa began.

The Transition's Beginnings

"When I was just a few years older than you, the winds of a great change had begun to pick up. My generation stood in the face of an approaching storm, and many of us believed we had to work together to put the world's great ship on a different course. We often used the metaphor of a trim tab to describe what we

had to do. You remember what a trim tab is, right?"

"Yes," exclaimed Emilia. "It's the little rudder at the edge of a ship's big rudder that makes the ship start changing direction. A little movement of the trim tab can make a big difference."

"Exactly," praised Rosa. "We saw ourselves as the trim tab that would have to push humanity in a new direction.

"When I was a junior at the university, I got involved in a student group called Badgers For Our Future. We were part of a national youth coalition called Young Americans For Our Future, which was just one of many national and global coalitions of young people that belonged to the Great Transition movement. These groups rallied together passionate young people, channeled their energy into organized actions, and gave them the skills they needed to make change in their communities. Together, we had our sights set on a better future for our generation and for the ones that would come after ours, like yours."

"But what was wrong with the world then?" asked Emilia, knowing the answer already, but inserting the question mostly for the dramatic effect.

On cue, Rosa continued. "Well, when your grandpa and I were young, the world was facing some problems that had left many people feeling desperate. In the 2020s, politicians in Washington, DC and here in Wisconsin were not getting along with each other. In fact, some of their arguments had been going on for more than a decade, and they were having trouble getting anything done. On top of the political gridlock, the economy was stuck in a rut. The federal government and most states were in financial trouble, which did nothing to

fix mounting inequality and public discontent. Making things more difficult was a very small group of people who were hoarding much of the nation's wealth and power. Any effort to change things was stifled, and public outrage had hit a boiling point.

"What's more, we were on the verge of a widespread environmental breakdown. We humans could not stop hurting our waters, soils, air, plants, and fellow creatures. Although many people were trying to prevent what seemed like an inevitable collapse, they were swimming against a strong current. There was little political will to enforce strong environmental regulations, and other measures remained tepid. Many people in my generation used to say the rhetoric for change was hot, but the action was cold.

"While political action stagnated, global temperatures continued to rise, and the climate was changing much more rapidly and dramatically than scientists had predicted and people thought possible. In the United States, the Southwest was suffering from chronic drought and spiraling quickly toward a water crisis. The East Coast was battered by frequent and ferocious storms, and several coastal communities eventually sank into the rising Atlantic. Here in the Yahara, extreme spring rains repeatedly drenched our communities beyond what we could absorb. There was a time when many worried the lakes would never recover from the onslaught of runoff that accompanied these storms. On top of these destructive weather patterns, a set of costly natural disasters hit a few of the most vulnerable areas of the country. The one that made the history books was Superstorm Sam. Many people from my generation still remember what they were doing the

day that storm hit. Altogether, America's forecast looked grim.

"Despite this doom and gloom, my generation did not lose hope. Sure, we were disenchanted with politicians and the political system, but we did not let our disenchantment turn into dismay or indifference. We felt a moral obligation to turn the ship around. We focused on solutions, not problems, and pushed against the systems that were blocking our path.

"You see, my generation saw the world differently than the generations before us. In fact, younger generations often grow into an ideology that differs from their elders. I bet you see the world differently than I do. From my generation's perspective, the drive for material wealth that had dominated many cultures, especially America's, was one of the systems standing in our way. We were unhappy with the excessive consumerism and angry about the social inequalities and ecological destruction it caused. To us, life quality was not based on quantity, and wealth provided no shield against the crises we were facing. We wanted off the treadmill of consumption and out of the rat race. Many of us believed we needed more time and freedom to cultivate meaningful connections with each other and with nature, and it would be these connections that would ensure our well-being into the future."

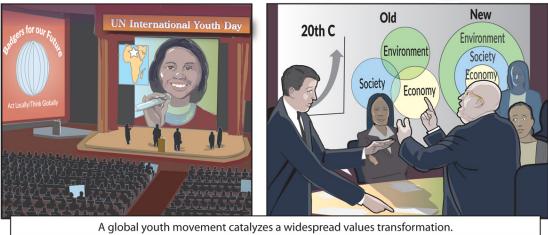
"So people back then didn't think they were connected with nature?" Emilia blurted out in disbelief. "And what does 'sustainable' mean again?"

"Two very good questions, my bird," said Rosa. "Well, many people of all walks of life did feel a connection with nature. But, you see, what was different back then was how society as a whole dealt with this connection. Collectively, we didn't do the best job of recognizing our interdependence with the Earth, especially in how we went about making decisions. When I was at the university, I remember learning about what some scholars called the human-nature dichotomy, which is the idea that humans and nature are separate from each other. There is a long history behind how this perspective came about, but some people blamed this mindset for enabling the environmental destruction humanity was causing—by separating ourselves from nature, we created enough distance to blind us to the damage.

"But, among my generation, this idea was eroding, as more of us grasped the belief that humans are nature. Society is part of the ecosystem, and our actions—whether intentional or unintentional, positive or negative—have complex impacts on the environment and on one another, which leads me to what I meant by 'sustainable.'

"Some of the ways the world works today did not exist when I was your age. For example, you've learned in school that the United States Constitution grants explicit rights to nature. The government also pays farmers to help them grow their food organically. These things came from my generation's prioritization of nature and collective well-being. We believed true happiness came from connection and meaning, and our prosperity relied on our success at nurturing these things. These priorities fueled our desire for sustainability, which means that we can live a good life now, but we must live within the limits that nature has set for us, so that future generations can also live a good life and have their needs met. My generation did a lot to fight for the higher equality and better environment that you get to enjoy today."







"But it seems like it would have been impossible to make such big changes," said Emilia.

"At times, it did feel impossible, my bird. Change isn't easy, and some people chafed at the ideas my generation pursued. The sort of life we wanted presented an uneasy tradeoff. The reluctant didn't want to give up the conveniences and individual freedoms the high-consumption lifestyle provided them. It was harder for them to recognize or accept the long-term, collective payoffs of their sacrifices.

Despite this friction, my generation perse-

vered. The stakes seemed too high. United under a common vision, Badgers For Our Future and the other youth-led groups around the world formed a massive network, organizing in the grassroots and online. From the global to local levels, we shared ideas and resources, aligned our events, empowered each other, and rallied together to get our voices heard and put pressure on leaders. No matter our politics, class, race, or religion, we embraced our diversity and felt an incredible sense of belonging to this amazing movement of people."

"Grandma, get to the part where you meet grandpa," said Emilia, whose attention was starting to drift through all the solidarity talk.

Rosa chuckled. "Ok, ok. Sorry, I get so wrapped up in remembering the excitement of that time that I forget the details you like to hear about. My work with Badgers For Our Future set the course of my fate both professionally and personally. It started my career in community organizing. Even after I graduated, I stayed involved with the group, organizing rallies and trainings to mobilize post-college young adults. It was at a rally in celebration of the United Nations' International Youth Day one summer that I met your grandpa. He was a handsome, young entrepreneur who owned a start-up urban farming business. We bonded quickly, especially when we discovered our mutual passion for raising backyard chickens, which might explain your love of birds. Anyway, the rest is history for another story.

"Let's fast forward a bit. Through the 2020s, 2030s, and into the 2040s, my generation grew up, became established adults, and took the leadership baton. This allowed us to leverage the momentum we had generated in our youth and wage an incredible transformation. We

changed policies and enabled collective practices that better reflected our values around community building, social equality, and environmental sustainability. Although the climate continued to be volatile, the will and capacity to meaningfully mitigate and adapt to its impacts had spread throughout the United States. This transformation was not without its growing pains, of course. Breaking free of the old ways and creating new ways that worked took time, and some trial and error. But by the time your dad's generation came of age, the Transition had unfolded and a new paradigm came into full bloom. Already, I can tell that your generation will continue the pursuit of the Transition's ideals, as the work is certainly not done yet.

"And, Grandpa. He was quite the leader. Throughout his life, he was a true inspiration to me and to many other people. One of my favorite stories is how he persuaded our entire congregation to adopt efforts to care for God's creation. Grandpa spearheaded planting the church garden and started the program to donate its surplus to local food pantries. We also converted the church's large front lawn into a prairie and upgraded the building to be highly energy efficient. Our efforts inspired many other local congregations to take on similar initiatives.

"Which brings us back to your original question: how did this beach come to be named after Grandpa? Well, his urban farming business grew from a scrappy start-up to a thriving local establishment in a very short period of time. As our generation began to buy houses and property, we eagerly invested in urban gardens and farms. Grandpa soon became a respected business owner in the Yahara, and he eventually became president of the South

Metropolitan Business Association. With a foot in the business, farming, and citizen action worlds, he managed to organize a coalition that was instrumental in improving the conditions of the lakes. By the time he passed, he had left quite a mark on the city of Monona. To honor his legacy, the city named this beach after him.

"This beach and the surrounding marsh are the products of an initiative the coalition undertook under Grandpa's leadership. In fact, he saw the preserve as one of the coalition's crowning achievements, especially given how hard they fought for it. Even though most Yaharans had become more willing to undertake serious conservation measures, the willingness was not universal, especially when certain sacrifices were required. To create the preserve, Grandpa had to convince several residents to give up either some of their property or their control of it. While some eagerly obliged, believing in the importance of restoring the shoreline, a few put up a fight. Concerned about the preserve's impact on their taxes and individual freedoms, they took the coalition to court. Fortunately, the court ruled unanimously in the coalition's favor. To the court, the benefits of the shoreline restoration to the whole of the watershed and its communities far outweighed the costs for these few individual property owners. It was a glorious victory! Oh, how we celebrated! It symbolized how far we'd come in putting the good of our communities and our environment before the desires of the individual. The triumph was proof the Great Transition had arrived."

A Connected Watershed

Rosa had barely finished her story when she and Emilia reached the boat landing. They

THE PURSUIT OF **HAPPINESS**

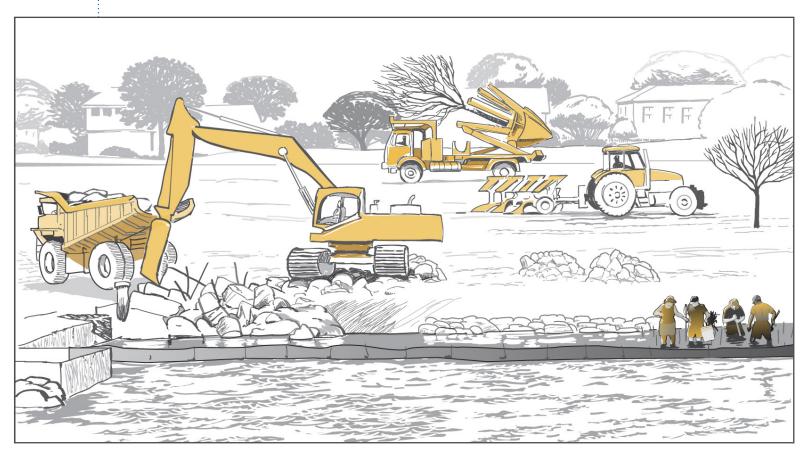
The pursuit of sustainable happiness and well-being was a significant driver of the Great Transition. The effort to build stronger local communities stemmed from a heightened awareness of the importance of positive social relationships and engagement to achieving happiness. The cooperative efforts to improve social equality and environmental sustainability reflected another happiness tenet: a sense of meaning and purpose. Mending and tending interactions with nature in everyday life became essential to living meaningfully, in addition to living sustainably. With the widespread recognition that environmental degradation threatens human security and well-being, especially among the most vulnerable populations, coordinated efforts to enable sustainable development and the equitable distribution of resources multiplied. Such efforts came not only from the youth movements, but also from civic and religious groups. Increasing social tolerance enabled the assembly of more and stronger ecumenical initiatives around common concerns, such as poverty elimination and environmental stewardship.

Perhaps one of the greatest indicators of the commitment to improving human well-being was the United States' adoption of the Gross National Happiness (GNH) index as its official gauge of prosperity. GNH measures a country's life quality according to four pillars: good governance, sustainable socio-economic development, cultural preservation, and environmental conservation. The United States was one of many countries to adopt GNH—a scale of impact that belies its origins in the tiny country of Bhutan. Its far-reaching adoption was a powerful statement that gross domestic product (GDP) had lost its relevance in determining a nation's standard of living. Unbridled growth would not a prosperous country make, as became the dominant belief. Equality, resilience, community, and happiness—these would lead to the good life.

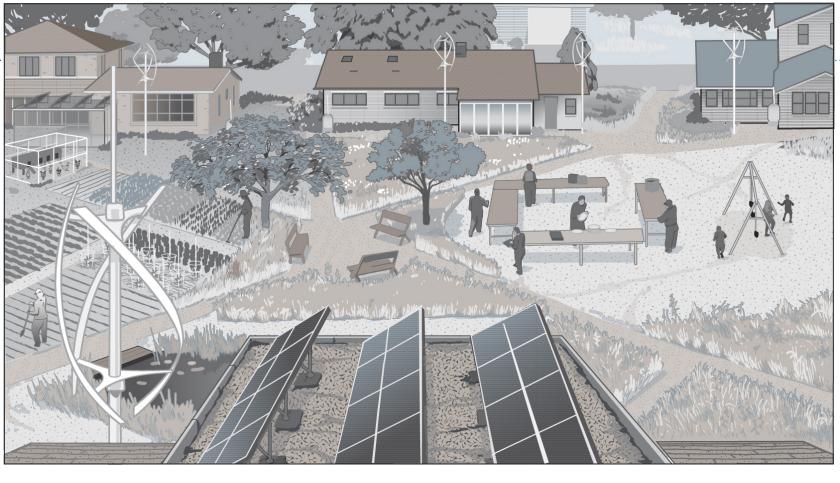
quickly pulled out the canoe, placed it on the community canoe shelf, and hurried home to start preparing for the afternoon celebrations. It was the one-hundredth anniversary of Earth Day, and their co-housing community was readying for its annual celebratory gathering. All around Yahara, communities were prepping for their own activities: prairie burning, a music festival, garden planting parties, canoe trips on the lakes, and the like. Earth Day has grown to mainstream holiday proportions in the region, especially since Wisconsin was home to its founder, former governor and Senator Gaylord Nelson. The commemoration is but one manifestation of the new world order Rosa, Sebastian, and their generational cohort ushered in.

By the time Rosa and Emilia reached the

community courtyard, several of the co-housing members were already out in the garden, harvesting the springtime bounty. At nearly an acre, the community's garden is actually large enough to be considered a small-scale farm. The community started it many years ago, when they combined their backyards into one giant, shared courtyard. Along with the garden, the communal lot contains a small park, where the residents frequently gather for meals, celebrations, and leisure. This arrangement is now common in Yahara's neighborhoods, both urban and suburban. Like Rosa and Emilia's community, neighbors have joined their yards, converting them to resident-owned and managed communal spaces. Many former single-family backyards are now pieces of com-



Under the new values paradigm, Yahara's communities undertook many efforts to improve natural areas and water resources, such as this shoreline restoration.



Rosa and Emilia's community is representative of communities throughout Yahara. Their shared space includes a small farm, prairie, and park, and is host to gatherings such as the Earth Day celebration.

munity gardens, parks, even restored prairie patches and small forests. Private property still exists, but owners treat their land with the recognition that it is a piece of a larger landscape they share with their human and nonhuman neighbors. Green infrastructure—such as rain gardens, pervious pavement, bioswales, and native vegetation—is common. The era of the well-manicured, partitioned lawn (and much that it symbolized) has come to an end.

The combined lots represent one of the most important outcomes of the Great Transition: the widespread focus on community building and preservation. The value shift toward enhancing human quality of life and away from wealth gain allowed global initiatives aimed at increasing educational and advancement opportunities, especially for women, to flourish, which slowed and eventually halted population growth worldwide. In the United States, as fam-

ily sizes decreased, the conceptual boundaries of "family" expanded to include neighbors and friends. This broadened scope helped foster shifts in life patterns toward the prioritization of friends, family, and free-time, and away from fixations on things, work, and economic wealth. For example, the average work week is now 30 hours, and job sharing has increased, leaving more time for engagement in one's community and in nature. The connections between people, and between people and nature, have become the foundations on which life is oriented and lived. Well-being is no longer measured in wealth and possessions, but with social ties and healthy ecosystems.

From lawn to city, human settlements sport a community-oriented design, with fences removed, city and town centers revitalized, and more protected natural spaces scattered about the landscape. Housing options also reflect

the increased emphasis on community. While single-family dwellings still exist, the lots on which they stand have shrunk where possible, filled in with either more units or shared natural space. The availability of co-owned dwellings has grown. Efforts to reduce residential sprawl to preserve farmland and natural spaces have helped rural towns and suburban areas, such as Sun Prairie, McFarland, Windsor, DeForest, Waunakee, and Oregon, become self-sustaining, walkable communities with bustling downtowns. A minority voice within the older generations occasionally complains that Yahara's new arrangement constrains individual privacy, but the widespread embrace of shared open space and walkability outweighs such complaints.

The makeover of Yahara's urban centers, still homes to the bulk of the population, entailed not just denser housing and joined lots but also improved public infrastructure to meet the demand for more livable communities. Overall, the built environment is designed for efficiency and integration with nature. Yahara residents are much less reliant on cars. More bikes and buses swarm the streets of the watershed's cities. To accommodate the growing masses of bike commuters, most major traffic arteries are lined with bike lanes and paths, and new ridership-supporting policies and programs have helped build more tolerance between drivers and bikers. The cars that do roam the streets are hybrids or electric: such technology advanced rapidly during the Transition. With guidance from its German sister city, Freiburg, Madison has even woven a streetcar system through its streets and into Middleton and Fitchburg, with plans for further expansion.

Values alone did not make this infrastruc-

ture enhancement possible; funding, too, was necessary. Shifted tax structures, which reflect local and national priorities, and social innovation played important roles. With the increased sense of responsibility toward one's community and the dedication to improving life quality, most people in Yahara view taxes as a way of supporting each other and strengthening their communities. Opinions on taxes are still diverse, but compromise has become easier under the eased political tension and heightened recognition of common ground.

Also, philanthropy has dramatically increased among the nation's richest individuals and companies, as wealth sharing with nonprofits and underserved communities has become a tenet of business-as-usual. Through collective impact initiatives and public-private partnerships, social services, such as childcare and healthcare, and social equality have improved. Crowdsourcing also serves as a funding and buy-in mechanism for community-based projects. In addition to sharing economic resources, communities share goods and services with each other, such as vehicles, appliances, equipment, meals, and expertise. more so than earlier in the century. Thus, both the physical and social landscapes are draped in the community-oriented social fabric.

Earth Day is an occasion when the vibrancy of Yahara's communities is in full bloom. Across the watershed, communities celebrate the day with rituals that serve to further strengthen social ties. For the past ten years, Rosa and her neighbors have gathered to plant the summer harvest, a gathering followed by music and eating. Today's early morning story time made Rosa a little late to pick up the meat for the celebratory meal from Blue Hill Farm. If she didn't

hurry to catch the bus, they would be closed by the time she got there—most businesses close early on Earth Day.

Food culture has changed dramatically through the Transition. Views and practices around agriculture, food, and eating are imbued with the cultural narrative of connection—namely, the inseparable connection between food and nature. Attitudes and norms around food choices reflect the concern for lightening agriculture's environmental and social footprints. Notably, Americans eat significantly less meat. Instead of the average eight ounces per day from earlier in the twenty-first

century, they now eat an average of only one or two meat-based meals per week. While hunting has remained a popular way to eat meat sustainably, widespread public concern over the climate footprint of livestock banished meat as a dietary centerpiece.

Not surprisingly, the country's diet change altered the livestock and dairy farming industries in Wisconsin. Concentrated animal feeding operations (CAFOs) and commodity farms have disappeared, their environmental footprints and animal-rearing practices no longer socially acceptable and their subsidies cut off. While cheese, yogurt, and butter still adorn



This view of farmland north of Lake Mendota shows marks of the Great Transition: smaller farms, land restorations, pastures, and crop diversity.

platters, granola, and toast, the dairy industry has also reorganized around the demand for quality. The shifts in meat and dairy demand, however, did not entail a loss of support for all livestock operations. Small-scale, rotationally grazed livestock farms have experienced a renaissance in popularity, and the higher prices they receive for their higher quality products enable a sustainable existence.

The diet change also caused a transformation in Yahara's agricultural landscape. With the average American diet now primarily plant based, the seas of corn and soy have, for the most part, dried up. Along with the disappearance of the corn-based diet for livestock, many processed foods have also disappeared. Small-scale farms, which operate under a cooperative and/or community supported agriculture model, paint the landscape with colorful mosaics of vegetables and pasture. Alfalfa fields are still a part of this mosaic, but to a lesser extent, and more acres have been filled in with small grains, such as wheat, oats, and rye. Improved public support for farmland protection allows farmers to make novel and sometimes riskier investments, especially in new crops that may attract new markets. Farmers also get public assistance to mix their fields with soil-building prairie and forest, creating a patchwork of farmland and wildlife habitat that has enhanced biodiversity, recreational opportunities, and ecosystem resilience.

It was not just the diet change that brought about this landscape transformation; the concern for quality, not maximum yield, also helped. As the perceived need to produce, produce, produce for cheap, cheap, cheap died, farmers no longer felt the pressure to squeeze all the crop and dime out of their

land they could. Although the average farm has shrunk in size, the amount of agricultural land in the watershed has remained steady over the past few decades, as there are more farms. Shrinking farm sizes, along with assistance programs, made it easier for farmers to implement and experiment with conservation farming practices, and it has made their operations less mechanized. As a result, farm sector jobs have increased, a trend further facilitated by the implementation of a mandatory living wage. This package of changes has caused food prices to rise, a trend by which the public is largely unfazed, however. With consumer culture permeated by the demand for quality, stronger local food markets, and higher wages all around, people are generally willing and able to spend more money on healthier, more diverse foods.

"How's business been since the flood?"
Rosa asked Kevin, as the young farmer dug
her order out of the freezer. Last year the
watershed experienced a particularly wet
spring and early summer, which left many
farms soggy from floodwaters.

"Mostly unharmed, thankfully," Kevin replied.
"The restoration we did to the floodplain sure helped us stay afloat, so to speak. I heard Fishtail Farm had a heck of a time, though. They've been slow to get that farm into shape, and they pretty much lost their crops. Plus, they're in some sort of trouble for the load of phosphorus that ran off their land."

"Oh, I heard about that, too. Well, I guess we all learn the hard way sometimes," said Rosa, with little sympathy.

Rosa's unsympathetic reaction stems from the now-widespread expectation that land owners manage their land as part of the Yahara

CONSUMER POWER AND THE LIVING ECONOMY

By 2070, consumer choices reflect the new set of values and corresponding public expectations. Material wealth is not the coefficient of life quality. As such, households, overall, consume less. Reusing materials and objects for as long as they are repairable and usable is the norm. Planned obsolescence is no longer part of product design. What individuals don't share with their communities is purchased primarily out of need. What they do purchase is often bought locally, and when not locally available, is sourced from a socially and environmentally responsible business—which is not difficult to do as, by now, most businesses adhere to responsible practices. People see buying local as not only the responsible choice, but also a way to keep communities thriving and preserve a sense of place.

In response to both widespread public pressure and internal shifts in priorities, businesses and corporations have internalized social and environmental costs and incorporated social equity and environmental impacts into their bottom lines. By and large, corporate leaders recognize their existence and growth are dependent on healthy and resilient communities and ecosystems; without them, there can be no long-term prosperity. Consumers perceive corporations' existence as for the public good and remain vigilant to their business operations. If one violates public trust, it faces fines or sanctions.

An example of the strength of the new consumer values is the disappearance of products that are no longer deemed socially acceptable, such as processed convenience foods. As consumer demand shifted toward higher quality foods, the accessibility and ubiquity of healthy foods increased. Consumers prefer that their money go directly to farmers. As farming became more lucrative, farmers could make bigger investments in their farms and, thus, provide more high quality food to the public.

The shift in economic priorities led to the evolution of what some might call a "Living Economy." That is, the economy now functions like an ecological system. It is a means of serving people and preserving nature. Like ecological systems, place has become essential to healthy economic systems, hence the concern for nurturing local economies. Financial services have become better able to respond to community needs and opportunities. Public utilities manage life's basic needs—energy, water, food, health, education, and environmental quality—since they are viewed as public goods that require expensive investments. Although economic equality has improved as a result of these changes, poverty still exists, and some people still rely on assistance programs. However, strengthened communities also help to meet some of the social need, and there is general confidence that the Living Economy will enable economic sustainability and resilience.

commons. Since the Transition, farms, towns, and cities alike have boosted their efforts to both repair and prevent flood and runoff damage. Through management models that entail community ownership, monitoring, and effective communication, residents care for land cognizant of their obligation toward the many beings that rely on it. In doing so, they have been able to more assuredly protect open space, as well as deepen trust in each other.

While the values shift fueled the pursuit of

these efforts, they could not have been successful without the strengthened influence of civil society in regional governance. With the aid of on- and offline communication tools and procedures, citizen advocates, watchdog groups, and other NGOs have created a network of vigilance and cooperation that has increased transparency and public participation in decision making—groundwork laid largely by campaign finance reform, which put an equalizing cap on political contributions. Government

agencies still oversee natural resource management and govern land development, but the public plays a strong role in upholding their accountability, as well as that of the private sector, and in pushing for meaningful measures to improve life quality.

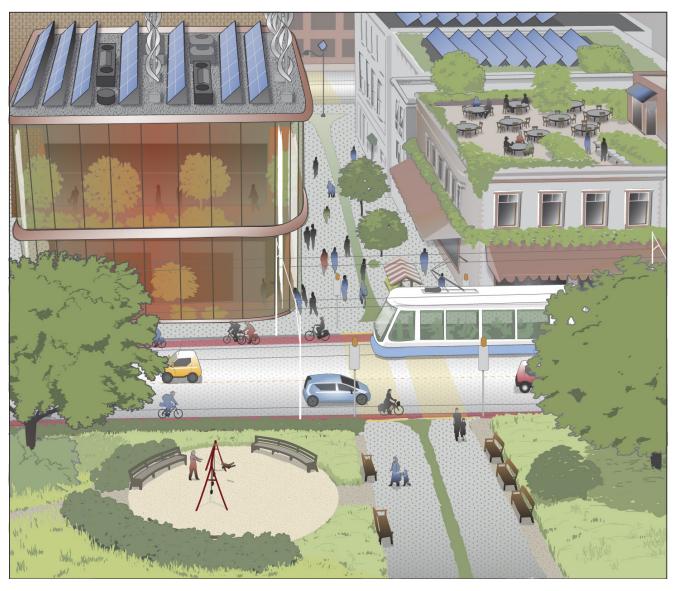
The lakeshore restoration project that led to the creation of Bastian's Beach and Lakeshore Preserve—the project spearheaded by Sebastian and his coalition—is an exemplary product of the increased public participation and cooperation. In addition to restoring the marsh and the beach, the coalition rallied property owners to create an interconnected greenway of wetland patches and rain gardens, which extends through many of the neighborhood's backyards. The greenway not only helps slow urban runoff, it also symbolizes the community spirit in lake management.

The creation of the preserve and greenway was accompanied by the implementation of stronger phosphorus runoff laws for both urban and rural landowners. The coalition also designed a funding partnership model between local businesses and nonprofits, in which businesses create philanthropic branches to fund and coordinate the lake management efforts undertaken by their nonprofit beneficiaries. This model has been successful at fostering unique collaborations, causing its replication throughout the watershed and the state. It has bolstered the private sector's influence in land conservation and has enabled impressively effective behavior change programs, such as campaigns to encourage lakeshore property owners to convert their lakefront lawns back to natural lakeshores and incentive programs for farmers to restore vegetation in floodplains on their properties. In fact, the restoration of lakeshores, wetlands, and other riparian areas are among the biggest ecological success stories of the Great Transition so far.

But such change does not always happen smoothly, and watchdogs' loud barks on foul play can stir up tension. The upswing in civic engagement has caused more frequent whistle blowing, which is good for making change, but also for creating conflict. For one, regulation enforcement is still catching up to public demand, leaving a long queue of cases against irresponsible businesses and developers. While most businesses and developers are adhering to public expectations, bad apples exist, despite the threat of hefty fines or sanctions for violations. At the same time, the occasional overzealous watchdog stirs up tension where it is undue.

Neither does change happen completely evenly. Despite the majority shift in consumer values, pockets of "traditionalists," who have been slower to accept or adopt the newer norms, feel society has not necessarily gotten better with the Transition, since certain conveniences and privacies have disappeared. Also, while formerly underserved populations are much better served than earlier in the century, time has been a slow healer. These communities still face disparities. Even when good intentions exist, scattering philanthropy and shared wealth evenly is no easy task.

Moreover, some marks of pre-Transition Yahara are slow to fade from the landscape, and some may never completely disappear. Invasive species have stubbornly held their ground around the lakes, and while many native species are returning, they must live with their intrusive neighbors. Also, some chemical contaminants have persisted in the



By 2070, all of Yahara's cities and towns are designed to be walkable and sustainable places to live, with features such as ample public transportation, renewable energy installations, and green spaces.

lakes, and thus so have advisories against the consumption of large, slow-growing fishes, which carry high concentrations of pollutants in their bodies.

Another persistent legacy from previous generations is phosphorus. Despite all of the changes made to Yahara's landscape, which people thought would bring quick improvements to lake water quality, the results have been disappointing. Nearly three decades since the Transition began, the lakes have not become cleaner, and nuisance algal blooms

continue to close beaches and threaten public health. Only recently did a team of scientists from the University of Wisconsin-Madison figure out why.

It turns out the disappearance of corn from the watershed had an unintended consequence. Corn is exceptionally good at taking phosphorus out of the soil to use for growing. Removing this nutrient-hungry plant from a landscape so saturated with phosphorus, but keeping the cows—even though they are few and spreading their manure around pastures—

resulted in just enough phosphorus going into the soil and not enough coming out. This imbalanced and backlogged phosphorus budget is still leaking into the lakes, inhibiting progress on cleaning them up.

Yet, the people of Yahara have not given up hope. Steadfast is their commitment to revitalizing and honoring their waters, for they are the region's lifeblood. Water conservation practices permeate everyday life at both the individual and collective levels. Lakeshore revitalization projects, such as boardwalks, art installations, and parks, are beloved gathering spaces. Despite the burdensome legacy they bear, the lakes remain central to the Yahara people's identity and sense of place.

Of course, another legacy that will long be a stone in the world's shoe is climate change. The flood Yahara experienced last year was not entirely abnormal. While worldwide mitigation efforts have begun to calm the climate, the planetary system is slow to forgive and forget. Earth's atmosphere is still laden with too much carbon dioxide and other greenhouse gases, much of it leftover from previous generations. Weird-weather years have lost their anomaly status, though, and people have learned to adapt.

Yahara is now better prepared to deal with the climate's weather tantrums, especially since land management is done in harmony with the natural landscape. Instead of complex engineered systems, plants are the common solution to controlling water's ebbs and flows. Restored shores and floodplains can better withstand floodwaters. Pervious surfaces and re-vegetated swaths of land have sprouted across the watershed, allowing more precipitation to make its way back into the soil and,

eventually, to groundwater, instead of wandering down the streets and into waterways. The increased crop diversity and improved water conservation practices have made farms more resilient to drought.

Adaptation went hand-in-hand with the slew of coordinated efforts to dramatically reduce greenhouse gas emissions. The bout of weather disasters from the 2020s through the 2040s, accompanied by the generational shift in leadership, led to a critical mass in public concern. Under public pressure, the U.S. government phased out fossil fuel subsidies and many institutions divested from oil and gas companies, which sent energy prices soaring and fossil fuel use plummeting. While energy prices now internalize the social and environmental costs, the expense has its drawbacks. For example, gone are the days of cheap air fare. Air travel has become limited and infrequent for most people. Those who fondly remember the days of Orbitz and Expedia lament the restricted travel; although, the discontent has spurred a revival of the nation's cross-country train system.

Generally, Yahara's energy culture reflects
Transition values and priorities. Renewable
energy sources predominantly fuel the region.
Wind, solar, and geothermal systems are prevalent landscape features. Their technology has advanced, subsidies help with the costs, and the energy grid has morphed to better accommodate them. Many people view technology as intended only for serving community and local needs, a perception that has focused funding, research, and development on appropriate technology—i.e., small-scale, locally relevant, environmentally and socially benign, and affordable technological solutions. Additionally,

per-capita energy consumption has dropped dramatically, especially as related behavioral norms have shifted. For example, public interest in once-common energy-intensive objects and activities has waned, especially as leisure time is more often spent with friends, family, and nature, instead of in front of the television or computer. These shifts have benefited public health. With skies less stuffed with emissions, air quality related diseases, such as asthma, are on the decline. Since more people are living the pedestrian life, with their feet more frequently on the pavement or the bike pedal, the obesity rate is shrinking.

While the pedestrian life keeps most people close to home most of the time, they maintain a worldly perspective. The physical and financial barriers to long-distance travel have not prevented relationship-building across oceans and continents. For instance, a national-level foreign exchange program enables American youth to work, study, or volunteer abroad for a year during high school or college. Community-based endowments, along with government and private scholarships, help fund such adventures, making them widely accessible opportunities and a standard part of one's education. The intercultural understanding and empathy these horizon-broadening experiences foster is seen as imperative for nurturing healthy and happy communities at home. Furthermore, the Internet has remained a global forum for idea-sharing and storytelling. These virtual and real-life international connections are an important transaction of the new globalization.

Emilia daydreams often about her future year abroad. A young woman with little trepidation, she is eager to experience the world

beyond Yahara and make lasting friendships, like those her grandmother cherishes. Rosa has always told her that the sum of enriched connections—between cultures, between communities, between individuals, between word and deed, and between humans and nature—are part of the resilience equation.

Heading Toward Resilience

With the community seated around a ring of tables, the chatter died down and undivided attention was diverted to Rosa. It has become custom for Rosa, the unofficial community matriarch, to give an invocation before the Earth Day meal. This year is the first celebration without Sebastian, and Rosa's sorrow moved her to offer some additional thoughts. Lately, she has been thinking a lot about her own mortality and a question that she and Sebastian often discussed: how can we be sure our communities will continue to thrive?

"Since my youth," Rosa began, "people have talked about 'saving the earth' for the sake of future generations. I remember the sermons our pastor used to give when I was a child; he would proclaim it was our moral obligation to care for all of God's creation, to steward the Earth and prepare it for our children, and our children's children. But, at that time, and especially before becoming a mother, it seemed difficult to think that far ahead, to imagine future generations and what life could be like for them. Now, in watching my bird, Emilia, grow up, I can witness this intangible future and feel deeply the tangibility of the connection we all have with future generations.

"Sometime at the start of the Great Transition, I learned that transformational change usually occurs in the face or wake of a crisis.

But I often pondered, is it only a crisis that will move people to change? What about the higher reasons? Can they inspire us too?

"Now, as I look on our community and our region, I believe they can. Yes, my generation was staring in the face of a big crisis, one that would have surely made life for Emilia's generation difficult. But while the crisis was the source of urgency, I believe it was our values and our solidarity with those values and with each other that enabled the Great Transition.

"But transformational change also required the capacity to recognize that the structures of the old system—its economy, its ecosystems, its society—were crumbling and unsustainable. We needed the capacity to imagine and create a fundamentally new system that would lead us to a better future. We all had to be able to see the world differently, and to interact with it and with each other differently. We had to be flexible and be able to adapt to sudden, unforeseen changes, as much as the foreseen ones. And,

we had to be persistent.

"This recipe of factors was essential for us to move forward on our path towards building a resilient Yahara and a resilient Earth. We all know that we are inherently intertwined and interdependent with the Earth and her resources, and with each other. But it is not just our collective knowing of these connections that helps us move forward on our path. It is the actions we take, on our own and with each other, that will lead us toward resilience. With the strength we give each other, we can empower the generations that follow us to more confidently create an even-better future and be even better prepared for the uncertainties that await them.

"And, so, let's remember these connections as we honor the Earth today. For in honoring the Earth, we are also honoring current and future generations, so that we may continue to reap the benefits the Earth gives us. Let us give thanks."

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