

Section 2

Story of Place



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2.1 THE STORY OF PLACE® OF THE FINGER LAKES REGION

Introduction to Story of Place Concept

Communities that maintain their vitality, attract investment and resources, and develop the capacity to adapt have three things in common:

1. They know who they are, distinctively, as revealed through introspection and reflection
2. They developed a narrative to convey who they are to themselves and others
3. They embed that narrative and uniqueness into everything they do, creating alignment between the businesses and people they attract and their fundamental essence

The Story of Place is a systematic and participatory process that was used to identify and honor the unique nature of the Finger Lakes Region and the people who live there. The process began with the development of the narrative through which the region will be able to convey its Story and embed it in the Finger Lakes Regional Sustainability Plan (the Plan) and future strategies. This process of discovery has also supported the establishment of a network of relationships needed for Plan implementation and developed the capacity for whole-systems thinking. This approach acknowledges and respects the strength of diverse and collaborative systems working alongside each other to yield multiple benefits, and healthy, resilient systems.

Geographic & Geologic Setting

Though the nine counties addressed in this Plan are called “The Finger Lakes Region,” the area does not include all of the Finger Lakes, and the three western counties are actually in the Genesee Valley. Therefore, this region has sometimes been called the “Genesee-Finger Lakes Region.” Acknowledging that natural, built, social and

economic systems are not confined to established municipal boundaries, for the purposes of the Story of Place discovery, the term “region” refers to the larger area made up of the coastal plain of Lake Ontario and the watersheds that feed it. All of the waters of the Great Lakes drain through Lake Ontario on their way to the Atlantic Ocean. Lake Ontario is the lowest of the Great Lakes. All the rest sit within the same large plain with only a small change in elevation between Lake Superior and Lake Michigan. Lake Ontario lies almost 300 feet lower because of the great drop at Niagara Falls.

It is important to understand the geological processes that formed this landscape because geology and landform determine so much else about what is possible in a place. The region is part of a vast complex of bedrock that covers much of Canada and the northern United States. On top of this bedrock, two ancient seas formed. Each of these seas was filled when huge mountain ranges rose to the east and eroded down into them. Deposition of the skeletal remains of millions of sea creatures living in the warm shallow waters of these seas created the limestone layers throughout the region. Meanwhile, the material that eroded from the mountains formed the characteristic layers of shale. The limestone helps to buffer the pH of the normally acidic soils, and the shale provides excellent drainage. Both of these factors account for the region’s prime agricultural soils.

These seas and mountains were followed by at least four periods of glaciation, forming the existing landscape. Glaciers carved the Finger Lakes, the Great Lakes and improved the drainage of the soil. Since the path of the St. Lawrence River was under ice, melt water from the retreating glacier forced the water to run through the gap between the Adirondacks and the Catskills into the Hudson River, carving what is now the Mohawk Valley.

The Mohawk Valley and the coastal plain of Lake Ontario form a crucial link between the elevated plain of the Great Lakes and the Hudson Valley lowlands. This passage has determined the movement and growth of plants, animals, people,

and ideas for thousands of years – a central element to the Story of the Finger Lakes.

Eddying Leads to Innovation & Democratization

People have long used this area of low-elevation to cross the mountains that separate the eastern seaboard from the interior of the continent. It is the easiest crossing north of the Carolinas. Native trails, canals, railroads and modern highways all have followed the path carved by the glaciers and their melt water. However, it is more than a simple corridor. The coastal plain of Lake Ontario opens into a broad area between three narrow entrances: the Mohawk and St. Lawrence River Valleys to the east, and the narrow corridor between Lake Erie and the Appalachian Mountains to the west.

One way of picturing the dynamics of the region is to think of an eddy in a stream. The water in the main channel moves fast. But where the channel opens up, an eddy can form where the water slows down and spirals back in the opposite direction of the main flow. An eddy pulls things in, like a canoe or twigs or insects. The water slows down enough that soil and nutrients can drop out and plants can take root. Lake Ontario is in fact a slowing, settling pond between the Niagara River Gorge

Eddying in a stream allows for soil and nutrients to drop out, which attracts diverse species and allows plants to take root.

and the St. Lawrence River (**Figure 2-1**). In any waterway, where the channel flattens and spreads out, resources collect, things take root, and diverse species are attracted and can get established.

This rich pocket of soils supported a large and agriculturally productive native population up through the time of the Revolutionary War. There



Figure 2-1: “Channels” flowing into and out of the broader basin where eddying occurs

were a few comparable pockets of good soil along the eastern seaboard but they were claimed early on by wealthy plantation owners, royal land grants, or corporations. The majority of good soils on the continent, in the upper Midwest and throughout the Great Plains, remained out of reach during the Colonial period. So the coastal plain of Lake Ontario represented the first large expanse of high quality soils available to common people in the newly established United States. These extensive fertile farmlands enabled the growth of a prosperous farming middle class much like the one that grew soon after in Ohio and the Upper Midwest. This was the first large expanse of farmland settled by truly free Europeans who were neither serfs nor serving under a monarch.

The eco-regions, represented on **Figure 2-2**, are determined by the soils, elevation, and climate of a region, which determine what can grow and live there. The dark green eco-region of the Great Lakes (labeled 15 on **Figure 2-2**) reaches a narrow arm into this region where it meets the Allegheny Highlands, an extension of the Appalachians. It is as though the Midwest reaches an arm into the eastern highlands. An alternative analysis describes this eco-region as a western extension of the New York lowlands. In either case it is a meeting place.

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Because this region was scraped bare by the glaciers, all of the woody species that grow here moved into the area from elsewhere. They came from all directions to take root and thrive in the fertile soils and moderate climate, making it a species rich area.

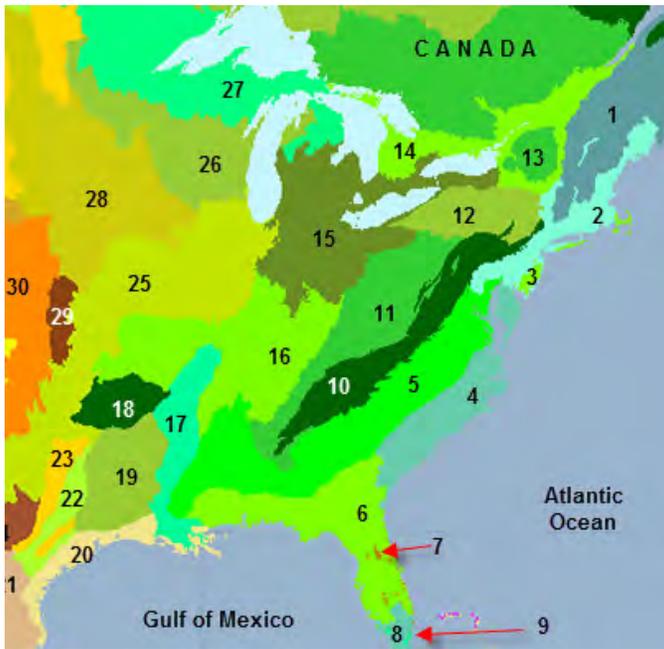


Figure 2-2: North American Eco-regions

The Five (later six) Nations of the Iroquois called themselves the Haudenosaunee—People of the Longhouse—because they saw the Ontario Lake plain and the Mohawk Valley as one great Longhouse that they lived within. Their Longhouse was the gateway to the Great Lakes, the Midwest and the drainage of the Mississippi. Due to its strategic location, the Longhouse was right in the middle of the European struggle, especially between the British and the French, for the furs and other riches of the “New World”. It continued to be strategically important during both the American Revolution and the War of 1812.

The Erie Canal and the Mohawk Trail followed the same path (**Figure 2-3**), the constriction in the water transportation routes between the eastern

seaboard and the Great Lakes/Mississippi Valley. Due to its inherent attractiveness, people not only traveled through, they settled and took root. Population grew rapidly during the Erie Canal era. This fertile open space adjacent to the main course of flow allowed resources, people, and ideas to settle out and take root, seeding many new ideas and ways of doing things. Wheat production, water-driven milling capacity, and the development of water transportation to get products to market in New York City, meant that Rochester quickly took off as the Flour City and one of the new country’s first industrial boom towns.



Figure 2-3: Historic Corridors and Settlements

As The Ohio Valley surpassed the Genesee Valley in the production of wheat and other farm products, the Flour City became the Flower City. A thriving nursery industry supplied cold tolerant fruits and flowers for local use, as well as to the Upper Midwest and cold growing areas in general. Today’s apple and grape industries are based in the breeding of apple and grape varieties, particularly seedless white table grapes named after regional towns like Himrod and Interlaken. Many of the varieties bred here are well known to home gardens all over the country.

Jell-O was started in Le Roy, New York, by Pearle and Mary Wait, who adapted a process for making powdered gelatin that had been invented downstate.

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Their business made use of regionally abundant animal bones and byproducts. The complex gelatin molds enjoyed by the wealthy during the Victorian Era could now be easily and inexpensively made by almost anyone. Jell-O's broad popular acceptance was the result of a pioneering marketing campaign that included legions of salesmen armed with Jell-O recipe books, advertisements in Ladies Home Journal, and sponsorship of early radio shows. The expansion of the middle-class and the development of refrigeration and new pudding varieties led to Jell-O's great popularity in the 1950's and 1960's. It recently became the official dessert of Utah and of the Salt Lake City Olympics, reflecting its popularity among Mormons, a religious community that also originated in this region.

When the Erie Canal was developed, there were no civil engineers in this country and the engineering profession was in its infancy. Learning from the canal builders of England and Europe, the Canal's builders developed a host of new techniques to



meet the challenges presented by the monumental task that the canal represented. Some engineering techniques and methodologies upon which our society is built were developed for the Erie Canal. The success of the Erie Canal led to the building of many other projects, including the much larger and longer St. Lawrence Seaway. In a similar way, Rochester laid the pattern for water-based

commerce that drove the development of the industrial cities of the Upper Midwest, cities like Chicago and Detroit. Unlike older cities, even those of the East Coast, these new industrial cities were not organized on a medieval pattern of Church/Central Plaza. They were organized around transportation and commerce, a new pattern that has come to dominate urban development.

The patterns and organizations of farms and farm communities of the Upper Midwest were also first developed here. The large flat fields and abundant harvests called for new strategies for growing and distribution. Also, this region was the first where Europeans settled and farmed as free people rather than serfs, slaves, indentured servants, or the subjects of a sovereign of some kind. They needed to invent new ways to organize and govern themselves. Innovations like The Grange (oldest American agricultural advocacy group), farm co-ops, and home rule were the result.

In many histories, this region is known as the “Burned Over District” for the great religious revivals that swept through during the antebellum period known as the “Great Awakening”. The

large populations from diverse places that streamed into this region found it almost empty of traditional religious institutions to fill their spiritual needs. This led to a period of ferment and experimentation that fostered a host of new sects and religions including Seventh Day Adventism, Mormonism, Spiritualism, as well as revival meetings and circuit rider preachers. These religious revivals led to a continuous conversation about grace, salvation,

*Innovation:
agricultural industry
took root locally
and developed
innovative solutions
such as The Grange
fraternal
organization and
cold-tolerant fruit,
both of whose
benefits spread well
beyond the region.*

Eddying: when populations “streaming” through found a limited presence of traditional denominations, new sects and spiritual experimentation took root, flourished, and eventually spread.

good works, and free will that laid the basis for many of the social movements that were to follow. They also developed the institutions that would follow the settlers west.

Long before European contact, the Five (later six) Nations of the Iroquois established the first democratic confederacy in the Americas, including complete women’s suffrage. Having

come through a long period of terrible and unremitting violence, the Five Nations chose to lay down their arms and form a confederacy. The wampum belt of the Great Law depicts an organization that is at once political, social, and cosmological. The pattern includes the Elder Brothers (Seneca, Mohawk), the Younger Brothers (Oneida, Cayuga), the Fire Keeper in the center (Onondaga), and the Clan Mothers. The bundle of five arrows symbolizes the collective insight that while one arrow is easily broken, a bundle cannot be broken. The confederacy is represented by the longhouse, and the peace by the Tree of Peace on whose top sits the eagle who watches for danger.

Franklin and Jefferson were both aware of the Iroquois system. Franklin wrote, “It would be a strange thing if Six Nations of ignorant savages should be capable of forming a scheme for such an union, and be able to execute it in such a manner as that it has subsisted ages and appears indissoluble; and yet that a like union should be impracticable for ten or a dozen English colonies, to whom it is more necessary and must be more advantageous, and who cannot be supposed to want an equal understanding of their interests.”

In the new constitution, the Elder and Younger Brothers became the Senate and the House, the fire keeper the President, and the Clan Mothers, the Judiciary, with the power to remove any leaders. The Eagle atop the Tree of Peace and the bundle of five arrows became the eagle clutching thirteen arrows on the great seal of the U.S. and the famous first words “We the People” derives from the first lines of the Iroquois Thanksgiving Address.

These ideals of equality and freedom reappeared repeatedly in the social movements that grew in the region: abolitionism, women’s rights, even Memorial Day which commemorates the common soldier. These freedom movements grew directly out of the interaction between the great Iroquois tradition and the moral questioning of the Great Awakening, and they changed the world. Women involved in the movement for women’s rights took inspiration from their Iroquois friends, who at that time

represented the only role models for strong women in central roles of social and political leadership. Lucretia Mott originally came to the region with her husband to witness the constitutional convention of the Senecas in 1848.

Many national and international companies started in the region and have nurtured their success through innovative approaches. Seneca Falls became the pump capitol of the world and is still home to Gould’s Pumps. Although pumping technology has a long history, the region showed characteristic ingenuity in developing and elaborating a variety of pumps to better serve local needs. Many different

Innovations around a local need – the ideas of democracy, equality and freedom that developed along the southern shores of Lake Ontario seeded ideas and realizations that continue to reverberate around the world.

pumps were designed and built in Seneca Falls, including the world's first fire engine which found a broad market in the rest of the country and the world.

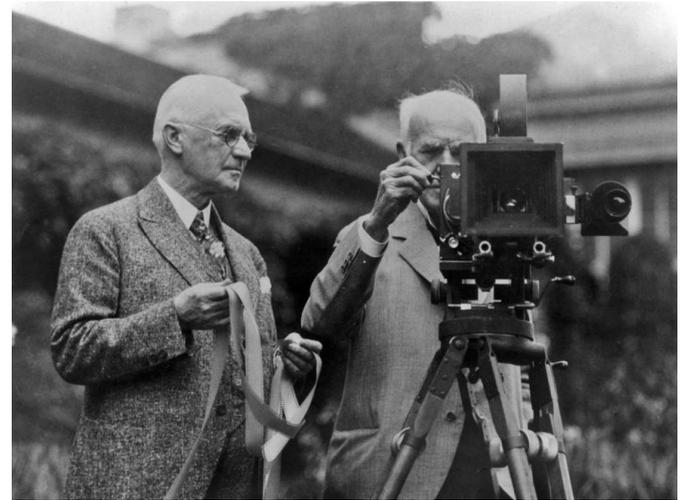
Wegmans is well known in and beyond the region for fostering direct connections with local farmers, a for treating workers well. They have a history of investing in their communities through scholarships, health education, and other programs. They have remained regional, even while expanding, and have pioneered a model of a socially engaged grocery store that has influenced larger chains like Whole Foods. French's Mustard started as a wheat mill, but turned to milling

mustard seed from local farms instead. This style of mustard has spread all over the world. Champion Sportswear was founded as Champion Knitwear in Rochester in 1919. They are the clothing company that invented the "hoodie," sports bra, reversible t-shirts, and breathable mesh clothing which are now ubiquitous.

According to legend, George Eastman went on a trip and brought along a photography kit, complete with

glass plates and chemicals. Upon returning, he was determined that there must be a better way to take pictures that was not so bulky and cumbersome. To satisfy that need he developed first the dry plate and then the film camera systems. Kodak's success was built on making photography easy, accessible, and affordable for all. Like the builders of the Erie Canal, the religious and freedom movements, and Western Union (which also was founded in Rochester), he created a product desired around the world by solving a personal or local need.

Following on its history of bringing ease and affordability to photography, Kodak developed digital photography. Rather than seeing digital photography as the next wave, the company was ambivalent about the new technology and worried that it would compete with its incredibly successful print and negative business. The tensions in the company surfaced as overt conflicts between the digital and print photography divisions. They had stuck to the idea of print photography so strongly that their cameras were meant to interface directly with a printer to print out photos rather than share them in digital format. Though they created the next wave of innovation they were unable to let go of earlier successes to catch the new wave.



Xerox is most famous for its dry paper copiers, making carbon copies nearly obsolete. They also developed the fax machine, laser printer and the first personal computer – all innovations that launched the revolution in how we manage and communicate information. The first, and possibly most significant, innovation was the very idea of a personal computer rather than one that filled a room. This computer also contained the first visual interface, and the first mouse, making it intelligible to a layperson. The prohibitive price of \$16,000 to produce these computers led to the sell-off of these breakthroughs to Apple. These innovations are now everywhere, from phones, to tablets, and laptops.

Democratization: Kodak cameras, Jell-O gelatin molds, and Goulds Pumps – innovations that were advanced in the region and made accessible and affordable to the larger population.

In contrast to Kodak and Xerox, Bausch and Lomb, another key player in the image/optics realm, has done a very good job of riding successive waves of innovation. Originally an importer of monacles from Germany, they began to manufacture and sell their own. They pioneered the use of Vulcanite, an early plastic made from rubber, as a material for glass and monocle frames. When the blockades during the Civil War made gold and tortoise shell expensive, their sales soared. Their development of this material led to its use in everything from jewelry to pens, flashlights, camera bodies and even false teeth.



Continuously innovating – Bausch & Lomb was not content to focus long-term on any one product – they were continuously looking to ride the next wave of innovation.

In the next generation they developed a technique for casting glass lenses rather than painstakingly grinding them. This made their product cheaper and gave them a considerable edge in supplying optics to government, industry, and private customers.

The casting of lenses became standard practice for everything from headlight lenses to light fixtures. This trend continued with the development of the famous Ray Ban sunglasses, originally designed for WWII fighter pilots. Their most recent game-changing innovation has been the soft contact lens. Today they have sold off most of their other product lines including Ray Ban to remake themselves as an eye-care products company. Rather than resting on their successes they have continued to innovate and to sell off older products in order to capitalize new ones.

Lessons from our Story

The region's Story reveals that the Finger Lakes Region, or the Genesee-Finger Lakes Region, has functioned as a place of collection, settlement, nurturing, and dissemination of valuable innovations that have benefitted the region as well as all corners of the globe. The fertile ground of this region made settlement possible and attractive. The combination of settlement and a continual stream of people and fresh ideas passing through contributed to its evolution to naturally function as a place where ideas and technologies came together, were enriched and developed, and then dispersed around the world to the benefit of all. For this reason, *eddy* serves as a good metaphor for the cultural and economic dynamics that have characterized the region. A region where traders, pioneers, and inventors passing between the Atlantic coast and the continental interior have slowed down and settled out, creating a rich, stable, diverse region in the process. The Story also reveals numerous examples of the region's contribution to the

The lessons of our Story of Place provide a source of pride in our past, a love for our region, and inspiration for achieving a resilient, sustainable future.

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democratization of ideas and products from the Iroquois system and women’s rights movement to the affordability and accessibility of gelatin and photography. Finally, the region has a strong history of innovation around local needs that are relevant to a larger world – this is evident from the early agricultural practices through the products of

companies like Gould Pumps and French’s mustard to the management practices of Wegmans. The concept of *continuously innovating*, as evidenced through the history of Bausch and Lomb, should be used as a means to grow the capabilities and advancements needed for each successive stage.

The Story of Place echoes the region’s assets as presented in the FLREDC Strategic Plan Vision Statement:

The Story of the Finger Lakes Region reveals that the region has functioned as a place of collection, settlement, nurturing, and dissemination of valuable innovations that have benefitted the region as well as all corners of the globe.

medicine, science, engineering, and technology. Through these efforts, we seek to become a national leader in innovation and commercialization with the long-term goals of increasing job creation at a rate that exceeds national levels and enhancing the region’s quality of life to attract and retain business and our citizens.

The Finger Lakes region will accelerate its transformation to a diverse, knowledge-based economy by building on strengths that include renewable natural resources, a talented and highly educated workforce, a historic commitment to innovation and philanthropy, leadership as the state’s top agricultural region, international recognition as a center for optics and photonics, and national leadership in per capita intellectual property and degreeed in higher education. We will expand a successful history of collaboration between public and private institutions to optimize our region’s performance in advanced manufacturing, the arts, tourism, and basic and applied research in

2.2 STORY OF PLACE FRAMEWORK

The Goals and Strategies outlined in this section have been informed in part by a thoughtful investigation of the patterns and qualities that give the Finger Lakes Region its unique character. This investigation, known as a Story of Place, yielded several key preliminary insights about the region. These insights, as shown below, were used to generate overarching strategies intended to integrate numerous, diverse activities across multiple counties and communities. Collectively,

they are intended to inform a coherent sustainability effort to impart lasting value to all aspects of the region, both man-made and natural.

Overarching Strategy #1 | Eddying

Leverage local needs and the region's slower pace to develop overlooked, perhaps simple solutions to regional sustainability challenges that are not resource or capital intensive.

The Finger Lakes Region has always been fed by outside resources flowing through, slowing down, and nourishing the system. Regional sustainability

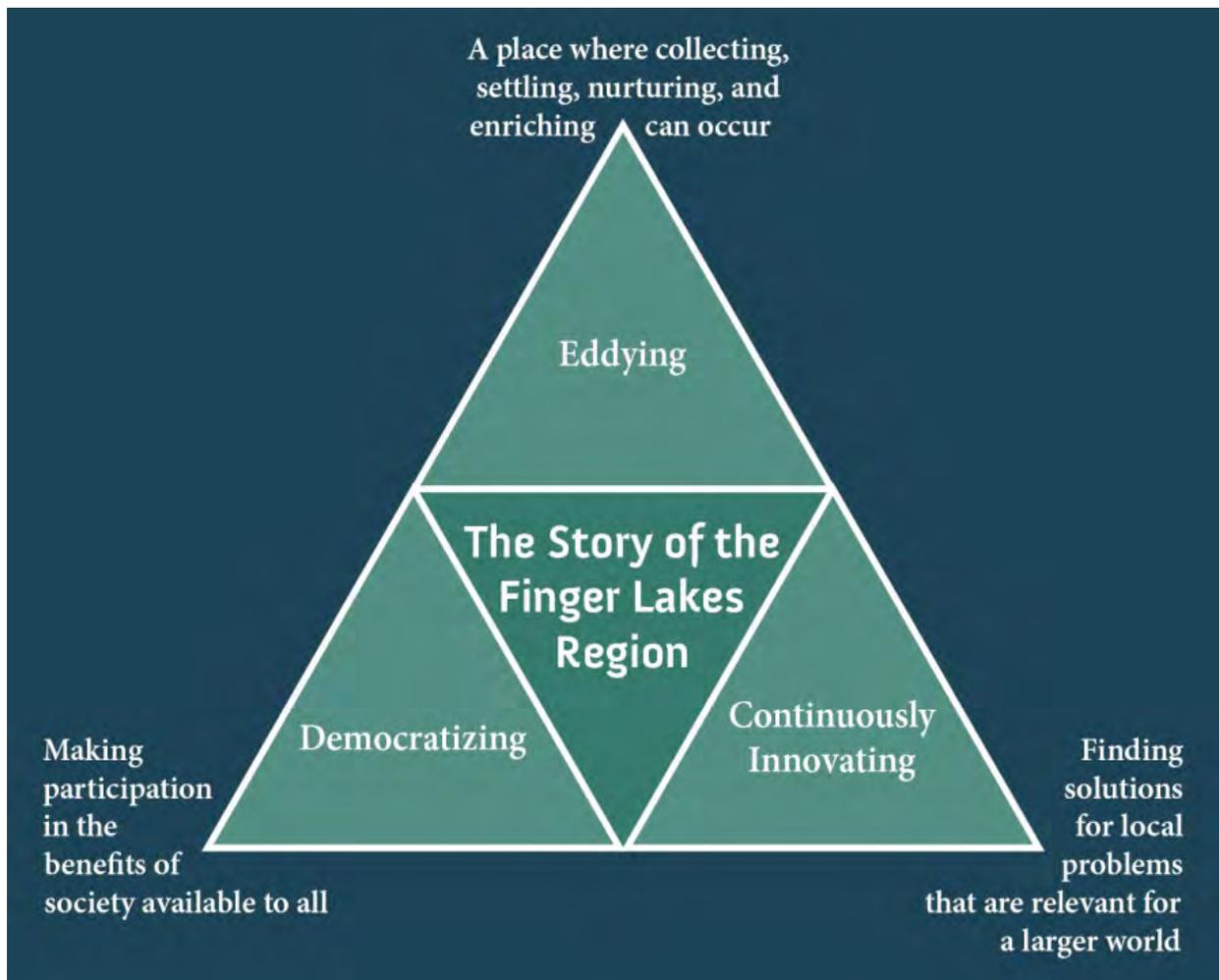


Figure 2-4: Story of Place Framework

challenges that have a strong technology or infrastructure dimension are a natural starting point, given the region's particular strength in manufacturing and materials science innovation. The larger Finger Lakes community, including both private and public sector stakeholders, should pursue the gaps that occur at those places where the areas of greatest need intersect. This focus will help attract business, research, and talent from the larger "stream", encouraging them to settle in this nurturing region in hopes of maximizing their potential for progress.

Overarching Strategy #2 | Democratizing

Pursue innovation that is basic, practical, and accessible.

A second notable characteristic of the Story of the Finger Lakes Region is an innate tendency to democratize its innovations for widespread application. From the broad influence of the Iroquois Confederacy's governing structures, to the transformational impact of the suffragists and abolitionists, to the way the Erie Canal made goods available to all income levels, to the nearly universal popularity of Jell-O and Kodak in their heydays – the innovations that came out of the Finger Lakes Region raised the level of equity and full participation for all Americans.

Innovations and solutions often need to first prove their relevance locally. Once established, they have the potential for application in many places beyond the region. For example, before Jell-O, gelatin desserts were a luxury that could only be afforded by the wealthy. Companies like Eastman Kodak, Western Union, and Gould's Pumps have their roots in the Finger Lakes Region and share a similar story. Our sustainable future is largely dependent on local innovators looking for basic improvements or products that are affordable and feasible enough to allow for rapid expansion outside of the region.

Overarching Strategy #3 | Continuously Innovating

Build for the future capacity by letting each innovation serve as a seed for follow-up innovations.

Both the region and its companies have flourished best when they pursued continuous innovation rather than becoming too attached to the achievements of the past. The Erie Canal made Rochester one of the country's first boom towns, but the canal was very quickly supplanted by the railroads which were in turn supplanted by the automobile. These changes demanded agility, creativity, and vision to adapt. In some instances the region was successful in meeting the challenges; other times it struggled to innovate and progress.

The challenge for the region is to embrace its role as a continuous creator of populist solutions, moving beyond merely reaping the harvest generated by those solutions. The ongoing evolution of ideas should be used as a means to grow the capabilities and advancements needed for each successive stage.