CREDITS

The Waterways Vitality Action Plan was conceived and funded by Lowell Heritage Partnership (LHP) in collaboration with the City of Lowell. Essential support was provided by Enterprise Bank, Lowell National Historical Park, Greater Merrimack Valley Convention & Visitors Bureau, Greater Lowell Community Foundation, UMass Lowell Innovation Hub, Mill No. 5, and private donors. Additional participants are named on page 30.

The graphics and layout of this Action Plan were developed by Solomon Office.

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February 2017
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Front and back cover photographs by James Hogan
OVERVIEW

PROCESS

Through an extensive community planning process, a consensus emerged that certain water-related areas offer the best potential to become vibrant locations all year. A range of placemaking ideas compiled by the planners inspired the artistic renderings in this report. Recommendations are intended to enhance key areas of the national landmark 5.6 mile canal system and call attention to Lowell’s most underappreciated resource – its waterways.

MISSION STATEMENT

The mission of the Lowell Waterways Vitality Initiative is to enhance the everyday experience of people in Lowell by making the city’s historic waterways more accessible, active, and vibrant.
INTRODUCTION

HISTORY

Water was the catalyst for the founding of Lowell in the 1820s. Its canal system generated power for the mills and later served as the city’s competitive advantage in the 1970s. At that time the community advocated for state and national parks to celebrate the heritage of America’s most significant planned industrial city. Congress authorized a study of Lowell’s historical and cultural assets that led to the establishment of Lowell National Historical Park in 1978, which was preceded by Lowell State Heritage Park in 1975. The canal system, owned and operated by Enel Green Power, continues to generate hydroelectric power.

Lowell has become an international model for urban revitalization thanks to its adaptive reuse of historic structures and its innovative cultural programs. In the past 40 years, $1 billion has been invested in preservation projects, setting the stage for the city’s next substantial initiative. The historic canal system, a National Engineering Landmark, is owned and operated by Enel Green Power, and continues to generate hydroelectric power. The community consensus is that the waterways and their settings offer an extraordinary opportunity as a major urban amenity.

"I wanted people to have a positive association with their environment. Our greatness comes from our adaptive reuse."
— Patrick J. Mogan, “Father” of Lowell National Historical Park

"The Lowell canal system is an engineering marvel and urban lifestyle gem, and we will make it shine in a way that everyone will want to see it."
— Kevin Murphy, City Manager, Lowell

PROJECT BACKGROUND

In January 2016, more than 100 people gathered at the Luna Theatre in Mill No. 5 to witness the Lowell Heritage Partnership and City of Lowell present a vision of what the waterways could become if the best ideas and required resources came together. The idea gained momentum at the 2016 Winterfest when City leaders switched on colorful permanent lights on the Merrimack Canal at Lucy Larcom Park. The LHP brought like-minded community people together and hired Daniel Solomon Koff of Solomon Office to shape a plan for animating the waterways.

Next, as a result of a generous pledge of funding, the project expanded to embrace two historic bridges and the Merrimack River. An additional endeavor envisions the lighting of multiple downtown properties and works of art to complement the waterfront developments. Working groups met to fill in the outlines of the plan. In September 2016, a pilot lighting display at the Swamp Locks gatehouse and lock chambers drew 300 people to the Hamilton Canal Innovation District. City officials and those attending were called to “Light Up the Locks,” and a commitment was made towards a broad program of lighting and expanded events.

By revitalizing its waterways and related historic structures, Lowell can increase economic development and enhance its cultural profile in a sustainable and inclusive way. This plan shows how the waterways can become more active and exciting for residents and visitors. Essential to the making of the city, the rivers and canals remain vital assets for present and future generations.

MAIN GOALS

1) Create an economic, cultural, and environmental improvement strategy along the waterways that complements Lowell’s historic character
2) Design lighting features to enhance attractiveness, visibility, and safety
3) Work with property owners and partners to encourage waterside areas for retail, restaurants, galleries, and other compatible uses
4) Produce more events to make the city more distinctive and attractive
5) Soften concrete and brick areas with gardens and artwork
6) Improve way-finding signs to make the waterways more accessible
The following sites have been designated as focus areas because of their high potential to encourage participation, visitation, and creative celebration of Lowell’s water-based assets. Additional improvements will increase access and activity.

JANUARY 28
Presentation at Luna Theater

FEBRUARY 11
First community planning session

FEBRUARY 19 & 20
Winterfest lights, Lucy Larcom Park

MARCH 10
Second community planning session

JULY 7
Community engagement, First Thursdays

JULY 29, 30, & 31
Community engagement, Lowell Folk Festival

SEPTEMBER 1
“Light Up The Locks,” Swamp Locks

SEPTEMBER 28
Mural lighting, New England Quilt Museum

PUBLIC PARTICIPATION TO DATE

For a schedule of implementation and next steps, see Page 30
Key Locations and Features

The key locations and features that have been identified in this plan follow the recommendations set forth in the City of Lowell Master Plan, Sustainable Lowell 2025. These objectives include: “Promote waterfront access and development downtown.” The tasks consist of surveying property, evaluating assets and opportunities, identifying potential impediments to redevelopment, and establishing regulations for waterfront businesses. The plan also calls for events, lighting displays, water sprays, and environmental art.

The following pages contain drawings in which artistic license was used to illustrate how activation strategies may appear. The drawings are not meant to suggest the exact shape or location of any project. Actual designs and activities will be refined in consultation with partners and stakeholders.

“The canal system in Lowell is unique because of its historical importance, its grand scale, and its technological complexity… At Lowell, science, perhaps for the first time in history, exerted a regular and profound influence on technology.”

— Dr. Patrick Malone, Congressional testimony, August 1974

Accessible Sites

- Focus Area
- Path: Existing
- Path: Proposed

Lighting Features

- Historic Structures
- Public Art
- Smokestacks
- Towers
Bounded by the Merrimack Canal and adjacent to Lowell High School, with an historic trolley passing along the canal bank, Lucy Larcom Park can be a highly active gathering place year-round. Additionally, the park may be expanded to the north side of the canal on a temporary basis for festivals and events. Examples of similar park areas that contribute to the vitality of urban life (allowing for differences in scale) are the Navy Pier in Chicago, Bryant Park in New York City, and the Riverwalk in San Antonio, Texas. The Merrimack Canal once generated power for Lowell’s largest mill. The loss of adjacent boarding houses is credited with starting the city’s preservation movement. The centrally located downtown park on occasion is filled with displays, vendors, and people such as during the Lowell Folk Festival and Winterfest. The goal is to make this a magnet for daily activity because of links to the Merrimack Street commercial corridor, as well as Boarding House Park and the Boott Cotton Mills Museum, a high school serving thousands of students, and the potential for year-round recreational, tourist, and other activities.

**RECOMMENDATIONS**

- Add tables and chairs with game boards
- Construct a small stage
- Develop pop-up displays and vendor booths
- Build a portable climbing wall, set up book and art carts, and make a seasonal information kiosk
- Convert the canal gatehouse to a welcome center with space for community and commercial uses
The Merrimack Canal has great four-season potential. This includes the possibility of skating on the canal, on artificial surfaces, or on nearby skating paths as seen recently on Boston’s Government Center Plaza. An illuminated gatehouse and family-friendly features will complement the City of Lowell’s lighting of the canal and other park upgrades.

RECOMMENDATIONS

• Illuminate the gatehouse and pedestrian path
• Add warming station for families
• Allow pop-up displays, vendor booths, and other activities
• Place fire pits in the park during events
• Create skating opportunities on or aside of on the canal
• Install temporary public art along the canal or from the elevated walkways at the high school

“Going forward, what we’re interested in doing is utilizing the canal system to the greatest extent possible.”

— Mayor Edward Kennedy, City of Lowell
Two elegant churches in Gothic Revival and Byzantine styles frame one of the earliest urban redevelopment projects of Lowell’s revitalization period. The grounds of St. Patrick Church (1853) and Holy Trinity Greek Orthodox Church (1908) are connected by Ecumenical Plaza, a 1970s-era brick platform over the Western Canal. Physically and symbolically linking two sections of the historic Acre neighborhood with its multicultural population, the Plaza was pictured as a new public space. Its potential has not been fully realized.

This plan reimagines the canal and park-side experience from a community and visitor point of view. With engaged community partners, neighbors, and church-goers, the Plaza can be lively. Possibilities include gardens, farm markets, ethnic crafts vendors, buskers, fairs, and festivals.

**RECOMMENDATIONS**

- Prepare the venue for regular and special events
- Work with neighborhood organizations to generate involvement and input
- Use church edifices for colorful projections during festivals
- Explore architectural lighting opportunities for St. Patrick’s Church and Holy Trinity Greek Orthodox Church
- Maintain and improve plantings along canal banks
- Organize water-based events and ceremonies around canals
- Encourage vendors and performers to use the space
Lowell’s largest redevelopment tract is positioned at the southern gateway to the downtown and represents a unique opportunity to renew Lowell’s dedication to innovation. The view of the massive brick mills is the first place visitors encounter the scene of Lowell as America’s most significant planned industrial city.

The Swamp Locks, one of most distinctive features in the city, was named after the wetlands that were formed by the confluence of canal segments. Today’s parking lots are slated to give way to available building parcels and additional open space opportunities.

The City’s ambitious economic development plans include several large structures and an area for a parking garage. The Commonwealth is building a $200 million trial court at the eastern edge of the district. UMass Lowell has moved into 110 Canal Street, establishing an Innovation Hub and Medical Device Development Center.

The adjacent Utopian Park has shown its potential with nighttime events (food trucks, performers, and more) organized by Made in Lowell. On September 1, 2016, the Lowell Heritage Partnership, City officials, and community collaborators produced a spectacular one-night lighting display complete with entertainment, food trucks, and artwork that reinforced the site’s potential.

**RECOMMENDATIONS**

- Install permanent lighting along the locks, gatehouse, and other areas with historic infrastructure
- Install water features to call attention to the junction
- Expand boat tours including potential commercial uses
- Offer incentives for canal-side outdoor dining and activities
- Make connections to Mill No. 5 and Western Avenue Studios
- Preserve green space and sight lines to Industrial Canyon
- Enhance pedestrian promenades along canals
- Complement historic mill structures such as the “ghost bridge” over Jackson Street with temporary and permanent public art
Urban designer and author Jeff Speck singled out the Lower Locks in the Lowell Downtown Evolution Plan. The Lower Locks, he writes, “has the potential to fundamentally transform Lowell into a city of the first rank.”

The massive complex of gates, locks, and spillways is dramatic. Prodigious granite walls rise up from the base of the locks within sight of the confluence of the Concord River. An elegant gatehouse perches atop the locks, masking the serene mill pond above the sheets of water pouring down to the canal bed.

The Pawtucket Canal was originally built as a transportation canal in 1796 to route goods around the Pawtucket Falls on the Merrimack River. But with the construction of the Lower Locks in 1823, the canal was incorporated into a water control system to power mills.

Today, the spectacular setting is framed by the downtown campus of Middlesex Community College and the UMass Lowell Inn & Conference Center. The presence of two institutions of higher education offers a wealth of opportunities for active use as well as options for regular and special events.

RECOMMENDATIONS

- Light the locks, gatehouse, walls, and walkways
- Maintain and illuminate works of public art
- Offer incentives for water-side cafés and eateries
- Make locations available for vendors
- Improve access for pedestrians and people with disabilities
- In addition to the National Park Service canal boats, consider adding a water taxi port
- Improve historic properties where Central Street meets the Pawtucket Canal
A major goal of the Lowell Waterways Vitality Initiative is to light these two landmark bridges in a fashion that will heighten their visibility and further develop linkages on both sides of the river for recreational, pedestrian, and social uses. Already striking works of industrial America, these structures will gain value when illuminated in a new and dramatic way.

The Cox Bridge, informally called the Bridge Street Bridge, is a “rare example of a small-scale through truss cantilever” design. It has three main spans and is 474 feet long. This bridge connects the core of Downtown to the Centralville neighborhood and like its steel cousin, the Ouellette Bridge, is a highly visible major artery.

Upriver from the Cox Bridge, the Ouellette Bridge is nearby LeLacheur Park, where the minor league Lowell Spinners, a Red Sox affiliate, play their games. The Ouellette Bridge connects westerly portions of Centralville to what was once known as Little Canada, UMass Lowell’s East Campus, and the downtown. The 780-foot bridge has five spans in a pin-connected style.

Writing about the Ouellette Bridge, historicbridges.org states: “This bridge is among the most beautiful bridges in the country...It is the longest lenticular truss bridge in the country and also is in first place for most number of lenticular spans, which is five.”

RECOMMENDATIONS

- Light up bridges, pedestrian paths, and Rivewalk extension
- Light up river facades of Boott Mills and Massachusetts Mills
- Add temporary public art and additional river features
- Consider water taxi port locations and more active uses
- Connect Centralville and Downtown through activities, events, and park and pedestrian improvements
MERRIMACK CANAL LIGHTING DISTRICT

Inspired by the City’s Merrimack Canal permanent lighting additions, business and property owners have begun to light key buildings and structures near the Merrimack Canal. Some of the properties that are proposed for illumination are highlighted in the map above.

Other candidates for lighting will be part of later phases. Discussions are ongoing with Lowell National Historical Park and the Lowell Historic Board to set criteria for these and additional districts.

Lowell is fortunate to have great resources in design, products, and trades that have fostered this aspect of the lighting initiative. The goals of this effort are to highlight Lowell’s outstanding architecture and sites and to extend the day, enhancing the business and residential climate as well as contributing to public safety.

DEMONSTRATION PROJECTS

“With a little effort, one could readily transform the huge mills, thus illuminated, into palaces lighted up for festival occasions . . . .”


MERRIMACK CANAL LIGHTING DISTRICT

Veils of Color by Barbara Pool, Pawtucket Canal, 2016

Lowell Walks, 2016


Wannalancit Mills annual smokestack lighting, 2015

Photo by Kevin Harkins

Photo by Fred Faust

Photo by James Hogan

Photo by Kevin Harkins

Photo by Jim Higgins

Photo by Karen Hagin
PLACEMAKING IN THE USA

Lawn on D, Boston, MA, 2015

WaterFire, Providence, RI

Tom Tom Festival, Charlottesville, VA, 2013

INTERNATIONAL PRECEDENTS

Naviglage Grande, Milan, Italy

Lyon Light Festival, France c. 1643

Badeschiff Pool on the Danube River, Vienna, Austria, c. 2006

Flying Dutchman by Visual Skin, Amsterdam Light Festival, Netherlands, 2015

The Pool by Jen Lewin Studio, Instanbul Light Festival, Turkey, 2015
## Proposed Budget

### Capital Budget – Rivers

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Prepared by the Lowell Heritage Partnership

12/11/2016

## Action Steps and Timeline

### February 2017
- Publish Final Action Plan
- Begin Monthly Meetings
- Form Steering Committee and Subcommittees

### Spring 2017
- Launch Fundraising Campaign
- Hire initial staff

### Summer/Fall 2017
- Set First-Year Budget (July 1, 2017 to June 30, 2018)

**Phase I**
- Western Canal/Ecumenical Plaza (Acre Neighborhood)

**Phase II**
- Cox Bridge Lighting (Merrimack River)

**Phase III**
- Ouellette Bridge Lighting (Merrimack River)

**Phase IV**
- Hamilton Canal Innovation District/Swamp Locks (Pawtucket Canal, Merrimack Canal, and Hamilton Canal)

**Phase V**
- Lucy Larcom Park/Merrimack Canal (subject to project schedule for Lowell High School renovation)

This plan recommends that events occur in each focus area every year even as the infrastructure improvements are made as funds are available. With all physical improvements, sustainable maintenance plans will be essential.
ACKNOWLEDGMENTS

PROJECT PARTNERS

City of Lowell
Mayor Edward Kennedy
Vice Chair Daniel Roukie
Councilor Corey Belanger
Councilor Rodney Elliott
Councilor John Leahy
Councilor James Leary
Councilor Rita Mercier
Councilor James Milinazzo
Councilor Bill Samaras
City Manager Kevin Murphy

Department of Planning and Development

Department of Cultural Affairs & Special Events

Congressional Representative
Congresswoman Niki Tsongas

Lowell State House Delegation
Senator Eileen Donoghue
Representative Tom Golden
Representative Rady Mom
Representative David Nangle

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Nick Vandenberg, Animator
Jamie Boudreau, Airgoz Photography

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Mark Sweeney
Sean Thibodeau
Amy Elizabeth Uebel

Ex-Officio Members
Peter Aucella
Celeste Bernardo

Recommendations of this initiative complement the following earlier reports:
The Brown Book, 1976
The Canalway, A Proposal Canalway Task Force, June, 1985
Preservation Plan, Lowell Historic Preservation Commission, 1980
Preservation Plan Amendment, Lowell Historic Preservation Commission, 1990
Lowell: The Flowering City, Project Anthropolis Charette & Human Services Corporation, 1996
Advisory Services Panel Report, Lowell Massachusetts, Urban Land Institute, 2003
Open Space Plan, City of Lowell DPD, 2005
On the Cultural Road, Mt. Auburn Associates & Lowell Plan, 2007
Hamilton Canal District Master Plan, City of Lowell, Trinity Financial, Icon Architecture, 2007
Lowell Downtown Evolution Plan, Speck & Associates LLC, AECOM, Rock Maple Studios, 2010
Sustainable Lowell 2025, Office of the City Manager, 2013