New York State

# anal Plan 2050 Verk State Corporation

**Final Report** December 2024

## **Letter from Canal Leadership**

Since its establishment under New York State Canal Law in 1992, the Canal Recreationway Commission (CRC) has been dedicated to developing the New York State Canal System into a vibrant recreationway that enriches communities and connects people to the cultural, historical, and natural treasures of our waterways. Adopted by the Commission in 1995, the first Canal Recreationway Plan laid the foundation for a decades-long transition from a post-industrial waterway to a thriving collection of canals and recreational trails that has contributed immeasurably to the quality of life in Upstate New York and drawn thousands of visitors from around the world each year.

Empowered by its mandate and inspired by the upcoming bicentennial of the Erie Canal, the CRC felt there was no better time to revisit and reaffirm its vision for the Canal System. This Canal Recreationway Plan 2050 casts its gaze a quarter century into the future, contemplating how New York State might continue to build upon the success of the 1995 Plan to further the System's impact on tourism, recreation, and economic development while expanding its focus to include environmental stewardship, accessibility, and strategic land use.

This document is the culmination of hundreds of hours of engagement with community members, laborers, and wide-ranging interest groups. We are sincerely grateful for the unique perspective and experience these collaborators have offered throughout the planning process. Although the New York State Canal Corporation is responsible for the maintenance and operation of the System, the intended audience of the Plan is much broader. The Plan seeks to inspire the vast ecosystem of people and organizations who care about and benefit from the Canal System.

So, whether you are a historian, environmentalist, educator, preservationist, economic developer, lawmaker, local community member, or canal enthusiast, we invite you to join us in embracing this vision for the future of the New York State Canal System. Together, we can ensure its enduring legacy as a dynamic resource that continues to enrich lives, strengthen communities, and contribute to the prosperity and vitality of our region.

Sincerely,

Kil Wyslam:

Kal Wysokowski Canal Recreationway Commissioner

Chairperson and Commissioner Erie Canalway National Heritage Corridor

N.A.M.

Brian U. Stratton Director New York State Canal Corporation

Justin E. Driscoll President and CEO New York Power Authority



## A Vision Tor New York States Canals and Canalway Trails

## **Plan Contents**

## **1.** Introduction

- 1.1 About the Plan
- 1.2 About the Process
- 1.3 Overview of the NYS Cana
- 1.4 A Brief History of the NYS
- 1.5 Past Plans & Research
- 1.6 Public Engagement Summa

## 2. The State of the C

- 2.1 Many Canals, One System
- 2.2 The Canals Today
- 2.3 The Canals Tomorrow

## **3. Future Vision**

- 3.1 Overview of the Vision
- 3.2 Vision Statement
- 3.3 Guiding Principles

## 4. Strategies & Actio

- 4.1 Summary of Strategies
- 4.2 Strategies by Guiding Princ

## 5. Implementation

5.1 Getting to 2050

## Appendix

Glossary Legal Requirements Acknowledgements

	7
	8
al System	10
Canal System	12
	14
lary	16
Canal System	
	21
	22
	24
	27
	28
	30
ons	
	33
ciple	34
	73
	76
	78
	79

## Introduction



## **About the Plan**

The Canal Recreationway Plan is a guiding document that sets out an inspiring vision for the future of the New York State Canal System. It offers a shared framework and set of goals for the many people and organizations working towards the continued success of the System — including State agencies, local leaders, non-profit groups, and the communities and industries along the Canals. Mandated by New York State law, this plan outlines a cohesive approach to the planning and management of the New York State Canals, Canal Lands, and Canalway Trails. Since the publication of the first Canal Recreationway Plan in 1995, the Canal System has evolved from an active industrial corridor to a vibrant hub for recreation, with countless New Yorkers boating, paddling, fishing, running, and cycling along its waterways and trails each year.

As the bicentennial of the Erie Canal approaches in 2025, this plan contemplates the System's third century of operation to chart a future distinct from its past. This plan lays out a roadmap for that future. In doing so, it considers the System's many aspects, not only navigation and recreational use, but also environmental stewardship, care for critical infrastructure, adapting to a changing climate, and the economic benefits of Canal waterfronts. This iteration of the Canal Recreationway Plan looks to 2050, and beyond, to envision a reinvigorated network of parks, trails, and waterways that remain relevant and vital to upstate New York for decades to come. To do so, it expresses an aspirational vision for the System (p.26), defines a series of guiding principles to direct future planning (p.28), and ultimately identifies a set of strategies and actions to help enact this vision (pp.32-70).

While the development of this Plan was led by the Canal Recreationway Commission (CRC), and supported by the New York Power Authority (NYPA) and the New York State Canal Corporation (NYSCC), the ideas and aspirations that underlie it were shaped in close collaboration with Canal communities and the people of New York State.

## **Primary Stakeholders**

- Canal Recreationway Commission
- New York State Canal Corporation
- New York Power Authority
- Communities and the People of New York State

## Contributors

- Erie Canalway National Heritage Corridor
- Parks & Trails NY
- New York State Department of State
- New York State Office of Parks, Recreation
   and Historic Preservation

## **Consultant Team**

- Agency LP
   Planning Lead
- Fisher Associates
   Local Planning Support
- David Klein Ecology
- Moffatt & Nichol Hydrology & Engineering
- Netula
   Website Development

## **About the Process**

The planning process took place over the course of the 2024 calendar year, having kicked off in January and concluded in December with the submission of the final plan. The different phases of this process are described below.

**Phase 1** January – April 2024 Phase 2 May – August 2024 Phase 3 September – November 2024 Phase 4

## Listen & Learn

This first phase of work focused on establishing an understanding of the Canal System rooted in the experience of the staff, locktenders, and locals that know it best. These conversations took place in two ways, first through quided tours at key locations across the System, and second through group conversations with NYPA, NYSCC, and CRC staff and representatives to discuss key issues of management, maintenance, land use, and more. This on-the-ground perspective was supplemented by a highlevel review of the past plans and projects that have made the Canal System what it is today. Taken together, the resulting insights provided the foundation for future planning work.

## Envision

This second stage aimed to collectively define a shared vision for the future of the Canals, Canalway Trails, and communities they pass through. To help do so, a series of public workshops were held to solicit ideas and aspirations from the System's users and neighbors. Concurrently, topical focus groups were convened with subject-matter experts and external, technical stakeholders to identify best practices that could be applied across the System. This public and advisory input was used to create four possible future scenarios for the Canal System.

## **Future Strategy**

This third phase of the process worked to consolidate a singular vision for the System's future based on the scenarios previously developed. Within this chosen direction, a series of draft goals, strategies, and highlevel actions were be crafted to articulate connected, consistent elements that support the entire Canal System, as well as the distinct identities of each region and community.

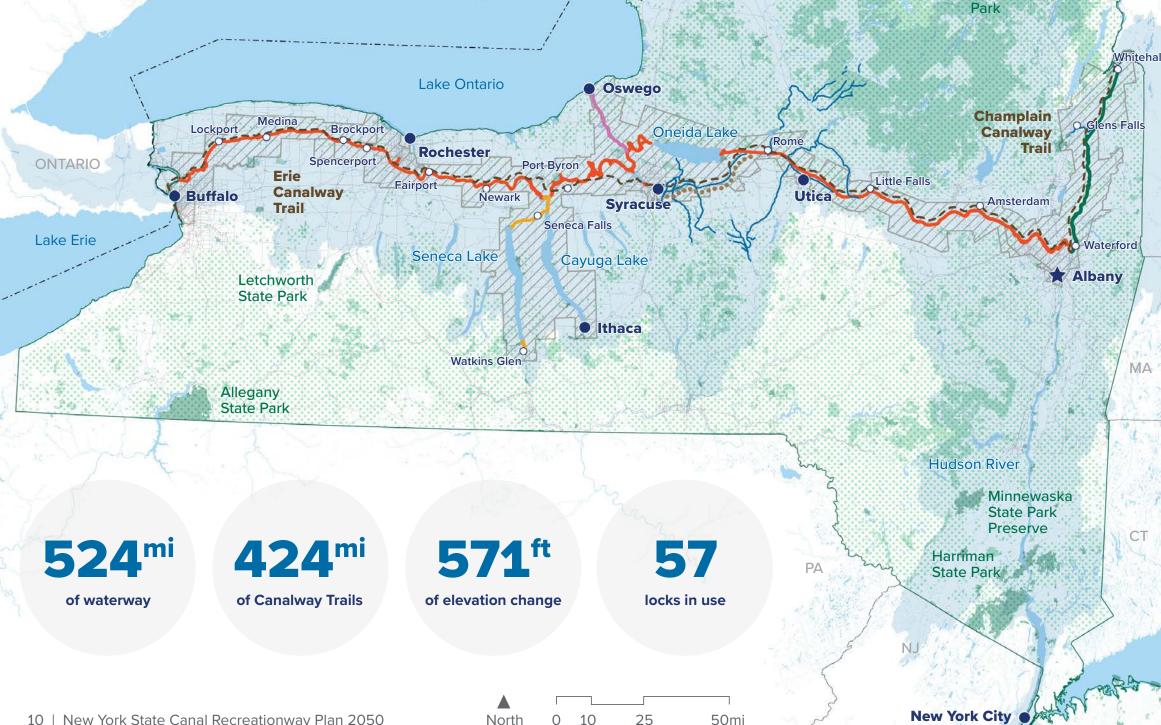
## Deliver

This fourth and final phase concentrated on refining the final vision, strategies, and actions to ensure it was aligned, appropriate, and applicable for stakeholders to make use of in their work. A close review of the plan was conducted with the CRC to confirm that it met all necessary legal requirements in order to be adopted.

Children aboard the Riverie on the Erie Canal

## **Overview of the New York State Canal System**

The Canal System is a diverse collection of canals, rivers, lakes, trails, and associated amenities. The map below shows their deep interconnectedness and vast reach across the state.



CANADA



## Erie Canal -

QUEBEC

Adirondack

Lake Champlain

The Erie Canal is the largest, and most well known segment of the New York State Canal System having played a critical role in the state and nation's historical development. It spans from the capital of Albany all the way to Buffalo on the westernmost edge of the state. Because of its great length and varied character it is often also subdivided into the Western Erie (from Buffalo to Syracuse) and the Eastern Erie (from Syracuse to Albany). The Erie also connects through Oneida Lake, one of the largest lakes in the system. In total, the Erie Canal is 338 miles long.

## Champlain Canal \_\_\_\_\_

The Champlain Canal begins at its junction with the Erie Canal in Waterford and runs north to Whitehall, where it connects with Lake Champlain. The Champlain Canal also connects to the Hudson River running south towards New York City. The Champlain Canal is 60 miles long.

## Oswego Canal —

VT

The Oswego Canal runs northward from Three Rivers Junction on the Erie Canal to Lake Ontario. The Oswego Canal is 24 miles long.

## Cayuga-Seneca Canal ——

The Cayuga-Seneca Canal connects its namesake lakes, Cayuga Lake and Seneca Lake, with the Erie Canal near Montezuma, NY. The Cayuga-Seneca Canal is 12 miles long, with an additional 90 miles through Cayuga Lake to Ithaca and through Seneca Lake to Watkins Glen and Montour Falls.

## Feeder Canals —

Along with the construction of the Erie, Champlain, Oswego, and Cayuga-Seneca Canals, shorter "feeder" canals were constructed in order to supply water from nearby waterways to the Canals.

## Canalway Trails — —

As part of the larger 750-mile Empire State Trail, the Erie Canalway Trail and Champlain Canalway Trail run largely parallel to their namesake Canals and offer 424 miles of trails for walking, cycling, running, and hiking across the State. The trails are mostly off-road, though there are on-road stretches on both Canalway Trails.

## Old Erie Canal State Historic Park ••••

This historic park covers a 36-mile stretch of the Old Erie Canal between Syracuse and Rome, and provides visitors with opportunities for hiking, cycling, fishing, and paddling.

## Erie Canalway National Heritage Corridor

Established in 2000 by Congress in recognition of the Canals' national significance, the Corridor covers the Erie, Champlain, Oswego, and Cayuga-Seneca Canals and their historic alignments. Within the 4,834 square mile area are over 800 listings on the National Register of Historic Places and 34 National Historic Landmarks. It is managed as a partnership between the Erie Canalway National Heritage Corridor Commission and its non-profit partner, the Erie Canalway Heritage Fund.

## Watersheds

The greater watershed of the Canals spans the state and connects many diverse bodies of water beyond the system itself, from the Great Lakes to the Hudson River.

## **A Brief History of the New York State Canal System**

## <sup>...</sup> Pre-1800s

## 1836 - 1862

## **Indigenous Land Stewardship**

The New York State Canal System spans the unceded lands of many First Nations — The people of the Haudenosaunee Confederacy and the Mohican Nation. For centuries, before the construction of the Canals and the dispossession of their ancestral homelands, these people sustainably stewarded these lands and waterways.

## **Enlarged Erie Canal**

As canal use surged, the need for greater capacity became evident. In response, the Erie, Champlain, and Oswego canals were enlarged to a depth of 7 feet and a width of 70 feet, with larger locks and an increased boat capacity of 240 tons.

## 1903

## **Construction of a New Barge Canal is Authorized by the New York State Legislature**

On the success of the Erie, and based on recommendations from a committee appointed by Governor Theodore Roosevelt, the State authorized the construction of a larger Canal System to accommodate 1,000-ton barges.

## 1992

**CRC is Established, NYSCC** is Founded, and Management of the Canal System is **Transferred to the New York State Thruway Authority** 

An amendment to Canal Law transferred the Canal System to the New York State Thruway Authority while concurrently creating the New York State **Canal Corporation and Canal** Recreationway Commission to advise the authority on canalrelated activities.



## 2000

## **Congress establishes** the Erie Canalway National Heritage Corridor

In recognition of the System's historical, natural, and cultural significance, it is designated a National Heritage Area in order to help preserve and interpret the canals and the communities along their banks.

## 1817.....

## **Construction of the Erie Canal Begins**

In Rome, on July 4th, work began to dig a canal across New York State with the aim of connecting the Hudson River to the Great Lakes. The minimum dimensions of the canal were to be 4 feet deep and 40 feet wide, with locks capable of servicing boats up to 30 tons.



## <sup>......</sup>1825

## **Erie Canal Opens**

The opening was marked by the "Wedding of the Waters", where Governor Dewitt Clinton ceremoniously poured water from Lake Erie into the New York Harbor. Thanks to the Erie Canal the travel time between Albany and Buffalo was reduced from two weeks to five days.

**Opening of the New Barge** 

York State Canal System

Cayuga–Seneca Canals.

The New York State Barge Canal System, expanded to a width of 120 feet and a minimum depth of 12 feet to accommodate self-

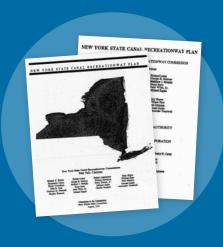
propelled vessels, supersedes the old Erie, Champlain, Oswego, and

## 1967

**New York State Department** of Transportation Assumes **Control of the Canals** 

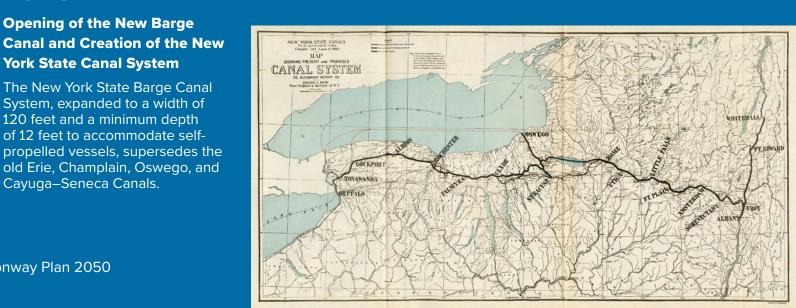
As the Department of Public Works was consolidated into the New York State Department of Transportation (NYSDOT), the management for the Canal System became the responsibility of NYSDOT.

**Plan is Adopted** 



## 2016

New York State Canal System designated as a National **Historic Landmark by US Secretary of the Interior** 





## September 21–25, 2025

**The New York State Canal System Hosts the World Canals Conference and Celebrates its Bicentennial** 

As the System marks its 200th anniversary, it will welcome the world to New York State recognize its storied history and to look ahead to the future together.

## 2024

**Planning Process Undertaken to Update the Canal Recreationway** Plan to 2050 and Beyond

## **The First Canal Recreationway**

## 1995

## **Oversight of NYSCC and Management of the Canal** System Transferred to NYPA

Control over the Canal System and responsibility for the New York State Canal Corporation was assumed by the New York Power Authority.

## 2019

**Reimagine The Canals (RTC) Initiative is Created and RTC** Task Force is Established

**New York State Water Trail** designated a National Water Trail by US Secretary of the Interior

## **Past Plans & Research**

This plan builds on many past and concurrent planning efforts across NYPA, NYSCC, and New York State as a whole. Listed below are a selection of the key documents that were reviewed and consulted in the creation of this Canal Recrationway Plan:

## 1939 – Present

## **Canal Law**

The section of the Consolidated Laws of New York (Chapter 5) that governs the planning, development, construction, reconstruction, maintenance and operation of the Canal System.

## 1995

## **1995** Canal Recreationway Plan

The first Recreationway Plan that set forth goals, strategies and recommendations for the New York State Canal System to transform itself from a commercial shipping channel and working waterway into a recreationway.

## 2006

## **Erie Canalway Preservation** & Management Plan

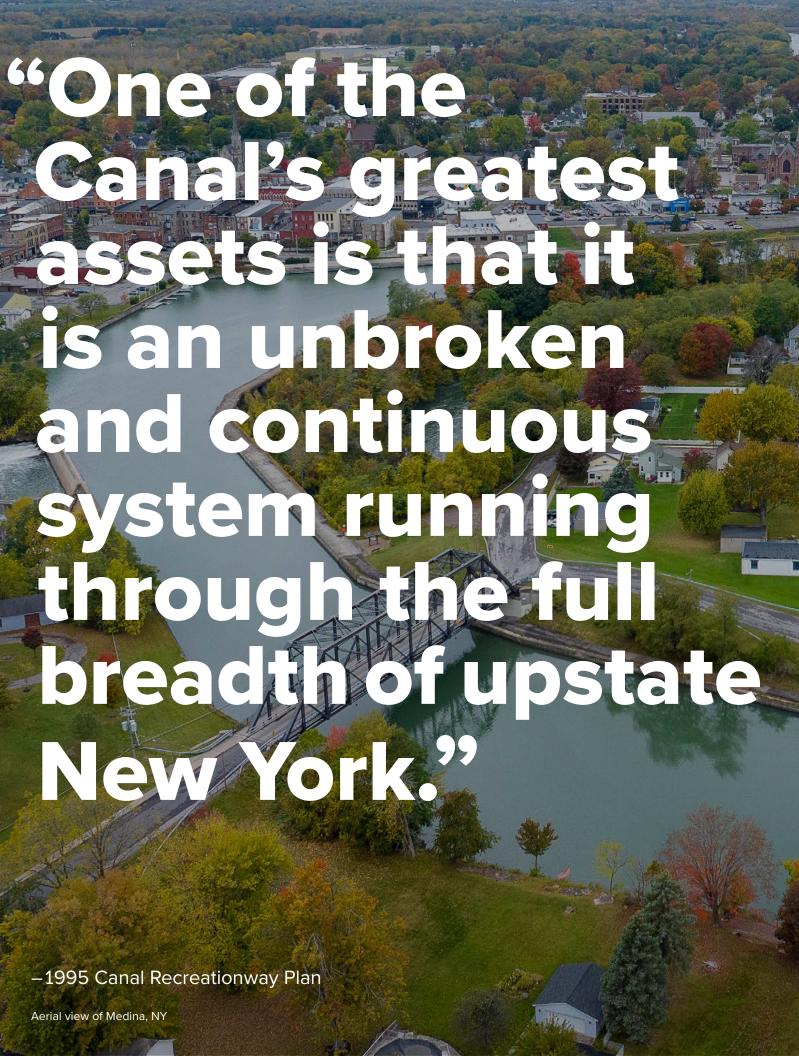
A comprehensive plan for the Erie Canalway National Heritage Corridor that identifies the mission, vision, and goals to guide the Corridor towards "preserving and interpreting [the] nation's past, providing world class recreational and educational opportunities, fostering economic revitalization, and improving quality of life."

## **Other materials reviewed:**

- NYPA VISION2030
- 2020 Canalway Trail User Counts
- Climate Leadership & Community Protection Act
- CRC 2022 Activity Report
- New York Climate Impact Assessment
- New York State Canal System -Phase 1 Economic Impact Study
- NYS Canal Corporation Organizational Chart
- NYSCC and NYPA GIS data
- NYSCC 2022 Subsidiary Report
- NYPA Sustainability Plan
- Reimagine the Canals Taskforce Report
- Upstate Flood Mitigation Task Force Report
- New York State Executive Order 22

## -1995 Canal Recreationway Plan

Aerial view of Medina, NY



## **Public Engagement Summary**

A large part of this planning effort focused on meaningfully engaging New Yorkers about their Canals and Canalway Trails. To do so in a way that is productive and inclusive, the planning team employed a range of strategies described below:



## **Online Survey**

In an effort to broaden outreach into the many Canal communities themselves, the planning team attended a variety of events along the Canals including the Taste of Wayne County outdoor market, Oswego's Harborfest, Little Falls' annual Canal Celebration, and more. At these events, Canal neighbors and users were asked about their current experience and future aspirations for the system.

**Canalside Pop-Up Events** 



To reach audiences who may not have been able to attend in-person workshops or events, an online survey was shared on the project website to understand how people use the Canal System today and their ideas for how they want to engage with the System in the future.



## 200+ public workshop participants



To reach a broad audience of New Yorkers, four public workshops were held to discuss the planning process and in-progress ideas for the future of the Canal System. Three in-person workshops were held across the System in Rochester, Herkimer, and Schuylerville, with an additional online session for those who preferred to participate virtually.



Amsterdam.





50

staff & managers engaged

## **Site Tours & Interviews**

To identify on-the-ground priorities, the planning team visited key locations along the Canals accompanied by the staff and local leaders that oversee them. Site tours covered a variety of site conditions, from the historic Flight of Five in Lockport, to a maintenance pumpout in Phoenix, to the site of the Guy Park Manor restoration in

## **Focus Groups**

With the aim of soliciting best practices from local and national experts, a series of focus groups were conducted on the topics of Tourism & Economic Development; Working Waterways; Culture & History; Recreational Boating; and Parks & Open Space. Internal staff focus groups were also held to discuss issues of operations, maintenance, and management.

100+

comment cards

filled out



wounts Sal Rid My favorite activity on the act New York State Canals is ... Vor State York The route from Rinport to Rithfird. Great Rite and great restaurant in Ritt My favorite activity on the State C New York State Canals is... My favorite activity on the New York State Canals is ...

## "When you get out on a bike or a boat, you realize just how lucky we are."

-Public Workshop Participant

Colonial Belle on the Erie Canal near Fairport, NY

Overall, most participants made clear that they love the waterways and trails, and recognize the System as a gem which needs to be maintained and properly funded so that communities can retain it as a resource for years to come. There is also a strong hope to showcase the System as an appreciated asset of the state of New York, which many feel is currently unknown by people outside the region.

## **Recreation remains the heart of the System**

A testament to the success of the 1995 plan, a majority of the positive comments shared about the System centered around recreation, and many of people's fondest memories of the Canals revolve around recreation in some way — from organized events to personal moments. The outdoor recreation provided by the Canals and Canalway Trails, whether for fitness or as a way to enjoy nature, was the most commonly noted reason that people spend time on the System.

## There is a desire for places to pause

While the Canals and Canalway Trails make it easy to travel along them, there was an articulated desire from users for more frequent seating, benches, picnic areas, and camping options where they can stop and spend time on their journey. With the strong interest in biking, providing additional repair facilities along the trails was also a common request. Other amenities along the trails, such as bathrooms and drinking fountains, were a high priority for many respondents.

## Praise for locktenders as the public face of the System

Across many conversations and workshops, there was consistent commendation of locktenders along the Canals for the helpfulness, friendliness, and historical knowledge that they provide to passers-through. In many ways, they were described as the face of the Canals because they are a consistent point of human interaction for travelers on the water. In conversations with locktenders, they acknowledged that "customer service" is a part of their job in addition to the technical operations and maintenance they provide.

## Water quality, infrastructure maintenance, and safety are top concerns

When asked what they wish to see improved, many members of the public were concerned about water quality along the Canals, citing odor, litter, and invasive species as threats that need to be managed. Equally, people shared their worries about safety along the System in two major ways. First, the on-road sections of the Canalway Trails were noted as feeling unwelcoming and, at times, dangerous to ride on alongside cars. Second, people described a notable perceived lack of safety that comes from seeing visible deterioration on walls or unkempt landscaping. That said, there was an overall positive expression that since NYPA gained control of the Canals in 2017 maintenance practices have improved.

## Public Engagement Summary continued...

# The State of the Canal vsem

## **Many Canals, One System**

This plan is grounded in the belief that a truly expansive vision for New York State's Canals and Canalway Trails must celebrate the System as a whole – from the many geographic segments of the Canals, to the many different roles the Canals play in people's lives. "Many Canals, One System" describes a core philosophy and approach that seeks to embrace this diversity of users, uses, and places along the system.

Following this approach, the assessment of current conditions and future considerations has been categorized thematically. The themes reflect a multi-faceted understanding of the Canals as:

## Historic Asset History

The Canals are a living piece of New York State's, The sense of being a "Canal community" is a and the United States' history. Visitors from around unique shared identity held by many who live or the globe regularly visit the System to see the grew up along the system. The Canals feature Canals because of that very historical significance. prominently in the cultural life and traditions of The System is also a deeply significant part of the these places, as can be seen along the many local history of the Canal towns that proliferated murals, sculptures, and plaques that adorn them. along its reach.

## Recreationway Recreation

The Canals provide millions of New Yorkers a place to be active and outdoors, along the trails and on the water. In many ways, recreation is the primary way people relate to the System today.

## Economic Engine Economy

The New York State Canal System has played and continues to play a pivotal role in the state's economic development. The very purpose of the Canals' creation was to ease the inland commercial shipping of goods.

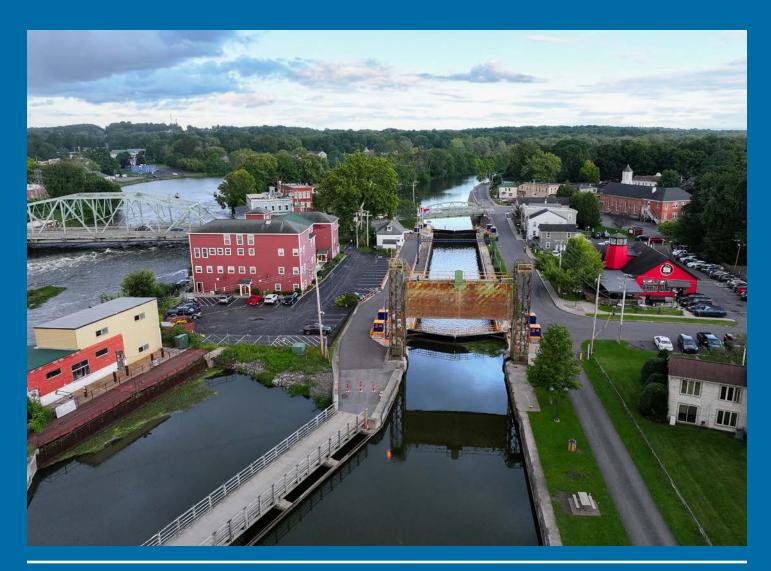
## Cultural Connector Culture

## **Ecological System Ecology**

The Canal System traverses through several ecoregions and connects some of New York's most ecologically significant habitats. Both in it's role as a man-made connector as well as a natural wildlife habitat, it has an outsized impact on the sustained health of the state's plants and animals.

## Infrastructure Infrastructure

The Canal System remains a remarkable feat of civil engineering due to its monumental scale. Much of this infrastructure has been in continuous use for over two centuries now, and provides an incredible example of early technological innovation.



Baldwinsville, NY

## **The Canals Today**

Strengths & Challenges

Today, the New York State Canal System is primarily a recreational blue- and greenway serving cyclists, runners, and hikers, boaters, and paddlers. The Canalway Trails, part of the larger Empire State Trail, remain open for cyclist and pedestrian use year-round and the Canals are open for navigation through the locks from May through October.

Encompassing 2,800 assets, including 57 locks, guard gates, 16 life bridges, dams – both fixed and moveable, and maintenance facilities, the System faces significant repair challenges due to aging infrastructure. NYPA and NYSCC have been balancing maintenance priorities while advancing revitalization projects and encouraging more people to get out on the Canals. Managing a system of this magnitude comes with significant strengths and challenges, all of which were communicated through internal conversations with staff and through public engagement with stakeholders all along the canals. Those strengths and challenges are summarized on the next pages.

## **Key Strengths**

## Infrastructure

- Dedicated maintenance staff and engineers have preserved infrastructure and kept the System in continuous operation for centuries
- Hydropower produced at plants along the System is a valuable source of renewable energy

## Recreation

- Canalway Trail use remains healthy and recreational programming is a major asset
- Recreational programs such as the Fall Fishing Program and On the Canals have seen strong participation in recent years

## Economy

- As New York State prioritizes decarbonization, support for commercial shipping could grow due its lower environmental impact
- A number of Canalside towns and cities have been selected as winners of the State's Downtown Revitalization Initiative (DRI)

## Ecology

 The Montezuma Wildlife Refuge complex is a crucial stopover point for more than one million migratory birds annually

## History

 With the bicentennial celebrations and the World Canals Conference there is set to be increased interest and attention on the System

## Culture

• The Canal System hosts many regionally popular events like Locktoberfest and the Canal Fest of the Tonawandas

## **Key Challenges**

## Infrastructure

- Aging infrastructure creates a backlog of maintenance needs that requires significant capital investment to address
- Flooding occurs along the System due to ice jams and periods of heavy precipitation

## Recreation

 Warmer weather and reduced freezing has limited the possibility of winter recreation on the Canals

## Economy

 There is a concentration of economically disadvantaged communities along many parts of the Canal System

## Ecology

- Aquatic Invasive Species (AIS) threaten the System's ecological health and water quality
- Destructive insects such as the Emerald Ash Borer pose a direct threat to the health of trees on embankments and elsewhere in the System

## Culture

 Many major cities have lost their direct connection to the Canals, which may contribute to a lack of awareness or interest from some New Yorkers in urban areas



Amsterdam, NY

## **The Canals Tomorrow**

**Opportunities & Obstacles** 

Looking ahead 25 years, the New York State Canal System faces many opportunities and external obstacles. Aging infrastructure requires strategic and well-funded planning to avoid continued short-term fixes. Climate change adds complexity, with warmer winters impacting recreation seasons and increasing flooding risks, while heavier precipitation may heighten the need for improved stormwater management. Economically, the shift toward a green economy could revive low-carbon commercial shipping on the Canals and support clean energy goals. Additionally, there is growing interest in elevating the Canals' under-represented narratives, positioning it as nationally significant infrastructure with evolving cultural value. In conversations with staff and the public, getting ahead of trends in climate change, economic development, community change, and infrastructure needs were identified as vital to the long-term success of the System. The opportunities and obstacles are summarized on the next pages.

## **Key Opportunities**

## Infrastructure

• New technologies may support a more effective and responsive approach to infrastructure management in the future

## Recreation

• With shorter winter sports seasons, the Canal System may come to play a larger recreational role for New Yorkers

## Economy

 By supporting clean energy production, green industries, and sustainable transport, the Canal System could play a key role in the New York's emerging green economy

## Ecology

 As wildlife adapts to changing habitats and climatic conditions, the Canals could help support biodiversity by implementing nature-based solutions and habitat restoration projects

## **Climate Projections**

The following projections were assembled by NYPA's sustainability team based on a model created by the New York State Energy Research and Development Authority (NYSERDA). They are included here to provide a general picture of changing seasonal temperatures (in °F) and precipitation (in inches) in the region.

Central/Fing		ıl/Finger	Lakes	kes Champlain Valley		alley	Great Lakes			Mohawk Valley		North Hudson River Valley				
		Base*	2050	2080	Base*	2050	2080	Base*	2050	2080	Base*	2050	2080	Base*	2050	2080
Mintor	°F	26.6	34.2	37.8	18.8	27	31.3	26.2	33.9	37.8	20.8	28.3	31.9	25	32.9	37.1
Winter	in	6.2	7.37	8.06	8.2	9.92	10.74	8.9	10.50	11.48	8.5	10.2	11.13	8.6	10.40	11.18
Guring	°F	45.4	51.6	54.6	41.5	47.7	51.2	45.2	51.3	54.8	40.8	47	50.1	46.7	52.9	56.3
Spring	in	8.6	9.89	10.40	9.6	11.23	11.71	9.2	10.58	11.31	10.8	12.31	13.06	10.6	12.29	13.03
<b>C</b>	°F	68.1	74.5	79	65.4	71.8	76.5	68.6	75.1	79.5	63.5	69.9	74.4	69.5	75.9	80.6
Summer	in	11	11.66	11.77	12.6	13.60	13.60	10.4	10.92	10.92	12.8	13.82	14.08	12.2	12.93	13.17
Fall	°F	50.4	56.7	60.8	45.6	52	56.3	51	57.2	61.3	45.4	51.9	56	50.1	56.5	60.6
	in	9.9	10.59	10.79	11.7	12.87	12.98	11.8	12.74	12.98	11.5	12.42	12.76	10.8	11.88	11.98

\*Baseline data is an average of observed temperatures and precipitation between the years 1981 – 2010 Projection values are the 75th percentile of 35 GCMs and 2 SSPs (SSP2-4.5 and SSP5-8.5). Decimal places are shown for values less than 1, although this does not indicate higher precision/certainty.

## **Key Obstacles**

## Infrastructure

• Historic infrastructure will need to contend with increasingly variable and intense weather events, including increased precipitation

## Recreation

 Potentially warmer winters and shorter fall foliage seasons could decrease tourism interest in the region

## Ecology

- Warmer temperatures & altered precipitation patterns may impact the types of crops and agricultural practices that are viable
- The Great Lakes region is projected to see increasing variability in water levels and ice cover, impacting both local ecosystems and hydropower producers downstream
- The Finger Lakes are at higher risk for harmful algal blooms due to increased water temperatures and nutrient runoff
- Increasing land development could worsen issues of erosion and water quality

# Futue View of the second secon

## **Overview of the Vision**

To define what lies ahead for the Canal System, this chapter lays out a future vision, expressed through a vision statement, along with a series of guiding principles that constitute core attitudes and approaches the System should strive to embody.

Building on these principles, a series of strategies and associated actions have been developed to help bring this vision to life. The relationship between these plan components is illustrated in the diagram to the right.

## Vision

The plan vision describes the long-term aspirations for the Canal System. The vision statement articulates what this vision might look and feel like for the people who use the System.

## **Guiding Principles**

Guiding principles refer to the core attitudes and approaches the System should strive to embody in its pursuit of the overall vision.

## **Strategies**

Strategies are high-level goals that help put the guiding principles in practice, and may guide decision making in pursuit of implementing the vision.

## **Actions**

Actions describe the possible programs, projects, or other initiatives that may be undertaken in the implementation of a given strategy.

## A vibrant throughline of canals, parks, and trails...

## ...for New York State.

## **Vision Statement**

Building on the strong foundation laid in the 1995 plan, the next 25 years and beyond will see the New York State Canal System evolve from a linear recreationway to a complete network of waterways, parks, and trails. This evolution will provide valuable ecological, economic, and cultural assets that complement the recreational amenities New Yorkers have come to love.

Around every bend, this wellmaintained network of trails and waterways will connect New Yorkers to main streets and nature. The system's iconic infrastructure will be preserved and renewed to highlight history and revitalize Canal communities. The Canals will continue to keep New Yorkers active outdoors while strengthening the landscapes, ecosystems, and habitats they run through.

## **Guiding Principles**

## Care

Care for the System's expansive infrastructure.

From the engineered locks and dams to the landscaped parks and trails, the System is composed of many different types of infrastructure, each with its own operational needs and maintenance cycles. Investing in the long-term health of these varied assets and equipping staff to look after them appropriately is the foundation upon which a successful future can be built.

## Convene

**Convene both local residents and visitors.** As a System with a national and global reach, the Canals draw nearby neighbors and tourists from afar. Thoughtfully balancing their needs, and identifying mutually beneficial offerings that bring them together, is critical to ensuring the System is well-used and well-loved by all.

## Connect

## Connect upstate New York to the world.

The Canals' original purpose was to connect the country's coast to the heartland. Carrying this forward means maintaining the continuity of the system's Canals and Canalway Trails – coordinating with surrounding cities, trails, and waterways to reach beyond the region to the wider world.

## Commemorate

Commemorate history and culture in

all its forms. The Canal System played a prominent role in shaping the country's history and the state's cultural identity. Expanding the narratives, voices, and mediums through which that history and culture are shared is an important step towards fostering a richer understanding of the past and a more vibrant vision for the future.

## Catalyze

**Catalyze local revitalization of Canal** 

**communities.** The Canals are a unique physical and economic asset for the towns and cities they run through. Making the most of these local waterfronts through strategic investment and programming is vital to helping Canal communities thrive.

## Champion

**Champion quality-of-life and inclusivity for all users.** The parks, trails, and waterways that make up the System are valuable spaces of recreation and leisure for those who use them. Prioritizing greater accessibility and awareness around the System is essential to making sure everyone can benefit from all the Canals have to offer.

## Cultivate

**Cultivate upstate's ecoregions and natural systems.** Though man-made, the Canals and trails are deeply embedded in New York State's natural systems. Embracing environmental issues, such as biodiversity or stormwater management, can meaningfully contribute to the resilience and health of the surrounding region. **Trails** 



## Parks

## Strategies and Actions

## **Summary of Strategies**

Care for the System's expansive	34
infrastructure	
<b>Strategy 1:</b> Invest in sustainably modernizing the Canal System	35
<b>Strategy 2:</b> Align staffing and operations with the needs of a contemporary parks network	36
<b>Strategy 3:</b> Build staff capacity to preserve and manage the System's many types of infrastructure	38
<b>Strategy 4:</b> Electrify and decarbonize Canal operations to support a climate-resilient future	39
Convene both local residents	40
and visitors	
<b>Strategy 1:</b> Make visitor experience a core capability	41
Strategy 2: Foster local volunteer engagement and stewardship	42
<b>Strategy 3:</b> Communicate the System's varied offerings to attract diverse audiences	43
Connect upstate New York	44
to the world	
<b>Strategy 1:</b> Complete and expand the Canalway Trails	45
<b>Strategy 2:</b> Maintain and promote through- navigation along the waterway	46
<b>Strategy 3:</b> Strengthen relationships with neighboring waterways and trail networks	47
<b>Strategy 4:</b> Grow the System's global reach and recognition as a leading waterway and open space network	48
Commemorate history and culture	50
in all its forms	
<b>Strategy 1:</b> Share the history of the Canals with intentionality about who is telling the stories	51
Strategy 2: Use place-based practices to tell more stories about the Canals	52
<b>Strategy 3:</b> Appeal to broader audiences with high-tech and high-touch programming	53
<b>Strategy 4:</b> Expand the narrative of Canal storytelling, by piloting scalable projects	54

Catalyze local revitalization of Canal communities	56
<b>Strategy 1:</b> Enhance public spaces along the Canals and connect activities to local identity to revitalize Canal communities, large and small	57
<b>Strategy 2:</b> Strengthen local economies by leveraging Canal infrastructure for new and existing industries	58
<b>Strategy 3:</b> Modernize appropriately-scaled commercial shipping opportunities along the Canal System to increase economic activity and provide alternative green transportation options	59
<b>Strategy 4:</b> Strategically manage and allocate Canalside land in support of the plan's vision and local community economic development	60
Champion quality-of-life and	62
inclusivity for all users	
<b>Strategy 1:</b> Commit to making accessibility the standard across the System	63
<b>Strategy 2:</b> Expand "off-season" programming to activate the Canals year-round	64
<b>Strategy 3:</b> Prioritize youth programming to grow the next generation of Canal enthusiasts	65
<b>Strategy 4:</b> Promote equitable economic access to programs and amenities	66
Cultivate upstate's ecoregions	68
and natural systems	
<b>Strategy 1:</b> Leverage the Canals' right-of-way and water systems in service of holistic natural resource management efforts	69
<b>Strategy 2:</b> Strategically adapt the System to enhance the climate resilience of the Canal infrastructure and neighboring communities	70
<b>Strategy 3:</b> Promote water management practices that balance the needs of different uses and regions along the System	71

**Principle 1** 

## Care for the System's expansive infrastructure

## **Strategies:**

- **1** Invest in sustainably modernizing the Canal System
- 2 Align staffing and operations with the needs of a contemporary parks network
- 3 Build staff capacity to preserve and manage the System's many types of infrastructure
- Electrify and decarbonize Canal operations to support a climate-resilient future

Strategy 1

Invest in sustainably modernizing the Canal System

## **Actions:**

- **1.** Prioritize the infrastructure upgrades starting with those that ensure the health or safety of the System followed by those most critical to realizing the long-term vision of vibrant waterways, trails, and parks.
- **2.** Implement appropriate digital infrastructure to support lock operations, maintenance, and reinvestment:
  - a. Integrate devices and sensors to constantly monitor Canal health, water quality, and infrastructure conditions. This data should feed into a centralized system that can trigger maintenance alerts or adjust operations based on environmental factors.
  - b. Catalog operational decisions in combination with observed hydraulic characteristics such as water levels, and streamflow to create a more complete record of water management decisions along the System.

Built between 1905 and 1918, the Barge Canal and its supporting lock infrastructure continue to be maintained to preserve its functionality and historic integrity. Everything in the System is uniquely designed and built to support a mode of transportation that was so far ahead of its time that it could not be replicated - from the brass handles powering the lock doors to the reliance on direct current (DC) power. This innovation is also what makes the need to modernize operations so important. By expanding methods of data collection, revisiting management and operations frameworks to balance historic integrity with efficiency, and ensuring decisions are driven by robust data, the Canal System can remain one-of-a-kind while also keeping up with today's operational needs.

- c. Investigate a System-wide digital asset management system that will track and catalog routine and major maintenance investments in Canal infrastructure and store relevant files to keep infrastructure records up-to-date.
- 3. Use a balanced observations and model-based approach to Canal management with the aim of reducing reliance on institutional knowledge, providing consistent operations, and building processes that can adapt to organizational change.

## **Align staffing** and operations with the needs of a contemporary parks network

To best support the growth of the System into an open space network that promotes recreational use and ecological stewardship, it is essential to align staffing and operations with changing demands on the Canals, trails, and surrounding lands. This includes enhancing staff expertise in public land management, expanding maintenance practices to address infrastructure needs while also ensuring that the Canals and trails are accessible and safe, and adopting operational approaches that balance ecological preservation with increased public use. By building capacity in these areas, the Canal System can continue to evolve as a destination that meets both recreational and conservation needs for communities today and in the future.

## **Actions:**

- **1.** Develop design and maintenance guidelines for the many types of landscapes owned by NYSCC along the system, and ensure the organization provides appropriate training and resources for staff to implement them.
- **2.** Build NYSCC staff understanding of how this vision plan is connected to the system's day-today operations. Provide staff with tools to see and take pride in how their ongoing work aligns with long-term goals.
- 3. Ensure necessary investments in the System are resilient to shifts in resource availability, operational priorities, and environmental conditions.
- **4.** Expand professional and organizational affiliations to increase access to technical assistance and best practices from peer organizations.

**5.** Develop a framework for immediate and future governance of the Canal System which clarifies responsibilities for Plan implementation, including capital project decision-making, fundraising, programming, and maintenance. Investigate a more formal partnership with a non-profit organization to expand access to funding and better share operational responsibilities between stakeholders. (see Approach to Governance on the following page)

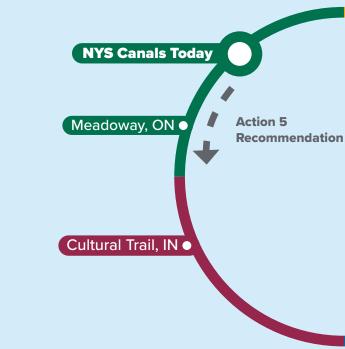
## **Approach to Governance**

Governance refers to the framework that outlines who is responsible for publicly accessible spaces, like the Canal System, and how these parties make decisions regarding maintenance, programming, and operations. There are four governance models that frame how the CRC and NYSCC could consider responsibilities for the plan's implementation and future oversight. Today, much of the system's oversight is led by NYSCC with engagement by municipalities and other entities along key stretches of the System.

## Single Agency-led

NYSCC grows staff and skills to manage, host, and NYSCC provides funding for capital improvements, but multiple governmental and/or non-profit expand public programs as well as to maintain and manage the Canals and trails for increased public partners take on programming and focused use. Municipalities and community organizations ecological restoration efforts including volunteer continue to play a modest role in hosting local coordination. events, through the NYSCC permitting process. Example: Bergen Arches in Jersey City, NJ and multiple municipalities; C&O Canal in Maryland and Washington D.C

Example: Meadoway in Toronto, ON and multiple municipalities



## **Conservancy Model**

A majority of the Canal System's public-facing responsibilities are borne by a private, non-profit organization who funds, maintains, programs, and often has a lease or easement over portions or the full reach of the System.

Example: High Line Canal in Denver, CO; The Riverline in Buffalo, NY

## **Multi-Partner**

C&O Canal, MD/DC Bergen Arches, NJDC • High Line Canal, CO Riverline, NY

## Outsourced

A private provider is contracted to provide public programming and/or the Canals' maintenance and operations of trails and open spaces.

Example: Indianapolis Cultural Trail in Indianapolis, IN

## Strategy 4

Electrify and decarbonize Canal operations to support a climate-resilient future

## **Actions:**

 Build partnerships with State, Federal, and philanthropic stakeholders to secure more diverse funding streams to address infrastructure restoration costs. Communicate deferred and critical maintenance work not as a barrier to the vision, but as foundational investments that must be completed to enable future growth.

**Build staff capacity** 

to preserve

and manage

the System's

many types of

infrastructure

2. Create traineeships and expand opportunities that create pathways to develop the specialized skills needed to work in the lock houses and on the System.



## Case Study Gowanus Canal Green Team

The Gowanus Green Team are paid high school apprentices engaged in environmental stewardship, nursery maintenance, green infrastructure, and urban conservation work each summer. This program aims to educate local youth, expand job opportunities, and cultivate awareness and urgency regarding the importance of environmental work in Gowanus and New York City. Green Team is an integral part of Gowanus Canal Conservancy's growing maintenance team, providing stewardship for green spaces in Gowanus and the Lowlands Nursery.

To effectively manage this complex system, future

conditions of aging infrastructure. Today, deferred

maintenance is substantial enough to restrict

the Canal System's ability to be proactive about

By situating the vision within staff capacity and built infrastructure needs, it can attract support

and funding, connecting the System's success to

the state's overall growth and those working to

preserve and manage the Canals.

aspirations need to be balanced with the immediate

investments in resilience, adaptation, and efficiency.

Learn more: https://gowanuscanalconservancy.org/green-team/

## **Actions:**

- Transition the System's maintenance fleet to electric propulsion, setting a precedent for oth vessels. Pilot electric dredging boats, patrol boats, and lock operation vessels, expanding their use wherever possible.
- Develop a network of fast-charging stations at intervals that ensure electric vessels have access to power along their routes. These stations should be high-speed to accommodate quick recharges during short docking periods.
- Encourage the adoption of electric recreational vessels by providing subsidized or free chargin stations in popular recreation zones, which can also increase interest in recreational boating.
- Partner with tourism and rental companies to establish electric boat rentals for visitors. Promoting e-boating can generate additional revenue while reinforcing the Canals' lowemission goals.

The Canals are more than waterways, they are both a legacy of an energy independent past and a future framed by climate resilience and sustainability. By electrifying and decarbonizing Canal operations, the Canal System can play a vital role in reducing emissions and advancing the State's climate goals, positioning itself as a model of sustainable infrastructure that supports communities, protects the environment, and preserves a rich heritage for future generations.

er	5.	Explore incentives for low-carbon vessels such as development of a lock fee structure that rewards low-emission vessels with discounted access to the Canal System. This structure could offer significant savings for electric or hybrid vessels, helping make low-carbon shipping a financially attractive option.
e		Case Study Rideau Canal Boat Cruise
ll าg า		Ottawa Boat Cruise has launched its second all- electric 100-passenger vessel on the Rideau Canal and plans to convert its entire National Capital Region fleet by 2026. The company received \$3.2 million from the Quebec government to support the project, which will include introducing a first-of-its-kind electric amphibus to the region in summer 2024, as well as replacing the classic Paula D ship on the Ottawa River with an electric 500-passenger catamaran in 2025. Learn more: https://obj.ca/ottawa-boat-cruise-electric-boat-plans-to- green-entire-fleet/

## **Convene** both local residents and visitors

## **Strategies:**

- 1 Make visitor experience a core capability
- 2 Foster local volunteer engagement and stewardship
- 3 Communicate the System's varied offerings to attract diverse audiences

Strategy 1

## Make visitor experience a core capability

## **Actions:**

- Develop a dedicated Visitor Experience Strategy that addresses the needs of the varied visitor demographics, different recreational activities, and diverse geographic conditions that make up the system.
- **2.** Assess the value of creating a dedicated visitor experience team within NYSCC.
- **3.** Consider hiring educational and informational guides to help meet visitor needs out on the System.
- **4.** Explore the possibility of retrofitting locks to act as visitor centers that serve as a focal point for visitor experience by providing key information and amenities.
- Continue to unify and improve wayfinding, interpretive materials, and other visitor-facing signage through system-wide design standards.
- 6. Explore sponsorship or donor opportunities to make capital investments along the Canals that support visitor experience such as restrooms, bicycle racks, and benches.

Delivering a high-quality visitor experience is key to enhancing popular perception and ensuring the lasting success of the Canal System. Done well, with easy-to-navigate trails, engaging activities, and well-maintained facilities, the System feels welcoming and memorable for all. To achieve this, the New York State Canal System should make a real commitment to investing in and prioritizing visitor experience, just as any major parks and recreation system.



## Case Study

## Lake Superior National Marine Conservation Area Visitor Experience Strategy

This Visitor Experience Strategy was designed by Parks Canada to ensure that National Parks, National Historic Sites, and National Marine Conservation Areas visitor experiences connect with Canadians. The purpose of the Visitor Experience Strategy is to build compelling visitor experiences that connect the visitors' hearts and minds with a deeper understanding of the very essence of Canada. The overarching goal is to facilitate unforgettable visitor experiences for the target audiences.

Learn more: https://parks.canada.ca/amnc-nmca/on/super/info/index/ves

## Strategy 3

## Strategy 2

## Foster local volunteer engagement and stewardship

Over the years, many locals and Canal enthusiasts have come together to tend to the stretch of the system in their community. In some places, these groups fill informational or programmatic gaps through self-directed events or place-specific signage. Finding ways to formalize and support these allied groups presents an opportunity to share some of the resources required for beautification and activation. Alongside the physical network of trails, parks, and waterways, future outreach should seek to grow a social network of local volunteers to help Canal communities learn from one another and coordinate efforts. Communicate the System's varied offerings to attract diverse audiences

## **Actions:**

- **1.** Partner to establish local "Friends of the Canals" groups where there is a critical mass of interested volunteers and identify capacity within NYSCC to support and guide these groups.
- 2. Develop three to five-year formalized agreements with "Friends of Canals" groups that identify their objectives, relationship to NYSCC, and their expected contributions to programming and maintenance.
- **3.** Pilot volunteer-led clean-up and fundraising efforts like an "Adopt-a-Lock" or "Adopt-a-Park" program.
- **4.** Recognize local volunteer contributions to the Canal Network in communications and public relations campaigns.



## Case Study

## **Best Practices for State Park & Historic Site Friends Groups**

Parks & Trails New York (PTNY) has created a best practices manual for "Friends Groups" as a resource to help build the capacity of these groups, expand outreach and communications, and enhance advocacy. The manual covers a variety of topics including: becoming a recognized "Friend Group," building a membership base, managing volunteer groups, and applying for grants & fundraising efforts.

Learn more: https://www.ptnyfriends.org/resource-kit

## **Actions:**

- Create an accessible annual report for the System that shares the progress about this plan's implementation, provides updates on capital investments and programming highlights, and spotlights future events to connect readers to Canal communities and tourism opportunities.
- 2. Develop segmented marketing strategies that cater to the many different groups that use or could use the System, such as families, outdoor enthusiasts, cultural tourists, and history buffs, and expand these approaches to include local, regional, national, and international outreach.
- 3. Conduct marketing campaigns that span a variety of channels to reach different audiences, such as local radio, social media, public billboards, or mailers.
- Update informational materials to make the System easier to navigate and explore in a variety of ways. Consolidate and improve online maps to provide easy access to wayfinding, local resources in Canal communities, and other useful information for visitors.

One of the System's most significant strengths is its varied character and qualities—historic, cultural, economic, recreational, and beyond. Because of that, the Canals have something to offer almost everyone who might visit. While this vision plan prioritizes the parks, trails, and recreational aspects of the corridor, the System should also uplift opportunities for these other offerings to connect with current and potential visitors of all kinds.

5.	Consider translation needs for all
	communications materials and signage on the
	system. Create standards for communications
	that strive to reach audiences with different
	reading abilities.

## Case Study

## Georgetown Heritage

In fall 2023, the the Chesapeake & Ohio Canal (C&O Canal, as most refer to it today) was drained for a major infrastructure rehabilitation project led by the national Park Service (NPS). With the boat tours on hiatus due to renovation efforts, Georgetown Heritage has shifted to offering the Industry & Innovation: a Walking Tour of the C&O Canal program. Guests can explore important sites along the canal to understand how the canal shaped the industrial development of Georgetown, and how Georgetown shaped the canal.

Learn more: https://www.georgetownheritage.org/

## Connect upstate New York to the world

## **Strategies:**

- Complete and expand the **Canalway Trails**
- 2 Maintain and promote throughnavigation along the waterway
- 3 Strengthen relationships with neighboring waterways and trail networks
- 4 Grow the System's global reach and recognition as a leading waterway & open space network

44 | New York State Canal Recreationway Plan 2050

Strategy 1

## **Complete and** expand the **Canalway Trails**

## **Actions:**

- 1. Study the feasibility of creating Canalway Trails along the Oswego and Cayuga-Seneca Canals including necessary land acquisitions, potential advocacy and funding partners, and possible routes in alignment with Parks & Trails NY's prior assessments.
- **2.** Commit to moving the existing Erie and Champlain Canalway Trails fully off-road wherever possible. Provide physical separation between vehicular traffic and trails where offroad is not possible.
- 3. Promote the NYS Canalway Water Trail alongside the land trails as a unified and multimodal recreational trail network.
- 4. Evaluate physical accessibility, availability of amenities, and location of facilities along all existing Canalway Trails and Water Trails to understand how the trail experience can be improved.
- 5. Work with Canal communities to encourage connections between Canalway Trails and local bike lanes or sidewalks, increasing access to in-town amenities

The Canalway Trails are an integral and thriving part of the System with more than 3.9 million estimated annual visitors. The trails connect communities and allow people to travel along the Canals' length by bike or on foot, from a short stroll to a long-term excursion. Investing in the improvement, expansion, and upkeep of the trails should be a critical focus of future planning for the System as a parks network and recreationway. Doing so effectively should involve close coordination and collaboration with other State agencies and non-profit partners.

## Case Study **The Towpath Trail**

From 1827 to 1913, mules pulled canal boats along the Towpath Trail, laden with passengers and goods up and down the historic Ohio & Erie Canal. Today, Towpath Trail is managed by multiple partners including: Cleveland Metroparks, Cuyahoga Valley National Park, Summit Metro Parks, Stark Parks, Tuscarawas County Park Department. As of 2022, the Towpath Trail is more than 90 miles long, and when completed, the Towpath Trail will be 101 miles long. Through these partnerships, guests can experience the trail and explore key visitor centers to learn more about the cultural, historic, natural and recreational resources being preserved and celebrated along the Canal.

## Learn more: https://www.ohioanderiecanalway.com/explore/the-towpathtrail/

## Strategy 2

## Strategy 3

## Maintain and promote throughnavigation along the waterway

For two centuries the Canals have provided continuous connection by water from the Great Lakes to the East Coast. Still today, recreational boaters and paddlers navigate the length of the system, tour boats take sightseers under bridges and through locks, and commercial vessels float freight across the Canals. Getting out on the water, for new visitors and expert mariners alike, is a unique and defining experience of the Canals that should be supported as a core feature of the System.

Strengthen relationships with neighboring waterways and trail networks

## **Actions:**

- **1.** Standardize hours of lock operation across the System and clearly communicate them to ease trip planning for boaters.
- **2.** Conduct a study to understand the experience of recreational boating on the Canals for both motorized vessels and paddle crafts. As part of this study, opportunities for the improvement of boating facilities, tie-ups, harbors, and other amenities should be identified and prioritized.
- **3.** Create easy-to-share guidance around the safe use of motorized and non-motorized vessels on the different Canal sections, and ensure local rental providers are equipped with this information.
- 4. Develop a mobile app or web-based system to give operators real-time updates on lock status, water levels, and docking availability. This will make voyage planning easier and reduce idling.

- 5. Assess the potential economic benefits of locking fees, seasonal permits, or other user fees to generate additional revenue for maintenance and operational expenses.
- 6. Explore the feasibility and potential benefits of a water taxi or ferry system in densely populated stretches of the system, starting by studying potential ridership demand and assessing possible routes and expected fare revenue.

## Case Study

## **C&O Canal Explorer Mobile App**

The C&O Canal Explorer app has over 800 points of interest mapped in a searchable format, allowing guests to find hiking trails, campgrounds, history, trailheads, parking, and more at a glance. The app also calculates the distance from one's location to nearby amenities, and points of interest.

## Learn more:

https://www.canaltrust.org/plan/explorer-mobile-app/

## **Actions:**

- 1. Study the feasibility of connections between Canalway Trails and surrounding greenways or multi-use paths.
- **2.** Identify opportunities from cross-promotion and connected tourism offerings between the Canals and other nearby natural attractions like Niagara Falls.
- **3.** Enhance the Canal identity on the many lakes and rivers connected to the Canal System such as Oneida Lake, Onondaga Lake, Cayuga Lake, Lake Ontario, Lake Erie, Seneca Lake, and Mohawk River through Canalside placemaking efforts and Canals-focused programming in these areas.
- **4.** Explore opportunities for collaborative planning and learning alongside peer organizations that oversee canals, waterways, and park networks in the region.

The New York State Canal System is surrounded by several recreational and natural assets - including lakes, rivers, forests, and other parks and trails. Better coordinating and integrating with these neighboring amenities would serve to expand the reach of the System and reinforce its relationship with the wider region. In doing so, NYSCC should work to identify new partners who can share knowledge and resources, as well as collaborate in supporting the System.



## Case Study **Florida Trail Association**

The Florida Trail Association builds, maintains, protects, and promotes the unique Florida National Scenic Trail (Florida Trail), along with a network of hiking trails throughout the state of Florida. It is a multi-jurisdictional trail only made possible by negotiated partnerships. Currently it runs through 36 counties, about 20 cities and towns, multiple state and national parks, forests, wildlife management areas, wildlife refuges, water management areas, military bases, the Seminole Reservation, an island authority, and a college campus. It also runs through hundreds of large and small private holdings. These entities have significantly different missions and management objectives though the FTA's objective is to make these jurisdictional differences invisible to users.

Learn more: https://floridatrail.org/

Grow the System's global reach and recognition as a leading waterway and open space network For many travelers, the Canal System's significance is rooted in its history, the more recent accomplishments of the Canals can go underappreciated. Building on the commemoration of the Bicentennial and the energy of the concurrent 2025 World Canals Conference, NYSCC should make a conscious effort to uplift the present successes and highlight future aspirations of the systems to ensure the continued relevance and interest in the system nationally and internationally.

## **Actions:**

- Work with all partners and stakeholders involved with the System to explore the potential operational and economic benefits of national or global designations such as a UNESCO World Heritage Site, a National Park, or a National Recreation Area.
- 2. Maintain an active presence at global parks and canals events such as the World Canals Conference, and work to establish NYSCC as thought leaders in these spaces.
- **3.** Study opportunities for creative and innovative recreational uses of infrastructure and resources throughout the Canal System or within specific reaches of the System.
- **4.** Pursue awards that recognize the ambitious planning, design, engineering, and program management work currently being done along the System.



Boats passing through Lock E2

## **Commemorate** history and culture in all its forms

## **Strategies:**

- 1 Share the history of the Canals with intentionality about who is telling the stories
- 2 Use place-based practices to tell more stories about the Canals
- Appeal to broader audiences with high-tech and high-touch programming
- 4 Expand the narrative of Canal storytelling, by piloting scalable projects

Strategy 1

Share the history of the Canals with intentionality about who is telling the stories

## **Actions:**

- 1. Engage historic preservation organizations to showcase the historical significance of different buildings and infrastructure in the Canal System, focusing on the social history of those who built, lived around, and were displaced by these projects.
- 2. Establish a liaison within NYSCC/CRC to build a reliable channel of communication with Indigenous nations and organizations.
- **3.** Collaborate with Indigenous communities to ensure their stories are told with agency, linking past and present narratives.
- **4.** Develop a historical narrative that connects local stories with broader historical movements, appealing to residents and visitors alike.
- Encourage residents to contribute to Canal storytelling through oral and written history programs, making sure local voices are heard.
- 6. Partner with Indigenous archeologists and archivists to catalog Indigenous cultural resources within Canal Lands.

Recognizing the historical significance of the Canal System involves acknowledging past harms and elevating the voices that have often been marginalized. These recommendations aim to intentionally share the history of the Canals by focusing on the social narratives of those who built, lived around, and were displaced by the Canals' construction and continued operations. Collaborating with Indigenous communities is essential to ensure their stories are told authentically, fostering a deeper connection between past and present. By prioritizing local contributions and cataloging Indigenous cultural resources, the Canal System can facilitate a cohesive narrative that honors historical context while promoting trust and collaboration, ultimately enriching the experience for all visitors and residents.

 Engage Indigenous communities early in the life of Canal-based projects and encourage local Indigenous craftsmen, artists, historians or leaders as part of the process.

## Case Study

## Sault Ste. Marie Canal National Historic Site

Sault Ste. Marie Canal National Historic Site commemorates the canal's economic and strategic importance, though a new exhibit now gives voice to First Nations and Métis Nation history in the region in alignment with Parks Canada's Framework for History and Commemoration. New exhibit panels acknowledge the Sault Ste. Marie Canal site as being on the traditional territory of Anishinabek and Métis people and highlight how much was taken away from First Nations and Métis peoples' ways of life when the canal was built.

Learn more: https://parks.canada.ca/lhn-nhs/cadre-framework/ autochtones-sault-indigenous

## Strategy 2

## Strategy 3

## **Use place**based practices to tell more stories about the Canals

Building on the organization's strength in convening diverse stakeholders and the successful implementation of large-scale reinvestment projects in access to, along, and over the Canals, the CRC and NYPA can expand impact through collaborative branding and events with municipalities, museums, and community groups by focusing on capital investments that tell stories about the Canals themselves.

**Appeal to** broader audiences with high-tech and high-touch programming

## **Actions:**

- **1.** Foster collaborations between municipalities, museums, and community organizations to create unified branding or events that connect places and audiences.
- 2. Access creative placemaking grants that bring together art, culture, and economic development while requiring local matching funds.



## Case Study **I&M Silhouette Tour**

The Illinois & Michigan Canal National Heritage Area is the first of its kind: a national park of communities, not federal land. Based around the I&M Canal, which connected the Illinois River to Lake Michigan creating an all-water, inland route from the East Coast to the Gulf of Mexico, our National Heritage Area is made up of 60 cities and towns, from Chicago to LaSalle-Peru, who owe their growth to the canal. Working with artist and iron worker Marsha Lega, the I&M Canal developed rustic, life-size, Cor-Ten steel silhouettes based on real historical figures. Placed throughout our National Heritage Area, these silhouettes tell their stories and the lasting impact they have had.

Learn more: https://iandmcanal.org/silhouettetour/

## **Actions:**

- **1.** Continue to expand engagement with digital and print applications that offer different perspectives, especially for younger audiences and tourists.
- **2.** Use larger infrastructure projects as opportunities to incorporate accessible art forms like murals and water-based projects to engage broader audiences and activate public spaces.
- **3.** Expand the Learning Hub program to schools across the region, offering hands-on, experiential activities that connect them to their environment and connect to the school curriculum, fostering pride in place.
- 4. Encourage local museums to lead events along and on the Canals through art and performances by reducing logistical and permitting barriers.

As digital media consumption evolves, especially among younger audiences who crave interactive and diverse experiences, there is a unique opportunity for the New York Canals to engage broader communities through innovative storytelling and programming. The following recommendations outline opportunities to blend high-tech and high-touch approaches, utilizing digital and print applications to connect with tourists and locals alike. By incorporating accessible art into infrastructure projects and expanding educational initiatives, the Canals can foster pride in place and activate public spaces. Leveraging partnerships and creating memorable experiences along the Canal Network will also invite new audiences to explore and engage with the Canals on their terms.

- **5.** Explore partnerships with state and national heritage organizations to introduce long-term education and outreach initiatives targeting both local schools and the broader public.
- 6. Leverage new technologies and assets for STEM-centered education and programs.
- 7. Explore developing stand-alone installations geared toward long-distance travelers (on-water and on-trail).
- 8. Partner with local and statewide tourism agencies to bolster their calendars of events that communicate Canal-specific programs happening year-round.
- **9.** Explore providing photographable moments and campaigns that commemorate the areas along the Canal System and stimulate social media clout that could potentially inspire new user groups to explore the Canal System.

## Strategy 4

## Expand the narrative of Canal storytelling, by piloting scalable projects

Building on the success of existing programming, NYSCC can expand Canal storytelling through small, manageable projects like youth programs and boat tours. By learning from other canal systems, and collaborating with nearby creative and cultural organizations, the System can enhance its visibility and celebrate local artists and stories.

## **Actions:**

- Start with smaller, manageable projects (e.g., youth programs, boat tours, hands-on activities) to build momentum, testing interest and refining the approach before scaling up.
- 2. Coordinate with other canal systems for ideas and cross-regional collaborations, enhancing visibility and learning from shared challenges.
- **3.** Leverage existing, underutilized, replacement, or deactivated assets for use as landmarks along Canal Lands and places to support locally-led programming.
- **4.** Explore rotating system-wide exhibits that source contributions from local artists in Canal communities across the System.



## Case Study Canal to Cloth Immersion Tour (Augusta Canal)

The Augusta Canal located in Augusta, Georgia was built in 1845 as a source of power, followed in 1848 by the construction of the first factories along the canal banks to use the power generated by the water. With the Canal to Cloth tour, you can immerse yourself in the lives of canal workers in an experience that is authentic to Augusta and the Augusta Canal. This tour teaches the journey of cotton traveling down the canal to the historic mills, the process of refining raw cotton into cloth, the generation of green hydroelectric power, and the labor force that worked in the canal industries.

https://augustacanal.com/canal-to-cloth.php

Canalside event in Amsterdam, NY

## **Catalyze** local revitalization of Canal communities

## **Strategies:**

- 1 Enhance public spaces along the Canals and connect activities to local identity to revitalize Canal communities, large and small
- 2 Strengthen local economies by leveraging Canal infrastructure for new and existing industries
- 3 Modernize appropriately-scaled commercial shipping opportunities along the Canal System to increase economic activity and provide alternative green transportation options
- 4 Strategically manage and allocate Canalside land in support of the plan's vision and local community economic development

## Strategy 1

Enhance public spaces along the Canals and connect activities to local identity to revitalize Canal communities, large and small

## **Actions:**

- **1.** Partner with Canal communities to implement a regularly updated signage and marketing campaign to connect System users to nearby amenities and services, like restaurants, overnight accommodations, and emergency services.
- 2. Coordinate with state and local jurisdictions to identify challenging intersections and provide safe crossings and improvements from communities to Canalway Trails, open spaces, and the waterways.

Passionate Canal communities have played an important role in the activation, economic development, and care of the Canal System. They have made the Canals into a valuable resource and expanded the network of residents, business and property owners, and regular visitors who want to contribute to its continued success. From the committed volunteers working to share their local stories and improve access to trails along the Canals, to wayfinding strategies to bring people from their main streets to the Canals and encourage diverse ways to represent their communities to those who visit, this plan can lean into those local investments and help to amplify the physical places that support those communities.

- **3.** Create consistent, formal agreements with communities that protect the Canal System's and the communities' interests and ensure partners have the capacity to manage and maintain public spaces along the System effectively.
- Consider long-term permits or land use strategies for Canalside lands for public-private creative placemaking ventures that will support local economic revitalization, capture and redirect stormwater, and activate commercial districts.

Strategy 2

## Strengthen local economies by leveraging Canal infrastructure for new and existing industries

Many conversations during this process with stakeholders centered on the opportunity for the Canals to support or be part of the next frontier of economic development and advancement for the region and the state. There is potential to strengthen local economies by revitalizing infrastructure to support emerging and existing industries. Just like recent successes in Tonawanda and Amsterdam, investments in local projects—like docking facilities, hospitality venues, and welcome centers—could attract a steady flow of visitors, encouraging spending and fostering economic growth.

Modernize appropriatelyscaled commercial shipping opportunities along the Canal System to increase economic activity and provide alternative green transportation

## **Actions:**

- Study the capacity of waterways and Canal Lands to directly support target industries set by the state such as advanced manufacturing, agriculture, and clean energy.
- 2. Partner with state and regional economic development agencies to offer tax incentives and subsidies to create a business-friendly environment along the Canals.
- **3.** Remove limitations on the use of Canal infrastructure and waterways for both commercial shipping and renewable energy industry needs, where viable.
- **4.** Tie the Canal System to larger cultural and foodcentered celebrations by promoting businesses with event organizers and marketing the celebrations within a consolidated calendar of events.

## Case Study Massachusetts Green High Performance Computing Center

Massachusetts Green High Performance Computing Center (MGHPCC) is an intercollegiate high-performance computing facility located in Holyoke, Massachusetts, connected to that city's municipal fiber grid and powered by the Holyoke Canal System and Dam. The MGHPCC was the first university research data center to achieve LEED Platinum Certification, the highest level awarded by the Green Building Council's Leadership in Energy and Environmental Design Program due to two major investments: energy efficiency across the building and low environmental impact to the site and greater region.

Learn more: www.mghpcc.org/about-the-mghpcc/

## **Actions:**

- Provide reliable infrastructure throughout the year to increase commercial shipping and boost economic activity. By targeting investments and focusing on operation frequency and consistency, the reaches of Canals best suited for commercial shipping can be selected for economic studies to better understand the commercial demand, existing constraints, and barriers to commercial growth.
- 2. Evaluate dredging and sediment management needs to support both commercial and recreational vessel access, as appropriate. Identifying/updating design vessels, channel dimensions, depths, and adjacent mooring/ berthing access will be imperative to assessing the Canal System holistically and quantifying dredging and sediment management activities. As a first step, complete a System navigation assessment to identify maintenance and capital dredging needs as well as navigation risks based upon Canal reach and use.



The Canal System has long been a driver of economic vitality and has an opportunity to shepherd a climate-resilient future for the region. By communicating what potential, appropriately scaled commercial shipping opportunities exist, the Canals can boost local economies while committing to sustainable practices. The shift to low-carbon fuels and innovative solutions like electric barges or carbon capture not only reduces emissions but also positions the System as a "green" corridor for shipping. Addressing challenges in sediment management, including disposal site logistics, transport costs, and environmental regulations, also presents a unique opportunity to repurpose dredged material to create ecological or commercial value.

- Develop a feasibility study to explore alternative sediment management practices and reduce the reliance on disposal sites. Include analyses on sediment characterization (physical and chemical) to inform disposal/placement and/or beneficial use.
- Investigate the feasibility of dredging material to be used to beneficially nourish or restore habitat or to market it for commercial use.
- 5. Incentivize the commercial shipping industries to switch to low-carbon or renewable energy sources for fuel. Using measures like onboard carbon capture or electric barges, the Canal System could explore to reduce emissions and position the Canals as a green shipping route.
- 6. Develop scalable loading and unloading zones for various shipping uses (passenger, cargo, etc). Design these areas to support efficient cargo transfer with automated systems such as gantry cranes, reducing labor costs and improving speed.

## Strategically manage and allocate Canalside land in support of the plan's vision and local economic development

The properties that support or are adjacent to the Canals present an opportunity for NYSCC to meet multiple state goals. In order to clarify the role of the Canal System as an important network of trails, waterways, and open spaces, the lands that do not support that vision should be considered for other state and local growth goals, including opportunities to encourage conservation. The following action identifies opportunities to clarify how Canal Lands support the plan vision, and opportunities for investment or divestment of Canal Lands that are responsive to community needs and grounded in a sound communication of priorities.

## **Actions:**

- Develop a comprehensive real property strategy to optimize Canal Lands in alignment with this plan's vision, NYSCC's mission, and organizational priorities. The strategy should include the following tasks:
  - a. Establish a Land Management Framework

Create a framework to evaluate all properties, leases, and permits ensuring alignment with the Canal System's vision and guiding principles, including considerations of historic integrity, economic potential, environmental impact, and community need.

b. Conduct a Market Analysis for Canal Property Utilization

Perform a detailed market analysis of properties to identify how underutilized land could be transformed into productive uses, emphasizing modernization, economic sustainability, and green development principles.

- c. Coordinate with Municipal Partners Develop a collaborative process with municipalities to establish clear and realistic management, maintenance, and programming plans for Canal Lands within each locality, ensuring these lands are well-integrated and benefit the surrounding communities.
- d. Evaluate Properties for Potential Conveyance Identify and assess Canal Lands that require significant resources to maintain or operate or are misaligned with the NYSCC or CRC mission. Prioritize these properties for potential conveyance to reduce costs and redirect resources to mission-critical areas.



Workers tow a commercial barge through Lock E2

## Champion quality-of-life and inclusivity for all users

## **Strategies:**

- Commit to making accessibility the standard across the System
- **2** Expand "off-season" programming to activate the Canals year-round
- (3) Prioritize youth programming to grow the next generation of Canal enthusiasts
- Promote equitable economic access to programs & amenities

62 | New York State Canal Recreationway Plan 2050

Strategy 1

**Commit to** making accessibility the standard across the System

## **Actions:**

- **1.** Incorporate best practices for accessible and inclusive design for all ages and capabilities as core criteria in the design review process for all public-facing projects including parks, trails, and docks.
- 2. Assemble an accessibility and inclusion taskforce, composed of both internal leaders at NYSCC and external experts, to more deeply engrain accessibility into all aspects of Canal operations and spaces.
- 3. Continue to provide training and technical support for private businesses along the Canal to make their spaces and services more accessible to visitors and residents.

As a public asset, the Canal System must commit itself to being truly accessible for all members of the public. Recent efforts led by local non-profits have helped improve the physical accessibility of boat launches, trails, and Canalside facilities, creating a model that is starting to be implemented more widely across the system. Looking ahead, NYSCC should dedicate itself to internalizing and expanding these practices to all other spaces on the system to ensure improved access for all ages and capabilities.



## Case Study **Trail Accessibility Hub**

The Vermont Trails and Greenways Council is dedicated to creating accessible outdoor experiences for everyone. Their collaborative initiatives focus on providing the resources, support, and information needed to enhance trail accessibility through initiatives like their Trail Accesibility Hub. Here they offer essential information on best management practices, guidelines, events, example assessments, and opportunities for learning and networking. They also provides updates on funding opportunities and showcases accessible and adaptive trails.

Learn more:

https://vermonttgc.org/trail-accessibility-hub/buildingaccessible-trails/#accessibility-guidelines

## Strategy 2

## Expand "off-season" programming to activate the Canals yearround

While navigation season winds down in the fall, and winter months provide an important opportunity to conduct maintenance, the trails and parks on the System stay open and accessible to the public all year. To emphasize the multifaceted offerings of the System beyond the waterways, stakeholders should explore creative ways to grow "off-season" visitor attractions and trail use.

## Strategy 3

Prioritize youth programming to grow the next generation of Canal enthusiasts

## **Actions:**

- **1.** Expand marketing to show late-autumn and winter activities along the System to encourage awareness and interest in year-round use.
- 2. Explore opportunities to tap into the significant fall foliage tourism in New York State through fall color tourism tours on the Canalway Trails or Canalside spaces.
- **3.** Create a sponsorship-driven, multi-community event, like a wintertime light show, hockey, curling, and cross country skiing, that encourages visits to various parts of the Canal System over a several-month period.



## Case Study Sailing Through The Winter Solstice

Located along the Carroll Creek Linear Park in downtown Frederick, Maryland, the Sailing Through The Winter Solstice begins in November and turns through March of the next year. Residents are invited to transform boats into decorated vessles to illuminate the waterway. In addition, the program also serves as a fundraising iniative where guests can vote for their favorite boat (\$5 per vote), to raise money and awareness for various local causes.

Learn more: https://coloronthecreek.com/sttws/

## **Actions:**

- 1. Partner with other state agencies and local organizations to develop and provide youth-focused programming along the System. These programs should make use of the system's natural assets to grow interest in environmental stewardship and sustainability amongst the young people who participate.
- 2. Grow relationships with local schools to identify opportunities to engage students in both educational and recreational programming as part of extracurricular activities.
- **3.** Expand partnerships with the many universities and higher education institutions along the system to conduct student-led research or foster other hands-on learning opportunities related to the Canals.

Engaging young people with hands-on experiences is key to helping them develop a personal connection to the Canal System. These early interactions not only cultivate curiosity about the history and nature that surrounds them, but also exposes them to the many recreational activities that happen along the System – from biking, to boating, to birdwatching and beyond. For parents and caretakers, the Canalside parks and trails should also offer a valuable place to spend time together with family and friends outside of the home.



## Case Study Old Santee Canal Park

The Old Santee Canal Park located in Moncks Corner, SC offers a wide variety of educational programs that are both history and nature-based. History-based programs deal with the wide range of historical events that took place on or around Stony Landing, such as children's life, rice production and canal history. Environmental programs emphasize the vast diversity of plant and animal life found throughout the park. Topics include insects, reptiles, trees and swamps. In addition, week-long summer camps offer campers the chance to learn and experience life along the canal.

Learn more: https://www.oldsanteecanalpark.org/Education/Index.aspx

## Promote equitable economic access to programs and amenities

Access to the places and programs along the System at a low- to no cost helps afford everyone the opportunity to benefit from the natural beauty, physical activity, and social vibrance the System has to offer.

## **Actions:**

- Continue to provide a flexible pricing across a broad range of recreational activities on the water, along the trails, and in adjacent parks sponsored by NYSCC and local and national partner organizations.
- 2. Develop partnerships with local organizations across the system that serve demographic groups currently underrepresented in visitorship to the Canals and Canalway Trails.
- **3.** Internally audit the locations, times, and formats of public engagement efforts to date in order to identify potential gaps in who is being reached.



## Case Study On the Canals

The NYSCC and NYPA piloted the On the Canals program in 2020 to offer free outdoor, cultural, educational, and recreational adventures along the Canal System. Since its inception, the program has expanded to include year round activities and has reached more than 30,000 participants in NY State through partnerships with thirtyfour providers across the state. In 2024, 'On the Canals' also expanded to include an Accessibility Education Program. This new initiative will work to establish inclusive recreational opportunities for all ages and abilities across the 524-mile New York State Canal system through a collaboration with Rochester Accessible Adventures.

Learn more: https://onthecanals.com/



Cyclists in Waterloo, NY

## **Cultivate** upstate's ecoregions and natural systems

## Strategies:

- Leverage the Canals' right-ofway and water systems in service of holistic natural resource management efforts
- 2 Strategically adapt the System to enhance the climate resilience of the Canal infrastructure and neighboring communities
- Promote water management practices that balance the needs of different uses and regions along the System

Strategy 1

Leverage the Canals' right-of-way and water systems in service of holistic natural resource management efforts

## **Actions:**

- **1.** Assemble a natural resource inventory of the Canal itself and Canal lands and waters to guid future management.
- Examine the feasibility of modifying Canals at strategic locations to prevent AIS invasions

   including large infrastructure interventions, like permanent barriers with boat lifts, and less intrusive infrastructure solutions, like electric fis fences.
- 3. Expedite the implementation of interim solutions to prevent the spread of high-risk species, such as invasive carp, into the Canals and connected watersheds while permanent solutions are developed. High-risk species are those that are highly likely to negatively impact the environment, economy, recreation, human health, and Canal infrastructure.
- **4.** Prioritize development of a system-wide plan for AIS prevention and management, to include monitoring for early detection, rapid response

The Canals, trails, and adjacent lands are deeply entwined with the many ecoregions they pass through. Plants and animals, both native and invasive, have made a home in the system. The winds, waters, and migratory patterns flow across municipal, county, and state borders. To help contribute positively to the surrounding landscapes and remain sustainable for future use, careful resource management is essential. Effective cross-jurisdictional collaboration should be pursued to support the long-term resilience of this interconnected system for both wildlife and public enjoyment.

le	to new infestations, public outreach and education, best management, barriers and other deterrents.
<b>s</b> h	Collaborate across agencies and stakeholders to manage invasive aquatic plants like water chestnut starting at key sites for operations, wildlife habitat, and for public access and recreation.
e	Pilot the reforestation of fallow lands along the Canal System in partnership with local businesses, municipalities, or stakeholders for biodiversity, quality-of-life, and climate mitigation benefits.
t	

## Strategy 2

**Strategically** adapt the System to enhance the climate resilience of the Canal infrastructure and neighboring communities

Amidst a changing climate, with potentially more volatile and intense weather events, the System will need to be retrofitted to effectively contend with these new conditions. While the operational priority will remain the safety and reliability of the System, the Canals may also offer potential opportunities to improve resilience for the surrounding communities, particularly on issues of flooding.

Strategy 3

**Promote water** management practices that balance the needs of different uses and regions along the System

## **Actions:**

- **1.** Update the System's climate vulnerability assessment with particular attention to macroscale issues at the regional level to help guide high-level operational decisions.
- 2. Perform a carbon sequestration assessment on fallow forests along the Canals, and use this information to manage woodlands in service of carbon sequestration as an ecosystem service.
- 3. Evaluate the possible purchase of additional lands in the Clyde River floodplain to store flood waters, enable more natural hydrology, and reduce downstream flooding.
- 4. Explore the use of dredged sediment (see Catalyze, Strategy 3) to augment local agricultural land, provide bank stabilization, berming and land elevation to flood-prone communities or to nourish erosion-prone areas.

- 5. Prioritize a stormwater study focused on utilizing decommissioned portions of the historic canal, especially along the Champlain reach, as stormwater detention and infiltration basins that offset localized flooding.
- 6. Leverage environmental and resilience-focused grant funding to supplement existing budgets and implement green infrastructure projects across and adjacent to the Canal System.

## Case Study

## **High Line Canal Stormwater Transformation** and Enhancement Program (STEP)

The High Line Canal is a manmade resource that has created a microclimate of greenspace that has become a beloved community amenity. The HLC Conservancy, in partnership with Denver Water, is working to increase the stormwater benefits and function of the canal to to both support environmental health and provide a funding source for stormwater improvements.

Learn more: https://highlinecanal.org/stormwater/

## **Actions:**

- **1.** Continue to coordinate with regional flood mapping efforts, in order to refine and calibrate internal hydraulic models and inform future decision-making.
- 2. Convene regional water management stakeholders and engage them in a consultative process, assisted by watershed modeling, to provide more coordinated management.
- 3. Develop a sensitivity-based water management model that relies on a series of scenarios to make decisions about the needs of stakeholders against the need to effectively maintain the System.
- **4.** Study the co-benefits or competing water needs of different Canalside land uses (including agricultural, industrial, and recreational) to inform future water management practices that align with the goals of this Plan.

Effective water management along the Canal System requires balancing the diverse needs of various uses including navigation, recreation, irrigation, and flood mitigation. Today, this delicate balance is achieved through adaptive operations guided by statutory mandates, manual oversight, and localized expertise. Enhancing these practices will ensure the System remains resilient, meeting current demands while addressing future challenges like sedimentation, climate change, and changing user priorities.

# Implementation

## Getting to 2050

The success of any vision plan is measured by its implementation. To guide this implementation, and successfully embrace the vision for a connected, cared-for network of canals, trails, and open spaces, some fundamental questions must be answered: How will new projects be determined? Who pays for actions that require capital investment? How will the various assets in the system be maintained? What criteria determine prioritization for investment?

Effective coordination and cooperation will be crucial in bringing this plan's vision to life between the CRC, NYSCC, Canal communities, landowners, developers, local businesses, nonprofit organizations, and the people of New York State. Working broadly across the System's many components will also be critical to ensuring the plan's efforts align with broader state and regional goals.

Importantly, to provide the Canal System with the best chance for a long and vibrant trajectory, a thoughtful approach to programming, managing, and funding needs to be considered. By more clearly defining and communicating roles and responsibilities between the many stakeholders, a more sustainable financial and operational model can start to be developed. To catalyze the vision plan's implementation, the following critical actions should be prioritized:

**1.** Care for the System's expansive infrastructure Strategy 2, Action 5: Develop a framework for immediate and future governance of the Canals System which clarifies responsibilities for Plan implementation, including capital project decision-making, fundraising, programming, and maintenance. Investigate a more formal partnership with a non-profit organization to expand access to funding and better share operational responsibilities between stakeholders.

- 2. Convene both local residents and visitors Strategy 1, Action 1: Develop a dedicated Visitor Experience Strategy that addresses the needs of the varied visitor demographics, different recreational activities, and diverse geographic conditions that make up the system.
- 3. Catalyze local revitalization of Canal communities Strategy 2, Action 5: Develop a comprehensive real property strategy to optimize Canal Lands in alignment with this plan's vision, NYSCC's mission, and organizational priorities.

Pursuing these critical actions will strengthen the premise that successful implementation will result from a combination of overarching leadership that knits together initiatives for the full system and collaborative projects developed by key partners that build toward a greater whole. An achievement for one community is ultimately a "win" for the full 524-mile Canal System, and improvements that strengthen the System as a whole stand to benefit each canal community along its length.

Just as this plan was developed through broad public engagement and a consensus-building process, it is important to continue this genuine engagement with the surrounding municipalities and engaged local partners in the plan's implementation. This community engagement should be conducted as a collaborative effort between the individual municipalities, the CRC, NYSCC, and other key partners.

# Appendix

1

Sunset at Lock E20

## Glossary

Action	'Actions' identified in this plan refer to possible programs, projects, or other initiatives that may be undertaken in pursuit of implementing the plan's vision.	Downtown Revitalization Initiative (DRI)	The 'Downtown Re development gran of State that aims t
Aquatic Invasive Species (AIS)	'Aquatic Invasive Species' or 'AIS' refer to plants, animals, and other organisms that have evolved to live primarily in water that are non-native to the waterways of the canals or the surrounding watershed.		that offer a high qu job creation, and e communities are lo
Barge Canal	'Barge Canal' or 'Barge Canal System' refer to the enlarged system of Canals constructed from 1903 – 1918 that superseded the previous individual Canals. For the purposes of this plan the terms are identical in meaning to the Canal System defined below.	Empire State Trail (EST)	The 'Empire State trails opened in 20 the Canalway Trails System.
Canal Lands	'Canal Lands' refer to all lands and waters forming part of the Canal System, the title for which was originally vested in the State, acquired by the State, or which may in the future be acquired by the State for canal purposes.	Erie Canalway National Heritage Corridor (ECNHC)	The 'Erie Canalway National Heritage help preserve and communities along
Canal Recreationway Commission (CRC)	The 'Canal Recreationway Commission' or 'CRC' refers to the advisory body constituted to develop, maintain, and periodically revise a statewide Canal Recreationway Plan and to advise and assist the New York State Canal Corporation and the New York Power Authority in carrying out its duties and obligations related to the Canal.	New York Power Authority (NYPA)	The 'New York Pow the state of New Yo subdivision of the s five of the public a
Canal System	Unless more specifically contextualized, the 'Canal System,' the 'New York State Canal System,' 'NYS Canal System,' or simply the 'System' all refer to the lands, waters, trails, buildings, and other assets that enable or support the functioning of the recreationway.	New York State Canal Corporation (NYSCC)	The 'New York Stat Corporation' all ref chapter seven hun and continued and authority of the sta
Canals	Unless more specifically contextualized, 'Canals' refer to the network of navigable waterways, feeder canals, and reservoirs connected or related to the Erie, Oswego, Cayuga-Seneca, and Champlain canals.	Reimagine the Canals (RTC)	thousand five-b of 'Reimagine the Car Canal system could Reimagine the Car
Canalside	'Canalside' is used to describe structures, lands, or any space located directly adjacent to or along the Canals; or programs, events, or any activity taking place in these spaces.	Strategy	Task Force, and se 'Strategies' identifi
Canalway Trail	The 'Canalway Trail(s)' refer to a subset of multi-use recreational trails in the Empire State Trail (EST) network that run alongside or near to the waterways of the Canal System.		decision making in

Revitalization Initiative' or 'DRI' refers to an economic ant program administered by the New York State Department is to transform downtown neighborhoods into vibrant centers quality of life and are magnets for redevelopment, business, d economic and housing diversity. Many previously awarded e located along the Canals.

te Trail' or 'EST' refers to a network of multi-use recreational 2020 that span the state of New York. This network includes ails that run along or near to the waterways of the Canal

vay National Heritage Corridor' or 'ECNHC' refers to the e Area established by Congress in December 2000 to nd interpret New York State's historic canal system and the ang its banks.

Power Authority' or 'NYPA' refers to the power authority of / York, a body corporate and politic constituting a political he state created and constituted pursuant to title one of article c authorities law.

State Canal Corporation,' 'NYSCC,' or simply the 'Canal refer to a public benefit corporation created pursuant to undred sixty-six of the laws of nineteen hundred ninety-two nd reconstituted as a subsidiary corporation of the power state of New York pursuant to subdivision one of section one of the public authorities law.

Canals' or 'RTC' was an initiative to examine how the Erie ould be reimagined for the 21st century, which resulted in a Canals Competition, the creation of a Reimagine the Canals several capital projects across the Canal System.

tified in this plan refer to high-level goals that may guide in pursuit of implementing the plan's vision.

## Legal Requirements of the Canal Recreationway Plan

Per Canal Law Chapter 5, Article 13-A, Section-138-C, the Canal Recreationway Plan is required to address and explicitly advise on certain aspects of the system. The table below outlines those requirements and where they are met in this plan:

Requirement	Compliance
The plan shall include, but not be limited to:	
<ul> <li>a) criteria for uses of the canal system which will effectuate the goal and objective of developing the canal into a recreationway system;</li> </ul>	This plan articulates a vision for the Canal System focused primarily on recreation (p.29) that furthers the required goals of developing the canal into a recreationway system.
<ul> <li>b) provisions for fostering a canal system characterized by clusters of development connected by stretches of undeveloped open space in areas between cities, villages and hamlets which will be conducive to the preservation of waterfowl, fish and wildlife habitats;</li> </ul>	Guiding principle 7 (Cultivate) and related strategies and actions address issues of wildlife habitat preservation. Guiding principle 5 (Catalyze) and related strategies and actions address issues of appropriate Canalside development.
<ul> <li>c) provisions for the consideration of environmental resources, including lands which possess significance for wildlife management, recreation or natural resource protection purposes and significant freshwater wetlands;</li> </ul>	Guiding principle 7 (Cultivate) and related strategies and actions address issues of wildlife management and natural resource protection.
d) provisions which protect the public interest in such lands and waters for purposes of commerce, navigation, fishing, hunting, bathing, recreation and access to the lands and waters of the state, and otherwise encourage increased public access to the canal through the establishment of parks, scenic by ways and recreational trails on the canal system. Such provisions shall ensure the public safety;	Guiding principle 2 (Convene) and related strategies and actions address issues of public access. Guiding principle 3 (Connect) and related strategies and actions address issues of protecting navigation and the man- agement or establishment of recreational trails.
e) provisions to protect agricultural uses of canal land and waters;	Guiding principle 7 (Cultivate) and related strategies and actions address issues of agricultural use.
<li>f) provisions for appropriate development of businesses in appropriate locations which will support outdoor recreation activities;</li>	Guiding principle 5 (Catalyze) and related strategies and actions address issues of local economic development.
<ul> <li>g) provisions which give guidance to the authority with respect to managing water levels in reservoirs to provide water to the canal system and retain water for recreational purposes;</li> </ul>	Guiding principle 7 (Cultivate) and related strategies and actions address issues of water management.
<ul> <li>h) provisions to protect commercial shipping interests on the canal system;</li> </ul>	Guiding principle 5 (Catalyze) and related strategies and actions address issues of industry and commercial shipping.
i) provisions for the consideration of historic buildings, sites and districts.	Guiding principle 4 (Commemorate) and related strategies and actions address issues of historic preservation and interpretation

## Acknowledgements

This plan was informed by many conversations, questions, and stories shared by members of the public, as well as by insightful advice and ideas from NYSCC and NYPA staff. Thank you to all of those who attended public workshops, submitted responses to the online survey, and took the planning team on site tours.

## **Canal Recreationway Commissioners:**

Doug Cole Fra Putorti Kal Wysokowski Ken DeRoller Michele L. Vennard Natalie Stetson Stephen lachetta

## New York State Canal Corporation & New York Power Authority Staff:

Abby Heinl Alissa Ouderkirk Ambrose Barbuto Andy Marzo Angelyn Chandler Anthony Germano Brendan Simon Brian Platt Brian Stratton Cari Ficken Darby Racey Dave Boshart **David Mellen** Jacqueline Schillinger James Candiloro Jaime DeLuca Jesse Scott Joell Murney-Karsten John McKee Joseph Moloughney Joseph Savoie Junamin Hou Justine Heilner

Kaela Mainsah Katherine Littrell Ken Kemp Kevin Mainello Liz McAndrew Mark Turner Maureen Golan Michael Coon Michael Sullivan Nancy Harvey Nicholas Melson Nick Hanson Paul Glesta Paul Guarnieri Philip Kelly Pranav Bhardwaj **Rebecca Hughes** Ryan Mawr Sasha DelPeral Shane Mahar Shelby Moore Stephanie Rockwell Todd Lippa William Sweitzer

This effort was also guided by a series of focus groups, with participants from local, state, and national organizations. Thank you to all of those who contributed their expertise and provided invaluable advice that shaped the strategies and recommendations in this plan.

## **Focus Group Participants:**

Amanda Bearcroft NYS Department of State

Brad Utter New York State Museum

Courtney Spearman National Endowment for the Arts

David Kinyon Canal NY Marketing & Business Alliance

Gregory Delaney University at Buffalo

Irene Holak NYS Department of State

Molly Reilly NYS Office of Parks, Recreation and Historic Preservation

Patsy McEntee U.S. Forest Service

Paul Beyer NYS Department of State

Kim Russo America's Great Loop Cruisers' Association

Kim Vorchheimer Ess-Kay Yards Marina

Scott Croft Boat Owners Association of The United States

Tom Klein Waterfront Alliance

Valeria Ivan NYS Department of State



December 2024