



FEASIBILITY STUDY

PATROON CREEK GREENWAY

AUGUST 2022

ACKNOWLEDGMENTS

The Project Advisory and Citizen Advisory Committees (PAC and CAC, respectively) played an important role throughout the duration of this project. Committee members donated their time and knowledge to provide support, insight, and guidance — all of which made this project possible. The PAC and CAC consisted of individuals and staff from the following municipal and community organizations:

PROJECT ADVISORY COMMITTEE (PAC)

- City of Albany, Dept. of Engineering
- City of Albany, Dept. of Fire & Emergency Services
- City of Albany, Dept. of General Services
- City of Albany, Dept. of Planning & Development
- City of Albany, Dept. of Police, Division of Traffic Engineering
- City of Albany, Dept. of Recreation
- City of Albany, Dept. of Water
- City of Albany, Office of Special Events
- Albany County Water Purification District
- Capital District Transportation Authority (CDTA)
- Capital District Regional Planning Commission (CDRPC)
- Capital District Transportation Committee (CDTC)
- NYS Department of Transportation, Region 1

CITIZEN ADVISORY COMMITTEE (CAC)

- Arbor Hill Neighborhood Association
- West Hill Neighborhood Association
- Sheridan Hollow Neighborhood Association
- Ten Broeck Triangle Neighborhood Association
- Upper Washington Neighborhood Association
- Albany Public Library
- Albany School District
- University at Albany (SUNY), Facilities Management
- Common Councils, Ward 3, 5, 11, & 12
- Downtown BID
- Albany Bicycle Coalition
- Albany Pine Bush Preserve
- Friends of Tivoli

This plan was prepared by Bergmann Associates with funding and support from the Capital District Transportation Committee (CDTC). For more information about this plan, contact CDTC at: One Park Place, Albany, NY 12205 | (518)458-2161 | www.cdtcmpo.org.

This report was funded in part through grant[s] from the Federal Highway Administration [and Federal Transit Administration], U.S. Department of Transportation. The views and opinions of the authors [or agency] expressed herein do not necessarily state or reflect those of the U. S. Department of Transportation. The illustrations presented in this report are conceptual and may need to be investigated in more detail before any funding commitment is made.

CONTENTS

CHAPTER | INTRODUCTION 5

PURPOSE + GOALS 6

ONE CREEK, THREE PRESERVES 8

CHAPTER 2 | RELATED PLANS + POLICIES 13

CHAPTER 3 | EXISTING CONDITIONS..... 23

SOCIO-DEMOGRAPHIC PROFILE 24

LAND DEVELOPMENT PATTERNS 32

DESTINATIONS + SERVICES..... 40

TRANSPORTATION SYSTEMS..... 46

UTILITY INFRASTRUCTURE..... 60

NATURAL SYSTEMS 62

CHAPTER 4 | PUBLIC ENGAGEMENT..... 67

CHAPTER 5 | ALIGNMENT ANALYSIS 75

INTRODUCTION..... 76

FULLER ROAD..... 82

CA-1..... 84

CENTRAL AVE. 86

CR-1 88

EVERETT BRIDGE..... 90

IN-1..... 92

IN-2..... 94

IN-3..... 96

TIVOLI PRESERVE 98

NE-1 100

NE-2..... 102

NE-3..... 104

COST ESTIMATE ASSUMPTIONS..... 106

CHAPTER 5 | RECOMMENDATIONS 109

RECOMMENDED GREENWAY ALIGNMENT + FACILITY TYPES..... 110

NEIGHBORHOOD CONNECTIONS 114

TRAILHEADS, ACCESS POINTS + INTERPRETIVE STOPS 118

PLACEMAKING OPPORTUNITIES 124

WAYFINDING 132

NATIVE LANDSCAPES..... 136

CHAPTER 7 | IMPLEMENTATION 143

OVERVIEW 144

PHASING..... 146

POTENTIAL FUNDING SOURCES 152

APPENDIX A | Federal Environmental Justice Analysis

APPENDIX B | Railroad Analysis

APPENDIX C | Public Survey Results



PATROON CREEK GREENWAY FEASIBILITY STUDY
WE WANT TO HEAR FROM YOU!

Using the stickers provided, please place a sticker in the box under the activities YOU would like to see incorporated along the greenway.

ARTISTIC LIGHTING



CHAPTER 1

INTRODUCTION

This chapter describes the Patroon Creek Greenway Feasibility Study's purpose, goals, and study area. It also provides a brief history of Patroon Creek and introduces the three nature preserves that the future greenway will connect: Albany Pine Bush Preserve, Tivoli Lake Preserve, and the Hudson Riverfront Corning Preserve.

CHAPTER 1: INTRODUCTION

PURPOSE + GOALS

The purpose of the Patroon Creek Greenway Feasibility Study is to identify a feasible, multi-use trail connection between the Albany Pine Bush Preserve and the Hudson River waterfront. This approximately nine mile long trail corridor will provide a much needed east-west connection for cyclists, pedestrians, and other forms of active transportation in the City of Albany and the Capital District Region.

The Patroon Creek Greenway Feasibility Study is being conducted in partnership with the Capital District Transportation Committee (CDTC) and the City of Albany's Department of Planning and Development, and it is funded through CDTC's Unified Planning Work Program Task 4.68, Capital District Trails Plan Implementation.

This study builds on the 2004 Patroon Creek Greenway Linkage Study, which identified an initial route for the greenway and roughly followed the Interstate 90 (I-90) corridor. Working closely with the local community, stakeholders, and local and state agencies, this project builds on the recommendations in the 2004 Linkage Study as well as recent local and regional planning efforts to propose a trail corridor connecting communities to the Hudson River waterfront, Tivoli Lake Preserve, and Six Mile Waterworks Park / Albany Pine Bush Preserve.

Study Area

The study area for the Patroon Creek Greenway Feasibility Study is approximately 5,400 acres in size and includes all areas within roughly one-half mile of the CSX railroad corridor and Patroon Creek. The study area also spans multiple municipalities, including: the City of Albany, the Town of Colonie, and a small portion of the Town of Guilderland.

The eastern extent of the study area is defined by the Hudson River, and the western extent is defined by Interstate 87 (I-87). The northern boundary is shaped by major road corridors including Albany Shaker Road, Everett Road, Sand Creek Road, Osborne Road, and Central Avenue. The southern boundary is also delineated by major road corridors including: Clinton Avenue, Main Avenue, Washington Avenue, NY-85, and Western Avenue.

The study area is home to a diverse mix of land uses, services, and destinations. The eastern portion of the study area is comprised of the Arbor Hill and West Hill neighborhoods, several parks, and the north end of downtown Albany. The western portion of the study area is dominated by the UAlbany and Harriman State campuses, which are major employment and educational destinations. The central portion of the study area includes the Corporate Woods campus, a diversity of commercial and industrial uses along paralleling Central Avenue, and the Upper Washington Avenue neighborhood.

PROJECT GOALS

Provide Equitable Access

by creating safe, accessible linkages between the Greenway and neighborhoods, with a focus on serving historically marginalized communities

Increase Connectivity

by using the Greenway to link recreational, economic, educational, and community services and destinations

Enhance Quality of Life

for residents by improving the City's attractiveness, expanding public space, and increasing mobility options

Improve Public Health

by expanding opportunities for active transportation and recreation, increasing access to nature, and improving air quality through the reduction vehicle miles traveled and greenhouse gas emissions

PATROON CREEK GREENWAY: STUDY AREA



ONE CREEK, THREE PRESERVES

Patroon Creek is roughly six miles in length and passes through three nature preserves, linking the Albany Pine Bush at its source, the Tivoli Lake Preserve where the creek was daylighted in 2019, and the Corning Preserve at its mouth on the Hudson River. In linking these three preserves, the Patroon Creek Greenway will increase access to these natural resources while also providing greater access to regional destinations through the trail's connections to other trail systems, bicycle infrastructure, and destinations.

Patroon Creek

EARLY HISTORY

Patroon Creek is part of a tributary system serving the Hudson River. The Native stewards* of these lands were the Mohicans, “The people of the waters that are never still” and the Haudenosaunee (hoe-dee-no-SHOW-nee), “people who build a house”. When first discovered by European settlers, the creek was referred to as Bloomaert’s Kill (a Dutch word for stream) and shortly thereafter was used as a power source for several saw mills. The first grist and saw mills were established in the mid-1600s.

In 1844, the railroad was rerouted to the Tivoli Hollow Line, which ran along the Patroon Creek and, in 1845, the Albany Waterworks Company purchased a portion of the Patroon Creek for use as its water supply. In 1850, the company was replaced by a municipal water supply and the three creeks that met at the head of Patroon Creek were dammed to form Rensselaer Lake.

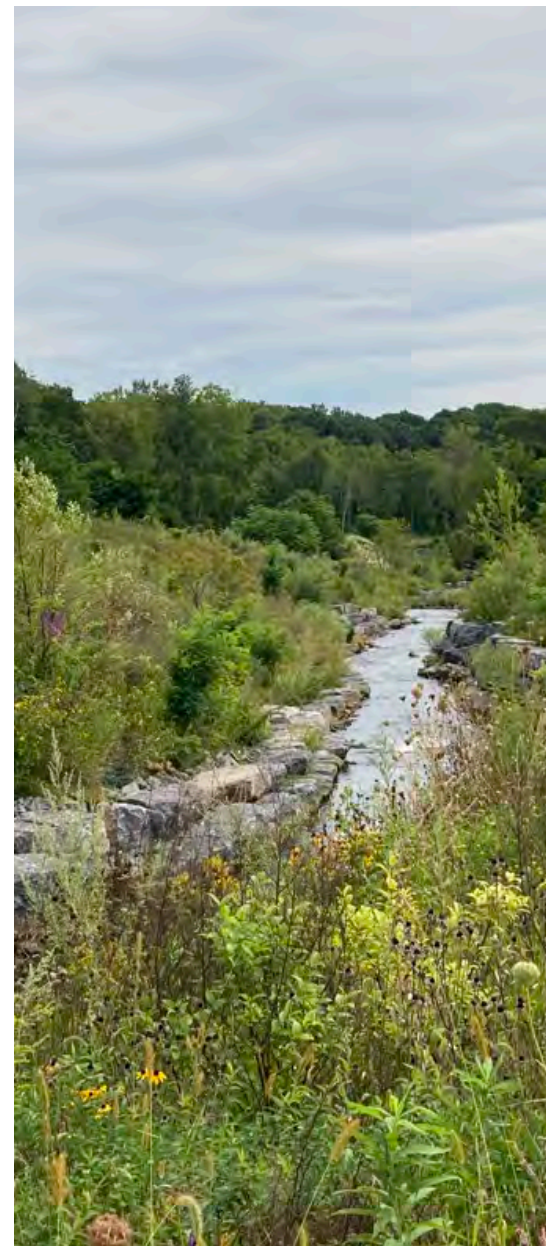
Several additional reservoirs, including the Lower and Upper Tivoli Lakes, were formed along the creek and supplied parts of Albany with water until the late 1800s when the Hudson River became the primary source of the city’s water.

INDUSTRIAL ABUSE

From the early 1900s, the Patroon Creek served mainly industrial purposes, including as a supply for the West Albany Rail Yard and as a waterway carrying pollution from several industries along its tributaries, including the Mercury Refining Company and National Lead Industries. In 1962, it was determined that Patroon Creek was so contaminated that it had to be culverted. In 1983, it was declared a Superfund site, and in 1993, it was declared one of the State’s 10 worst polluted streams.

RESTORATION

After a \$4 million cleanup supervised by the Environmental Protection Agency (EPA) and other cleanup efforts, the stream regained health, and by 1998, crawfish, mayfly and minnows had been found, a sign that indicates much higher water quality. In 2016, the Albany Water Board pursued daylighting a portion of Patroon Creek and, in 2019, a 1500 foot stretch of Patroon Creek that runs through the Tivoli Lake Preserve was daylighted as a result of a \$2.1 million grant from the NYS Department of Environmental Conservation (NYS DEC) and the NYS Environmental Facilities Corporation (NYS EFC).



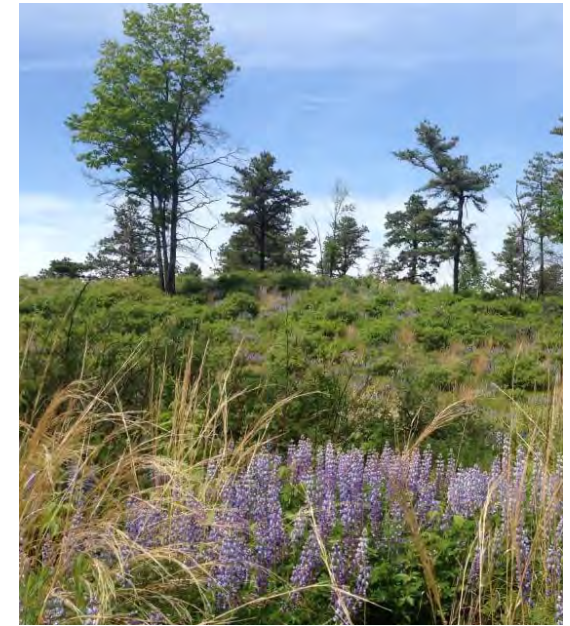
▲ Patroon Creek in Tivoli Lake Preserve

As a direct result of the daylighting, this stretch of Patroon Creek helps reduce flooding, increases water quality through aeration, and creates important habitat for aquatic life and pollinator species. The once piped and polluted waterway now serves as a unique natural resource for the surrounding community. The design includes a series of pools, riffles, and small waterfalls that create important fish habitat, add to the aeration of the stream, and improve the mental health benefits of the stream by adding the sounds and reflective play of the water.

The Creek has much higher flow during wet weather than dry water; and any overflow during wet weather is diverted to Tivoli Lake to help prevent localized flooding. This also benefits the lake by adding to its circulation and cooling.

Albany Pine Bush

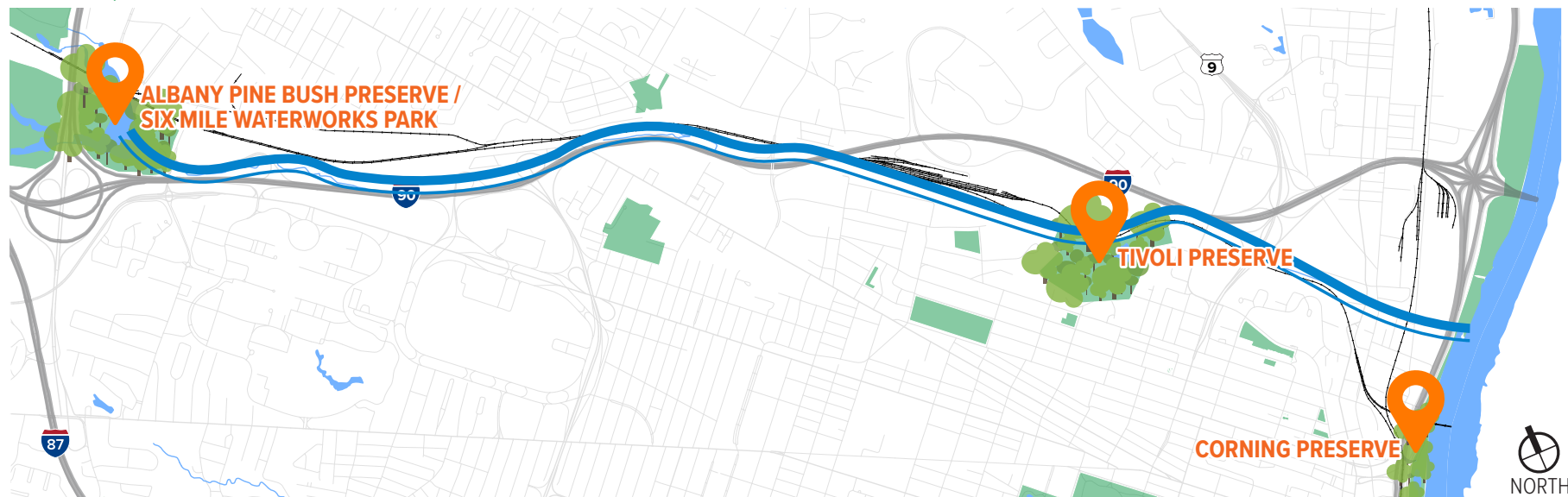
Known for its gently rolling sand-dunes and home to one of the best remaining pitch pine-scrub oak barrens in the world, the Albany Pine Bush Preserve is home to a unique variety of rare plants and animals, including the federally endangered Karner blue butterfly. This 3,350 acre preserve offers visitors an experience rich in geological, natural and cultural history and has many trails and activities that are free and open to the public year round. The Albany Pine Bush Discovery Center provides visitors with interactive exhibits and activities to explore the preserve's geologic and cultural significance, examine the plants and animals that live in this landscape, study preserve management principles, and consider human impacts on this sensitive landscape.



▲ Albany Pinebush Preserve

Image credit: Albany Pine Bush Preserve Commission

One Creek, Three Preserves

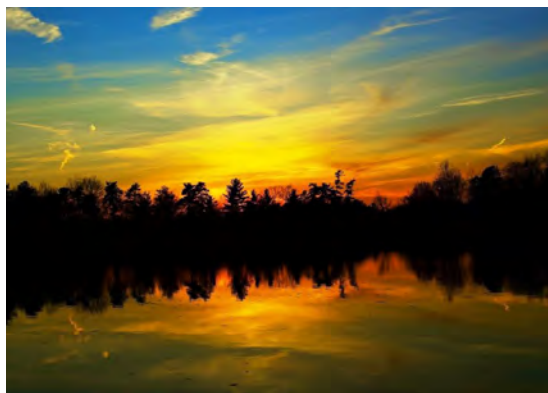


ONE CREEK, THREE PRESERVES (CONT.)

6-MILE WATERWORKS PARK

Six Mile Waterworks Park is in the eastern portion of the Albany Pine Bush Preserve and offers walking trails, a playground, picnic tables with grills, and a lake. The 57 acre park contains a 6-mile multi-use trail and connects to other regional trails as well.

Rensselaer Lake is the headwaters of Patroon Creek and is stocked annually with approximately 2,000 rainbow trout each year, offering prime fishing opportunities. According to Save the Pine Bush, this area was one of the first tracts, if not the first tract, in the state to be set aside for forest and water conservation. The dam and reservoir were completed in 1852 and served as the sole water source for Albany until 1875. The dam was located approximately six miles from the Albany City Hall when it was constructed, hence the original name of the lake, Six Mile Waterworks.



▲ **Rensselaer Lake at 6-Mile Waterworks Park**
Image credit: Albany Pine Bush Preserve Commission

Tivoli Lake Preserve

Tivoli Lake Preserve is the largest rural preserve in the City of Albany and one of the largest urban parks in the State. The 80-acre preserve was established in 1975 and is home to many natural and community attractions including Tivoli Lake, a daylighted segment of Patroon Creek, riparian wetlands, upland forests and meadows, walking and biking trails, community gardens and outdoor educational facilities.

BROTHER YUSUF BURGESS AND THE FRIENDS OF TIVOLI LAKE PRESERVE AND FARM

Brother Yusuf called himself a “closet environmentalist” in the inner city. He founded Youth Ed-Venture and Nature Network, to introduce Albany youth to the Adirondacks and the Catskills – and to the Tivoli Lake Preserve. His favorite slogan was “No Child Left Inside.”

Brother Yusuf founded Friends of Tivoli Lake, which played a huge role in the vision and progress for the Preserve today. He taught local youth how to fish, forage, care for, and enjoy the environment. Tragically, Brother Yusuf died suddenly in December 2014. A trail and farm have been named in his honor and his legacy continues at Tivoli Lake Preserve and Farm.

Friends of Tivoli is a non-profit organization and growing community of individuals whose mission it is to be a steward of the Preserve and facilitate conservation, environmental education, and outdoor recreation. Their activities seek to empower individuals and families to enjoy the natural world, promoting healthier and more peaceful communities.

TIVOLI LAKE PRESERVE: A BRIEF HISTORY

Early Years

1850 - Albany purchases land and dams Patroon Creek to create a reservoir.

Early 1900s - The Preserve becomes a dumping ground for trash and polluted water runs red from slaughterhouse discharge.

1957 - Albany revitalizes area and creates “Tivoli Lakes Nature Study Sanctuary,” where students learn gardening, biology, art, and homemaking.

1974 - The Preserve suffers from neglect and The Times Union writes a mock “obituary.” In June, 1986, another article notes that “people simply drive in, dump their garbage, and leave.”

Hope Again

1990s - An environmental group successfully persuaded the state to close a soot-emitting power plant about a half-mile from Tivoli; part of the large settlement goes to revitalizing the Preserve.

Early 2000s - Rustic trails are formed and neighborhood groups engage. The environmental group goes out of business and another period of decline sets in.

2014 - Brother Yusuf founds Friends of Tivoli Lake and works with Albany to complete a Visioning Plan.

2019 - Tivoli Preserve Community Farm joins Friends of Tivoli Lake to form Friends of Tivoli Lake Preserve and Farm. Patroon Creek is daylighted in Tivoli Lake Preserve.

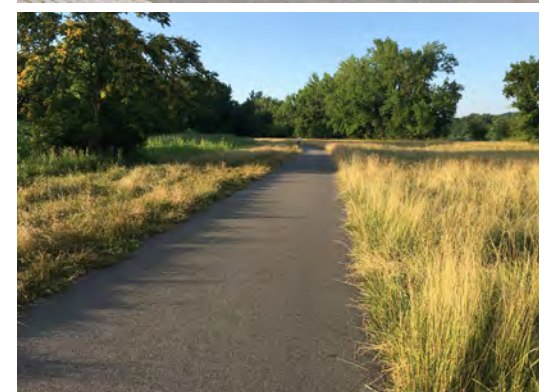
Their work is rooted in conservation, education, and recreation. Programming ranges from a sheep-grazing project that helps with invasive species management to community farms that teach farming, to nature walks and fiber arts lessons.

Corning Riverfront Park

Originally called Corning Preserve, Corning Riverfront Park provides access to the Hudson River and is home to the Jennings Landing Amphitheater (host to Albany's Alive at Five concert series and the Albany Riverfront Jazz Festival). It also contains a public boat launch and is home to the Albany Rowing Center. There the waterfront can be enjoyed by kayak, on foot or by bicycle. The preserve also provides access to the Mohawk-Hudson Bike-Hike Trail, which is now part of the Empire State Trail System and features a playground, benches and picnic tables. Major improvements underway include a new two-way bicycle path and kayak access to the two tidal ponds.

THE ALBANY SKYWAY

The Albany Skyway is an elevated park under I-787 that transforms a former interstate ramp into a bicycle and pedestrian park and provides a direct connection between downtown Albany, the Corning Riverfront Park, and the Hudson River. It recently opened to the public in April 2022.



▲ Counterclockwise from Top Left: 1. Brother Yusuf Burgess (image credit: Adirondack Almanac); 2. Tivoli Lake Preserve (image credit: City of Albany); 3. Friends of Tivoli Preserve and Farm use wool produced by the sheep at Tivoli Lake Preserve as part of their fiber arts program (image credit: Friends of Tivoli Lake Preserve); 4. Corning Preserve (image credit: NYS Empire State Trail); 5. Corning Preserve Trail and Mohawk Hudson Bike Hike Trail (image credit: NYS Empire State Trail); 6. Rendering of the Albany Skyway (image credit: City of Albany).