



DELAWARE  
RARITAN CANAL

**2021** DELAWARE AND RARITAN  
CANAL COMMISSION  
**ANNUAL REPORT**



On the cover: Cast iron sign, alongside the Delaware and Raritan Canal in Kingston, dates to the mid-20th century, before the Canal Commission and the canal state park were established in 1974.

*Photo: Erica Vavrence*

On this page: Photo of the cast iron sign appeared in author Elizabeth Menzies' book "Millstone Valley," published in 1969.

# TABLE OF CONTENTS

- 3 From the Executive Director's Desk**
- 4 Message from the Vice-Chairman**
- 6 About the Commission**
- 7 The Canal ... Through the Years**
- 9 Commissioners**
- 13 Staff**
- 16 Highlights of 2021**
- 32 Regulatory Program**
- 34 Finances 2021**
- 37 Approved Individual Projects 2021**
- 42 Acknowledgments**

This annual report was prepared in compliance with the provisions of N.J.S.A. 13:13A-11(i), which directs that "... each year, the Commission shall make an annual report of its activities for the preceding calendar year to the Governor and to the Legislature." This report provides a complete statement of the Commission's finances and covers its operations for 2021.



John Hutchison  
Photo: Erica Varence

## From the Executive Director's Desk

The Delaware and Raritan Canal Commission made significant progress on many key issues during 2021 despite various constraints imposed by the COVID-19 pandemic. I am pleased to report that, throughout the past year, the Commission's staff fulfilled its responsibilities and advanced vital projects and process improvements that will ensure our critical mission and operations continue without interruption.

Among the notable milestones reached in 2021 was the Commission's collaboration with the Edward J. Bloustein School of Planning and Public Policy at Rutgers University to undertake the first meaningful reappraisal of the Commission's Master Plan in more than three decades.

The staff were also able to make regulatory documents more accessible and transparent to the communities the Commission serves, embracing and leveraging technology in new ways.

Finally, the Commission successfully partnered with our colleagues in the New Jersey Department of Environmental Protection and the New Jersey Water Supply Authority to develop and implement much-needed improvements to the Delaware and Raritan Canal State Park that will enhance the extraordinary environmental, recreational and historic resources of this remarkable and much-loved part of New Jersey.

I hope you enjoy learning about these and many other achievements in the following pages, and I look forward to sharing additional accomplishments in the year ahead.

Sincerely,

John Hutchison

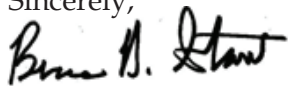
# Message from the Vice-Chairman

It is my pleasure to present to you the Delaware and Raritan Canal Commission's 2021 Annual Report. The Commission is charged with the authority to regulate development in and around the Delaware and Raritan Canal State Park with the objective of preserving the state park's unique recreational, historic and ecological value to all New Jerseyans and protecting the canal as a source of drinking water for more than one million people in central New Jersey.

The Delaware and Raritan Canal State Park's multiuse trail is 70 miles long and runs through four counties. One of New Jersey's most treasured resources, the state park is among the most frequently visited and a vital source of recreation for hikers, bikers, bird watchers and other outdoor enthusiasts.

The Commission is honored to be charged as stewards of this invaluable resource, and we are pleased to share the details of our 2021 work in the pages that follow.

Sincerely,



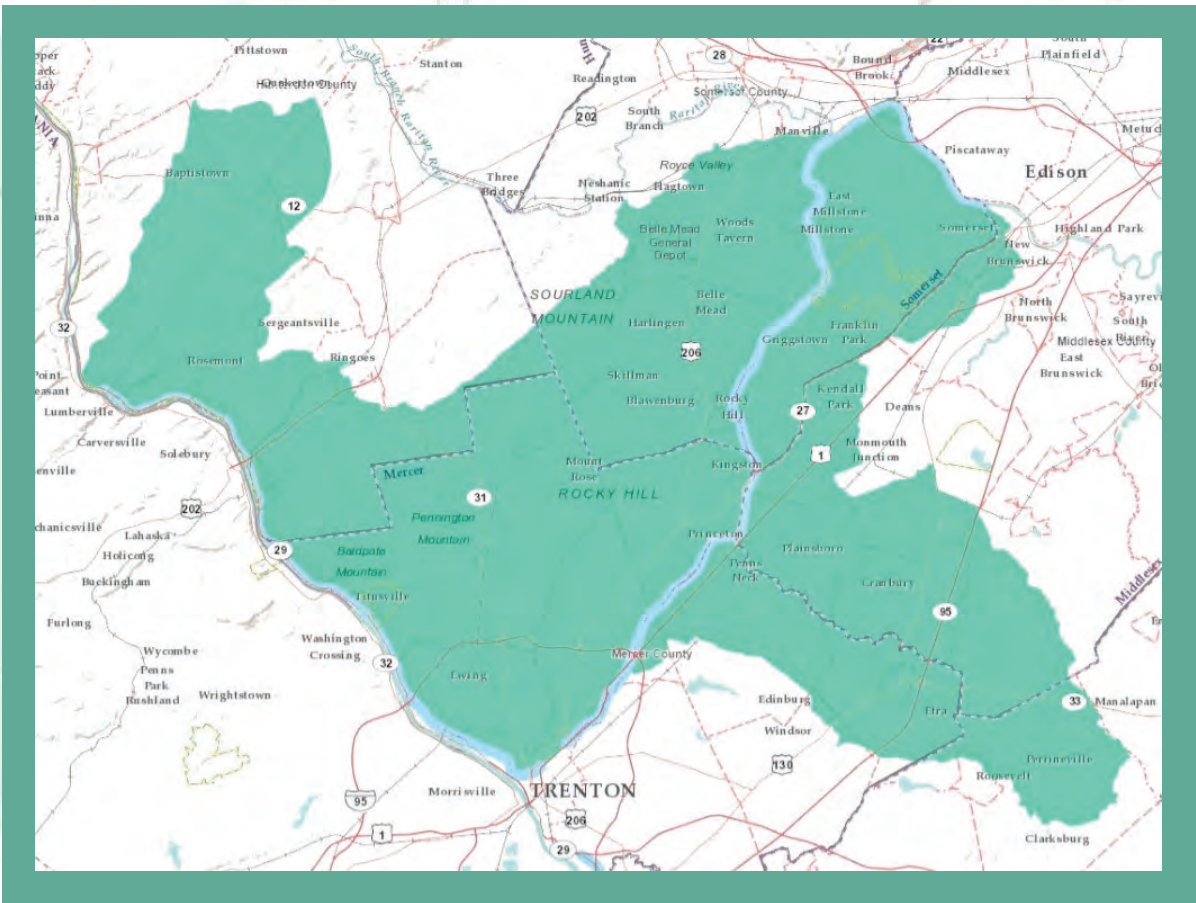
Bruce D. Stout, Ph.D.



*Photo: Courtesy of Bruce D. Stout*



**The Canal Commission Review Zones comprise 5 counties and 34 municipalities.**



**Hunterdon County**

- Delaware
- East Amwell
- Franklin
- Kingwood
- Lambertville
- Raritan
- Stockton
- West Amwell

**Mercer County**

- East Windsor
- Ewing
- Hamilton
- Hightstown
- Hopewell Borough
- Hopewell Township
- Lawrence
- Pennington
- Princeton
- Robbinsville
- Trenton
- West Windsor

**Middlesex County**

- Cranbury
- Monroe
- New Brunswick
- North Brunswick
- Plainsboro
- South Brunswick

**Monmouth County**

- Millstone Township

**Somerset County**

- Franklin
- Hillsborough
- Manville
- Millstone Borough
- Montgomery
- Rocky Hill
- South Bound Brook

# ABOUT THE COMMISSION



Canal and multiuse trail, Lawrence Township.  
*Photo: Erica Vavrence*

## THE LEGISLATURE AUTHORIZED THE COMMISSION TO PERFORM THREE MAJOR DUTIES:

- Review and approve, reject or modify any action by the State in the Canal Park, or any permit for action in the Delaware and Raritan Canal State Park
- Undertake planning for the development of the park
- Prepare and administer a land use regulatory program in designated Review Zones throughout a 450-square-mile watershed around the canal that will protect the park from the harmful impacts of new development in central New Jersey

The Delaware and Raritan Canal Commission, a state agency created by law in 1974, is responsible for preparing, adopting and implementing a master plan for the physical development of the Delaware and Raritan Canal State Park; reviewing state and local actions that impact on the park to ensure that these actions conform as nearly as possible to the Commission's master plan; and coordinating and supporting activities by citizens' groups to promote and preserve the park.

The Commission works closely with the New Jersey Department of Environmental Protection, Division of Parks and Forestry, State Park Service, which owns and manages the Delaware and Raritan Canal as a state park.

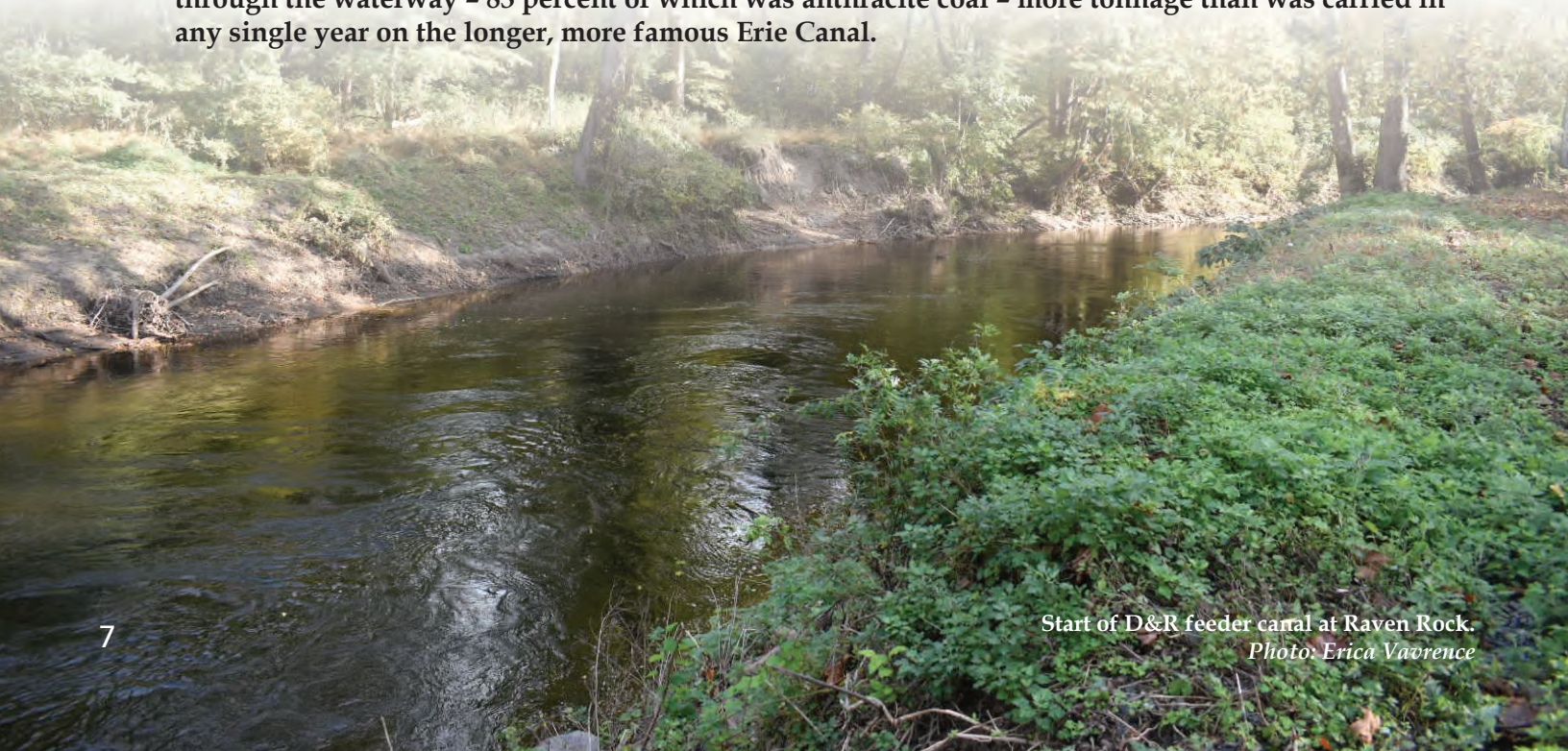
The Commission also coordinates its activities with the New Jersey Water Supply Authority, which operates and maintains the vitally important water transmission complex elements of the canal, providing up to 100 million gallons of drinking water daily for 1 million people in central New Jersey.

Together, the three agencies ensure that the environmental, recreational, historic and water supply resources of the Delaware and Raritan Canal are protected and preserved for future generations of New Jerseyans.



# THE CANAL ... THROUGH THE YEARS

- 1830:** Legislation enacted on the same day to two competing interests for the right to construct two different forms of transportation through central New Jersey: the Delaware & Raritan Canal Company and the Camden and Amboy Railroad and Transportation Company. On February 4, 1830, ground is broken on the Delaware and Raritan Canal under the direction of Canvass White, who served as engineer to a number of canals throughout the northeastern U.S.
- 1831:** The New Jersey Legislature passes the so-called "Marriage Act," enabling the Delaware & Raritan Canal Company and the Camden & Amboy Railroad, which subsequently became the "Joint Companies," to pool their revenues and expenses, consolidate their stock and complete both the canal and railroad. The legislation creates a powerful monopoly. In return, the State of New Jersey received 2,000 shares of company stock and a guaranteed source of annual revenue for state government.
- 1832:** A cholera epidemic sweeps through the U.S. Hundreds of canal workers, mostly Irish immigrants, die and are buried in local cemeteries, along the banks of the canal and in graves at Bulls Island and Ten Mile Run.
- 1834:** Completed at a cost of \$2.8 million dollars, the Delaware and Raritan Canal opens for through navigation in May.
- 1847:** A connection is established between the Delaware and Raritan Canal and the Delaware Division of the Pennsylvania Canal. Outlet locks were constructed at Lambertville, N.J., and New Hope, Pa., which were connected by means of a cable ferry across the Delaware River.
- 1850:** Construction begins on Belvidere & Delaware Railroad along the original feeder canal towpath, which is subsequently moved to the opposite (berm) side of the canal.
- 1851:** The main portion of the canal is dredged to a uniform depth of eight feet.
- 1853:** Locks on main canal are lengthened to 220 feet, and the banks are rippedraped to prevent erosion from steam-powered canal boats.
- 1861:** At the outbreak of the American Civil War, 14 Delaware and Raritan Canal steam transports carry 3,000 New Jersey troops and equipment south to assist in defending Washington, D.C.
- 1866:** The Delaware and Raritan Canal experiences peak year for freight; 2,857,233 tons were shipped through the waterway - 83 percent of which was anthracite coal - more tonnage than was carried in any single year on the longer, more famous Erie Canal.



Start of D&R feeder canal at Raven Rock.  
Photo: Erica Vavrence



- 1868:** A system of steam-powered winches and steam-activated valves and gates for all locks is installed to speed the passage of vessels.
- 1871:** The properties of the Joint Companies are leased to the Pennsylvania Railroad for a period of 999 years. A steady decline in freight traffic begins due to competition with the railroads.
- 1877:** Toll rates are reduced to combat competition from the railroads.
- 1893:** The main line of the Pennsylvania Railroad in New Jersey is expanded to four tracks. The Delaware and Raritan Canal posts a net operating loss for the first time; it never operates profitably again.
- 1902:** The Pennsylvania Railroad stone arch bridge is constructed over the canal and the Raritan River in New Brunswick. The construction of this first non-opening bridge over the canal limits the mast height of vessels operating in the canal to 50 feet.
- 1913:** The cable ferry connection between Pennsylvania's Delaware Canal and the Delaware and Raritan Canal at Lambertville is abandoned. The transportation of anthracite coal from Pennsylvania through the Delaware and Raritan Canal effectively ends.
- 1924:** The canal experiences its greatest annual dollar loss of \$383,471.
- 1929:** The canal experiences its peak year for pleasure boating, with 941 non-commercial vessels using the canal.
- 1931:** Only 41,801 tons of freight traffic are transported through the Delaware and Raritan Canal.
- 1932:** The canal closes in winter of 1932 but does not reopen in spring of 1933, and it is officially abandoned by the Pennsylvania Railroad.
- 1936:** The main canal in Trenton south of the juncture with the feeder was deeded to city and filled as part of a Works Progress Administration project. Part of filled area is eventually used for the construction of State Highway Route 129.
- 1937:** After failing to operate for three consecutive years, the United New Jersey Railroad and Canal Company and the Pennsylvania Railroad forfeit the Delaware and Raritan Canal to State of New Jersey pursuant to the terms of the original charter of the Joint Companies.
- 1944:** Construction begins to convert the Delaware and Raritan Canal to a water supply system. The canal's locks and wooden gates are removed, and many of the movable swing and lift bridges are replaced by fixed-span bridges.
- 1973:** The Delaware and Raritan Canal and 17 related structures are placed on the National Register of Historic Places.
- 1974:** Bipartisan legislation, spearheaded by Senator Raymond Bateman (R-Somerset) and Senator John A. Lynch Sr. (D-Middlesex), is enacted to create both the Delaware and Raritan Canal State Park and the Delaware and Raritan Canal Commission.

**Sources:** The Canal Society of New Jersey  
McKelvey, William J. (1975). *The Delaware & Raritan Canal: A Pictorial History*. (1st ed.). York, PA. Canal Press Incorporated.



# COMMISSIONERS

The Delaware and Raritan Canal Commission was created by the Delaware and Raritan Canal State Park Law of 1974, (N.J.S.A. 13:13A-1 et seq.), passed by the Legislature and signed into law by Governor Brendan T. Byrne. The law states that the Commission shall consist of nine members:

- *The Commissioner of the Department of Environmental Protection, who serves ex officio; or a designee of the Commissioner, who may lawfully vote in the Commissioner's absence; and*
- *Eight citizens of the State, appointed by the Governor, with the advice and consent of the Senate. No more than four commissioners shall be of the same political party. At least four of the commissioners shall be residents of Hunterdon, Mercer, Middlesex and Somerset counties. One commissioner must also be a mayor of a municipality appertaining to the Delaware and Raritan Canal State Park. Not more than one commissioner can be appointed from any one municipality.*

Commissioners serve for terms of five years from their appointment, and until a successor has been appointed and qualified. Commissioners are uncompensated for their service. The law directs that the Governor designate one of the Commissioners, other than the Commissioner of the Department of Environmental Protection, to serve as Chairman. The position of Chairman has been vacant since November 19, 2014, and the Commission Vice-Chairman has served as Acting Chairman since that time.

The Commission meets once a month to take formal action on development applications and to make recommendations to staff about planning efforts. Commissioners appoint the Executive Director who serves at the pleasure of the Commission. The Commissioners are routinely involved with staff on many key issues.

## **BRUCE D. STOUT, Ph.D., Vice-Chairman**

Bruce D. Stout, a resident of Delaware Township, Hunterdon County, has been a public member of the Delaware and Raritan Canal Commission since 2013. A nearly daily user of the Delaware and Raritan Canal State Park, Vice-Chairman Stout is Professor Emeritus at The College of New Jersey and has held numerous positions in government and academia. Former Chair of the Department of Criminology at The College of New Jersey, he taught at the Rutgers Graduate School of Criminal Justice and at Penn State-Abington. He also was Executive Director of the Violence Institute and the Behavioral Research and Training Institute at the University of Medicine and Dentistry of New Jersey, where he was a clinical assistant professor in the Department of Psychiatry at the Robert Wood Johnson Medical School.



In government, Vice-Chairman Stout has served as Deputy Chief of Policy and Planning for Governor Whitman, Executive Director of the Juvenile Justice Commission, Director of the Division of Child Behavioral Health Services and Research Director for the Juvenile Delinquency Commission. He also worked for the office of Governor Jon Corzine, where he chaired the re-entry working group that developed the re-entry component of the Governor's crime plan and where he worked with the Government Efficiency and Reform Commission on sentencing and corrections reform. He is also a board member of the National Center for Advocacy and Recovery. He earned his doctorate at Rutgers University.

**SHAWN M. LATOURETTE, *Commissioner of Environmental Protection, Ex Officio***

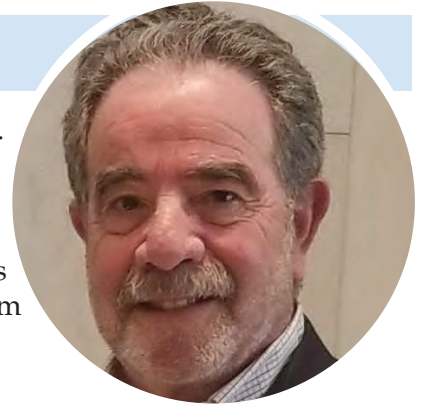
Appointed by Governor Philip D. Murphy, Shawn M. LaTourette became New Jersey's Commissioner of Environmental Protection on June 14, 2021. He is responsible for formulating statewide environmental policy while directing programs that protect public health and ensure the quality of New Jersey's air, land, water, and natural and historic resources. A lawyer and policymaker with more than 20 years of experience in environmental protection, Commissioner LaTourette began his career defending victims of toxic exposure. He also has served in executive roles and as a trusted adviser to government, community and non-profit organizations, and leaders in industry and infrastructure, while also litigating high-stakes lawsuits involving environmental, energy and public health concerns.



Born and raised in New Jersey, he graduated magna cum laude from Rutgers University and earned his law degree summa cum laude from Rutgers Law School, where he was the class salutatorian and received multiple environmental and governance awards, and published scholarship on environmental law, natural resource damage and climate issues.

**PHILLIP LUBITZ**

Phillip Lubitz has spent a lifetime living along the Delaware and Raritan Canal. He is a four-time mayor of Kingwood Township where he currently chairs the township Board of Adjustment and Housing Board. He has also served on Kingwood's Open Space Committee for the past 10 years. Commissioner Lubitz earned a Bachelor of Arts from George Washington University and a master's degree in social work, with a concentration in administration and policy, from Rutgers University.



*On the multiuse trail, Delaware Township.  
Photo: Darlene J. Yuhas*

## DOUGLAS H. PALMER

Douglas H. Palmer has served the public for nearly 30 years, first, legislatively as a Mercer County Freeholder in the 1980s, and then, in 1990, when he became the first African American elected to lead the capital city of Trenton as Mayor and completed his fifth term in June 2010. He has developed and implemented urban policy and community development initiatives, presiding over the U.S. Conference of Mayors, the New Jersey Urban Mayors and other national and statewide organizations dedicated to data-driven problem solving and best practices.



Commissioner Palmer's achievements as Mayor included reducing crime and unemployment, dramatically increasing homeownership for working families, maintaining a high tax collection rate and balanced budgets, establishing a civilian police director and bringing to the state capital the Marriott Hotel, an anchor of downtown revitalization. He also led efforts to obtain funding for the \$75 million expansion of the Trenton Train Station. He is the recipient of numerous awards and honors, and he has been involved extensively in philanthropy and related projects.

He is President and Chief Executive Officer of Douglas H. Palmer and Associates, LLC, which specializes in intergovernmental and corporate consulting. In addition, he is a managing principal in Arete Strategic Development, LLC, and co-founder of Arete Financial where he is the manager of its public sector and infrastructure programs. He also is a partner in DSW Solutions, a government relations firm.

A graduate of Hampton University where he earned a Bachelor of Science in Business Administration, he is married to Christiana Foglio-Palmer. They have a daughter, Laila.

## CARYL "CHRIS" SHOFFNER

Caryl "Chris" Shoffner is Mayor of South Bound Brook Borough and has served as a member of the Delaware and Raritan Canal Commission since 2020. Before becoming Mayor in 2016, she was a borough council member for nine years. Deeply committed to her community, she also has served as a volunteer with the South Bound Brook Fire Company for the past two decades.



Commissioner Shoffner earned a bachelor's degree in education from Marywood University in Scranton, Pa., and worked as a special education teacher.

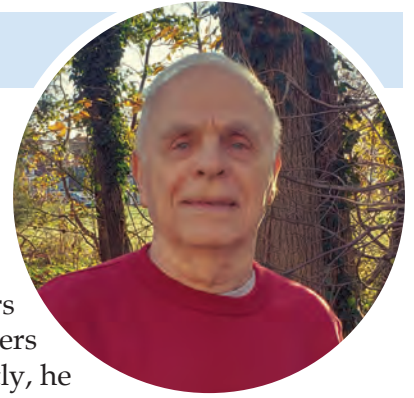
A member of the Teamsters Union for more than three decades, she was employed as a driver for Entenmann's for 24 years. She also worked as a driver for UPS for a decade and served as a shop steward.

## JOHN J. REISER

John Reiser is a resident of North Brunswick Township. He served as County Engineer for Middlesex County for 43 years until his retirement in 2013. Commissioner Reiser is a civil engineer with a bachelor's degree and master's degree in civil engineering from Rutgers University.

Upon graduation from Rutgers, he attended the U.S. Army Corps of Engineers School at Fort Belvoir, Virginia. In 1965, he left the Army Corps of Engineers Reserve as a Captain on the general staff of an Engineering Brigade. Subsequently, he worked for the County of Los Angeles and the City of New Brunswick. Before retiring, he was a licensed professional engineer in four states.

Commissioner Reiser has been married for 53 years to Sandra Wisniewski. They have two children, Marla, a 1991 graduate of Stanford University, and Matthew, who graduated from Georgetown University in 1993.



Suspension detail,  
Lumberville-Raven Rock Bridge.  
*Photo: Erica Vavrence*



# STAFF

John Hutchison, *Executive Director*  
M. Colleen Christie Maloney, *Review Zone Officer*  
Erica Vavrence, *Executive Assistant*  
Darlene J. Yuhas, *Communications Director*

## Engineers

Joseph Ruggeri, *P.E., CFM*  
Damian T. Friebel, *P.E*

The Delaware and Raritan Canal Commission is advised in its actions by its Executive Director, who serves as the chief administrative officer of the Commission. The Executive Director is an employee of the Department of Environmental Protection, but by law is appointed by and serves at the pleasure of the Commission. The Director oversees the operations of the professional staff based at their office at the historic Prallsville Mills complex in Stockton, New Jersey.

## JOHN HUTCHISON, *Executive Director*

John Hutchison was appointed the fourth Executive Director of the Delaware and Raritan Canal Commission on July 10, 2017. Prior to his appointment, he served as a Senior Policy Advisor to the Commissioner of Environmental Protection. From 2010 to 2011, Mr. Hutchison was Executive Director of the Red Tape Review Group, a bipartisan commission established to review rules promulgated by State departments and agencies and make recommendations for reforming the regulatory process in New Jersey.

Before serving in the Executive Branch, Mr. Hutchison held various staff positions with the New Jersey Legislature. He served as Director of Research for the Senate Majority Staff from 1993 to 2007. He was aide to several standing reference committees, most notably the Senate Environment Committee, where he assisted in drafting legislation to reform the State's hazardous waste cleanup laws, promote the productive reuse of brownfields sites, and establish the Garden State Preservation Trust open space acquisition program. From 1988 until 1993, he was a Research Associate with the non-partisan Office of Legislative Services. At OLS he drafted legislation on a wide range of environmental protection, natural resource, agriculture and coastal issues. He also served as aide to the Senate Coastal Resources and Tourism Committee and the Assembly Economic Growth, Agriculture and Tourism Committee.

Mr. Hutchison has served as a member of the State Health Benefits Plan Design Committee, the New Jersey Economic Development Authority, the New Jersey State Privacy Study Commission, the New Jersey Lake Restoration Study Commission, the Lambertville City Planning Board and the Lambertville Shade Tree Commission.

## **M. COLLEEN CHRISTIE MALONEY, *Review Zone Officer***

Colleen Christie Maloney has worked implementing the Commission's land use program and Master Plan goals for more than 10 years. She guides applicants' projects from pre-application review through the Commission's application process toward issuance of approval.

Previously, Ms. Maloney worked as project editor in the publications office at Rutgers-New Brunswick, serving university clients such as the Eagleton Institute of Politics, the Zimmerli Art Museum, and the Rutgers Cooperative Extension Service.

A graduate of the University of Richmond, Ms. Maloney has roots in the Trenton/Princeton area and on Long Beach Island. She is now a 30-year Hunterdon County resident. Her passions include painting, eagle spotting, wooden boats and sailing in Little Egg Harbor. She enjoys the recreational and historic elements of the Delaware and Raritan Canal State Park daily.

## **ERICA VAVRENCE, *Executive Assistant***

Erica Vavrence has been serving as Assistant to the Executive Director since November 2021; she first joined the Commission as a part-time staff member in February 2020.

Ms. Vavrence was previously employed for seven years with the South Hunterdon Regional School District in the Transportation Department. A member of the West Amwell/Lambertville community since 2008, she serves on the board of the Lambertville Area Education Foundation and for three years was president of the West Amwell Elementary School PTO.

She studied Environmental Law and Natural Resource Management at Rutgers University, and her education has given her a strong appreciation for the Commission's work to protect the canal's environmental, recreational and historic resources.

She enjoys traveling to tropical destinations with her family and spending time at their home in Tuckerton, N.J., where she delights in the beauty of the coastline and the Pinelands.

## **DARLENE J. YUHAS, *Communications Director***

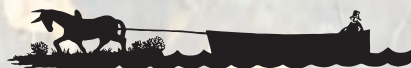
Darlene J. Yuhas joined the Delaware and Raritan Canal Commission as Communications Director in May 2021. She previously served as Deputy Director of Communications at the New Jersey Department of Environmental Protection from 2018 to 2021. Earlier, she worked as a Public Information Officer and as Communications Manager from 2003 to 2010.

In between her DEP service, Ms. Yuhas worked for seven years at the U.S. Environmental Protection Agency, writing and editing strategic communications for EPA Administrators Lisa P. Jackson and Gina McCarthy and Deputy Administrator Robert Perciasepe.

She began her career as a journalist and was a newspaper reporter and editor in central New Jersey for more than a decade.

A Garden State resident for most of her life, Ms. Yuhas spent seven years in Arizona, enjoying the stunning Sonoran Desert, beautiful sunsets and very low humidity. While there, she worked for the state's largest electric utility as a speechwriter for the company's Chief Executive Officer and as a communications adviser to the Vice President of Government Relations.

Missing the distinct change of seasons back East, especially autumn, she returned to New Jersey in 2002, bought a little Victorian house in Lambertville and has been enchanted with the D&R Canal ever since.



## JOSEPH RUGGERI, P.E., CFM



Joseph Ruggeri is a Supervising Environmental Engineer in the New Jersey State National Flood Insurance Program Coordinator's Office of the Department of Environmental Protection. He is a Licensed Professional Engineer and Certified Floodplain Manager who holds both a Bachelor of Science and a Master of Science in Civil and Environmental Engineering from the College of Engineering at Rutgers University. Reporting directly to the Executive Director of the Delaware and Raritan Canal Commission, Mr. Ruggeri serves as the Commission engineer performing stormwater management and stream corridor reviews for proposed development projects within the canal watershed. He is a Past Chair of the New Jersey Association for Floodplain Management and past Treasurer of the Association of State Floodplain Managers.

For the first 16-plus years of his career with the DEP, he was responsible for preparing and reviewing dam engineering studies, construction permit applications, dam removal design plans, restoration grant and loan applications, hydrologic and hydraulic studies, dam breach studies, emergency action plans, flood inundation mapping and dam operation and maintenance manuals.

During the past 15-plus years in the New Jersey State National Flood Insurance Program Coordinator's Office, Mr. Ruggeri's responsibilities have included assisting municipalities with their participation in the Federal Emergency Management Agency, National Flood Insurance Program and the Community Rating System; leading the DEP Cooperating Technical Partners program in developing Flood Risk MAP products for FEMA; coordination and assistance to the U.S. Army Corps of Engineers in the planning, design and construction of flood mitigation projects; maintaining, amending, revising and distributing New Jersey Floodway and Flood Hazard Area Delineation Maps and their supporting data; and all work related to flood insurance, flood hazard mitigation, flood risk reduction, floodplain management and floodplain studies.

In addition, Mr. Ruggeri was highly involved in developing the New Jersey Governor Flood Task Force and the associated Report on Delaware River Flood Mitigation issued in August 2006 and the Passaic River Basin Flood Advisory Commission and associated report to the Governor in December 2010. He served as chair of the Floodplain Mapping Committee of the Delaware River Basin Interstate Flood Mitigation Task Force and as co-chair of the Delaware River Basin Floodplain Regulations Evaluation Subcommittee, and currently serves on several committees including the State Hazard Mitigation Team technical and planning committees.

## DAMIAN T. FRIEBEL, P.E.



Damian T. Friebel, P.E., is a Supervising Environmental Engineer with more than 20 years of experience with the New Jersey Department of Environmental Protection's Watershed and Land Management Program. In that role, Mr. Friebel supervises staff engineers who perform reviews of environmental control work consisting of design calculations, plans and project specific specifications, while using laws such as the Flood Hazard Area Control Act, Waterfront Development Act, Coastal Area Facility Review Act, and Freshwater Wetland Protection Act, to issue permits intended to minimize damage to life and property from flooding caused by development within regulated areas and to preserve the quality of surface waters.

Mr. Friebel also works as a review zone officer for the Delaware and Raritan Canal Commission, where his primary responsibility is to prepare staff reports for the Commission's Executive Director for consistency with the Master Plan of the Delaware and Raritan Canal State Park for all public and private projects located within the Commission's review zone.

He is a licensed professional engineer and graduate of the Florida Institute of Technology with a Bachelor of Science in Civil Engineering.



# HIGHLIGHTS OF 2021



Kingston locktender's house.  
*Photo: Erica Vavrence*





“

... **THE CHALLENGES WE FACE TODAY** – on environmental, historic, recreational and land use terms – only partially resemble those considered three decades ago. The Delaware and Raritan Canal faces new threats and new circumstances that require renewed planning efforts.

”

“

The region represents a respite from the larger suburban and urbanized State of New Jersey and offers a connection to the state’s past.

**PROTECTION OF THIS JEWEL** of Central New Jersey is not only for the sake of safeguarding our past or prolonging our enjoyment of the park at the present, but for the sake of preserving a natural treasure for future generations.

”

# RUTGERS UNIVERSITY BLOUSTEIN SCHOOL ANALYSIS EMPHASIZES CRITICAL NEED FOR UPDATED D&R CANAL COMMISSION MASTER PLAN

After four months of intensive study, a team of graduate students from Rutgers University's Edward J. Bloustein School of Planning and Public Policy completed a comprehensive report that underscores the pressing need for substantive revisions to the Delaware and Raritan Canal Commission's 1989 Master Plan.

Presented to the Commission in May, the 138-page report, titled "Observations and Recommendations for the Delaware and Raritan Canal Master Plan Update," is serving as a guiding document for revising the three-decades-old master plan and is proving valuable in determining potential avenues for funding the update. The graduate students at the Bloustein School researched and wrote the report under the supervision and guidance of Professor Jeanne Herb. The university team worked in close collaboration with the Delaware and Raritan Canal Commission and key stakeholders.

Since the Master Plan's last revision 32 years ago, the canal region has changed significantly, particularly in land-use patterns, climate and environmental conditions, recreational use, demographics and the condition of the canal's historic and cultural resources.

The Bloustein graduate team's research and critical analysis validates Commissioners' ongoing concerns about the challenges of conducting regulatory reviews without an updated master plan that reflects actual conditions in the Review Zone.

The report states that the 1989 Master Plan's goals "have been impacted by emerging trends and conditions that were unpredictable or not considered at the time of the original master planning effort. The major trends identified are demographics; the economy; land use, development and urbanization; the environment; and sense of place."

After collecting and analyzing data from 1989 to present day, the graduate team determined the following:

**Demographics:** The population has gradually increased and has become more racially and ethnically diverse with time. Median income has shown dips and rises in the past three decades, but some municipalities are more burdened than others.

**Economy:** Continued economic growth within the surrounding five counties is key to contextualize and guide economic development strategies for the Canal Park, while recognizing that development pressures will persist in the region.

**Land Use, Development, and Urbanization:** Increasing urbanization and development in nearby communities pose both threats and opportunities to the vitality of the Canal Park.

**Environment:** Climate change, invasive species, and areas of contamination are critical areas of examination that have newfound importance since 1989.

**Sense of Place:** The beauty and vibrancy of the Canal Park stem from its role as a natural resource and site for recreational activity that is full of rich history.

The report includes a host of compelling findings and recommendations and examines the strengths, weaknesses, opportunities and threats, commonly known as a SWOT analysis, the Commission will face when updating the master plan.

To read the report in its entirety, visit <https://bloustein.rutgers.edu/wp-content/uploads/2021/05/Delaware-and-Raritan-Canal-Master-Plan-Report-Sm.pdf>





## TROPICAL STORM IDA

Prallsville Mills entrance driveway, Stockton.  
Photo: John Hutchison

**It was one of the deadliest storms in New Jersey's history.** On the evening of September 1, Tropical Storm Ida tore a path of devastation through the Garden State, unleashing record-setting rainfall and ferocious winds that claimed at least 30 lives, spawned tornadoes, toppled trees and utility poles, heavily damaged homes and businesses, and left thousands of residents in the dark.

The havoc wreaked by the remnants of Hurricane Ida in central New Jersey proved the mettle of the Commission and colleagues in the DEP Division of Parks and Forestry's State Park Service, New Jersey Water Supply Authority and other state government agencies.

### AT THE COMMISSION'S HEADQUARTERS ...

Despite its proximity to the Wickecheoke Creek and the Delaware River, the Commission's headquarters at the historic Prallsville Mills complex in Stockton did not sustain any flood damage from Tropical Storm Ida. After a two-day power outage, the staff resumed regular operations. On September 1 at 11 p.m., the Delaware River gauge at Stockton crested at approximately 19.7 feet. For context, the office flooded in April 2005 and again in June 2006 with recorded gauge peak elevations of 26.0 feet and 25.39 feet, respectively. More recently, Tropical Storm Lee in September 2011 had a recorded gauge peak of 21.76 feet, but the office was spared any damage.

The campus of Prallsville Mills did not fare as well. The entrance driveway sustained heavy scour and erosion from flooding, and the historic raceways to the Grist Mill were damaged from the force of waters flowing from the higher ground nearby.

For the Commission, the most recent flood event underscored the need to bolster existing contingency plans to ensure future evacuation plans are safe and efficient.

The lessons of Tropical Storm Ida – along with those learned during the ongoing COVID-19 pandemic – are that the Commission must ensure its historical project files are scanned to the DEP's shared drive (see related story on page 29) and that the Commission implement mandatory electronic submission of application documents. Both precautions would ensure that the Commission staff will be able to work remotely for an extended time, and that the historical project files, essential to determining Commission jurisdiction over applications, will be available for future use regardless of the conditions at the Commission's physical office.



Top, Port Mercer, Lawrence Township.  
At right, Wickecheoke Creek at Stockton.  
Photos: John Hutchison

## IN THE DELAWARE AND RARITAN CANAL STATE PARK ...

Soon after the storm, Delaware and Raritan Canal State Park Superintendent Patricia Kalleser reported that the unprecedented deluge and its subsequent flooding impacted 45-50 miles of the park's multiuse trail.

As park staff worked long hours to clear the debris and make repairs, the extent of the damage forced the closure of many areas of the trail that were rendered muddy, rough and rutted and a danger to walkers and cyclists. Trail closures included the Alexauken Creek access area in Lambertville and its associated detour and over the Wickecheoke Creek in Stockton.

At Prallsville Mills, the stone stream embankment behind the Grist Mill and Commission headquarters was undermined, a previously filled sinkhole re-emerged, and two additional areas were damaged by flood waters.

In Lawrence Township, the trail in the vicinity of Port Mercer Canal House was also closed, and a heavily flood-damaged area along Quaker Road will require restoration. Severe scouring was discovered along 22 miles of the main canal between Landing Lane and N.J. State Highway Route 27 in Kingston.

Boat launches along the Delaware River were open, but boaters were advised to use caution. After a brief closure, Bulls Island Recreation Area's day-use area reopened to the public.

As autumn faded to winter, repairs continued.

## FOR THE NEW JERSEY WATER SUPPLY AUTHORITY ...

In the storm's aftermath, New Jersey Water Supply Authority Facilities Manager Michael Sellar reported that staff devoted significant energy and resources to clearing debris and silt and repairing storm damage at various locations.

Repairs were necessary at the severely damaged park path from Queens Bridge to the South Bound Brook Spillway, and to the riverside of the towpath at Six-Mile Run, which was affected by sloughing.

Trees were cleared from the canal and the multiuse trail, and the confluence of Wickecheoke Creek in Stockton required dredging of accumulated material from the upstream side of the bridge. Dredging also was necessary at Lockatong Creek and at the Laceworks Building in Lambertville.

The Water Supply Authority reported that the accumulation of storm debris did not impact the canal flow.



# WHEN PASSING THROUGH THESE WOODS, NEW BENCH MARKS A LOVELY SPOT TO LINGER



Bench at Bulls Island and inscribed plaque.  
*Photos: Erica Vavrence*

## It may well be the best seat in the entire place.

Overlooking the Delaware River near Raven Rock at Bulls Island Recreation Area, with a glorious view of white-capped water rushing over the wing dam, the new redwood bench appears to float above the green ground cover.

This particular perch is a gift to the people of New Jersey and all Bulls Island visitors from Kingwood Township resident Phillip Lubitz and his wife, Barbara Schlichting. Adorned with an inscribed plaque and installed during August 2021, the bench was given as tribute to a lifelong love of the river, the historic canal it feeds, and the priceless memories made along its banks.

“It’s such a special spot to us, and we know that it would be the kind of place that other people would like to stop and reflect. A peaceful place,” said Lubitz, a native Trentonian who grew up on the canal. He also demonstrates his deep appreciation for the river and canal through his work as a Commissioner with the Delaware and Raritan Canal Commission.

With their Kingwood home situated on the hillside two miles east of Bulls Island, the couple has walked countless times through those quiet woods with their dog, Kirby, a black and white Papillon. And they cherish the times spent there with their daughter, SuFen, and their goddaughter, Rachel.

“When the weather is nice, I cycle there almost every day,” he said. The couple agreed the gift of the bench was an ideal way to celebrate their joyful experiences there.

An early riser, Commissioner Lubitz for years would often pedal north to Frenchtown. “There are two places where the water level recedes, and you can walk out into the Delaware. I found that those two spots became meditative. Part of my meditation was listening closely to the river. Just as when you listen carefully to an orchestra, you can hear individual instruments, you can also pick out different sounds as the water runs over rocks,” he said.

What he discovered during his meditation at the river is perfectly captured in the inscription he chose for the bench plaque, a quote from American writer Mark Twain: “The river has great wisdom and whispers its secrets to the hearts of men.”

The couple hopes that when visitors come upon the bench while passing through those woods, they’ll sit for a while – and listen.







## **NEW AND IMPROVED LISTINGS OF NATIVE TREES AND SHRUB SPECIES ACCEPTABLE TO THE COMMISSION WHEN REVIEWING PERMIT APPLICATIONS WERE AMONG THE FEATURED ADDITIONS TO THE COMMISSION’S WEBSITE DURING 2021.**

The two lists, also helpful to all central New Jersey residents, offer hyperlinks to the U.S. Department of Agriculture Plant Database, which provides useful information on the distribution, original duration, growth habit and native status data of vascular plants throughout the United States. The lists also advise applicants of the Commission’s policy that the native trees and shrubs must have an 85 percent survivability rate over three years after planting.

The Delaware and Raritan Canal State Park Master Plan states that landscape materials used in the park or on adjoining lands should be native to the region and appropriate for their specific habitat. Further, several Commission regulations contain provisions that require the preservation and planting of native vegetation and prohibit destruction of those trees and plants.

The lists are based upon observations made in 1973 by the planner Fritts Golden, which were then presented to the Commission in an unpublished report titled, “The Delaware and Raritan Canal: The Nature of its Surroundings” and subsequently referenced in the 1977 Master Plan.

To access the lists, visit the Commission website at [nj.gov/dep/drcc/](http://nj.gov/dep/drcc/). Click on “Information and Education,” and then scroll through “Important Documents.”

Multiuse trail, Delaware Township.  
Photo: Darlene J. Yulias



## **DRCC WEBSITE NOW OFFERS COMPLETE COLLECTION OF MEETING MINUTES**

Almost everything you’d like to know about the earliest official actions of the Delaware and Raritan Canal Commission is now just a couple of clicks away.

As part of the Commission’s ongoing work to enhance its website, a complete collection of the agency’s meeting minutes – from 1975 through 2021 – were made available for public review during 2021. The Commission held its first meeting on March 14, 1975.

The completion of the project to post meeting minutes covering all 46 years of Commission operations demonstrates its commitment to greater transparency and accessibility. Along with offering an array of informative documents, the website also seeks to generate interest in – and advocacy for – the D&R Canal.

Revamped during 2020 with the standardized and professional-looking architecture common to all state government websites, the Commission’s website also hosts annual reports, the bylaws, Commissioner biographies, links to the NJ-GeoWeb mapping tool, FAQs about the land use program, copies of the Commission’s historic planning documents, Commission-related legislation, maps, staff contacts, interactive driving directions to the Commission office, links to canal-related organizations throughout the United States, and a tool for filing OPRA requests.

You can learn more at [nj.gov/dep/drcc/](http://nj.gov/dep/drcc/).



East Millstone Bridgetender's Station  
readied for rehabilitation.  
*Photo: Patricia Kalleser*



## COMMISSION MITIGATION MONEY GIVING NEW LIFE TO PRICELESS PIECE OF CANAL HISTORY

Work began in earnest during autumn on the rehabilitation of the historic East Millstone Bridgetender's Station in Somerset County, a project made possible through nearly \$100,000 in mitigation funds awarded by the Commission in May.

The East Millstone Station on Amwell Road is one of only five that remain within the Delaware and Raritan Canal Historic District. During the canal's operation from 1834 to 1932, a bridgetender's station served an important function as a toll collector's booth and as a warm, dry location from where the tender could await oncoming canal boats.

The project entails using some of the original wood and hardware to restore the bridgetender's station to its original 19th century appearance and move it slightly farther away from the canal embankment.

The proposed scope of work includes stabilizing the raked wood framing and repairing it, installing new asphalt shingle roofing, restoring the exterior wood

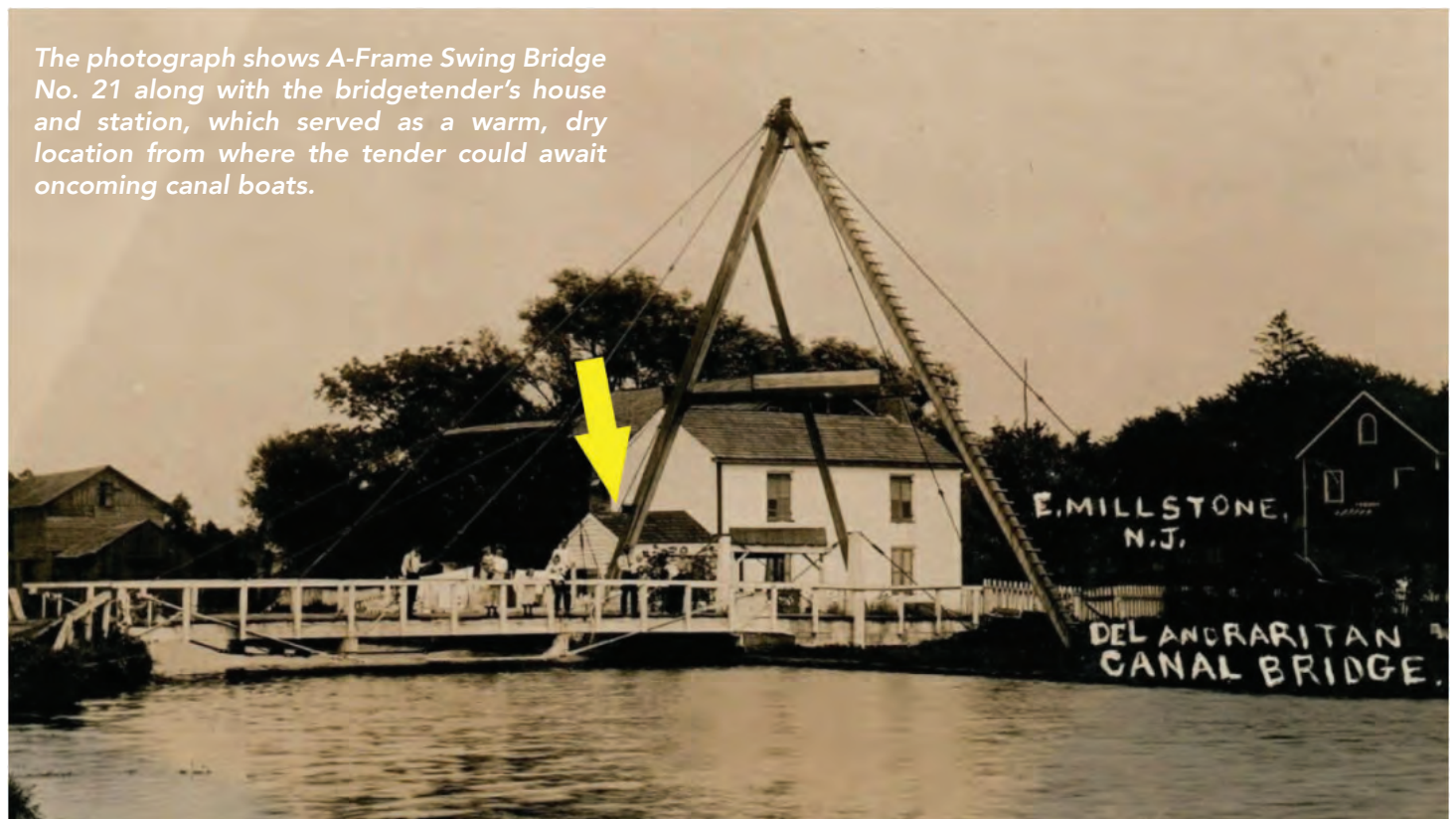
siding, restoring wood windows and door, exterior woodwork repairs and exterior painting.

The Commission recognized the pressing need to rehabilitate the bridgetender's station, and in May, approved a resolution that redirected \$98,178 from an existing mitigation account to the DEP's Office of Resource Development to launch the long-awaited restoration.

The D&R Canal Watch also contributed \$20,000 to the project.

The restoration will allow the interpretation of the station and its role in the history of the D&R Canal and its associated historic district and as part of the Millstone Scenic Byway.

The other bridgetender stations are located at Blackwells Mills, Griggstown and Zarephath. The structure at Kingston served as both a bridgetender's station and a toll house.





ADA ramp repaired.  
*Photo: Patricia Kalleser*

**Repairs were completed to the Delaware and Raritan Canal State Park ADA-ramp at the Lambertville restroom building during autumn.**

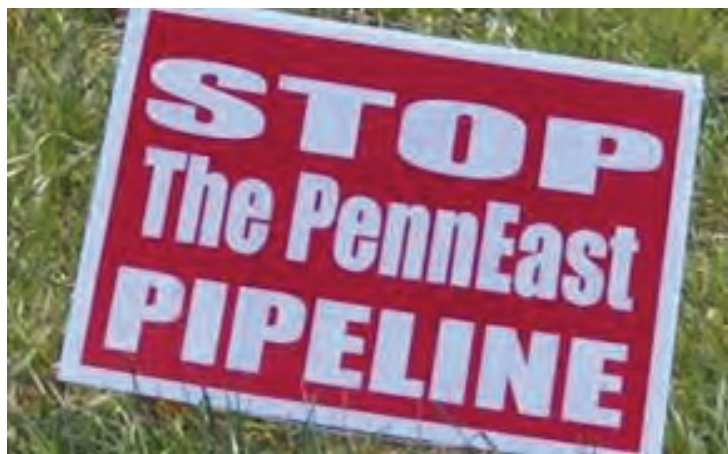
The ramp had been seriously damaged by motor-vehicle strikes. Repairs, which included installing protective bollards, were among mitigation projects that were a condition of the Commission’s approval of the Public Service Electric and Gas Roseland-Pleasant Valley Electric Transmission line. Those projects also entail rehabilitation of the Moore’s Creek access area and the removal and replacement of dead and dying trees in the state park along Route 29 from Moore’s Station south to the Baldpate Mountain Trail entrance in Hopewell Township, Mercer County.

**Cyclists, walkers and other outdoor enthusiasts in November cheered the long-awaited opening of the Scudder Falls Shared-Use Path connecting the Pennsylvania Delaware Canal Park and the New Jersey Delaware and Raritan Canal Park.**

The Delaware River Joint Toll Bridge Commission said the new link makes Scudder Falls the only river crossing that allows cyclists to ride across without dismounting their bikes. The DEP’s Historic Preservation Office, Green Acres Program and Division of Parks and Forestry worked on the project with the Department of Transportation and the Joint Toll Bridge Commission. The D&R Canal Commission played a key role in reviewing and approving necessary applications along the way. The project is also consistent with the objectives of the Commission’s master plan in that it encourages expanded use of the park.



Shared-use path.  
*Photos: Division of Parks and Forestry*



**The Federal Energy Regulatory Commission in December formally rescinded certifications for PennEast Pipeline Company’s planned construction of a 116-mile natural gas pipeline from Pennsylvania into New Jersey.**

The action officially put an end to the project, which drew strong opposition from property owners, residents, environmental advocates, lawmakers and government agencies, including the Delaware and Raritan Canal Commission. FERC’s decision to vacate its approvals came soon after PennEast announced it would halt efforts to develop the \$1-billion project because it faced insurmountable legal and regulatory challenges. During the

seven-year battle to stop the pipeline, the Commission was among the plaintiffs taking vigorous legal action, consistently citing major concerns about potential adverse impacts on the environmental, recreational and historic resources of the canal and the canal state park.

# INTERAGENCY TASK FORCE EFFORTS YIELD AGREEMENT ON DESIGN GUIDELINES FOR BRIDGE REPAIRS, REPLACEMENTS OVER THE CANAL

Alexander Road bridge over the canal,  
Municipalities of Princeton/West Windsor.  
Photo: Erica Vavrence

Culminating the work of a special interagency task force, the Commissioners in May approved a memorandum of agreement that outlines key principles to guide the design of repairs and replacements of certain bridges over the Delaware and Raritan Canal.

The MOA among the Commission, the New Jersey Department of Transportation and the State Historic Preservation Office ensures the coordinated, standardized and expedited review of the visual, historic and natural quality impacts of bridge projects within the Commission's Review Zone.

Led by Commission Vice-Chairman Bruce D. Stout, the interagency task force was convened to devise an improved and more efficient approach to bridge projects and to create agreed-upon design principles for bridge repairs and replacements. The task force's deliberations benefited from the participation of local municipal and county representatives and other stakeholders interested in the canal.

The task force was charged with identifying, categorizing and developing a shared understanding of the existing bridges with wooden decks within the Delaware and Raritan Canal State Park, and the review of the regulatory, policy, design, safety and engineering issues and concerns of both the NJDOT and the Commission on periodically rehabilitating and potentially replacing those bridges.

All the bridges would have the T-4 "New Hampshire" model metal railing design, which was a crash-tested bridge designed similarly to the current canal bridges. The MOA also includes a provision requiring all bridges to maintain a 36-inch clearance over water to allow navigation by kayaks and canoes and, where significant pedestrian use exists, pedestrian crossings would be constructed and NJDOT would maintain such crossings.

The MOA memorializes the task force's recommendations on the design principles.

Vice-Chairman Stout acknowledged canal stakeholders Robert Barth and Robert von Zumbusch for their participation in the task force's work.



## COMMISSION MAKES MAJOR MOVE TO SAFEGUARD ESSENTIAL PROJECT DOCUMENTS

Advancing one of its most significant and challenging initiatives, the Delaware and Raritan Canal Commission in December contracted with a Trenton-based records management service to scan nearly 1 million pages of critical agency documents that have been stored on paper only for more than four decades.

The Commission's work with ACCSES-NJ, the state contract vendor for scanning services, and its affiliate, Easterseals New Jersey, represents a giant leap forward in ensuring the Commission's records are properly retained and stored and protected from any natural disaster, fire, flood or other severe damage.

The Commission is instituting a records retention and storage policy that complies with state regulations and creates a permanent electronic library of the Commission's project documents. Commission staff members will now have at their disposal electronic records of previous projects, which – given the need to assess impervious surface cumulative to 1980 – are essential to determining Commission jurisdiction and the scope of review of future projects.

The staff will also be able to respond quickly to OPRA requests relating to past Commission projects. Further, in addition to safeguarding project documents from damage, the electronic library will enable the continuity of government and of Commission operations.

The scanning project entails an estimated 578 boxes of Commission files now being stored at the DEP's central warehouse in Trenton. Most of those documents had, for decades, been stored in filing cabinets at the Commission's headquarters at Stockton's historic Prallsville Mills, situated alongside the flood-prone Wickechoke Creek, which broke its banks and inundated the building twice in recent years.

The Commission also is working with ACCSES-NJ to achieve certification and compliance with the New Jersey's Division of Revenue and Enterprise Services Records Management Services. This process will certify that the Commission's image scanning and retention policy and disaster prevention and recovery policy comply with state law and will result in the scanned records being considered legally equivalent to paper documents.

The entire project is expected to be completed within the next four years.

Major document scanning initiative is underway.  
Photo: Darlene J. Yuhas



## CANAL COMMISSION IS TAKING GOOD CARE OF ITS HISTORIC HEADQUARTERS

The Commission made impressive progress during 2021 in ongoing efforts to preserve its historic headquarters at Prallsville Mills in Stockton and to significantly improve the structure's safety, weather-proofing and appearance.

Originally a wagon shed, circa 1850, the two-story building has been undergoing a much-needed rehabilitation since 2017. During 2021, the Commission completed a project to stain the wooden exterior and to replace old, faulty and drafty windows and doors. Those improvements were among the most recent projects, which have included a new roof, repairs to the distinctive sliding barn doors and the removal and repair of damaged exterior siding.

The next round of physical plant improvements will focus on repairing the perished stone mortar on the building's foundation and replacing the older of two Commission furnaces, which appears to have been installed in 2002 and is reaching the end of its useful life.

In August, a historic masonry contractor examined the existing mortar, which suffered severe deterioration from flooding events in 2005 and 2011. It was determined that repairs are warranted and will help to ensure the building is water-tight.

Also, Delaware and Raritan Canal State Park colleagues replaced the stone gravel along the eastern elevation of the Commission's offices, creating a splash block to protect the newly repaired sliding barn door entrance to the conference room.



Delaware and Raritan Canal Commission headquarters, Stockton.  
*Photos: Erica Vavrence*



# COMMISSION'S GRATITUDE GOES OUT TO VOLUNTEERS WHO CARE ABOUT KEEPING THE CANAL AND STATE PARK CLEAN

*Hundreds of volunteers rolled up their sleeves during 2021 and turned out to beautify various portions of the Delaware and Raritan Canal, the state park and the Delaware River and protect the environmental, historical and recreational value of those treasured resources.*

*The largest event was the annual cleanup along the Delaware River from Frenchtown to Trenton in October. Organized by State Park Naturalist Stephanie Fox, it drew upward of 200 energetic volunteers. For this cleanup, the State Park Service partnered with the New Jersey Clean Communities Program in Hunterdon and Mercer counties, Friends of Abbott Marshlands, the Kiwanis Club in Trenton and the Delaware River Greenway Partnership.*

## **Other cleanup activities throughout the year included:**

**FEBRUARY:** Cleanup day at Duck Island with the Central Jersey "Stream Team" and Mercer County Clean Communities groups. Approximately 150 vehicle tires were removed from the "abandoned" section of the canal.

**MARCH:** The DEP's "Watershed Ambassador" program hosted two cleanups in the City of Trenton; and park staff hosted an additional cleanup event.

**APRIL:** Several Earth Day cleanup events were held along the main canal, the feeder canal, the City of Bordentown, and the City of Trenton. Raritan Headwaters Association were among groups that participated in the cleanups.

**JULY:** Youth Conservation Corps, which includes intercity youth, began a three-week program within the state park. The program featured maintenance activities, such as building picnic tables in Trenton, and afternoon visits to state park sites and historic sites.

**OCTOBER:** The Solvay Group were out cleaning up around the Millstone Aqueduct.



*Photos: Courtesy of Division of Parks and Forestry*



# REGULATORY PROGRAM

The Delaware and Raritan Canal State Park Law of 1974 directs the Commission to preserve and protect the Delaware and Raritan Canal as a historic and natural resource as well as a water supply system for much of central New Jersey. To advance this statutory mandate, the Commission was given regulatory authority to protect the Delaware and Raritan Canal State Park from new development that “may cause an adverse impact on the park including drainage, aesthetic and ecological factors.” To that end, the Commission reviews development projects within a designated “Review Zone” established by administrative regulations promulgated at N.J.A.C. 7:45 for their impact on the following:

- Stormwater drainage and water quality;
- Streams corridors;
- Visual, historic and natural quality; and
- Traffic.

The Review Zone is further divided into two subzones. Review Zone “A” is the area within 1,000 feet on either side of the center line of the canal, except in the municipality of Princeton, where the west bank of Carnegie Lake shall be the boundary of Zone A and where the Raritan River is within 1,000 feet, its farthest bank being the boundary. Review Zone “B” is based upon sub-watersheds in central New Jersey that impact the Delaware and Raritan Canal. The Commission’s regulatory jurisdiction encompasses approximately 450 square miles of land area in central New Jersey.

Developments that are defined as “major” projects under the Commission’s regulations – projects that involve the cumulative coverage since January 11, 1980, of one-quarter acre or more of impervious surface, or the disturbance of one acre of land – must meet the Commission’s standards for managing stormwater runoff quantity and quality. In addition, a project of any size that is proposed in Zone A is reviewed for its visual, historic and natural quality impact upon the Delaware and Raritan Canal State Park. The Commission also reviews certain projects that are within one mile of the park for their traffic impact. The Commission also requires the preservation of corridors along the major streams that enter the park.

Through its regulatory program, the Commission holds conservation easements on more than 5,000 acres of land that provide flood storage, improve water quality of major streams that enter the canal and provide habitat for wildlife.



The Commission staff, comprising four full-time employees and two part-time engineers, handled a total of 647 project reviews during calendar year 2021. Of these reviews, 121 were deemed complete by staff and presented to the Commission for formal action; 52 were General Permit Authorizations issued by the Executive Director in accordance with Subchapter 5 of N.J.A.C. 7:45; 101 were jurisdictional determinations; and 119 were certificates of approval. In addition, 254 were determined to be technically or administratively deficient, and staff issued reports recommending that the necessary additional information be submitted to determine completeness. Commission staff also engaged in many informal reviews and preapplication meetings with the regulated community to determine whether the projects were complete and ready for Commission consideration.

## **CONSERVATION EASEMENT ACREAGE PRESERVED**

Stream corridors are critical to improving and maintaining water quality entering the Delaware and Raritan Canal and the canal park; they allow these areas to store and mitigate stormwater that may contribute to flooding. N.J.A.C. 7:45-9.5 direct applicants for individual permits that impact upon a Commission-regulated stream corridor to take whatever measures are necessary to ensure that those corridors will be preserved, and to prevent future encroachments in the stream corridor.

The Commission's regulations also provide that, at a minimum, such measures shall include easements, deed restrictions or other measures satisfactory to the Commission. To further this regulatory mandate, the Commission requires conservation easements on stream corridor buffers for approved projects.

The easements along stream corridors that flow into the Delaware and Raritan Canal State Park generally stipulate the landowner's responsibility to not develop the land, often require the planting of native vegetation, and often impose "no mowing" and other landscape maintenance restrictions. Easement documents are filed with the clerk of the county in which the permitted project is located and run with the land, meaning that the environmental protections automatically transfer with the property when it is transferred to a different owner.

The Commission's stream corridor protections and easement program have resulted in one of the largest protected riparian corridors in New Jersey. More than 5,000 acres of stream corridor have been preserved, and hundreds of acres of native plant restorations have been undertaken under the Commission's direction to date – an accomplishment reached at no cost to the taxpayers.

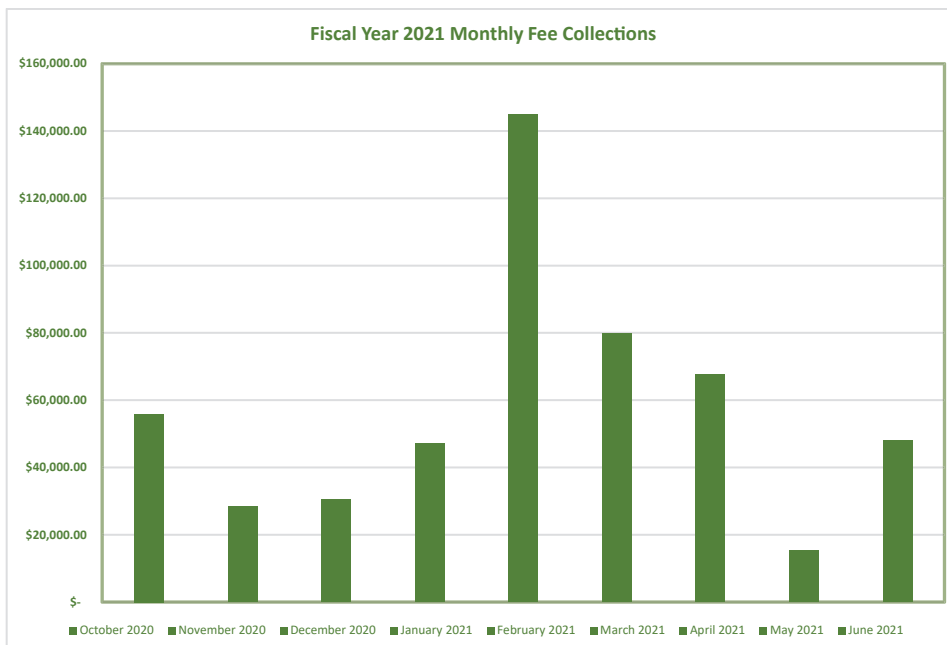
In 2021 the Commission executed easements that added an estimated 225 acres of stream corridor easements to those that have been preserved since the inception of the Commission's regulatory program in 1980.

# FINANCES 2021

Fiscal Year 2021 was an abbreviated one, running from October 1, 2020, to June 30, 2021.

Last year, New Jersey extended the state's fiscal year by three months from June 30, 2020, to September 30, 2020.

During Fiscal Year 2021, the Commission collected \$517,975 in total revenue from application fees. The following chart details the amount of monthly fee collections:



## MONTHLY DEPOSIT SETS A RECORD

In February 2021 fee deposits totaled \$133,350, the largest single deposit made since the Commission's operations were put on a fee basis during 2009.

Commission Executive Director John Hutchison attributed the unprecedented monthly total to the staff's considerable workload. He also noted that since the agency's fee structure is based, in large part, upon the amount of a project's proposed disturbance, fee collections are being pushed higher by the large number of warehouse and multi-family residential developments in the Review Zone.

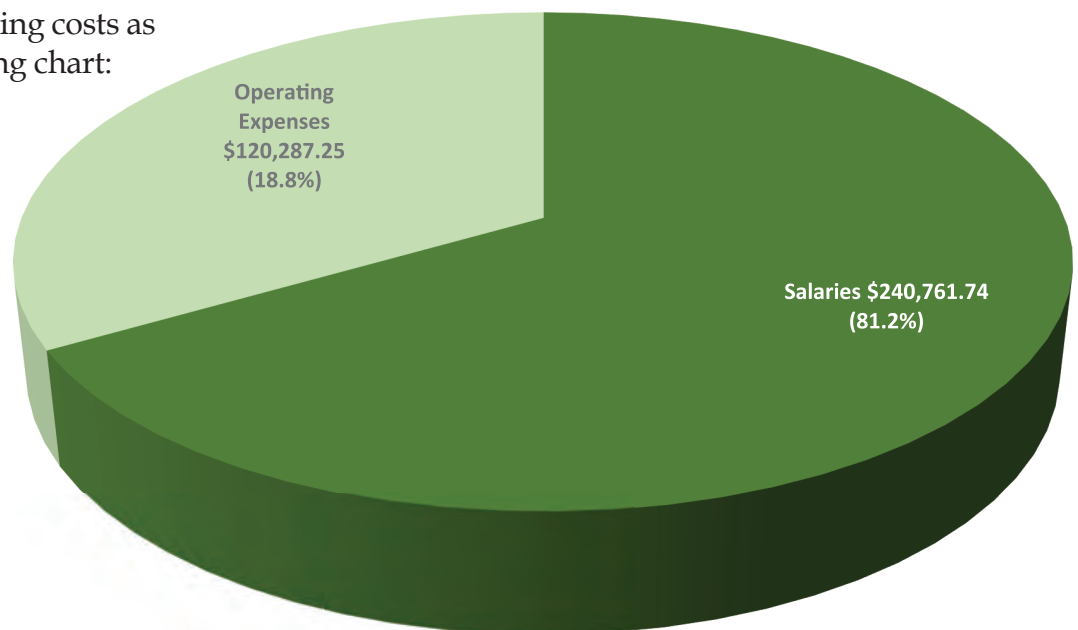
Despite the COVID-19 pandemic, the Commission's fiscal position overall remains strong.



Commission fees are predominantly collected for the review of stormwater applications and stream corridor impact, but also include the review of visual, historic and natural quality impacts of proposed projects, traffic impact review, jurisdictional determinations, general permits and subdivisions. The following table provides a detailed breakdown of application fees collected pursuant to the various subchapters of the Commission’s regulations:

| <b>FEE CATEGORY</b>  | <b>AMOUNT COLLECTED</b> |
|--|-------------------------|
| Jurisdictional Determinations, N.J.A.C. 7:45-13.2(a)                           | \$3,700                 |
| General Permit No. 1, N.J.A.C. 7:45-13.2(b)                                    | \$150                   |
| General Permit No. 2, N.J.A.C. 7:45-13.2(c)                                    | \$1,800                 |
| Subdivision Review (lot line review only), N.J.A.C. 7:45-13.2(i)               | \$400                   |
| Stormwater Runoff and Water Quality Impact, N.J.A.C. 7:45-13.2                 | \$391,387.50            |
| Stream Corridor Impact, N.J.A.C. 7:45-13.2(g)                                  | \$69,750                |
| Visual, Historic and Natural Quality Impact Review, N.J.A.C. 7:45-13.2 (d)&(e) | \$13,150                |
| Other (primarily “major modifications”), N.J.A.C. 7:45-13.2(k)                 | \$37,637.50             |
| <b>FY2021 TOTAL FEES COLLECTED</b>   | <b>\$517,975</b>        |

The Commission expended a total of \$361,048.99 in FY2021. Those expenditures are broken down into salaries and operating costs as depicted in the following chart:



A detailed itemization of the \$120,287.25 in Commission Operating Expenses for FY 2021 is provided in the following table:

| Expenditure Detail                      | Total Amount Expended |
|---|-----------------------|
| Office Supplies                         | \$787.32              |
| Photocopier Rental                      | \$2,068.55            |
| Household/Security                      | \$373.71              |
| Postage                                 | \$2,388.78            |
| Information Pro Tele Op Services        | \$762.23              |
| Household                               | \$4,581.69            |
| Temporary Personnel Employment Services | \$7,381.24            |
| Office of Attorney General Charges      | \$15,757              |
| Buildings and Grounds Maintenance       | \$618.25              |
| Maintenance of Vehicles                 | \$207.35              |
| Rent -- Other                           | \$434.08              |
| Buildings and Grounds Improvements      | \$82,932.05           |
| Other Equipment                         | \$1,890               |
| Info Processing Tele Equipment          | \$105                 |
| <b>FY2021 Total Operating Expenses</b>  | <b>\$120,287.25</b>   |



# APPROVED INDIVIDUAL PROJECTS 2021

## JANUARY

### ZONE A

- #19-2081C 7 North Main Street – Shed Dormer Addition, Lambertville
- #20-3570B 37 Clinton Street – Residential Renovation and Addition, Lambertville
- #20-4654B 11 Clinton Street – Deck Expansion, Lambertville
- #20-5536 34 River Drive – Levi Knowles House & Carriage Barn Restoration, Hopewell Township

### ZONE B

- #19-1525B Village Point – Hillsborough Centre, Hillsborough Township
- #20-2595A Redevelopment of Princeton Executive Park – Hotel, Retail and Multi-Family Development, West Windsor
- #20-2824C True Jesus Church Addition, Hillsborough Township
- #20-2918B Sierra Office Park – Proposed Warehouse, Ewing Township
- #20-2931A 102 Interchange Warehouse, South Brunswick Township
- #18-3085B Koyal Realty Event Center Building, North Brunswick Township
- #20-3585D Onyx Properties – Major Modification, Franklin Township
- #20-5565 230 Belmont Avenue – Proposed Warehouse, Franklin Township

## FEBRUARY

### ZONE A

- #20-5642 7 Ferry Street -- Residence Demolition/Construction, Stockton Borough

### ZONE B

- #20-2699B West Windsor Duck Pond – Proposed Residential Development, West Windsor
- #20-3606A Hogan Self Storage II, Hopewell Township
- #20-4384B Airport Corporate Park – Proposed Warehouse, Ewing Township
- #20-5609 Lawrence-Hopewell Trail – Pretty Brook Segment, Lawrence Township
- #20-5616 Princeton University Lake Campus – Temporary Rugby Field, West Windsor

## MARCH

### ZONE A

- #20-3475B The Trail at Princeton Pike – Proposed Residential Development, Lawrence Township
- #21-2903J 1365 Lamberton Road Warehouse – Major Modification, Hamilton Township
- #20-4399C 51 Bridge Street – Proposed Subdivision/Garage/Driveway, Lambertville
- #20-5560 PSE&G Roseland-Pleasant Valley Transmission Project, Hopewell Township/  
East Amwell Township/West Amwell Township/Lambertville
- #20-5628 1 Mill Street – Proposed Single Family Dwelling, Stockton Borough
- #21-5668 Delaware and Raritan Canal State Park – Cooley Tract Parking, Kingwood
- #21-5669 Delaware and Raritan Canal State Park – Riverview Parking Area, Kingwood

## **ZONE B**

- #20-0519A McDonald's Hillsborough Restaurant – Proposed Renovations, Hillsborough
- #21-2441DD Princeton University East Campus Garage, Municipality of Princeton
- #20-3374B Millstone Development – Proposed Warehouse/Office, Millstone Township
- #20-3983C Hindu American Religious Center – Storage and Kitchen, Robbinsville
- #20-4710A Forsgate -- Proposed Warehouse Facility – S121, South Brunswick Township
- #20-5601 36 Haypress Road – Subdivision, South Brunswick Township
- #20-5608 1385 Livingston Avenue – Building Addition, North Brunswick Township
- #21-2818B East Windsor Senior Center – Proposed Additions,
- #20-4939C Silvi Concrete – Building Addition & Vehicle Parking, Millstone Township

# **APRIL**

## **ZONE A**

- #20-0724A 65 Wilson Street – Proposed Residential Development, Lambertville
- #21-5675 135 West Hanover Street – Drainage Improvements, Trenton
- #21-5683 55 Lambert Lane – Proposed Residence Addition, Lambertville

## **ZONE B**

- #20-2945D Hightstown High School – Tennis Courts & Site Work, Hightstown Borough/East Windsor
- #20-5611 The Regency at Cranbury – Proposed Adult Community, Cranbury Township
- #20-5629 Proposed McDonald's Restaurant Reconstruction, East Windsor
- #20-5637 Cranbury Road Sidewalk Construction, West Windsor
- #20-5557 Madadi Retail Center Redevelopment, East Windsor/Hightstown Borough
- #21-5665 29 Pleasant Valley Harbourton Road – Proposed Residence, Hopewell Township
- #21-2441FF Princeton University – Soccer Stadium and Practice Field, Municipality of Princeton
- #21-2441GG Princeton University – Practice Facility at Springdale Golf Club, Municipality of Princeton

# **MAY**

## **ZONE A**

None.

## **ZONE B**

- #19-0590B 1165 Route 27 – Proposed Restaurant/ATM, Franklin Township
- #21-2441HH Princeton University – Art Museum, Municipality of Princeton
- #20-2661A 505 Route 33 – Proposed Warehouses, Millstone Township
- #20-3738A Avalon Assisted Living – Building Addition, Hillsborough Township
- #20-5494A 336 Applegarth Road Redevelopment, Monroe Township
- #20-5591 PSE&G – Texas Avenue Substation Expansion, Lawrence Township
- #20-5606 PSE&G Mount Rose Substation 69kv Expansion, Hopewell Township
- #20-5616B Princeton University Lake Campus – Cross Country Course, West Windsor

# **JUNE**

## **ZONE A**

- #20-2091N New Jersey American Water – Canal Road Treatment Plant Ozone System Upgrade, Franklin Township
- #21-2554E Haldeman Lexus – Proposed Showroom Addition, Lawrence Township
- #20-2903I Lambertson Road – Proposed Widening Project, Hamilton Township
- #20-5580 Montgomery Township Stage II WWTP – Flood Protection Project, Montgomery
- #21-5681 121-125 Perry Street – Proposed Apartment Building, Trenton





## **ZONE B**

- #20-1701C Veronica Avenue & Bennetts Lane – Proposed Warehouse Facility, Franklin Township
- #21-2441JJ Princeton University East Campus TIGER & Athletic Operations Building, Municipality of Princeton
- #21-3541G Firmenich Inc. – Campus Entrance Upgrade, Plainsboro Township
- #21-4172C 17 School House Road – Proposed Warehouse, Franklin Township
- #21-5010C Riverside Center – DEY6 Amazon Delivery Station – Major Modification, Monroe Township
- #18-5061 501 Jersey Avenue Property, LLC – Proposed Warehouse, New Brunswick
- #19-5506 Windsor Pointe – Proposed Multi-Family Residential Development, East Windsor
- #21-5616C Princeton University – Lake Campus South, West Windsor
- #20-5657 Princeton LIHTC Urban Renewal – Age-Restricted Affordable Housing Project, Municipality of Princeton

# **JULY**

## **ZONE A**

- #20-0496D 114 Canal Road – Remediation Project, South Bound Brook Borough
- #21-2422C The Center School – Proposed Solar Carport, Franklin Township
- #21-3880A 62-64 Coryell Street – Parking Lot Gate Operator & Barrier Arm, Lambertville
- #20-4594A 80 Wilson Street – Major Modification, Lambertville
- #21-5712 Transcontinental Gas Pipeline – Proposed Tree Clearing, Franklin Township
- #21-5731 28 Coleman Lane – Proposed Fence, Hopewell Township

## **ZONE B**

- #21-2789U The College of New Jersey – Pedestrian Path, Ewing Township
- #21-3423A 1440 Lower Ferry Road – Site Improvements, Ewing Township
- #21-5553A 261 Livingston Avenue – Apartment Building, New Brunswick

# **AUGUST**

## **ZONE A**

- #19-3406C Pillar of Fire International – Proposed Parking Area Expansion, Franklin Township
- #18-3765B 39 Ferry Street – Proposed Townhomes, Lambertville

## **ZONE B**

- #21-0663B Innovation Park at East Windsor – Major Modification, East Windsor
- #21-1454B 15 Cranbury Road – Apartment Buildings, West Windsor Township
- #19-2282B The Promenade at Somerset – Proposed Townhome Development, Franklin Township
- #21-3033C Culver Estates – Proposed Residential Development, South Brunswick Township
- #20-5523 Route 1 – Convenience Store/Fueling Station/Hotel, West Windsor Township
- #20-5572 343 Princeton-Hightstown Road – Proposed Office Building, East Windsor
- #20-5644 1150 Cranbury South River Road – Warehouse S141, South Brunswick Township
- #21-5657A 100 Thanet Road – Multi-Family Residential Development, Municipality of Princeton
- #21-5662 401 Cottontail Lane – Proposed Warehouse Building, Franklin Township
- #21-5697 Hillsborough High School – Rear Driveway Improvements, Hillsborough Township
- #21-5724 Princeton Community Village – Affordable Housing Project, Municipality of Princeton



# SEPTEMBER

## ZONE A

- #21-5628A 1 Mill Street Single-Family Residence – Major Modification, Stockton Borough
- #21-5706 NJDOT – Route 295 Safe and Connected Corridor Project, Ewing Township/  
Hopewell Township/Lawrence Township/Hamilton Township
- #21-5742A 69 Grouser Road – Proposed Residence, Franklin Township

## ZONE B

- #21-2789V The College of New Jersey – Proposed Fitness Court, Ewing Township
- #21-2945E Hightstown High School – New Parking Lot and Bus Lane, Hightstown Borough/East  
Windsor Township
- #21-5661 Hopewell Parc – North and South – Proposed Residential Complex, Hopewell Township
- #21-5725 50 Jersey Avenue – Proposed K-8 School, New Brunswick

# OCTOBER

## ZONE A

- #21-2441MM Princeton University – Lake Campus North, West Windsor Township
- #21-5157A East Millstone Park – Playground Equipment Installation, Franklin Township
- #21-5703 NJDOT – Route 1-Bakers Basin/Franklin Corner Road to Green Street – Smart and  
Connected Corridor Project, Lawrence/West Windsor/Plainsboro/South  
Brunswick/North Brunswick
- #21-5779 Trenton Battle Monument Park – Soil Boring Installation, Trenton

## ZONE B

- #19-1688B Cranbury South Brunswick Park – Commercial Warehouse Development,  
South Brunswick Township/Cranbury Township
- #21-2332B The Square at West Windsor – Building C Drive-thru Roadway, West Windsor Township
- #21-2689A 45-48 Commerce Drive – Proposed Warehousing Facility, South Brunswick Township
- #21-3393C Notre Dame High School – Turf Field Improvements, Lawrence Township
- #21-4815A 58 White Oak Drive – Proposed Residence, Municipality of Princeton
- #20-5548 Heritage at West Windsor – Residential Development, West Windsor Township
- #20-5563 Suez Water NJ – Princeton Meadows WWTP Upgrade, Plainsboro Township
- #20-5648 483-485 Elizabeth Avenue – Proposed Warehouse, Franklin Township
- #21-5656 Bank Street Village – Proposed Mixed Use Development, Hightstown Borough
- #21-5666 Wilson Farm Property – Proposed Skilled Nursing Facility and Residential Development,  
South Brunswick Township
- #21-5726 Rutgers Cancer Institute of NJ – Medical Pavilion, New Brunswick City
- #21-5744 Mercer County Route No. 583/645 – Transportation Intersection Safety Improvements,  
Lawrence Township
- #21-5745 Chabad Lubavitch Jewish Center – Proposed House of Worship, Monroe Township
- #21-5751 Franklin Township Public Library – New Building, Franklin Township



# NOVEMBER

## ZONE A

- #21-3503C Woolverton Inn – Barn Complex Renovations, Stockton Borough
- #20-5099B 21 Kingwood-Stockton Road – Tilch Residence, Delaware Township
- #21-5702 650 New York Avenue – Trenton Self-Storage, Trenton

## ZONE B

- #21-1764C New Jersey Turnpike – Molly Pitcher Service Area Improvements, Cranbury Township
- #20-5635 J.V.B. Wicoff Elementary School – Additions & Renovations – Phase 1, Plainsboro Township
- #21-5667 Realignment of N.J. State Highway Route No. 64/Mercer County Route No. 571, West Windsor
- #21-5667A Princeton Junction Train Station – Mixed-Use Development, West Windsor
- #21-5673A Princeton Orchards – Proposed Residential Development, South Brunswick
- #21-5698 Lawrence-Hopewell Trail – Mt. Rose Distillery Trail, Hopewell Township
- #19-5512 201 Woods Road – Proposed Assisted Living Facility, Hillsborough Township

# DECEMBER

## ZONE A

- #18-1993A Calvary Community Church – Addition/Parking Expansion, Franklin Township
- #21-2852C 60 Cottontail Lane – AT&T Site W-828 Equipment Installation, Franklin Township
- #20-5425A 7 Delevan Street – Proposed Townhouses, Lambertville

## ZONE B

- #20-2639A Nongshim Holdings USA, Inc. – Warehouse Expansion, South Brunswick
- #20-5554 HSC West Windsor – Proposed Commercial Development, West Windsor

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22/22 canal mile marker, near Rocky Hill.  
*Photo: Vicki Chirco*



