

2019 ANNUAL REPORT
DELAWARE & RARITAN CANAL COMMISSION



John S. Loos, Vice Chairman
Honorable Catherine R. McCabe, Commissioner of Environmental Protection (*ex officio*)
Olivia Carpenter Glenn (Commissioner designee)
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Delaware & Raritan Canal Commission 2019 Annual Report

Background

The Delaware and Raritan Canal Commission is a state agency created pursuant to the “Delaware and Raritan Canal State Park Law of 1974” (N.J.S.A. 13:13A-1 et seq.) whose mission is to: prepare, adopt, and implement a master plan for the physical development of the Delaware and Raritan Canal State Park; review State and local actions that impact on the park to insure these actions conform as nearly as possible to the Commission’s master plan; and coordinate and support activities by citizens’ groups to promote and preserve the park.

The Commission works with the Department of Environmental Protection (DEP), 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 (NJWSA), which operates and maintains the vitally important water transmission elements of the canal, which provide 100 million gallons of drinking water daily for 1 million people in central New Jersey. Working together, the three agencies ensure that the environmental, recreational, historic and water supply resources of the Delaware and Raritan Canal are protected and preserved.

The Commission comprises the Commissioner of Environmental Protection (*ex officio*), and eight residents from Middlesex, Somerset, Mercer and Hunterdon counties, who are appointed by the Governor, with the advice and consent of the State Senate. At present, the membership of the Commission has three vacancies, and the remaining Commissioners serve in “holdover” status. Additionally, the Commission remains without an appointed Chairman selected by the Governor pursuant to subsection f. of N.J.S.A. 13:13A-11 since November 19, 2014. 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. Commissioners are also routinely involved with staff on many of the key issues addressed by the Commission.

2019 Activities

This report has been prepared in compliance with the provisions of N.J.S.A. 13:13A-11(i), which directs that “...[o]n or before December 31 in 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 Annual Report provides a complete operating and financial statement covering the Commission’s operations for 2019.

Operational Issues

Resignation of Commissioner Leck: On October 1, 2019, the Commission Acting Chairman accepted with regret the resignation of Mary Alessio Leck, Ph.D., concluding six years of meritorious service to the Delaware and Raritan Canal Commission. A noted botanist and Rider University Biology Professor from 1970 until her retirement in 2001, Dr. Leck taught courses in general biology, field natural history, marine biology and plant biology, and is the recipient of numerous accolades for her distinguished teaching and research career. In 2013, Dr. Leck brought her extensive scientific knowledge of the plant life of the canal region to the deliberations of the Commission, providing valuable advice to her fellow Commissioners and

to the Commission staff on how best to ensure the preservation and restoration of stream corridors in the Commission Review Zone. Due to her pivotal role in promoting the significance of the Abbott Marshlands, Dr. Leck helped transform a forgotten wasteland into a recognized resource for environmental education, leading ecological studies, developing management plans, the agreement that led to the formation of the Abbott Marshlands Council, an invasive species inventory, a teachers' manual, lesson plans and the Abbott Marshlands website, all while serving to link these efforts to protect and preserve the marshlands with the mission of the Delaware and Raritan Canal Commission to protect the environmental, recreational and historic integrity of the so-called "abandoned" section of the Delaware and Raritan Canal.

Dr. Leck's resignation left the Commission with six Commissioners out of an authorized membership of nine. N.J.S.A. 13:13A-11g. states that "[T]he powers of the commission shall be vested in the members thereof in office from time to time, and a majority of the total authorized membership of the commission shall constitute a quorum at any meeting thereof." If the Commission cannot secure a quorum of five members to conduct its business, the 45-day automatic approval of project applications pursuant to N.J.S.A. 13:13A-14(c) would ensue.

Video conferencing technology: Partly as a result of Dr. Leck's resignation, Commission staff purchased equipment needed to allow Commissioners to attend meetings via video conferencing pursuant to Article III, Section 4 of the Commission Bylaws, and thereby help forestall a potential future absence of a quorum. The DEP Office of Information Resource Management (OIRM) installed an 80-inch monitor and computer in the Commission conference room, and removed the 1970s vintage motion picture screen. The monitor/computer will provide the Commission with the following benefits:

- The computer and monitor will easily permit Commissioners to attend future meetings using the existing DEP Skype for Business account.
- The screen will allow staff to display in large format architectural/engineering and site photos of pending projects, rather than relying on 11"x17" black-and-white printed copies of those documents.
- The large screen will facilitate Commission staff use of interactive tools like NJ-Geoweb and allow staff to better participate in remote meetings and webinars.



(Commission Conference Room with video conferencing equipment installed)

Commission office exterior repairs: Commission staff continues to address deferred maintenance issues to the physical plant at the Commission's office, located at the historic Prallsville Mills complex in Stockton, Hunterdon County. In October, the north elevation of the office exterior, which had suffered from extensive water, clinging vegetation and insect damage, was replaced with an historically accurate board and batten siding. The office porch roof, which had sustained extensive water damage, was also replaced. With the assistance of the Division of Parks and Forestry, steps were undertaken to prevent future water damage to the exterior of the office by installing gutters and snow-stops to the building roof.

Working with the DEP Office of Natural Resource Development and their architectural consultant, work continued on the project to replace the remaining Commission office exterior siding, windows and doors. The replacement of exterior features will largely match what is in place now; however, the sliding windows of a modern design, which presently suffer from seal failure, would be replaced (subject to review and approval by the State Historic Preservation Office) with divided light windows that would match the other buildings at the Prallsville complex.



(north elevation prior to repair)



(exterior water damage)



(north elevation of Commission office after repairs)

Document archiving, storage and scanning: In 2019 the Commission project file archiving project was concluded. The project, which began in 2018, was undertaken to ensure that the Commission's public records relating to projects were maintained pursuant to the record retention schedules required by the Division of Archives and Records Management (DARM) in the Department of State, and in conformance with applicable State and federal codes, regulations, and statutes of limitation. A total of 524 boxes of files were collated, boxed pursuant to DARM requirements and archived at the DEP central warehouse in Trenton.

Emergency IT improvements: An unintended result of the project file archiving was the discovery in January that the Commission's computers, wi-fi, and router, ran through a single extension cord in the office attic, which also shared the same circuit as the building furnace. Bryan Electric was retained to install a new dedicated circuit, quad receptacle and 20-amp circuit breaker. In addition, a battery backup power system was installed to allow the Commission computers to operate for a short interval in the event that power to the building is cut. The Commission staff thanks DEP OIRM Director Peter Tenebruso and his staff for their swift response to a situation that could have posed a major threat to the Commission's continuity of operations.

Energy-efficient interior/exterior lighting: In February, the Commission replaced interior fluorescent lights in the office engineering and entry areas, as well as the broken exterior safety lights at a cost of approximately \$5,000. The 35-year-old lights were replaced with energy-efficient LED lighting. According to the U.S. Department of Energy, LED lighting offers savings of over 80 percent and a service life that is 25 times longer than traditional lighting. The work is also consistent with current DEP sustainability initiatives and will help lower utility costs paid by the Division of Parks and Forestry.

Commission website: Working in conjunction with the New Jersey Office of Information Technology (OIT), the Commission staff made major strides toward revamping the Commission's website, which was launched in 1999, and has undergone little change or modernizing since that time.

The Commission staff and OIT are presently working on a new website that will contain considerably more information than the current site. The new site will include: Commissioner biographies; stream corridor easement signage information; past meeting minutes; Commission annual reports; the 1977 and 1989 Delaware and Raritan Canal State Park master plans; the 1982 Historic Structures Survey; the 1980 Development Guide; and the 200-2013 Delaware and Raritan Canal State Park Development Plan. Commission staff hopes to relaunch the website in the Spring of 2020. The new website will provide valuable information to canal stakeholders, the regulated community and the public.

Preservation of historic photographic slides: In September, the Commission Executive Director met with archivists from DARM to discuss the Commission's extensive collection of 35mm photographic slides. During his long and distinguished tenure, former Director James Amon compiled a valuable collection of slides, consisting of historic photos and postcards of the canal and its structures, photos depicting the construction and development of the Delaware and Raritan Canal State Park. He also created an archive of photographs that display the flora and fauna of the canal region and captured typical scenes of life along the canal in the 1970s and 1980s. Because the public is unaware of its existence, this valuable photographic record is generally inaccessible.

It soon became clear that to preserve the collection of photographic slides, it would be necessary to accession the materials to DARM, which the Commission authorized on December 18, 2019. Accessioning represents an opportunity for DARM to gain basic physical and intellectual control of material, and in this way, provide a collections management arrangement that is beyond the expertise of the Commission staff to implement. Thus, in the case of the Commission slide collection, the originals are now the legal property of DARM and stored in an archivally appropriate setting using correct storage materials. The originals would be made available to scholars, writers and the public at the archives building, and could be made available for displays if the goal of a Delaware and Raritan Canal museum were ever to become a reality.

Although it is estimated that cataloging and scanning the slides will take as long as three years, DARM has agreed to provide the Commission with electronic reproductions of some of the best historic images of the Delaware and Raritan Canal, which will be made available on the Commission's relaunched website in 2020.

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. In furtherance of 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, esthetic 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:

- 1) Stormwater drainage and water quality;
- 2) Stream corridors;
- 3) Visual, historic and natural quality; and
- 4) 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 located in central New Jersey that impact the Delaware and Raritan Canal. The Commission's regulatory jurisdiction encompasses approximately 400 square miles of land area located 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 over 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, consisting of three full-time employees and two part-time engineers, reviewed a total of 482 projects in calendar year 2019. Of these reviews, 108 were deemed complete by staff and presented to the Commission for formal action; 53 were General Permit Authorizations issued by the Executive Director in accordance with Subchapter 5 of N.J.A.C. 7:45, and 121 were jurisdictional determinations. In addition, 200 staff reports were determined to be technically or administratively deficient, and staff issued reports recommending the submission of additional information necessary to determine completeness. Commission staff also engaged in many informal reviews and pre-application meetings with the regulated community to determine whether projects were complete and ready for Commission consideration.

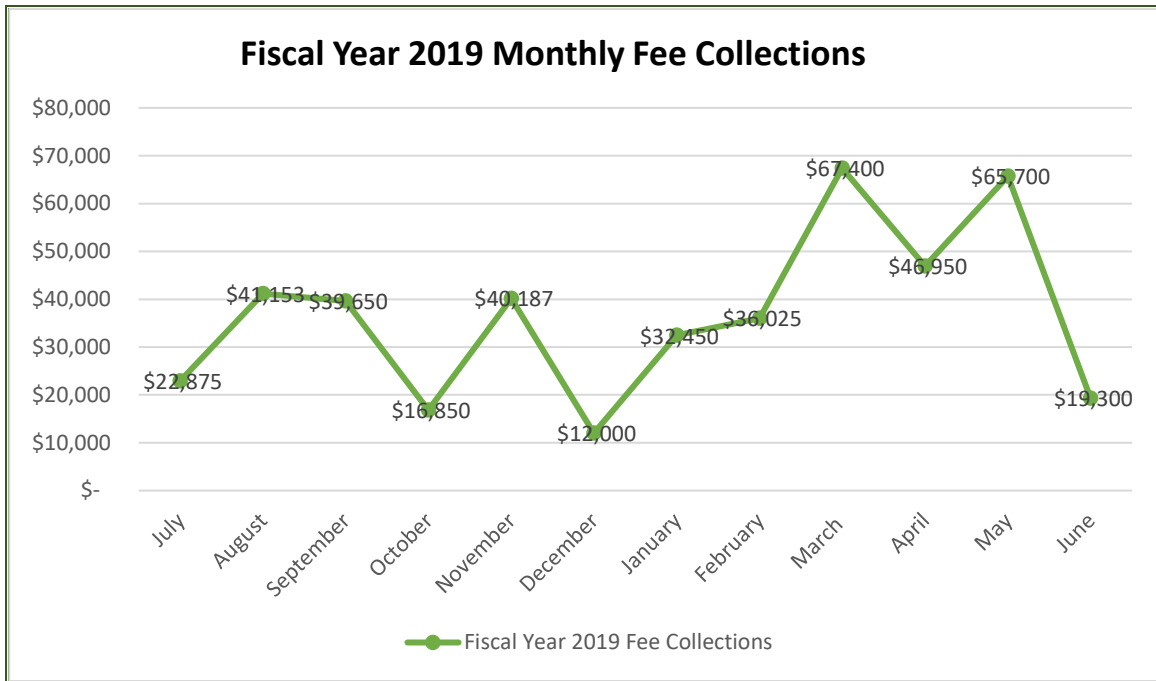
Conservation Easement acreage preserved: Stream corridors are critical to improving and maintaining water quality entering the Delaware and Raritan Canal and canal park; they allow these areas to store and mitigate stormwater that may contribute to flooding. N.J.A.C. 7:45-9.5 direct applicants for individual 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 further provide that at a minimum, such measures shall include easements, deed restrictions, or other measures satisfactory to the Commission. In furtherance of 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 responsibility of the landowner 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 the property 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. Over 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 undertaken at no cost to state taxpayers. In 2019 the Commission executed easements that added an additional 14.6 acres of stream corridor easements to those that have been preserved since the inception of the Commission's regulatory program in 1980.

Financial Information

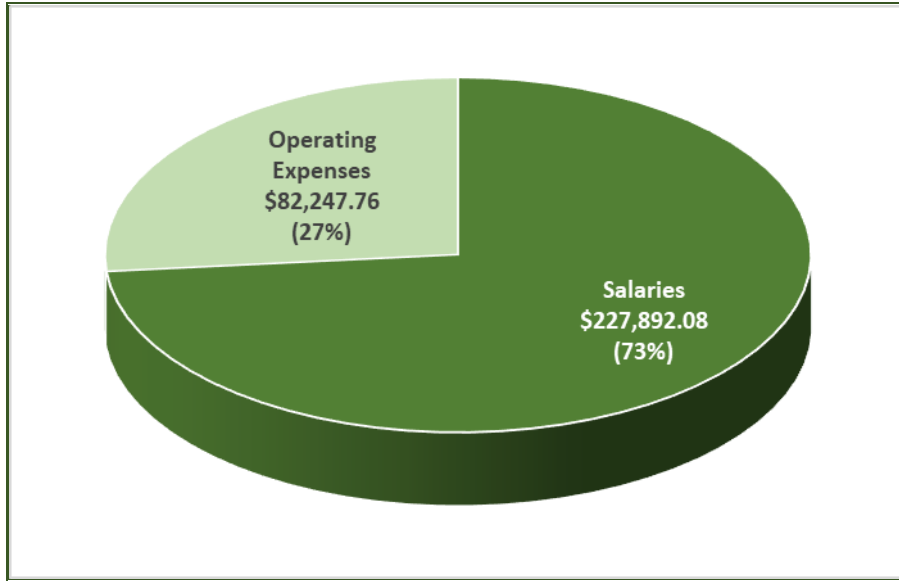
During Fiscal Year 2019, which ended on June 30, 2019, the Commission collected \$440,540.90 in total revenue from project application fees. The following chart details the amount of monthly fee collections:



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:

Fee Category	Amount Collected
Jurisdictional Determinations (N.J.A.C. 7:45-13.2(a))	\$5,650
General Permit No. 1 (N.J.A.C. 7:45-13.2(b))	\$450
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))	\$100
Stormwater Runoff and Water Quality Impact (N.J.A.C. 7:45-13.2)	\$360,512
Stream Corridor Impact (N.J.A.C. 7:45-13.2(g))	\$57,100
Visual, Historic and Natural Quality Impact Review (N.J.A.C. 7:45-13.2 (d)&(e))	\$8,350
Other (primarily “major modifications”) (N.J.A.C. 7:45-13.2(k))	\$12,578

The Commission expended a total of \$310,139.84 in FY 2019. The Commission expenditures in FY 2019 are further broken down into the salary and operating costs noted in the following chart:



A detailed itemization of the \$82,247.76 in Commission Operating Expenses for FY 2019 is provided in the following table.

Expenditure Detail	Total Amount Expended
Office Supplies	\$1,420.35
State Printshop Charges	\$537.78
Photocopier Rental	\$2,074.92
Household/Security	\$730.66
Conference Registration Fees	\$80.00
Postage	\$2,017.74
NJOIT Website Design & Administration	\$1,566.69
Janitorial Services	\$2,533.56
Temporary Personnel Employment Services	\$23,378.90
Miscellaneous Services	\$2,645.42
Office of Attorney General Charges	\$16,840.00
Building & Grounds Maintenance	\$5,474.10
Rent -- Other	\$329.51
Buildings and Grounds Improvements	\$1,025.00
Equipment Purchases	\$19,681.63
Computer Hardware & Peripheral Purchases	\$1,911.50
FY19 Total Operating Expenses	<u>\$82,247.76</u>

Notable Commission Projects/Actions

22/22 Mile-Marker Replacement: In May 2019, the Commission received an email from a Montgomery Township resident who was interested in the fate of the “lost” canal mile-marker near Rocky Hill. The canal’s mile-markers are artifacts of great historic significance. During the canal’s period of operation, mile-markers were placed at along the canal at an angle to the towpath. Each marker displayed two numbers. Going downstream from the summit of the canal at Trenton, the number facing the mule driver told him the distance that remained from that point to New Brunswick. Turning around, the driver could read the number that gave the mileage back to the main canal’s point of origin in Bordentown. Together these numbers always totaled 44, which was the length in miles of the main canal. The 22/22 mile-marker is significant in that it is more ornate than the others, given its location at the half-way point of the main canal.

It was determined after a site visit that the 22/22 mile-marker was broken and had fallen into the canal embankment.



(22/22 Mile-marker as “found” in the canal embankment)

Using mitigation monies, the Commission approved the expenditure of \$4,850 for the restoration of the marker by an historic masonry contractor. In October of 2019, the contractor removed the marker from the embankment, repaired a vertical crack, and repositioned it at the correct angle and on a new base under the supervision of Delaware and Raritan Canal State Park Historian Vicki Chirco.



(Restored 22/22 Mile-marker)

Bulls Island Recreation Area: In cooperation with DEP Division of Parks and Forestry Director Olivia Carpenter Glenn, an inter-departmental working group consisting of representatives from the Commission, the Division of Parks and Forestry, the State Historic Preservation Office and the New Jersey Water Supply Authority convened to devise a plan for the future use of the northern portion of the Bull's Island Recreation Area, which has been closed to the public since 2011. When a plan is developed and agreed upon, the Division would submit the plan to the full Commission as a proposed project within the park pursuant to N.J.S.A. 13:13A-14b. Once the project is approved, the Commission can propose and adopt an amendment to the Delaware and Raritan Canal State Park Master Plan that incorporates the elements of the plan.

Native Tree and Shrub List update: The Commission began the process of updating and expanding the Commission's list of native plants and shrubs. The Commission's regulations refer to native plants in two areas. First, the Commission's stream corridor regulations (N.J.A.C. 7:45-9 and N.J.A.C. 7:45-12.4(a), respectively) endorse the use of native plantings when the Commission issues waivers of strict compliance for a project that meets the criteria of not having an adverse impact upon a stream corridor's ability to function as a buffer for a water course's ecological health and as a natural area. More explicitly, the visual, historic and natural quality impact standards direct at N.J.A.C. 7:4510.5(d)5 that for projects in Commission Review Zone A, wherever possible, natural terrains, soils, stones, and vegetation should be

preserved, and that new vegetation, stones, and soils should be “native to the environment in which they are placed.”

Commissioners and the regulated community have often struggled with implementing these requirements. Commissioners have to consider applications that contain non-native vegetation that applicants wish to plant for ornamental purposes, or due to the challenges of planting in an urban environment, while the regulated community has suggested that the Commission native tree and shrub lists are out-of-date and contain species that are difficult to obtain from commercial nurseries.

Staff is working on a two-pronged approach to this issue that it hopes will yield results in the year 2020. Staff would like to revise the manner in which vegetation is reviewed in project applications to provide enhanced guidance to the regulated community. First, staff is working on the creation of a list of invasive vegetation that should be proactively discouraged for projects located within the Review Zone. Staff would also like to expand and revise the existing lists of native trees and shrubs to include species from other sources within the State and Federal governments. The Commission staff extends its gratitude to Delaware and Raritan Canal State Park Naturalist Stephanie Fox, and Regional Forester Rosa Yoo of the Bureau of Forest Management, Division of Parks and Forestry, for taking the time to discuss this issue with the Commission staff and sharing their considerable expertise.

Conclusion

Although the Commission faces considerable uncertainty with respect to its ability to maintain a quorum in order to perform its statutory function, progress was nevertheless made on a wide array of issues in 2019. The Commission’s working relationships with the Division of Parks and Forestry and the NJWSA remain strong, and the staff is confident that additional improvements to the Commission’s operations will be realized in 2020.