

2017 ANNUAL REPORT
DELAWARE & RARITAN CANAL COMMISSION



John S. Loos, Vice Chairman
Honorable Bob Martin, Commissioner of Environmental Protection (*ex officio*)
Robert M. Bostock (Commissioner designee)
Julia Cobb Allen
Mary Alessio Leck, PhD.
Phillip Lubitz
Douglas H. Palmer
Bruce D. Stout, PhD.

Delaware & Raritan Canal Commission 2017 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 closely 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 coordinates its activities with the New Jersey Water Supply Authority (NJWSA), which operates and maintains the vitally important water transmission complex elements of the canal, and provides 100 million gallons of drinking water daily for 1.5 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 is comprised of nine residents from Middlesex, Somerset, Mercer and Hunterdon counties, who are appointed by the Governor, with the advice and consent of the State Senate. It should be noted that in 2017, the membership of the Commission has two vacancies among its membership, and that five of the six appointed Commissioners are 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 is an employee of the DEP, but by law is appointed by and serves at the pleasure of the Commission. Commissioners are also routinely involved with staff on many of the key issues addressed by the Commission.

2017 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 2017.

Executive Director Appointment:

On July 10, 2017, the Commissioners unanimously appointed John Hutchison as the fourth Executive Director in the history of the Commission. Mr. Hutchison succeeded Marlen Dooley, who had held the position since 2011. Prior to his appointment, he served as a Senior Policy Advisor to the Commissioner of Environmental Protection, was Executive Director of the bi-partisan Red Tape Review Group, and had held several research positions with the State Legislature.

Operational Issues:

In 2017 a series of deferred maintenance issues and equipment upgrades were undertaken to improve the Commission's ability to carry out its mission. These improvements to the physical plant and information technology resources were instituted at the Commission's office, located at the historic Prallsville Mills complex in Stockton, Hunterdon County. A faulty and cost-ineffective HVAC system, installed in 1984, was replaced in December. DEP Historic Preservation Office approval was obtained and architectural preliminary work was completed to replace the office roof in early 2018. The State Park Service maintenance staff at Bulls Island Recreation Area provided tree-trimming, debris removal and vegetation clearing at the office. The Commission office telephone system was replaced in September, providing staff with intercom and voicemail functions that were not available on the old system.

Working with the DEP Office of Information Resource Management (ORM), the Commission staff email accounts were migrated into the State email system, providing enhanced capabilities, transparency and security to the Commission's communications. Computers purchased in early 2017 were re-imaged to provide updated and missing software programs, and brought onto the DEP/OIRM network by means of the installation of a virtual private network at the Commission office. Approximately 14,000 documents were copied onto a shared drive on the DEP network. Commission documents are now provided enhanced security, are stored on offsite servers, and are backed up each day. For the first time, Commission staff can now avail themselves of expert technical assistance from the DEP/OIRM "Help Desk," which can resolve many IT issues remotely from Trenton.

A new copier/printer/scanner was installed at the Commission office in December, providing staff with the ability to scan, save and email documents. The new device was procured at a lower rental cost than the existing copier, and its use should reduce the amount of paper files stored onsite. Additionally, the Commission began emailing copies of scanned documents to applicants whenever possible to municipal and county planning agencies and stakeholders, which should significantly reduce postage costs in 2018 and beyond.

Working with the DEP Division of Financial Management Planning and General Services, the Commission staff identified monies in the New Jersey Turnpike widening mitigation account that can be used to purchase a replacement Commission vehicle. The vehicle will be purchased in early 2018 and used to monitor compliance on the six conservation easements established as a condition of the approval granted for the turnpike widening project.

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 which "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 furthest 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 five counties and 21 municipalities of central New Jersey.

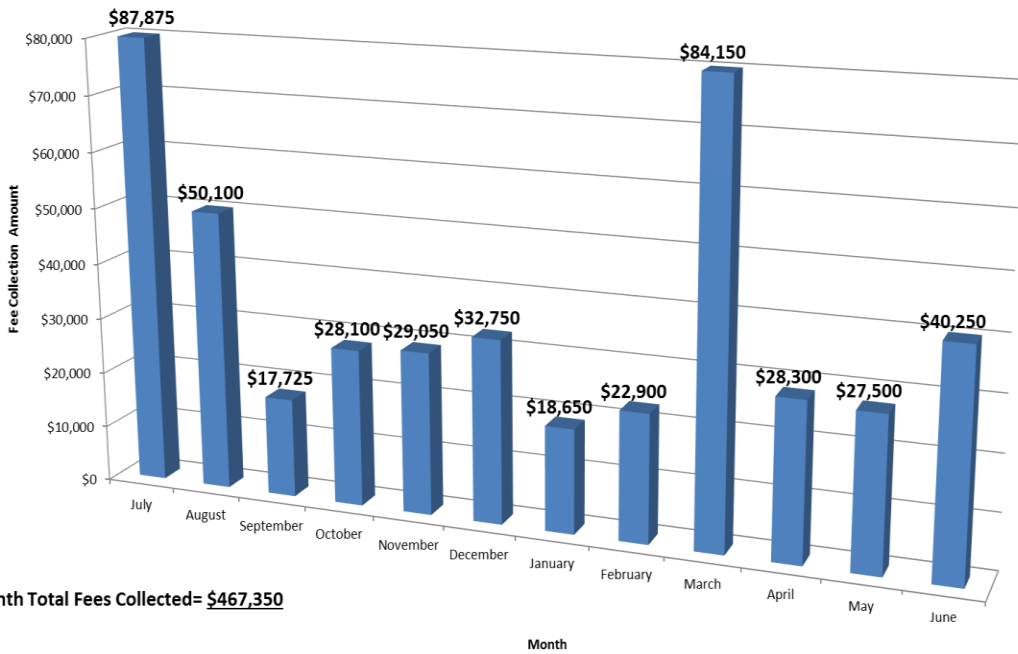
Developments that are defined as “major” projects under the Commission’s regulations (projects that involve the cumulative coverage since January 11, 1980 of one-quarter acre or more of impervious surface, or the disturbance of one acre of land) must meet the Commission’s standards for managing stormwater 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. and the Commission 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 provides flood storage, improves water quality of major streams that enter the canal, and provides habitat for wildlife.

The Canal Commission staff, consisting of two full-time employees, one temporary hourly staff, and two engineers typically employed one day each per week, reviewed a total of 156 projects in calendar year 2017. Of these reviews, 85 were deemed complete by staff and presented to the Commission for formal action; 58 were General Permit Authorizations issued by the Executive Director in accordance with Subchapter 5 of N.J.A.C. 7:45, and 79 were jurisdictional determinations. The overall number does not include the many informal reviews and pre-applications meetings the Commission staff participated in with the regulated community to determine whether projects were administratively complete and ready for Commission review.

Financial Information:

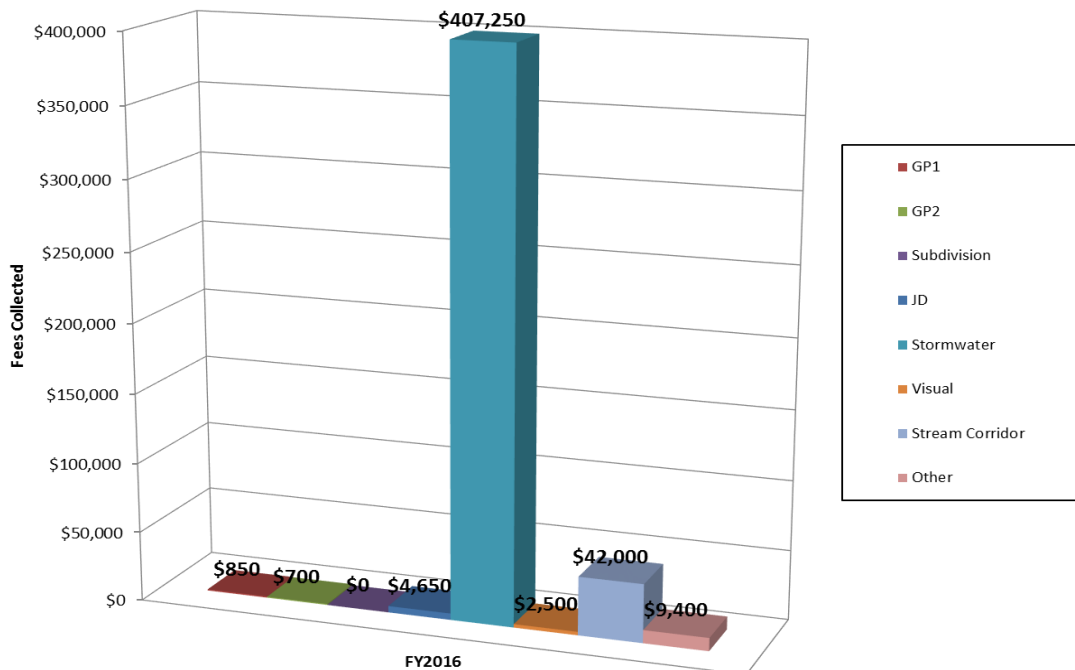
During Fiscal Year 2017, which ended on June 30, 2017, the Commission collected \$467,350 in total revenue from project application fees. The following chart details the amount of monthly fee collections.

12-Month FY2017 Budget Report (July 2016 to June 2017) on DRCC Fee Collection



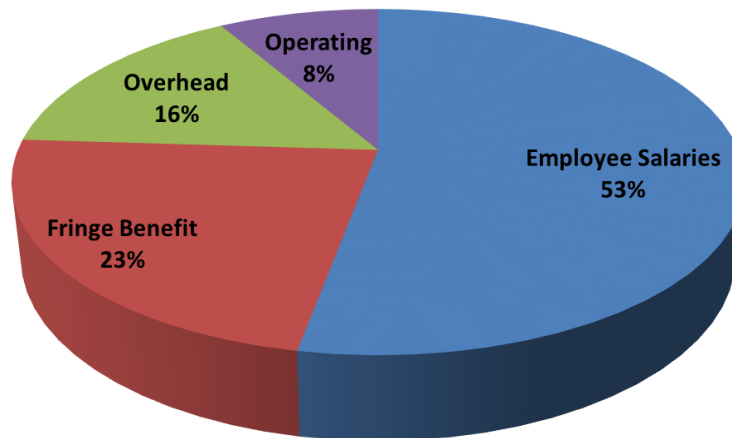
The Commission fee collections are mainly for the review of stormwater applications and stream corridor impact but also include the review of jurisdictional determinations, general permits and subdivisions. The following chart reflects the specific amount of fees collected for each category of review in FY2017.

12-Month FY2017 (July 2016 to June 2017) DRCC Fee Collection Breakout



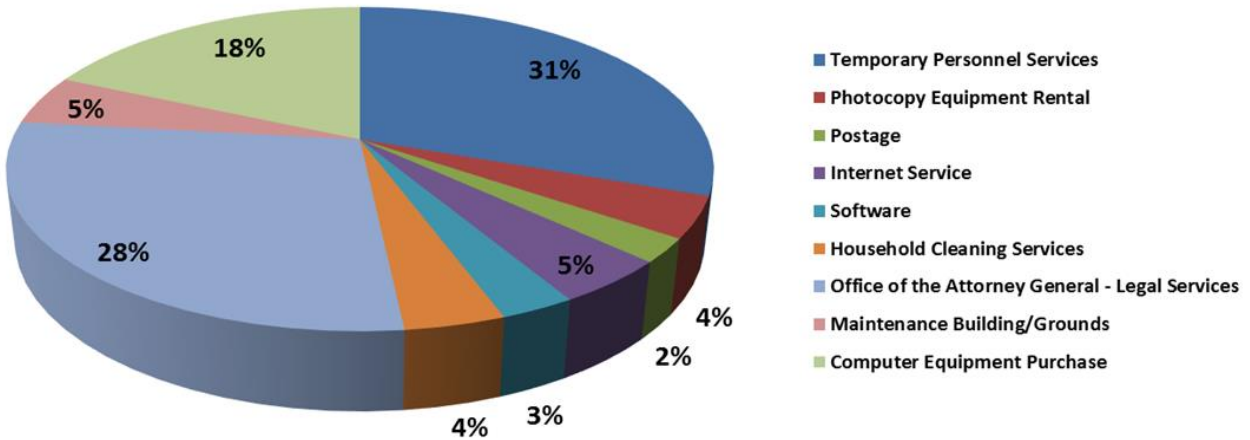
The Commission expended a total of \$377,128 in FY 2017. The Commission expenditures in FY 2017 can be earmarked for salary costs and operating costs as noted in the following table and pie chart.

Table 1: FY 2017 Total Expenses	
SALARY COSTS	
Employee salaries	\$198,853
Employee Fringe Benefits	\$86,599
Department Administrative Overhead (Indirect)	\$58,458
OPERATING COSTS	\$33,218
Total Expenditures	\$377,128



The \$33,218 in Commission Operating Expenses for FY2017 are detailed in the following table and chart.

Table 2: FY2017 Commission Operating Expenses		
Temporary Personnel Services	\$10,133	31%
Photocopy Equipment Rental	\$1,369	4%
Postage	\$795	2%
Internet Service	\$1,495	5%
Software	\$966	3%
Household Cleaning Services	\$1,295	4%
Office of the Attorney General - Legal Services	\$9,454	28%
Maintenance Building/Grounds	\$1,645	5%
Computer Equipment Purchase	\$6,067	18%
Total	\$33,218	



Notable Commission Projects/Actions:

- In February, the Commission approved a plan submitted by the DEP Division of Parks and Forestry to address the infestation of ash trees in the Delaware and Raritan Canal State Park by the Emerald Ash Borer (EAB), an exotic beetle that was discovered in New Jersey in May of 2014. EAB eats ash foliage but cause little damage; however, their larvae feed on the inner bark of the ash, disrupting the tree's ability to transport water and nutrients. EAB kills trees within three to four years after detection, and 99% of trees die after initial infestation. Trees die from the top down and become brittle very quickly, resulting in the risk of dropping large branches and tree tops. EAB has killed hundreds of millions of ash trees in North America and has been detected in 30 states. In addition to the program of felling and treatment of diseased trees, the Commission approved a mitigation plan to replant areas of the park with native species such as Swamp White Oak, Pin Oak, Tulip Poplar, Sweet Gum, Black Walnut, Dogwood, Arrowwood Viburnum, Black Chokeberry, Elderberry, and Eastern Redbud, at a density of 500 trees per acre.
- As a condition of the 2013 approval of the project to mitigate the impacts of the Delaware River Joint Toll Bridge Commission project to replace the Scudder Falls Bridge that carries Interstate 95 from New Jersey into Pennsylvania, the Commission approved the construction of a pedestrian and bicycle lane that will connect the Delaware Canal path in Pennsylvania with the Delaware and Raritan Canal path in New Jersey. This project will expand the existing system of loop trails and improve transportation and recreational opportunities in the area.
- The Commission worked cooperatively with the DEP, the NJWSA and the many canal stakeholders to implement the authority's comprehensive plan to address the emerging threat posed by the spread of the invasive aquatic plant hydrilla (*Hydrilla verticillata*) in the Delaware and Raritan Canal. Known as the "The Perfect Weed" because of its tolerance to varied water conditions, easy reproduction, and difficulty to control, hydrilla was introduced to the United States in the 1950's as an aquarium plant. Hydrilla can form dense mats that can choke water flow, clog culverts and pipes, and has been documented to alter water chemistry -- pH, dissolved oxygen, and temperature. If unmanaged, Hydrilla has the potential to reduce water flow in the canal by up to 85%, and clog or damage water intakes. Since the canal has several spillways along its length

where water enters neighboring waterbodies, hydrilla could be introduced into the Delaware River, the Assunpink Creek, the Millstone River and the Raritan River. The introduction or further spread into these water bodies would be ecologically catastrophic, and have significant impacts on water supply and recreation. Fortunately, the first year of the management program yielded excellent results. Compared with the baseline aquatic plant survey conducted in September 2016, hydrilla observations were reduced from 56% of sites surveyed to 5% of sites in September 2017. Hydrilla tuber sampling documented a percent decrease of 82-100% compared with the 2016 results. While these results are encouraging, hydrilla is extremely persistent and resilient. Very low tuber densities, lower than the observed numbers in the Delaware and Raritan Canal, are enough to reestablish high plant densities in just a few years. Accordingly, the NJWSA-led management program, with annual modification, will continue for the foreseeable future with collaborative support from the Commission, the DEP and the canal's stakeholder groups.

- In July, the Commission staff granted access to a representative of Princeton University to examine historic maps detailing property ownership in the area surrounding Carnegie Lake in the municipality of Princeton and West Windsor Township. By sharing the Commission's archive of historic maps, the university gained a better understanding of property ownership adjacent to their proposed campus expansion. In return for making the historic maps available, the university electronically scanned them and provided the scanned copies, allowing the Commission staff to make copies of the maps available to the public in the future.
- In August, the Commission adopted voluntary standards and practices for permit submission, record retention and stream corridor mapping using electronic methods. In addition to paper documents, applicants will be encouraged to submit permit information to the Commission in an electronic format on a compact disk, USB flash drive, or other method. Ultimately, this will facilitate the long-term goal of converting the information into a geo-reference spatial overlay on the DEP GeoWeb system.

Conclusion:

In summary, 2017 was an eventful and productive year for the Delaware and Raritan Canal Commission. The Commission looks forward to working with the new administration of Governor-elect Murphy and Lieutenant Governor-elect Oliver, the membership of the State Legislature, and the incoming leadership of the Department of Environmental Protection to expand upon the successes noted above, and to continue the Commission's mission to preserve and protect the environmental, water supply and historic resources that comprise the Delaware and Raritan Canal for future generations of New Jerseyans.

