

DEPARTMENT OF PUBLIC WORKS SEWER FUND

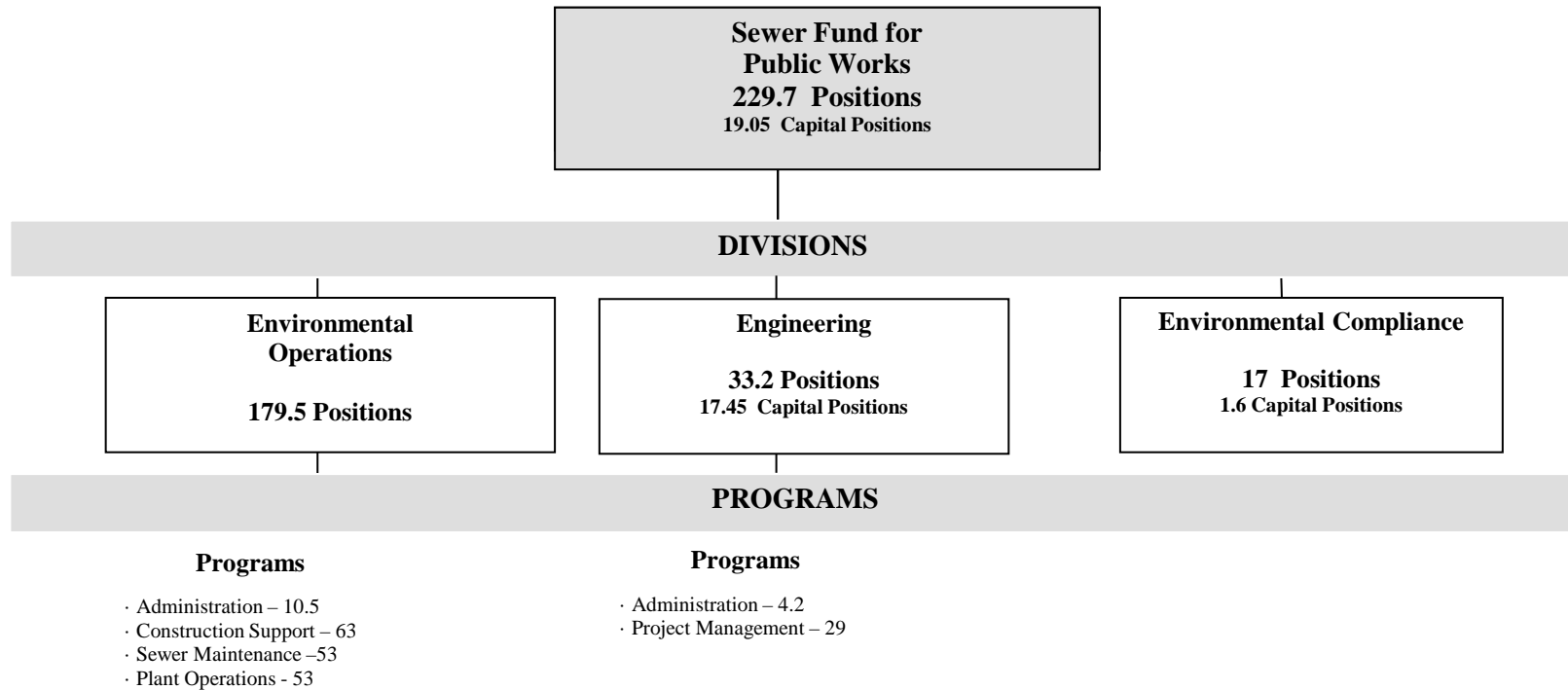
FY2019

RECOMMENDED BUDGET

TO COUNTY COUNCIL

April 23, 2018

**NEW CASTLE COUNTY
DEPARTMENT OF PUBLIC WORKS SEWER FUND
FY2019 ORGANIZATIONAL CHART**



**NEW CASTLE COUNTY
DEPARTMENT OF PUBLIC WORKS SEWER FUND
FY2018 ACCOMPLISHMENTS**

- Initiated the emergency repair of the Christina River Force Main (CRFM), including locating the damaged section of pipe with commercial divers, completing plans and specifications, obtaining a State loan and coordinating stakeholders.
- Exceeded our goal of cleaning 500 miles of sanitary sewer by cleaning 576 miles of sanitary sewers located in over 200 subdivisions and off-road areas using in-house equipment and operators during the previous 12 months.
- Cleared and field-marked 43,703 Miss-Utility sanitary sewer location requests with in-house personnel during the past year. These requests included both emergency and routine mark-outs.
- Treated all high priority and secondary priority areas in the Chemical Root Control Program. All of these areas continue to experience a significant drop in root-related Sanitary Sewer Overflows (SSO).
- Cleaned and TV'd the following trunklines and collector systems during the past year: North Christina Interceptor, Eagle Run Trunkline, Boulden Industrial Park Trunkline, Greenbriar Outfall and Valmy Lane, Marra Landing, Governors Field, Hares Corner and Little Falls collection systems. Cleaning trunklines is a relatively new practice aimed at reducing SSOs.
- Corrected hydrogen sulfide corrosion, grease, roots, debris, structural problems, and leaking joints discovered during the cleaning and CCTV evaluations.
- Completed or currently accomplishing the major rehabilitation of six wastewater facilities to improve their reliability and/or extend their service life: Belltown III, Newport, Farnhurst, Brandywine Towers and Cavaliers pumping stations as well as the Delaware City wastewater treatment plant.
- Continued major equipment and/or building rehabilitation projects at seven large pumping stations using a combination of contract vendors and Plant Operations personnel: Edgemoor, Buttonwood, Stoney Creek, White Clay, Naamans, Terminal Avenue and Christiana.
- Completed 31 sanitary repairs in-house, including 4 emergencies (8.12%), replacing 785 ft. of pipe.
- Completed major maintenance to stormwater facilities located at Salem Woods, Chandeleur Woods #2, Amberwood #1 and the Airport Industrial Park using in-house crews. Also replaced the original piping and outlet structure at Lewis Pond in Banning Park.
- Inspected 2200+ stormwater management facilities and monitored 1300+ Commercial Food Establishments (CFE).
- Completed sampling of the designated outfalls in the Shellpot and Christina watersheds for developing a PMP (Pollutant Minimization Plan) for PCBs (Polychlorinated Biphenyls) per the County's National Pollutant Discharge Elimination System (NPDES) permit.
- Received approval of our Stormwater Pollution Prevention and Management Plan in compliance with our NPDES permit.
- Ran the successful Great Schools Clean Streams contest. Over 6,021 residents pledged to properly dispose of their fats, oils, and grease and over 300,000 advertising impressions were made.

Department of Public Works
Sewer Fund FY2018 Accomplishments
-Continued-

- Completed 82,600 linear feet of cured-in-place pipe lining.
- Completed 217 trenchless lateral repairs.
- Completed pipe rehabilitation (excavate point repairs, pipe grouting and pipe lining) on the Sunny Brae Trunkline and its watershed including Foulk Woods and Graylyn Crest communities.
- Refined the sewer flow meter and rain gauge network to assist in identifying improvements needed to the sanitary sewer system. Improved flow meter network and tools also better defines sewer capacity available to support growth.
- Completed construction of the new Red Lion Pump Station.
- Completed emergency repairs to the surge tank and station bypass at the White Clay Creek pump station
- Completed reviews of private sector projects including 32 sanitary plan sets, 2 pump stations, 10 grinder pumps and 13 road bond inspections.
- Successfully renegotiated the revised CSO Elimination Plan, part of the Secretary's Order to rehabilitate the Brandywine Hundred sewer system, with DNREC. The revised plan eliminates Phase 2 from the original plan, deferring approximately \$70 million.
- Revised the calculation of the sewer rate so the Department can meet all stakeholders' expectations while ensuring financial stability in the sewer fund.
- Implemented Cityworks throughout the Environmental Operations Division.

**NEW CASTLE COUNTY
DEPARTMENT OF PUBLIC WORKS SEWER FUND
FY2019 GOALS**

- Using the recently-implemented Cityworks software, establish benchmarks and track service delivery for those services provided by the Environmental Operations Division.
- Expand the number of areas where grease control and root control chemicals are introduced into the sewer system to reduce main line blockages caused by grease and tree roots that cause back-ups and sanitary sewer overflows.
- Protect private residences and other sensitive areas by performing routine preventive cleaning of at least 500 miles of the sanitary sewer system.
- Prevent utility damage and comply with the legal requirements of Miss Utility membership, including both emergency and routine sanitary sewer marking.
- Increase the focus on safety by reviewing each section's safety training and personal protective equipment (PPE), establishing written safety and training policies and working with Risk Management to enhance safety protocol and training as necessary.
- Protect and improve stream water quality by operating and maintaining the wastewater treatment plants in Delaware City, Port Penn, Odessa and Lea Eara Farms at or below their allowable permit limits and with zero NPDES violations.
- Complete the long-term plan for the Christina River Force Main (CRFM) and begin preliminary design
- Complete sanitary repairs, paving and drainage projects efficiently and less expensively than contracted services.
- Respond to emergency sanitary sewer situations immediately after we receive the call, investigate the problem and prepare for the necessary repairs or bypass pumping in 2 hours or less.
- Complete the Water Quality Improvement Plans (WQIP) for Christina Basin and Dragon Run watersheds and negotiate cost share agreements with co-permittees.
- Complete the major rehabilitation of the Governor Printz Interceptor, located on Governor Printz Boulevard between Sunset Drive and Holly Oak Road.
- Inspect the growing inventory of SWM facilities annually, which is projected to be over 2,400 next calendar year.
- Increase clean water public education programs to enhance stormwater permit requirements and to reduce sanitary sewer blockages.
- Complete Phase 1 sewer rehabilitation projects as designated in the Brandywine Hundred CSO elimination plan and eliminate ND-34 overflow structure by December 31, 2018.

Department of Public Works
Sewer Fund FY2018 Goals/Objectives
-Continued-

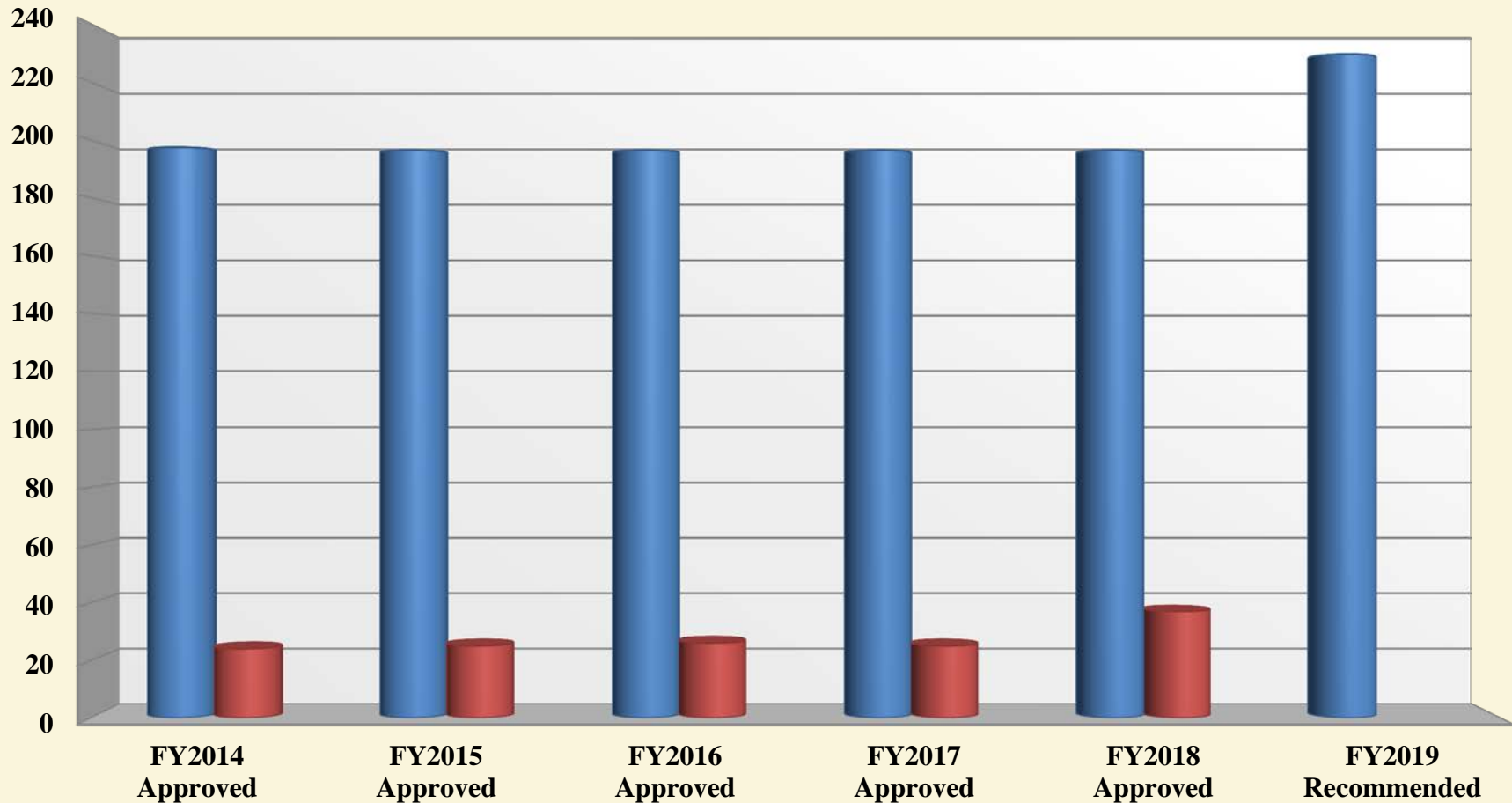
- Re-instate a portion of the South Christina interceptor currently not in use, improving capacity in a large growth area.
- Participate in the DelDOT SR72 Advanced Utility Relocation project, extending sanitary sewer to homeowners on SR72 so the road will not have to be impacted in the future.
- Construct the Lea Eara Forcemain, thereby eliminating the Lea Eara Farms Treatment Plant, which has been leaching nitrogen into the groundwater and is the subject of a DNREC enforcement order.

**NEW CASTLE COUNTY
DEPARTMENT OF PUBLIC WORKS SEWER FUND
FY2019 CHALLENGES**

- Maintaining expected levels of service and meeting regulatory demands with reduced staff levels. Past understaffing has resulted in reduced service levels and maintenance deferrals which will take time to correct.
- Operation and maintenance of the County's sanitary sewer system's expanding infrastructure. During the previous calendar year, a net total of 795 service connections, 237 manholes, and 8 miles of main pipe were added to the County's sanitary sewer system.
- Protection of the Christina River Forcemain, a critical high-volume wastewater transmission pipeline, as construction technology increasingly moves to horizontal drilling of new utilities.
- Meeting our regulatory requirements for inspecting stormwater management facilities with the number of facilities expected to grow by 20%.
- Ensuring residential Maintenance Corporations comply with stormwater management maintenance requirements, which are sometimes complicated and expensive for maintenance corporations.

POSITION OVERVIEW

**NEW CASTLE COUNTY
DEPARTMENT OF PUBLIC WORKS SEWER FUND
POSITION HISTORY**



	FY2014 Approved	FY2015 Approved	FY2016 Approved	FY2017 Approved	FY2018 Approved	FY2019 Recommended
■ Number of Positions	197.5	196.5	196.5	196.5	196.5	229.7
■ Vacancies	24	25	26	25	37	

FY19 reflects the 31.2 positions transferred from the General Fund

**NEW CASTLE COUNTY
DEPARTMENT OF PUBLIC WORKS SEWER FUND
FY2019 POSITION ADJUSTMENTS**

Title	FROM	TO	Addition (PIR)	Delete	Transfer	Comments
Secretary	40501	40306			0.6	move 60% from GF to SF, new OCA
Secretary	40501	40306			1.0	move from GF to SF, new OCA
Engineering & Env Services	40501	40306			0.6	move 60% from GF to SF, new OCA
Assistant County Engineer	40501	40306			1.0	move from GF to SF, new OCA
Assistant County Engineer	40501	40306			1.0	move from GF to SF, new OCA
Chief of Project Management	40502	40307			1.0	move from GF to SF, new OCA
Operations Engineer	40504	40307			1.0	move from GF to SF, new OCA
Sewer Management Engineer	40504	40307			1.0	move from GF to SF, new OCA
Sewer System Analyst	40504	40307			1.0	move from GF to SF, new OCA
Civil Engineer II	40504	40307			1.0	move from GF to SF, new OCA
Civil Engineer II	40504	40307			1.0	move from GF to SF, new OCA
Civil Engineer II	40504	40307			1.0	move from GF to SF, new OCA
Civil Engineer II	40310	40307			1.0	moved to new OCA
Civil Engineer II	40504	40307			1.0	move from GF to SF, new OCA
Drafting & Design Supervisor	40504	40307			1.0	move from GF to SF, new OCA
Civil Engineer I	40504	40307			1.0	move from GF to SF, new OCA
Civil Engineer I	40504	40307			1.0	move from GF to SF, new OCA
Planner II	40305	40307			1.0	moved to new OCA
Chief Construction Inspector	40502	40307			1.0	move from GF to SF, new OCA
Chief Construction Inspector	40502	40307			1.0	move from GF to SF, new OCA
Chief Right of Way Agent	40502	40307			1.0	move from GF to SF, new OCA
Staff Engineer	40504	40307			1.0	move from GF to SF, new OCA
Staff Engineer	40504	40307			1.0	move from GF to SF, new OCA
Construction Inspection Supervisor	40502	40307			1.0	move from GF to SF, new OCA
Public Works Inspector	40502	40307			1.0	move from GF to SF, new OCA
Public Works Inspector	40502	40307			1.0	move from GF to SF, new OCA
Public Works Inspector	40502	40307			1.0	move from GF to SF, new OCA
Public Works Inspector	40502	40307			1.0	move from GF to SF, new OCA
Public Works Inspector	40502	40307			1.0	move from GF to SF, new OCA
Public Works Inspector	40502	40307			1.0	move from GF to SF, new OCA
Public Works Inspector	40502	40307			1.0	move from GF to SF, new OCA
Sanitary Sewer Information Spec.	40504	40307			1.0	move from GF to SF, new OCA
Drafting Technician II	40504	40307			1.0	move from GF to SF, new OCA
Purchasing Agent	30401	40307			1.0	position moved from Purchasing
Civil Engineer I		40307	1.0			add new position
Civil Engineer II	40504	40305			1.0	move from GF to SF
Planner II	40305	40307			1.0	moved to new OCA
Public Works Senior Manager	40100	40310			1.0	move from GF to SF
Civil Engineer II	40310	40307			1.0	moved to new OCA
Total:			1	0.0	36.2	
Total Dept Change:					37.2	

**NEW CASTLE COUNTY
DEPARTMENT OF PUBLIC WORKS SEWER FUND
CURRENT VACANCIES AS OF FEBRUARY 28, 2018**

Position Title	Date Vacated	Fund Source	Comments
Environmental Compliance			
Public Works Inspector	8/1/2008	Sewer	
Assistant County Attorney II	11/17/2017	Sewer	
Construction Support			
Crew Chief II	12/31/2015	Sewer	
Motor Equipment Operator I	12/12/2016	Sewer	
Motor Equipment Operator II	3/18/2017	Sewer	
Motor Equipment Operator III	3/19/2016	Sewer	
Utility Technician	11/21/2012	Sewer	Retitled from MEO II in FY18
Motor Equipment Operator III	10/16/2017	Sewer	
Trades Helper	10/30/2017	Sewer	
Maintenance & Construction Worker	10/4/2017	Sewer	
Maintenance & Construction Worker	1/1/2010	Sewer	
Sewer Maintenance			
Maintenance & Construction Worker	5/31/2017	Sewer	
Maintenance & Construction Worker	11/14/2017	Sewer	
Maintenance & Construction Worker	8/19/2017	Sewer	
Maintenance & Construction Worker	8/19/2017	Sewer	
Maintenance & Construction Worker	7/21/2017	Sewer	
Maintenance & Construction Worker	9/30/2017	Sewer	
Motor Equipment Operator II	3/6/2017	Sewer	
Motor Equipment Operator II	1/25/2017	Sewer	
Superintendent of Sewer Maintenance	9/2/2017	Sewer	
Trades Helper	11/7/2016	Sewer	
Plant Operations			
Plant Operation Technician	1/2/2018	Sewer	
Plant Operation Technician	12/30/2017	Sewer	
Motor Equipment Operator II	10/2/2017	Sewer	
Motor Equipment Operator II	5/12/2016	Sewer	
Plumber	5/22/2017	Sewer	
Pump Station Mechanic	6/24/2017	Sewer	
Pump Station Mechanic	1/11/2017	Sewer	
Pump Station Mechanic Apprentice	8/8/2011	Sewer	
Radio Communicator	8/14/2017	Sewer	
Sr. Electrician	2/16/2015	Sewer	
Sr. Electrician	6/18/2012	Sewer	
Trades Helper	10/2/2017	Sewer	
Trades Helper	10/2/2017	Sewer	
Trades Helper	11/10/2015	Sewer	
Trades Helper	3/14/2015	Sewer	
Wastewater Treatment Plant Operator	4/7/2017	Sewer	
Total Vacancies:	37		
Vacancy Rate:	19%		

**NEW CASTLE COUNTY
DEPARTMENT OF PUBLIC WORKS SEWER FUND
DIVERSITY SUMMARY FOR CY2017**

JOB CATEGORIES	NUMBER OF EMPLOYEES														Totals
	MALE							FEMALE							
	Hispanic or Latino	White (Non Hispanic or Latino)	Black or African American (Non Hispanic or Latino)	Asian (Non Hispanic or Latino)	Native Hawaiian or Other Pacific Islander (Non Hispanic or Latino)	American Indian or Alaska Native (Non Hispanic or Latino)	Two or More Races (Non Hispanic or Latino)	Hispanic or Latino	White (Non Hispanic or Latino)	Black or African American (Non Hispanic or Latino)	Asian (Non Hispanic or Latino)	Native Hawaiian or Other Pacific Islander (Non Hispanic or Latino)	American Indian or Alaska Native (Non Hispanic or Latino)	Two or More Races (Non Hispanic or Latino)	
Officials and Administrators		5						1							6
Professionals		9						3.5	1						14
Technicians		6	1												7
Paraprofessionals															0
Administrative Support		3						2	3						8
Skilled Craft Workers	4	82	10												96
Service-Maintenance	1	17	9						1						28
Certain Elected/Appointed Officials															0
TOTAL	5	122	20	0	0	0	0	0	6.5	5	0	0	0	0	158.5

State and Local Government Information (EEO-4) Report Format: In advance of the September 30, 2017 deadline for filing the FY2017 EEO-4 Report, the Office of Human Resources implemented changes in ethnic group coding required by the Equal Employment Opportunity Commission (EEOC). In addition, job categories were reviewed on a county-wide basis, resulting in job category changes to approximately fifty (50) position titles.

Category	Males	Females	Total
# Total	147	11.5	158.5
% Total	93%	7%	100%
# Non White	25	5	30
% Non White	17%	43%	19%

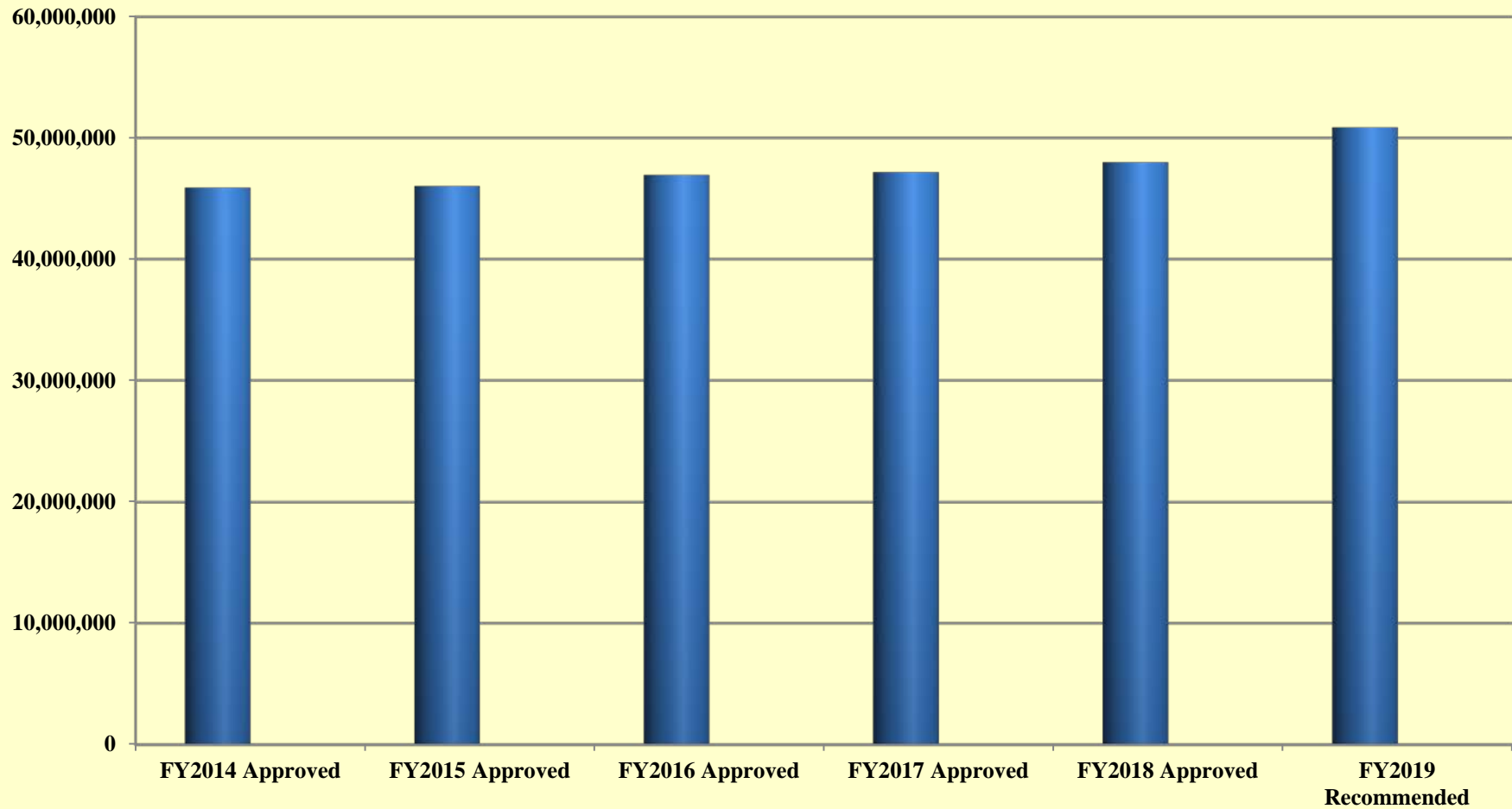
**NEW CASTLE COUNTY
DEPARTMENT OF PUBLIC WORKS SEWER FUND
DIVERSITY SUMMARY FOR 2016-2014**

JOB CATEGORIES		NUMBER OF EMPLOYEES											
		Overall Totals (Sum of Col. B-K)	MALE						FEMALE				
			White (Not of Hispanic Origin)	Black (Not of Hispanic Origin)	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	White (Not of Hispanic Origin)	Black (Not of Hispanic Origin)	Hispanic	Asian or Pacific Islander	American Indian or Alaskan Native	
			A	B	C	D	E	F	G	H	I	J	K
Officials and Administrators	2016	1	1										
	2015	1	1										
	2014	1	1										
Professionals	2016	14.5	9					4.5	1				
	2015	15.5	9					5.5	1				
	2014	15.5	10					4.5	1				
Technicians	2016	12	10	1				1					
	2015	12	10	1				1					
	2014	12	10	1				1					
Paraprofessionals	2016	0											
	2015	0											
	2014	0											
Administrative Support	2016	9	3					5	1				
	2015	8	3					4	1				
	2014	8	3					4	1				
Skilled Craft Workers	2016	106	89	11	5		1						
	2015	105	88	11	5			1					
	2014	102	88	8	5			1					
Service-Maintenance	2016	30	14	14	1				1				
	2015	31	16	13	1				1				
	2014	34	19	13	1				1				
Certain Elected/Appointed Officials	2016	0											
	2015	0											
	2014	0											
TOTAL	2016	172.5	126	26	6	0	1	10.5	3	0	0	0	
	2015	172.5	127	25	6	0	0	11.5	3	0	0	0	
	2014	172.5	131	22	6	0	0	10.5	3	0	0	0	

State and Local Government Information (EEO-4) Report Format

BUDGET OVERVIEW

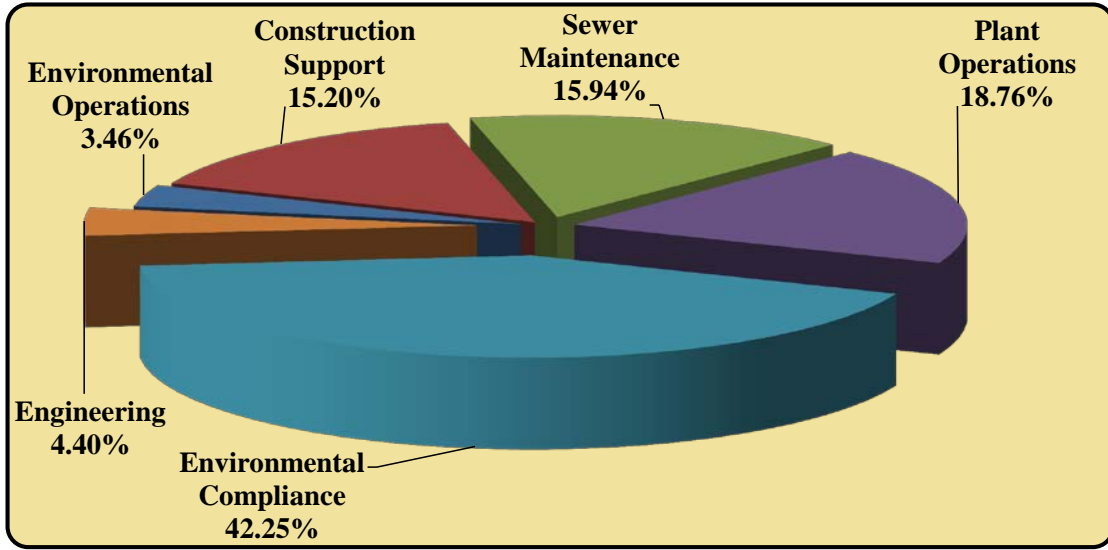
**NEW CASTLE COUNTY
DEPARTMENT OF PUBLIC WORKS SEWER FUND
BUDGET HISTORY**



	FY2014 Approved	FY2015 Approved	FY2016 Approved	FY2017 Approved	FY2018 Approved	FY2019 Recommended
DEPARTMENT OF PUBLIC WORKS SEWER FUND	45,897,739	46,029,753	46,956,744	47,178,874	48,013,996	50,870,518
% Change over PY	-0.94%	0.29%	2.01%	0.47%	1.77%	5.95%

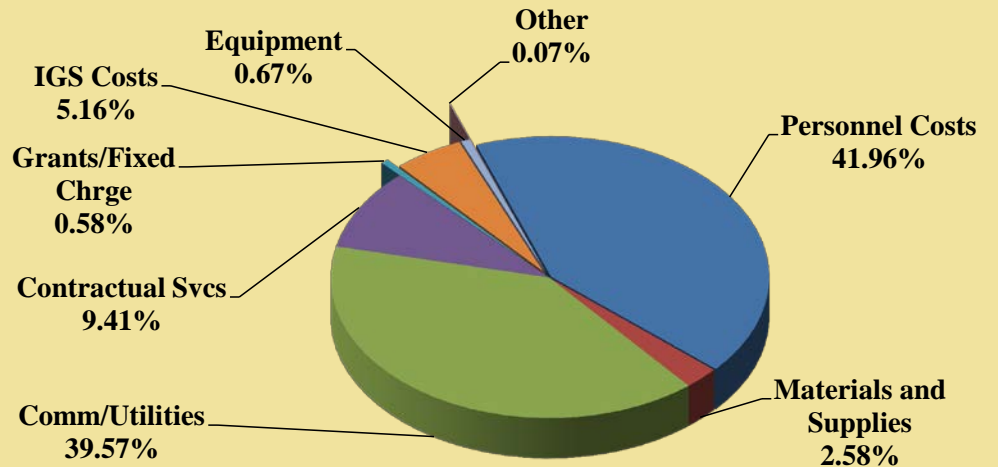
FY19 reflects the 31.2 positions transferred from the General Fund

**NEW CASTLE COUNTY
DEPARTMENT OF PUBLIC WORKS SEWER FUND
BUDGET OVERVIEW**



<u>Division</u>	<u>FY2019 Recommended</u>
Environmental Operations	\$1,761,310
Construction Support	\$7,731,361
Sewer Maintenance	\$8,108,413
Plant Operations	\$9,541,514
Environmental Compliance	\$21,490,505
Engineering	\$2,237,415
Recommended Budget	\$50,870,518

<u>Object Level</u>	<u>FY2019 Recommended</u>
Personnel Costs	\$21,347,479
Materials and Supplies	\$1,312,510
Comm/Utilities	\$20,128,106
Contractual Svcs	\$4,785,926
Grants/Fixed Chrg	\$293,600
IGS Costs	\$2,625,788
Equipment	\$341,623
Other	\$35,486
Recommended Budget	\$50,870,518



**NEW CASTLE COUNTY
DEPARTMENT OF PUBLIC WORKS SEWER FUND
BUDGET SUMMARY**

	FY2018 Approved	FY2019 Recommended	FY2018 Approved vs. FY2019 Recommended	% Increase/ (Decrease) over FY2018 Approved
Salaries and Wages	\$11,797,217	\$13,347,314	\$1,550,097	13.14%
Employee Benefits	\$6,695,055	\$8,000,165	\$1,305,110	19.49%
Training and Civic Affairs	\$2,580	\$15,486	\$12,906	500.23%
Communications/Utilities	\$20,058,756	\$20,128,106	\$69,350	0.35%
Materials and Supplies	\$1,250,265	\$1,312,510	\$62,245	4.98%
Contractual Services	\$4,636,873	\$4,785,926	\$149,053	3.21%
Equipment Replacement	\$303,546	\$341,623	\$38,077	12.54%
Grants and Fixed Charges	\$293,900	\$293,600	(\$300)	-0.10%
Land and Structures	\$20,000	\$20,000	\$0	0.00%
Intergovernmental Service Charges	\$2,955,804	\$2,625,788	(\$330,016)	-11.17%
Total:	\$48,013,996	\$50,870,518	\$2,856,522	5.95%

**NEW CASTLE COUNTY
DEPARTMENT OF PUBLIC WORKS SEWER FUND
BUDGET DETAILS**

Object Level	FY2018 Approved	FY2019 Recommended	\$ Change	% Change
Salaries and Wages:	\$11,797,217	\$13,347,314	\$1,550,097	13.14%
Increase is attributed to the transfer of 31.2 Engineering positions from the General Fund; 1 Senior Manager position from General Fund; 1 Purchasing Agent from Administrative Services to Public Works; 1 PIR for a Civil Engineer I in Engineering; merit increases and negotiated salary increases for all union and non-union employees. Increase in overtime for Plant Operations - \$56,000.				
Employee Benefits:	\$6,695,055	\$8,000,165	\$1,305,110	19.49%
Calculated based on employee benefit rates: 60.111% Full-Time and 10.922% Part-Time.				
Training and Civic Affairs:	\$2,580	\$15,486	\$12,906	500.23%
Increase of \$2,000 in Environmental Compliance for catering; \$8,886 in Environmental Operations for trainers fees, membership dues, airfare, tolls, parking fees, hotel, meals, conference fees, seminar fees and training material; \$2,600 in Engineering for meals, tuition reimbursement, membership dues, tolls, parking fees and mileage.				
Communication and Utilities:	\$20,058,756	\$20,128,106	\$69,350	0.35%
Increase is attributed to \$57,400 for electric and gas heat; \$19,000 for water; \$12,200 for cellular telephone offset by a reduction of (\$15,000) for sewer service charge to Middletown; and (\$6,000) for telephone service.				
Materials and Supplies:	\$1,250,265	\$1,312,510	\$62,245	4.98%
Increase is attributed to \$46,000 for equipment repair supplies, \$7,500 for plumbing supplies, \$6,000 in chemical supplies, \$2,705 for miscellaneous and \$4,000 for construction materials in Plant Operations; \$10,500 in computer paper/supplies and \$3,550 for miscellaneous office supplies in Engineering; \$2,000 in office supplies for Environmental Operations; \$4,500 in clothing and uniform for Construction Support and Engineering; offset by a decrease of (\$30,000) for agricultural supplies in Plant Operations.				
Contractual Services:	\$4,636,873	\$4,785,926	\$149,053	3.21%
<u>Other Professional Services</u> - Increase of \$191,500 due to transferring Engineering from General Fund. <u>Engineering Services</u> - Increase of \$50,000 due to transferring Engineering from General Fund. <u>Environmental Compliance</u> - Increase of \$28,500 for attorney fees, \$10,000 for grass cutting at storm basin ponds. <u>Plant Operations</u> - \$54,500 for equipment repairs. <u>Environmental Operations</u> - \$43,500 for Cityworks maintenance contract. Offset by a reduction of (\$205,000) in equipment repairs in Environmental Compliance and (\$16,135) for stormwater infrastructure in Environmental Operations.				
Equipment Replacement:	\$303,546	\$341,623	\$38,077	12.54%
Increase is attributed to \$24,000 for printing equipment in Engineering; \$11,500 for (5) ADS Echo's in Sewer Maintenance; and \$4,000 for safety equipment in Sewer Maintenance and Plant Operations.				
Grants and Fixed Charges:	\$293,900	\$293,600	(\$300)	-0.10%
Decrease (\$300) for tax payments in Environmental Operations.				
Land and Structures	\$20,000	\$20,000	\$0	0.00%
Budget includes manhole lids and covers for Construction Support.				
Intergovernmental Service Charges:	\$2,955,804	\$2,625,788	(\$330,016)	-11.17%
Information Systems - \$711,939, increase of \$10,856 Photocopies - \$4,355, increase of \$4,355 Fleet - \$1,888,440, a decrease of (\$366,281) due to change in methodology Geographic Information Systems - \$21,054, no change				

BUDGET BY OBJECT LEVEL 3

NEW CASTLE COUNTY
DEPARTMENT OF PUBLIC WORKS SEWER FUND
BUDGET BY OBJECT LEVEL 3

Object Level 1	Object Level 3	Environmental Operations	Construction Support	Sewer Maint	Plant Operations	Environmental Compliance	Engineering	Grand Total
11 Salaries and Wages	1001 Salaries & Wages-Permanent	819,029	3,396,254	2,662,660	2,940,107	1,039,485	1,136,631	11,994,166
	1003 Salaries & Wages-Seasonal	-	39,332	-	-	7,500	-	46,832
	1006 Salaries & Wages-Holiday	-	-	-	21,000	-	-	21,000
	1007 Salaries & Wages-Shift Diff.	-	-	19,000	6,400	-	-	25,400
	1008 Salaries & Wages-Overtime	26,000	281,216	442,000	340,000	8,200	-	1,097,416
	1009 Salaries & Wages- Premium & Overtime	-	-	40,000	120,000	2,500	-	162,500
11 Salaries and Wages Total		845,029	3,716,802	3,163,660	3,427,507	1,057,685	1,136,631	13,347,314
15 Employee Benefits	1500 Emp. Bene.-Regular Overhead	492,327	2,041,522	1,600,551	1,767,328	624,844	683,239	7,209,811
	1510 Empl. Ben. - Premium Overhead	15,629	169,042	301,156	292,980	6,432	-	785,239
	1520 E/B-Regular-Part-Time	-	4,296	-	-	819	-	5,115
15 Employee Benefits Total		507,956	2,214,860	1,901,707	2,060,308	632,095	683,239	8,000,165
22 Training and Civic Affairs	2001 Airfare	150	-	-	-	-	-	150
	2004 Mileage Reimbursements	-	-	-	-	-	25	25
	2005 Tolls	200	-	-	-	150	50	400
	2006 Parking Fees	235	-	-	-	-	125	360
	2010 Hotel Accommodations	1,100	-	-	-	-	-	1,100
	2020 Meals	300	-	-	-	-	200	500
	2101 Conference Fees	500	-	-	-	-	-	500
	2102 Seminar Fees	381	-	-	-	-	-	381
	2103 Trainers	5,000	-	-	-	-	-	5,000
	2104 Training Materials	130	-	-	-	-	-	130
	2110 Tuition Reimbursement	-	-	-	-	-	1,000	1,000
	2301 Membership Dues	1,240	-	-	-	-	1,500	1,200
2310 Catering	-	-	-	-	-	2,000	-	2,000
22 Training and Civic Affairs Total		9,236	-	-	-	3,650	2,600	15,486
23 Communication and Utilities	3100 Postage	-	-	-	150	-	-	150
	3115 Freight/Shipping	-	-	-	600	-	-	600
	3200 Telephone Service	-	-	-	25,600	-	-	25,600
	3204 Telephone - Local Data Services	-	-	-	39,350	-	-	39,350
	3210 Cellular Telephone Service	8,400	-	-	-	2,400	3,600	14,400
	3212 Cellular/Wireless Data Service	1,500	5,000	10,000	15,300	5,000	-	36,800
	3300 Electric Service	-	-	-	1,687,000	-	-	1,687,000
	3400 Water Service	-	-	-	95,000	-	-	95,000
	3500 Landfill Charges	-	10,000	5,050	13,800	-	-	28,850
	3600 Gas Heat	-	-	-	25,000	-	-	25,000
	3800 Sewer Service	-	-	-	-	18,175,356	-	18,175,356
23 Communication and Utilities Total		9,900	15,000	15,050	1,901,800	18,182,756	3,600	20,128,106

NEW CASTLE COUNTY
DEPARTMENT OF PUBLIC WORKS SEWER FUND
BUDGET BY OBJECT LEVEL 3

Object Level 1	Object Level 3	Environmental Operations	Construction Support	Sewer Maint	Plant Operations	Environmental Compliance	Engineering	Grand Total
24 Materials and Supplies	4000 Books and Subscriptions	100	-	500	300	-	1,000	1,900
	4001 Clothing and Uniforms	26,000	3,000	7,500	22,500	600	1,500	61,100
	4002 Food Products	-	-	-	-	-	650	650
	4004 Miscellaneous Materials	-	1,000	-	13,700	-	50	14,750
	4101 Office Supplies	2,000	300	1,000	1,100	1,500	3,500	9,400
	4102 Photographic Supplies	-	-	500	650	-	-	1,150
	4104 Computer Supplies	1,500	-	2,500	2,890	6,000	8,500	21,390
	4105 Medical & Safety Supplies	1,900	7,500	20,000	21,000	3,000	-	53,400
	4106 Custodial Supplies	-	2,000	5,000	6,500	-	-	13,500
	4107 Computer Paper	-	-	-	-	-	2,000	2,000
	4108 Computer Software	-	-	4,500	-	-	-	4,500
	4220 Construction Material	-	339,307	11,000	49,000	-	-	399,307
	4221 Electrical Supplies	-	-	600	56,500	-	-	57,100
	4222 Plumbing Supplies	-	38,000	1,000	42,500	-	-	81,500
	4223 Lumber	-	1,000	-	2,600	-	-	3,600
	4224 Equipment Repair Supplies	-	900	60,500	219,000	1,700	-	282,100
	4310 Chemical Supplies	-	65,236	15,000	78,000	51,600	-	209,836
	4311 Gas & Welding Supplies	-	-	-	11,800	3,000	-	14,800
	4312 Propane	-	-	-	250	-	-	250
	4320 Agricultural Supplies	-	10,000	1,500	10,000	-	-	21,500
4330 Vehicular Supplies	-	-	577	500	-	-	1,077	
4336 Motor Fuels-Diesel	-	-	-	15,800	-	-	15,800	
4350 Small Tools	-	7,500	20,000	14,400	-	-	41,900	
24 Materials and Supplies Total		31,500	475,743	151,677	568,990	67,400	17,200	1,312,510
25 Contractual Services	5000 Instructors Fee	-	-	4,500	-	-	-	4,500
	5101 Vehicular Repairs	-	10,000	9,000	450	-	-	19,450
	5101 Equipment Repairs	-	21,400	30,000	154,500	15,000	-	220,900
	5102 Radio & Communication Repairs	-	-	500	76,200	-	-	76,700
	5104 Facility Repairs	-	-	-	115,000	-	-	115,000
	5300 Printing & Related Costs	750	-	-	-	-	900	1,650
	5400 Legal Fees	-	-	-	-	98,000	420	98,420
	5406 Other Professional Services	96,600	20,750	1,727,350	449,500	424,500	191,500	2,910,200
	5408 Attorney Fees	-	-	-	-	80,000	-	80,000
	5504 Other Equipment & Prop. Rental	-	44,300	4,850	25,000	-	-	74,150
	5600 Engineering Services	31,530	-	59,526	6,000	670,000	50,000	817,056
	5602 Landscape Services	-	10,700	-	-	-	-	10,700
	5610 Site Preparations	-	-	-	2,000	-	-	2,000
	5611 Facilities Construction	-	-	-	8,000	-	-	8,000
5613 Sewer Infrastructure	-	-	179,500	-	-	-	179,500	

NEW CASTLE COUNTY
DEPARTMENT OF PUBLIC WORKS SEWER FUND
BUDGET BY OBJECT LEVEL 3

Object Level 1	Object Level 3	Environmental Operations	Construction Support	Sewer Maint	Plant Operations	Environmental Compliance	Engineering	Grand Total
25 Contractual Services (Cont.)	5614 Stormwater Infrastructure	-	3,000	-	-	-	-	3,000
	5701 Grass Cutting	-	-	-	-	60,000	-	60,000
	5710 Computer Software Maint. Contract	43,500	-	-	-	-	-	43,500
	5730 Pest Control	-	-	2,500	-	-	-	2,500
	5731 Trash Removal	-	-	-	25,000	-	-	25,000
	5735 Safety Inspections	-	-	-	8,000	-	-	8,000
	5736 Fire and Security Services	-	-	-	3,000	-	-	3,000
	5738 Non Hazardous Waste Disposal	-	14,000	-	1,000	-	-	15,000
	5740 Car Wash Service	-	6,500	600	-	-	-	7,100
	5810 Food Services	-	-	600	-	-	-	600
25 Contractual Services Total		172,380	130,650	2,018,926	873,650	1,347,500	242,820	4,785,926
30 Intergovernmental Service Chge	5900 IS Contract-Data Processing	31,564	198,856	167,292	169,030	53,660	91,537	711,939
	5901 IS Contract-Photocopies	4,355	-	-	-	-	-	4,355
	5904 IS Contract-Fleet-Vehicles	5,436	938,050	525,678	358,029	27,759	33,488	1,888,440
	5907 IS Contract-GIS-Geographic Info Systems	21,054	-	-	-	-	-	21,054
30 Intergovernmental Service Chge Total		62,409	1,136,906	692,970	527,059	81,419	125,025	2,625,788
26 Equipment Replacement	6109 Computer Equipment	-	-	-	-	-	1,000	1,000
	6110 Communication Equipment <\$5,000	-	-	1,200	10,000	-	-	11,200
	6111 Safety Equipment <\$5,000	-	10,000	12,000	37,000	-	-	59,000
	6112 Laboratory & Scientific Equip. <\$5,000	-	-	-	5,500	9,000	-	14,500
	6122 Photography & Video Equip <\$5,000	700	-	-	-	-	-	700
	6123 Printing Equipment	-	-	-	-	-	24,000	24,000
	6150 Instruments <\$5,000	-	-	13,500	5,000	9,000	-	27,500
	6160 Office Equipment <\$5,000	-	-	-	-	-	1,300	1,300
	6170 Non-Motorized Mobile Equip. <\$5,000	-	-	57,000	-	-	-	57,000
	6180 Building Equipment <\$5,000	-	-	-	10,000	-	-	10,000
	6181 Building Equipment =>\$5,000	-	-	-	14,000	-	-	14,000
	6201 Office Furniture <\$5,000	2,200	-	-	500	-	-	2,700
	6401 Construction Machinery	-	-	-	6,000	-	-	6,000
	6402 Portable Machinery <\$5,000	-	2,900	-	16,500	-	-	19,400
	6403 Fixed Machinery <\$5,000	-	-	-	25,000	-	-	25,000
	6405 Portable Machinery =>\$5,000	-	8,500	7,123	7,800	-	-	23,423
	6406 Fixed Machinery =>\$5,000	-	-	-	25,000	-	-	25,000
6410 Special Purpose Machinery <\$5,000	-	-	-	7,900	-	-	7,900	
6411 Special Purpose Machinery =>\$5,000	-	-	-	12,000	-	-	12,000	
26 Equipment Replacement Total		2,900	21,400	90,823	182,200	18,000	26,300	341,623

**NEW CASTLE COUNTY
DEPARTMENT OF PUBLIC WORKS SEWER FUND
BUDGET BY OBJECT LEVEL 3**

Object Level 1	Object Level 3	Environmental Operations	Construction Support	Sewer Maint	Plant Operations	Environmental Compliance	Engineering	Grand Total
27 Fixed Charges	7010 County Mandated Grants	120,000	-	-	-	-	-	120,000
	7014 Settlements	-	-	-	-	100,000	-	100,000
	7210 Pass Thru Grants	-	-	73,600	-	-	-	73,600
27 Fixed Charges Total		120,000	-	73,600	-	100,000	-	293,600
28 Land & Structures	8011 Land Improvements Sewer	-	20,000	-	-	-	-	20,000
28 Land & Structures Total		-	20,000	-	-	-	-	20,000
Grand Total		1,761,310	7,731,361	8,108,413	9,541,514	21,490,505	2,237,415	50,870,518

CONTRACTUAL SERVICES DETAIL

**NEW CASTLE COUNTY
DEPARTMENT OF PUBLIC WORKS SEWER FUND
CONTRACTUAL SERVICES DETAIL**

OCA	OCA Title	Object Level	Object Level 3 Title	FY2019 Recommended Budget	Explanation
Construction Support					
040302	Construction Support	5100	Vehicular Repair	\$ 10,000	Repairs not handled in-house
		5101	Equipment Repair	\$ 21,400	Miscellaneous shop equipment
		5406	Other Professional Services	\$ 20,750	Testing clean fill; stormwater facility maintenance
		5504	Equipment Rental	\$ 44,300	Rental of equipment to perform construction related work
		5602	Landscape Services	\$ 10,700	Tree emergencies in waterways
		5738	Non Hazardous Waste Disposal	\$ 14,000	Disposal of non hazardous waste
					\$ 9,500
			Total	\$ 130,650	
Environmental Compliance					
040305	Environmental Compliance	5101	Equipment Repairs	\$ 15,000	Lab equipment repairs
		5400	Legal Fees	\$ 98,000	EPA oversight cost for Army Creek Landfill & Tybouts
		5406	Professional Services*	\$ 424,500	PCB Sampling; Chemical (FOG) and bacterial grease abatement; NPDES; FOG
		5408	Attorney Fees	\$ 80,000	Army Creek
		5600	Engineering Services	\$ 670,000	Consultants; State debris pit funds; NPDES; FOG; Inspections
		5701	Grass Cutting	\$ 60,000	Mowing ponds
			Total	\$ 1,347,500	
*Includes CMOM Enhancement Program for Fats, Oils and Grease program approved in FY2009; without the Program total is \$175,500.					
Engineering					
040306	Administration			\$ 400	Miscellaneous Contractual Services
040307	Project Management	5406	Professional Services	\$ 191,500	Flow Meter contract
		5600	Engineering Services	\$ 50,000	Consulting for planning, design and specialty services as needed
				\$ 920	Miscellaneous Contractual Services
			Total	\$ 242,820	

**NEW CASTLE COUNTY
DEPARTMENT OF PUBLIC WORKS SEWER FUND
CONTRACTUAL SERVICES DETAIL**

OCA	OCA Title	Object Level	Object Level 3 Title	FY2019 Recommended Budget	Explanation
Environmental Operations					
040310	Environmental Operations	5406	Professional Services	\$ 96,600	Sewer & stormwater ops w/ Conserv. District & stormwater consulting
		5600	Engineering Services	\$ 31,530	Consulting for septic elimination and District engineering services
		5710	Computer Software Maint.	\$ 43,500	Cityworks Maintenance Contract
				\$ 750	Miscellaneous Contractual Services
			Total		\$ 172,380
Sewer Operations					
040311	Sewer Maintenance	5101	Equipment Repair	\$ 30,000	Repairs to various sewer equipment
		5406	Professional Services*	\$ 1,727,350	Trunkline PM; Chemical Root; Sanitary Sewer CCTV; etc.
		5600	Engineering Services	\$ 59,526	Engineering and GIS mapping consultants as needed
		5613	Sewer Infrastructure	\$ 179,500	Repairs to various sewer lines as needed
				\$ 22,550	Miscellaneous Contractual Services
	Total		\$ 2,018,926		
				*Includes CMOM Enhancement Programs for Trunk Line PM; Chemical Root; Sanitary Sewer CCTV approved in FY2009. Without the Programs total is \$0.	
Plant Operations					
040312	Plant Operations	5101	Equipment Repair	\$ 154,500	Repairs to generators, pumps, chlorinators as needed
		5102	Radio & Communications	\$ 76,200	Maintenance and operation of VHF Radio; AVL; Mobile; Data
		5104	Facility Repair	\$ 115,000	Various concrete, structure and building repairs as needed
		5406	Professional Services*	\$ 449,500	Odor and H2S treatment CRFM and other locations (CMOM)
		5504	Other Equipment	\$ 25,000	Lease tower space for radio communication
		5731	Trash Removal	\$ 25,000	Trash and sludge removal from plant sites
				\$ 28,450	Miscellaneous Contractual Services
	Total		\$ 873,650		
				*Includes CMOM Enhancement Program for Odor and H2S Treatment CRFM and other locations approved in FY2009. Without the Program the cost is \$0.	
Total Contractual Services				\$ 4,785,926	

PROGRAM IMPROVEMENT REQUESTS

- 1 **Priority in Department (Rank):** _____
- 2 **PIR Title:** Civil Engineer I (CE) Selective Certification in Mechanical Systems
- 3 **Implementation date (if approved):** 7/1/2018
- 4 **Department (choose from list):** Public Works
- 5 **Organization Cost Account:** 40307
- 6 **Type (choose from list):** Improved Service
- 7 **Effect on existing budget (choose from list):** Decrease

8 **Estimated Cost:**

	2019	2020	2021
Salary/Benefits:	\$20,008	\$21,010	\$22,060
Other:	\$0	\$0	\$0
Capital:	\$60,265	\$63,278	\$66,435
Total	\$80,273	\$84,288	\$88,495

Estimated Revenue: \$0 \$0 \$0

Net Effect: -\$80,273 -\$84,288 -\$88,495

- 9 **New positions requested (complete supplemental):** yes - see attached

- 10 **Major equipment required (Complete Supplemental):** select one

Description	#	Unit Cost	Total Cost
No major equipment required			\$ -
			\$ -
			\$ -
			\$ -
TOTAL:	0	\$ -	\$ -

- 11 **Objectives of the Program:**
 The program would ensure critical pump station and forcemain reviews and projects are completed in a timely manner. It will improve project delivery schedules for capital projects by better distributing responsibilities to more appropriate experience levels, while improving the overall management of the sanitary sewer system.

- 12 **Need for the program and effect on service levels:**
 See attached (#12 Need for program tab)

- 13 **Impact on revenues/expense resulting from implementation of this PIR (be specific):**
 Additional employee expenses will be offset by reduced capital project costs and schedule. We will also be able to perform more work in-house, spending less in professional services.

- 14 **Funding source and amount:**
 Funding Source: Operating/Capital
 Total PIR Request (FY2019): \$80,273

- 1 **Priority in Department (Rank):** _____
- 2 **PIR Title:** Civil Engineer I (CE) Selective Certification in Mechanical Systems
- 3 **Implementation date (if approved):** 7/1/2018
- 4 **Department (choose from list):** Public Works
- 5 **Organization Cost Account:** 40307
- 6 **Type (choose from list):**
- 7 **Effect on existing budget (choose from list):**

12 Need for the program and effect on service levels:

In 2000, NCC operated 130 pump stations and 60 miles of force main. In 2016, NCC operates 170 pump stations and 100 miles of force main.

In 2015, capital improvement projects related to pump stations and treatment plants were transferred from the Environmental Operations Division to the Engineering and Environmental Compliance Division. That transfer of responsibilities included the transfer of a Civil Engineer II, who supported the Operations Division in performing design review of land development projects and the executing capital projects related to pump stations and treatment plants.

In addition, the recent Christina River Force Main (CRFM) emergency highlights the need to regularly perform condition assessments. As a result of the engineering project, the long-term planning for the CRFM has become more of a priority and this significant project will be managed by the Civil Engineer I. The existing capital work required for pump stations exceeds the ability of one Civil Engineer II. Completing capital projects is imperative to reducing our risk of operating our pump stations and treatment plants. This engineer is responsible for very large, complicated capital improvement projects, and the design review of all land development projects.

In addition to the current workload, the Department is starting to use a Computerized Maintenance Management System (CMMS) for the Plant Operations section, which will better track maintenance work performed, and also identify and track the need for capital improvements. A condition assessment of the pump stations was completed in the summer of 2016 and it is the Department's intent to perform condition assessments on a regular basis in order to identify capital improvements needs to ensure proper operation of the pump stations. This effort is necessary to comply with regulatory guidelines.

The current Civil Engineer II cannot meet the increasing demand in responsibility for the pump stations.

In order to provide good customer service, the Department's goal for providing design review comments on a submitted sanitary sewer construction plan is 20 working days from submission. Pump station reviews are generally slower than this goal due to the workload described above. The existing CE Is and CE IIs are fully committed to other projects, and, they do not have the knowledge of mechanical and electrical systems found within a pump station. Design review tasks will be transferred to the new CE I as it provides an opportunity to learn about pump station design, construction and maintenance. With an additional CE I position, the Department would be able to meet the design review response goal, and complete the capital improvements projects without sacrificing one goal for the other.

POSITION SUPPLEMENTAL

1 **Priority in Department (Rank):** 0

2 **PIR Title:** Civil Engineer I (CE) Selective Certification in Mechanical Systems

3 **Implementation date (if approved):** 7/1/2018

4 **Department (choose from list):** Public Works

5 **Organization Cost Account:** 40307

9 **New positions requested:**

Title	#	Salary	Benefits	Total Cost
Civil Engineer I Selective Certification	.25 FTOP	\$ 12,632	\$ 7,456	\$ 20,088
	.75 CA	\$ 37,896	\$ 22,369	\$ 60,265
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
TOTAL:	0	\$ 50,528	\$ 29,826	\$ 80,354

FEE SCHEDULE

**NEW CASTLE COUNTY
DEPARTMENT OF PUBLIC WORKS SEWER FUND
FY2019 FEE SCHEDULE**

Item	Object Code	Revenue Source	Current Fee	Last Increase MM/YY	FY2018 Projected Revenue	FY2019 Projected Revenue	Comparable Fees	Comments	
1	0256	Construction/Exploratory Plan Review	Varies	2015	\$ 20,000	\$ 20,000	N/A	Per UDC, Appendix C for list of fees	
3	0257	Wastehauler Dump Fees	\$60/1000 gallons	2015	\$ 1,100,000	\$ 1,170,000	\$57.12 septage/\$75 grease (Kent County)	Wastehaulers dumping at Airport Rd Pump Station reference New Castle County Code, Chapter 38	
4		Wastehauler Permit Fees	\$109.00 per truck	2018	\$ 7,000	\$ 7,000	\$125 per truck (Kent County)	Annual Waste Hauler Fee	
5	0258	Survey & Inspections	Varies	N/A	\$ 80,000	\$ 80,000		New Castle County Code, §38.03.002	
6	0259	Ground Water Discharge	\$200/qtr. + \$3./1,000 gal		\$ 25,000	\$ 25,000		Handled thru special approval; limited to term and requirements	
7	0263	Wastewater Permit Fees:		2018	\$ 184,714	\$ 187,714	Philadelphia \$500/year Wilmington \$400/year	Permits wastewater discharge	
8		-EPA Categorical Standard	\$ 2,731						
9		-Process Flow >25,000 gpd	\$ 2,731						
10		-Toxic Chemical POTW Transfer	\$ 2,185						
11		-Nonsignificant Industrial User	\$ 1,093						
12		-Permit Variance	\$ 1,639						
13		-SIU Permit Amendment	\$ 1,365						
14		-Nonsignificant User Amendment	\$ 546						
15	0267	CFE Fee	\$ 109	2018	\$ 101,180	\$ 102,000	0-\$300 tri-annually (Kent County)	Fats, Oil and Grease Program mandated by EPA.	
16	0972	Miscellaneous	Market Price		\$ 17,026	\$ 9,500		Scrap Metal, rebates, etc...	
17									
18									
19									
20									
21									
22									
23									
24									
					\$ 1,601,214				

NOTE: FY2018 Projected Revenue based on current fee schedule, FY2019 Projected Revenue based on requested fee schedule.