



State of Delaware Water Pollution Control Fund

FFY 2022 Intended Use Plan

Prepared by: The Department of Natural Resources &
Environmental Control, Environmental Finance
Issued: June 15, 2022

Table of Contents

I.	INTRODUCTION.....	2
II.	CWSRF PROGRAM GOALS.....	2
III.	FUND SOURCES, USES, AND PROGRAM REQUIREMENT.....	4
IV.	PROJECT SELECTION FUNDING PROCESS.....	6
V.	INTEREST RATES AND LOAN TERMS.....	8
VI.	AFFORDABILITY CRITERIA.....	9
VII.	AUTHORITY TO PROVIDE ADDITIONAL SUBSIDIZATION.....	10
VIII.	LOANS FOR PRIVATE BUSINESSES, PRIVATE LANDOWNERS, PRIVATELY-OWNED PROJECTS.....	10
IX.	PROJECT ELIGIBILITIES.....	10
X.	CWSRF FINANCIAL STATUS.....	12
XI.	PUBLIC REVIEW AND COMMENT.....	12
XII.	ASSURANCES.....	12
XIII.	CWSRF AND DWSRF FEDERAL FUND TRANSFERABILITY.....	14
XIV.	CWSRF MUNICIPAL AND GREEN PROJECTS - FUNDING LIST.....	14
XV.	NON – FEDERAL ADMINISTRATION ACCOUNT.....	14
XVI.	APPENDIX.....	16

Delaware Water Pollution Control Revolving Fund

FFY 2022 Intended Use Plan

I. Introduction

This Intended Use Plan (IUP) is required by Section 606(c) of the Clean Water Act (CWA) and will be submitted to the U.S. Environmental Protection Agency (EPA) as part of the State of Delaware's FFY 2022 Federal Capitalization Grant Applications. An IUP is prepared annually, with an option to submit a revised IUP mid-year, ensuring that all potential loan applicants have an opportunity to submit project needs for funding consideration. This IUP will be submitted to EPA in July 2022.

The IUP identifies the intended use of the funds requested, and how the additional financial assistance will support the goals of the Delaware Water Pollution Control Revolving Fund, also known as the Clean Water State Revolving Fund (CWSRF). The mission of the CWSRF is to provide a continuing source of financing for environmental infrastructure capital needs to maintain and improve water quality. Financial assistance is provided by the CWSRF to public and private entities for planning, design, and construction of wastewater collection, treatment and disposal facilities, stormwater infrastructure improvements, non-point source, and estuary water pollution control projects.

Although previously approved and awarded by EPA, this IUP also describes the transfer of Federal funds between the Department of Health and Social Service's (DHSS) Drinking Water State Revolving Fund (DWSRF) and the CWSRF. It identifies how the additional financial assistance was used to support the goals of the CWSRF, and the amount of the transfer.

All eligible applicants submitting Project Notices-of-Intent (NOIs) are listed on the 2022 Project Priority List (2022 PPL) in priority order. However, no funds are committed or reserved for individual projects until financial assistance applications are solicited, received, and approved; indicating the project's readiness to proceed. Projects that are ready to proceed are then funded in priority order.

II. CWSRF Program Goals

The State of Delaware is committed to using Federal capitalization grants to provide financial assistance for eligible projects that will proceed quickly to construction, and further the water quality mission of the CWSRF. The following are the short-term and long-term goals.

Short-Term Goals

To enter into binding commitments for projects that will proceed to construction or award of construction contracts within eight (8) quarters of the FFY 2022 Grant awards.

To achieve a CWSRF program "PACE" that exceeds 95 percent utilization of available funds for project binding loan commitments.

To first expend the full State match requirement of the Capitalization Grants, and then spend the Federal portion of the Capitalization Grants. This will prevent any proportionality or improper payments of Federal cash draws.

To expand the loan portfolio of the CWSRF to include other innovative uses such as loans for land conservation, stormwater, water conservation, energy efficiency, as well as green and sustainable water infrastructure projects consistent with CWSRF program rules, requirements, and regulations.

To enhance the collaboration between DNREC and DHSS relative to the operation of the CWSRF and DWSRF programs. These enhancements will focus on adding increased program value to applicants and borrowers, such as:

- Combined CWSRF and DWSRF Semi-Annual Workshops
- Offering Planning and Design Loans for Projects that are not Ready to Proceed
- Combined CWSRF and DWSRF Loan Closings (where applicable)
- Eliminate need for Interim Construction Project Financing from other funding sources (bank financing for project construction is not needed; CWSRF and DWSRF funds can be used for project planning, design, and construction); loan reimbursement requests based on incurred eligible project costs are normally processed within 30 days
- Processing Loan Reimbursement Requests within 30 days or less

To provide technical assistance to rural and small publicly owned treatment works. The CWSRF will provide technical assistance in a variety of ways, including soliciting a contractor to provide assistance to small, rural systems, with the goal of helping systems put themselves in a position to move forward with an application for funding from the CWSRF. Additionally, CWSRF internal staff will provide technical assistance as needed to small and rural systems.

To enhance marketing and outreach to disadvantaged communities by partnering with Counties, municipalities, DHSS, Delaware State Housing Authority, Southeast RCAP, and other potential non-profits to educate potential borrowers about the CWSRF program and other State funding programs.

Transition the CWSRF Septic Rehabilitation Loan Program, Agricultural Non-Point Source Loan Program, and the Expanded Uses Non-Point Source Loan Program to grant programs funded via the Non-federal administrative account.

To comply with all Federal capitalization grant and project reporting requirements.

To analyze financial leveraging as a tool that may be needed to help meet the growing demand for loans provided by the CWSRF.

Long-Term Goals

To ensure the long-term viability of the CWSRF program, while providing necessary project subsidization when needed.

To optimize the CWSRF program to address changing loan demand for Non-Point Source concerns and other difficult to finance water quality improvement issues.

To identify and fund projects associated with the Bipartisan Infrastructure Law (BIL).

To periodically evaluate additional funding opportunities to meet emerging water quality and public health needs.

III. Fund Sources, Uses, and Program Requirement

DNREC will be applying for the FFY 2022 Federal Base Capitalization Grant of \$5,681,000 for which a twenty percent (20%) State match \$1,136,200 is required, the General Supplemental Grant of \$8,738,000 for which a ten percent (10%) State match \$873,800 is required, and the Emerging Contaminants Grant of \$459,000 for which a zero percent (0%) State match \$0 is required. The required (20% and 10%) State matches will be provided from State appropriations.

Water Resources Reform and Development Act (WRRDA) amendment changes to the CWSRF program allow 1/5 of 1% of the CWSRF's Net Fund Position to be used for Federal program administration; a total of \$646,568 was used for SFY 2022 and \$667,665 is projected for SFY 2023 use.

Additionally, two percent (2%) of the combined FFY 2022 Federal Capitalization Grants will be used for technical assistance, calculated at \$297,560. The 2% is intended to assist rural and small publicly owned treatment works. The uses of fund include, but is not limited to, community outreach, technical evaluation of wastewater solutions, preparation of applications, preliminary engineering reports, and financial documents necessary for receiving SRF assistance. This provision applies to the base program, the general supplemental, and emerging contaminants funds.

The ten percent (10%) minimum additional subsidy of \$568,100, 10% mandated congressional authority subsidy of \$568,100 for the Base FFY 2022 Grant will be used for principal loan forgiveness for eligible borrowers; and (10%) \$568,100 will be used for projects funded under a Green Project Reserve (GPR) - green infrastructure, water or energy efficiency, and innovative uses. Up to thirty percent (30%) \$1,704,300 of the FFY Base 2022 Grant may be used for additional subsidization under WRRDA based on project affordability.

The mandated forty-nine (49%) of the FFY 2022 Supplemental Federal Capitalization Grant in the amount of \$4,281,620, additionally 10% (\$873,800) will directed toward GPR funding. The mandated one hundred percent (100%) of the FFY 2022 Emerging Contaminants Federal Capitalization Grant in the amount of \$459,000 will be used for additional subsidy for eligible borrowers, of which \$45,900 will be directed to GPR.

The CWSRF reserves the right to transfer up to the full amount of emerging contaminants grant to the DWSRF.

Table-1 Sources and Uses

CWSRF SFY 23 Sources:

Projected Fund Balance at 6/30/2022	\$79,570,774
Base Cap Grant	\$5,681,000
Base Cap Grant State Match	\$1,136,200
Supplemental Cap Grant	\$8,738,000
Supplemental Cap Grant State Match	\$873,800
Emerging Contaminants Cap Grant	\$459,000
Emerging Contaminants Cap Grant State Match	\$0
Projected Repayments to the Fund	\$22,385,248
Projected Investment Interest Income	\$0
Total Sources for SFY 23	\$118,844,022

CWSRF SFY 23 Uses:

1/5 th of 1% Administration of the Fund	\$667,665
2% Technical Assistance (FFY 22 All Cap Grants)	\$297,560
Estimated Loan Disbursements from PPL & Loans in Construction	\$93,315,726
Total Uses	\$94,280,951
Projected Ending Fund Balance at 6/30/2023	\$24,563,071

***Note: Total PPL exceeds expected disbursements**

Transfer between SRF programs

In FFY 2012, the DWSRF transferred \$27,050,176 in Federal and \$5,410,035 in State funds to the CWSRF program. The transferred funds were used to provide a CWSRF loan for the City of Wilmington’s Renewable Energy Biosolids Facility (REBF). Should repayment become necessary, the transfer will be repaid by meeting DWSRF loan disbursement needs. It is the understanding between both DNREC and DHSS that up to \$32,460,211 will be made available for DWSRF loan disbursements after the following funding sources have been exhausted: first Federal Capitalization Grants; and second DWSRF loan repayments. After these funding sources have been exhausted, DNREC will provide loan disbursements for existing and/or new DWSRF loans on a cash flow basis as needed up to the amount of the previously transferred DWSRF funds stated above. To date, no funds have been transferred back to the DWSRF program.

IV. Project Selection Funding Process

On March 24, 2022, a workshop was held to provide a detailed overview of the CWSRF and DWSRF programs; and to inform municipalities, private businesses, consulting engineering firms, non-profits, and other interested parties of the need to submit NOIs for the 2022 PPL process by April 25, 2022. Eighteen (18) new NOIs were received totaling \$115,157,731.

The selection process for funding projects in part with FFY 2022 Grant funds is based on their respective 2022 PPL ranking, and readiness to proceed. The following projects with a total cost of \$344,393,883 may receive CWSRF funding: thirty-nine (39) Wastewater/Stormwater Projects are projected to utilize \$288,759,703 from the CWSRF; and three (3) Green Project Reserve (GPR) projects are projected to utilize \$4,000,000. Prior year projects remain on the funding list until the associated loans are closed or withdrawn by applicants.

The remaining portion of this page was intentionally left blank.



Table 2 – Wastewater, Stormwater, and Green Project Reserve (GPR) Projects Selected for CWSRF Funding

Applicant / Project Name	Total Project Cost	CWSRF Loan Requested	Base or Corpus Funding	Supplemental Funding	EC Funding
Lewes Board of Public Works					
Donovan Smith MHP Sewer Extension	\$2,742,146	\$2,742,146	\$2,742,146		
Savannah Road Sewer Extension	\$2,025,000	\$2,025,000	\$2,025,000		
Cape Henlopen Sewer Extension	\$3,875,000	\$3,875,000	\$3,875,000		
Capes Cove Tenant Association Sewer Extension	\$874,347	\$874,347	\$874,347		
Town of Smyrna					
East Commerce Street Utility Replacement	\$1,940,881	\$1,940,881	\$1,940,881		
Kent County Levy Court					
Biosolids Capacity Extension Project	\$24,668,300	\$17,000,000	\$17,000,000		
Whispering Pines MHP Septic Elimination - Phase 2	\$737,856	\$722,856	\$722,856		
US 13 South Force Main Replacement Project	\$10,314,015	\$6,894,015	\$6,894,015		
City of Wilmington					
Aeration/Secondary Clarifiers Rehab. Phase 1	\$8,700,000	\$8,700,000	\$8,700,000		
Digester Rehabilitation Phase 2	\$3,000,000	\$3,000,000	\$3,000,000		
Aeration/Secondary Clarifiers Rehab Ph2	\$7,900,000	\$7,900,000	\$7,441,000		\$459,000
Replacement of Dewatering Centrifuges	\$3,400,000	\$3,400,000	\$3,400,000		
South Wilmington Sewer Separation Outfall B and Outfall C	\$9,000,000	\$9,000,000	\$9,000,000		
11th St Pump Station Replacement and Upgrade: Phase 2 of 4	\$14,500,000	\$14,500,000	\$14,500,000		
Prices Run Interceptor and CSO4A Outfall Rehabilitation	\$10,100,000	\$10,100,000	\$10,100,000		
Sussex County Council					
Blackwater Village	\$9,286,981	\$9,286,981	\$9,286,981		
Lochwood	\$8,439,458	\$8,439,458	\$8,439,458		
Briarwood Estates	\$2,365,802	\$2,365,802	\$2,365,802		
Countryside Hamlet	\$1,940,400	\$1,840,400	\$1,840,400		
Slaughter Beach Septic Elimination	\$21,695,687	\$21,695,687	\$17,414,067	\$4,281,620	
New Castle County					
Southern Sanitary Sewer Area	\$27,312,000	\$25,745,000	\$25,745,000		
Holloway Terrace Sanitary Sewer Replacement	\$2,270,000	\$2,200,000	\$2,200,000		
West Wing Sanitary Sewer System	\$20,335,000	\$20,000,000	\$20,000,000		
Interstate Highway Crossings Sanitary Sewer	\$1,200,000	\$900,000	\$900,000		
Christina River Force Main Rehabilitation - Phase 1 and 2	\$65,000,000	\$33,150,000	\$28,693,620	\$4,456,380	
Airport Road Sanitary Sewer System Interceptor Revitalization	\$7,750,000	\$7,750,000	\$7,750,000		
Richardson Park Pump Station - Phase 2	\$15,549,000	\$15,000,000	\$15,000,000		
Springfields 2 Sewer Manhole Replacement / Rehabilitation	\$1,364,933	\$1,309,933	\$1,309,933		
Brandywine Interceptor Replacement - Phase 1	\$3,700,000	\$3,000,000	\$3,000,000		
Diamond State Sustainability Corp					
Grants Way Community Septic Elimination	\$4,594,400	\$4,594,400	\$4,594,400		
Sandy Ridge	\$4,157,400	\$4,157,400	\$4,157,400		
City of Newark					
Sanitary Sewer Study and Repairs	\$3,100,000	\$3,100,000	\$3,100,000		
Town of Clayton					
Sewer Rehabilitation Utilizing Cured-In-Place Pipe Lining	\$1,175,000	\$1,175,000	\$1,175,000		
Town of Middletown					
Rapid Infiltration Basins - Von Croy Farm	\$2,982,962	\$2,982,962	\$2,982,962		
Northwest Region Septic Elimination	\$460,000	\$460,000	\$460,000		
Pump Station and Force Main to Water Farm No. 1	\$13,828,000	\$13,828,000	\$13,828,000		
Northeast Quadrant - Sewer System Improvements	\$2,568,553	\$2,568,553	\$2,568,553		
City of Seaford					
Seaford WWTF - Upgrade and Expansion	\$7,370,000	\$7,300,000	\$7,300,000		
Martin Farms Sewer Relocation	\$3,121,282	\$3,121,282	\$3,121,282		
Total Wastewater	\$335,344,403	\$288,645,103	\$279,448,103	\$8,738,000	\$459,000

Green Project Reserve					
Applicant / Project Name	Total Project Cost	CWSRF Loan Requested	Base or Corpus Funding	Supplemental Funding	EC Funding
<u>New Castle County /DeIDOT</u>					
Robscott Manor Water Quality Improvement Project <u>DNREC, Division of Watershed Stewardship</u>	\$2,046,480	\$ 997,000.00	\$ 997,000.00		
Watershed Improvement Projects <u>City of Lewes</u>	\$1,503,000	\$ 1,503,000.00	\$ 1,503,000.00		
Jones Farm Purchase	\$5,500,000	\$ 1,500,000.00	\$ 1,500,000.00		
Total GPR	\$9,049,480	\$4,000,000	\$4,000,000		
Total	\$344,393,883	\$292,645,103	\$283,448,103	\$8,738,000	\$459,000

Note: These IUP Project Estimates are based on original Notices of Intent (NOIs) or Application Submitted and are subject to change with final applications and binding commitments. Additionally, should project(s) noted for Emerging Contaminants not be determined eligible, the CWSRF reserves the right to solicit additional Emerging Contaminant projects for the balance of the grant.

V. Interest Rates and Loan Terms

The current interest rate policy went into effect on January 1, 2021. Project affordability criteria and interest rates apply to new public, private/public use, investor-owned, and private/private use CWSRF and DWSRF loan applications.

- Interest rates shall be set at 1.0 percent per annum.
- Administrative Fees shall be set no lower than 1.0 percent per annum.
- A lower interest rate may be made available based on projected residential user rates as a percentage of Median Household Income (MHI) above 1.5 percent for a single wastewater or drinking water provided utility, and 3.0 percent for a combined wastewater and drinking water provided utility, only after other alternatives such as extended repayment terms, principal forgiveness or supplemental grants are exhausted.
- Should any municipal applicant demonstrate that the municipal bond rate available to its organization is lower than the collective interest rate and administrative fee set by this policy, then DNREC may match the lower bond rate by adjusting the interest rate.
- CWSRF Expanded Use Program loans (residential septic system replacements, and poultry and dairy best management practices) will have a fixed interest rate of either 1.5 percent or 3.0 percent. (Effective July 1, 2021)
- Should US Tax Reform (or other regulatory changes) have an impact on the pricing of tax-exempt bonds and their relative value to taxable bonds, this policy will be reviewed and adjusted.

Administrative Accountability and Annual Review Requirements:

- No less frequently than annually, Environmental Finance will perform a financial review of the CWSRF and DWSRF loan portfolios and make any changes to assure efficient use of funds and their perpetuity. This review shall consider factors such as the water quality and public health priorities, demand for financial assistance, availability and financial benefit of other assistance programs, state funding priorities, demographics and affordability and current market conditions.

- Environmental Finance will use financial modeling to understand how different loan terms and project types may impact the long-term growth of the CWSRF and DWSRF.

(1) *Benchmarks Used for this Policy:*

The benchmarks for this policy were recommended by the State’s financial advisory council PFM, LLC. The below is historical data of the Bond Buyer Index 11 (BBI 11-GO1) and Bond Buyer Index 20 (BBI 20-GO2) over the past three years as published weekly in the Bond Buyer <https://www.bondbuyer.com/tag/bond-buyer-indexes>. Additionally, average 30-year conventional mortgage rates, 20-year average commercial mortgage rates on farmland, and USDA loan rates were studied over the past three years. Environmental Finance will continue to monitor the below industry benchmarks to ensure compliance with offering a “rate between 0.0 percent and market rate.” CWSRF regulations Section 35.3120 and DWSRF Section 35.3525 require that SRF loan interest rates be between zero percent and the market rate, as determined by the states. The U.S. Environmental Protection Agency (EPA) does not define market rate.

VI. Affordability Criteria

The CWSRF affordability criteria will be used to determine whether a project is eligible for principal forgiveness. Principal forgiveness awards will be determined based upon applications received through the annual CWSRF solicitation process and will be provided on a first come first serve basis, to the extent available. Section 603(i)(2) of the CWA requires the follow factors: MHI, unemployment rate, population trends of the borrower (or the project area if the project is located in a different jurisdiction) and other relevant data. Affordability criteria measures are the following:

Income Data – 1.5 percent of MHI will be considered affordable for a single wastewater or drinking water residential user rates; 3.0 percent of MHI will be considered affordable for combined wastewater and drinking water residential user rates. Delaware’s affordability criteria accounts for existing system costs relative to Operations and Maintenance (O&M) and Capital, as well as proposed project O&M and Capital costs as a function of MHI (1.5 percent water or wastewater, 3.0 percent if both services are provided) for the project area. MHI is based on the most recent census data for the municipality or county. **CWSRF loan applicants whose MHI is not representative of the census data may provide documentation in order to obtain principal forgiveness or additional subsidization. Documentation will be in the form of a representative income survey of the majority of the residents of the project area.**

Unemployment Data – Nonpayment of residential wastewater and drinking water utility bills are normally directly associated with insufficient income and unemployment. Communities with greater than or equal to 3.4% unemployed population greater than or equal to 16 years in civilian labor force will be eligible for additional subsidy. Based on the percent above the threshold, additional subsidy may be provided to the extent available.

Population Trends – Wastewater utilities can be negatively impacted by decreasing population in relation to fixed assets and expenses that were designed/sized to service a larger customer base. Communities with greater than or equal to 12.1% vacant households would be eligible for additional subsidy. Based on the percent above the threshold, additional subsidy may be provided to the extent available.

Or; if the applicant is deemed “disadvantaged” by one of these methods:

- Climate and Economic Justice Screening Tool: <https://screeningtool.geoplatform.gov/en/>
- The community has greater than or equal to 30.9% population living under 200% of poverty level

If considered disadvantaged under this method, additional subsidy consideration may be given on a percentage basis in concert with any wastewater rate increase (to the extent available).

For projects that may seem unaffordable but are actually not cost effective, the CWSRF will review projects for the cost per EDU. Projects in which the cost per EDU is greater than \$25,000 will be subject to additional analysis. This may include: income surveys, value engineering, detailed budget review, and/or a capital contribution from the borrower.

VII. Authority to Provide Additional Subsidization

DNREC has the authority to implement the CWSRF under 29 Del. C. Ch. 80, §8003. This authority includes any other allowable purposes including additional subsidization through principal loan forgiveness under the CWA, as amended.

As of May 31, 2022, DNREC has achieved grant compliance for the required 10% (minimum) loan forgiveness. Delaware has allocated \$13.7 million in principal loan forgiveness to date and plans to allocate \$5.8 million in SFY 2023.

VIII. Loans for Private Businesses, Private Landowners, Privately-Owned Projects

Private businesses, private landowners, and privately-owned centralized wastewater treatment projects are eligible under the Clean Water Act Section 320 Estuary Program as long as the project is within a national estuary and consistent with the Comprehensive Conservation Management Plans (CCMPs); consistency to be determined by Environmental Finance staff.

IX. Project Eligibilities

Ten percent (10%) of the annual Federal capitalization grants **must** be allocated towards projects that qualify as Green Project Reserve. The following is an overview of CWSRF project eligibility categories that meet EPA definition of Water Efficiency; Energy Efficiency; Green Infrastructure; and Environmentally Innovative.

Entities eligible for CWSRF assistance include: municipalities, State agencies, and non- profits for the construction of publicly owned treatment works defined in Section 212 of the CWA; public or private entities that implement projects under Delaware's Nonpoint Source Management Plans defined in Section 319 of the CWA; and public or private entities that implement projects under Delaware's Estuary Comprehensive Conservation Management Plans as defined in Section 320 of the CWA. Eligible assistance activities include:

- Planning and design activities that are reasonably expected to result in a capital project;
- Building activities that implement capital projects; and
- Water Efficiency, Energy Efficiency, Green Infrastructure, and Environmentally Innovative stand-alone projects are eligible; they do not need to be part of a larger capital improvement project.

Water Efficiency

Water efficiency is the use of improved technologies and practices to deliver equal or better services with less water. Examples of water efficiency projects include:

- Installation of water meters;

- Retrofit or replacement of water using fixtures, fittings, equipment, or appliances;
- Efficient landscape or agricultural irrigation equipment;
- Systems to recycle gray water;
- Reclamation, recycling, and reuse of existing rainwater, condensate, degraded water, stormwater, and/or wastewater streams;
- Collection system leak detection equipment; and
- Development and initial distribution of public education materials

Energy Efficiency

Energy efficiency includes capital projects that reduce the energy consumption of eligible water quality projects, or produce clean energy used by a treatment works defined in Selection 212 of the CWA. Clean energy includes wind, solar, geothermal, hydroelectric, and biogas combined heat and power systems. Examples of energy efficiency projects include:

- Energy efficient retrofits and upgrades to pumps and treatment processes;
- Leak detection equipment for treatment works;
- Producing clean power for 212 treatment works on site (wind, solar, hydroelectric, geothermal, biogas powered combined heat and power); and
- Pro-rata share of capital costs for offsite publicly owned clean energy facilities that provide power to a treatment works

Green Infrastructure

Green Infrastructure includes a wide array of practices at multiple scales that manage wet weather to maintain and restore natural hydrology by infiltrating, evapotranspiring and capturing and using stormwater. On a regional scale, green infrastructure is the preservation and restoration of natural landscape features, such as forests, floodplains, and wetlands, coupled with policies such as infill and redevelopment that reduce overall imperviousness in a watershed. On the local scale green infrastructure consists of site- and neighborhood-specific practices, such as bioretention, trees, green roofs, porous pavements, and cisterns. In addition to managing rainfall, these green infrastructure technologies can simultaneously provide other benefits such as helping filter air pollutants, reducing energy demands, mitigating urban heat islands, and sequestering carbon while also providing communities with aesthetic, recreational and natural resource benefits.

Examples of green infrastructure projects include:

- Implementation of comprehensive street tree or urban forestry programs, including expansion of tree box sizes to manage additional stormwater and enhance tree health;
- Implementation of green streets (combinations of green infrastructure practices in transportation rights-of-ways), for either new development, redevelopment, or retrofits;
- Implementation of water harvesting and reuse programs or projects, where consistent with State and local laws and policies;
- Implementation of wet weather management systems for parking areas which include: the incremental cost of porous pavement, bioretention, trees, green roofs, and other practices that mimic natural hydrology and reduce effective imperviousness at one or more scales;
- Establishment and restoration of riparian buffers, floodplains, wetlands, and other natural features; Downspout disconnection to remove stormwater from combined sewers and storm sewers; and
- Comprehensive retrofit programs designed to keep wet weather out of all types of sewer systems using green infrastructure technologies and approaches

Land Conservation Loan Sponsorship Program and Water Quality Loan Sponsorship Program (Programs are currently on hold until such time that interest rates support sponsorships)

X. CWSRF Financial Status

Delaware agrees to submit to EPA a Federal Financial Status Report – Standard Form 425 within 90 days after the end of each State fiscal year during the term of the Capitalization Grant Agreement.

XI. Public Review and Comment

The PPL and IUP will be made available to the Water Infrastructure Advisory Council (WIAC) and the public on June 15, 2022. A public hearing on the PPL and IUP was noticed to the Public Meeting Calendar on May 25, 2022. Newspaper notices were posted in the Delaware News Journal and Delaware State News on May 22, 2022, informing the public of a Public Hearing to be held on May 29, 2022, to receive public comment on the 2022 PPL and IUP. The WIAC will meet on June 15, 2022, to review, approve, and recommend the Revised PPL and IUP; subject to no adverse public comments received by July 15, 2022. No adverse public comments are anticipated.

XII. Assurances

Required Reporting

Delaware will enter all projects funded into the National State Revolving Fund Data System on an ongoing basis.

Environmental and Financial Reviews

Delaware will meet environmental review requirements by complying with Section IV, paragraph G, of the Operating Agreement between the State of Delaware and the EPA, and Section V of the Regulations Governing the Administration of the CWSRF.

Binding Commitments

Delaware will enter into binding commitments equal to at least one hundred twenty percent (120%) of each quarterly payment within one (1) year of receipt of that payment.

Disadvantaged Business Enterprise (DBE)

To ensure compliance with this requirement, the CWSRF will review and approve the DBE solicitation efforts of the borrower / borrower's engineer for prime contractors as well as efforts of the subcontractors associated with each selected prime contractor.

Davis Bacon Wage Rate Act Requirement

The CWSRF will require all treatment works projects to apply Davis Bacon wages.

Expeditious and Timely Expenditures

To help ensure that more loans close on time and projects are completed as soon as possible, assistance has been made available to communities from the CWSRF Non- Federal Administrative Account. The following is an overview of the various incentive grants to facilitate CWSRF loan demand.

- Wastewater Match Planning Grants – \$50k per project is available for feasibility studies to identify and evaluate wastewater needs, requiring a cash match.
- Surface Water Matching Planning Grants – \$50k per project is available for feasibility studies to identify and evaluate surface water management needs, requiring a cash match.
- Project Planning Advances – \$100k per project is available for the development of required PERs and EIDs necessary to apply for a CWSRF loan; \$50k is forgiven and \$50k is applied to the CWSRF loan when closed. If a CWSRF does not close, the entire \$100k is forgiven.
- Planning and Design Loans – Provide 0% Loans for Projects that are not Ready to Proceed. Loans are to allow funding for design and planning not covered under planning advances. Loan will be combined with loan for capital project.
- Wastewater Asset Management Grants – Up to a \$100k grant is available to assist with the development of an asset management plan.
- WIAC Subcommittees –Subcommittees were formed to discuss and facilitate a path forward for helping loans close on time and to help ensure that closed projects are completed on time. Subcommittee recommendations will be made to the full WIAC for consideration and implementation.

First Use for Enforceable Requirements Certification

Delaware certifies that all of its municipal facilities are in substantial compliance with their current NPDES permits.

Program Pace Requirement

The indicator for program pace, “Loans as a Percentage of Funds Available,” is calculated by dividing the total amount of executed loans by the total amount of funds available for projects. This indicator shows whether a State is using its available funds in an expeditious and timely manner. It compares the amount of closed loans to the total amount of funds available. One of the CWSRF’s short-term goals is to maintain a cumulative program pace that exceeds 95 percent for signed binding loan commitments.

Equivalency Requirement

CWSRF Base Grant - \$5,681,000 will use the New Castle County Christina River Forcemain Project (\$33.1 Million in total will report \$5,681,000)

CWSRF Supplemental - \$8,738,000 will use the New Castle County Christina River Forcemain Project (\$33.1 Million in total will report \$4,456,380) and the Sussex County Slaughter Beach Septic Elimination Project (\$21.6 Million in total will report \$4,281,620)

CWSRF Emerging Contaminants - \$459,000 will use the City of Wilmington Aeration/Secondary Clarifiers Rehab Phase 1 project (\$8.7 Million in total will report \$459,000)

XIII. CWSRF and DWSRF Federal Fund Transferability

Delaware reserves the right to transfer Capitalization Grant and loan repayment monies between the State’s CWSRF and the DWSRF programs as necessary to ensure the full utilization of the Federal assistance.

XIV. CWSRF Municipal and Green Projects - Funding List

Attachment A provides a list of wastewater and green projects that will be funded with CWSRF funds. The list includes the 2022 PPL Rank Order, PPL Year, PPL Score, Applicant Name, Project Name, Population Served, Waterbody/NPDES Permit, Total Project Cost, CWSRF Financing, and Type of Assistance.

XV. Non – Federal Administration Account

Delaware has established a Non-Federal Administration Account (NFAA) funded by one percent of the interest collected as the administrative fee charged on CWSRF municipal loans. The fee is collected from the interest portion of municipal loan repayments over the term of each loan. The NFAA is accounted for and managed separately from the corpus of the CWSRF. Funds in the NFAA are not considered CWSRF program income due to the fact that Federal capitalization grants that originally funded the loans are financially closed-out prior to receiving fees from completed projects.

Historically, the NFAA has been used to supplement the program administration allowance associated with each Federal capitalization grant, and to fund the salaries for other water quality positions in the Division of Water. The NFAA is now used for a number of innovative water quality programs that in part help to facilitate new CWSRF loan demand. The planned uses are consistent with EPA’s Guidance on Fees Charged by States to Recipients of CWSRF Program

Assistance, 40 CRF Part 35. A conservative estimate of the NFAA revenue and planned uses are provided in Attachment B.

Total annual revenue for the CWSRF NFAA in SFY2021 was \$3,417,714, which includes \$620,661 of CWSRF Federal Admin revenue and \$50,914 for DWSRF NFAA cost share of Environmental Finance (EF) activities. Total CWSRF NFAA Expenses were \$2,500,478, which include \$1,128,137 for EF activities; Water/Watershed technical program expenses \$553,924; and wastewater/surface-water grant obligations of \$818,417. The ending available fund balance for SFY2021 was \$6,967,780. Below is a list of the 2022 uses.

- CWSRF Program Administrative Expenses
- Contractual Groundwater Position
- Contractual Stormwater Position
- 6 Division of Water Positions
- Septic Rehabilitation Grant Program
- Agricultural Non-Point Source Grant Program
- Expanded Uses Non-Point Source Grant Program
- Community Water Quality Improvement Grants
- Wastewater Matching Planning Grants
- Stormwater Matching Planning Grants
- Wastewater Asset Management Grants
- Wastewater Planning Advances
- Wastewater Needs Assessment
- Stormwater Needs Assessment

The NFAA is reviewed semi-annually to ensure its sustainability before additional uses are considered. The CWSRF's Annual Report includes a description of the NFAA, fees charged, actual use, and the remaining balance in the account.

XVI. APPENDIX

- Attachment A 2022 CWSRF Wastewater & GPR Projects – Funding List
- Attachment B Non-Fed Admin Current & Planned Uses
- Attachment C 2022 CWSRF Sources & Uses of Funds
- Attachment D Cumulative Binding Commitments & Disbursements
- Attachment E FFY 2022 ACH Payment Schedule

DRAFT

Attachment A - FFY 2022 CWSRF Revised Wastewater, Stormwater, and GPR Projects - Funding List

FFY 2022 CWSRF Wastewater and Stormwater Projects

PPL Year	PPL Year Rank	PPL Score	Applicant	Project Name	Population Served	Waterbody / NPDES Permit	Total Project Cost	GPR Category	GPR Eligibility	CWRF Financing	CWA Project Type
2018	11	70.1	City of Lewes Board of Public Works	Donovan Smith Mobile Home Park Sewer Extension	400	Delaware Bay & Estuary - Broadkill River WW NPDES Discharge Permit DE 0021512	\$2,742,146	N/A	N/A	\$2,742,146	212

Description of Project and Problem: The project will install approximately 4,500 feet of 8-inch PVC sewer main (connected into the existing Board sewer collection system on Donovan Road near the Savannah Place development), 28 manholes with frames and covers, approximately 1,300 feet of 6-inch PVC house sewer services with cleanouts, sewer main and service trench restoration, for 130 mobile home units, to serve the existing Donovan Smith Mobile Home Park. Also, the Park's existing sewage holding tanks will be abandoned. Currently, the Donovan Smith Mobile Home Park is situated outside City limits and sanitary sewage is collected into several on-site holding tanks, which are pumped out several times per week for off-site disposal. Installation of the Board's public sewer system will eliminate the holding tanks and provide a safer, healthier, more sustainable sewage collection and treatment alternative. Public Health Problem: The Donovan Smith Mobile Home Park sewage system utilizes old and aging collection pipes, small pump stations and holding tanks to collect wastewater flow for eventual off-site disposal. The project will provide gravity sewer collection to a development whose current service is provided by a community system that is not performing well and whose current water service is via an on-site community well and distribution system that are located proximate to the existing sewage holding tanks. Expected Project Benefits: The project will serve a development that currently depends on an aging sewage collection system consisting of old collection pipes and pump stations, community-wide holding tanks and a pump-out for off-site disposal methodology. Additional benefits from the project include an enhanced technical and managerial capacity during times of emergency.

2018	14	65.8	City of Lewes Board of Public Works	Savannah Road Sewer Extension	90	Delaware Bay & Estuary - Broadkill River WW NPDES Discharge Permit DE 0021512	\$2,025,000	N/A	N/A	\$2,025,000	212
------	----	------	-------------------------------------	-------------------------------	----	--	-------------	-----	-----	-------------	-----

Description of Project and Problem: The project will install approximately 1,025 feet of 10-inch PVC sewer main (connected into the existing Board sewer collection system on Donovan Road near the Savannah Place development) with four (4) manholes with frames and covers, an approximate 80-foot jack & bore of 10-inch PVC sewer main with appropriately-sized casing under DelDOT-maintained Savannah Road (Route 9), and approximately 1,600 feet of 8-inch PVC sewer main installed in a southerly direction on the east side of Savannah Road with five (5) manholes, and approximately 700 feet of 6-inch PVC house sewer services with cleanouts, including sewer main and service trench restoration, for 21 single family homes and one (1) commercial improved parcel. Also, existing septic systems will be abandoned upon sewer main/service installation and hook-up by residents/commercial users. Currently, the 21 single family, and one (1) commercial, parcels on Savannah Road are situated outside City limits and sanitary sewage is treated via individual on-site septic systems. Installation of the Board's public sewer system will eliminate the on-site septic systems, provide a safer, healthier, more-sustainable sewage collection and treatment alternative, and encourage annexation into the City of Lewes.

2018	23	45.0	Town of Smyrna	East Commerce Utility Replacement	3,050	Delaware Bay & Estuary - Smyrna River N/A	\$1,940,881	N/A	N/A	\$1,940,881	212
------	----	------	----------------	-----------------------------------	-------	--	-------------	-----	-----	-------------	-----

Description of Project and Problem: The East Commerce Street Utility Replacement Project will encompass the replacement of the existing sewer main within East Commerce Street between East Street and Fairfield Drive. The project consists of approximately 1200 linear feet of existing 8" gravity sewer main, 700 linear feet of 10" gravity sewer, 100 linear feet of existing 12" gravity sewer main, 350 linear feet of 18" gravity sewer main, and 350 linear feet of 24" sewer main. The sewer mains will be replaced with new PVC piping, and the Town's hydraulic model will be utilized to determine pipe segments that should be upsized. The project will also include the replacement of all associated manholes, cleanouts, and laterals.

Attachment A - FFY 2022 CWSRF Revised Wastewater, Stormwater, and GPR Projects - Funding List

FFY 2022 CWSRF Wastewater and Stormwater Projects

PPL Year	PPL Year Rank	PPL Score	Applicant	Project Name	Population Served	Waterbody / NPDES Permit	Total Project Cost	GPR Category	GPR Eligibility	CWRF Financing	CWA Project Type
2020	4	60.0	Kent County Levy Court	Biosolids Capacity Expansion Project	130,000	Delaware Bay & Estuary - Murderkill River NPDES DE 0020338	\$24,668,300	N/A	N/A	\$17,000,000	212

Description of Project and Problem: The project will provide and install new dryers, associated equipment and accessories for the production of Class A biosolids. The equipment and accessories may be located in either the existing building or in a new building adjacent to the existing thermal drying processes. Changes in screening, dewatering, pumping, and conveying may be required for the new equipment. The design shall utilize energy efficient technologies and automation in control and monitoring. If changes are expected to the end product, such as elimination of lime addition, a market analysis survey will be completed to determine the farmers' acceptance of a new product. The Biosolids Capacity Expansion Project will evaluate alternatives for producing Class A biosolids and the replacement of existing dryers and other equipment. Services of a consulting engineering firm were acquired to evaluate the available technologies, review product acceptability, and implement the design/construction of the selected option. A Request for Qualifications (RFQ) for Engineering Services was advertised in the DE State News in summer 2018. After review of submittals, interviews were conducted in October 2018. In late November 2018, Kent County Levy Court authorized negotiations with the top ranked firm of Rummel, Klepper & Kahl, LLP (RK&K). The engineering contract was finalized in April 2019 and planning was started for the project in May 2019. A preliminary cost estimate dated October 2019 is attached. The preliminary engineering report for the project is currently scheduled to be completed in April 2020 with start of design and construction to follow.

2021	5	84.2	City of Lewes Board of Public Works	Cape Henlopen State Park Sewer Extension	613	Inland Bays - Lewes-Rehoboth Canal WW NPDES Discharge Permit DE 0021512	\$3,875,000	N/A	N/A	\$3,875,000	212
------	---	------	-------------------------------------	--	-----	--	-------------	-----	-----	-------------	-----

Description of Project and Problem: The purpose of the project is to eliminate the existing CHSP primary wastewater treatment facility (Imhoff Tank system) that currently discharges via rapid infiltration basins (RIBs) within the State Park, and pump all of its wastewater into the BPW sanitary sewer collection system within the Cape Shores development located on Cape Henlopen Drive – the flow will ultimately be treated at the BPW advanced wastewater treatment facility thereby eliminating significant concentrations of suspended solids, biological oxygen demand, and nutrients from entering the groundwater near the Lewes-Rehoboth Canal. This is a significant water quality improvement to the Inland Bays/Atlantic Ocean watershed and the excellent groundwater recharge area around the City of Lewes. The CHSP Main Pump Station, that currently pumps from the primary WWTF to the RIBs, will be replaced with a newly constructed pump station, and pump station structure, to increase flow capacity, replace damaged and outdated equipment, meet current design practices for wastewater facilities, and raise the facilities above the floodplain elevation including a 0.4-meter (1.31-feet) sea level rise consideration. A new 4-inch to 6-inch force main and short run of gravity sewers will be constructed to convey flows from the new CHSP Pump Station to the existing BPW Pump Station No. 83. BPW Pump Station No. 83 will also be upgraded to increase capacity to accommodate projected flows from the CHSP, replace damaged and outdated equipment, meet current design practices for wastewater facilities, and raise certain components above the floodplain elevation. Initial improvements will upgrade Pump Station No. 83 from the current capacity of 82,000 gallons per day (gpd) to 137,500 gpd. In addition, the electrical and flow meter systems at Pump Station No. 83 will be upgraded to accommodate the ultimate future flow of 176,000 gpd. Future improvements would be implemented when flows to Pump Station No. 83 reach 80% of 137,500 gpd (i.e., 110,000 gpd), and would upgrade the pump station to accommodate 176,000 gpd.

2021	6	80.0	City of Seaford	Seaford WWTF - Upgrade & Expansion of Selected Improvements	8,000	Chesapeake Bay - Nanticoke River NPDES DE0020265	\$7,370,000	N/A	N/A	\$7,300,000	212
------	---	------	-----------------	---	-------	---	-------------	-----	-----	-------------	-----

Description of Project and Problem: The City of Seaford owns and operates a wastewater treatment facility with a rated hydraulic capacity of 2.0 MGD. GMB prepared and submitted to DNREC a Preliminary Engineering Report (PER) on July 26, 2017, for Seaford WWTF Upgrade & Expansion to a capacity of 3.0 MGD. The PER was deemed acceptable to DNREC by email dated May 2, 2019. The design of selected common elements will follow those recommendations provided in the PER document. The scope of improvements planned for the current project includes the following Upgrade and Expansion Improvements: Headworks Structure and Primary Screening Improvements, Influent Pumping Station Rehabilitation and Improvements, New Grit Removal / Handling Structure Including Flow Splitter Box and provisions for future Secondary Screening Equipment, Rehabilitation of both Primary Clarifiers, New Septage and Leachate Handling Facility located at Existing Compost Site, Electrical Power, Mechanical (HVAC) and Controls/SCADA improvements necessary to serve Proposed Improvement areas, Site and Stormwater Management design related to Proposed Improvements, Sea Level Rise Mitigation Considerations related to Proposed Improvements. The proposed project is the first step to upgrading and expanding the Seaford WWTF. The upgrade and expansion improvements are being phased to allow the project to be more affordable and to address attrition that some unit processes are exhibiting. At a later point in time the remainder of the WWTF (biological system, etc.) will be upgraded and expanded. At that point the facility will have a rated capacity of 3.0 MGD and treat to ENR effluent quality standards.

Attachment A - FFY 2022 CWSRF Revised Wastewater, Stormwater, and GPR Projects - Funding List

FFY 2022 CWSRF Wastewater and Stormwater Projects

PPL Year	PPL Year Rank	PPL Score	Applicant	Project Name	Population Served	Waterbody / NPDES Permit	Total Project Cost	GPR Category	GPR Eligibility	CWSRF Financing	CWA Project Type
2021	8	73.2	Sussex County Council	Blackwater Village	739	Inland Bays - Indian River Bay NPDES-005-0008	\$9,286,981	N/A	N/A	\$9,286,981	212

Description of Project and Problem: Install a gravity collection and conveyance system including a new pumpstation and forcemain to serve the existing Blackwater Village Subdivision, a community in the Clarksville Area of Sussex County that was established as a new area of the Sussex County Unified Sanitary Sewer District. The community requested information and petitions to be distributed to the community as to whether they wanted to receive central sewer service from Sussex County. More than the required 50 petitions were received so the engineering department established a proposed boundary. A public hearing was held presenting the proposed boundary and allowing ample time after the meeting for revisions to the boundary. No requests were received, and the boundary presented to County Council for adoption of the required Resolution. With the boundary established a referendum was scheduled and held on creating a new area to the unified district. The referendum passed with a count of 91 in favor and 61 opposed. The results of the referendum will be presented to County Council to adopt a Resolution creating the new area. This project will remove approximately 211 existing on-site septic systems and prevents another 65 from being constructed for the vacant lots. This community is adjacent to Blackwater Creek which discharges into the Indian River Bay. This is a septic elimination project to continue Sussex County's efforts to serve existing communities/homes and eliminate existing septic systems.

2021	9	73.2	Sussex County Council	Lochwood	732	Inland Bays - Rehoboth Bay WPCC-3042C-90 (Spray Irrigation)	\$8,439,458	N/A	N/A	\$8,439,458	212
------	---	------	-----------------------	----------	-----	--	-------------	-----	-----	-------------	-----

Description of Project and Problem: Install a gravity collection and conveyance system including a new pumpstation and forcemain to serve the existing Lochwood Subdivision, a community in the Angola Neck Area that has been annexed within the boundary of the Sussex County Unified Sanitary Sewer District. The community requested information about central sewer service be provided at their annual HOA meeting. There was enough interest to request the County to proceed therefore polling letters were developed and distributed to the entire community. The polling results supported a public hearing to be held, the results were presented to County Council and the annexation was approved. This will remove approximately 209 existing on-site septic systems. This community is a peninsula into Burton Pond which discharges into Herring Creek which feeds into Rehoboth Bay. This is a septic elimination project to continue Sussex County's efforts to serve existing communities/homes and eliminate existing septic systems.

2021	10	67.5	Sussex County Council	Briarwood Estates	228	Inland Bays - Rehoboth Bay WPCC-3042C-90 (Spray Irrigation)	\$2,365,802	N/A	N/A	\$2,365,802	212
------	----	------	-----------------------	-------------------	-----	--	-------------	-----	-----	-------------	-----

Description of Project and Problem: Install a gravity collection system and conveyance system to an existing gravity connection point to serve the existing Briarwood Estates community. This community is in the West Rehoboth area adjacent to Love Creek. The subdivision was recently annexed into the boundary of the Sussex County Unified Sanitary Sewer District. The community requested information be presented at their annual meeting, this meeting provided enough interest for the County to proceed with polling letters. The letter was developed and distributed to the entire community. The results from the polling letter supported a public hearing to be held to explain the costs and impacts to the community. The results of the public hearing were presented to County Council and the annexation was approved. This will remove approximately 65 existing on-site septic systems, some immediately adjacent to Love Creek which discharges into the Rehoboth Bay. This is a septic elimination project to continue Sussex County's efforts to serve existing communities/homes and eliminate existing septic systems.

2021	12	67.1	Sussex County Council	Countryside Hamlet	165	Inland Bays - Indian River Bay WPCC-3042C-90 (Spray Irrigation)	\$1,940,400	N/A	N/A	\$1,840,400	212
------	----	------	-----------------------	--------------------	-----	--	-------------	-----	-----	-------------	-----

Description of Project and Problem: Install a gravity collection system and conveyance system to an new pumpstation. Then install a pressure forcemain up Delaware Ave. Ext. to an existing connection point south of the Town of Frankford. This community is on the north side of Lazy Lagoon Road east of Route 113 Dupont Blvd. The community was recently annexed into the boundary of the Sussex County Unified Sanitary Sewer District (Dagsboro/Frankford Area). The Engineering Department received a request from the property owner to provide central sewer service to the community stating failing on-site system. The department posted notices for a Public Hearing on the annexation from County Council, the council supported the request. The hearing was held before County Council at one of their regularly scheduled meetings and the annexation was approved. This will remove a large failing on-site septic system. Water Pollution Control Needs/Environmental Benefits: This is a septic elimination project to continue Sussex County's efforts to serve existing communities/homes and eliminate existing septic systems. This also addresses an under-served community in Sussex County.

Attachment A - FFY 2022 CWSRF Revised Wastewater, Stormwater, and GPR Projects - Funding List

FFY 2022 CWSRF Wastewater and Stormwater Projects

PPL Year	PPL Year Rank	PPL Score	Applicant	Project Name	Population Served	Waterbody / NPDES Permit	Total Project Cost	GPR Category	GPR Eligibility	CWRF Financing	CWA Project Type
2021	13	60.0	New Castle County Department of Public Works	NCC Southern Sanitary Sewer Area - Expanded Treatment and Outfall	90,000	Chesapeake Bay - C & D Canal West N/A	\$27,312,000	N/A	N/A	\$25,745,000	212

Description of Project and Problem: The purpose of the project is to upgrade the existing New Castle County Water Farm Treatment Plant, serving the County's Southern Sewer Service Area (SSSA), including a new discharge to the Delaware River and increasing the facilities current wastewater treatment capacity. The SSSA includes the majority of the land areas within the County south of Chesapeake and Delaware Canal and north of the Middletown-Odessa-Townsend urban area. The current wastewater flow in the SSSA is approximately 1.15 million gallons per day (mgd) and is expected to reach 1.8 mgd within the next four years, exceeding the current disposal capacity. The project proposes to increase the treatment and disposal capacity to 5.0 mgd, which is the anticipated long-term demand of the SSSA at year 2050. Additionally, the project will eliminate the existing Port Penn Treatment plant, rerouting the Port Penn flow to the existing Water Farm Plant through a new pump station and force main serving Port Penn, effectively eliminating both the Port Penn and Water Farm discharges to the Appoquinimink River. This project will result in a net reduction of NPDES permitted outfalls and eliminate discharge into a TMDL impaired water course.

2021	14	55.0	New Castle County Department of Public Works	Holloway Terrace Sanitary Sewer Replacement	4,356	Piedmont - Christina River N/A	\$2,270,000	N/A	N/A	\$2,200,000	212
------	----	------	---	---	-------	-----------------------------------	-------------	-----	-----	-------------	-----

Description of Project and Problem: The Holloway Terrace Trunkline conveys wastewater from residential, commercial and industrial properties in the Route 9 corridor immediately south of the City of Wilmington. The sewer basin includes areas targeted for redevelopment in the Route 9 Corridor Master Plan, which is a Wilmapco initiative as well as being a component of the New Castle County Comprehensive Development Plan. The conveyance capacity of the existing pipe limits the ability to add more wastewater flows from the area and therefore limits development opportunities. The proposed replacement pipe will provide greater capacity.

2021	15	35.0	New Castle County Department of Public Works	West Wing Sanitary Sewer System	17,000	Delaware Bay & Estuary - Delaware River N/A	\$20,335,000	N/A	N/A	\$20,000,000	212
------	----	------	---	---------------------------------	--------	--	--------------	-----	-----	--------------	-----

Description of Project and Problem: The purpose of the project is to design and construct the West Wing portion of the County's Southern Sewer Service Area (SSSA). The SSSA includes the majority of the land areas within the County south of Chesapeake and Delaware Canal and north of the Middletown-Odessa-Townsend urban area. The SSSA is divided into three areas; the Central Core Area, and the East and West Wings. The West Wing portion of the SSSA includes the land areas on the north and south side of Churchtown Road, bound on the east by properties on both sides of the Route #896 Summit Bridge Road corridor and bound on the west by the Maryland-Delaware Stateline. The project proposes to construct a regional pump station and two force mains to convey wastewater from the West Wing, to the Central Core and ultimately to the Water Farm Wastewater Treatment Plant. The West Wing infrastructure will convey approximately 1.3 million gallons of wastewater per day (mgd) on average with a peak capacity of 5.5 mgd.

2021	14	35.0	Kent County Levy Court Department of Public Works	Whispering Pines Mobile Home Park, Phase 2 Septic Elimination Project	115	Delaware Bay & Estuary - St. Jones River NPDES DE 0020338	\$737,856	N/A	N/A	\$722,856	212
------	----	------	--	---	-----	--	-----------	-----	-----	-----------	-----

Description of Project and Problem: The "Whispering Pines, Phase 2 Septic Elimination Project" is the construction of the remaining central sewer system to serve the remaining portion of Whispering Pines Mobile Home Park, connect about 52 units, and abandon the onsite septic system tanks. The proposed sewer system will consist of gravity mains, a duplex grinder pump station, and a forcemain which will connect to the existing Phase 1 gravity sewer system.

2021	15	35.0	New Castle County Department of Public Works	Interstate Highway Crossings Sanitary Sewer	46	Piedmont - Shellpot Creek N/A	\$1,200,000	N/A	N/A	\$900,000	212
------	----	------	---	---	----	----------------------------------	-------------	-----	-----	-----------	-----

Description of Project and Problem: This proposed rehabilitation project will serve to prolong the service life of sanitary sewer pipes that convey wastewater flows across the Interstate highways located north of the City of Wilmington and the state line. These pipes were installed with the construction of the interstate highway and are over 60 years old. This project is component of the CSO Elimination Plan for the Brandywine Hundred Sewer Rehabilitation Program which was assembled to address DNREC Secretary's Order 2003-W-0053.

Attachment A - FFY 2022 CWSRF Revised Wastewater, Stormwater, and GPR Projects - Funding List

FFY 2022 CWSRF Wastewater and Stormwater Projects

PPL Year	PPL Year Rank	PPL Score	Applicant	Project Name	Population Served	Waterbody / NPDES Permit	Total Project Cost	GPR Category	GPR Eligibility	CWRF Financing	CWA Project Type
2021	16	30.0	New Castle County Department of Public Works	Christina River Force Main Rehabilitation - Phase 1 and 2	330,000	Delaware Bay & Estuary - Delaware River N/A	\$65,000,000	N/A	N/A	\$33,150,000	212

Description of Project and Problem: Phase 1 entails the construction of approximately 1,500 linear feet (LF) of new 72" fiberglass-reinforced polymer mortar force main pipe across the Christina River adjacent to the existing Christina River Force Main (CRFM). The new pipe, which will be installed utilizing trenchless technologies, will not be connected to the existing CRFM but will be designed with terminal manifolds and valving on either side of the River that will allow for emergency connections in the event of a failure of the remaining CRFM which would necessitate bypass pumping. This redundancy is essential while the County continues its planning for the overall CRFM project. Phase 2 entails the connection to and continuation of the Phase 1 piping described above with approximately 5,000 LF of new 72" fiberglass-reinforced polymer mortar force main pipe to the Wilmington Wastewater Treatment Plant (WWTP), including modifications to the headworks channel of the WWTP where the new pipe will discharge. The existing CRFM is approximately 10 miles of transmission piping consisting primarily of prestressed concrete cylinder pipe (PCCP) ranging in size from 36-inch to 84-inch in diameter and is fed by (5) major sewage pump stations with dedicated force mains into the trunk line. The existing CRFM crosses the Christina River in 3 locations. The CRFM conveys approximately 50 million gallons per day (MGD) with wet weather flows being significantly higher. The existing CRFM represents the County's primary sewage conveyance system serving approximately 60% of the County's total population including the City of Newark, City of New Castle, the Town of Newport, the Town of Elsmere and portions of the City of Wilmington. The CRFM conveys sewage to the City of Wilmington's Wastewater Treatment Plant (WWTP). The proposed project will also involve upgrades to the tributary pump station and force main network as well as upgrades to the headworks of the Wilmington WWTP. The County is in the process of planning and evaluating alternative routes for the new CRFM. The purpose of the Phase 1 and Phase 2 projects is to construct new critical segments of the CRFM that is common to all of the alternative routes currently being evaluated. Given the nature of the design of the terminal points of the pipe allowing for emergency connection on either side of the River, the projects will provide flexibility and redundancy in the CRFM system to the WWTP in the event of a failure on either side of the River.

2021	17	30.0	New Castle County Department of Public Works	NCC Airport Road Sanitary System Original Interceptor Revitalization	108,000	Piedmont - Christina River N/A	\$7,750,000	N/A	N/A	\$7,750,000	212
------	----	------	---	--	---------	-----------------------------------	-------------	-----	-----	-------------	-----

Description of Project and Problem:
Investigation and rehabilitation and/or replacement of sanitary sewer assets.

2021	18	30.0	New Castle County Department of Public Works	Richardson Park Pump Station - Phase 2	30,000	Delaware Bay & Estuary - Delaware River N/A	\$15,549,000	N/A	N/A	\$15,000,000	212
------	----	------	---	--	--------	--	--------------	-----	-----	--------------	-----

Description of Project and Problem: The purpose of the project is to complete the construction of the new Richardson Park Pump Station, including the construction of all vertical assets, mechanical, electrical, and site improvements. The existing Richardson Park Pumping Station was built in 1952 and has undergone multiple modifications since the original construction. Considered as one of the five major pump stations contributing to New Castle County's Christina River Force Main, the existing Richardson Park station is currently the oldest major pump station facility in New Castle County. The station conveys an average of 4 million gallons per day (MGD) with maximum station capacity of 19.5 MGD. Phase 1 of the project was completed in 2019, primarily involving the construction of the new subsurface pumping well; of which, the new location has been located out of the 100-year FEMA flood plain, providing future safeguard and resiliency in wastewater service to the region. The existing station has exceeded the intended service life and is in need of replacement. The project will secure NCC Public Works ability to provide reliable, safe, and consistent wastewater service to the Richardson Park Sewer Basin, which consists of an estimated population of 30,000 residents and customers.

2021	19	30.0	New Castle County Department of Public Works	Springfields 2 Sewer Manhole Replacement / Rehabilitation	12,724	Delaware Bay & Estuary - Army Creek N/A	\$1,364,933	N/A	N/A	\$1,309,933	212
------	----	------	---	---	--------	--	-------------	-----	-----	-------------	-----

Description of Project and Problem: The Springfield's sewer trunkline conveys wastewater from primarily residential communities in the Bear, DE area. Several sewage pump stations direct wastewater flows to this trunkline thus extending the residence time of wastewater in the sewer system resulting in an anaerobic condition with the consequence of formulation of hydrogen sulfide. The presence of the hydrogen sulfide has resulted in severe corrosion to the exposed cementitious surfaces in the sewer manholes. Many of the manholes in the trunkline have degraded to the extent that they are not repairable and must be replaced while other manholes require installation of a protective surface liner to protect from further corrosion.

Attachment A - FFY 2022 CWSRF Revised Wastewater, Stormwater, and GPR Projects - Funding List

FFY 2022 CWSRF Wastewater and Stormwater Projects

PPL Year	PPL Year Rank	PPL Score	Applicant	Project Name	Population Served	Waterbody / NPDES Permit	Total Project Cost	GPR Category	GPR Eligibility	CWSRF Financing	CWA Project Type
2021	3	35.0	New Castle County Department of Public Works	Brandywine Interceptor Replacement, Phase 1	3,183	Piedmont - Brandywine Creek N/A	\$3,700,000	N/A	N/A	\$3,000,000	212

Description of Project and Problem: The Brandywine Interceptor conveys wastewater from properties located in the Brandywine Valley, north of the City of Wilmington. The sewer basin includes significant business and community service entities including E.I. DuPont DE Nemours & Co. Experimental Station, A.I. DuPont Children's Hospital, AstraZeneca, as well as commercial and residential properties. The sewer pipe presently in place was installed in the 1930s and has exceeded its service life. It is subject to leakage from deteriorated pipe joint material and is prone to blockages due to pipe defects. The interceptor is located directly upstream of a City of Wilmington domestic surface water intake on the Brandywine Creek. The Department of Public Works plans to replace, repair and rehabilitate the interceptor in three distinct phases. Phase one, presently being prepared for construction, is located on Alapocas Woods Park property which is owned by the City of Wilmington and managed by the Delaware State Parks. This portion of the project includes extension of the current greenway trail at the completion of the sewer asset replacement and rehabilitation tasks.

2021	20	20.0	Kent County Levy Court Department of Public Works	US 13 Force Main Replacement Project - Puncheon Run to Rising Sun	130,000	Delaware Bay & Estuary - St. Jones River NPDES DE 0020338	\$10,314,015	N/A	N/A	\$6,894,015	212
------	----	------	--	---	---------	--	--------------	-----	-----	-------------	-----

Description of Project and Problem: The Kent County Levy Court (KCLC) owns a county-wide sanitary sewer collection, conveyance and treatment system operated by the Kent County Department of Public Works (KCDPW). The system includes gravity and force main facilities that transmit sewage from throughout the county to the Kent County Wastewater Treatment Plant in Frederica, located toward the southern end of the county (just outside the Town of Frederica). The Delaware Department of Transportation (DelDOT) is developing construction plans for Contract T201500202 – US 13, Lochmeath Way to Puncheon Run Connector and for Contract T201709503 – East Camden Bypass. The projects are directly adjacent to each other and include roadway widening and safety upgrades to US 13 and SR 10. KCDPW maintains a 30" force main sanitary sewer (FM SS) within the limits of the DelDOT projects, from the Puncheon Run to the intersection of SR 10 and Rising Sun Road. The existing 30" FM SS is a prestressed concrete cylinder pipe (PCCP) that was installed in 1970-1971. The average daily flow through the pipe in 2019 was 6.7 million gallons per day (mgd), ranging up to 8.7mgd, equating to approximately 50 percent of all of the wastewater treated at the Kent County Wastewater Treatment Facility. A 16" ductile iron pipe (DIP) running from Pump Station #14 at Isaacs Branch is connected to the 30" FM SS. A valve on this pipe currently diverts flow from the pump station to a 16" bypass system. The bypass system runs in the median of US 13 to the southern limits of the DelDOT project, south of Lochmeath Way. The 16" bypass system includes a short section of 10" PVC pipe, running from a valve near the Isaacs Branch pump station to the median of US 13, just south of Isaacs Branch. The infrastructure constructed during the early 1970's has recently experienced serious maintenance issues, including pipe crown deterioration and several ruptures, due to sewer gasses present and the age/material of the pipe. Given the age and maintenance concerns with the existing 30" PCCP, a study was prepared through KCDPW and DelDOT to assess the risks to this facility due to construction of the above noted DelDOT projects. The study considered: • Structural integrity of the PCCP due to stresses induced by vibrations from construction equipment, inadvertent hits by construction equipment and added live load stresses due to roadway widening over the existing sewer line. • Spot relocations due to unavoidable conflicts with the proposed DelDOT drainage system. Based on the study's conclusions, KCDPW proposes replacing the existing 30" PCCP within the limits of the DelDOT projects with a new 30" ductile iron pipe (DIP). The new 30" FM SS will be located along the west side of US 13 from the Puncheon Run to the US 13 / East Camden Bypass intersection. It will then cross US 13 and proceed along the new alignment of the East Camden Bypass, then crossing SR 10 to Rising Sun Road. As a part of this work the 16" DIP from the Isaacs Branch pump station will be extended to connect with the proposed 30" DIP and the 10" PVC portion of the existing bypass system will be upgraded to a 16" DIP to provide for system continuity and flow capability. DelDOT concurs with this approach and is preparing an agreement with KCLC to include the necessary sewer work in their road construction contracts along with monetary reimbursement for work that would previously have been required to remedy conflicts with proposed DelDOT drainage facilities. The agreement is currently being reviewed by DelDOT. This project is critical to maintaining the County's sewer infrastructure. The result will be a transmission line that will mitigate any potential transportation, environmental, public health, and safety impacts within the project limits.

2022	4	76.0	City of Lewes Board of Public Works	Capes Cove Tenant Association Sewer Extension	45	Delaware Bay & Estuary - Broadkill River DE 0021512	\$874,347	N/A	N/A	\$874,347	212
------	---	------	-------------------------------------	---	----	--	-----------	-----	-----	-----------	-----

Description of Project and Problem: The project will install approximately 275 feet of 8-inch PVC sewer main, three (3) manholes with frames and covers, one (1) Grinder Pump Station, approximately 130 feet of 2-inch PVC force main (manifolding into the BPW's existing force main system on New Road), approximately 625 feet of 6-inch PVC house sewer services with cleanouts, sewer main, service trench, and necessary private property restoration, for 13 mobile home units and one (1) adjacent commercial property, to serve the existing Capes Cove Tenant Association mobile home park w/BPW public sewer service. Also, the Association's existing, community-wide onsite septic system will be abandoned. Currently, the Capes Cove Tenant Association mobile home park is situated outside City limits and sanitary sewage is collected via gravity sewer pipe discharging into a community-wide on-site septic system. That existing collection and septic system is systemically problematic in that collection pipes from mobile home units are either just below grade or, in some cases, exposed above grade. The existing community septic system requires constant cleanout; the situation has become progressively worse with the septic system now requiring pump-out every 3-week. The Capes Cove community is concerned about wastewater leaching into the freshwater aquifers. Installation of the Board's public sewer system will eliminate the existing on-site, community-wide septic system and provide a safer, healthier, more-sustainable sewage collection and treatment alternative.

Attachment A - FFY 2022 CWSRF Revised Wastewater, Stormwater, and GPR Projects - Funding List

FFY 2022 CWSRF Wastewater and Stormwater Projects

PPL Year	PPL Year Rank	PPL Score	Applicant	Project Name	Population Served	Waterbody / NPDES Permit	Total Project Cost	GPR Category	GPR Eligibility	CWRF Financing	CWA Project Type
2022	5	70.0	City of Wilmington	Aeration/Secondary Clarifiers Rehab. Phase 1 - Blowers, Valves, and Structural	70,000	Piedmont - Shellpot Creek NPDES DE0020320	\$8,700,000	N/A	N/A	\$8,700,000	212

Description of Project and Problem: The existing aeration and final basin (secondary clarifier) structures at the Wilmington WWTP were built in 1971 and expanded in 1993. The secondary system at the WWTP is the heart of the treatment process removing soluble BOD to meet the plant effluent requirements. The aeration system is estimated to be responsible for over 50% of the overall power consumption at the Wilmington WWTP, therefore, an upgrade of the existing blowers with a more efficient type of blower would have a significant impact. Aeration grids have not been replaced in almost 20 years. The steel and concrete structures have severely deteriorated and corroded, resulting in safety hazards, operational inefficiencies, and reduced reliability. Additionally, many mechanical, electrical, and controls components are in poor condition and obsolete. The safety of operations and maintenance staff to monitor and repair the existing large, loud, high heat blowers in the pipe gallery are a concern. The major components of this project are: · Secondary Pipe Gallery Improvements: includes crack and substrate repairs to leaky walls and ceilings to maintain structural integrity of secondary plant area · Blower Upgrade: replace existing centrifugal blowers with highspeed turbo blowers with sound attenuation, new motor control center, air control valves, instruments, electrical wiring, and controls. · Aeration tank structural repairs/replacement: Replacement of existing concrete decking between tanks for safety with new aluminum grating.

2022	6	70.0	City of Wilmington	Digester Rehabilitation Phase 2	70,000	Piedmont - Shellpot Creek NPDES DE0020320	\$3,000,000	N/A	N/A	\$3,000,000	212
------	---	------	--------------------	---------------------------------	--------	--	-------------	-----	-----	-------------	-----

Description of Project and Problem: At the Wilmington WWTP, there are 5 operating digesters three of which were built in the 1950s and the other two built in the 1980s. Each has floating steel covers that are tilting, corroded, and well beyond their expected useful life. The digester mixing system installed over 20 years ago has not been used and is inoperable. Operator experience is that it never operated correctly. The project involves replacing the covers and installing a hydraulic mixing system (if needed) that maintains uniform digester conditions. The interior condition of concrete inside the digesters is unknown, there have not been any inspections in at least 15 years. Phase 2 encompasses the work needed on the second of five digesters to be rehabilitated/repared. Project Scope - This project would include the following main components: Condition assessment to fully define scope of rehabilitation for tank structure (after draining and cleaning), Removal of old floating cover, Installation of new fixed steel or membrane style cover, Installation of hydraulic mixing system (if needed), Electrical equipment upgrades as needed for cover selected, Piping and valve modifications/improvements. Additional items found during condition assessment, such as structural issues are not currently included in costs. Due to operational constraints, digester rehabilitation will be with an estimated duration of 9-12 months per digester.

2022	7	70.0	City of Wilmington	Aeration/Secondary Clarifiers Rehab Ph2 Aeration and Final Basin Rehab	70,000	Piedmont - Shellpot Creek NPDES DE0020320	\$7,900,000	N/A	N/A	\$7,900,000	212
------	---	------	--------------------	--	--------	--	-------------	-----	-----	-------------	-----

Description of Project and Problem: The existing aeration and final basin (secondary clarifier) structures at the Wilmington WWTP were built in 1971 and expanded in 1993. The secondary system at the WWTP is the heart of the treatment process removing soluble BOD to meet the plant effluent requirements. The aeration system is estimated to be responsible for over 50% of the overall power consumption at the Wilmington WWTP. Aeration grids and diffusers have not been replaced in almost 20 years. The steel and concrete structures have severely deteriorated and corroded, resulting in safety hazards, operational inefficiencies, and reduced reliability. Additionally, many mechanical, electrical, and controls components are in poor condition and obsolete. The safety of operations and maintenance staff to monitor and repair the existing large, loud, high heat blowers in the pipe gallery are a concern. In Phase 1 of this project, the blowers and valves are replaced, and some of the structural rehab work is completed. Project Scope - The major components of this project are: · Final Basins Rehabilitation: includes longitudinal and cross collectors, collector motors, structural repairs to concrete and steel, and replacement of electrical and control conduits. · Motor Control Center: Replace existing motor control center(s) with new centralized MCC for all secondary clarifier electrical rated for outdoor enclosure. · Aeration Tank Overhauls: includes new fine-bubble diffusers and/or grids, instrumentation, new controls, and remaining structural repairs.

Attachment A - FFY 2022 CWSRF Revised Wastewater, Stormwater, and GPR Projects - Funding List

FFY 2022 CWSRF Wastewater and Stormwater Projects

PPL Year	PPL Year Rank	PPL Score	Applicant	Project Name	Population Served	Waterbody / NPDES Permit	Total Project Cost	GPR Category	GPR Eligibility	CWRF Financing	CWA Project Type
2022	8	70.0	City of Wilmington	Replacement of Dewatering Centrifuges	70,000	Piedmont - Shellpot Creek NPDES DE0020320	\$3,400,000	N/A	N/A	\$3,400,000	212

Description of Project and Problem: Centrifuges are critical to the dewatering process and minimizing solids disposal costs. Solids disposal of non-dewatered material would not have a readily available disposal outlet and present non-compliance challenges. High quality solids enhance performance at the two existing centrifuges were installed at the Wilmington WWTP in 1999 and 2003. They have been rebuilt multiple times and the vendor has identified that replacement is required. Currently, the two centrifuges cannot operate up to their full potential. Due to their condition, frequent downtimes occur due to repairs and maintenance are experienced. Project Scope - This project would include the following main components: · Removal of existing 2 centrifuges, · Replacement of 2 centrifuges, · Enhancement of electrical system reliability · Reestablishment of controls, · Factory and field testing of all equipment and controls. Additionally, given its outdated technology, any need for operational modification will require system shut off. The project includes replacing the two existing centrifuges with new centrifuges that are more operationally efficient and can lessen performance interruptions due to upkeep.

2022	9	70.0	City of Wilmington	South Wilmington Sewer Separation Outfall B and Outfall C	70,000	Piedmont - Christina River NPDES DE0020320	\$9,000,000	N/A	N/A	\$9,000,000	212
------	---	------	--------------------	---	--------	---	-------------	-----	-----	-------------	-----

Description of Project and Problem: The South Wilmington Sewer Separation project aims to reduce CSO volumes and provide flood mitigation. This project will separate 27 acres of combined sewer pipes into stormwater and sewer pipes. When it rains, water will flow through the new stormwater pipes and into the restored South Wilmington Wetlands Park (SWWP), where it will be held, treated naturally to remove pollutants and gradually released into the Christina River. The South Wilmington Sewer Separation Outfall B and Outfall C project is listed in the City's Capital Improvement Plan (CIP) and has approved spending authority from City Council, meaning once funded, this project can start immediately. The scope of work/funding in this submittal will replace funding previously approved under the South Wilmington Wetland Park and Sewer Separation Project. Phase 1 of the sewer separation project (A Street) will continue to be funded under the currently funded project scope. This submission requests funding for Phase 2 and 3 of the sewer separation construction, and if approved, will result in a corresponding reduction of SRF drawdown requests from the currently funded SRF loan to be replaced by the new SRF loan. Project Scope - The major components of this project are: - Installation of new separate stormwater pipes and manholes, - Installation on new drainage inlets, - Installation of box manholes- Replacement of drainage inlets, - Enhancement of drainage vaults

2022	13	51.0	Sussex County Council	Slaughter Beach Septic Elimination	165	Delaware Bay & Estuary - Delaware Bay	\$21,695,687	N/A	N/A	\$21,695,687	212
------	----	------	-----------------------	------------------------------------	-----	---------------------------------------	--------------	-----	-----	--------------	-----

Description of Project and Problem: The project consists of installing a vacuum sewer system including a new vacuum collection/conveyance building to serve the existing Town of Slaughter Beach. Sewage from the Town will be pumped, via an approximately 10-mile forcemain, to Artesian Wastewater Management Inc.'s existing Sussex Regional Recharge Treatment Facility (SRRF) for treatment and disposal. The Town of Slaughter Beach is a coastal community located in Sussex County, Delaware and is bounded to the north by the Mispillion River, to the west and south by the marshes of Cedar Creek, Slaughter Creek and Prime Hook National Wildlife Refuge, and to the east by the Delaware Bay. The study area encompasses all 417 recorded lots within the municipal boundaries of the Town. Of the recorded Town lots 23 are either non-buildable due to wetlands impacts or are owned by the Town, the State of Delaware, or the Federal Government. Additionally, only approximately 290 of the Town's 394 buildable lots are currently improved. Some of the larger lots within the Town could be subdivided thereby increasing the potential for another approximately 95 developable lots. The Town has held several meetings over the past few years to discuss the potential of providing sewer service to the Town. In August of 2021 the Town approved Ordinance No. 2021-05 requesting Sussex County form a sewer district to provide public sewer service to the town. This ordinance also authorized the Mayor to execute the necessary agreements on behalf of the Town. One condition of the ordinance was that the annual Sussex County Sewer Assessment not to exceed \$1,200.00 per household. In response to the Town's request, on September 21, 2021, Sussex County Council passed resolution No. R023 021 establishing the Slaughter Beach Area of the Sussex County Unified Sanitary Sewer District. This resolution further authorizes the County Finance Director and County Engineer to apply for, accept, and receive grants, loans, and other funding necessary to provide adequate financing for the planning, design, construction, and all other phases of the sanitary sewer district. This project will remove approximately 290 existing on-site septic systems and prevent another approximately 200 potential systems from being constructed on the vacant parcels within town.

Attachment A - FFY 2022 CWSRF Revised Wastewater, Stormwater, and GPR Projects - Funding List

FFY 2022 CWSRF Wastewater and Stormwater Projects

PPL Year	PPL Year Rank	PPL Score	Applicant	Project Name	Population Served	Waterbody / NPDES Permit	Total Project Cost	GPR Category	GPR Eligibility	CWRF Financing	CWA Project Type
2022	11	50.0	City of Wilmington	11th Street Sewage Pump Station Replacement and Upgrade: Phase 2 of 4	70,000	Piedmont - Brandywine Creek NPDES DE0020320	\$14,500,000	N/A	N/A	\$14,500,000	212

Description of Project and Problem: The 11th Street Sewage Pump Station Replacement and Upgrade Project is listed in the City's Capital Improvement Plan (CIP) and has approved Spending Authority from City Council, meaning once funded this project can start immediately. The City operates the 11th Street Pump Station to convey the majority of the City's raw sewage from the City to the treatment plant. During low flow periods the plant output can be as low as 7 MGD. The current large pumps are unable to effectively meet this low flow condition. Peak wet weather flows exceed 150 MGD. Maintaining a firm pumping capacity of at least 150 MGD at 11th Street is a critical part of the City's Long Term Control Plan. Numerous improvements have been made to this pump station over its history. However, it is nearly 70 years old and several aspects of the pump station require significant upgrades to extend the useful life. The ability to perform these upgrades is impacted by limitations within the pump station and the discharge piping. Consequently, the City intends to construct a 11th Street Sewage Pump Station Replacement and upgrade that will provide significant operational benefits while also enabling future rehabilitation or replacement of the existing pump station. Project Scope - The major components of this project are: · Dry Weather Pump Station consisting of a self-cleaning wet well and submersible pumps, · Four 15 MGD submersible pumps to provide a total pump station capacity of 60 MGD, · New 72" force main to connect the pump station discharge to the existing 84" force main. This connection will require an extensive tapping and line-stopping operation, · New check valves, plug valves and ductile iron piping for the pump discharges, · New medium voltage switchgear in an outdoor enclosure, · New 2000 kva transformers. · New low voltage switchgear and VFDs to serve both the new and existing pump stations, · Demolition of an existing traffic building, existing transformers and medium voltage switchgear, · Site civil upgrades to include new grading, paving and fencing around the existing site.

2022	12	48.0	Diamond State Sustainability Corporation	Grants Way Septic Elimination	150	Delaware Bay & Estuary - Broadkill River 359109-02	\$4,594,400	N/A	N/A	\$4,594,400	212
------	----	------	--	-------------------------------	-----	---	-------------	-----	-----	-------------	-----

Description of Project and Problem: Grants Way is located on Broadkill Rd just east of the intersection with Rt. 1. The Grants Way community septic system is owned and operated by Diamond State Sustainability Corporation (DSSC). DSSC is a 501C3 non-profit wastewater utility regulated by the Public Service Commission. The Grants Way community consists of 80 subdivided lots. Of the existing lots, 77 are single family homes, 2 lots are vacant, and 1 lot is the Tidewater water facility. Generally, two houses share one 1,500 gallon septic tank providing primary treatment. The remaining wastewater is disposed of at the community drain field. The drain field is adjacent to Prime Hook Wildlife Refuge. The development is located within the Prime Hook subwatershed of the Broadkill watershed. The system is approximately 25 years old. Several of the septic tanks are losing their structural integrity. Frequently, because 2 homeowners share a septic tank, high solids wastewater from 1 homeowner can cause the neighboring user to experience back-ups. The existing collection system is 4-inch gravity piping. This system is reaching its useful life. It is not expected that this system can be sustainably maintained and operated for the long term and is not deemed a reliable, long-term solution for the community. It is proposed to install a collection and transmission system meeting Sussex County Ordinance 38 standards. After the wastewater is collected, it would be pumped to the nearby Woodfield Preserve development that is serviced by Artesian. The wastewater from Woodfield Preserve is then pumped to one of the Artesian's state-of-the-art wastewater treatment and disposal systems. Capacity at Artesian's facility would need to be purchased. These upgrades would provide a sustainable, long term wastewater solution for the community. This plan would be consistent with DNREC and Sussex County sewer standards and policies because 1) the infrastructure would be constructed to Ordinance 38 standards, 2) it leverages existing treatment and disposal capacities, 3) regionalization is promoted, 4) duplicate infrastructure is not built, and 5) septic tanks are eliminated from the Broadkill Watershed.

2022	13	45.0	City of Newark	Sanitary Sewer Study and Repairs	33,000	Piedmont - Christina River	\$3,100,000	N/A	N/A	\$3,100,000	212
------	----	------	----------------	----------------------------------	--------	----------------------------	-------------	-----	-----	-------------	-----

Description of Project and Problem: This project proposes to address the major deficiencies that were identified in the previous five years' worth of sewer inspections. The City has focused on inspecting the White Clay Creek Interceptor and the upstream portion of the Cool Run Interceptor, the two main trunk lines that receive sewage from Newark. Some of the deficiencies identified so far are mains exposed in the bank of the White Clay Creek, fractures, inflow and infiltration, roots, and a multitude of other issues. To address these issues, this project spans the entire City sewer system including both the White Clay and Cool Run Basins. This project includes CCTV inspection, various point repairs, and applying liners in areas requiring rehabilitation. Cleaning, inspection, and rehabilitation activities are prioritized based on the City's Sewer Cleaning Program and the Capacity Planning Report. This would be a recurring project as we continue our plan to try to visually inspect 5-10% of the City's sewer mains per year.

Attachment A - FFY 2022 CWSRF Revised Wastewater, Stormwater, and GPR Projects - Funding List

FFY 2022 CWSRF Wastewater and Stormwater Projects

PPL Year	PPL Year Rank	PPL Score	Applicant	Project Name	Population Served	Waterbody / NPDES Permit	Total Project Cost	GPR Category	GPR Eligibility	CWRF Financing	CWA Project Type
2022	14	45.0	Town of Clayton	Sewer Rehabilitation Utilizing Cured-In-Place Pipe Lining	3,798	Delaware Bay & Estuary - Smyrna River	\$1,175,000	N/A	N/A	\$1,175,000	212

Description of Project and Problem: The Town of Clayton covers approximately 3.0 square miles and has a population of 3,961 as reported in the 2020 census. The Town owns, operates, and maintains a wastewater system which includes eight (8) pumping stations and associated force mains, as well as approximately 12 miles of sanitary sewer. The Town provides service to 1,294 metered customers including residential and commercial customers and industrial properties within the incorporated Town limits. Approximately 230,000 – 350,000 gallons per day (GPD) of wastewater is either pumped or flows by gravity to both the Town of Smyrna’s and Kent County’s wastewater collection systems. The Town of Clayton’s original wastewater collection system, installed in 1915, was primarily composed of 4-inch cast iron pipe. The original piping has since been replaced with 6” through 12” polyvinyl chloride (PVC) and vitrified clay pipe (VCP). In late 2020 and early 2021, the Town experienced multiple emergency repair situations in the sewer mains in the older part of the Town’s collection system. During the repairs, it was noted that groundwater levels were extremely high, likely causing infiltration previously observed during a 1986 Inflow & Infiltration (I&I) Study and discussed in the 2018 Sewer System Asset Management Plan. Infiltration reduces the capacity of both the Town’s collection system and downstream facilities, including the Town of Smyrna sewer system and Kent County transmission and treatment facilities. Since the Town pays fees to both Smyrna and Kent County for the amount of wastewater flow in their respective transmission and treatment facilities, additional costs are incurred by the Town resulting from infiltration. A condition assessment of the sewer mains in the older part of the Town’s collection system was performed by an independent contractor using closed-circuit television (CCTV) and a Pipeline Assessment and Certification Program (PACP) based rating system utilizing a Wastewater Matching Planning Grant in 2021. This assessment was utilized by Verdantas (formerly Duffield Associates) to develop prioritized recommendations for sewer main improvements and estimated costs. The study indicates that a significant portion of the existing sanitary sewer pipes evaluated are in need of rehabilitation either through pipe replacement or other alternative measures before further deterioration occurs. The Town proposes to use the funds received through the American Rescue and Recovery Act to rehabilitate the pipes identified as in urgent need of repair or replacement, which is costly due to their age, depth, and location. However, the Town also desires to rehabilitate those mains deemed less urgent in the prepared study to reduce infiltration of groundwater into the sanitary sewer system and continue to maintain uninterrupted service to its residents. Rehabilitation of these pipes is proposed using cured-in-place pipe lining to minimize the disruption in service to the residents while improving the condition of the system. Cured-in-place pipe (CIPP) lining is performed by pulling a liner material into the existing pipe and then cures the liner onto the host pipe typically with heat or ultraviolet (UV) light. Prior to installation, the inside of the pipe must be cleaned and cleared of obstructions, debris, intruding laterals and taps, and joints with major offsets. Once the liner is installed, circulating heated water, steam, or UV light is used for the curing process. After the liner is cured, laterals are reinstated through a remotely operated cutting machine. Bypass pumping is required for the duration of the installation process, and the installed product will reduce the interior diameter of the pipe by approximately 5 percent. The installation of CIPP product requires curing time, which extends the duration of bypass pumping. The finished product is a pipe within a pipe, typically with smooth interior walls.

2022	15	40.0	City of Wilmington	Prices Run Sewer Interceptor Rehabilitation	70,000	Delaware Bay & Estuary - Delaware River NPDES DE0020320	\$10,100,000	N/A	N/A	\$10,100,000	212
------	----	------	--------------------	---	--------	--	--------------	-----	-----	--------------	-----

Description of Project and Problem: Price’s Run interceptor is roughly 9,000 linear feet (LF) of large diameter sewer interceptor that is in the north northeast section of the City of Wilmington’s combined collection system in a disadvantaged community. Price’s Run has an assortment of pipe diameters and materials, with some defects affecting some sections of the run more than others. Of the 9,000 LF that have been inspected 5,500 LF are the priority areas of the greatest need and highest risk within the Interceptor. In the section, it has been determined that the invert voids are expanding, and new voids are occurring overtime. CSO4A is located on N Locust Street and drains to the Brandywine River. There are three separate control structures that were built over generations from the 1950s through the early 2000’s with technologies to reflect that span of time. This includes a tidegate wall, stop log chamber and gates controlled by a Real Time Control System. These 3 separate control structures do not operate as an integrated system. This results in Combined Sewer Overflows that occur outside of the structured overflow during large rain events. The interceptor also functions to convey backwash water from the Porter Drinking Water Filtration Plant. Failure of the interceptor would result in significant localized flooding, combined sewer overflows to the Brandywine Creek, and potential shut down of the Porter Filter Plant. The project includes rehabilitation of the interceptor using primarily trenchless technologies (less public disturbance) to maintain reliability of the pipes, reduce flooding potential and maintain operation of the water treatment plant and the communities in Wilmington the interceptor serves for sanitary sewage collection. Rehabilitation of the outfall is required to reduce localized flooding, property damage and regulated combined sewer overflows. Project Scope - The major components of this project are: · Repair/Replacement of degraded/missing sections of pipe for approximately 5,500 LF, · For the concrete pipe invert erosion: Fill erosion with cementitious or geopolymer-material, · For reinforced concrete pipe with crown fractures and circumferential fractures, clean out fracture with water, then fill with urethane or cementitious grout, as appropriate, · Design and construct a single structure or series of structures at CSO4A to reduce the current head loss, with the goal of maintaining storage in Prices Run, while providing a higher level of service in the local area.

Attachment A - FFY 2022 CWSRF Revised Wastewater, Stormwater, and GPR Projects - Funding List

FFY 2022 CWSRF Wastewater and Stormwater Projects

PPL Year	PPL Year Rank	PPL Score	Applicant	Project Name	Population Served	Waterbody / NPDES Permit	Total Project Cost	GPR Category	GPR Eligibility	CWSRF Financing	CWA Project Type
2022	16	40.0	Town of Middletown	Rapid Infiltration Basins - Von Croy Farm	3,798	Delaware Bay & Estuary - Apoquimink River	\$2,982,962	N/A	N/A	\$2,982,962	212

Description of Project and Problem: Middletown owns and operates the Middletown WWTP with an 11.8-square-mile service area consisting of two sewer districts with 24 pump stations. The plant's current design flow is 2.5 MGD, average daily flow is approximately 1.6 MGD. The Town disposes of treated wastewater via spray irrigation and rapid infiltration basins. The Town is currently designing and building an upgrade to their WWTP to treat up to 3.5 MGD with expansion up to 5.0 MGD in the future. To dispose of this wastewater, the Town is proposing to construct 51 rapid infiltration basins on the parcel known as the Von Croy Farm. These RIBS will provide 590,400 sq. ft. of infiltration surface equating to an estimated 1.775 MGD of infiltration. This project coupled with the Treated Effluent Pumping Station and Force Main to Water Farm #1 (NOI application submitted separately) will ensure the Town has sufficient disposal capacity for the foreseeable future.

2022	17	35.0	City of Seaford	Martin Farms Sewer Relocation	169	Chesapeake Bay - Nanticoke River NPDES DE0020265	\$3,121,282	N/A	N/A	\$3,121,282	212
------	----	------	-----------------	-------------------------------	-----	---	-------------	-----	-----	-------------	-----

Description of Project and Problem: The project will install approximately 3,180 feet of 8-inch gravity sewer main (connected into the existing collection system on Nylon Boulevard and Sussex Avenue), 1,750 feet of 10-inch gravity sewer main, fifteen manholes and cover, and 67 new laterals to residences. The existing Martin Farms neighborhood water and sewer system is aging, contains lead water services and is misaligned with the mains located in the backyards of the residences of this area via an easement. The location of the utilities makes access for maintenance very difficult and burdensome to the City. This project would relocate the utilities into the paved roadway which will provide better access as well as update approximately 70-year-old pipe. The four-inch (4") and eight-inch (8") cast iron water main is known to have lead gooseneck bends for each service and would be replaced with new mains and services to each residence in the neighborhood.

2022	18	40.0	Town of Middletown	Northwest Region Septic Elimination	30	Delaware Bay & Estuary - Apoquimink River	\$460,000	N/A	N/A	\$460,000	212
------	----	------	--------------------	-------------------------------------	----	---	-----------	-----	-----	-----------	-----

Description of Project and Problem: The Town of Middletown has been approached by the owner of parcel 23-028.00-248 to provide the property sewer service as this property utilizes a septic system. With this project, the Town will also connect several commercial establishments on parcel 23-001.00-084 which are currently served by septic system. The proposed improvements include a new 8 inch sewer main and improvements to the pumps at the pump station. All parcels in the project area are within the Town limits.

2022	19	20.0	Town of Middletown	Treated Effluent Pumping Station and Force Main to Water Farm No. 1	22,582	Delaware Bay & Estuary - Apoquimink River	\$13,828,000	N/A	N/A	\$13,828,000	212
------	----	------	--------------------	---	--------	---	--------------	-----	-----	--------------	-----

Description of Project and Problem: Middletown owns and operates the Middletown WWTP with an 11.8-square-mile service area consisting of two sewer districts with 24 pump stations. The plant's current design flow is 2.5 MGD, average daily flow is approximately 1.6 MGD. The Town disposes of treated wastewater via spray irrigation and rapid infiltration basins. The Town is currently designing and building an upgrade to their WWTP to treat up to 3.75 MGD with expansion up to 5.0 MGD in the future. The Town is seeking funding for a new pumping station and force main to convey treated effluent to New Castle County's Water Farm No.1, which is the County's regional treatment and disposal facility for southern New Castle County. The project includes an approximately 29,000 LF - 20" force main from a new pump station at the Town's existing WWTP to the County's Water Farm No. 1 treatment facility. The County would receive and then pump the treated effluent via a separate force main to a new Delaware River outfall. The County's force main and Delaware River outfall are the subject of a separate CWSRF application. The Town's project would provide abundant disposal capacity to the Town, alleviate the Town from operation and maintenance of and restrictions associated with spray irrigation and rapid infiltration basins, and reduce the loading of nitrogen and phosphorus within the water shed by transporting wastewater from the impaired Apoquimink River watershed and to the non-TMDL limited Delaware River.

Attachment A - FFY 2022 CWSRF Revised Wastewater, Stormwater, and GPR Projects - Funding List

FFY 2022 CWSRF Wastewater and Stormwater Projects

PPL Year	PPL Year Rank	PPL Score	Applicant	Project Name	Population Served	Waterbody / NPDES Permit	Total Project Cost	GPR Category	GPR Eligibility	CWRF Financing	CWA Project Type
2022	20	20.0	Town of Middletown	Northeast Quadrant - Sewer System Improvements	173	Delaware Bay & Estuary - Appoquinimink River	\$2,568,553	N/A	N/A	\$2,568,553	212

Description of Project and Problem: The Town of Middletown has, for several years, continues to replace old and aging infrastructure within targeted areas of the Town. The northeast quadrant is an area northeast of the intersection of Broad Street and Main Street in the center of the Town's downtown district and is the next area that is slated to be upgraded. The project limits are currently served by truss pipe and clay pipe. CCTV investigations have shown that this aged infrastructure is a source of infiltration and also has numerous sags. This project will replace the existing sewer main and laterals with sewer main and laterals in compliance with the Town's Standard Specifications and Ten States Standards. By upgrading the system components, the Town will reduce infiltration, improve capacity, and ensure a resilient sewer system to serve its users. NOTE: A separate DWSRF NOI application has been submitted to DNREC for replacement of the water distribution system in the northeast quadrant simultaneous with the sewer system replacement.

2022	21	20.0	Diamond State Sustainability Corporation	Sandy Ridge	150	Chesapeake Bay - Broad Creek	\$4,157,400	N/A	N/A	\$4,157,400	212
------	----	------	--	-------------	-----	------------------------------	-------------	-----	-----	-------------	-----

Description of Project and Problem: Sandy Ridge is located on Old Stage Rd just east of the Town of Laurel. The Sandy Ridge community septic system is owned and operated by Diamond State Sustainability Corporation (DSSC). DSSC is a 501C3 non-profit wastewater utility regulated by the Public Service Commission. The Grants Way community consists of 72 subdivided lots. Of the existing lots, 67 have single family homes and 5 are vacant. Of the 67 homes, 4 of them have individual septic systems on their property. Therefore, there are 63 existing customers. Generally, two houses share one 1,500 gallon septic tank providing primary treatment. The remaining wastewater is disposed of at the community drain field. The development is located within the Broad Creek watershed of the Chesapeake Bay. The system is approximately 25 years old. Several of the septic tanks are losing their structural integrity. Frequently, because 2 homeowners share a septic tank, high solids or other flushable items from 1 homeowner can cause the neighboring user to experience back-ups. The existing collection system is 4-inch gravity piping. This system is reaching its useful life. It is not expected that this collection system can be sustainably maintained and operated for the long term and is not deemed a reliable, long-term solution for the community. It is proposed to install a new collection system constructed in accordance with Sussex County engineering standards. The existing septic tanks and 4-inch piping will be replaced with 8-inch diameter gravity sewers, new manholes, and clean-outs. A new centralized pump station with emergency power would be constructed. A primary clarifier and sludge holding tank would be constructed to provide centralized sludge management. These upgrades would facilitate future improvements as well. For example, a new wastewater treatment plant could then be constructed or the wastewater could be pumped offsite to a regional system. These upgrades would be a first step to providing a sustainable, long term wastewater solution for the community. This plan would be consistent with DNREC and Sussex County sewer standards and policies because the infrastructure would be constructed to Ordinance 38 standards and it facilitates futures regionalization. Financing assumptions include: 1) this project would need to be approved by the PSC, 2) a rate increase would be needed, and 3) principal forgiveness would be available to provide a user fee less than 1.5% MHI. The project is located in US Census Tract 517.02 and it is anticipated that the community is within the low-moderate income range.

Sub-Total FFY 2022 Wastewater and Stormwater Projects

\$335,344,403

\$288,645,103

Attachment A - FFY 2022 CWSRF Revised Wastewater, Stormwater, and GPR Projects - Funding List

FFY 2022 CWSRF GPR Projects (*The Percentage of the Project that is Energy Efficient will be determined after receipt of application)

PPL Year	PPL Year Rank	PPL Score	Applicant	Project Name	Population Served	Waterbody / NPDES Permit	Total Project Cost	GPR Category	GPR Eligibility	CWRF Financing	CWA Project Type
2020	3	50.0	New Castle County / DeIDOT	Robscott Manor Water Quality Improvement Project	961,939	Piedmont - Christina River WPCC 3063A/96	\$2,046,480	Green Infrastructure	N/A	\$997,000	319/GPR

Description of Project and Problem: New Castle County (NCC) and DeIDOT, with support of the City of Newark (Newark), will implement a stream restoration, meadow /forest restoration, and pedestrian access path to improve water quality as a result in the reduction of channel erosion. The stream restoration will employ the floodplain reconnection technique. This provides significant ecological benefits by encouraging groundwater recharge, improving water quality (by trapping nutrients and sediment), improving in-stream habitat for plants, fish, and invertebrates, and restoring the natural riverine processes. Additional benefits include a decrease in downstream flooding, increased native habitat, and recreation. The project is located within the Robscott Manor Park between Sanford Drive and Edjil Drive just east of SR-896 and south of SR- 4. There is approximately 1,650 ft of stream within NCC owned land, and an additional 117 ft within drainage easements under the jurisdiction of Newark. The stream accepts runoff from 12 DeIDOT outfalls, totaling 282 acres of drainage. The existing channel is incised, actively eroding, and contributing sediment downstream. The restoration will lower the energy in the system by adding a floodplain, making the stream more stable. (Was part of the Watershed Improvements Projects solicitation).

2020	3	50.0	DNREC, Division of Watershed Stewardship	Watershed Improvement Projects	961,939	TBD N/A	\$1,503,000	TBD	N/A	\$1,503,000	319/GPR
------	---	------	--	--------------------------------	---------	------------	-------------	-----	-----	-------------	---------

Description of Project and Problem: Implemented projects will be specifically designed to improve water quality as part of specific Delaware priority watershed improvement plans. Proposals will be selected for funding consideration through a Special Project Solicitation Advertisement conducted by the Division of Watershed Stewardship, Nonpoint Source (NPS) Pollution Program based on geographic scope; watershed impairment; watershed plan; water quality improvement; eligibility of applicant and project; and applicant capacity. Partnerships are encouraged where necessary to promote larger projects that are beyond the capacity of smaller organizations.

2020	8	50.0	City of Lewes	Jones Farm Purchase	3,500	Delaware Bay & Estuary - Broadkill River N/A	\$5,500,000	Green Infrastructure	N/A	\$1,500,000	319/GPR
------	---	------	---------------	---------------------	-------	---	-------------	----------------------	-----	-------------	---------

Description of Project and Problem: The City of Lewes is partnering with the Lewes Board of Public Works and Sussex County to purchase the Jones Farm, a +/-34.5-acre parcel of land at the corner of Clay Road and Kings Highway just outside of Lewes city limits. This piece of land is a critical parcel to preserve as it is part of the region's open space network and because it lies within the wellhead protection ordinance for the City's municipal wells. It also sits at the headwaters of Ebenezer Branch, a tributary of Canary Creek. The parcel is located in the rapidly-growing Lewes area, one of the few remaining large tracts of unprotected, undeveloped land in the Cape Henlopen region. The property is adjacent to the wellfield for the water system operated by the Lewes Board of Public Works. The Board's wells are in the unconfined aquifer, which have a larger area of influence than wells that are in the confined aquifer, and protecting this land will ensure that the land is not developed with impervious cover that will reduce recharge capacity or developed with uses that adversely affect the quality of the wells. Also, given the location of the property at the headwaters of Ebenezer Branch and its associated wetlands, protection of this property will benefit the water quality of this tributary to Canary Creek, as well as provide flood protection by not adding impervious cover to a watershed that already experiences flooding problems.

Sub-Total FFY 2022 GPR Projects							\$9,049,480			\$4,000,000	
Total CWSRF FFY 2022 Project Funding							\$344,393,883			\$292,645,103	

Notes: Section 212 Publicly-Owned Treatment Works; Section 319 Non-Point Source; Section 320 Natural Estuary; LCL and Conservation Loan; WQIL Water Quality Improvement Loan; GPR Green Project

Attachment C: Sources and Uses of Funds for the CWSRF

SFY 2022 Beginning Fund Balance	July 1, 2021		<u><u>\$77,555,636</u></u>
SFY 2022 Source of Funds			
Capitalization Grant (FFY21)		\$7,779,000	
State Match - (20%)		1,555,800	
Repayments*		19,843,893	
Investment Interest		0	
Sources Subtotal projected through	June 30, 2022		\$29,178,693
SFY 2022 Use of Funds			
Construction Loan Disbursements*		\$26,516,987	
Administration - (1/5th of 1% of net position)		646,568	
Reserved for Transfer of Funds back to DWSRF (as needed)		<u>As Needed</u>	
Total Uses Projected			(\$27,163,555)
SFY 2022 Projected Fund Balance	June 30, 2022		<u><u>\$79,570,774</u></u>
SFY 2023 Source of Funds			
Base Capitalization Grant (FFY22)		\$5,681,000	
Base State Match - (20%)		1,136,200	
Supplemental Capitalization Grant (FFY22)		8,738,000	
State Match Supplemental		873,800	
Emerging Contaminants Capitalization Grant (FFY22)		459,000	
State Match Emerging Contaminants		0	
Repayments		22,385,248	
Investment Interest		0	
Projected Sources Subtotal	June 30, 2023		\$39,273,248
SFY 2023 Use of Funds			
New Loans Closed - From IUP			
Section 212 Projects Closed		\$ 288,645,103	
Section 319 Projects Closed		0	
Section 320 Projects Closed		0	
Land Conservation Loans Closed		0	
Green Projects Closed		4,000,000	
Proposed Administration - (1/5th of 1% of net position)		667,665	
Proposed Technical Assistance - (2% of Cap Grants)		297,560	
Reserved for Transfer of Funds back to DWSRF (as needed)		<u>As Needed</u>	
Total Loan Obligations Proposed		\$ 293,610,328.00	
Estimated Disbursements on loans closed			\$94,280,951
SFY 2023 Projected Fund Balance	June 30, 2023		<u><u>\$24,563,071</u></u>

*includes projections through SFY end 6/30/2022

Delaware Water Pollution Control Revolving Fund								
Attachment D: Binding Commitment and Disbursements by Project								
Data Sources: Project Status Report, Cash Flow Report, and 2022 Draft PPL/IUP					Disbursements Ending 9/30/2023			
					10/1/2022	1/1/2023	4/1/2023	7/1/2023
					12/31/2022	3/31/2023	6/30/2023	9/30/2023
Project	Loan Amount	Binding Commitment Date	Est. Construction Completion Date	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	
Wastewater Projects								
City of Wilmington								
Prices Run Sewer Interceptor Rehabilitation	\$10,100,000	Pending	Sep-25	\$0	\$3,030,000	\$4,040,000	\$2,525,000	
Clarifiers Rehab Phase 1	\$8,700,000	Pending	Sep-23	\$870,000	\$1,740,000	\$2,610,000	\$3,480,000	
Digester Rehab Phase 2	\$3,000,000	Pending	Sep-23	\$300,000	\$900,000	\$900,000	\$900,000	
Clarifiers Rehab Phase 2	\$7,900,000	Pending	Sep-23	\$790,000	\$1,580,000	\$1,975,000	\$3,555,000	
Centrifuges Replacement	\$3,400,000	Pending	Sep-23	\$340,000	\$1,020,000	\$1,020,000	\$1,020,000	
S Wilmington Sewer Separation	\$9,000,000	Pending	Dec-23	\$900,000	\$2,700,000	\$2,250,000	\$2,700,000	
11th Street Pump Station Replacement	\$14,500,000	Pending	Dec-23	\$1,450,000	\$4,350,000	\$4,350,000	\$4,350,000	
City of Lewes Board of Public Works								
Savannah Road Sewer Extension	\$2,025,000	Pending	Mar-24	\$0	\$0	\$506,250	\$506,250	
Donovan Smith MHP Sewer Extension	\$2,742,146	Pending	Nov-23	\$0	\$822,644	\$1,096,858	\$274,215	
Cape Henlopen State Park Sewer Extension	\$3,875,000	Pending	May-23	\$387,500	\$1,162,500	\$1,162,500	\$1,162,500	
Capes Cove Sewer Extension	\$874,347	Pending	Dec-23	\$0	\$0	\$174,869	\$174,869	
Sussex County Council								
Briarwood Estates	\$2,365,802	Pending	Jan-24	\$0	\$236,580	\$473,160	\$473,160	
Slaughter Beach Septic Elimination	\$21,695,687	Pending	Nov-24	\$0	\$0	\$2,169,569	\$6,508,706	
Lochwood	\$8,439,458	Pending	Apr-24	\$0	\$0	\$1,687,892	\$1,687,892	
Blackwater Village	\$9,286,981	Pending	Mar-24	\$0	\$0	\$928,698	\$1,857,396	
Countryside Hamlet	\$1,840,400	Pending	Sep-23	\$184,040	\$736,160	\$368,080	\$552,120	
Kent County Levy Court								
Biosolids Capacity Expansion Project	\$17,000,000	Mar-21	Jul-24	\$3,400,000	\$6,800,000	\$5,100,000	\$1,700,000	
US Force Main Replacement - Pucheon Run	\$6,894,015	Jan-22	Dec-23	\$0	\$2,068,205	\$2,757,606	\$1,378,803	
Whispering Pines - Phase II	\$722,856	Pending	Jan-23	\$72,286	\$216,857	\$216,857	\$216,857	
Town of Middletown								
NE Quadrant Sewer System Rehab	\$2,568,553	Pending	Jan-24	\$0	\$0	\$513,711	\$1,027,421	
NW Septic Elimination	\$460,000	Pending	Aug-23	\$46,000	\$368,000	\$46,000	\$0	
RIBs Van Croy Farm	\$2,982,962	Pending	Dec-23	\$0	\$0	\$298,296	\$2,684,666	
Pump Station & Forcemain to Water Farm #1	\$13,828,000	Pending	Dec-24	\$0	\$0	\$0	\$0	
Town of Smyrna								
E Commerce Street Utility Replacement Project	\$1,940,881	Apr-19	Dec-23	\$0	\$0	\$388,176	\$388,176	
Town of Clayton								
Sewer System Rehab	\$1,175,000	Pending	Apr-23	\$117,500	\$940,000	\$117,500	\$0	
City of Seaford								
Waste Water Treatment Facility Upgrade & Expansion	\$7,300,000	Pending	Sep-23	\$0	\$0	\$730,000	\$2,920,000	
Martin Farms Sewer Relocation	\$3,121,282	Pending	Dec-24	\$0	\$0	\$312,128	\$1,248,513	
New Castle County								
Airport Rd Sanitary Sewer Revitalization	\$7,750,000	Pending	Apr-24	\$0	\$0	\$775,000	\$3,100,000	
Christina River Force Main Rehab - WIFIA	\$33,150,000	Pending	Sep-23	\$0	\$0	\$3,315,000	\$6,630,000	
Holloway Terrace Sanitary Sewer	\$2,200,000	Pending	Jun-23	\$0	\$0	\$220,000	\$440,000	
Springfields 2 Sewer Manhole Replacement	\$1,309,933	Pending	Sep-23	\$0	\$0	\$130,993	\$261,987	
Brandywine Interceptor Replacement Phase I	\$3,000,000	Pending	Oct-23	\$0	\$0	\$0	\$0	
Interstate Highway Crossings Sanitary Sewer Pipe Rehab	\$900,000	Pending	Mar-24	\$0	\$0	\$0	\$90,000	
Richardson Park Pump Station Phase II	\$15,000,000	Pending	Feb-24	\$0	\$0	\$4,500,000	\$4,500,000	
Southern Sanitary Sewer Area - Expanded Treatment	\$25,745,000	Pending	Jan-24	\$0	\$0	\$0	\$0	
West Wing Sanitary Sewer System	\$20,000,000	Pending	Jan-24	\$0	\$0	\$0	\$0	
Diamond State Sustainability Corp								
Grants Way Septic Elimination	\$4,594,400	Pending	Dec-23	\$459,440	\$1,378,320	\$2,297,200	\$459,440	
Sandy Ridge Collection System	\$4,157,400	Pending	Dec-23	\$415,740	\$1,247,220	\$2,078,700	\$415,740	
City of Newark								
Sanitary Sewer Phase III	\$3,100,000	Pending	Dec-23	\$310,000	\$620,000	\$1,240,000	\$620,000	
Green Project Reserve Projects								
DNREC, Division of Watershed Stewardship								
Watershed Improvement Projects	\$1,503,000	One-time	One-time	\$0	\$0	\$0	\$0	
New Castle County / DelDot								
Robscott Manor Water Quality Improvement Project	\$997,000	Aug-20	May-22	\$99,700	\$199,400	\$697,900	\$0	
City of Lewes								
Jones Farm Land Purchase	\$1,500,000	Pending	Dec-22	\$1,500,000	\$0	\$0	\$0	
Transfer of Funds back to DWSRF								
As Needed		N/A		As Needed	As Needed	As Needed	As Needed	
Administrative Expenses								
	\$667,665			\$667,665	\$0	\$0	\$0	
Totals	\$293,312,768			\$12,309,871	\$32,115,885	\$51,447,944	\$59,808,711	
Grant Award - Federal Share	\$5,681,000			\$5,681,000	\$0	\$0	\$0	
Grant Award - State Match	\$1,136,200			\$1,136,200	\$0	\$0	\$0	
BIL Supplemental Grant Award - Federal Share	\$8,738,000			\$8,738,000	\$0	\$0	\$0	
BIL Supplemental Grant Award - State Match	\$873,800			\$873,800	\$0	\$0	\$0	
BIL Emerging Contaminants Grant Award - Federal Share	\$459,000			\$459,000	\$0	\$0	\$0	
BIL Emerging Contaminants Grant Award - State Match	\$0			\$0	\$0	\$0	\$0	
CWSRF Corpus - Repayment Funds	\$276,424,768			(\$4,578,129)	\$32,115,885	\$51,447,944	\$59,808,711	
Base Federal %	83.33%			83.33%				
Base State Match %	16.67%			16.67%				

Note 1: All values in blue are calculated.

**Attachment E: FFY2022 ASAP Payment Schedule
(Federal Dollars)**

Calendar Year / Federal QTR	Payment Date	ASAP Payment Schedule	ASAP Cumulative Amount
22/1	1st Quarter	\$0	\$0
22/2	2nd Quarter	\$5,681,000	\$5,681,000
23/3	3rd Quarter	\$8,738,000	\$14,419,000
23/4	4th Quarter	\$459,000	\$14,878,000

DRAFT