



State of Delaware Water Pollution Control Fund

FFY 2022 Intended Use Plan

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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.

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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 was 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 met on June 15, 2022, and reviewed, approved, and recommend the PPL and IUP; subject to no adverse public comments were received by July 15, 2022. Three written comments were received by July 15, 2022. The comments had many good suggestions on how to improve the program and may be considered in the future, but none warranted a substantive change to the IUP.

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
- Attachment F 2015 PPL SOP

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.

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|------|----|------|-------------------------------------|-------------------------------|----|--|-------------|-----|-----|-------------|-----|
| 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.

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|------|----|------|----------------|-----------------------------------|-------|--|-------------|-----|-----|-------------|-----|
| 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.

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|------|---|------|-------------------------------------|--|-----|--|-------------|-----|-----|-------------|-----|
| 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.

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|------|---|------|-----------------|---|-------|---|-------------|-----|-----|-------------|-----|
| 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 | CWRF 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.

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|------|---|------|-----------------------|----------|-----|--|-------------|-----|-----|-------------|-----|
| 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.

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|------|----|------|-----------------------|-------------------|-----|--|-------------|-----|-----|-------------|-----|
| 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.

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|------|----|------|-----------------------|--------------------|-----|--|-------------|-----|-----|-------------|-----|
| 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.

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|------|----|------|---|---|-------|-----------------------------------|-------------|-----|-----|-------------|-----|
| 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.

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|------|----|------|---|---------------------------------|--------|--|--------------|-----|-----|--------------|-----|
| 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.

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|------|----|------|--|---|-----|--|-----------|-----|-----|-----------|-----|
| 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.

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|------|----|------|---|---|----|----------------------------------|-------------|-----|-----|-----------|-----|
| 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.

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|------|----|------|---|--|---------|-----------------------------------|-------------|-----|-----|-------------|-----|
| 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.

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|------|----|------|---|--|--------|--|--------------|-----|-----|--------------|-----|
| 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.

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|------|----|------|---|---|--------|--|-------------|-----|-----|-------------|-----|
| 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 | CWRF 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.

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|------|----|------|--|---|---------|--|--------------|-----|-----|-------------|-----|
| 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 |
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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.

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|------|---|------|-------------------------------------|---|----|--|-----------|-----|-----|-----------|-----|
| 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.

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| 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.

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| 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.

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|------|---|------|--------------------|---|--------|---|-------------|-----|-----|-------------|-----|
| 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

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| 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.

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FFY 2022 CWSRF Wastewater and Stormwater Projects

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|----------|---------------|-----------|--------------------|---|-------------------|--|--------------------|--------------|-----------------|----------------|------------------|
| 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.

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| 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.

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|------|----|------|----------------|----------------------------------|--------|----------------------------|-------------|-----|-----|-------------|-----|
| 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.

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|----------|---------------|-----------|-----------------|---|-------------------|---------------------------------------|--------------------|--------------|-----------------|----------------|------------------|
| 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.

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| 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 B CWSRF Non Federal Administrative Account (NFAA)
Current and Planned Uses**

Prior Year Ending Fund Balance SFY 21/Starting Balance SFY 22 \$ 8,029,768.00

| | FY20 Actual | FY21 Actual | FY22 To Date 4/30/2022 | FY22 Projected | FY23 Projected | FY24 Projected | FY25 Projected |
|--|----------------|----------------|---------------------------|-------------------|-------------------|-------------------|-------------------|
| 1. Revenue (includes Fed and Non-Fed Admin) | | | | | | | |
| Total Annual Revenues | \$3,535,500 | \$3,417,714 | \$3,077,348 | \$3,301,440 | \$3,464,801 | \$3,623,263 | \$3,784,894 |
| 2. EF Administrative Expenses and Uses (includes Fed and Non-Fed Admin) | | | | | | | |
| Total Administrative Expenses | \$1,071,021 | \$1,128,137 | \$969,933 | \$1,247,882 | \$1,363,765 | \$1,481,927 | \$1,602,411 |
| Total Administrative Obligations Remaining | \$197,903 | \$374,601 | \$82,328 | \$200,000 | \$200,000 | \$200,000 | \$200,000 |
| 3. CWSRF State Match | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| 4. Grant Program Expenses & Additional DNREC Position Salaries/Benefits | | | | | | | |
| Total Program Expenses | \$1,389,393 | \$1,372,341 | \$1,093,418 | \$2,239,365 | \$2,596,976 | \$2,611,932 | \$2,626,537 |
| Total Grant Program Obligations Remaining | \$1,299,050 | \$1,604,623 | \$1,541,725 | \$2,777,241 | \$1,417,667 | \$1,417,667 | \$1,417,667 |
| 5. Total NFAA Expenses | \$2,460,414 | \$2,500,478 | \$2,063,351 | \$3,487,247 | \$3,960,741 | \$4,093,858 | \$4,228,948 |
| Total NFAA End of FY Obligations | \$1,496,953 | \$1,979,224 | \$1,624,053 | \$2,977,241 | \$1,617,667 | \$1,617,667 | \$1,617,667 |
| 6. Annual Fund Growth (Decrease) | \$1,075,086 | \$917,236 | \$1,013,997 | (\$185,806) | (\$495,940) | (\$470,595) | (\$444,054) |
| 7. Balances | | | | | | | |
| Cash Balance | \$7,112,189 | \$8,029,768 | \$9,043,765 | \$7,843,961 | \$7,348,021 | \$6,877,426 | \$6,433,372 |
| Available Balance | \$6,690,322 | \$6,967,780 | \$7,419,712 | \$4,866,720 | \$5,730,354 | \$5,259,759 | \$4,815,705 |
| 8. Grant Program Annual Budgets | | | | | | | |
| SEFO Program (strictly for low-income) | \$350,000 | \$385,000 | \$350,000 | \$350,000 | \$1,000,000 | \$1,000,000 | \$1,000,000 |
| Wastewater Matching Planning Grants | \$150,000 | \$150,000 | \$150,000 | \$150,000 | \$150,000 | \$150,000 | \$150,000 |
| Wastewater Asset Management Grants | \$200,000 | \$200,000 | \$300,000 | \$300,000 | \$500,000 | \$500,000 | \$500,000 |
| Wastewater Planning Advance Grants | \$200,000 | \$200,000 | \$352,700 | \$352,700 | \$400,000 | \$400,000 | \$400,000 |
| Surface Water Matching Planning Grants | \$250,000 | \$250,000 | \$305,500 | \$305,500 | \$259,151 | \$259,151 | \$259,151 |
| Community Water Quality Grants | \$250,000 | \$250,000 | \$280,016 | \$280,016 | \$308,516 | \$308,516 | \$308,516 |
| | \$1,599,700 | \$1,435,000 | \$1,738,216 | \$1,738,216 | \$2,617,667 | \$2,617,667 | \$2,617,667 |
| Obligated | \$1,496,953 | \$1,979,224 | \$1,624,053 | \$2,977,241 | \$1,617,667 | \$1,617,667 | \$1,617,667 |

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 | <u>0</u> | |
| 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 | <u>0</u> | |
| 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 | \$14,878,000 | \$14,878,000 |
| 22/2 | 2nd Quarter | \$0 | \$14,878,000 |
| 23/3 | 3rd Quarter | \$0 | \$14,878,000 |
| 23/4 | 4th Quarter | \$0 | \$14,878,000 |

| | | |
|---|--|------------------------------|
| DELAWARE WATER POLLUTION CONTROL STATE REVOLVING FUNDS DNREC - ENVIRONMENTAL FINANCE | | |
| <i>Subject: Standard Operating Procedures for establishing the Project Priority List for the Delaware's Water Pollution Control Revolving Fund (WPCRF)</i> | | |
| <i>Effective Date: October 20, 2010</i> | <i>Revision Date: December 9/2015</i> | <i>Date Reviewed:</i> |

Purpose:

In accordance with the current rules and regulations governing the WPCRF for municipal wastewater treatment works, each state must submit a priority system for the United States Environmental Protection Agency's (EPA) approval. The priority system should describe the methodology used by the state to rank projects that are considered eligible for federal assistance. The Delaware Department of Natural Resources and Environmental Control is the designated state agency for developing and administering the priority system for the WPCRF. The Department must annually prepare and submit a priority list to the EPA of all projects for which federal assistance will be requested from the State's current allotment.

Policy References:

- Powers and Duties of the Secretary of the Department of Natural Resources and Environmental control. - Chapter 80, Title 29, Delaware Code, Sec. 8003
- Water Infrastructure Advisory Council - Chapter 80, Title 29, Delaware Code, Sec. 8003(11)(d)(2)
- CWSRF Regulations (40 CFR Part 35.31) <https://www.govinfo.gov/content/pkg/CFR-2011-title40-vol1/pdf/CFR-2011-title40-vol1-part35-subpartK.pdf>

Records Archive Location:

The Project Priority List is kept at the following locations.

- G: CWSRF PLL-IUP Annual Process/Annual PPLs and IUPs
- Environmental Finance Website <https://dnrec.alpha.delaware.gov/environmental-finance/>

Standard Operating Procedures for establishing the Project Priority List:

SECTION 1 - INTRODUCTION

- 1.01 The State of Delaware receives monies for the Water Pollution Control Revolving Fund (WPCRF) under the Clean Water Act which defines the formula for allocating funds to the states. The amount received by the State depends on Congressional appropriations and executive authorization.
- 1.02 In accordance with the current rules and regulations governing the WPCRF for municipal wastewater treatment works, each state must submit a priority system for the United States Environmental Protection Agency's (EPA) approval. The priority system should describe the methodology used by the state to rank projects that are considered eligible for federal assistance. The Delaware Department of Natural Resources and Environmental Control is the designated state agency for developing and administering the priority system for the WPCRF. The Department must annually prepare and submit a priority list to the EPA of all projects for which federal assistance will be requested from the State's current allotment.
- 1.03 A priority system for evaluating projects was established in 1960 to allocate funds. It was amended in 1967, 1971, 1974, 1978, 1983, 1996, 2000, 2005, and 2010 and is hereby further amended to be consistent with the current regulations under the state priority system, as amended, and with state laws.
- 1.04 Pursuant to Chapter 80, Title 29, Delaware Code, Sec. 8003, the Secretary of the Department is empowered to administer the WPCRF in accordance with the requirements set forth in Title VI of the Federal Clean Water Act.
- 1.05 Pursuant to Chapter 80, Title 29, Delaware Code, Sec. 8003(11)(d)(2), the Water Infrastructure Advisory Council will review the Project Priority List and amend, if necessary, and provide for review at a public hearing.

SECTION 2 - DEFINITIONS

- 2.01 AVAILABLE FUNDS: Shall mean the capitalization funds plus repayments on previous loans, plus accrued interest available, or expected to be available, to the State for allotment during a fiscal year, and are used for determining the fundable portion of the project priority list. The available funds are determined by subtracting from the total funds available (or expected to be available) to the State, all mandatory, optional, and any additional reserves deemed appropriate by the State.
- 2.02 COUNCIL: Shall mean the Water Infrastructure Advisory Council which is appointed by the Governor of Delaware and the General Assembly.
- 2.03 DEPARTMENT: Shall mean the Department of Natural Resources and Environmental Control.
- 2.04 EDU: Equivalent Dwelling Unit shall mean a dwelling unit or equivalent unit discharging 240 gallons per day.
- 2.05 EPA: Shall mean the United States Environmental Protection Agency.
- 2.06 FUNDABLE PRIORITY LIST: Shall mean that portion of the Project Priority List which might reasonably be funded from available funds.
- 2.07 MANDATORY DOCUMENTS: Shall mean those materials and information that must be included with a loan application as set forth in the Procedures of the Water Pollution Control Revolving Fund.
- 2.08 MHI: Shall mean Median Household Income as established by the U.S. Census Bureau and adjusted annually by the regional consumer price index.
- 2.09 PLANNING PRIORITY LIST: Shall mean that portion of the Project Priority List which might be funded

from future authorized allotments and other available funds. It includes those projects which could be moved up onto the Fundable Priority List as detailed in Section 5 of these procedures. Projects on the Planning Priority List shall be subjected to public participation together with and at the same time as those on the Fundable Priority List.

- 2.10 **PROJECT:** Shall mean a project for the planning, design, or construction of treatment works.
- 2.11 **PROJECT COST:** Shall mean the total cost of the construction of the project including consulting, legal, and engineering fees.
- 2.12 **PROJECT PRIORITY LIST:** Shall mean the ordered listing of projects for which the Department expects Federal and State financial assistance.
- 2.13 **QUALIFIED AGENCY:** Shall mean any legally incorporated town or city, county government, state agency, sanitary district, authority authorized by law, or private business organized to provide treatment works.
- 2.14 **TREATMENT WORKS:** Shall mean any devices and systems for the storage, treatment, recycling, and reclamation of municipal sewage or industrial wastes. These include interceptor sewers, outfall sewers, sewage collection systems, pumping, power, and other equipment and their appurtenances; extensions, improvements, remodeling, additions, and alterations thereof; and any works, including acquisition of the land that will be an integral part of the treatment process or is used for ultimate disposal of residues resulting from such treatment (including land for composting sludge, temporary storage of such compost and land used for the storage of treated wastewater in land application systems before land application) or any other method or system for preventing, abating, reducing, storing, treating, separating, or disposing of municipal or industrial waste, including waste in combined storm water and sanitary sewer systems.
- 2.15 **WATER QUALITY STANDARDS:** Shall mean the standards duly adopted by the State of Delaware and submitted to the Environmental Protection Agency.
- 2.16 **WATERSHED MANAGEMENT PLAN:** Shall mean any written description of voluntary or mandatory actions that will result in the reduction of pollutant loads to a surface water body. Plans shall be prepared by a qualified agency and include, but not be limited to, Watershed Implementation Plans, Comprehensive Conservation and Management Plans, and Basin Plans.

SECTION 3 - PRIORITY SYSTEM

3.01 All projects, or in the case of non-point source activities programs, considered eligible for State and Federal funding assistance will be evaluated in accordance with the criteria listed below and described in Section 4 - Criteria for Evaluation and Rating. Priorities will strictly follow the scores received. The “best” score a project may receive is 120 points; such a project would have the highest possible priority. The numerical score is derived using the following classifications:

| | Maximum Pts | Bonus Pts |
|--|--------------------|------------------|
| I. Water Quality Protection | 0-45 points | 0-10 points |
| II. Targeted Water Bodies | 0-20 points | |
| III. Clean Water Priorities | 0-20 points | |
| IV. Strategies for State Policies and Spending | 0-10 points | |
| V. Green Project Reserve | 0-10 points | |
| VI. Sustainability | 0-30 points | |
| VII. Land Conservation Sponsorship | 0 points | 10 points |
| VIII. Borrower Type | <u>0-10 points</u> | |
| Total Priority Score | 145 points | <u>30 points</u> |

SECTION 4 - CRITERIA FOR EVALUATION AND RATING

4.01 WATER QUALITY PROTECTION (0-45 points plus 10 bonus points)

For Nutrients, the effectiveness of a given project will be rated based upon the total pounds of nitrogen plus the total pounds of phosphorus that will be removed from discharges as a result of the project. Based on studies conducted by the Department, the total nitrogen plus total phosphorus removal for septic eliminations will be calculated at 0.13 pounds per day per EDU. Other projects, such as wastewater treatment facilities, combined sewer overflows, etc. will be calculated based on engineer’s estimates. Points will be determined for effectiveness by multiplying the estimated total pounds of nitrogen plus phosphorus per day to be removed from the discharge by 0.30 (Maximum Points = 45). The qualified agency may submit additional information to support the estimated total pounds of nitrogen plus phosphorus to be removed from the discharge.

For toxic pollutants, the effectiveness of a given project will be rated based on its ability to eliminate or reduce the severity of Delaware fish consumption advisories; eliminate or reduce the severity of toxic impacts to benthic aquatic life; or otherwise attain numeric toxics criteria for the protection of human health and aquatic life in Delaware Water Quality Standards. Points will be determined for effectiveness by multiplying the percent reduction in impact by 0.5 (Maximum Points = 45). The qualified agency may submit additional information to support the estimated percent reduction in toxic impact associated with the project.

Non-point source projects will receive points based on the published efficiencies of the best management practices (BMP’s). The points will be determined on the percent efficiency of the project multiplied by 45 points. (i.e. a BMP with a 20% efficiency will receive 9 points).

Treatment plant projects that provide a higher level of treatment than required in the applicable permit will receive an additional BONUS point for each 10% of the allowable pollutant load eliminated by the project.

4.02 TARGETED WATER BODIES (0-20 points)

Pursuant to Section 303(d) of the Clean Water Act, every April 1st of every even-numbered year, Delaware develops a list of waters that do not meet surface water quality standards and need Total Maximum Daily Loads (TMDLs). TMDLs establish the maximum point and non-point source loadings of certain pollutants that must not be exceeded if surface water quality goals are to be met. Priorities (High, Medium, Low) are also established in order to set milestones for the development of TMDLs. Additionally, the “303(d) List” identifies those water bodies targeted for TMDL activities (e.g., monitoring, modeling, developing options, etc.) during the coming 2 years. Scores are assigned as follows:

| <u>TMDL Status</u> | <u>Score</u> |
|---|--------------|
| Project addresses an existing TMDL allocation, or | 20 |
| Project addresses a watershed management plan, or | 10 |
| None of the above | 0 |

4.03 CLEAN WATER FACILITY PRIORITIES (0-20 points)

Criteria for ranking specific types of projects that contribute to achieving statewide environmental priorities are presented in this Section.

A. SEPTIC SYSTEM ELIMINATION PROJECTS

Septic system elimination projects will receive fifteen (15) points.

B. WASTEWATER TREATMENT FACILITIES and COMBINED SEWER OVERFLOWS (CSO's)

Projects that provide new, upgraded, or expanded wastewater treatment and disposal facilities or eliminate or reduce the impact of wastewater discharges, including CSO's, but excluding septic elimination projects, will receive twenty (20) points.

C. OTHER WASTEWATER FACILITY PROJECTS

Projects that provide upgraded or expanded wastewater collection systems, including inflow and infiltration (I&I) elimination, that provide new, upgraded or expanded wastewater transmission systems, including pump or lift stations, but excluding septic elimination projects, will receive ten (10) points. Projects that correct I&I problems will receive fifteen (15) points.

D. SURFACE WATER MANAGEMENT PROJECTS

Projects that correct surface water management problems will receive fifteen (15) points. Projects that address surface water management problems under a MS4 permit will receive twenty (20) points.

E. WATERSHED APPROACH TO TOXICS ASSESSMENT AND RESTORATION (WATAR)

Projects that implement elimination or reduction of toxic impacts in Delaware surface waters will receive fifteen (15) points. Projects that eliminate or reduce toxics and implement wetland restoration will receive twenty (20) points.

F. OTHER WATER QUALITY PROJECTS

Other eligible projects that address a non-point source problem, wetland restoration, or other watershed related problem will receive ten (10) points.

4.04 STRATEGIES FOR STATE POLICIES AND SPENDING (0-10 points)

The Governor's Cabinet Committee on State Planning Issues has approved "Delaware Strategies for State Policies and Spending".

A. In part it reads as follows: "It is the State's philosophy that:

1. State spending should promote quality and efficiency – not sprawl.
2. State policies should foster order and resource protection – not degradation."

B. Investment Level Descriptions:

1. Level 1 – The State will direct maximum assistance to upgrades, reconstruction, treatment improvements, and system expansions and will place priority on existing systems for improved efficiency, enhanced water quality management, and additional capacity for redevelopment, infill, and for new community development that supports efficient and orderly land use patterns.
2. Level 2 – The State will direct assistance to extending existing or creating new systems where logical, or where they would prevent future environmental or health risks.
3. Level 3 - State financial assistance to local government's wastewater facilities will be prioritized in Level 1 and 2 areas before being considered in Investment Level 3. Investments needed to correct public health and existing environmental problems will be considered on a case-by-case basis.

4. Level 4 - Additional state investments in water and wastewater systems will be limited to existing or imminent public health, safety or environmental risks only, with little provision for additional capacity to accommodate further development.
5. Out of Play - Lands that are not at all available for development or for redevelopment. These include publicly-owned lands, lands for which serious legal constraints on development are identified, and lands in some form of permanent open-space protection.

Investment Level Scores - Projects in investment areas will be rated as follows:

| <u>Investment Level (212 projects only)</u> | <u>Points</u> |
|---|---------------|
| Level 1 | 10 |
| Level 2 | 10 |
| Level 3 | 5 |
| Level 4 | 0 |
| Out of Play | 0 |

Non-Point Source projects are highly likely to be in non-investment areas and do not contribute to sprawl.

| | |
|---------------------------------|----|
| Non-Point Source Projects (319) | 10 |
|---------------------------------|----|

4.05 GREEN PROJECT RESERVE (0-10 points)

Congress' intent in enacting the Green Project Reserve (GPR) is to direct State investment practices in the water sector to guide funding toward projects that utilize green or soft-path practices to complement and augment hard or gray infrastructure, adopt practices that reduce the environmental footprint of water and wastewater treatment, collection, and distribution, help utilities adapt to climate change, enhance water and energy conservation, adopt more sustainable solutions to wet weather flows, and promote innovative approaches to water management problems. Over time, GPR projects could enable utilities to take savings derived from reducing water losses and energy consumption, and use them for public health and environmental enhancement projects. Additionally, EPA expects that green projects will help the water sector improve the quality of water services without putting additional strain on the energy grid, and by reducing the volume of water lost every year.

Projects that address green infrastructure, water or energy efficiency improvements, or other environmentally innovative activities will receive additional points in the ranking.

Eligibility will be determined by using the EPA document: 2010 Clean Water and Drinking Water State Revolving Fund 20% Green Project Reserve: Guidance for Determining Eligibility – April 21, 2010

Projects that meet the requirements of one of the four categories below will receive ten (10) points.

A. GREEN INFRASTRUCTURE

Green stormwater infrastructure includes a wide array of practices at multiple scales that manage wet weather and that maintain and restore natural hydrology by infiltrating, evapotranspiring and harvesting 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, permeable pavements and cisterns.

B. WATER EFFICIENCY

EPA's WaterSense program defines water efficiency as the use of improved technologies and

practices to deliver equal or better services with less water. Water efficiency encompasses conservation and reuse efforts, as well as water loss reduction and prevention, to protect water resources for the future.

C. ENERGY EFFICIENCY

Energy efficiency is the use of improved technologies and practices to reduce the energy consumption of water quality projects, use energy in a more efficient way, and/or produce/utilize renewable energy.

D. ENVIRONMENTALLY INNOVATIVE

Environmentally innovative projects include those that demonstrate new and/or innovative approaches to delivering services or managing water resources in a more sustainable way.

4.06 SUSTAINABILITY (0-30 points)

A. ASSET MANAGEMENT

The project will receive ten (10) points if the system has mapped its wastewater collection and treatment components and analyzed conditions, including risks of failure, expected dates of renewals and ultimate replacements, and sources and amounts of revenues needed to finance operations, maintenance and capital needs.

B. FULL COST PRICING

The project will receive ten (10) points if project/system has developed appropriate pricing/rate/affordability standards to build, operate, and maintain systems AND project/system has specifically allocated funds for the rehabilitation and replacement of aging and deteriorating infrastructure.

C. CLIMATE CHANGE / RESILIENCY

Projects that incorporate climate change considerations and/or that increase climate resiliency will receive ten (10) points. The State of Delaware has published scenarios for sea level rise and projections for precipitation and temperature that can be utilized for this purpose.

4.07 WATER QUALITY or LAND CONSERVATION SPONSORSHIP (10 bonus points)

The project will receive ten (10) points if the applicant is willing and eligible to sponsor a Forestland, Open Space, or Wetlands Conservation Easement or an Ecology or Watershed Restoration Project. Project must be defined to receive credit for this section.

4.08 TYPE OF APPLICANT (0-10 points)

Applicants will receive points based on type of borrower:

| | |
|---|-----------|
| Municipality (i.e. City, Town, or County) | 10 points |
| State Agency | 10 points |
| Non-Profit | 5 points |
| None of the Above | 0 points |

4.09 PROJECT PRIORITY LIST

Projects are ranked based upon the total scores. The total scores will determine the Project Priority List. In the case of a tie in the priority ranking, projects will be selected in the order of the population served. The project benefiting the larger population will be rated higher.

SECTION 5 - OPERATING PROCEDURES

- 5.01 Potential applicants for a WPCRF loan are to notify the Department of their intent to seek financial assistance for a project to be undertaken in the subsequent fiscal year (beginning July 1). Potential applicants may submit a Notice-of-Intent by as directed by the Department.
- 5.02 Potential loan applicants will be notified by the Department at least thirty (30) days in advance an impending deadline for receipt of Notifications-of-Intent.
- 5.03 The Notification-of-Intent shall contain the following information:
- a. Name of municipality or qualified agency and responsible party.
 - b. Estimated total construction costs of the project for which a loan will be sought. Also, the estimated cost of the planning studies and the design costs (preparation of plans and specifications). List the various costs separately.
 - c. Brief description of the proposed project including anticipated scope, water pollution control needs, and population affected. The description must be sufficient to evaluate the project based on the project priority list ranking criteria.
 - d. Estimated dates of initiation and completion of the preliminary plans and studies (if completed, so state).
 - e. Estimated dates of initiation and completion of construction drawings and specifications (if completed, so state).
 - f. Estimated dates of initiation and completion of construction.
 - g. Estimated date(s) of initiation of operations.
 - h. The NPDES or other permit number if one exists.
- 5.04 Successful applicants will be notified of their placement on the State's "Project Priority List" for the subsequent fiscal year.
- 5.05 Once notified of their placement on the fundable portion of the Priority List, qualified agencies will have sixty (60) days to submit a complete application and retain their rank on the Priority List.
- 5.06 All loan applications must be complete and accompanied by the required "mandatory documents" stipulated in the procedures of the Delaware Water Pollution Control Revolving Fund, and any additional checklists and/or background materials requested by the Department and of which the applicant shall be informed.
- 5.07 Applicants for projects on the "Planning Priority List" will be notified and their projects advanced to the Fundable Priority List in order of their priority score or readiness to proceed when, for any reason, a project must be removed from the current years Fundable Priority List, or when additional funds become available.
- 5.08 Applicants may be given at least fifteen (15) days by the Department to supply missing or corrected mandatory application documents and at least twenty (20) days to comply with requests for corrections, changes, or additions to the plans and specifications. Failure to respond within the period stipulated in the letter of transmittal may result in the project being dropped to the bottom of the review list for processing.
- 5.09 Applications will be processed and the plans/specifications reviewed by the Department in chronological

order of receipt of same from the applicant. In the case of concurrent submittal, priority score will determine the review position.

- 5.10 Projects on the “Planning Priority List” will not automatically be placed on a subsequent years Project Priority List. Applicants must resubmit the Notification-of-Intent in order to have the project reviewed and scored again for placement on the subsequent years Project Priority List.
- 5.11 The Council shall annually hold a public hearing on the proposed project priority lists in accordance with Sec. 8003(11)(d)(2) of 20 Delaware Code and comment upon, approve, or rearrange the priority lists.