

Delaware

DRINKING WATER STATE REVOLVING FUND (DWSRF)

Intended Use Plan
FINAL | REVISED April 1, 2024

Delaware Health and Social Services
Intended Use Plan
2023 Federal Allocation *Revised April 1, 2024*

Federal Fiscal Year (FFY) 2023
State Fiscal Year (SFY) 2024

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Background

The Intended Use Plan (IUP) is a document that Delaware Health and Social Services (DHSS) submits annually as part of the grant application to US Environmental Protection Agency (EPA) to request the Drinking Water State Revolving Funds (DWSRF) Capitalization Grants under the Safe Drinking Water Act (SDWA) and Catalog of Federal Domestic Assistance (CFDA) 66.468.

DHSS anticipates being eligible for \$5,037,000 in federal base capitalization grant funds. DHSS will allocate the full award amount of \$5,037,000 in federal funds plus \$1,007,400 in state funds (20% required state match) for infrastructure improvement projects and subsidy requirements.

Additionally, DHSS is eligible for \$57,345,000 in federal Bipartisan Infrastructure Law (BIL) capitalization grant funds. There are three (3) distinct grants under the BIL, and they include: Supplemental, Emerging Contaminants and Lead Service Line (LSL) Replacement Capitalization Grants. DHSS will allocate roughly \$40,141,500 in federal funds plus \$2,105,500 in state funds (10% required state match for Supplemental funds only) for infrastructure improvement projects and subsidy requirements. Up to 31% will be used for Set-Aside activity support.

Under this IUP Delaware intends to show it has enough projects to apply for full allotment of each grant – Base, General Supplemental, LSL Replacement, and Emerging Contaminants. See **Figure 1** showing totals for the FFY2023 DWSRF Notice of Intent (NOI) solicitation. Every effort will be made by the program to ensure the state meets the requirements of providing loan assistance to small systems. The program has partnered with technical assistance providers and the University of Delaware’s Institute for Public Administration to assist in identification of and application by small water systems.

Figure 1: Cumulative NOI Requests FFY23

	Actual Project Requests	State Match for Projects	Anticipated Federal Award for Projects
LSLR	\$22,450,584		\$28,650,000
EC	\$56,984,115		\$7,640,000
Supplemental	\$20,997,800	\$2,105,500	\$21,055,000
Base	\$45,369,650	\$1,007,400	\$5,037,000

Goals

Long Term Goals are to:

- Assist Public Water Systems (PWSs) with achieving affordable compliance and public health protection through DHSS staff strategies and contracted Set-Aside activities
- Maintain the DWSRF in perpetuity by thoughtful use and management of the assets by expecting an adequate rate of return and positive cash flow trend, utilizing the Cash Flow Modeling prepared by Department of Natural Resources and Environmental Control

(DNREC) Environmental Finance (EF)

- Utilize resources and funds to target the most significant public health and compliance problems facing the State's drinking water resources
- Manage the DWSRF fund with urgency and agency

Short Term Goals are to:

- Collaborate with the DHSS Capacity Development program to assist PWSs to develop and implement asset management plans (per AWIA 2018) via training or support from our technical assistance providers. The DWSRF program is currently considering the option of requiring proof of an implemented asset management plan from PWSs for consideration of DWSRF financial support
- Manage the NFAA account judiciously, including reallocation of WIAC approved DWSRF grant allotments by annually, as need dictates
- Provide funding to upgrade infrastructure for PWS projects in Delaware
- Decrease public health risks in drinking water in 2023-2024 for about one third of Delaware residents
- Meet the Program Activity Measure of 96% of fund utilization rate, as negotiated with EPA by continuing to encourage quick spending with loan recipients and sub-grantees
- Contract with Delaware Rural Water Association (DRWA), to provide technical assistance, training, along with strategies to small and mid-size municipalities to maintain and return to compliance with state and federal regulations
- Provide operator education through contracts with Delaware Technical and Community College (DTCC)
- Offer Sustainability and Source Water Protection initiatives through a contract with Kash Group LLC
- Utilize Set-Aside funds as outlined in the Work Plans
- Hold quarterly meetings with Set-Aside recipients to monitor activity progress and evaluate expeditious spending
- Provide support to the DNREC Water Supply Section (WSS) and Remediation Sections.
- Provide support to the DNREC Source Water Protection (SWP) Crop Cover Ag Strategy
- Provide support to the DNREC Underground Injection Control (UIC) in the implementation of two new technologies in the: EQUIS and PFAS Tracing.
- Utilize resources in the DHSS Office of Engineering (OE) to ensure borrowers are following crosscutter requirements on construction projects
- Monitor the Drinking Water to Clean Water Transfer, with EPA assistance

Performance Evaluation Review (PER) Action Items

The review covered the period July 1, 2021, through June 30, 2022 (State Fiscal Year (SFY) 2022). The US Environmental Protection Agency (EPA) conducted its site visit between March 27, 2023 and March 30, 2023.

EPA commends DHSS on increasing executed loans since 2020 and providing 73% of its state fiscal year 2022 funding to disadvantaged communities. However, EPA recommends DHSS fill their engineering vacancies and improve overall project file management to ensure effective administration of the program and Bipartisan Infrastructure Law funding. EPA also recommends DHSS complete corrections to its Federal Financial Accountability and Transparency Act (FFATA) reporting.

The PER for SFY22 included the following action items.

1. EPA recommends DHSS implement its plan to hire more engineers as soon as possible to ensure continued timely review and management of projects especially with the expected increase in volume due to BIL.
2. EPA recommends DHSS complete corrections to FFATA reporting.
3. EPA suggests completing the following tasks to improve project file management:
 - Create and implement a Standard Operating Procedure for project filing and file organization;
 - Implement a procedure (e.g., checklist) to clearly document the review of EIDs;
 - Incorporate the FFRMS into the state environmental review process; and
 - Clearly state CatEx or FONSI in published environmental determinations.

DHSS is taking the necessary steps to correct all action items.

DWSRF Infrastructure Project Selection

In February 2023, NOIs were ranked and placed in priority order, based on public health protection and SDWA compliance. All projects listed on the PPL are considered equivalency projects. Projects have not yet had financial reviews. Anticipated subsidies are based on historical data only and are subject to change. Full applications are due in late summer of 2023, with an exact date to be published in short order. Financial reviews will be performed during evaluations of the full applications.

The Comprehensive, Fundable and by Capitalization Fund Grant Project Priority Lists (PPLs) are attached, as **Appendix A, B, and C**, respectively.

If additional solicitations for projects occur within the year, the projects will be ranked using the approved Ranking Criteria and then placed on the PPL according to its merit and public health impact. Any revisions to the PPL will go through a public comment period before being finalized.

DHSS will use all the required subsidies. The exact amounts and projects for which those amounts will be applied will be known after **July 1, 2023**, once the State budget is final. DHSS has requested state funds to help supplement disadvantaged communities' financial burden.

Bypass Procedures

Upon written notice, DHSS can bypass a project on the fundable portion of the PPL based on the following:

- Project is withdrawn by the applicant
- Project is not ready to proceed
- System is unwilling to address any Significant Non-Compliance (SNC) issues
- System is lacking technical, managerial, or financial capacity
- System is out of compliance and demonstrates unwillingness to correct A133 Audit, Single Audit requirements, Davis Bacon, or Buy America Build America (BABA) Act.
- System is not current on loan repayments from prior closed loans
- An emergency project is approved

DHSS will reinstate bypassed projects if funds become available and the project meets all criteria above. Funds that become available due to project bypass will be offered to the next project on the

PPL.

Emergency Project Requirements

EPA allows States to establish procedures to identify and prioritize Emergency Projects under consideration for DWSRF funding.

Projects necessary to alleviate emergency situations that result in an imminent threat to public health can be immediately elevated to the top of the PPL upon recommendation by DHSS and the concurrence of the WIAC.

Additionally, should an emergency project arise to mitigate a public health need and the project is not yet on the PPL; DHSS will elevate the project to NOI and review status. A potential fundable project may proceed, so long as it is captured in the Annual report and identified in the next available PPL.

As of July 2023, DHSS has not received any emergency project applications.

Ranking Criteria – Revised this year.

See 2023 [DWSRF Ranking Criteria](#) EPA approved changes attached as **Appendix D**.

Tie-breaking procedures

The project with the greatest number of points under the Quality Deficiencies will receive the higher ranking. If there is still a tie, the system with the greater population will receive the higher ranking, or, if the tie occurs with the same borrower, the borrower will be consulted before any decisions are made.

Subsidy Requirements

DHSS will meet minimum subsidy requirements by providing principal forgiveness or grants to: Communities identified as Disadvantaged.

- The next most ‘in need’ communities as identified by the financial review and affordability criteria mentioned herein and based on project priority
- Applicants who meet the 2023 Additional Subsidy Provisions, Part 1) Congressional Additional Subsidy Authority Provisions

A community considered for the DWSRF Disadvantaged Community Program may receive additional subsidies to the extent that that subsidy is available and within programmatic structure.

Disadvantaged Community (DAC) definition

A disadvantaged community is one that:

1. Meets the Affordability Criteria; or
2. Is identified by [EPA EJScreen](#) tool at 90% (USA) percentile or higher for Environmental Justice Indexes or for “Low Income” under the Socioeconomic Indexes; or
3. Is identified as disadvantaged by the [White House Climate and Economic Screening Tool](#); or
4. Is underserved.

Affordability Criteria –

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. DWSRF loan applicants whose MHI is not representative of the census data may be required to provide documentation 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.

Underserved –

As defined in SDWA section 1459A (emphasis added): “(2) INCLUSIONS.—The term ‘underserved community’ includes a political subdivision of a State that either, as determined by the Administrator— ‘(A) does not have household drinking water or wastewater services; or ‘(B) is served by a public water system that violates, or exceeds, as applicable, a requirement of a national primary drinking water regulation issued under section 1412, including— ‘(i) a maximum contaminant level; ‘(ii) a treatment technique; and ‘(iii) an action level.”

In the PPL, you will find that borrowers may have been identified as DACs. If so, they will be demarcated using the identifier illustrated in **Figure 2**, which represents each of the four (4) components of the DAC definition.

Figure 2: DAC Identifiers on Project Priority List (PPL)

Disadvantaged Community Identifier	
A=	Affordability, pending final financial reviews
E=	EPA EJSscreen
W=	White House Climate and Economic Screening Tool
U=	Underserved

Each of the four (4) capitalization grants has additional subsidy (Ad Sub) requirements. In **Figure 3**, the anticipated totals are illustrated.

Figure 3: Anticipated Ad Sub totals

Additional Subsidy	
Name	Total
LSLR DAC	\$14,038,500
EC	\$7,640,000
Supplemental DAC	\$10,316,950
Base DAC	\$604,440
Base Congressional	\$705,180

Loan Projections

DHSS proposes to fund all projects listed on the PPL by using federal and state funds in addition to other sources to provide low interest loans and grants to public water systems for infrastructure improvement projects.

The Delaware DWSRF FOCUS Model, in **Figure 4**, illustrates the ability of the program to fund projects beyond the capacity federal Capitalization Grant awards.

Figure 4: Delaware DWSRF FOCUS Model

Delaware DWSRF FOCUS Model

Financing and Cash Flow Utilization in the SRF

Version: February 2023

Summary

State Fiscal Year	2023	2024	2025	2026
New Commitments	\$74,997,677	\$150,620,139	\$75,000,000	\$75,000,000
Disbursements including Loans in Construction	\$43,403,085	\$99,681,136	\$119,391,537	\$66,849,788
Loan Repayments	\$10,730,865	\$12,323,732	\$15,982,127	\$18,865,781
Capitalization Grant Payments	\$60,905,000	\$60,905,000	\$60,905,000	\$60,905,000
State Match	\$3,200,800	\$5,000,000	\$5,000,000	\$5,000,000
End of Year Cash Balance	\$106,730,117	\$66,397,163	\$10,012,203	\$9,052,646

New commitments for SFY23 represents loans pending settlement or approval through SFY23. SFY24 includes 100% of the FFY23 PPL. SFY25-26 are estimates.

80% of portfolio is traditional with a 20-year term at 2%, 15% of portfolio is small community with a 30-year term at 1%, and 5% of portfolio is sponsorship with a 20-year term at 2%.

Principal forgiveness of \$48 Million has been committed and is assumed at the minimum requirement amounts of the Cap Grant in future years.

Assumes a \$5 Million minimum cash balance.

SFY24 through SFY26 assumes the same level funding of the SFY23 Cap Grants. |

Other Program Information

Interest Rate Policy – Revised this year.

The size and complexity of the CWSRF and DWSRF underscore the need to routinely analyze and track financial conditions and periodically evaluate various Fund management options. Such an analysis was recently completed by our financial management analysts in consultation with the State’s financial advisory consultant, PFM, LLC.

For the purpose of this policy, loan documents shall set forth provisions for the borrower to pay to the Department on the principal amount drawn down and outstanding from the date(s) drawn, interest and an administrative fee (collectively, interest and the administrative fee are referred to as “Fee” in the loan documents).

The payments of principal and interest are deposited into the CWSRF and DWSRF respectively. The administrative fee is deposited separately into the CWSRF or DWSRF Non-Federal Administrative Account (NFAA), respectively, to support each of the SRF’s program expenses, wastewater and drinking water quality related expenses, and innovative wastewater and drinking water quality programs. Funds within the respective NFAAs are accounted for separately from the

CWSRF and DWSRF Capital Reserve Loan Funds. Each NFAA complies with EPA’s Guidance on Fees Charged on CWSRF and DWSRF loans.

The following criteria, interest rates and administrative fees apply to new public, private/public use, investor-owned, and private/private use CWSRF and DWSRF loan applications presented for approval from the date of this policy until this policy is revised.

- Interest plus fee rates shall be set at 2.0 percent per annum.
- Administrative Fees shall be set at 50 percent the overall interest rate.
- Interest plus fee rates for all Lead Service Line Replacement loans shall be set at 0.0 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.
- 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.

The NFAA will support DNREC EF FTEs, DHSS FTEs, Matching Planning Grants, Asset Management Grants, DHSS Laboratory supplies, water testing equipment, and contractual water testing.

Possible DWSRF Administrative Loan Fees

DWSRF Administrative Loan Fees have been waived for the 2023 PPL/applicants.

Leveraging

DHSS does not anticipate the need to reserve the right to transfer Capitalization Grant and loan repayments monies between the State’s Clean Water State Revolving Fund (CWSRF) and Drinking Water State Revolving Fund programs, as necessary to ensure the full utilization of the federal assistance during this grant year.

State Match

The State Match for both the base and supplemental capitalization grants will be made using State of Delaware Bond Bill funds.

Cash Draw Ratio

As it relates to proportionality for cash draws, note that DHSS will draw the entire state match for infrastructure projects and then move on to the federal grant funds.

Cross Collateralization between SRF programs—Transfer Use

As of March 1, 2023, there is \$31,161,803 available for drinking water project loans and current loan disbursement. This ‘transfer back’ to the DWSRF may begin in calendar year 2023. DHSS

will coordinate with DNREC to receive regular account summaries. Those summaries will be reported in the next corresponding Annual Report.

Cross Collateralization between SRF programs

In FFY 12 the DWSRF program transferred \$27,050,176 in Federal funds and \$5,410,035 in State funds to the CWSRF program. Of this, \$1,298,408 was used for administrative costs (4%). This leaves \$31,161,803 available for project loans.

It is the understanding between both DNREC and DHSS that these funds will be made available back to DHSS for payments on existing loans and to make additional loans when needed by the DWSRF program on a cash flow basis.

Funds for both new and existing DWSRF loans will be used in the following order: first from the Federal capitalization grants, second from the DWSRF repayment & interest fund, then when these funds are exhausted, from the previously transferred funds to the CWSRF program.

To date, no funds have been transferred back to the DWSRF program. DHSS reserves the right to transfer additional funds between the programs if needed.

DWSRF Coordination of funding priorities with State Drinking Water Enforcement Agency

The DWSRF program coordinates with the Office of Drinking Water by performing a [Capacity Development review](#). In addition, offices collaborate throughout the year to offer technical assistance through Delaware Rural Water Association (DRWA) to systems that are on Public Notice.

Davis Bacon Compliance

DHSS agrees to comply with Davis Bacon requirements as outlined in guidance distributed by EPA. Additionally, DHSS performs site inspections during construction.

Green Project Reserve

DHSS is not participating in Green Project Reserve for 2023, as it is not in federal grant requirements. DHSS will use this coming year to learn more about this initiative and its benefits to borrowers.

DHSS will support engagement with a green energy consultant for feasibility studies and implementation plans to support categorically green drinking water projects.

Sustainability Policy Description

Fix It First

DHSS does not fund projects that are primarily for growth. Applicants are encouraged to study existing infrastructure to determine most critical needs, and then base their DWSRF applications on those needs.

Capacity Development for Loan Applicants

The DWSRF program requires the Capacity Development Program, housed in the Office of Drinking Water, review the Capacity Development portion of each full application, work with systems to increase technical, managerial, and financial capacity; ensure creation and maintenance of asset management plans; and report any serious, outstanding problems to the DWSRF program

so that they may be addressed before loan closing.

Asset Management

DHSS will begin to require Asset Management Plans (AMPs) for DWSRF consideration and financial support. To date, 19 systems have started an AMP. The NFAA has funded the AMP Grant program. The maximum grant amount is \$100,000. Soon, the Capacity Development program will begin reviewing submitted AMPs as a new initiative.

Disadvantaged Business Enterprise Participation

Loans using the capitalization grant and state match funds will conform to Disadvantaged Business Enterprise (DBE) steps as outlined by EPA. Borrowers must document and demonstrate good faith efforts consistent with federal regulations.

Davis Bacon Act Participation

All DWSRF-assisted projects capitalization grant and state match funds will conform to Davis Bacon wage determinations, wages, and activities as outlined by EPA. Borrowers must document and demonstrate efforts consistent with federal regulations. Davis Bacon Act Participation.

Efficient Expenditure

- Loans- the DWSRF program will use a “First in-First Out” approach when making loan payments
- The DWSRF program will follow the Safe Drinking Water Act’s requirement at 42 U.S. Code §300j-12(g)(3) and EPA’s regulations at 40 CFR §35.3550(l), by committing to expend all funds as efficiently as possible and in an expeditious and timely manner. The DWSRF program will reduce, if not eliminate, its unliquidated obligations (ULO) and expedite cash draws. The DWSRF program will draw capitalization grant funds using the state’s oldest open grant.
- Set-Asides- the DWSRF program will prepare one-year set-aside budgets. During the second year of the grant, the program will review expenditures and re-budget set-aside funds for additional set-aside work or project loans per EPA approval. All funds will be expended by the end of the third year of the grant.

Project Management

DHSS designates all loans to requirements of Single Audits, DBE, Crosscutters (e.g., Civil Rights Act Title VI), Davis Bacon, Federal Funding Accountability and Transparency Act (FFATA), and BABA.

Reporting

DHSS will make all efforts to report all applicable information to: FFATA, Projects Benefits, Reports, and the Office of Water State Revolving Fund (OWSRF) portal in accordance with applicable due dates set forth by EPA.

Ag Strategy

Please refer to the 15% Supplemental Capitalization Grant Set-Aside for information on the Cover Crop Program to learn how DHSS DWSRF Administration is meeting EPA’s Ag Strategy recommendations.

Sources and Uses

See **Table 1** below illustrating the Sources and Uses of the DWSRF fund, including open grants, appropriations being applied for, match, repayments, and fee income.

Table 1: Sources and Uses

DWSRF SFY 24 Sources:	
Projected Fund Balance at 6/30/23	\$106,730,117
Base Cap Grant	\$4,938,000
Base Cap Grant State Match	\$987,600
Supplemental Cap Grant	\$21,055,000
Supplemental Cap Grant State Match	\$2,105,500
Lead Service Line Cap Grant	\$28,650,000
Emerging Contaminants Cap Grant	\$7,640,000
Projected Repayments to the Fund	\$12,323,732
Projected Investment Income	\$ -
Total Sources for SFY 24	\$184,429,949

DWSRF SFY 24 Uses:	
Disbursements Projects for Construction	\$99,681,136
2% Technical Assistance	\$1,218,100
4% Administration	\$2,436,200
10% Program Management	\$6,090,500
15% Local Assistance	\$9,135,750
Total Uses for SFY 24	\$118,561,686
Total Projected Fund Balance 6/30/24	\$59,394,101
*note PPL exceeds expected disbursements	

In consideration of projects for construction, the DWSRF program will prepare one-year budgets utilizing applications received during the program’s solicitation of NOIs. If the sources exceed the uses, the program may pursue additional solicitation for projects each year. The program anticipates entering in to signed final loan agreements within one year of award of the Capitalization Agreements. All funds will be expended expeditiously and by the end of the project period for the award.

Set-Aside Activities

The SDWA allows states to use part of the Capitalization grant to support Set-Aside activities. Up to 31% of each Capitalization grant may be used for Set-Aside activities.

Delaware reserves its authority to apply remaining 2%, 4% and 10% set asides from prior Base Grants to future capitalization grants. Delaware also reserves its authority to bank the 2%, 4% and 10% set-asides from future BIL - General Supplemental and LSL Replacement Grants. The below figure illustrates Delaware’s reserve set-asides.

See all Set Aside Work Plans attached as **Appendix E**.

Delaware	2023 Allotment	2023 Request	2023 Reserve Set-Asides	Total to date Reserve Set-Asides
DWSRF Base State Match 20%	\$5,037,000	\$5,037,000		
2%	\$100,740	\$0	\$100,740	\$103,568
4%	\$201,480	\$0	\$201,480	\$218,553
10%	\$503,700	\$0	\$503,700	\$541,575
15%	\$755,550	\$0		
DWSRF Supplemental State Match 10%	\$21,055,000	\$21,055,000		
2%	\$421,100	\$262,485	\$158,615	\$439,260
4%	\$842,200	\$794,099	\$48,101	\$350,932
10%	\$2,105,500	\$1,197,325	\$908,175	\$2,344,173
15%	\$3,158,250	\$2,637,607		
DWSRF Lead Service Line	\$28,650,000	\$28,650,000		
2%	\$573,000	\$75,214	\$497,786	\$894,407
4%	\$1,146,000	\$1,121,736	\$24,264	\$865,974
10%	\$2,865,000	\$0	\$2,865,000	\$5,700,000
15%	\$4,297,500	\$0		
DWSRF Emerg Contam	\$7,640,000	\$7,640,000		
2%	\$152,800	\$0	\$152,800	\$225,900
4%	\$305,600	\$146,015	\$159,585	\$313,359
10%	\$764,000	\$0	\$764,000	\$1,519,500
15%	\$1,146,000	\$0		
Total	\$62,382,000		\$6,384,246	\$27,034,402

Base Capitalization Grant Set-Asides

Small Systems Technical Assistance (2% Base)

DWSRF is not using the Base Capitalization Grant to fund Set-Aside activities. The Base Capitalization Grant will be used to fund projects.

DWSRF Program Administration (4% Base)

DWSRF is not using the Base Capitalization Grant to fund Set-Aside activities. The Base Capitalization Grant will be used to fund projects.

State Program Management (10% Base)

DWSRF is not using the Base Capitalization Grant to fund Set-Aside activities. The Base Capitalization Grant will be used to fund projects.

Local Assistance and Other State Programs (15% Base)

DWSRF is not using the Base Capitalization Grant to fund Set-Aside activities. The Base Capitalization Grant will be used to fund projects.

Supplemental BIL Capitalization Grant

Small Systems Technical Assistance (2% Supplemental)

Provide assistance to small systems through contractor personnel. Contracts with Delaware Rural Water Association (DRWA) and Delaware Technical Community College (DTCC) continue to provide technical assistance and training to public water systems serving less than 10,000 people.

DRWA Contracts

- DRWA will assist on-site with system water operators in providing the necessary technical information and guidance templates on how to establish and implement a workable cross-connection control plan management program. The program will provide quarterly CCC training to state drinking water EHS's, Food Service Inspectors, Plumbing Inspectors and the Direct Responsible in Charge of the water system with hands-on technical assistance, which includes data collection, program procedures, testing notifications, review of treatment and distribution system infrastructure site plans and providing recommendations on the types and placement of backflow prevention assemblies in the prevention of contamination into the water source.
- DRWA will provide 80 onsite technical assistance site visits to small Community Water Systems (CWS) and municipal water systems. On-site visits can include technical, financial and managerial capacity assistance along with promotion of the DWSRF Program and one-on-one application/process help. Activities may include community association meetings, water infrastructure meetings, workforce development training, EPA Region III activities and workshops, and acting as a liaison between interested parties and stakeholders.
- DRWA will provide a minimum of five (5) Delaware High Schools, representing each county, a Career Training for High School Students Pre-Apprenticeship Program to demonstrate the need for young adults to enter the field of drinking water distribution, operations and water treatment. This program is open to any student that is interested in venturing into a career related to water treatment and water operations & maintenance within a community water system. DRWA shall also be seeking the interest of partnering with water utilities that are willing to allow participating students to be able to work and gain field knowledge on the job where they may earn while they learn. Students who seek to advance their knowledge will be eligible to enroll in DRWA's two (2) year Water Systems Operation Specialist Apprenticeship Program which will offer more in-depth training such as chemistry, filtration, and math equations and chemical additions.

DTCC Contracts

- Provide tuition assistance for continuing education for approximately 115 Operators-In-Training and licensed water operators of small public water supply systems and provide tuition assistance for Base Level Water Operators Course to approximately 26 new operators.

- Administrative salary funding will be utilized for the following: to plan operations; recruit and interview prospective students; counsel students regarding course schedules; work with industry leaders to offer courses that meet the needs of operators; identify new courses needed; assist with tutoring needs; development of job building skills; assist with employment opportunities; and market program and courses to industry via varying methods. In addition, staff will assist with registering students, and will report and track the funding for students enrolled in this program.

DWSRF Program Administration (4% Supplemental)

The 4% Supplemental Set-Asides will be used to fund the salaries, fringe benefits, supplies, contractual and indirect charges of DHSS DWSRF and Office of Engineering FTEs.

State Program Management (10% Supplemental)

The 10% Supplemental Set-Asides will be used to fund the salaries, fringe benefits, travel, supplies, contractual, indirect, and other charges of DHSS Delaware Public Health Laboratory (DPHL), Office of Drinking Water and DNREC FTEs.

Operator Certification

Operator Certification expenses are absorbed by funding positions with the EPA PWSS grant. DHSS could use the DWSRF grant as a source of funding to prop up the Operator Certification program. Proposed activities include:

- Monitor, track, and report water operator licensures.
- Communicate with operators in providing assistance, training opportunities, industry and regulatory updates, and other information pertinent to drinking water.
- Provide regulatory-related trainings to water operators by ODW staff.
- Provide administrative review and processing of water operator licenses renewals.
- Provide support and proctoring assistance to DTCC for Drinking Water Operator examinations.
- Ensure public water systems that are required to have a licensed water operator do so, either by directly employing an operator or by contracting with an operator.
- Assist licensed water operators in obtaining the proper endorsements for the water systems they operate.
- Maintain licensed water operator data in a database.
- Plan and prepare for updating aging database.

Public Water Supply Supervision (PWSS)

- Monitor, track, and report compliance for approximately 470 Public Water Systems.
- Upgrade from SDWIS/State 3.3 to SDWIS/State 3.4.
- Develop a plan for private drinking water labs to submit their drinking water sample results electronically.
- Continue to utilize EPA reporting under the Enforcement Response Policy and Enforcement Tracking Tool (ETT).
- Facilitate posting of all relevant public water systems information and sample results to Delaware's Drinking Water Watch public-facing webpage.

Delaware Public Health Laboratory

- Continue analyzing samples for the presence of Legionella
- Purchase supplies and reagents to maintain higher levels of operational efficiencies and cost effectiveness
- Cross train for continuity of operations in the event of emergency situations, including flooding and other weather-related events
- Purchase benches on wheels to help in moving instruments in case of an emergency
- Continue to perform audits for the certification of drinking water testing laboratories within Delaware
- Purchase LIMS (Labwear) to reduce manual entry of sample results, will generate automated upload from instrument to LIMS
- Continue to perform in-house testing to include test samples for chemical analysis and bacteriological

Underground Injection Control (UIC)

- The UIC Program will continue to work with the Division of Public Health to ensure that underground sources of drinking water are protected by providing technical support on the oversight and management of wastewater treatment and disposal systems. This includes reviewing applications and issuing Construction and/or Operations Permits that include effluent limitations, operational, monitoring, and reporting requirements designed for the protection of public health and the environment.
- The UIC Program will continue to perform inspections of Class V UIC wells and if any compliance issues are identified; follow-up with informal and/or formal enforcement to gain compliance permit conditions, State, and Federal Regulations.
- The UIC Program will continue to develop and implement the EQUS data management application so facilities can submit data electronically and continuous monitoring data can be collected and reported in real-time.
- The UIC Program will continue to develop and implement real-time/contemporary web- based groundwater monitoring and UIC program management tools using MS Power BI.

Local Assistance and Other State Programs (15% Supplemental)

The 15% Supplemental Set-Asides will be used to fund the salaries, fringe benefits, supplies, other and indirect charges of DNREC Source Water Protection and DHSS Division of Public Health Office of Drinking Water FTEs, as well as contractual Engineers.

This set-aside will fund the following initiatives:

Capacity Development

- Provide assistance to all proposed public drinking water systems to ensure that the water system owner/operator has demonstrated adequate TMF capacity, and that the water meets all applicable SDWA requirements prior to operating.
- Monitor and assist new public water systems in Lead and Copper Rule compliance.
- Report the name of new and proposed PWSs for the Semi-Annual DWSRF Set-Aside reports.
- Assist new CWSs and NTNCWs in their compliance with the requirement to operate under the supervision of a Delaware licensed water operator.

- Provide in-depth training in CCR report creation to technical and managerial staff of CWSs in Delaware to increase compliance with the CCR.
- Provide assistance to existing PWSs with an ETT score of 11 or higher or that are identified as being in need through routine regulatory activities conducted by ODW.
- Evaluate and report the TMF capacities of at least one-third of Delaware's water systems.
- Monitor, evaluate, train, and assist PWSs and operators in LCR compliance, schedules, and reporting.
- Track and report existing PWSs appearing on the ETT report with scores of 5 and greater to technical assistance providers to facilitate achieving compliance.

DRWA and DTCC Contracts through Capacity Development

- Conduct specialized emergency response training classes.
- Conduct municipalities with Emergency Response Plans
- Create new online courses for Delaware water operators.
- Revise and update existing online water operator courses.
- Develop, host, and market webinars, topics include Addressing AWIA, Emerging Technologies, Drone Usage, and Addressing an Aging Workforce.
- Assess and Purchase New Automated Training Devices – DTCC shall research, assess, and purchase training equipment, textbooks, curriculum, and/or software pertaining to water quality control and processes to enhance classroom instruction and improve field skills.

DRWA contract

- DRWA will provide multiple emergency response, confined space and safety hands-on workshops to SRF funded community and municipal employees. The hands-on workshops will consist of how to respond to different types of emergencies, how to establish a command post, staging areas, preparing for long-haul disasters, self-contained breathing apparatus usage, fittings and types, blood borne pathogens, controlled bleeding at the job site and working with ropes and rigging.

DTCC Contract

- Certify and provide continuing education to Operators-In-Training and licensed water operators of small public water supply systems (non-profit).
- Update and improve existing water courses to modern standards.

Sussex Conservation District

- Sussex County Source Water Protection Agricultural Best Management Practices (BMPs).
- Work with producers and landowners to educate them on the importance their property plays in protecting the State's drinking water resources and assist them in identifying opportunities for the implementation of various Source Water Protection Area practices established in the USDA- Natural Resources Conservation Service (NRCS) Environmental Quality Incentive Program (EQIP).
- Work with agricultural producers in Sussex County to address those concerns and plan the priority practices.
- Assist landowners through the NRCS EQIP financial assistance application process.
- Provide financial assistance towards the implementation of cover crops and other water quality BMPs to reduce runoff from agricultural fields and the uptake of excess nutrients.

Sustainability 1:1 Assistance and Cyber Security Programs

The DWSRF Program will continue to work with Kash Srinivasan Group, LLC will provide continued support for Sustainability of Drinking Water Utilities in the State. Contractor will provide support to the Capacity Development and DWSRF programs by assisting Delaware’s public water systems (PWSs) with resources to meet EPA’s Financial capacity requirements, which in turn will assist PWSs achieve and maintain long-term sustainability and compliance with the national safe drinking water regulations. As part of this effort, Kash Srinivasan Group, LLC will engage with selected municipalities to develop custom implementations of Financial Analysis tools developed by the University of North Carolina (“UNC tools”).

Emerging Contaminants BIL Capitalization Grant

Small Systems Technical Assistance (2% Emerging Contaminants)

This Emerging Contaminants set-aside will not be used for Set-Aside activities.

DWSRF Program Administration (4% Emerging Contaminants)

The 4% Emerging Contaminants Set-Asides will be used to fund the salaries, fringe benefits, contractual, supplies, indirect, and other state costs of DHSS Environmental Hazards and Toxicology and Office of Engineering FTEs.

State Program Management (10% Emerging Contaminants)

This Emerging Contaminants set-aside will not be used for Set-Aside activities.

Local Assistance and Other State Programs (15% Emerging Contaminants)

This Emerging Contaminants set-aside will not be used for Set-Aside activities.

Lead Service Line Replacement BIL Capitalization Grant

Small Systems Technical Assistance (2% Lead Service Line Replacement)

Provide assistance to small systems through contractor personnel. Funds provide technical assistance to public water systems serving less than 10,000 people. Contracts with DRWA and 120Water provide technical assistance and training.

DRWA & 120Water contract

- LCR Technical Assistance and Training -DRWA and 120Water are partnering to deliver market differentiated, high-impact and ongoing Technical Assistance to educate utility operators, superintendents, key personnel, and city managers about the complexities and nuances of Safe Drinking Water Regulatory Compliance.
- The partnership will conduct, at minimum, three instructor-led Technical Assistance Training Seminars throughout the calendar year with a focus on the Lead and Copper Rule (LCR) and the Lead and Copper Rule Improvements (LCRI). Given the evolving landscape of LCR(I), we are proposing a 5-year technical assistance program designed to give ongoing, world-class education to the utilities across the state of Delaware and Maryland.
- It is the goal of this partnership to ensure that the funding being made available to systems for LCR compliance will be used efficiently and effectively, resulting in better and more consistent outcomes for all stakeholders.

DWSRF Program Administration (4% Lead Service Line Replacement)

The 4% Lead Service Line Replacement Set-Asides will be used to fund the salaries, fringe benefits, contractual, supplies and indirect costs of DHSS DWSRF FTEs.

Lead Service Line Inventories

- Provide assistance to PWSs to prepare and maintain an inventory of service line materials by October 16, 2024, through DRWA and Knowledge Services Contracts.

State Program Management (10% Lead Service Line Replacement)

This Lead Service Line Replacement set-aside will not be used for Set-Aside activities.

Local Assistance and Other State Programs (15% Lead Service Line Replacement)

This Lead Service Line Replacement set-aside will not be used for Set-Aside activities.

Public Review

A virtual public meeting was held on March 15, 2023. DHSS posted the Fundable PPL and IUP online for public comment for 30 days. DHSS advised the EPA when the comment period occurred. This IUP was presented in a hearing on March 15, 2023, before the Delaware Water Infrastructure Advisory Council (WIAC) and public stakeholders. Visit this page for details of the WIAC meeting: <https://dnrec.alpha.delaware.gov/events/water-infrastructure-advisory-council-16/>.

This IUP and associated documents were available for public review and comment through April 15, 2023. No written comments were provided to DHSS during public review and comment period. Revisions were made to the PPL, and it is attached (Appendices A, B and C) to include those revisions.

Appendix A Comprehensive PPL

Rank	WaterSystem/ Borrower	PWSID #	Population Served	Fundable Project Name	Project Description	Amount	DAC?- A, E, W, U	Total Points	Funding Appropriation	Financing	Terms	Anticipated subsidy	Estimated Binding Commitment Date	Estimated Loan Execution Date
1	Town of Milton	DE0000629	3,200	Water Main Replace	Replacing 3500ft of water main	\$1,785,000		695	Supplemental	2.00%	20 years		Sep-23	Oct-23
2	Town Laurel	DE0000597	3,984	Well 5	New well location to mitigate PFAS	\$4,862,800	A*	595	EC			EC	Sep-23	Oct-23
3	Holly Oak	DE0000568	210	Waterline Extension	Emerging Contaminants	\$1,300,000	A*	590	EC				Sep-23	Oct-23
4	City of Wilmington	DE0000663	107,976	3 Small Mains	Replace water mains and fire hydrants	\$10,000,000	E,W	570	Supplemental	2.00%	20 years	Sup DAC	Dec-23	Jan-24
4	Bridgeville	DE0000559	2,256	Bridgeville Waterlines	replace/update waterlines	\$2,090,000	A*	570	Base	2.00%	20 years	Base DAC	Dec-23	Jan-24
5	City of New Castle	DE0000634	5,364	PFAS WTF Expansion	PFAS system modifications	\$1,135,920	A*	530	EC			EC	Mar-24	Apr-24
6	Town of Selbyville	DE0000654	3,502	Tingle Acres MHP	Replace 59 service connections	\$707,000	A*	480	Base	2.00%	20 years	2022 Base Congressiona	Mar-24	Apr-24
7	Town Laurel	DE0000597	3,984	P-3 Transite Supplemental Funding	Supplemental funding DWSR Loan 21000094	\$1,242,100	A*	465	Base	2.00%	20 years	2023 Base Congressiona	Jun-24	Jul-24
7	Town Laurel	DE0000597	3,984	P-4 Transite Water Main Replace	Replacement 1300ft water mains, 36 water	\$1,280,800	A*	465	Supplemental	2.00%	20 years	Sup DAC	Dec-23	Jan-24
8	Town Laurel	DE0000597	3,984	New WTP & Well	New well location to mitigate PFAS	\$4,862,800	A*	445	Corpus	2.00%	20 years	EC	Dec-23	Jan-24
9	City of Wilmington	DE0000663	107,976	Emerging Contam/PFAS Remove	Upgrade to PFAS removal	\$40,212,595	E,W	440	Corpus	2.00%	20 years		Dec-23	Jan-24
10	City of New Castle	DE0000634	5,364	Lead Service Line Inv.	replace 100 LSL water lines	\$284,800	A*	430	LSLR	0.00%	20 years	LSLR	Mar-24	Apr-24
11	Town of Milton	DE0000629	3,200	Federal St. Well & Treatment	Install new well and treatment facility	\$901,000		420	Corpus	2.00%	20 years		Sep-23	Oct-23
12	City of Wilmington	DE0000663	107,976	Clearwell/Storage Improve	Improve and repair Clearwell at Porter Filter	\$17,700,000	E,W	400	Corpus	2.00%	20 years		Dec-23	Jan-24
12	Town of Millsboro	DE0000622	6,863	Lead Service Line Inv.	Update GIS to track LSL	\$76,800	A*,E,W	400	LSLR	0.00%	20 years	LSLR	Mar-24	Apr-24
12	Town of Milton	DE0000629	3,200	Chandler St. Improvements	Improvements and upgrades to SCADA	\$579,000		400	Supplemental	2.00%	20 years		Sep-23	Oct-23
13	City of Newark	DE0000630	4,000	Water Main Replace	Replace water mains or line interior to minimize	\$3,300,000		370	Corpus	2.00%	20 years		Jun-24	Jul-24
14	Town Laurel	DE0000597	3,984	New Water Tower	Replace water storage tank	\$3,150,000	A*	365	Corpus	2.00%	20 years		Dec-24	Jan-25
15	City of New Castle	DE0000634	5,364	SCADA System Improve	Update to SCADA system	\$72,450	A*	340	Corpus	2.00%	20 years		Mar-24	Apr-24
16	Town of Selbyville	DE0000654	3,502	Lead Service Line Replace	1900 service line connections	\$18,900,000		320	LSLR	0.00%	20 years	LSLR	Mar-24	Apr-24
16	Tidewater	DE0000221	29,416	Bethany Bay WTF	Additional well expansion/PFAS	\$2,610,000		320	Corpus	2.00%	20 years		Sep-24	Oct-24
17	City of Newark	DE0000630	4,000	Lead Pipe Id & Replace	Lead Component Service Line Replacements	\$2,250,000		300	LSLR	0.00%	20 years	LSLR	Jun-24	Jul-24
17	City of Newark	DE0000630	4,000	Water Main Assessment	Determine remaining life on pipes	\$3,500,000		300	Supplemental	2.00%	20 years		Jun-24	Jul-24
17	Bethany Beach	DE0000556	1,000	North Atlantic Ave	redirecting 4in main to 8in main	\$750,000		300	Corpus	2.00%	20 years		Jun-24	Jul-24
18	Town of Milton	DE0000629	3,200	Federal St. Water Tower	Installation 500K gallon water storage tower	\$3,225,000		280	Corpus	2.00%	20 years		Sep-23	Oct-23
18	Tidewater	DE0000991	29,661	Kendale IC	Update to main from 12" to 16"	\$1,060,000		280	Supplemental	2.00%	20 years		Sep-24	Oct-24
19	City of Newark	DE0000630	4,000	Facilities Site/Security Upgrade	Update system to include security fencing, signage, camera	\$2,100,000		260	Supplemental	2.00%	20 years		Jun-24	Jul-24
20	Veolia Water	DE0000564	100,495	Well PFAS Treatment	Solicit and construction PFAS removal	\$2,000,000		240	Corpus	2.00%	20 years		Dec-24	Jan-25

21	City of Newark	DE0000630	4,000	Finished Water Tank	Replace inefficient standpipes with elevated storage tank	\$5,150,000		230	Corpus	2.00%	20 years		Jun-24	Jul-24	
22	Tidewater	DE0000263	>10,000	LCR Excavations	Develop lead service line inventories	\$576,000		210	LSLR	0.00%	20 years	LSLR	Sep-24	Oct-24	
23	Tidewater	DE0000991	29,661	Minos Conway	Upgrades to connector and hydrants	\$693,000		200	Supplemental	2.00%	20 years		Sep-24	Oct-24	
23	Tidewater	DE0000124	17,208	Lochmeath Puncheon Run	Updates to infrastructure	\$659,000		200	Corpus	2.00%	20 years		Sep-24	Oct-24	
24	Delmar	DE0000567	2,027	Lead Service Line Inv.	UpdateLCRRto compliance	\$362,984		180	LSLR	0.00%	20 years	LSLR	Mar-24	Apr-24	
25	Town of Georgetown	DE0000592	7,259	Automated Meter Infra	AMI to have real time data on leaks	\$2,834,600		160	Corpus	2.00%	20 years		Dec-24	Jan-25	
26	Town of Georgetown	DE0000592	7,259	Elevated Storage Tank	Updates to 2 storage tanks	\$3,588,500		150	Corpus	2.00%	20 years		Dec-24	Jan-25	
						\$145,802,149									

Appendix B Fundable PPL

Rank	WaterSystem/ Borrower	PWSID #	Population Served	Fundable Project Name	Project Description	Amount	DAC?- A, E, W, U	Total Points	Funding Appropriation	Financing	Terms	Anticipated subsidy	Estimated Binding Commitment Date	Estimated Loan Execution Date
1	Town of Milton	DE0000629	3,200	Water Main Replace	Replacing 3500ft of water main	\$1,785,000		695	Supplemental	2.00%	20 years		Sep-23	Oct-23
2	Town Laurel	DE0000597	3,984	Well 5	New well location to mitigate PFAS	\$4,862,800	A*	595	EC			EC	Sep-23	Oct-23
3	Holly Oak	DE0000568	210	Waterline Extension	Emerging Contaminants	\$1,300,000	A*	590	EC				Sep-23	Oct-23
4	City of Wilmington	DE0000663	107,976	3 Small Mains	Replace water mains and fire hydrants	\$10,000,000	E,W	570	Supplemental	2.00%	20 years	Sup DAC	Dec-23	Jan-24
4	Bridgeville	DE0000559	2,256	Bridgeville Waterlines	replace/update waterlines	\$2,090,000	A*	570	Base	2.00%	20 years	Base DAC	Dec-23	Jan-24
5	City of New Castle	DE0000634	5,364	PFAS WTF Expansion	PFAS system modifications	\$1,135,920	A*	530	EC			EC	Mar-24	Apr-24
6	Town of Selbyville	DE0000654	3,502	Tingle Acres MHP	Replace 59 service connections	\$707,000	A*	480	Base	2.00%	20 years	2022 Base Congressiona	Mar-24	Apr-24
7	Town Laurel	DE0000597	3,984	P-3 Transite Supplemental Funding	Supplemental funding DWSR Loan 21000094	\$1,242,100	A*	465	Base	2.00%	20 years	2023 Base Congressiona	Jun-24	Jul-24
7	Town Laurel	DE0000597	3,984	P-4 Transite Water Main Replace	Replacement 1300ft water mains, 36 water	\$1,280,800	A*	465	Supplemental	2.00%	20 years	Sup DAC	Dec-23	Jan-24
8	Town Laurel	DE0000597	3,984	New WTP & Well	New well location to mitigate PFAS	\$4,862,800	A*	445	Corpus	2.00%	20 years	EC	Dec-23	Jan-24
9	City of Wilmington	DE0000663	107,976	Emerging Contam/PFAS Remove	Upgrade to PFAS removal	\$40,212,595	E,W	440	Corpus	2.00%	20 years		Dec-23	Jan-24
10	City of New Castle	DE0000634	5,364	Lead Service Line Inv.	replace 100 LSL water lines	\$284,800	A*	430	LSLR	0.00%	20 years	LSLR	Mar-24	Apr-24
11	Town of Milton	DE0000629	3,200	Federal St. Well & Treatment	Install new well and treatment facility	\$901,000		420	Corpus	2.00%	20 years		Sep-23	Oct-23
12	City of Wilmington	DE0000663	107,976	Clearwell/Storage Improve	Improve and repair Clearwell at Porter Filter	\$17,700,000	E,W	400	Corpus	2.00%	20 years		Dec-23	Jan-24
12	Town of Millsboro	DE0000622	6,863	Lead Service Line Inv.	Update GIS to track LSL	\$76,800	A*,E,W	400	LSLR	0.00%	20 years	LSLR	Mar-24	Apr-24
12	Town of Milton	DE0000629	3,200	Chandler St. Improvements	Improvements and upgrades to SCADA	\$579,000		400	Supplemental	2.00%	20 years		Sep-23	Oct-23
13	City of Newark	DE0000630	4,000	Water Main Replace	Replace water mains or line interior to minimize	\$3,300,000		370	Corpus	2.00%	20 years		Jun-24	Jul-24
14	Town Laurel	DE0000597	3,984	New Water Tower	Replace water storage tank	\$3,150,000	A*	365	Corpus	2.00%	20 years		Dec-24	Jan-25
15	City of New Castle	DE0000634	5,364	SCADA System Improve	Updates to SCADA system	\$72,450	A*	340	Corpus	2.00%	20 years		Mar-24	Apr-24
16	Town of Selbyville	DE0000654	3,502	Lead Service Line Replace	1900 service line connections	\$18,900,000		320	LSLR	0.00%	20 years	LSLR	Mar-24	Apr-24
16	Tidewater	DE0000221	29,416	Bethany Bay WTF	Additional well expansion/PFAS	\$2,610,000		320	Corpus	2.00%	20 years		Sep-24	Oct-24
17	City of Newark	DE0000630	4,000	Lead Pipe Id & Replace	Lead Component Service Line Replacements	\$2,250,000		300	LSLR	0.00%	20 years	LSLR	Jun-24	Jul-24
17	City of Newark	DE0000630	4,000	Water Main Assessment	Determine remaining life on pipes	\$3,500,000		300	Supplemental	2.00%	20 years		Jun-24	Jul-24
17	Bethany Beach	DE0000556	1,000	North Atlantic Ave	redirecting 4in main to 8in main	\$750,000		300	Corpus	2.00%	20 years		Jun-24	Jul-24
18	Town of Milton	DE0000629	3,200	Federal St. Water Tower	Installation 500K gallon water storage tower	\$3,225,000		280	Corpus	2.00%	20 years		Sep-23	Oct-23
18	Tidewater	DE0000991	29,661	Kendale IC	Updates to main from 12" to 16"	\$1,060,000		280	Supplemental	2.00%	20 years		Sep-24	Oct-24
19	City of Newark	DE0000630	4,000	Facilities Site/Security Upgrade	Update system to include security fencing, signage, camera	\$2,100,000		260	Supplemental	2.00%	20 years		Jun-24	Jul-24
20	Veolia Water	DE0000564	100,495	Well PFAS Treatment	Solicit and construction PFAS removal	\$2,000,000		240	Corpus	2.00%	20 years		Dec-24	Jan-25

21	City of Newark	DE0000630	4,000	Finished Water Tank	Replace inefficient standpipes with elevated storage tank	\$5,150,000		230	Corpus	2.00%	20 years		Jun-24	Jul-24
22	Tidewater	DE0000263	>10,000	LCR Excavations	Develop lead service line inventories	\$576,000		210	LSLR	0.00%	20 years	LSLR	Sep-24	Oct-24
23	Tidewater	DE0000991	29,661	Minos Conway	Upgrades to connector and hydrants	\$693,000		200	Supplemental	2.00%	20 years		Sep-24	Oct-24
23	Tidewater	DE0000124	17,208	Lochmeath Puncheon Run	Updates to infrastructure	\$659,000		200	Corpus	2.00%	20 years		Sep-24	Oct-24
24	Delmar	DE0000567	2,027	Lead Service Line Inv.	Update LCRR to compliance	\$362,984		180	LSLR	0.00%	20 years	LSLR	Mar-24	Apr-24
25	Town of Georgetown	DE0000592	7,259	Automated Meter Infra	AMI to have real time data on leaks	\$2,834,600		160	Corpus	2.00%	20 years		Dec-24	Jan-25
26	Town of Georgetown	DE0000592	7,259	Elevated Storage Tank	Updates to 2 storage tanks	\$3,588,500		150	Corpus	2.00%	20 years		Dec-24	Jan-25
						\$145,802,149								

*=Anticipated

Disadvantaged Community Identifier
A= Affordability, pending final financial reviews
E= EPA Ejscreen
W= White House Climate and Economic Screening Tool
U= Underserved

Additional Subsidy Name	Total
LSLR DAC	\$14,038,500
EC	\$7,640,000
Supplemental DAC	\$10,316,950
Base DAC	\$604,440
Base Congressional	\$705,180

Grant	Actual Project Requests	State Match for Projects	Anticipated Federal Award for Projects
LSLR	22,450,584		28,650,000
EC	56,984,115		7,640,000
Supplemental	20,997,800	2,105,500	21,055,000
Base	45,369,650	1,007,400	5,037,000

Appendix C Funding by Grant PPL

Base Capitalization Grant Projects and DWSRF Corpus Fund Projects

Rank	Water System/ Borrower	PWSID #	Population Served	Fundable Project Name	Project Description	Amount	DAC? A, E, W, U	Total Points	Funding Appropriation	Financing	Terms	Anticipated subsidy
4	Bridgeville	DE0000559	2,256	Bridgeville Waterlines	replace/update waterlines	\$2,090,000	A*	570	Base	2.00%	20 years	Base DAC
6	Town of Selbyville	DE0000654	3,502	Tingle Acres MHP	Replace 59 service	\$707,000	A*	480	Base	2.00%	20 years	2022 Base Congressional
7	Town Laurel	DE0000597	3,984	Supplemental Funding	Supplemental funding DWSR	\$1,242,100	A*	465	Base	2.00%	20 years	2023 Base Congressional
11	Town of Milton	DE0000629	3,200	Federal St. Well & Treatment	Install new well and treatment	\$901,000		420	Corpus	2.00%	20 years	
12	City of Wilmington	DE0000663	107,976	Clearwell/Storage Improve	Improve and repair Clearwell at	\$17,700,000	E,W	400	Corpus	2.00%	20 years	
13	City of Newark	DE0000630	4,000	Water Main Replace	Replace water mains or line	\$3,300,000		370	Corpus	2.00%	20 years	
14	Town Laurel	DE0000597	3,984	New Water Tower	Replace water storage tank	\$3,150,000	A*	365	Corpus	2.00%	20 years	
15	City of New Castle	DE0000634	5,364	SCADA System Improve	Updates to SCADA system	\$72,450	A*	340	Corpus	2.00%	20 years	
17	Bethany Beach	DE0000556	1,000	North Atlantic Ave	redirecting 4in main to 8in main	\$750,000		300	Corpus	2.00%	20 years	
18	Town of Milton	DE0000629	3,200	Federal St. Water Tower	Installation 500K gallon water	\$3,225,000		280	Corpus	2.00%	20 years	
21	City of Newark	DE0000630	4,000	Finished Water Tank	Replace inefficient standpipes with	\$5,150,000		230	Corpus	2.00%	20 years	
23	Tidewater	DE0000124	17,208	Lochmeath Puncheon Run	Updates to infrastructure	\$659,000		200	Corpus	2.00%	20 years	
25	Town of Georgetown	DE0000592	7,259	Automated Meter Infra	AMI to have real time data on leaks	\$2,834,600		160	Corpus	2.00%	20 years	
26	Town of Georgetown	DE0000592	7,259	Elevated Storage Tank	Updates to 2 storage tanks	\$3,588,500		150	Corpus	2.00%	20 years	
						\$45,369,650						

Supplemental Capitalization Grant Projects

Rank	WaterSystem/ Borrower	PWSID #	Population Served	FundableProject Name	Project Description	Amount	DAC? A, E, W, U	Total Points	Funding Appropriation	Financing	Terms	Anticipated subsidy
1	Town of Milton	DE0000629	3,200	Water Main Replace	Replacing 3500ft of water main	\$1,785,000		695	Supplemental	2.00%	20 years	
5	City of Wilmington	DE0000663	107,976	3 Small Mains	Replace watermains and	\$10,000,000	E,W	570	Supplemental	2.00%	20 years	
9	Town Laurel	DE0000597	3,984	P-4 Transite Water Main Replace	Replacement 1300ft water	\$1,280,800	A*	465	Supplemental	2.00%	20 years	
17	City of Newark	DE0000630	4,000	Water Main Assessment	Determine remaining life on	\$3,500,000		300	Supplemental	2.00%	20 years	
18	Town of Milton	DE0000629	3,200	Chandler St. Improvements	Improvements and upgrades to	\$579,000		400	Supplemental	2.00%	20 years	
29	Tidewater	DE0000263	29,661	Kendale IC	Updates to main from 12" to 16"	\$1,060,000		280	Supplemental	2.00%	20 years	
30	City of Newark	DE0000630	4,000	Site/Security Upgrade	Update system to include security	\$2,100,000		260	Supplemental	2.00%	20 years	
34	Tidewater	DE0000263	29,661	Minos Conway	Upgrades to connector and	\$693,000		200	Supplemental	2.00%	20 years	
						\$20,997,800						

Emerging Contaminants Capitalization Grant Projects and DWSRF Corpus Fund Projects

2	Town Laurel	DE0000597	3,984	Well 5	New well location to mitigate PFAS	\$4,862,800	A*	595	EC				EC
3	Holly Oak	DE0000568	210	Waterline Extension	LSL replacement	\$1,300,000	A*	590	EC				
6	City of New Castle	DE0000634	5,364	PFAS WTF Expansion	PFAS system modifications	\$1,135,920	A*	530	EC				EC
11	Town Laurel	DE0000597	3,984	New WTP & Well	New well location to mitigate PFAS	\$4,862,800	A*	445	Corpus	2.00%	20 years		EC
12	City of Wilmington	DE0000663	107,976	Contam/PFAS Remove	Upgrades to PFAS removal	\$40,212,595	E,W	440	Corpus	2.00%	20 years		
24	Tidewater	DE0000263	29,416	Bethany Bay WTF	Additional well expansion/PFAS	\$2,610,000		320	Corpus	2.00%	20 years		
31	Veolia Water	DE0000564	100,495	Well PFAS Treatment	Solicit and construction PFAS	\$2,000,000		240	Corpus	2.00%	20 years		
						\$56,984,115							

Lead Service Line Replacement Capitalization Grant Projects

Rank	WaterSystem/ Borrower	PWSID #	Population Served	FundableProject Name	Project Description	Amount	DAC? - A, E, W, U	Total Points	Funding Appropriation	Financing	Terms	Anticipated subsidy
13	City of New Castle	DE0000634	5364	Lead Service Line Inv.	replace 100 LSL water lines	\$284,800	A*	430	LSLR	0.00%	20 years	LSLR
17	Town of Millsboro	DE0000622	6863	Lead Service Line Inv.	Update GIS to track LSL	\$76,800	A*, E, W	400	LSLR	0.00%	20 years	LSLR
25	Town of Selbyville	DE0000654	3502	Lead Service Line Replace	1900 service line connections	\$18,900,000		320	LSLR	0.00%	20 years	LSLR
27	City of Newark	DE0000630	4000	Lead Pipe Id & Replace	Lead Component Service Line	\$2,250,000		300	LSLR	0.00%	20 years	LSLR
33	Tidewater	DE0000263	>10,000	LCRExcavations	Develop lead service line	\$576,000		210	LSLR	0.00%	20 years	LSLR
36	Delmar	DE0000567	2027	Lead Service Line Inv.	Update LCRR to compliance	\$362,984		180	LSLR	0.00%	20 years	LSLR
						\$22,450,584						

Appendix D 2023 DWSRF PPL Ranking Criteria Approval



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III**

Four Penn Center
1600 John F. Kennedy Boulevard
Philadelphia, Pennsylvania 19103-2852

Ms. Marissa Jacobi
Public Health Treatment Program Administrator
Division of Public Health
Delaware Department of Health and Social Services
Jesse Cooper Building
417 Federal Street, Office 207
Dover, Delaware 19901

Dear Ms. Jacobi:

EPA has reviewed the revised Project Priority List (PPL) Ranking Criteria submitted on January 23, 2023, by the Division of Public Health for Drinking Water Capital Projects. This revision includes awarding points to projects that address storage and redundancy. Projects that address quality deficiencies also received additional points.

If you or your staff have any questions, please contact Annette Sparks, EPA's Drinking Water Project Officer for Delaware, at (215) 814-5403 or me at (215) 814-2094.

Sincerely,

JEFFREY Digitally signed by
BOYLAN JEFFREY BOYLAN
Date: 2023.03.07
09:45:48 -0500

Jeff Boylan, Chief
Infrastructure and Assistance Section
Water Division

Appendix E 2023 DWSRF Set-Aside Work Plans

**Delaware Drinking Water State Revolving Fund
Set-Aside Work Plan
2023 Federal Allocation**

Base Capitalization Grant

2%

Technical Assistance

DWSRF is not using the Base Capitalization Grant to fund Set-Aside activities. The Base Capitalization Grant will be used to fund projects.

4%

DWSRF Administration

DWSRF is not using the Base Capitalization Grant to fund Set-Aside activities. The Base Capitalization Grant will be used to fund projects.

10%

State Program Management

DWSRF is not using the Base Capitalization Grant to fund Set-Aside activities. The Base Capitalization Grant will be used to fund projects.

15%

Local Assistance/Other Programs

DWSRF is not using the Base Capitalization Grant to fund Set-Aside activities. The Base Capitalization Grant will be used to fund projects.

Supplemental BIL Capitalization Grant

2%

Technical Assistance

Work years to implement activities: 1 year (October 1, 2023 - September 30, 2024)

Delaware Rural Water Association (DRWA) and Delaware Technical Community College (DTCC)

Relationship to On-Going Program

DRWA and the Environmental Training Center at DTCC remain the sole providers of on-site technical assistance and operator education respectively.

Progress Made To-Date

DRWA has provided technical assistance since 1999, helping small systems comply with Safe Drinking Water Act (SDWA) Regulations.

DTCC has provided operator education since 1999, helping water operators maintain licensure and compliance with SDWA Regulations.

DRWA

Future Plans

DRWA shall provide onsite technical assistance to municipal and community water systems in Delaware. In addition to the work described below, DRWA will work with the Office of Drinking

Water (ODW), the Office of Engineering (OE), and the Drinking Water State Revolving Fund (DWSRF) to identify systems in need of technical assistance, including Cross Connection Control planning.

DRWA

Objectives and Outputs

- DRWA will provide on-site assistance shall provide facilities with instructions on the essential elements that make up the effective on-going Cross Connection Control Program. Community water systems found having a potential health hazard from a cross connection shall be referred to the DWSRF Program for directions on how to apply for a loan so the system can make compliance corrections within the treatment or distribution system
- Delaware Rural Water Association (DRWA) will provide 80 onsite technical assistance site visits to small Community Water Systems (CWS) and municipal water systems. On-site visits can include technical, financial, and managerial capacity assistance along with promotion of the DWSRF Program and one-on-one application/process help.
- DRWA will provide a minimum of five (5) Delaware High Schools, representing each county, a Career Training for High School Students Pre-Apprenticeship Program to demonstrate the need for young adults to enter the field of drinking water distribution, operations and water treatment. This program is open to any student that is interested in venturing into a career related to water treatment and water operations & maintenance within a community water system. DRWA shall also be seeking the interest of partnering with water utilities that are willing to allow participating students to be able to work and gain field knowledge on the job where they may earn while they learn. Students who seek to advance their knowledge will be eligible to enroll in DRWA's two (2) year Water Systems Operation Specialist Apprenticeship Program which will offer more in-depth training such as chemistry, filtration, and math equations and chemical additions.

Outcomes and Benefits

- 80 municipal and small water systems will receive technical, financial, and managerial assistance.
- Systems in danger of being non-compliant or are in non-compliance will receive priority technical assistance.
- Non-compliant water systems will receive training and tools to help return to compliance.
- Systems will receive contamination and/or preventive maintenance education and training.
- Facilities will have instruction on the essential elements that make up an effective ongoing Cross Connection Control Program.
- DWSRF borrowers or applicants will be provided with system-specific training.
- Students will learn valuable skills and knowledge while growing the water operator field.

Evaluation

DRWA will meet with DWSRF Program representative(s) quarterly to review deliverable accomplishments. Successes and barriers will be evaluated, and adjustments will be made accordingly. The DWSRF will provide the EPA with Set-Aside reports for the periods of October 1, 2023 – March 31, 2024, and April 1, 2024 - September 30, 2024.

DTCC

Future Plans

DTCC will provide training for new and licensed water operators, develop, and improve training programs, recruit new students to enter the Drinking Water Training program, and assist in job placement for new operators.

Objectives and Outputs 2023-11, 2023-12, and 2023-13 semesters)

- Certify and provide continuing education for approximately 115 Operators-In-Training and licensed water operators of small public water supply systems (non-private)
- Provide tuition assistance for Base Level Water Operators Course to approximately 26 new operators Provide approximately 75 total training events during the fall, spring, and summer semesters that have been approved for water operators.
- Market the program to Delaware water operators annually and assist in placing new water operators in jobs for the Delaware Drinking Water Industry.
- Provide tuition assistance to fifteen (15) water operators seeking endorsements who operate small public (non-profit) water systems and six (6) limited water operators of small public water systems (non-profit)

Outcomes and Benefits

- 115 water operators will enhance their technical skills with continued education and certification
- 26 new water operators will be able to enroll in the Base Level Water Operator's Course
- Base Level Water Operators will gain knowledge in basic math skills
- Delaware's drinking water industry will have new recruits
- Successful administrative support and oversight of technical training programs will continue

Evaluation

DTCC will meet with DWSRF Program representative(s) quarterly to review deliverable accomplishments. Successes and barriers will be evaluated, and adjustments will be made accordingly. The DWSRF will provide the EPA with Set-Aside reports for the periods of October 1, 2022 – March 31, 2023, and April 1, 2023 - September 30, 2023.

4%

DWSRF Administration

The 4% Supplemental Set-Asides will be used to fund the salaries, fringe benefits, supplies, contractual and indirect charges of DHSS DWSRF and Office of Engineering FTEs.

10%

State Program Management

The 10% Supplemental Set-Asides will be used to fund the salaries, fringe benefits, travel, supplies, contractual, indirect, and other charges of DHSS Delaware Public Health Laboratory, Office of Drinking Water and DNREC FTEs.

Work years to implement activities: 1 year (October 1, 2023 - September 30, 2024)

Operator Certification

Costs of maintaining the Operator Certification program are minimal. Office of Drinking Water (ODW) coordinates with DTCC to provide provisions and proctoring for Drinking Water Operator Examinations.

Relationship to On-Going Program

The Operator Certification program ensures that operators of Delaware's public water systems are properly trained and therefore able to operate their water systems in compliance with the SDWA.

Progress Made To-Date

Currently there are approximately 443 active licensed water operators and 147 Approved Sampler/Tester-only individuals.

Future Plans

DHSS will continue to administer the Operator Certification program in coordination with the Advisory Council for Certification of Public Water Systems Operators and ODW.

Objectives and Outputs

- Monitor, track, and report water operator licensures to EPA
- Communicate with operators in providing assistance, training opportunities, industry and regulatory updates, and other information pertinent to drinking water
- Provide regulatory-related trainings to water operators by ODW staff
- Provide administrative review and processing of water operator licenses renewals
- Provide support and proctoring assistance to DTCC for Drinking Water Operator examinations
- Assist licensed water operators in obtaining the proper endorsements for the water systems they operate
- Maintain licensed water operator data in a database
- Plan and prepare for updating aging database
- Regulatory oversight of all water operator licensure via ODW staff
- Vast majority of Delaware public water systems requiring a licensed water operator will be in compliance with the requirements, currently at a rate of 99%
- Information about important drinking water topics reaches a large segment of the drinking water professional community
- The number of water operator examinations and passing rates will be monitored for use in decision-making regarding examination quality and effectiveness
- Licensure renewal and associated continuing education compliance is tracked and maintained administratively via a database
- Increased training opportunities for Delaware licensed water operators.

Evaluation

ODW will meet with DWSRF Program representative(s) quarterly to review deliverable accomplishments. Successes and barriers will be evaluated, and adjustments will be made accordingly. The DWSRF will provide the EPA with Set-Aside reports for the periods of October 1, 2023 – March 31, 2024, and April 1, 2024 - September 30, 2024.

Public Water Supply Supervision

Relationship to On-Going Program

The set-aside funds are used to supplement the Public Water Supply Supervision (PWSS) program in carrying out activities including staff training, enforcement of SDWA regulations, data management, laboratory certification, and compliance assistance.

Progress Made To-Date

The PWSS program has helped Delaware's public water systems maintain compliance with SDWA regulations and health-based standards, resulting in 98% compliance.

Future Plans

The PWSS Program will work with applicable stakeholders on the upgrade from the Safe Drinking Water Information System (SDWIS)/State 3.3 to SDWIS/State 3.4. PWSS will also plan and develop for electronic submittals of drinking water sample results analyzed by private Delaware-certified drinking water laboratories.

Objectives and Outputs

- Monitor, track, and report compliance for approximately 470 Public Water Systems
- Upgrade from SDWIS/State 3.3 to SDWIS/State 3.4
- Develop a plan for private drinking water labs allowing them to submit their drinking water sample results electronically
- Ensure public water systems that are required to have a licensed water operator do so, either by

directly employing an operator or by contracting with an operator

- Continue to utilize EPA reporting under the Enforcement Response Policy and Enforcement Tracking Tool (ETT)
- Facilitate posting of all relevant public water systems information and sample results to Delaware's Drinking Water Watch public-facing webpage
- Determine progress with cross-connection control plan development necessary to ensure compliance at or prior to the compliance deadline, development of asset management plans, lead service line inventories, and awareness of PFAS Drinking Water MCL development.
- Approximately 95% of Delaware's population served by public water systems will receive water that meets all health-based standards
- SDWIS/State 3.4 will allow for improved functionality of the drinking water database
- Electronic submittals for private laboratory sample results will allow for improved efficiency in storing and reporting drinking water sample data
- Public water systems with an ETT score of 11 or greater will be monitored quarterly and offered technical assistance and/or increased enforcement
- Public water systems and the general public will have access to all sample results for all public water systems
- Lead service line (LSL) inventories will assist with the removal of all LSLs in Delaware to assure lead-free drinking water.
- Cross-connection control plans will reduce/prevent the unnecessary contamination of public drinking water systems.
- Awareness of PFAS in drinking water and the environment will promote discussion regarding monitoring, control technologies, and outreach for public water systems and the public.

Evaluation

PWSS will meet with DWSRF Program representative(s) quarterly to review deliverable accomplishments. Successes and barriers will be evaluated, and adjustments will be made accordingly. The DWSRF will provide the EPA with Set-Aside reports for the periods of October 1, 2023 – March 31, 2024, and April 1, 2024 - September 30, 2024.

Delaware Public Health Laboratory

Relationship to On-Going Program

The Delaware Public Health Laboratory (DPHL) is within the Department of Health and Social Services, Division of Public Health. The primary responsibilities of the Laboratory, regarding the Safe Drinking Water Act, is to ensure the safety of drinking water sources in order to protect public health through the prevention of water borne diseases and contaminants.

Progress Made To-Date

The Delaware Public Health Laboratory continues to ensure consistency, reliability and quality of all analytical work involving drinking water samples obtained from public and private sources. Beyond the routine work the laboratory has made significant strides in expanding its testing capacity by embarking on advanced methodology's such as EPA method 525.2 for pesticides.

- Two staff members visited the Maryland State Laboratory to shadow a chemist performing EPA method 525.2; they brought back valuable information to help bring the method up in our laboratory

Future Plans

- Implement and validate updated EPA approved methodologies per the Safe Drinking Water Act
- Implement EPA method 525.2 for pesticides, this will include the purchase of reagents required for analysis
- Achieve certification for EPA method 525.2
- Pursue grant funds to maintain updated technologies including equipment and supplies as required by the US EPA program.
- Maintain compliance with EPA, state standards, and regulations

- Continue to perform the responsibilities of the certification officer program for the state of Delaware. This includes sending another staff member to Certification Officer training in Organics
- Ensure that the DPHL meets all certification testing standards defined by the EPA
- Ensure that the laboratory is cooperating and integrating with associated programs to ensure best use of funding, personnel, and equipment.

Objectives and Outputs

- Pursue the purchase of a GC/MS to analyze drinking water samples for the presence of pesticides.
- Pursue the purchase of benches on wheels; this will help in moving instruments in case of emergency.
- Continue analyzing samples for the presence of *Legionella* utilizing molecular methods.
- Continue to purchase of supplies and reagents to maintain higher levels of operational efficiencies and cost effectiveness. (Approximate cost for supplies and reagents is \$260,000 annually including instrument gases and instrument maintenance contracts)
- Continue to cross train for continuity of operations in the event of emergency situations including flooding and other weather-related events.
- Estimated amount of laboratory tests that will be performed from October 2022 to September 2023:
 - Samples for chemical analysis 5990
 - Samples for bacteriological 7569
 - Tests reported 98,729
- The Delaware Public Health Laboratory will continue to perform audits for the certification of drinking water testing laboratories within Delaware.
- Reduce manual entry of sample results use funds for LIMS (Labware) to create automated upload from instrument to LIMS.

Outcomes and Benefits

- The Delaware Public Health Laboratory continues to provide reliable and consistent monitoring for the drinking water program in Delaware. To ensure the health and safety of the citizens and visitors of Delaware.
- The Laboratory continues to maintain preparedness for emergency response and disaster in cooperation with other emergency responders including the 31st Civil Support Team (US National Guard) in Delaware.
- Among programs the Delaware Public Health Laboratory is ensuring that our role meets all the needs and requirements for the successful implementation of other components that influence and affect drinking water covered by the Delaware Department of Health and Social Services.

Evaluation

The Public Health Laboratory will meet with DWSRF Program representative(s) quarterly to review deliverable accomplishments. Successes and barriers will be evaluated, and adjustments will be made accordingly. The DWSRF will provide the EPA with Set-Aside reports for the periods of October 1, 2023 – March 31, 2024, and April 1, 2024 - September 30, 2024.

Underground Injection Control Program

Relationship to On-Going Program

The Underground Injection Control (UIC) program continues to be administered by DNREC's Division of Water. This regulatory program controls real and potential sources of groundwater contamination.

Progress Made To-Date

Delaware's Underground Injection Control program has efficiently monitored on-site wastewater treatment and disposal systems (OWTDS's), Class V injection wells, groundwater remediation projects, large OWTDS's, Aquifer Storage, and Recovery (ASR) wells.

Future Plans

- Continue to work with Division of Public Health and provide technical support as needed on identifying and managing potential impacts to groundwater from operations of major wastewater treatment and disposal facilities
- Develop and implement EQuIS data management so facilities can submit data electronically and continuous monitoring data can be collected and reported in real-time
- Develop real-time/contemporary web-based groundwater monitoring and UIC program management tools using MS Power BI
- Continue to perform inspections of Class V wells in Delaware

Objectives and Outputs

- Review 20 Large OWTDS's permit applications
- Inspect 250 OWTDS's, and other UIC facilities
- Perform 10 recon inspections to identify and close (if found) automotive floor drains, large capacity cesspools, and industrial discharges with direct discharges to ground water (if existing)
- Migrate operation and monitoring databases of current active wastewater treatment and disposal facilities into EQuIS
- Develop Power BI permitting and monitoring applications for best management practices
- Participate in Public outreach and educational events
- Participate in the development of a pollution control strategy for the Chesapeake Basin Watershed

Outcomes and Benefits

- Potential groundwater impacts can be identified accurately in advance; and managed efficiently
- Groundwater contamination from underground injection facilities will decrease
- Public will gain knowledge of pollution prevention or pollution reduction opportunities
- Power BI and EQuIS applications will provide powerful tools to manage and visualize data ensuring a more data-driven integrated approach to decision-making and greater protection of groundwater resources

Evaluation

UIC will meet with DWSRF Program representative(s) quarterly to review deliverable accomplishments. Successes and barriers will be evaluated, and adjustments will be made accordingly. The DWSRF will provide the EPA with Set-Aside reports for the periods of October 1, 2023 – March 31, 2024, and April 1, 2024 - September 30, 2024.

15%

Local Assistance/Other Programs

Work years to implement activities: 1 year (October 1, 2023 - September 30, 2024)

Capacity Development Program NEW systems

Relationship to On-Going Program

This portion of the Capacity Development program assists new drinking water system owner/operators and DWSRF applicants in building technical, managerial, and financial (TMF) capacity.

Progress Made To-Date

All new and newly discovered public water systems (PWSs) that will be regulated by ODW have been given TMF assistance, thus ensuring, that the water system can open and/or maintain compliance with SDWA regulations. Since the initiation of the Capacity Development program, all DWSRF loan applicants have been assessed for TMF and offered assistance in areas identified.

Future Plans

- Track and identify trends in TMF capacity for all Delaware public water systems triennially
- Assist new community water systems (CWSs) and Non-transient non-community water systems (NTNCWSs) to prepare for Lead and Copper Rule (LCR) compliant sampling plans upon activation as

a public water system

- Maintain increased educational efforts to prospective new systems so that initial operations are not impeded by non-compliance
- Assist new CWSs and NTNCWs to be compliant with the SDWA for their three-year term as a new PWS in Delaware
- Encourage and assist PWSs to develop and implement asset management plans that include best practices for asset management as required by America's Water Infrastructure Act (AWIA).

Objectives and Outputs

- Provide assistance to all proposed public drinking water systems to ensure that the water system owner/operator has demonstrated adequate TMF capacity, and that the water meets all applicable SDWA requirements prior to operating
- Monitor and assist new public water systems in LCR/LCRR compliance
- Report the name of new and proposed PWSs for the Semi-Annual DWSRF Set-Aside reports
- Assist new CWSs and NTNCWs in their compliance with the requirement to operate under the supervision of a Delaware licensed water operator

Outcomes and Benefits

- 100% of new water systems will open and remain in compliance with the SDWA for their three-year term as a new PWS in Delaware
- 100% of new public water systems will be assisted with lead and copper rule compliance
- New public water systems identified in need of assistance shall be referred to DRWA

Capacity Development Program EXISTING Systems

Relationship to On-Going Program

This portion of Capacity Development assists existing water systems with maintaining technical, managerial, and financial capacity.

Progress Made To-Date

The Capacity Development Program has provided technical and managerial assistance to existing water systems to facilitate compliance with the Lead and Copper Monitoring Rule, the Consumer Confidence Rule, and other regulatory requirements under the SDWA. The number of existing systems out of compliance with the requirement to operate under the purview of a license water operator remains low.

Future Plans

- Improve compliance with the SDWA by facilitating a better understand of the regulations, including LCR revisions, CCR, and other state and federal regulation in development
- Encourage and assist PWSs to develop and implement asset management plans that include best practices for asset management as required by AWIA.
- Refer existing public water systems with a score of 11 or higher on the ETT list to external assistance providers

Objectives and Outputs

- Provide in-depth training in CCR report creation to technical and managerial staff of CWSs in Delaware to increase compliance with the CCR
- Provide assistance to existing PWSs with an ETT score of 11 or higher or that are identified as being in need through routine regulatory activities conducted by ODW
- Evaluate and report the TMF capacities of at least one-third of Delaware's water systems
- Monitor, evaluate, train, and assist PWSs and operators in LCR compliance, schedules, and reporting
- Track and report existing PWSs appearing on the ETT report with scores of 5 and greater to technical assistance providers to facilitate achieving compliance.

Outcomes and Benefits

- PWSs will be better equipped to create and distribute CCR reports per the requirements of the SDWA
- All existing public water systems with an ETT score of 11 or higher and those that are otherwise identified as being in need of assistance will be offered TMF assistance
- One-third of Delaware's PWSs will be assessed for TMF capacities
- Delaware's CWSs and NTNC water systems will be monitored, evaluated, and assisted in LCR sampling compliance, schedules, and reporting; training will be conducted for Delaware PWSs on LCR compliance and on LCRR compliance requirements
- Existing public water systems will be offered the opportunity to receive TMF capacity assistance to achieve compliance

Evaluation

Capacity Development will meet with DWSRF Program representative(s) quarterly to review deliverable accomplishments. Successes and barriers will be evaluated, and adjustments will be made accordingly. The DWSRF will provide the EPA with Set-Aside reports for the periods of October 1, 2023 – March 31, 2024, and April 1, 2024 - September 30, 2024.

DRWA

Relationship to On-Going Program

DHSS will continue to contract with DRWA to provide Geographical Information Systems (GIS) Surveys for community water systems such as small municipal and non-municipal water systems. DRWA shall provide: Specialized Emergency training and assist four municipals to develop an emergency response plan.

Future Plans

Delaware Rural Water Association (DRWA) will provide on-site technical assistance in basic GIS distribution surveys for community water systems (small and medium municipals including Tidewater and Artesian operated systems). The Delaware Rural Water Association (DRWA) will provide multiple emergency response, confined space and safety hands-on workshops to SRF funded community and municipal employees

The Specialized Emergency Response training provides municipals employees instruction on how to respond and prepare for different types of natural or man-made disasters.

Objectives and Outputs

• Five (5) small community water systems (population under 1000), Five (5) municipal communities (population under 10,000) and a minimum of Five (5) seasonal water systems will be provided with GIS on-site technical assistance and system distribution maps Provide multiple emergency response, confined space, and safety hands-on workshops to SRF funded community and municipal employees. Workshops will consist of how to respond to different types of emergencies, how to establish a command post, staging areas, preparing for long-haul disasters, self-contained breathing apparatus usage, fittings and types, blood borne pathogens, controlled bleeding at the job site and working with ropes and rigging Operators will be shown how to manage and track supplies needed for short- and long-term outages and what types of specialized tools are required.

Outcomes/Benefits

- Smaller systems will be able to map out locations of assets. The compilation of location data will provide the aforementioned water systems with first step of EPA's Core Asset Management criteria
- The Specialized Emergency Response training provides towns with a strategy in the event they have an emergency

Evaluation

DRWA will meet with DWSRF Program representative(s) quarterly to review deliverable

accomplishments. Successes and barriers will be evaluated, and adjustments will be made accordingly. The DWSRF will provide the EPA with Set-Aside reports for the periods of October 1, 2023 – March 31, 2024, and April 1, 2024 - September 30, 2024.

DTCC

Relationship to on-going program

DHSS will continue to contract with DTCC to assist with continued education and certification of water operators.

Future Plans

DTCC will continue to offer online classes to water operators to allow flexibility for water operators seeking continuing education.

Objectives and Outputs

- Develop one “Train the Trainer” course for the instructors to include updated teaching methods, utilization of hands-on equipment and implementation of new hands-on assessments. Up to eight (8) instructors will be paid to attend these two three (3) hour sessions.
- Update and improve existing water courses to modern standards.
- Host one Emergency Response workshop to address both climate and health emergencies. One additional workshop addressing one of the following issues: Emerging Technology, Aging Workforce, PFAS, New Lead and Copper Regulations. Workshop Topics will be approved by DHSS personnel.

Outcomes and Benefits

- Delaware water operators will receive training to ensure system operators are well trained to maintain their systems in compliance
- Online training will be updated with the most current methods
- Webinar will allow managers to be aware of changes in the water system industry
- Water operator skills will be enhanced by the instruction on water quality process control equipment and/or software technology

Evaluation

DTCC will meet with DWSRF Program representative(s) quarterly to review deliverable accomplishments. Successes and barriers will be evaluated, and adjustments will be made accordingly. The DWSRF will provide the EPA with Set-Aside reports for the periods of October 1, 2023 – March 31, 2024, and April 1, 2024 - September 30, 2024.

Sustainability 1:1 Assistance

The DWSRF Program will continue to work with Kash Srinivasan Group, LLC to provide 1:1 assistance to small and medium municipal public water systems to engage in long range planning activities for their utilities. At least five municipalities will develop custom implementation of Financial Analysis tools developed by the University of North Carolina.

Source Water Protection

Relationship to On-Going Program

The Source Water Protection (SWP) program continues to be administered by Department of Natural Resources and Environmental Control (DNREC)’s Division of Water. This regulatory program controls wellhead and source-water protection activities.

Future Plans

The Delaware Source Water Assessment and Protection Program (SWAPP) will help public water systems receive assistance from the DWSRF by the following activities: Source Water Assessment,

Characterization, and Monitoring; Prioritization of State SWP activities; Integration of SWAPP with other state, federal, and local programs; Motivating Local SWP activities; and Managing Information.

Objectives and Outputs

- Source Water Assessment, Characterization and Monitoring – This includes providing assessments for any new system, revising and updating existing source water assessments (e.g. delineation, contaminant sources, susceptibility assessment), providing technical assistance to solve source water problems including recommendations for potential DWSRF funded monitoring network/systems development, and resource characterization activities. The SWAP will continue the development of an ambient groundwater monitoring program, including the deployment of long-term monitoring equipment with real time data telemetry capabilities, while utilizing existing Delaware Geological Survey (DGS) and DNREC Water Supply Section monitoring well infrastructure, and the Water Allocation Branch permitting process
- Prioritization of State SWP activities – This includes support of local efforts to develop SWP ordinances and comprehensive plans or other local approaches, support to SWP-related UIC activities, and related needs
- Integration of SWAPP with other state, federal, and local programs – This includes work with the federal, state agencies, private organizations, and local governments with regards to source identification, characterization, and prevention
- Motivating Local SWP activities – This includes technical assistance, committee representation, information dissemination; review of local development plans and comprehensive land use plans as part of the Preliminary Land Use Service (PLUS) process and participation on the New Castle County Resource Protection Area Technical Advisory Committee (RPATAC)
- Managing Information – This includes data collection, data storage, and recovery, GIS development, web availability, state, and federal data reporting capacity. Additionally, the SWAPP will work with systems to evaluate their needs for data management and operational enhancements (e.g., SCADA) that could benefit from potential DWSRF funding. For this grant cycle, contractual funding will be utilized to support the EQUIS Enterprise migration project which will be used by the Division of Water to store, share, and review analytical/permit data throughout the State including the Ambient Groundwater Monitoring project. In addition, the SWAPP will commence discovery and needs assessment, in collaboration with the Office of Drinking Water, Delaware Geological Survey, and DNREC Division of Water to determine the feasibility of creating an interagency data repository to using WaterSTAR, formally RBDMS Environmental, as a set of tools for managing laboratory analytical and field data. For this grant cycle the SWAPP working closely with the Well Permitting Branch will pilot a “Public Well Missing Records Reconnaissance Project” in which the SWAPP will work with the Office of Drinking Water and licensed water well contractors to investigate, locate, survey, and inspect public wells with incomplete or missing records in order to build a more complete database record for both DNREC and DHSS

Outcomes/Benefits

- Provide assessments for any new system, revising and updating existing source water assessments (e.g., delineation, contaminant sources, susceptibility assessment), providing technical assistance to solve source water problems including recommendations for potential DWSRF funded monitoring network/systems development, and resource characterization activities. The SWAP will continue the development of a statewide ambient groundwater monitoring program, including the deployment of long-term monitoring equipment with real time data telemetry capabilities, while utilizing existing Delaware Geological Survey (DGS) and DNREC Water Supply Section monitoring well infrastructure, and the Water Allocation Branch permitting process. For this grant cycle, contractual support will be utilized for miscellaneous groundwater sampling including raw water sampling of public water systems. Water quality data results collected as part of the ambient groundwater monitoring program or traditional groundwater sampling efforts will be shared with the Office of Drinking Water and other appropriate partners to inform and facilitate future regulatory decisions.

- Support local efforts to develop SWP ordinances and comprehensive plans or other local approaches, support to SWP-related UIC activities, and related needs
- Work with the federal, state agencies, private organizations, and local governments with regards to source identification, characterization, and prevention.
- Provide technical assistance, committee representation, information dissemination; review of local development plans and comprehensive land use plans as part of the Preliminary Land Use Service (PLUS) process and participation on the New Castle County Resource Protection Area Technical Advisory Committee (RPATAC)
- Manage data, including develop GIS, web availability, state, and federal data reporting capacity. Additionally, the SWAPP will work with systems to evaluate their needs for data management and operational enhancements (e.g. SCADA) that could benefit from potential DWSRF funding. For this grant cycle, contractual funding will be utilized to support the EQUIS Enterprise migration project which will be used by the Division of Water to store, share, and review analytical and permit data throughout the State including the Ambient Groundwater Monitoring project. The data stored in EQUIS will be used to inform future Division of Water permitting decisions while data stored in the WaterSTAR system will be used to increase data sharing and data access between interagency partners. Additionally, records collected as part of the “Public Well Missing Records Reconnaissance Project” will be shared between DNREC and DHSS in order to build a more complete database record for both DNREC and DHSS
- Cover Crop Program—Ag Strategy
- DWSRF proposes, to meet EPA’s recommended Ag Strategy, to continue to fund the Cover Crop Program this grant cycle

Evaluation

SWP will meet with DWSRF Program representative(s) quarterly to review deliverable accomplishments. Successes and barriers will be evaluated, and adjustments will be made accordingly. The DWSRF will provide the EPA with Set-Aside reports for the periods of October 1, 2023 – March 31, 2024, and April 1, 2024 – September 30, 2024.

Sussex Conservation District

Sussex County Source Water Protection Agricultural Best Management Practices

- This project will focus primarily on the runoff and leaching from agriculture, which is considered a nonpoint source of pollution. The Chesapeake Bay Program defines a nonpoint source of pollution as a diffuse source of pollution that cannot be attributed to a clearly identifiable, specific physical location or a defined discharge channel. This includes the nutrients that runoff the ground from any land use - croplands, feedlots, lawns, parking lots, streets, forests, etc. - and enter waterways. It also includes nutrients that enter through air pollution, through the groundwater, or from septic systems.
- Protecting Delaware’s drinking water through the implementation of water quality best management practices (BMP) is imperative for every Delaware citizen to have access to clean drinking water. The implementation of these BMPs is needed to meet the goals and objectives of the Chesapeake Bay Watershed Implementation Plan (WIP), Inland Bays Pollution Control Strategy, and Total Maximum Daily Loads in Sussex County, Delaware.
- The Sussex Conservation District (SCD) will increase implementation and track best management practices made by agricultural producers and landowners within established source water protection areas in Sussex County. An SCD agricultural conservation planner will work with these producers and landowners to educate them on the importance their property plays in protecting the State’s drinking water resources and assist them in identifying opportunities for the implementation of various Source Water Protection Area (SWPA) practices established in the USDA-NRCS Environmental Quality Incentive Program (EQIP). The SCD planner will work with agricultural producers in Sussex County to address resource concerns in the SWPA areas, making recommendations on how to best address those concerns, and planning the priority practices. Planners will also assist the landowner through the NRCS EQIP financial assistance application process through to contract obligation and practice

implementation. SCD will track and report these BMPs located in SWPA.

- Producers located in the established SWPA will be eligible for a 90% incentive rate on 32 eligible USDA-NRCS SWPA priority practices, leaving only 10% of the implementation cost to be covered by the landowner. It is hoped that SCD can partner with the Delaware Rural Water Association's Source Water Program and their relationships with local water utilities to help share the cost of the practices, leaving the landowner with no more than 5% of the cost.
- NRCS and the Sussex Conservation District will provide financial assistance towards the implementation of cover crops (partially funded by DWSRF) and other water quality BMPs to reduce runoff from agricultural fields and the uptake of excess nutrients, resulting in an improvement to drinking water sources and overall water quality. Data specifying detailed information about each BMP will be tracked and reported annually.
- Additionally, SCD will promote this partnership and activities through our outreach and education programs including print and news media, social media outlets, and one-on-one conversations with Sussex County landowners. SCD will also include this as part of its soil health outreach events including workshops and field days.

Emerging Contaminants BIL Capitalization Grant

2%

Technical Assistance

This Emerging Contaminants set-aside will not be used for Set-Aside activities.

4%

DWSRF Administration

The 4% Emerging Contaminants Set-Asides will be used to fund the salaries, fringe benefits, contractual, supplies and indirect costs of DHSS DWSRF and Office of Engineering FTEs.

15%

Local Assistance/Other Programs

This Emerging Contaminants set-aside will not be used for Set-Aside activities.

Lead Service Line Replacement Capitalization Grant

2%

Technical Assistance

Work years to implement activities: 5 years (October 1, 2022 - September 30, 2027)

Provide assistance to small systems through contractor personnel. Funds provide technical assistance to public water systems serving less than 10,000 people. Contracts with DRWA and 120Water as well as collaboration with the Department of Education provide technical assistance and training.

DRWA & 120Water contract:

- LCR Technical Assistance and Training -- DRWA and 120Water are partnering to deliver market differentiated, high-impact and ongoing Technical Assistance to educate utility operators, superintendents, key personnel, and city managers about the complexities and nuances of Safe Drinking Water Regulatory Compliance.
- The partnership will conduct, at minimum, three instructor-led Technical Assistance Training Seminars throughout the calendar year with a focus on the Lead and Copper Rule (LCR) and the Lead and Copper Rule Improvements (LCRI). Given the evolving landscape of LCR(I), we are proposing a 5-year technical assistance program designed to give ongoing, world-class education to the utilities across the state of Delaware and Maryland.
- It is the goal of this partnership to ensure that the funding being made available to systems for LCR

compliance will be used efficiently and effectively, resulting in better and more consistent outcomes for all stakeholders.

4%

DWSRF Administration

The 4% Lead Service Line Replacement Set-Asides will be used to fund the salaries, fringe benefits, contractual, supplies and indirect costs of DHSS DWSRF FTEs.

Lead Service Line Inventories

- Provide assistance to PWSs to prepare and maintain an inventory of service line materials by October 16, 2024, through DRWA and Knowledge Services Contracts.