

# Delaware

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DRINKING WATER STATE REVOLVING FUND (DWSRF)

DRAFT

Intended Use Plan

DRAFT | March 13, 2024

**Delaware Health and Social Services  
Intended Use Plan  
2024 Federal Allocation**

**Federal Fiscal Year (FFY) 2024  
State Fiscal Year (SFY) 2025**

Background ..... 4

Goals ..... 4

Performance Evaluation Review (PER) Action Items ..... 5

DWSRF Infrastructure Project Selection ..... 6

Bypass Procedures ..... 6

Emergency Project Requirements ..... 7

Ranking Criteria – Revised this year ..... 7

Tie-breaking procedures ..... 7

Subsidy Requirements ..... 7

Disadvantaged Community (DAC) definition ..... 7

Loan Projections ..... 9

Other Program Information ..... 10

Interest Rate Policy ..... 10

Possible DWSRF Administrative Loan Fees ..... 11

Leveraging ..... 11

State Match ..... 11

Cash Draw Ratio ..... 11

Cross Collateralization between SRF programs—Transfer Use ..... 11

Davis Bacon Compliance ..... 11

Green Project Reserve ..... 12

Sustainability Policy Description Fix It First ..... 12

Capacity Development for Loan Applicants ..... 12

Asset Management ..... 12

Disadvantaged Business Enterprise Participation ..... 12

Davis Bacon Act Participation ..... 12

Efficient Expenditure ..... 12

Project Management ..... 13

Reporting ..... 13

Ag Strategy .....	13
Sources and Uses .....	13
Set-Aside Activities.....	14
Base Capitalization Grant Set-Asides.....	15
Small Systems Technical Assistance (2% Base).....	15
DWSRF Program Administration (4% Base).....	15
State Program Management (10% Base) .....	15
Local Assistance and Other State Programs (15% Base) .....	15
Supplemental BIL Capitalization Grant .....	15
Small Systems Technical Assistance (2% Supplemental).....	15
DWSRF Program Administration (4% Supplemental).....	16
State Program Management (10% Supplemental).....	16
Local Assistance and Other State Programs (15% Supplemental) .....	18
Emerging Contaminants BIL Capitalization Grant.....	20
Small Systems Technical Assistance (2% Emerging Contaminants) .....	20
DWSRF Program Administration (4% Emerging Contaminants).....	20
Local Assistance and Other State Programs (15% Emerging Contaminants).....	20
Public Review .....	20
Appendix A Comprehensive PPL .....	21
Appendix B Fundable PPL.....	22
Appendix C Funding by Grant PPL .....	23
Appendix D 2024 DWSRF PPL Ranking Criteria Approval.....	24
Appendix E 2024 DWSRF Set-Aside Work Plans .....	25

## 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 the 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 anticipates being eligible for \$61,520,000 in federal Bipartisan Infrastructure Law (BIL) capitalization grant funds. There are three (3) distinct grants under the BIL, and they include Supplemental, Emerging Contaminants (EC), and Lead Service Line (LSL) Replacement Capitalization Grants. DHSS will allocate roughly \$21,165,750 in federal funds plus \$4,597,000 in state funds (20% 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 the Base, General Supplemental, and Emerging Contaminants Grants. Delaware is not requesting the LSL Replacement Capitalization Grant at this time due to a lack of demand by Public Water Systems. 2023 funds will continue to be accessible to Public Water Systems for inventory activities and project needs as defined in the 2023 IUP. DHSS reserves the right to request the 2024 LSL Replacement Capitalization Grant within the next year should demand necessitate. See **Figure 1** showing totals for the FFY2024 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 the identification of and application by small water systems.

**Figure 1: Cumulative NOI Requests FFY23**

	Actual Project Requests	StateMatch for Projects	Anticipated FederalAwardfor Projects
LSLR	\$4,512,298		\$30,845,000
EC	\$99,117,610		\$7,690,000
Supplemental	\$20,483,615	\$4,597,000	\$22,985,000
Base	\$4,297,314	\$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 the 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 currently requires 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 2024-2025 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 and training 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).
- 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 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 US Environmental Protection Agency (EPA) will conduct its site visit between April 9, 2024, and April 11, 2024, to review the period July 1, 2022, through June 30, 2023 (State Fiscal Year (SFY) 2023).

The EPA conducted its site visit between March 27, 2023, and March 30, 2023, which reviewed the period from July 1, 2021, through June 30, 2022 (SFY 2022).

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 2024, 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 by June 21<sup>st</sup>, 2024.** 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 their merit and public health impact.

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, 2024**, 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 an 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 emergencies 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 March 2024, DHSS has not received any emergency project applications.

### **Ranking Criteria – Revised this year.**

See 2024 [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 2024 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; or

5. The project area is confined by and benefiting specific census tracts that have a percentage of population that is below the poverty level which is greater than the state-wide percentage of population below the poverty level.

**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 five (5) 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 Ejscreen Tool
W = White House Climate and Economic Screening Tool
U = Underserved
C = Census Tract



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	\$15,114,050
EC	\$7,690,000
Supplemental DAC	\$11,262,650
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: March 2024

**Summary**

State Fiscal Year	2024	2025	2026	2027
New Commitments	\$45,942,582	\$128,410,837	\$85,000,000	\$85,000,000
Disbursements including Loans in Construction	\$62,416,540	\$129,952,593	\$91,645,271	\$67,723,001
Loan Repayments	\$11,905,922	\$13,740,308	\$16,811,647	\$21,602,758
Capitalization Grant Payments	\$105,326,257	\$66,557,000	\$66,557,000	\$66,557,000
State Match	\$3,112,900	\$5,604,400	\$5,218,400	\$5,218,400
End of Year Cash Balance (Not Discounted)	\$153,012,047	\$95,502,211	\$71,811,316	\$76,833,803

- New commitments for SFY24 represents loans pending settlement and approved through SFY24. SFY25 includes 100% of the FFY24 PPL. SFY26-27 are estimates.
- Capitalization Grant Payments for SFY24 include the remaining balances from SFY23 Grants received. SFY25 represents the preliminary allotments. SFY26-27 is assumed at SFY25 level.
- 80% of portfolio is traditional with a 20-year term at 2%, and 20% of portfolio is small community with a 30-year term at 1%.
- Principal forgiveness of \$63 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.

## Other Program Information

### Interest Rate Policy

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 2024 PPL/applicants.

### **Leveraging**

DHSS does not anticipate the need to reserve the right to transfer Capitalization Grant and loan repayment 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, 2024, 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 2024. 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 FFY12 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 2024, 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, to review the Capacity Development portion of each full application, work with systems to increase technical, managerial, and financial capacity; ensure the 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, 21 systems have started an AMP. The NFAA has funded the AMP Grant program. The maximum grant amount is \$100,000. The long-term goal is to have the Capacity Development program review 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 project capitalization grants 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.

#### **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 25 Sources:**

Projected Fund Balance at 6/30/2024	\$ 153,012,047
Estimated Base Cap Grant	\$ 5,037,000
Base Cap Grant State Match	\$ 1,007,400
Estimated Supplemental Cap Grant	\$ 22,985,000
Estimated Supplemental Cap Grant State Match	\$ 4,597,000
Estimated Lead Cap Grant	\$ 30,845,000
Estimated Emerging Contaminants Cap Grant	\$ 7,690,000
Projected Repayments to the Fund	\$ 13,740,308
Projected Investment Income	\$ 2,000,000
<b>Total Sources for SFY 25:</b>	<b>\$ 240,913,755</b>

**DWSRF SFY 25 Uses:**

Disbursements Projects for Construction	\$ 129,952,593
2% Technical Assistance	\$ 1,230,400
4% Administration	\$ 2,460,800
10% Program Management	\$ 4,082,000
15% Local Assistance	\$ 7,685,750
<b>Total Uses for SFY 25:</b>	<b>\$ 145,411,543</b>

<b>Total Projected Fund Balance 6/30/25</b>	<b>\$ 95,502,212</b>
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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 into 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 the 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 - Supplemental, Emerging Contaminants, and LSL Replacement Grants. The below figure illustrates Delaware's reserve set-asides.

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

Delaware Grants	2024 Allotment	2024 Request	2024 Reserve	Total Reserve
<b>Base</b>	<b>\$5,037,000</b>			
2%	\$100,740	\$0	\$100,740	\$204,308
4%	\$201,480	\$0	\$201,480	\$420,033
10%	\$503,700	\$0	\$503,700	\$1,045,275
15%	\$755,550	\$0	\$0	\$0
Projects for Const	\$3,475,530	\$5,037,000	\$0	\$0
<b>Subtotals</b>	<b>\$5,037,000</b>	<b>\$5,037,000</b>	<b>\$805,920</b>	<b>\$1,669,616</b>

<b>Supplemental</b>	<b>\$22,985,000</b>			
2%	\$459,700	\$338,125	\$121,575	\$560,835
4%	\$919,400	\$837,061	\$82,339	\$433,271
10%	\$2,298,500	\$1,228,088	\$1,070,412	\$3,414,585
15%	\$3,447,750	\$2,731,696	\$0	\$0
Projects for Const	\$15,859,650	\$17,850,030	\$0	\$0
<b>Subtotals</b>	<b>\$22,985,000</b>	<b>\$22,985,000</b>	<b>\$1,274,326</b>	<b>\$4,408,691</b>

<b>Lead Service Lines</b>	<b>\$30,845,000</b>			
2%	\$616,900	\$0	\$616,900	\$1,511,307
4%	\$1,233,800	\$0	\$1,233,800	\$2,099,774
10%	\$3,084,500	\$0	\$3,084,500	\$8,784,500
15%	\$4,626,750	\$0	\$0	\$0
Projects for Const	\$21,283,050	\$0	\$0	\$0
<b>Subtotals</b>	<b>\$30,845,000</b>	<b>\$0</b>	<b>\$4,935,200</b>	<b>\$12,395,581</b>

<b>Emerging Contaminants</b>	<b>\$7,690,000</b>			
2%	\$153,800	\$0	\$153,800	\$379,700
4%	\$307,600	\$132,371	\$175,229	\$488,588
10%	\$769,000	\$0	\$769,000	\$2,288,500
15%	\$1,153,500	\$0	\$0	\$0
Projects for Const	\$5,306,100	\$7,557,629	\$0	\$0
<b>Subtotals</b>	<b>\$7,690,000</b>	<b>\$7,690,000</b>	<b>\$1,098,029</b>	<b>\$3,156,788</b>



## **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**

- Through the Cross Connection Control Planning Management contract, DRWA will assist on-site with the 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 Cross Connection Control (CCC) training to state drinking water Environmental Health Specialist'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 shall assist five community water systems in implementing CCC Plans. DRWA will provide on-site assistance at several locations conducting basic system evaluations starting at the source into the municipal facilities, demonstrating to the municipal system operators and town officials on how to identify potential contamination sites from cross connections. DRWA will also conduct four CCC Planning Management virtual workshops for municipal operations specialists and municipal members.
- Through the State Revolving Fund contract, DRWA will provide 100 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 also provide 1:1 regulatory training for municipal decision-makers including PFAS/emerging contaminants and LSLI compliance.

- Through the Career Training for High School Students contract, DRWA will provide a minimum of five 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 who 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-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**

- Through the Technical Training contract, DTCC will provide tuition assistance for continuing education for approximately 70 Operators-In- Training and licensed water operators. Provide tuition assistance for the Base Level Water Operators Course to approximately 30 new operators. Provide tuition assistance to 30 water operators seeking endorsements. Provide tuition assistance to 12 limited license water operators. Provide tuition assistance to guarantee the execution of a fall and spring Limited License Water Operators Certification Course
- Through the Administrative Support and Oversight contract, DTCC will 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, develop 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 required program audits and the salaries, fringe benefits, supplies, contractual services, indirect and other personnel charges of DHSS DWSRF, and Environmental Hazards and Toxicology FTEs.

#### **State Program Management (10% Supplemental)**

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



## **Operator Certification**

- 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.
- Expand regulatory-related trainings to water operators by ODW staff, including greater online training opportunities.
- Provide administrative review and processing of water operator license 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.

## **Public Water Supply Supervision (PWSS)**

- Monitor, track, and report compliance for approximately 461 Public Water Systems.
- Develop a plan for private drinking water labs 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.
- Build LCR resiliency within the PWSS Program.
- Faster response to issues related to SDWIS.

## **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.
- Continue to perform audits for the certification of drinking water testing laboratories within Delaware.
- 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. UIC Program activities include permitting, compliance, and enforcement, integration of water quality protection and management with local, state, and federal programs, providing technical assistance and support to municipalities, counties, and utilities regarding wastewater treatment and disposal operations, and managing

information including groundwater monitoring data.

- 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 with permit conditions, State, and Federal Regulations.
- The UIC Program will continue to develop and implement the EQuIS 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 participate in technical assistance and outreach opportunities including offering technical support to municipalities, counties, and utilities regarding wastewater treatment and disposal operations and technologies, continue to participate in EPA's Decentralized Wastewater MOU Partnership, and continue to work with public and private partners on economic development plans through the Department's Planners Technical Advisory Committee (PTAC).
- The UIC Program will continue to participate in the implementation of the pollution control strategy for the Chesapeake Bay Watershed.

### **Local Assistance and Other State Programs (15% Supplemental)**

The 15% Supplemental Set-Asides will be used to fund the salaries, fringe benefits, travel, supplies, contractual services, indirect and other personnel charges of DHSS Office of Drinking Water, Office of Engineering, Environmental Hazards and Toxicology and DNREC Division of Water FTEs.

### **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 names 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.
- Develop a voluntary cybersecurity assessment program to assist water systems with cybersecurity initiatives.
- 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 to include preparedness for LCRR compliance requirements.
- 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 Contracts**

- Through the Water System Operations Specialist Emergency Training 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 and staging areas, prepare 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.

- Through the Lead and Copper Rule Technical Assistance and Education Training contract, DRWA and 120 Water are partnering to deliver market-differentiated, high - impact and ongoing Technical Assistance to educate State Public Health staff, water utility operators, superintendents, key personnel, and city managers about the complexities and nuances of the Safe Drinking Water Regulatory Compliance. The partnership will conduct, at a minimum, four 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). The goal of this partnership is to ensure that the funding being made available to systems for LCR compliance will be used efficiently and effectively. DRWA staff will also provide 1:1 system-specific assistance to ensure accurate data collection and input to 120Water/Office of Drinking Water data warehouses.

### **DTCC Contracts**

- Through the Training Equipment contract, DTCC will research, assess, and purchase training equipment, textbooks and curriculum to enhance continuing education to Operators-In-Training and licensed water operators.
- Through the Course Development and Workshop Host contract, DTCC will update and improve existing water courses to modern standards, develop one new in person class, develop two “Train the Trainer” courses for the instructors to include updated teaching methods, utilization of hands-on equipment and implementation of new hands-on assessments. DTCC will host one workshop that will be centrally located to address such subjects as Emergency Response, Emergency Technology, Aging Workforce, and PFAS.

### **Sussex Conservation District**

- The Sussex Conservation District (SCD) will continue to improve the implementation rate of agricultural Best Management Practices (BMPs) in well-head protection areas, excellent groundwater recharge areas, and all other agricultural areas in Sussex County as part of an effort to protect the public drinking-water supply and nearby surface waters.

### **Brandywine Conservancy**

- Brandywine Conservancy will provide work in support of the protection and improvement of source water for drinking water utilities in the State.

### **Ag Strategy Program/Source Water Protection**

- The Ag Strategy Program will continue to provide outreach to farmers who may not be in the Cover Crop program, exploration of expanded eligibilities, i.e., buffer zones, and pollinator plots. The program may also explore further incentives for farms that are close to municipal source water protection areas.
- Prioritize Source Water Protection (SWP) activities by supporting local efforts to develop ordinances and comprehensive plans or other local approaches, support to UIC activities, and related needs.
- Work with federal, state, and local governments, and private organizations regarding source identification, characterization, and prevention.
- Provide technical assistance, committee representation, and information dissemination for local source water protection activities.
- Continue managing information by collecting data, facilitating data storage and recovery, GIS

development, web availability and support state and federal data reporting capacity.

### **Sustainability 1:1 Assistance and Cyber Security Programs**

The DWSRF Program will continue to work with Kash Srinivasan Group, LLC who 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”).

### **Delaware Nutrient Management Commission**

The DWSRF Program aims to bolster the Delaware Nutrient Management Commission’s initiatives to mitigate phosphorous intake in Delaware’s soil, addressing the contamination affecting the State’s source water. The addition of nutrients to bodies of surface water accelerates the eutrophication process, in which the water becomes overly enriched with nutrients. Elevated nutrient levels within the water often causes abnormally high production of algae and aquatic plants. The eventual decomposition of increased amounts of organic matter can deplete the water’s dissolved oxygen content, resulting in the death of fish and other aquatic organisms. Of all cropland nutrient inputs, phosphorous is the most important nutrient to prevent from reaching surface water bodies. Due to low natural levels of phosphorous, phosphorus availability usually limits biological productivity in surface waters.

## **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, travel, supplies, other and indirect costs of DHSS Environmental Hazards and Toxicology, and Office of Engineering FTEs.

### **State Program Management (10% Supplemental)**

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.

### **Public Review**

A virtual public meeting will be held on March 20, 2024 in which this IUP will be presented before the Delaware Water Infrastructure Advisory Council (WIAC) and public stakeholders. DHSS will post the Fundable PPL and IUP online for public comment for 30 days. DHSS will advise the EPA when the comment period occurs and will share any meaningful public comment that is received. 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 will be available for public review and comment through April 20, 2024.**

**Appendix A Comprehensive PPL**

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## Delaware Division of Public Health Drinking Water State Revolving Fund 2024 Comprehensive Project Priority List

Rank	Water System/ Borrower	PWSID #	Population Served	Fundable Project Name	Project Description	Amount	DAC? - A, E, W, U, C	Total Points	Funding Appropriation	Financing	Terms	Anticipated subsidy
1	Lewes BPW	DE0000462	3,420	Hoornkill Ave Extension and Improvements	This project will extend approx. 700 ft of 8-inch water main to the end of Hoornkill Ave. to serve 11 single-family homes currently on individual wells. This project will also replace aging water distribution system infrastructure dating back to the 1960's, including iron pipes and potential lead service line components.	\$ 747,314.00		770	Base	2.00%	20 years	Base Congressional
2	City of Seaford	DE0000246	6,699	Martin Farms Lead Service Abatement	This project would relocate the utilities into the paved roadway which will provide better access as well as replace approximately 70-year-old pipe with lead components.	\$ 2,162,298.00	C	700	LSLR	0.00%	20 years	LSLR
3	Town Laurel	DE0000597	3,984	New WTP and Well Replacement	This project aims to abandon this well and drill a new well in the Manokin confined aquifer to eliminate the concerns with elevated levels of PFAS.	\$ 5,517,610.00	A, C	610	EC	2.00%	20 years	EC
4	Lewes BPW	DE0000462	3,420	4th St. Water System Replacement-Improvements	This project will replace approximately 2,000 feet of various-sized cast iron and ductile iron water mains on 4th Street from Savannah Road to Burton Avenue.	\$ 2,158,615.00		585	Supplemental	2.00%	20 years	
5	City of Wilmington	DE0000663	107,976	Water Distribution and Transmission Improvements-Lead Removal	This project will eliminate any exposure the potable water may have with lead material in the distribution system by replacing the old cast iron pipe with modern-day cement-lined, ductile iron pipe with an engineered rubber gasket.	\$ 10,000,000.00	A, E, W, C	560	Supplemental	2.00%	20 years	Supplemental
6	City of Wilmington	DE0000663	107,976	Emerging Contaminants/PFAS Removal	This project will incorporate the most cost-efficient means of removing PFAS from the City's source at the Poter and Brandywine Plants, currently recognized to be the addition of GAC (Granular Activated Carbon) contact vessels into the treatment process, installed post-filtration and before the Clearwell.	\$ 73,200,000.00	A, E, W, C	440	EC	2.00%	20 years	EC
7	City of Newark	DE0000630	40,000	Curtis Water Treatment Plant-PFAS Removal	This project would begin a comprehensive review of treatment at our surface water treatment plant and make necessary upgrades to our storage and distribution.	\$ 20,400,000.00		415	EC	2.00%	20 years	EC
8	Town Laurel	DE0000597	3,984	Elevated Water Tower Replacement	This project will construct a new water tower to replace the Town's current tower which is nearly 90 years old.	\$ 4,075,000.00	A, C	360	Supplemental	2.00%	20 years	Supplemental
9	City of Newark	DE0000630	40,000	Water Main Replacement and Rehabilitation	This project will replace mains or line the interior to minimize main breaks, improve water quality, and improve fire flow.	\$ 2,150,000.00		355	Supplemental	2.00%	20 years	
10	City of Newark	DE0000630	40,000	Lead Service Line Identification and Replacement	This project proposes to address the identification and replacement of lead pipes and fittings within our system.	\$ 2,350,000.00		290	LSLR	0.00%	20 years	
10	City of Newark	DE0000630	40,000	Water Facilities Site and Security Upgrade	This project will make necessary security upgrades.	\$ 2,100,000.00		290	Supplemental	2.00%	20 years	
11	City of Newark	DE0000630	40,000	Water Main Line Condition Assessment	This project would utilize non-destructive pipe testing to determine the condition and remaining life of existing pipes.	\$ 3,550,000.00		195	Base	2.00%	20 years	
						\$ 128,410,837.00						

**Appendix B Fundable PPL**

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## Delaware Division of Public Health Drinking Water State Revolving Fund 2024 Fundable Project Priority List

Rank	Water System/ Borrower	PWSID #	Population Served	Fundable Project Name	Project Description	Amount	DAC? - A, E, W, U, C	Total Points	Funding Appropriation	Financing	Terms	Anticipated subsidy
1	Lewes BPW	DE0000462	3,420	Hoornkill Ave Extension and Improvements	This project will extend approx. 700 ft of 8-inch water main to the end of Hoornkill Ave. to serve 11 single-family homes currently on individual wells. This project will also replace aging water distribution system infrastructure dating back to the 1960's, including iron pipes and potential lead service line components.	\$ 747,314.00		770	Base	2.00%	20 years	Base Congressional
2	City of Seaford	DE0000246	6,699	Martin Farms Lead Service Abatement	This project would relocate the utilities into the paved roadway which will provide better access as well as replace approximately 70-year-old pipe with lead components.	\$ 2,162,298.00	C	700	LSLR	0.00%	20 years	LSLR
3	Town Laurel	DE0000597	3,984	New WTP and Well Replacement	This project aims to abandon this well and drill a new well in the Manokin confined aquifer to eliminate the concerns with elevated levels of PFAS.	\$ 5,517,610.00	A, C	610	EC	2.00%	20 years	EC
4	Lewes BPW	DE0000462	3,420	4th St. Water System Replacement-Improvements	This project will replace approximately 2,000 feet of various-sized cast iron and ductile iron water mains on 4th Street from Savannah Road to Burton Avenue.	\$ 2,158,615.00		585	Supplemental	2.00%	20 years	
5	City of Wilmington	DE0000663	107,976	Water Distribution and Transmission Improvements-Lead Removal	This project will eliminate any exposure the potable water may have with lead material in the distribution system by replacing the old cast iron pipe with modern-day cement-lined, ductile iron pipe with an engineered rubber gasket.	\$ 10,000,000.00	A, E, W, C	560	Supplemental	2.00%	20 years	Supplemental
6	City of Wilmington	DE0000663	107,976	Emerging Contaminants/PFAS Removal	This project will incorporate the most cost-efficient means of removing PFAS from the City's source at the Poter and Brandywine Plants, currently recognized to be the addition of GAC (Granular Activated Carbon) contact vessels into the treatment process, installed post-filtration and before the Clearwell.	\$ 73,200,000.00	A, E, W, C	440	EC	2.00%	20 years	EC
7	City of Newark	DE0000630	40,000	Curtis Water Treatment Plant-PFAS Removal	This project would begin a comprehensive review of treatment at our surface water treatment plant and make necessary upgrades to our storage and distribution.	\$ 20,400,000.00		415	EC	2.00%	20 years	EC
8	Town Laurel	DE0000597	3,984	Elevated Water Tower Replacement	This project will construct a new water tower to replace the Town's current tower which is nearly 90 years old.	\$ 4,075,000.00	A, C	360	Supplemental	2.00%	20 years	Supplemental
9	City of Newark	DE0000630	40,000	Water Main Replacement and Rehabilitation	This project will replace mains or line the interior to minimize main breaks, improve water quality, and improve fire flow.	\$ 2,150,000.00		355	Supplemental	2.00%	20 years	
10	City of Newark	DE0000630	40,000	Lead Service Line Identification and Replacement	This project proposes to address the identification and replacement of lead pipes and fittings within our system.	\$ 2,350,000.00		290	LSLR	0.00%	20 years	
10	City of Newark	DE0000630	40,000	Water Facilities Site and Security Upgrade	This project will make necessary security upgrades.	\$ 2,100,000.00		290	Supplemental	2.00%	20 years	
11	City of Newark	DE0000630	40,000	Water Main Line Condition Assessment	This project would utilize non-destructive pipe testing to determine the condition and remaining life of existing pipes.	\$ 3,550,000.00		195	Base	2.00%	20 years	
						\$ 128,410,837.00						



**KEY:**

Grant	Actual Project Requests	State Match for Projects	Anticipated Federal Award for Projects	Disadvantaged Community Identifier	Additional Subsidy Name	Total
Lead Service Line Replacement (LSLR)	\$4,512,298.00		\$30,845,000.00	A = Affordability, pending final financial reviews	LSLR DAC	\$15,114,050
Emerging Contaminants (EC)	\$99,117,610.00		\$7,690,000.00	E = EPA Ejscreen Tool W = White House Climate and Economic Screening Tool	EC	\$7,690,000
Supplemental	\$20,483,615.00	\$4,597,000.00	\$22,985,000.00		Supplemental DAC	\$11,262,650
Base	\$4,297,314.00	\$1,007,400.00	\$5,037,000.00	U = Underserved C = Census Tract	Base DAC Base Congressional	\$604,440 \$705,180

**Appendix C Funding by Grant PPL**

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Delaware Division of Public Health Drinking Water State Revolving Fund  
2024 Base Capitalization Grant Project Priority List

Rank	Water System/ Borrower	PWSID #	Population Served	Fundable Project Name	Project Description	Amount	DAC? - A, E, W, U, C	Total Points	Funding Appropriation	Financing	Terms	Anticipated subsidy
1	Lewes BPW	<a href="#">DE0000462</a>	3,420	Hornkill Ace Extension and Improvement	This project will extend approx. 700 ft of 8-inch water main to the end of Hornkill Ave. to serve 11 single-family homes currently on individual wells. This project will also replace aging water distribution system infrastructure dating back to the 1960's, including iron pipes and potential lead service line components.	\$ 747,314.00		770	Base	2.00%	20 years	Base Congressional
11	City of Newark	<a href="#">DE0000630</a>	40,000	Water Main Condition Assessment	This project would utilize non-destructive pipe testing to determine the condition and remaining life of existing pipes.	\$3,550,000.00		195	Base	2.00%	20 years	
						\$4,297,314.00						



**Delaware Division of Public Health Drinking Water State Revolving Fund  
2024 Supplemental Capitalization Grant Project Priority List**

Rank	Water System/ Borrower	PWSID #	Population Served	Fundable Project Name	Project Description	Amount	DAC?- A, E, W, U, C	Total Points	Funding Appropriation	Financing	Terms	Anticipated subsidy
4	Lewes BPW	<u>DE0000462</u>	3,420	4th St. Water System Replacement - Improvements	This project will replace approximately 2,000 feet of various-sized cast iron and ductile iron water mains on 4th Street from Savannah Road to Burton Avenue.	\$ 2,158,615.00		585	Supplemental	2.00%	20 years	
5	City of Wilmington	DE0000663	107,976	Water Distribution and Transmission Improvements- Lead Removal	This project will eliminate any exposure the potable water may have with lead material in the distribution system by replacing the old cast iron pipe with modern-day cement-lined, ductile iron pipe with an engineered rubber gasket.	\$ 10,000,000.00	A, E, W, C	560	Supplemental	2.00%	20 years	Supplemental
8	Town Laurel	<u>DE0000597</u>	3,984	Elevated Water Tower Replacement	This project will construct a new water tower to replace the Town's current tower which is nearly 90 years old.	\$ 4,075,000.00	A, C	360	Supplemental	2.00%	20 years	Supplemental
9	City of Newark	<u>DE0000630</u>	40,000	Water Main Replacement and Rehabilitation	This project will replace mains or line the interior to minimize main breaks, improve water quality, and improve fire flow.	\$ 2,150,000.00		355	Supplemental	2.00%	20 years	
10	City of Newark	<u>DE0000630</u>	40,000	Water Facilities Site and Security Upgrade	This project will make necessary security upgrades.	\$ 2,100,000.00		290	Supplemental	2.00%	20 years	
						<b>\$ 20,483,615.00</b>						



**Delaware Division of Public Health Drinking Water State Revolving Fund  
2024 Lead Service Line Capitalization Grant Project Priority List**

Rank	Water System/ Borrower	PWSID #	Population Served	Fundable Project Name	Project Description	Amount	DAC? - A, E, W, U, C	Total Points	Funding Appropriation	Financing	Terms	Anticipated subsidy
<b>2</b>	City of Seaford	<u>DE0000246</u>	6,699	Martin Farms Lead Service Abatement	This project would relocate the utilities into the paved roadway which will provide better access as well as replace approximately 70-year-old pipe with lead components.	\$ 2,162,298.00	C	<b>700</b>	LSLR	0.00%	20 years	<b>LSLR</b>
<b>10</b>	City of Newark	<u>DE0000630</u>	40,000	Lead Service Line Identification and Replacement	This project proposes to address the identification and replacement of lead pipes and fittings within our system.	\$ 2,350,000.00		<b>290</b>	LSLR	0.00%	20 years	
						<b>\$ 4,512,298.00</b>						

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## Delaware Division of Public Health Drinking Water State Revolving Fund 2024 Emerging Contaminants Capitalization Grant Project Priority List

Rank	Water System/ Borrower	PWSID #	Population Served	Fundable Project Name	Project Description	Amount	DAC? - A, E, W, U, C	Total Points	Funding Appropriation	Financing	Terms	Anticipated subsidy
3	Town Laurel	DE0000597	3,984	New WTP and Well Replacement	This project aims to abandon this well and drill a new well in the Manokin confined aquifer to eliminate the concerns with elevated levels of PFAS.	\$ 5,517,610.00	A, C	610	EC	2.00%	20 years	EC
6	City of Wilmington	DE0000663	107,976	Emerging Contaminants/PFAS Removal	This project will incorporate the most cost-efficient means of removing PFAS from the City's source at the Poter and Brandywine Plants, currently recognized to be the addition of GAC (Granular Activated Carbon) contact vessels into the treatment process, installed post-filtration and before the Clearwell.	\$73,200,000.00	, E, W,	440	EC	2.00%	20 years	EC
7	City of Newark	DE0000630	40,000	Curtis Water Treatment Plant- PFAS Removal	This project would begin a comprehensive review of treatment at our surface water treatment plant and make necessary upgrades to our storage and distribution.	\$20,400,000.00		415	EC	2.00%	20 years	EC
						<b>\$99,117,610.00</b>						

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**Appendix D 2024 DWSRF PPL Ranking Criteria Approval**

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**REGION 3**

PHILADELPHIA, PA 19103

February 13, 2024

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 reviewed the revised Project Priority List (PPL) Ranking Criteria submitted on October 16, 2023, by the Division of Public Health for Drinking Water Capital Projects. The revision includes the following changes:

1. Section 2b, Affordability/Disadvantaged Community Considerations, increases the maximum points from 100 to 175 ensuring applicants identify how they determined their disadvantaged status, and the most severely disadvantaged communities rank highest.
2. Section 2f, Storage, adds 30 points for projects addressing the lack of critical redundancy.

EPA approves these revisions. If you or your staff have any questions, please contact Annette Sparks, EPA's Drinking Water Project Officer for Delaware, at [Sparks.Annette@epa.gov](mailto:Sparks.Annette@epa.gov) or (215) 814-5403 or me at [Boylan.Jeffrey@epa.gov](mailto:Boylan.Jeffrey@epa.gov) (215) 814-2094.

Sincerely,

JEFFREY Digitally signed  
by JEFFREY

BOYLAN 8OYLAN  
Date:2024.0213  
13:34:33 -0500

Jeff Boylan, Chief  
Infrastructure and Assistance Section  
Water Division



**Appendix E 2024 DWSRF Set-Aside Work Plans**

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# Delaware

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DRINKING WATER STATE REVOLVING FUND (DWSRF)



DWSRF Workplans  
Federal Fiscal Year 2024  
State Fiscal Year 2025

## Background

This document contains the work plans that the Delaware Drinking Water State Revolving Fund (DWSRF) and their partners across the state will accomplish this year. Delaware Health and Social Services (DHSS) submit this annually as part of the grant applications to the US Environmental Protection Agency (EPA) to request the DWSRF Capitalization Grants under the Safe Drinking Water Act (SDWA) and Catalog of Federal Domestic Assistance (CFDA) 66.468.

The Base Capitalization Grant will not be used to fund Set Aside activities. The Bipartisan Infrastructure Law (BIL) Supplemental and Emerging Containments, and Grants will be used to fund the following set-asides, 2% Technical Assistance, 4% DWSRF Administration, 10% State Program Management, and 15% Local Assistance/Other Programs. The program work year to implement activities is from October 1, 2024 – September 30, 2025.

DRAFT

**Delaware Drinking Water State Revolving Fund  
Set-Aside Work Plan  
2024 Federal Allocation**

**Supplemental BIL Capitalization Grant**

**2% Technical Assistance**

**Delaware Technical Community College**

**Administrative Support and Oversight 2%**

The Delaware Technical Community College will plan operations, recruit and interview prospective students, counsel students regarding course schedules, work with industry leaders to offer courses that meet the needs of our operators, identify new courses needed, assist with tutoring needs, develop job building skills, assist with employment opportunities, market program and courses to industry via varying methods. In addition, staff will assist with registering students, and report and track the funding for students enrolled in this program.

DTCC will also:

- Develop and improve training programs.
- 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.
- Assist in placing new water operators in jobs for the Delaware Drinking Water Industry.

**Technical Training 2%**

The Delaware Technical Community College Environmental Training Center will:

- Provide tuition assistance for continuing education for approximately 70 Operators-In-Training and licensed water operators that include DTCC's 2025-11, 2025-12, and 2025-13 semesters.
- Provide tuition assistance for the Base Level Water Operators Course to approximately thirty (30) new operators that include DTCC's 2025-11, 2025-12, and 2025-13 semesters. Base level math will be offered as part of the program if the student is in need.
  - This grant shall also provide tuition assistance to guarantee the execution of a fall and spring Base Level Water Course. Such assistance will count against the 30 tuitions allotted for this contract.

- Provide tuition assistance to thirty (30) water operators seeking endorsements.
- Provide tuition assistance to twelve (12) limited license water operators.
- This grant shall also provide tuition assistance to guarantee the execution of a fall and spring Limited License Water Operators Certification Course. Such assistance will count against the six (6) tuitions allotted for this contract.
- Recruit students through advertisement in the local press to enter a drinking water training program.

## **Delaware Rural Water Association**

### **STATE REVOLVING FUND (SRF)**

**2%**

Delaware Rural Water Association (DRWA) will provide 100 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, and workforce development training. EPA Region III activities and workshops and acting as a liaison between interested parties and stakeholders. Additionally, DRWA will provide 1:1 regulatory training for municipal decisions makers including PFAS/emerging contaminants and LSLI compliance.

#### Priority Technical Assistance:

DRWA will work with the DWSRF Set Aside Manager, Office of Drinking Water Capacity Development Office, and Office of Engineering in identifying systems in need of priority technical assistance under the Enforcement Targeting Tool (ETT) System. Systems may be defined as community, non-transient non-community, transient and/or seasonal.

Priority identification criteria may include, but not be limited to, systems receiving a public notice, critical sanitary survey violations, contamination exceedance and emergency response planning. This program will also provide technical assistance with public education awareness on PFOS & PFAS and assisting systems with the new LCRR Regulation and Private Well Public Educational Awareness. Any system found in need of infrastructure improvements shall be referred to the DWSRF program for future assistance. Assistance may include contamination prevention, rule education, water specialist operator training and/or preventive maintenance assistance planning. Priority systems can be classified as those that are either already out of compliance or reaching non-compliance.

#### Mobile On-Site Training Assistance:

DRWA will deploy upon request the mobile on-site training unit to demonstrate system specific needs to SRF funded systems so that they understand either operational or testing methods to meet the Safe Drinking Water Act (SDWA) compliance and public health benefits. Such assistance could include, but not be limited to, SRF funding opportunities, public awareness of Drinking Water Standards, contamination prevention, lead service line identification assistance, water treatment process and dealing with unregulated contaminants.

GIS/Location-Mapping/Drone Assistance:

DRWA will deploy upon request GIS/Locating devices and software along with drone capabilities. Data collected through deployment can be particularly helpful when reporting BIL project progression and success stories. This data will be shared with DPH upon request.

### **Cross Connection Control Planning Management (CCCPM) 2%**

With the adoption of the new Drinking Water Cross Connection Control Regulation that went into effect February 11, 2021, DRWA will provide on-site assistance to SRF funded municipal water systems. DRWA will assist on-site with the 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. Services provided will be conducted in accordance with all current local, state, and federal codes.

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 systems hands-on technical assistance which will include data collection, program procedures, testing notifications, review of treatment and distribution system infrastructure site plans and make recommendations on the types and placement of backflow prevention assemblies in the prevention of contamination into the water source.

Cross-Connection Control Plan ordinances may need to be written, reviewed and changed at times. Such changes include cross-connection control plan policies and procedures as the system infrastructure grows. Most plans are not currently being followed within some municipalities such as irrigation lines being tied directly to potable water systems without any preventive measures. Delaware Rural Water/HydroCorp shall assist 5 community water systems in doing Cross Connection Control Plan implementation.

This program will help identify and provide the needed assistance in the field where contamination could occur and demonstrate preventive and corrective measures. DRWA will also provide on-site assistance at several locations conducting basic on-site system evaluations starting at the water source (well) into the municipal facilities, demonstrating to municipal system operators and town officials on how to identify potential contamination sites resulting from cross connections.

DRWA and HydroCorp will also conduct 4 Cross-Connection Control Planning Management virtual workshops for municipal operations specialists and municipal members. The workshops will provide guidance on how the asset management plan can be used during capital improvement planning, updating program procedures, data reporting, responsibilities of the water operators and protocols on the prevention of contamination in the municipals water treatment and distribution system.

## **Career Training for High School Students (CTHSS)**

**2%**

The Delaware Rural Water Association (DRWA) is a statewide non-profit association dedicated to providing technical assistance and specialized training for rural water and wastewater systems. DRWA proposes to provide, to a minimum of five (5) Delaware High Schools representing each county, a program to demonstrate the need for young adults to enter the field of drinking water distribution, operations, and water treatment.

Students in each school shall be taught and tested as they were an entry level operator and the curriculum for this entry level instruction shall cover source water protection, SDWA regulations, distribution system operations and maintenance, basic lab procedures and sampling and testing methods.

This introductory entry level course will be open to any student that is interested in venturing into a career related to water treatment and water operations and 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.

DRWA is focusing priorities on workforce development. In addition to the highly successful High School Program, we are building a formal pathway from High School participation (Junior Year) to Pre-Apprenticeship (Senior Year) then to Apprenticeship and full-time employment in the water industry. To build a robust program, DRWA will need to seek more education-specific talent, including top-notch instructors who can build first-rate curriculums and incorporate classroom training with hands-on skills.

### **4% Program Administration**

The 4% Supplemental Set-Aside will be used to fund required program audits and the salaries, fringe benefits, travel, supplies, contractual services, indirect, and other personnel charges of DHSS DWSRF, and Environmental Hazards and Toxicology FTEs.

### **10% State Program Management**

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

### **Office of Drinking Water (ODW)**

#### **Operator Certification**

**10%**

The costs of maintaining the Operator Certification program remain low. However, updates and enhancements to the program are underway and may elicit temporary funding increases.

### *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 114 Approved Sampler/Tester-only individuals and approximately 501 active licensed water operators:

- Water Supply Operator (Base Level) - 385
- Distribution Operator - 8
- Limited License - 35
- Grandfather License - 9
- Operator in Training (OIT) - 2
- Reciprocal License - 28

### *Future Plans*

DHSS will continue to administer the Operation 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.
- Expand regulatory-related trainings to water operators by ODW staff, including greater online training opportunities.
- Provide administrative review and processing of water operator licenses renewals.
- Provide support 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.

### *Outcomes and Benefits*

- Regulatory oversight of all water operator licensure via ODW staff.
- Vast majority of Delaware public water systems requiring a licensed water operator will adhere to 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.
- License renewal and associated continuing education compliance will be tracked and maintained administratively via a database.
- Increased Base-level Operator and Endorsement examinations and training opportunities for Delaware licensed water operators.

### *Evaluation*

ODW will meet with DWSRF quarterly to review deliverable accomplishments. Successes and barriers will be evaluated, and adjustments will be made accordingly. DWSRF will provide the



EPA with Set-Aside reports for the periods of October 1, 2024 – March 31, 2025, and April 1, 2025 - September 30, 2025.

## **Public Water Supply Supervision**

**10%**

### *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. This program has also assumed responsibility for oversight and compliance for the LCR. Each Environmental Health Specialist II is responsible for LCR compliance for all water systems within their assigned territories.

### *Future Plans*

The PWSS Program will work with applicable stakeholders on the installation and implementation of electronic submittals of drinking water sample results analyzed by private Delaware-certified drinking water laboratories through CMDP. The program will also begin investigating options for performing electronic sanitary surveys in the field and an electronic CCR Writer platform to further assist water systems with CCR compliance. The PWSS Program will be pursuing a direct contract with a vendor for SDWIS upgrades with ongoing maintenance.

### *Objectives and Outputs*

- Monitor, track, and report compliance for approximately 461 Public Water Systems.
- Develop a plan for private drinking water labs 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.
- Build LCR resiliency within the PWSS Program.
- Faster response to issues related to SDWIS.

### *Outcomes and Benefits*

- Approximately 95% of Delaware's population served by public water systems will receive water that meets all health-based standards.
- 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 public will have access to 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.
  - Improve overall LCR compliance and rule management resiliency.
  - Improve response efficiency for SDWIS upgrades and maintenance of the SDWIS database.

#### *Evaluation*

PWSS will meet with DWSRF quarterly to review deliverable accomplishments. Successes and barriers will be evaluated, and adjustments will be made accordingly. DWSRF will provide the EPA with Set-Aside reports for the periods of October 1, 2024 – March 31, 2025, and April 1, 2024 - September 30, 2025.

### **Delaware Public Health Laboratory**

**10%**

#### *Relationship to On-Going Program*

The Delaware Public Health Laboratory 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 to protect public health through the detection of microbiological and chemical contaminants. DPHL upholds these responsibilities by providing analysis and valid results to Delaware's regulatory agency (Office of Drinking Water).

#### *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 and digital PCR analysis for the detection of Legionella (both in progress).

- Now that all instruments and reagents have been purchased, the analyst has been working diligently with the instrument vendor (Agilent), EPA Region III, as well as public health labs in other states (Arkansas, Nebraska) to move forward with method implementation for 525.2.
- A new automated instrument for extraction was purchased and installed for the digital PCR method for Legionella detection. Legionella cultures were also ordered from ATCC to begin method validation.

### *Future Plans*

- Implement EPA method 525.2 for pesticides, this will include the purchase of reagents required for analysis.
- Implement and validate updated US EPA approved methodologies per the Clean Water Act 1972.
- Achieve certification for EPA method 525.2.
- Implement and validate a digital PCR method to detect *Legionella pneumophila* in drinking water that will permit preliminary results within 24 hours of submission.
- Implement EPA Method 531.2 for the detection of herbicides in drinking water, this will include the purchase of an HPLC instrument (estimated cost \$115,000), reagents and supplies.
- Implement EPA Method 533 for the detection of PFAS in drinking water, this will include the purchase of an LC/MS-MS (estimated cost \$500,000), reagents, and supplies.
- Pursue grant funds to maintain updated technologies including equipment (instruments, incubators, autosamplers, balances, waterbaths, chillers, vacuums) and supplies (reagents, standards, acids, gases, vials, filters, syringes, pipette tips, pipettes) as required by the US EPA program. Estimated cost for supplies, reagents, instrument gases and maintenance contracts \$300,000.
- Purchase new equipment to maintain higher levels of operational efficiencies and cost effectiveness (estimated cost \$200,000).
- Maintain compliance with US EPA and state standards and regulations.
- Continue to perform the responsibilities of the certification officer program for the state of Delaware. This includes sending two staff members to Certification Officer training in Inorganics and Microbiology.
- Ensure that the Delaware Public Health Laboratory meets all certification testing standards defined by the US EPA.
- Ensure that the laboratory is cooperating and integrating with associated programs to ensure best use of funding, personnel, and equipment.

### *Objectives and Outputs*

- Continue analyzing samples for the presence of *Legionella* utilizing screening and molecular methods (Approximate cost \$40,000 with new digital PCR method).
- Continue to purchase, instruments, supplies and reagents to maintain higher levels of operational efficiencies and cost effectiveness. (Approximate cost for supplies and reagents is \$300,000 annually including instrument gases and instrument maintenance contracts. Approximate cost of instrument replacement \$200,000 with install, training, and warranty extension).
- 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 2023 to September 2024:
  - Samples for chemical analysis 19,464
  - Samples for bacteriological 8,059
  - Tests reported 112,980
- The Delaware Public Health Laboratory will continue to perform audits for the

- certification of drinking water testing laboratories within Delaware. Continue to support two additional positions to allow time to perform external laboratory certification audits.
- Continue to support salary positions for all analysts (Chemists, Microbiologists and Lab Manager) as well as the Supply, Storage, and Distribution Tech I whose role as the lab courier allows us to receive EPA regulated samples for testing in a timely manner while abiding by EPA compliance rules for sample transport.

#### *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 31<sup>st</sup> 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 Delaware Public Health Laboratory meets and exceeds all EPA requirements and maintains certification for analyzing drinking water samples by US EPA.

## **Department of Natural Resources and Environmental Control (DNREC)**

### **Underground Injection Control Program**

**10%**

#### *Relationship to On-Going Program*

The Underground Injection Control (UIC) Program continues to be administered by the Delaware Department of Natural Resources and Environmental Control's Division of Water. This regulatory program controls real and potential sources of groundwater contamination thereby protecting Delaware's potable water supply for present and future use and protect public health.

#### *Future Plans*

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 and oversight support on the State's management of wastewater treatment and disposal systems. UIC Program activities include permitting, compliance, and enforcement, integration of water quality protection and management with local, state, and federal programs, providing technical assistance and support to municipalities, counties, and utilities regarding wastewater treatment and disposal operations, and managing information including groundwater monitoring data.

#### *Objectives and Outputs*

- Review applications and issue 20 large OWTDS Permits.

- The UIC Program will continue to review applications and issue large On-site Wastewater Treatment and Disposal System (OWTDS) Construction and/or Operations Permits that include effluent limitations, operational, monitoring, and reporting requirements designed for the protection of public health and the environment.
- Inspect 225 large on-site wastewater treatment and disposal systems, and other Class V UIC wells (e.g., remediation projects, aquifer storage and recovery projects).
  - The UIC Program will continue to perform inspections and groundwater monitoring data reviews of wastewater treatment and disposal systems (i.e., Class V UIC Wells), and if any compliance issues are identified, follow-up with informal (i.e., Notices of Violation) and/or formal (i.e., Orders) to gain compliance with permit conditions, State, and/or Federal Regulations. As part of the inspection program, the UIC Program is also instituting a wastewater treatment and disposal system effluent and groundwater monitoring verification program designed to split monitoring samples and ensure monitoring data submitted is representative of onsite conditions.
- Work to migrate current wastewater treatment and disposal systems data into EQUIS™.
  - The UIC Program will continue to provide contract support to the Division of Water for the development of the Environment Quality Information System (EQUIS™). The implementation of this application supports the UIC Program's data collection, storage, and analysis requirements by sharing analytical groundwater data throughout the State for permit and compliance evaluations and allow the submission of electronically and continuous real-time monitoring data.
- Participate in UIC technical assistance and outreach opportunities.
  - The UIC Program will continue to participate in technical assistance and outreach opportunities including offering technical support to municipalities, counties, and utilities regarding wastewater treatment and disposal operations and technologies, continue to participate in EPA's Decentralized Wastewater MOU Partnership, and continue to work with public and private partners on economic development plans through the Department's Planners Technical Advisory Committee (PTAC).
- Participate in the implementation of the pollution control strategy (PCS) for the Chesapeake Bay Watershed.
  - The UIC Program will continue to implement the pollution control strategies for the Chesapeake Bay Watershed including wastewater treatment and disposal system performance and monitoring and septic elimination. As part of this objective, the UIC Program will continue to participate in conference calls/meetings with the Chesapeake Bay Interagency Work Group, Chesapeake Bay Watershed Implementation Plan Group, and calls/meetings for consultation with the Division of Watershed Stewardship's Water Quality and Assessment Program on Delaware's Water Quality Standards.

### *Outcomes and Benefits*

- Real and potential groundwater impacts from wastewater treatment and disposal systems can be accurately identified and managed including implication of best management practices (BMPs) and mitigation measures.
- Groundwater contamination from underground injection wells will decrease.
- The EQUIS™ data management application will provide a powerful tool to manage, visualize, and assess groundwater monitoring data, ensuring a more data-driven integrated approach to policy and compliance decision-making, and greater protection of groundwater resources and public health.
- Technical support to municipalities, counties, and utilities regarding wastewater treatment and disposal operations and technologies will ensure improved performance thereby protecting public health and the environment.
- Collaboration between government agencies and non-profit organizations will increase pollution prevention and reduction opportunities in the Chesapeake Bay Watershed.

### *Evaluation*

The UIC Program will meet with DWSRF quarterly to review deliverable accomplishments. Successes and barriers will be evaluated, and adjustments will be made accordingly. DWSRF will provide the EPA with Set-Aside reports for the periods of October 1, 2024 - March 31, 2025, and April 1, 2025 - September 30, 2025.

## **15% Local Assistance/Other Programs**

The 15% Supplemental Set-Aside will be used to fund the salaries, fringe benefits, travel, supplies, contractual services, indirect and other personnel charges of DHSS Office of Drinking Water, Office of Engineering, Environmental Hazards and Toxicology, and DNREC Division of Water FTEs.

## **Office of Drinking Water (ODW)**

### **Capacity Development Program NEW systems 15%**

#### *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 PWS can operate and/or maintain compliance with SDWA regulations. Since the initial implementation of the Capacity Development Program in Delaware, all DWSRF loan applicants have been assessed for TMF needs 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 Lead and Copper Rule (LCR) compliant sampling plans upon activation as a public water system and provide assistance to achieve compliance with Lead and Copper Rule Revisions.
- 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).
- Add contract staff to develop and implement a voluntary cybersecurity assessment program.

#### *Objectives and Outputs*

- Provide assistance to all proposed PWSs 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 PWSs in LCR/LCRR compliance and related activities.
- Report the names 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.
- Develop a voluntary cybersecurity assessment program to assist water systems with cybersecurity initiatives.

#### *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 PWSs will receive assistance with LCR/LCRR compliance requirements.
- New PWSs identified in need of assistance shall be referred to technical assistance providers (DRWA, SERCAP).
- Ensure cybersecurity resiliency to protect public health.

### **Capacity Development Program EXISTING Systems**

**15%**

#### *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 PWSs to facilitate compliance with the Lead and Copper Rule (LCR), the Consumer Confidence Rule (CCR), 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 understanding of the regulations, including the LCR Revisions, CCR, and other state and federal regulations in development.
- Refer existing PWSs with a score of 5 and greater on the ETT list to technical assistance providers.
- Encourage and assist PWSs to develop and implement asset management plans that include best practices for asset management as required by AWIA.
- Add contract staff to develop and implement a voluntary cybersecurity assessment program.

#### *Objectives and Outputs*

- Provide in-depth training in CCR report creation to technical and managerial staff of CWSs in Delaware to facilitate a better understanding of requirements and to increase compliance with the CCR.
- Assist existing PWSs with an ETT score of 11 or higher or that are identified 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 to include preparedness for LCRR compliance requirements.
- Track and report existing PWSs appearing on the ETT report with scores of 5 and greater to technical assistance providers to facilitate achieving compliance.
- Develop a voluntary cybersecurity assessment program to assist water systems with cybersecurity initiatives.

#### *Outcomes and Benefits*

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

#### *Evaluation*

Capacity Development Program representative(s) 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 Program will provide EPA with Set-Aside reports for the periods of October 1, 2024 – March 31, 2025, and April 1, 2025 - September 30, 2025.



## Delaware Technical Community College

### **Course Development and Workshop Host**

**15%**

- Develop two “Train the Trainer” courses for the instructors to include updated teaching methods, utilization of hands-on equipment, and implementation of new hands-on assessments. Up to nine (9) instructors will be paid to attend each session. Each “Train the Trainer” will consist of a three-hour session.
- Develop one new in-person class.
- Update and improve existing water courses to modern standards.
- Host one workshop that will be centrally located to address such subjects as Emergency Response, Emerging Technology, Aging Workforce, and PFAS. Workshop Topics will be approved by DHSS personnel.

### **Training Equipment Purchase**

**15%**

This initiative will fund the research, assessment, and purchase of training equipment, textbooks, curriculum, and/or software pertaining to water quality control and processes to enhance classroom instruction and improve field skills.

Research to include:

- Update sampling, lab equipment, and supplies for new and existing Water Sampling courses.
- New books on water sampling, testing, and process control for the lending library.
- Software/hardware for additional Instrumentation and controls.
- Additional software for Environmental/Technical training.
- Training videos and interactive simulations for Water process problem-solving.

## **Department of Natural Resources and Environmental Control (DNREC)**

### **Source Water Protection**

**15%**

#### *Relationship to On-Going Program*

The Source Water Protection (SWP) program continues to be administered by the Department of Natural Resources and Environmental Control (DNREC)'s Division of Water. This regulatory program manages 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 through 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 SWAPP 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 DGS and DNREC Division of Water 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 federal and state agencies, private organizations, and local governments concerning 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 in the New Castle County Resource Protection Area Technical Advisory Committee (RPATAC) and the Delaware Water Supply Coordinating Council.
- 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 continue to participate and lead the 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 will work closely with the Division of Water Licensing Program Coordinator to continue work on the “Bilingual Licensing Examination and Content Development Accessibility and Support Project”, which will offer online training content in multiple languages to prospective licensees pursuing water well, on-site wastewater, or wastewater operation licensees. Additionally, since the training courses will be available online, they will be available to contractors including those from underrepresented sectors at any time of convenience for the prospective licensee.

### *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 SWAPP 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 DGS and DNREC Division of Water monitoring well infrastructure, and the Water Allocation Branch permitting process.

- Support local efforts to develop SWP ordinances and comprehensive plans or other local approaches, and support SWP-related UIC activities, and related needs.
- Work with federal, state agencies, private organizations, and local governments concerning 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) and the Delaware Water Supply Coordinating Council (WSCC).
- Manage data including data collection, data storage, and recovery, including developing GIS datasets and tools, increasing, and managing web availability, and improving efficiency of state and federal data reporting. 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, future Division of Water license holders who participate in the online “Bilingual Licensing Examination and Content Development Accessibility and Support Project” will have improved access and accessibility to training content before sitting for the licensing exams leading to more highly trained and licensed contractors benefitting Delaware’s water resources as well as improved regulatory compliance.
- Cover Crop Program—Ag Strategy.
- DWSRF proposes, to meet EPA’s recommended Ag Strategy, to fund the Cover Crop Program this grant cycle.

#### *Evaluation*

SWP will meet with DWSRF quarterly to review deliverable accomplishments. Successes and barriers will be evaluated, and adjustments will be made accordingly. DWSRF will provide the EPA with Set-Aside reports for the periods of October 1, 2024 – March 31, 2025, and April 1, 2025 - September 30, 2025.

### **Sussex Conservation District**

**15%**

The DWSRF Program will continue to work with the Sussex Conservation District to improve the implementation rate of agricultural Best Management Practices (BMPs) in well-head protection areas, excellent groundwater recharge areas, and all other agricultural areas in Sussex County as part

of an effort to protect the public drinking-water supply and nearby surface waters.

**Brandywine Conservancy 15%**

Contractor will provide work in support of the protection and improvement of source water for drinking water utilities in the State.

**Sustainability 1:1 Assistance and Cyber Security Programs 15%**

The DWSRF Program will continue to work with Kash Srinivasan Group, LLC to provide continued support for Drinking Water Utilities in the State. Contractor will provide support by continuing to offer on-site assessments to public water systems with SCADA control stems, develop and manage relationships with partner entities to accelerate water pollution mitigation efforts on regional farms affecting surface and groundwater sources used by Delaware water utilities and work with the Capacity Development staff to assist public water systems with creating, implementing and managing asset management plans and assist municipal-owned utilities with financial planning/water rate setting to assure long-term financial sustainability of their public water system.

**Delaware Rural Water Association**

**Water System Operations Specialist Emergency Training (WSOSE) 15%**

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 hands-on workshops will consist of how to respond to different types of emergencies, how to establish a command post and staging areas, prepare 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.

Systems do not receive this type of specialized assistance; they learn when the incident happens, and most are not prepared. Water systems should always be prepared for natural and man-made disasters. 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. Generators, trash pumps, and special valves and fittings are a few to mention and understand the safety of the equipment.

Delaware Rural Water shall assist the DHSS team in training with the new PFOS, PFAS Mobile Training Trailer providing technical assistance, community involvement, operator awareness, and facilitation of training classes as needed.

Additionally, DRWA will provide 1:1 PFAS and Emerging Contaminant assistance to water operators including sampling plans, treatment options, and compliance training. The focus will be on responding to emergencies (including PFAS or EC MCL exceedances), Asset Management Plans, and Cybersecurity training, preparedness, and response.

**Lead and Copper Rule Technical Assistance and Education Training 15%**

DRWA and 120 Water are partnering to deliver market differentiated, high -impact and ongoing Technical Assistance to educate State Public Health staff, water utility operators, superintendents, key personnel and city managers about the complexities and nuances of the Safe Drinking Water Regulatory Compliance. The partnership will conduct, at a minimum, four (4) 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. 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.

Additionally, DRWA will provide the ‘heavy lift’ to bridge the gap from regulations to boots on the ground implementation. Staff will provide timely and knowledgeable 1:1, system-specific assistance from funding opportunities (coordinating with the DWSRF contract) to accurate data collection and input to 120Water/ODW data warehouses, to public education, and pipe replacement guidance with homeowner protocols. DRWA will help break down fears of technology barriers and complex regulations to ensure that even the smallest of water systems can build and maintain compliance; thus, easing some burdens on DPH with decreased violations, reporting, and follow-up.

## **Delaware Nutrient Management Commission**

**15%**

The DWSRF Program aims to bolster the Delaware Nutrient Management Commission’s initiatives to mitigate phosphorous intake in Delaware’s soil, addressing the contamination affecting the State’s source water. The addition of nutrients to bodies of surface water accelerates the eutrophication process, in which the water becomes overly enriched with nutrients. Elevated nutrient levels within the water often cause abnormally high production of algae and aquatic plants. The eventual decomposition of increased amounts of organic matter can deplete the water’s dissolved oxygen content, resulting in the death of fish and other aquatic organisms. Of all cropland nutrient inputs, phosphorous is the most important nutrient to prevent from reaching surface water bodies. Due to low natural levels of phosphorous, phosphorus availability usually limits biological productivity in surface waters.

## **Emerging Contaminants BIL Capitalization Grant**

### **4% Program Administration**

The 4% Emerging Contaminants Set-Asides will be used to fund the salaries, fringe benefits, contractual, travel, supplies, indirect and other personnel costs of DHSS Environmental Hazards and Toxicology and Office of Engineering FTEs. The DWSRF Program will not be utilizing the 2%, 10% and 15% Emerging Contaminants Set-Asides to fund Set-Aside activities.