



DELAWARE DEPARTMENT OF
**NATURAL RESOURCES AND
ENVIRONMENTAL CONTROL**



Delaware's Clean Water Initiative for Underserved Communities

July 2021

Clean Water Initiative Report

Introduction

This report presents a summary of an exploration of ideas to facilitate the implementation of the strategy by the Governor and the Delaware Department of Natural Resources and Environmental Control (DNREC) to create a **Clean Water Initiative (CWI)** which benefits low-income and traditionally underserved communities.

The report is a part of the administration's initiative to address wastewater and drinking water issues in underserved communities. The Governor recommended to the State of Delaware's 149th General Assembly create an appropriation in House Bill 475 – Bond and Capital Improvements Act of the State of Delaware and Certain of its Authorities for the Fiscal Year Ending June 30, 2019 – funding for the CWI. The appropriation was for \$5 million and was to be used for the CWI and provide State Match for the Clean Water State Revolving Fund (CWSRF) Federal Capitalization Grant. In the 150th General Assembly, DNREC and the administration requested a similar appropriation to continue funding the CWI which was added to House Bill 180 – Bond and Capital Improvements Act. That appropriation was \$10 million and was to be used for the CWI and provide State Match for the CWSRF Federal Capitalization Grant. In the 150th General Assembly, DNREC and the administration requested a similar appropriation to continue funding the CWI which was added to House Bill 242 – Bond and Capital Improvements Act. That appropriation was \$5 million and was to be used for the CWI and provide State Match for the CWSRF Federal Capitalization Grant. In the 151st General Assembly, DNREC and the administration requested a \$22.5 million appropriation to support House Bill 200 – The Clean Water for Delaware Act and to continue funding the CWI which was added to Senate Bill 200 – Bond and Capital Improvements Act. That appropriation is \$22.5 million to be used for the CWI and to provide State Match for the CWSRF Federal Capitalization Grant.

The epilogue language for all the above appropriations reads as follows:

Section 88. Clean Water Initiative. *Section 1 Addendum of this Act makes an appropriation to Clean Water State Revolving Fund. At least \$1,600,000 of these funds shall be used for the development, administration and implementation of a clean water financing program to benefit low-income and traditionally underserved communities through lower interest rates and affordability grants.*

The remaining funds are shown below:

FY19 State Match was \$1,571,800 and FY20 State Match is \$1,556,000 leaving a balance of \$1,872,200 in the CWI FY19 appropriation. FY21 State Match was \$1,555,800 leaving a balance of \$8,444,200 in the CWI FY20 appropriation. There is a balance of \$5,000,000 in the CWI FY21 appropriation.

Department of Health and Social Services (DHSS) who is a partner in the CWI received a similar appropriation of \$22.5 million in FY22 for the State Match for the Drinking Water State Revolving Fund (DWSRF) and support the CWI.

Background/Problem Statement

Addressing the wastewater and drinking water needs of low-income and underserved communities in Delaware has been a long-standing problem. Many workgroups have been created over the years to offer remedial help to those “left behind,” which in some instances are low-income, minority and indigenous communities, with wastewater problems and drinking water systems with recognized needs. Those workgroups intended to help small communities and other areas throughout the State, with demonstrated public health and clean water challenges, but lack the technical or financial capacity to address those challenges.

With the proposed FY19 state appropriation of funds, DNREC explored ideas and developed potential solutions for a CWI. A cross-collaborative workgroup met weekly or bi-weekly and participants included staff from DNREC; the DHSS; and the Delaware State Housing Authority (DSHA). The workgroup extracted existing DNREC resources, documents, and subject matter experts' first-hand knowledge of communities with known wastewater and/or drinking water problems.

Chronology:

- 1 CWI meetings began – February 2018
- 2 Secretary briefed on draft CWI Report – September 19, 2018
- 3 Secretary Garvin Letter to Secretary Walker and Director Ben Addi – November 29, 2018
- 4 Reconvened CWI meetings with inter-agency group – February 2019
- 5 Smaller Core Group meet to prepare “shorter list” – April 2019
- 6 Tetra Tech – Contractor for Wastewater and Drinking Water Needs Assessment conducted feasibility analysis of the shorter list of communities – May 2019 – present
- 7 Secretary briefing on Revised Plan – August 28, 2019
- 8 Updated Revised Plan based on input from Secretary – December 30, 2019
- 9 Updated Plan based on new funding from Bond Bill and passage of HB 200 – June 30, 2021

1. Operational Definition of Low-Income Communities

Low-income communities historically have wastewater and drinking water needs, but have no managerial, technical, financial resources, or capacity to address these needs, mainly due to high incidences of poverty, low-income levels, geographical isolation, and the difficulty of attracting septic system operators.

An operational definition for low-income communities has been defined as communities that have at least 51% of the household incomes at or below area the current U.S. Department of Housing and Urban Development (HUD) low-income (80%) limit (LIL) and are connected to septic systems or community systems. This definition was arrived at after reviewing descriptions of underserved communities and it was decided to move forward with a more quantitative definition of low-income as the basis for the proposed initiative.

2. Community Selection Criteria

Lists of communities in need were developed by DNREC, the Water Infrastructure Advisory Council (WIAC), the Clean Water Task Force, and by Sussex County.

The list prepared by DNREC proposed uses of CWSRF additional subsidization funding and CWSRF project eligibilities for these communities. The list organized by WIAC was initially prepared by representatives from a wide variety of funders, non-profits and government agencies meeting under the auspices of the U. S. Department of Agriculture (USDA), to discuss failing septic “cluster” wastewater systems in private communities not served by a government-owned system. This list was included in the 2018 Statewide Assessments of Wastewater and Drinking Water Facilities and Service Areas Request Proposal. The list from the Clean Water and Flood Abatement Task Force Report was completed in July 2015. The list from DNREC was based on field knowledge and reported problems in the communities as of 2018. Finally, the list from Sussex County was derived from communities identified in HUD’s Voluntary Compliance Agreement with Sussex County in 2012, following a lawsuit, and is documented in the report entitled “Impacted Communities Study” (2016). A targeted list of communities was developed for the short-term project strategy. As part of this initiative, the below listed selection criteria was developed by the workgroup to focus the efforts on any underserved community in the long-term strategy:

Description of Criteria	Scoring Points
Project Type: Connection to Central Sewer, Installation of Community (Decentralized) System, upgrade of existing community system, upgrade of individual septs	Central Sewer - 15; New or Upgraded Community System -10; Individual septic upgrade -1
Addresses the feasibility of the sewer solution	High -15; Medium - 10; Low - 5
Estimated cost of the project	Less than \$500,000 - 15; \$500,000-\$1,000,000 -10; Greater than \$1,000,000 - 5
Number of residents in project area (economies of scale)	More than 250 - 15; 100-250 - 10; Less than 100 - 5
Factors: Length of time to complete project, readiness to proceed	Less than 6 months - 15; 6 months - 1 year -10; Greater than 1 year - 5
Implementation of Sewer, Water, and Other Infrastructure upgrades	Sewer and Water together - 15; Sewer only - 10
Level of commitment to project by community leaders	High -15; Medium - 10; Low - 5
Level of interest in residents, local legislators	High -15; Medium - 10; Low - 5
Extent to which other funding sources can be leveraged	Significant Match - 15; Moderate - 10; Minimal - 5
Project is high public health priority for DHSS	High -15; Medium - 10; Low - 5
Amount of nutrients/contaminants removed from environment as result of project	Elimination of greater than 50 septic systems -15; elimination of 25-50 systems - 10; less than 25 systems - 5
For current community systems, the frequency/ number of violations (i.e. DW enforcement actions)	High -15; Medium - 10; Low - 5
For individual septs, number/frequency of complaints to DNREC	High -15; Medium - 10; Low - 5
Distance to the closest central sewer district/provider (to aid those geographical challenged)	Central Sewer greater than 3 miles - 15; 1-2 miles - 10; less than 1 mile - 5
Project Area meets definition of Low-Moderate Income (LMI) as established by CDBG (less than 50% LMI not eligible)	90-100% LMI - 25; 80-89% - 20; 70-79% LMI - 15; 60-69% LMI -10; 51-59% LMI - 5
Project in watersheds implementing a strategy are highest priority	Projects in WIP* - 15; Projects in PCS** - 10
Technical, Managerial, and Financial capacity of project partners	High -15; Medium - 10; Low - 5
Level of nitrates in community water systems	Nitrate levels greater than 10 ppm -15

*WIP – Watershed Improvement Plan; **PCS – Pollution Control Strategy

3. Partnerships and Collaborations

Potential CWI partners could be non-profit organizations, state funding agencies, motivated Manufactured Home Park (MHP) owners, homeowners associations, federal funding agencies, private utility providers, counties, and municipalities. As part of earlier collaborative efforts, it was determined that there was a void in existing non-profits that had the technical, financial, and operational expertise to assist low-income communities. The USDA Rural Development prepared a Request for Information (RFI) in April 2016 to seek non-profits to provide the capacities.

Clean Water Solutions (CWS) evolved from the earlier USDA RFI in which entities submitted independent capability briefings on their organization's ability to provide concentrated support services to rural communities who operate community-owned water and/or wastewater systems. These entities are Diamond State Sustainability Corporation (DSSC), and the Southeast Rural Community Assistance Project who later formed into CWS. DSSC (<http://dsscde.org>) is the technical arm of CWS, created to assist low-income and underserved communities with environmental and infrastructure needs, including wastewater and drinking water issues. DSSC has identified five cluster communities of Country Glen, Morningside Village, Grants Way, Sandy Ridge and Chelesa Villa for a targeted takeover of wastewater assets. DSSC has expressed interest at being a partner with DNREC in implementing clean water solutions for low-income communities. Assisting these communities are part of the CWI long-term strategy.

Sussex County has historically created sanitary sewer districts or expanded districts when petitioned by citizens to do so. Recently, Sussex County has created the Western Sussex Sanitary Sewer District (WSSSD) that will take over the aging infrastructure of Bridgeville and Greenwood and send its sewer flows to the City of Seaford. The CWSRF loan documents state that for this project, additional capacity for 200 EDUs must be reserved for low-income/underserved communities (on a first come first serve basis). There are several communities on the consolidated list that could be served by the WSSSD including three communities targeted by DSSC.

More recently, Sussex County has committed to a partnership with DNREC to assist in serving low-income communities, even if the solution is not central sewer. The communities would be served in districts created under Delaware Code Title 9 § 6501, Establishment of sanitary sewer or water district, where the justification for the districts is the preservation of public health. The benefit is that the county would be a reputable partner to implement projects and be a responsible steward of the funds. However, this partnership would include the requirement of low-income communities to pay the Unified County O&M fee of \$286/EDU annually, but no debt service.

DHSS has received a similar bond appropriation to the CWI. DHSS's Administrator of Health Systems Protection has committed to partnering with in the implementation of the CWI when there are any opportunities for efficiencies and economies of scale to tackle both wastewater and drinking water issues in low-income communities together.

4. Outreach and Stakeholder Engagement

Annual workshops, public notices, and other forms of communication (e.g. focus groups and stakeholder meetings, funding guidelines, press releases and marketing brochures, pilots and demonstration projects) will form the vehicle for outreach efforts, both when announcing the commencement of the CWI and for future updates. Outreach will be made to non-profit organizations, private utility providers, counties, municipalities, motivated MHP owners, homeowners associations, state/federal partners, and local legislators. Prior to any solicitation, the eligibility of MHP owners/private landowners to receive these State CWI grant funds under Delaware Code will be confirmed.

5. Requests for Information/Solicitation

To encourage innovation, all funding applications will be made through RFI or open solicitations supported by documentation including, but not limited to, contaminant and/or public or environmental health information, income surveys and other currently unknown information about low-income and traditionally underserved communities.

Current Census data is unavailable for many of the rural low-income communities due to the census tracts being larger than the community area; therefore, income surveys are necessary to ensure the funds are reaching those most in need and meet the definition of low-income. As a result, income surveys will be required as part of the application for funding.

6. Clean Water Initiative Strategy

Immediate Strategy:

The CWSRF program should identify projects on its current project priority list (PPL) and intended use plan (IUP) that meet the criteria of the CWI. The only project on the PPL meeting the criteria is Donovan Smith MHP. This is an ideal demonstration project. As PPL's are updated, the projects will be screened for CWI funding opportunities.

Project: Donovan Smith MHP

Background: Currently, the MHP is situated outside city limits and sanitary sewage is managed via several onsite community septic systems, which are showing evidence of failure such as areas of active surfacing. DNREC performs inspections at the MHP annually, and over the last several years, and has documented compliance concerns on a number of occasions. Most recently, on January 15, 2021, DNREC staff inspected the MHP's community system. The inspector observed alarm lights flashing and untreated wastewater surfacing above the pressured dosed bed. Since that initial inspection, DNREC has performed inspections on February 17, 2021, March 19, 2021, and April 9, 2021, and documented the continued surfacing of untreated wastewater above the pressure dosed bed. Furthermore, DNREC has received multiple complaints of surfacing wastewater and other issues concerning community septic systems servicing other areas of the MHP. The exposure of untreated wastewater to the public is a significant public health hazard and risk to the environment.

Project: Installation of the Lewes Board of Public Works (BPW) public sewer system will eliminate the failing onsite community systems and provide a safer, healthier, more sustainable sewage collection and treatment alternative. The project will install approximately 4,500 feet of 8-inch PVC sewer main (connected into the existing Lewes sewer collection system on Donovan Road near the Savannah Place development), 28 manholes with frames and covers, approximately 1,300 feet of 6-inch PVC house sewer laterals with cleanouts, sewer main and service trench restoration, for 130 mobile home units, to serve the existing Donovan Smith MHP. Also, the Park's existing sewage holding tanks will be abandoned.

Estimated cost: \$2,283,063

Environmental benefit: elimination of non-conforming septic system, eliminate sewer overflows, improve quality of ground water

Funding Source: CWI Bond Bill, CWSRF and DWSRF

Why this project should be funded by CWI: The project meets the following CWI criteria:

- 1 Connecting septic system to central sewer
- 2 Practical and feasible solution to pollution problem
- 3 Project is ready to proceed
- 4 Will implement drinking water project at same time
- 5 Leverages other funds
- 6 High priority for DHSS
- 7 System has a history of complaints
- 8 System is contiguous to central sewer
- 9 Meets CWI criteria for income (income survey has been completed)
- 10 The technical, managerial, and financial capacity of the Lewes BPW are high
- 11 Project implementation will reduce nitrate levels in ground water
- 12 This project has backing from the local legislators

Next Steps: The project was presented to WIAC on February 20, 2021 and the funding was approved. DNREC is working with state AG, Lewes BPW, and MHP owner to finalize the MOU required by the financing. DNREC issued a Notice of Violation (NOV) on July 8, 2021 documenting the non-compliance and requiring interim corrective actions until the sewer connection is completed. Interim corrective actions include: (1) temporary fencing and the posting of “Keep Out” signs around all areas of surfacing wastewater, and (2) within five days of the NOV, pumping of wastewater from dosing tanks for offsite disposal every three days for failing systems, or more frequently if wastewater surfacing is observed. DNREC has determined that a “central wastewater system” is physically and legally available to the MHP; therefore, Donovan-Smith, MHP, LLC, must correct these violations by connecting the MHP to the sanitary sewer system.

Fiscal: This project will be initially funded by CWSRF program. After completion of construction, CWSRF portion of the loan will be principally forgiven by CWI Bond Bill funds.

Impact on Bond Bill Funds: The total project cost including impact fees will meet the FY 19 requirement to use at least \$1.6 million for low-income communities.

Short-Term Strategy:

The CWI Workgroup identified a “shorter” list of communities to be targeted. These communities were derived from the DSHA “Strong Communities” and MHP target areas. Communities that already have central sewer were removed and the list has been pared down to sixteen. That list was provided to the wastewater and drinking water needs assessment contractor, Tetra Tech, to do feasibility studies to determine the most promising projects to move forward with. The short-term strategy is to successfully implement three to five pilot projects. Once we have identified the pilot projects, we will reach out to stakeholders, potential partners, and community groups to begin the process. Below is the list for the short-term strategy:

Name	County	City or Town	Public Water	Public Sewer
Twin Maples MHP	Kent	Near Kenton	Community	Community
Flying Dutchman MHP	Kent	Woodbury	Community	Community
Lucas Development	Sussex	Milton	No	No
Mount Joy	Sussex	Millsboro	No	No
Concord	Sussex	East of Seaford	No	No
Possum Point	Sussex	Millsboro	No	No
Coverdale Crossroads	Sussex	Bridgeville	No	No
Cedar Creek (Near Lincoln)	Sussex	Milford	No	No
Cool Spring	Sussex	Near Harbeson	No	No
Diamond Acres	Sussex	Dagsboro	No	No
Greentop	Sussex	Lincoln	No	No
Slaughter Neck	Sussex	Lincoln	No	No
Layton's Riviera	Sussex	West of Seaford	Community	No
Dog Patch (near Clarksville)	Sussex	Millville	No	No
Marathana MHP	Kent	Magnolia	No	No
Countryside Hamlet	Sussex	Dagsboro	Community	No

Long-Term Strategy

The long-term strategy will be further defined based on the lessons learned from early pilots and the collection and analysis of data relative to the CWI. The plan is to further develop the guidance and application process. Workshops will be held, and stakeholders along with potential partners will be invited. A public solicitation process will be conducted similar to other solicitations that have been conducted by DNREC. Projects will continue to be identified on the CWSRF PPL that meet the criteria of the CWI and use the funds appropriately.