**West Virginia**
**Clean Water State Revolving Fund**

# FY2024
# Intended Use Plan

Submitted to the
U.S. Environmental Protection Agency
Region III
June 30, 2023

**west virginia department of environmental protection**

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## Appendices

# Glossary

The following abbreviations are used throughout this document to denote the listed words, terms and phrases:

AgWQLP – West Virginia Agricultural Water Quality Loan Program

ARC – Appalachian Regional Commission

BAN – Bond Anticipation Note

BCL – Binding Commitment Letter

BIL – 2022 Bipartisan Infrastructure Law

BRF – Brownfield Revolving Loan Fund

CA – West Virginia Conservation Agency

CWA – Federal Clean Water Act

CWSRF – Clean Water State Revolving Fund

DEP – West Virginia Department of Environmental Protection

DHHR – Department of Health and Human Resources

DWWM – Division of Water and Waste Management

DEP EBPP – Extended Bond Purchase Program

EPA – United States Environmental Protection Agency

IJDC – West Virginia Infrastructure and Jobs Development Council

IUP – Intended Use Plan

MHI – Median Household Income

NRCS – Natural Resources Conservation Service

NPS – Nonpoint Source

OA – Operating Agreement

OSLP – Onsite Systems Loan Program

PFAS – Polyfluoroalkyl Substances

POTW – Publicly Owned Treatment Works

PSC – Public Service Commission of West Virginia

USDA – United States Department of Agriculture

USGS – U. S. Geological Service

SCD – Soil Conservation District

WDA – West Virginia Water Development Authority

WRRDA – 2014 Water Resources Reform and Development Act

WWTP – Wastewater Treatment Plant

# Preface

## Mission Statements

**Department of Environmental Protection**

To efficiently and effectively carry out the State's environmental laws and regulations that are designed to provide and maintain a healthful environment consistent with the economic benefits derived from strong agricultural, manufacturing, tourism and energy-producing industries.

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**Division of Water and Waste Management**

To protect, preserve and enhance West Virginia's land and watersheds for the safety and benefit of all.

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**Clean Water State Revolving Fund**

To provide technical and financial assistance to local governmental entities to improve water quality and public health conditions.

# SECTION I
# Introduction

This document is the Clean Water State Revolving Fund's Intended Use Plan for state fiscal year 2024 (July 1, 2023 – June 30, 2024 (FY2024)). The Division of Water and Waste Management is the primary state agency that administers the Clean Water State Revolving Fund, with financial and support assistance provided by the West Virginia Water Development Authority.

As of July 1, 2023, there have been 35 federal capitalization grants and amendments awarded by the Environmental Protection Agency. The State has provided, where required, the 20% matching funds for each grant and amendment.

Repayments of prior loans and bonds and investment earnings are also available within the Clean Water State Revolving Fund to fund additional wastewater and nonpoint source projects. A calculation of available funds during this fiscal year is contained in Section II.

# SECTION II
# Funds Identification

The chart on the next page identifies the revenue sources that will be used for loans and other anticipated expenditure categories.

A similar chart can be found in Appendix E, which is used by EPA for its purpose only. This chart summarizes the federal capitalization grants, state matches, repayments, earnings, etc., since the program began. It also estimates the fiscal year revenue sources to calculate a theoretical amount of funds available.

# WEST VIRGINIA CLEAN WATER STATE REVOLVING FUND

## Intended Use Plan – Sources and Uses of Funds

## State FY2024 (July 1, 2023 – June 30, 2024)

**Available funds as of March 31, 2023:**

| | | |
|---|---|---|
| Cash balance in CWSRF account = | $226,627,094 | |
| Federal funds accounts payable (base grants) = | $ 0 | |
| | | $226,627,094 |

**New funds available during state FY2024:**

| | | |
|---|---|---|
| Next Federal EPA Base Grant | $ 11,694,000 | |
| Next Base State Match | $ 2,338,800 | |
| Next Federal BIL Grant | $ 32,493,000 | |
| Next BIL State Match | $ 3,249,300 | |
| Emerging Contaminants Grant** | $ 3,315,000 | |
| Est. Repayments (principal) (to 6/30/24)* = | $ 36,705,807 | |
| Est. Repayments (interest) (to 6/30/24)* = | $ 3,437,246 | |
| Est. Investment Earnings (to 6/30/24)* = | $ 5,517,432 | |
| | | $ 98,750,585 |

**Less:**

| | | |
|---|---|---|
| Existing project loans payables (3/31/23) = | $ 45,603,576 | |
| Existing binding commitments (3/31/23) = | $ 43,873,634 | |
| Existing Intent to Fund letters (3/31/23) = | $ 36,801,459 | |
| AgWQLP reserve = | $ 500,000 | |
| OSLP reserve = | $ 500,000 | |
| DEP Administration = | $ 0 | |
| | | $127,278,669 |

**Net available funds during FY2024 = $198,099,010**

Notes:

The matches should be received by July 2023.

* These are estimates at this time. Project funding will be adjusted to accommodate the actual funds received.

** No match is required

# SECTION III
# Goals

**A. <u>Long term goals</u>**

1. Expand the CWSRF accessibility by creating new financial assistance programs to address NPS pollution control problems.

2. Ensure the CWSRF program operates in perpetuity at its maximum level to provide financial assistance to entities approved by law.

   <u>Objective 1</u> – Conduct financial capability reviews on all potential loan recipients to assure credit worthiness and fiscal responsibility.

   <u>Objective 2</u> – Maximize investment opportunities.

   <u>Objective 3</u> – Monitor repayment activity of loan recipients and take action for collection of delinquent payments from loan recipients.

   <u>Objective 4</u> – Utilize EPA's financial planning model to ascertain the long-term effects of different CWSRF policies.

3. Integrate the CWSRF program into DEP's Watershed Management Framework to increase program effectiveness by targeting the CWSRF funds toward higher priority watersheds.

4. Market the CWSRF program throughout the State to increase commitment/ utilization of funds and maintain program pace by providing articles, press releases, and presentations on CWSRF program activities and participating in meetings of Federal and State associations concerned with water quality, health, and economic development issues.

5. Participate in the monthly meetings of the IJDC. Participation will include performing technical reviews on all proposed wastewater projects and coordinating and recommending the most feasible funding sources for all projects.

6. Incorporate EPA's strategic plan program activity measures into the CWSRF program by working to achieve a targeted fund utilization rate of 100% (cumulative dollar amount of loan assistance agreements divided by cumulative amount available for projects).

7. Develop effective wastewater management in rural, low income West Virginia communities. This includes investigating new funding opportunities and participating with local community leaders and civic groups to develop wastewater management ideas and programs.

**B. <u>Short term goals</u>**

1. Continue outreach efforts for potential new loan recipients.

2. Maintain a targeted fund utilization rate "pace" goal of at least 95%. Program pace is defined by EPA as the cumulative loan assistance provided, divided by the total amount of funds available. Loan assistance is defined as the cumulative assistance provided by executed loan, bond, and funding assistance agreements (does not include preliminary binding commitment letters).

3. Provide outreach and requested technical assistance to several communities in the Tygart River Watershed as they consider biological nutrient removal processes in their systems.

4. Coordinate and work with WV DEP's Abandoned Mine Lands section on the planning, design, and construction of wastewater treatment facilities that were awarded PILOT Grants.

5. Re-evaluate and potentially restructure the AgWQLP to entice applicants back to the program.

6. Partner with DHHR and USGS to determine what, if any, impacts PFAS will have on wastewater treatment systems and non-point projects in WV.

7. Market the emerging contaminants funding and encourage facilities to apply for funding for eligible projects.

# SECTION IV
# Project Priority List

The Project Priority List is contained in Appendix A. The list includes potential CWSRF binding commitments for Section 212 projects (publicly owned treatment works). Projects must appear on the priority list in order to receive consideration for a loan/bond purchase agreement or a formal loan commitment. The list was developed using fact sheets received from each applicant, consulting engineer or other representative, and should reflect current costs. If additional projects are developed during the fiscal year that do not appear on the list but would like to receive a commitment, they may be added to the list after adequate public notification procedures have been completed. This procedure generally takes 60 days.

The CWSRF will continue to commit funds to projects in order of their position on the priority list on a first-come, first-served basis, as long as all applicable program requirements have been met and the project is within six months of construction. At a minimum, the facilities plan, and plans and specifications must be approved. Consideration will be given to the status of rights-of-way obtainment and other items on the pre-bid checklist during this process. As projects are

deemed eligible for a binding commitment; they will be funded in order of priority. Furthermore, a project will not receive a commitment from the CWSRF unless it has received a funding recommendation from the IJDC in accordance with WV State Code, Chapter 31, Article 15A. This binding commitment from the CWSRF will remain in effect until the expiration date contained in the commitment and is subject to an extension.

Individual NPS pollution control activities and projects funded by the CWSRF do not have to appear on the annual priority list. However, the funding of these projects is described in Section V(I) and an amount has been reserved to fund these projects. These NPS projects are eligible for funding using state revolving funds in accordance with federal law and are defined under Section 319 of the CWA. Any type of NPS activities funded must be included in the DEP's approved NPS management plan.

# SECTION V
# Fund Activities

**A. <u>Interest rates on POTW loans</u>**

The eligibility criterion for low interest loan consideration will be based upon 3,400 gallons of monthly water usage. The DEP will use this criterion to determine the interest rate on loans. The maximum allowable term of the loans will be determined using the following range of user rates and MHI data:

*Less than 1.5% MHI:* *Terms will be based upon the 25-Bond Revenue Index. At BCL issuance, the CWSRF will use the last published rate less 5 basis points (.05) for a 20-year term. At no point will the terms exceed 2.75% interest rate, .25% annual admin fee, 20-year term**

*1.5% to 1.74% MHI:* *1.75% interest rate, .25% annual admin fee, 21 - 30-year term*

*1.75% to 2.0% MHI:* *.75% interest rate, .25% annual admin fee, 21 - 30-year term*

*Greater than 2% MHI:* *.25% interest rate, .25% annual admin fee, 31 - 40-year term*

The MHI data is derived from the 2020 census data published by the U.S. Department of Commerce, U.S. Census Bureau, American Fact Finder. Interest rates will not exceed 2.75% and will not be less than .25%. For all public service districts, the MHI to be used will be the lowest of either the county(s) or magisterial district(s) that is most appropriate for the project area. Magisterial district and county information can be found in Appendix D. Municipal MHI data is contained in Appendix D1.

Due to some concerns over the 2020 Census data, the use of income surveys to verify the MHI of individual communities will be allowed. Please see the CWSRF website for further guidance. https://dep.wv.gov/WWE/Programs/SRF/Pages/default.aspx

Should Congress amend the CWA or pass reform legislation that affects small, disadvantaged communities, the DEP may revise this interest rate policy to consider other factors as required by federal law.

The terms mentioned above will also be applied to stormwater projects.

* For collection system projects, a 30-year term will be considered if a substantial rate impact can be documented.

**B. Additional subsidization for disadvantaged communities**

This year's Clean Water Act Title VI funding allocation for West Virginia is $11,694,000. The Appropriations Act requires that a portion of each capitalization grant be used for additional loan subsidization and for funding green infrastructure projects. The Act requires a minimum of 10% be set aside for funding green projects. This amount will equal $1,169,400. The BIL states that the green project reserve provided for in the annual appropriation is applicable to the BIL capitalization grants. This amount will equal $3,249,300. The allowable green project categories that will be considered for this funding are described below.

The Act also requires a minimum amount be set aside for providing additional loan subsidization in the form of grants or principal forgiveness. Therefore, DEP will be setting aside $4,677,600 from the capitalization grant to be used as principal forgiveness.

This year's BIL funding allocation for West Virginia is $32,493,000. BIL requires that 49 percent of the allotment ($15,921,570) be in the form of grants or principal forgiveness.

Principal forgiveness of all or part of a loan will be the mechanism that will be used to supply the additional subsidization. Additional loan subsidization is a last resort for disadvantaged communities and will only be provided when other funding options within the CWSRF program are not practical to make the project financially affordable (i.e. 40-year loan terms, deferred principal repayments, reduced debt service coverage, etc.).

The 2014 Water Resources Reform and Development Act (WRRDA) amended sections of the Federal Water Pollution Control Act (FWPCA). Amendments to 603(i)(2) required States to develop affordability criteria that would assist in identifying applicants that would have difficulty financing projects without additional subsidization. The criteria, based upon a points system that will be used to identify these applicants as per WRRDA, are as follows:

Income based upon %MHI – Based upon the 2020 Census data for 3,400 gallons of water usage.

| MHI | Point |
|---|---|
| 1.25% - 1.74% | 20 |
| 1.75% - 1.99% | 30 |
| 2.0% - 2.4% | 40 |
| 2.5% or greater | 50 |

Unemployment Data – As published by WorkForce West Virginia, the State's average unemployment rate was 4.0% in 2022. See Appendix G.

| Locality's Unemployment Rate (UR) | Points |
|---|---|
| UR < West Virginia's UR | 0 |
| UR 0% - 2% above West Virginia's UR | 10 |
| UR > 2% above West Virginia's UR | 20 |

Population Trends – Based upon the percentage change for the period from 2015 to 2020 (calendar years) by county as published by the 2020 Census. See Appendix H.

| Change in Population | Points |
|---|---|
| Greater than +2% | 0 |
| 0 to +2% | 10 |
| Less than 0% | 20 |

Consolidation and extensions to serve unserved areas and failing systems: 10 Points

Poverty Rate greater than or equal to 20% as found on the following Census site: 10 Points https://data.census.gov/cedsci/

For applicants that receive at least 40 points, the project is eligible for the lesser of 50% of the total eligible CWSRF project costs or $1,500,000 in principal forgiveness.

For applicants that receive at least 70 points, the project is eligible for the lesser of 100% of the total eligible CWSRF project costs or $2,000,000 in principal forgiveness.

Readiness to proceed to construction is the primary criterion that will be used in allocating the additional subsidies. The final amount of the subsidy will be determined after receipt of bids and after a formal application is submitted. Note: As existing debt is retired, the dedicated revenue stream will rollover to pay the amount of any deferred loan.

Loan recipients eligible for additional subsidization must appear on the current priority list prior to loan closing.

## C. Green Projects Reserve

In accordance with federal law and to the extent there are sufficient eligible project applications, not less than 10% of the funds in the capitalization grant shall be used to address green infrastructure projects.

Allowable green infrastructure project categories will be as follows:

**1. Energy Efficiency**

A community may utilize improved technologies and practices to reduce the energy consumption of existing wastewater treatment systems, use energy in a more efficient way, and/or produce/utilize renewable energy. Only the dollar amount associated with the green component of a larger project will qualify for the green reserve. Proposed green projects in this category may be eligible to receive additional loan subsidization, in the form of principal forgiveness, to the lesser of 50% of the total eligible green CWSRF costs or $500,000.

Projects that will not be allowable include but are not limited to:

a. Infiltration and inflow pipe repair or replacement.
b. Purchase of hybrid/alternative fuel vehicles for sewer fleets.
c. Operation, maintenance, and replacement activities.
d. Drinking water related projects.

**2. Water Efficiency**

Water efficiency type projects are not eligible for additional loan subsidization or green technology funding, except for WWTP water efficient appliance/plumbing projects and water reuse projects. Proposed green projects in the water reuse category may be eligible to receive additional loan subsidization, in the form of principal forgiveness, to the lesser of 50% of the total eligible green CWSRF costs or $500,000.

**3. Storm Water / Green Infrastructure**

Allowable green projects to be funded under this category are:

a. Publicly sponsored projects that utilize green technologies to treat or eliminate storm water from existing wastewater collection and treatment systems.
b. MS4 sponsored projects that utilize green technologies to solve storm water issues.

Proposed green projects in this category may be eligible to receive additional loan subsidization, in the form of principal forgiveness, to the lesser of 50% of the total eligible green CWSRF costs or $500,000.

**4. Environmentally Innovative**

Allowable green projects to be funded in this category are:

Decentralized sewer systems

a. Publicly Owned Systems
b. Privately Owned Onsite Systems

This category is used for constructing, upgrading, or repairing onsite/septic systems to existing eligible structures to protect water quality. The project must be sponsored by a local entity eligible to receive SRF funding.

Proposed green projects in this category may be eligible to receive loan subsidization, in the form of principal forgiveness, of 100% of the total eligible green CWSRF costs. The CWSRF program will be offering a program to cover the pre-bid costs for categorically green decentralized sewer system projects only. This is based upon availability of principal forgiveness funds. The program may fund the pre-bid costs for these systems from the available green principal forgiveness funds. To qualify for these funds, the project sponsor must assure the CWSRF program that the project will proceed to advertising for bids within 12–18 months of receiving the funds. The sponsor will have to provide, at a minimum, the following documentation:

1. A recommendation to pursue CWSRF funds from the WVIJDC;
2. An engineering agreement approved by the CWSRF program;
3. A facilities plan approved by the CWSRF program;
4. Documentation of a pre-design meeting with representatives of the CWSRF Program;
5. A project timeline with an approvable project budget;
6. Documentation from the project sponsor that the customer base is willing to pay the proposed sewer rate; and
7. PSC approval, if required by law.

Based upon the above guidelines and criteria, a list of potential green projects is included in Appendix F of this document. These projects were submitted in response to a DEP solicitation for green projects that occurred in December 2022 and January 2023 simultaneously with the project priority list solicitation. The CWSRF program will further evaluate these projects to determine funding eligibility.

## D. Emerging Contaminants

The BIL created a CWSRF set-aside to fund projects that address emerging contaminants. The funding from this set-aside must be in the form of grants or principal forgiveness. West Virginia's allotment is $3,315,000. BIL requires a minimum of 10% be set aside for funding green projects. This amount will equal $331,500. Emerging contaminants refer to substances and microorganisms, including manufactured or naturally occurring physical, chemical, biological, radiological, or nuclear materials, which are known or anticipated in the environment, that may pose newly identified or re-emerging risks to human health, aquatic life, or the environment. These substances, microorganisms or materials can include many different types of natural or manufactured chemicals and substances – such as those in some compounds of personal care products, pharmaceuticals, industrial chemicals, pesticides, and microplastics.

The main categories of emerging contaminants include but are not limited to:

1. **Perfluoroalkyl and polyfluoroalkyl substances (PFAS) and other persistent organic pollutants (POPs),** such as polybrominated diphenyl ethers (PBDEs; used in flame retardants, furniture foam, plastics, etc.) and other persistent organic contaminants such as perfluorinated organic acids, PFAS free flame retardants.

2. **Biological contaminants and microorganisms,** such as antimicrobial resistant bacteria, biological materials, and pathogens.

3. **Some compounds of pharmaceuticals and personal care products (PPCPs),** including a wide suite of human prescribed drugs (e.g., antidepressants, blood pressure medications, hormones), over-the-counter medications (e.g., ibuprofen), bactericides, fragrances, UV filters (sunscreen agents), detergents, preservatives, and repellents;
   a. Insect Repellents, Cosmetics, and UF filters: DEET, Methylparabens, Benzophenone
   b. Fragrances: HHCB and AHTN (7-acetyl-1,1,3,4,4,-hexamethyl-1,2,3,4-tetrahydronaphthalene; CAS 2114-77-7; Tonalide)
   c. Cosmetic and food preservatives: BHA (butylated hydroxyanisole) and BHT (butylated hydroxytoluene)
   d. Veterinary medicines such as antimicrobials, antibiotics, anti-fungals, growth promoters, investigational new animal drugs, and hormones;
   e. Substances that illicit endocrine-disrupting chemicals (EDCs), including synthetic estrogens (e.g., 17aethynylestradiol, which also is a PCPP) and androgens (e.g., trembolone, a veterinary drug), naturally occurring estrogens (e.g., 17β-estradiol, testosterone), as well as many others (e.g., organochlorine pesticides, alkylphenols)

4. **Nanomaterials,** such as carbon nanotubes or nano-scale particulate titanium dioxide, of which little is known about either their environmental fate or effects.

5. **Microplastics/Nanoplastics -** Synthetic solid particle or polymeric matrix with regular or irregular shape and with size smaller than 5 mm of either primary or secondary manufacturing origin, or larger plastic materials that degrade into smaller pieces, including from tire wear (such as 6 PPD), which are insoluble in water. Primary microplastics include particles produced intentionally of this very dimension, like pre-production pellets used as intermediate in plastic production, microbeads for abrasive functions or microfibers that form from synthetic textiles.

Projects that address contaminants with water quality criteria established by EPA under CWA section 304(a), except for PFAS, are not eligible for CWSRF Emerging Contaminants fund.

As more information becomes available about the types of projects that would be eligible for emerging contaminants funding, projects will be added to this IUP via the priority list.

The CWSRF is also reserving the authority to transfer these funds to the Drinking Water Treatment Revolving Fund if no projects have received a binding commitment by June 2025.

## E. Annual administrative fees on POTW loans

Since 1994, an annual administrative fee has been charged on all loans as a means of supporting the administrative costs of operating the CWSRF in perpetuity. These fees are maintained in a separate account outside the CWSRF. The use of these fees is restricted in accordance with *EPA's Guidance on Fees Charged by States to Recipients*

*of Clean Water State Revolving Program Assistance* as published in the Federal Register on October 20, 2006. Funds have been expended from the account since FY1998.

The annual administrative fee is initially calculated using the outstanding principal amount of the loan over its life but repaid over the term of loan in equal installments as contained in the loan amortization schedule. The chart in Section V(A) will be used to determine the annual administrative fee on each loan. The administrative budget is approximately $4.9 million. This includes funding the DEP's Project WET position. The amount of the funds available as of December 31, 2022, was $14,855,407. These funds can also be used to fund the onsite systems program and are being used to match an ARC grant to provide sewer system mapping to several communities in the southern part of the State. This fund has also been used to provide funding in partnership with the WV DHHR and USGS to support a PFAS study over the past two years and is funding a position with the WV RWA to provide technical assistance to POTW's. It may also be used for additional project funding.

## F. Maximum allowable loans

In FY2024, there will not be a limit set on the amount of funds available to any single project. This practice will be reviewed annually and may change in future intended use plans.

## G. BAN leveraging program

DEP is continuing the following option for multimillion-dollar projects that cannot reduce their scope to reflect a reasonable cost. A specific dollar amount will be issued by the entity using a BAN for the length of the construction period. The CWSRF will commit out of its repayment stream a certain amount each fiscal year until the total commitment is equal to the BAN. The loan will then be closed following construction completion, retiring the BAN. This proposed closing date will also be reflected in the BAN documents. Repayment of the CWSRF loan will begin immediately using the first full calendar quarter following loan closing.

## H. Extended Bond Purchase Program

### 1. 30-year bonds

The EPA approval of the 30-year extended bond purchase program on April 13, 1999, allowed many disadvantaged communities in West Virginia to be funded under the CWSRF, resulting in additional water quality improvement projects and providing rate relief to customers of local governmental entities. The more advantageous bond terms have increased the number of sewer construction projects in the State and have allowed better leveraging of other State and Federal funds available for wastewater projects.

Section 603(d)(2) of the CWA allows local bonds to be purchased by the State at below market interest rates without limiting the term to 20 years as contained in Section 603(d)(1). West Virginia law governing municipalities and public service districts provides that governing bodies must issue bonds to pay the costs of wastewater projects and sets forth detailed terms regarding interest rates, maturity

dates and security provisions and with certain exceptions provides that the term of such bonds shall not exceed 40 years from the date of issuance.

Under the EBPP, the CWSRF will be purchasing local bonds with up to 30-year terms only for disadvantaged communities defined in Section V(A). Extended terms up to 30 years will be available to eligible communities meeting the above definition after a request is received from the community and an affordability analysis has been performed to determine what maturity date is necessary (not exceeding 30 years) in achieving, if possible, the targeted rate equal to 1.50% MHI.

Loans closed before July 2, 1999, cannot be refinanced or restructured using extended bond terms unless:

a. DEP determines that such restructuring is necessary to protect the integrity of the CWSRF;
b. the financial difficulty is due to unforeseen events (except population decline);
c. the community has taken all reasonable steps to reduce expenses and increase revenues and such measures have not remedied the financial difficulty;
d. the community has not discriminated in its payment of debt service on other outstanding debt;
e. the community agrees to and implements a long-term management plan; and
f. the PSC has approved the proposed restructuring (if applicable).

**2. <u>40-year bonds</u>**

In May 2001, EPA approved an extension to the 30-year extended bond purchase program by allowing bond terms to exceed 30 years, but no longer than 40 years. As with the 30-year bond program, offering up to 40-year terms requires that the long-term revolving nature of the CWSRF must be protected. The offering of extended financing terms must not decrease the projected revolving level of the fund by 10% or more compared to the revolving level that the fund would have attained if extended financing terms were not available.

In implementing this 40-year program and in consideration of the federal mandates, the DEP established the following parameters that must be met by a disadvantaged community in order to be eligible for extended bond terms greater than 30 and less than or equal to 40 years. The intent is to balance the financial need of the community with the long-term financial health of the CWSRF.

Facilities plans will include detailed information concerning expected increases in operation and maintenance costs from years 20 to 40 including, but not limited to schedules for the repair and replacement of all facilities units/components, including equipment.

Where there has been a historical decline in population, additional information in the facilities plan will be required concerning the composition of the population base, such as age and income characteristics. Other economic indicators, such as trends in tax base, number of jobs and housing starts, may be requested to determine those communities that pose a high risk to the CWSRF program.

For revenue projection and rate-setting purposes, the CWSRF will require that only 90% of any new potential customers be used in the facilities plan. This requirement will apply during the entire preconstruction phase of the project, including the PSC certificate case. A copy of the Rule 42 exhibit (or equivalent if a PSC certificate is not required) shall be submitted to the DEP to document compliance with this requirement. This requirement will not apply to existing customers already served by a collection system.

At the completion of final design and prior to the project authorization to advertise for bids, the above information will be utilized for the purposes of conducting a final financial review.

## I. Requirements for CWSRF Commitment

Formal Commitments – once it has been determined that a project can realistically proceed to construction within six months, a formal commitment of CWSRF funding will be made that may include such terms and conditions as deemed necessary. The CWSRF will continue to commit funds to projects in order of their position on the priority list on a first-come, first-served basis, if all applicable program requirements have been met. At a minimum, the facilities plan, and plans and specifications must be approved. Consideration will be given to the status of rights-of-way obtainment and other items on the pre-bid checklist during this process. As projects are deemed eligible for a binding commitment, they will be funded in order of priority. Prior to loan closing, the project must appear on the current year's priority list.

## J. Expanded uses of the CWSRF – Nonpoint Sources (NPS)

In addition to financing municipal sewage treatment and disposal projects, the CWSRF can finance an array of environmental projects to address NPS pollution.

NPS pollution is runoff from areas that have hard-to-trace specific sources of pollution such as farmland and suburban neighborhoods.

As with most other states, West Virginia has devoted the majority of CWSRF funds to the construction of traditional municipal wastewater treatment systems. However, in 1997 the CWSRF funded its first NPS water quality projects through the DEP's Agricultural Water Quality Loan Program in partnership with the West Virginia Conservation Agency. The purpose of the AgWQL program is to provide a source of low-interest financing match funds to implement best management agricultural practices that will reduce NPS impacts on water quality. This program is operated in conjunction with local participating banks.

In 2000, the CWSRF began a pilot implementation of its second NPS program titled the Onsite Systems Loan Program. The purpose of this program was to eliminate existing health hazards and water quality problems due to direct sewage discharges from houses using malfunctioning septic tank systems or direct pipes to a nearby stream. This was a cooperative venture between the DEP and county health departments. After several years

of frustration, this program was revived in 2008 and is now fully operational. The West Virginia Housing Development Fund and other nonprofit associations are participating in this program to make it accessible to existing individual homeowners throughout the state.

In creating the CWSRF, Congress ensured that it would be able to fund virtually any type of water quality project, including nonpoint source, wetlands, estuary, and other types of watershed projects, as well as more traditional municipal wastewater treatment systems. The CWSRF provisions in the CWA give no more preference to one category or type of project than any other.

1. **Agriculture Water Quality Loan Program**

   With the initiation of the FY1998 pilot program in five counties (Grant, Mineral, Pendleton, Hardy, and Hampshire), DEP addressed nonpoint sources of pollution by the installation of best management practices. The pilot program was a cooperative effort among the DEP, West Virginia Conservation Agency, United States Department of Agriculture, Natural Resources Conservation Service, local Soil Conservation Districts and local banking institutions.

   Agricultural producers at the local level work with the SCD, CA and NRCS to develop a conservation plan. A local participating bank then provides a 2% interest loan with terms not to exceed 10 years for construction that will be monitored by these agencies. The CWSRF loans money to local banks at 0% interest as a mechanism for the banks to reduce their interest rate. The DEP expanded this program statewide after securing EPA approval to do so. As of June 30, 2022, more than $13 million had been loaned under this program for installation of best management practices. Each fiscal year, an additional amount of money is set aside to fund more of these NPS projects. A one-time administrative fee is charged on each loan to cover DEP administrative expenses.

   The CWSRF will continue this program with a set-aside reserve of $500,000 to provide the necessary match to these agriculture grants.

2. **Onsite Systems Loan Program**

   An OSLP guidance document is available which explains the NPS program. Individual loans are limited to $10,000 and lender interest rates cannot exceed 2% with terms not to exceed 10 years for the replacement, repair or upgrade of onsite sewage systems. Exceptions to the $10,000 limit are made on a case-by-case basis.

   During the 2007 legislative session, the CWSRF statute was amended to expand the definition of “local entity”, which allows CWSRF money to be loaned to other entities who will act as an intermediary lender in the OSLP. The West Virginia Housing Development Fund was the first entity to enter into an agreement with the CWSRF to provide low interest loans to homeowners to correct failing onsite sewage systems. SAFE Housing and Economic Development, Inc. (SHED) has also entered into an agreement with the CWSRF to provide these loans to homeowners. The CWSRF will provide $500,000 as a set-aside for this program this fiscal year. Funds from the administrative fee account may also be used to

to fund this program. As of June 30, 2022, more than 3.3 million had been loaned under this program.

### 3. Other CWA Section 319 Nonpoint Source Activities

Nonpoint sources of water pollution, that may include contaminated groundwater flow and runoff from agricultural and developed land, have received far less attention. This is because nonpoint sources of pollution are harder to identify and address since they are not discrete end-of-pipe pollution sources.

In West Virginia, other nonpoint sources of pollution are identified in the State nonpoint source management plan developed by DEP. We will continue to evaluate the merits of providing funds to other NPS activities.

The WV DEP received an EPA capitalization grant to create a Brownfield Revolving Loan Fund (BRF). The CWSRF program will be working with the BRF to evaluate partnering opportunities for BRF ineligible expenses that may be eligible for the CWSRF. The CWSRF loan terms will mirror those for the BRF.

## K. Technical Assistance

The Bipartisan Infrastructure Law gives states the flexibility to use up to two percent of the BIL capitalization grant to provide technical assistance to rural, small, and tribal publicly owned treatment works. The CWSRF has contracted with the WV Rural Water Association to fund a technical assistance position. The CWSRF administrative fee account will be the source of the funds for this position. This will allow the program to use the two percent from the capitalization grant for projects. This position assists communities that are under enforcement action, have trouble meeting their NPDES permit limits, provides outreach to CSO/SSO communities, etc. and is free of charge to all WV POTW's. This position also provides asset management support and educates local utilities on energy and water efficiency technologies.

## L. Federal requirements

To streamline the program and reduce project costs, all new binding commitments made to POTW projects in this fiscal year will not have to meet many federal requirements. As a recipient of federal CWSRF funds, the DEP must apply these federal requirements to loans equal to the amounts of all the federal capitalization grants. Recipients of earmark grants from Congress will still have to meet these federal requirements for the entire project, including any CWSRF funds. This will likely continue in future fiscal years.

The projects listed in Appendix B have been selected to comply with federal requirements including, but not limited to, the Single Audit Act, DBE, FFATA, Buy American Build America Act (BABAA), EO 13690 Federal Flood Risk Management Standard, etc. These projects total more than the Base FFY 2023 capitalization grant which is $11,694,000 and more than the BIL FFY 2023 capitalization grant which is $32,493,000.

**M. Loan Prepayment**

CWSRF loan prepayment may be allowed under certain conditions upon prior written approval from the Program and the WDA. All requests will be evaluated against Program policy and will not be considered earlier than ten years from loan closing unless under special circumstances. Refinancing through the Program will be the preferred option.

# SECTION VI
# Assurances

DEP has provided the necessary assurances and certifications as part of the operating agreement with EPA. The Operating Agreement (OA) defines the mutual obligations between EPA and DEP. The purpose of the OA is to provide a framework of procedures to be followed in the management and administration of the CWSRF. The OA includes the requirements of the following sections of the Clean Water Act:

602(a) - Environmental Reviews – the DEP will conduct the reviews in accordance with State regulations.

602(b)(2) - Anticipated Cash Draw Ratio (Proportionality) – State match funds are disbursed prior to using capitalization grant funds.

602(b)(3) - Binding Commitments – the DEP will enter into binding commitments for 120% of each quarterly grant payment within one year of receipt of the payment.

602(b)(4) - Expeditious and Timely Expenditures – the DEP will expend all funds in the CWSRF in a timely manner.

602(b)(5) - First Use for Enforceable Requirements – the DEP has certified that all national municipal policy projects have met this requirement.

These and other procedures are described in the OA and may be examined by contacting the DEP.

# SECTION VII
# Criteria and Method for Distribution of Funds

The following approach was used to update the priority list, intended use plan and projection of the distribution of all funds contained in the CWSRF:

1. Analysis of community and financial assistance needed;
2. Review of project schedule to determine when the project would be in a state of readiness to proceed to construction;
3. Individual contact with potential loan recipient or its representative;
4. Allocation of funds among projects;
5. Development of an EPA payment schedule which will provide for making timely binding commitments to projects selected for CWSRF financial assistance;
6. Development of individual disbursement schedules to timely pay project costs as incurred;
7. Analysis of NPS activities and the extent to which reserved funds would be needed for such projects; and
8. Estimate of administrative expenditures that will occur during the fiscal year.

# SECTION VIII
# Public Participation

Comments will be received on the CWSRF IUP for FY2024 until June 30, 2023. A public meeting will be held at 9:30 am on June 15, 2023, at the WV DEP Headquarters in Charleston, WV. The option to attend virtually will also be offered. The notice was legally advertised in newspapers throughout the State. In addition, the DEP issued a notice of the IUP comment period by sending a mass email directly to consulting engineers, regional councils, and other interested parties.

Appendix C will contain the public comment notice and a summary of the comments.

# SECTION IX
# Agreement

The DEP has agreed to provide EPA with information for the environmental results for all loans closed during this fiscal year. This documentation is being requested by EPA to better ascertain the environmental results of projects funded under the CWSRF program.

# APPENDIX A

# FISCAL YEAR 2024
# PROJECT PRIORITY LIST

# FY2024 Priority List

| Project | SRF #C | Ranking | PriorityPoints |
|---|---|---|---|
| Alderson, Town of | 544700 | 135 | 45.00 |
| Anmoore, Town of | 544802 | 173 | 20.00 |
| Ansted, Town of (Sewer Line) | 544584 | 86 | 90.00 |
| Ansted, Town of (WWTP) | 544783 | 16 | 150.00 |
| Auburn, Town of | 547201-02 | 4 | 185.00 |
| Barboursville Sanitary Board, Village of | 544615 | 102 | 70.00 |
| Beckley Sanitary Board (Cranberry) | 544701 | 103 | 70.00 |
| Beckley Sanitary Board (Dry Hill) | 544626 | 125 | 55.00 |
| Beckley Sanitary Board (FC12 PS) | 544702 | 136 | 45.00 |
| Beckley Sanitary Board (Harper Crescent) | 544703 | 137 | 45.00 |
| Beckley Sanitary Board (Hedrick St.) | 544704 | 104 | 70.00 |
| Beckley Sanitary Board (Kanawha) | 544705 | 166 | 25.00 |
| Beckley Sanitary Board (Koch Ave) | 544706 | 105 | 70.00 |
| Beckley Sanitary Board (Maplewood Lane) | 544707 | 106 | 70.00 |
| Beckley Sanitary Board (Northwestern) | 544709 | 107 | 70.00 |
| Beckley Sanitary Board (Operations Facility) | 544710 | 174 | 20.00 |
| Beckley Sanitary Board (Pinecrest) | 544624 | 92 | 85.00 |
| Beckley Sanitary Board (Ragland) | 544711 | 175 | 20.00 |
| Beckley Sanitary Board (Rail Trail) | 544625 | 94 | 80.00 |
| Beckley Sanitary Board (Robert C. Byrd Dr.) | 544712 | 108 | 70.00 |
| Beckley Sanitary Board (Whitestick) | 544713 | 109 | 70.00 |
| Beckley Sanitary Board (Woodcrest) | 544714 | 138 | 45.00 |
| Beckley Sanitary Board (Woodlawn) | 544715 | 167 | 25.00 |
| Belington, City of | 544796 | 139 | 45.00 |
| Benwood, City of (Phase III) | 544716 | 7 | 170.00 |
| Benwood, City of (Phase IV) | 544717 | 8 | 170.00 |
| Beverly, Town of (WWTP Phase II) | 544828 | 95 | 80.00 |

| Project | SRF #C | Ranking | PriorityPoints |
|---|---|---|---|
| Big Bend PSD | 544627 | 65 | 115.00 |
| Bluefield Sanitary Board (Brushfork) | 544719 | 110 | 70.00 |
| Bluefield Sanitary Board (Midway) | 544493 | 45 | 120.00 |
| Bluewell PSD | 544594 | 46 | 120.00 |
| Boone County PSD | 544494 | 47 | 120.00 |
| Boone County PSD (Foster-Phase IA) | 544826 | 176 | 20.00 |
| Bradley PSD | 544663 | 71 | 105.00 |
| Bradshaw, Town of | 544595 | 87 | 90.00 |
| Buffalo Creek PSD | 544555 | 140 | 45.00 |
| Burnsville Public Utility Board (I&I) | 544578 | 66 | 115.00 |
| Burnsville Public Utility Board (Trailer Park Connection) | 544720 | 141 | 45.00 |
| Cameron Sanitary Board, City of | 544769 | 88 | 90.00 |
| Canaan Valley PSD (Phase II) | 544560 | 164 | 35.00 |
| Canaan Valley PSD (Zone A WWTP) | 544721 | 96 | 80.00 |
| Capon Bridge, Town of | 544766 | 168 | 25.00 |
| Carpendale, Town of | 544722 | 142 | 45.00 |
| Center PSD | 544787 | 165 | 30.00 |
| Central Hampshire PSD | 544773 | 111 | 70.00 |
| Charles Town Utility Board | 544686 | 89 | 90.00 |
| Charles Town, City of | 544813 | 126 | 55.00 |
| Clarksburg Sanitary Board, City of (Phase V-A) | 544824 | 17 | 145.00 |
| Clarksburg Sanitary Board, City of (Phase V-B) | 544823 | 78 | 95.00 |
| Clarksburg, City of | 544809 | 177 | 20.00 |
| Clay, Town of (Project #1) | 544614 | 37 | 125.00 |
| Clay, Town of (Project #2) | 544723 | 48 | 120.00 |
| Claywood Park PSD (Newark) | 544498 | 93 | 85.00 |
| Cowen PSD | 544724 | 169 | 25.00 |
| Crab Orchard-MacArthur PSD | 544630 | 18 | 145.00 |

| Project | SRF #C | Ranking | PriorityPoints |
|---|---|---|---|
| Davis, Town of | 544726 | 12 | 165.00 |
| Delbarton, Town of | 544201 | 19 | 145.00 |
| Elizabeth, Town of | 544819 | 79 | 95.00 |
| Elkins Sanitary Board, City of | 544778 | 9 | 170.00 |
| Enlarged Hepzibah PSD | 544664 | 143 | 45.00 |
| Fayetteville, Town of | 544814 | 178 | 20.00 |
| Flatwoods-Canoe Run PSD | 544729 | 49 | 120.00 |
| Flemington, Town of (I&I) | 544665 | 80 | 95.00 |
| Flemington, Town of (UV) | 544767 | 97 | 80.00 |
| Fort Gay, Town of (Phase I) | 544607 | 67 | 115.00 |
| Fort Gay, Town of (Phase II) | 544786 | 72 | 100.00 |
| Gary, City of | 544501 | 68 | 115.00 |
| Gilbert, Town of | 544502 | 50 | 120.00 |
| Grafton, City of | 544805 | 179 | 20.00 |
| Grantsville, Town of | 544634 | 73 | 100.00 |
| Greater Harrison Co. PSD (Quiet Dell) | 544730 | 180 | 20.00 |
| Greater Harrison Co. PSD (River Crossing) | 544635 | 181 | 20.00 |
| Greater Harrison Co. PSD (Woodstock HTS) | 544731 | 182 | 20.00 |
| Greater Paw Paw Sanitary District | 544820 | 112 | 70.00 |
| Greater Saint Albans PSD | 544406-04 | 20 | 145.00 |
| Greenbrier PSD #2 | 544732 | 144 | 45.00 |
| Hamlin PSD | 544799 | 90 | 90.00 |
| Hancock County PSD (Newell) | 544733 | 99 | 75.00 |
| Hancock County PSD (Route 2) | 544691 | 74 | 100.00 |
| Harpers Ferry-Bolivar PSD | 544772 | 145 | 45.00 |
| Harrisville, Town of | 544803 | 146 | 45.00 |
| Hillsboro, Town of | 544667 | 162 | 40.00 |
| Hinton, City of (CSO Abatement -Phase I) | 544550 | 21 | 145.00 |

| Project | SRF #C | Ranking | PriorityPoints |
|---|---|---|---|
| Hinton, City of (CSO Abatement -Phase II) | 544698 | 22 | 145.00 |
| Huntington Sanitary Board (13th St. PS) | 544790 | 31 | 135.00 |
| Huntington Sanitary Board (3rd & 5th St.) | 544816 | 15 | 160.00 |
| Huntington Sanitary Board (4th St. PS) | 544789 | 32 | 135.00 |
| Huntington Sanitary Board (Outfall Backflow) | 544817 | 13 | 165.00 |
| Huntington Sanitary Board (Route 10) | 544780 | 5 | 180.00 |
| Huntington Sanitary Board (WWTP) | 544788 | 6 | 175.00 |
| Kanawha Falls PSD | 544798 | 127 | 50.00 |
| Kanawha PSD (Lens Creek Phase I) | 544643 | 98 | 80.00 |
| Kanawha PSD (Lens Creek Phase II) | 544734 | 113 | 70.00 |
| Keyser, City of (I&I) | 544764 | 51 | 120.00 |
| Kingwood, City of | 544735 | 69 | 115.00 |
| Logan County PSD (Curtis Lorado) | 544794 | 183 | 20.00 |
| Logan County PSD (Holden) | 544669 | 184 | 20.00 |
| Logan County PSD (Mud Fork) | 544460-02 | 185 | 20.00 |
| Logan County PSD (North Mitchell Heights) | 544793 | 52 | 120.00 |
| Logan County PSD (WWTP) | 544791 | 147 | 45.00 |
| Logan, City of (Stollings, McConnell and Dingess Run) | 544804 | 2 | 190.00 |
| Lubeck PSD | 544621 | 186 | 20.00 |
| Malden PSD | 544736 | 53 | 120.00 |
| Marlinton, Town of | 544670 | 81 | 95.00 |
| Marmet Sanitary Board, Town of | 544737 | 128 | 50.00 |
| Marshall County Sewerage District | 544806 | 82 | 95.00 |
| Mason County PSD (Apple Grove) | 544699 | 54 | 120.00 |
| Mason County PSD (Sand Hill Rd Sewer) | 544771 | 38 | 125.00 |
| Masontown, Town of | 544825 | 148 | 45.00 |
| Matewan, Town of | 544482 | 114 | 70.00 |
| McDowell County PSD (Iaeger) | 544513 | 1 | 215.00 |

| Project | SRF #C | Ranking | PriorityPoints |
|---|---|---|---|
| McMechen, City of | N/A | 75 | 100.00 |
| Mercer County PSD | 544784 | 187 | 20.00 |
| Mercer County PSD (Matoaka) | 544671 | 115 | 70.00 |
| Mineral Wells PSD | 544639 | 33 | 135.00 |
| Mingo County PSD (Chattaroy) | 544312 | 23 | 145.00 |
| Monongah, Town of | 544738 | 24 | 145.00 |
| Montgomery, City of | 544779 | 83 | 95.00 |
| Morgantown Utility Board (Cheat Lake) | 544831 | 124 | 60.00 |
| Moundsville Sanitary/Stormwater Utility Bd | 544739 | 25 | 145.00 |
| Mount Zion PSD | 544521 | 55 | 120.00 |
| New Creek PSD | 544740 | 56 | 120.00 |
| New Martinsville, City of (AAA MHP) | 544741 | 129 | 50.00 |
| New Martinsville, City of (WWTP) | 544777 | 149 | 45.00 |
| Newburg, Town of | 544742 | 150 | 45.00 |
| Nitro Regional Wastewater Utility | 544652 | 57 | 120.00 |
| North Beckley PSD (Phase I) | 544617-01 | 39 | 125.00 |
| North Beckley PSD (Phase II) | 544617-02 | 40 | 125.00 |
| North Beckley PSD (Piney View) | 544832 | 188 | 20.00 |
| Nutter Fort, Town of (Phase IV) | 544693 | 26 | 145.00 |
| Nutter Fort, Town of (Phase V) | 544768 | 189 | 20.00 |
| Oak Hill Sanitary Board | 544623 | 41 | 125.00 |
| Oakvale Road PSD | 544682 | 100 | 75.00 |
| Oceana, Town of | 544694 | 42 | 125.00 |
| Paden City Sanitary Disposal Board | 544822 | 170 | 25.00 |
| Page-Kincaid PSD | 544508-02 | 14 | 165.00 |
| Parkersburg Utility Bd (Hill Ave) | 544745 | 58 | 120.00 |
| Parkersburg Utility Bd (Marrtown Road) | 544654 | 59 | 120.00 |
| Parkersburg Utility Board (Interceptor) | 544827 | 34 | 130.00 |

| Project | SRF #C | Ranking | PriorityPoints |
|---|---|---|---|
| Parsons, City of | 544800 | 130 | 50.00 |
| Paw Paw, Town of (Phase I) | 544684 | 84 | 95.00 |
| Paw Paw, Town of (Phase II) | 544747 | 35 | 130.00 |
| Pax, Town of | 544685 | 120 | 65.00 |
| Pea Ridge PSD (B Plant) | 544657 | 151 | 45.00 |
| Pea Ridge PSD (Guyan Ests) | 544781 | 190 | 20.00 |
| Pea Ridge PSD (Holiday Park) | 544609 | 3 | 190.00 |
| Pennsboro, City of | 544748 | 27 | 145.00 |
| Philippi, City of | 544797 | 152 | 45.00 |
| Point Pleasant, City of | 544749 | 153 | 45.00 |
| Preston County PSD | 544750 | 43 | 125.00 |
| Preston County Sewer PSD (Hazelton) | 544751 | 91 | 90.00 |
| Prichard PSD | 544298 | 191 | 20.00 |
| Princeton Sanitary Board | 544795 | 192 | 20.00 |
| Putnam PSD (Bills Creek) | N/A | 193 | 20.00 |
| Ravenswood, City of | 544782 | 163 | 40.00 |
| Ravenswood, City of (Phase I) | 544428 | 131 | 50.00 |
| Richwood, City of (Phase I) | 544579 | 36 | 130.00 |
| Richwood, City of (WWTP Replacement) | 544801 | 76 | 100.00 |
| Ripley Utility Board, City of | 544821 | 154 | 45.00 |
| Romney, Town of | 544807 | 121 | 65.00 |
| Romney, Town of (Phase II) | 544656 | 132 | 50.00 |
| Ronceverte, City of | 544611 | 101 | 75.00 |
| Rowlesburg, Town of (Lift Station) | 544785 | 85 | 95.00 |
| Rowlesburg, Town of (WWTP) | 544644 | 60 | 120.00 |
| Salem, City of (WWTP Upgrade Phase III) | 544752 | 61 | 120.00 |
| Salt Rock Sewer PSD (Phase II) | 544660 | 194 | 20.00 |
| Salt Rock Sewer PSD (WWTP) | 544818 | 155 | 45.00 |

| Project | SRF #C | Ranking | PriorityPoints |
|---|---|---|---|
| Shady Spring PSD (Glen Morgan) | 544645 | 116 | 70.00 |
| Shady Spring PSD (Grandview Sewer) | 544774 | 28 | 140.00 |
| Sissonville PSD | 544570 | 133 | 50.00 |
| Sistersville, City of | 544653 | 117 | 70.00 |
| Sistersville, City of (Virginia Terrace) | 544696 | 62 | 120.00 |
| Sophia Sanitary Board | 544085 | 122 | 65.00 |
| South Charleston Sanitary Board, City of | 544829 | 157 | 45.00 |
| South Charleston Sanitary Board, City of | 544808 | 156 | 45.00 |
| St. Marys, City of | 544753 | 171 | 25.00 |
| Star City, Town of | 544775 | 118 | 70.00 |
| Summit Park PSD | 544754 | 158 | 45.00 |
| Sun Valley PSD (Phase IIIB) | 544776 | 63 | 120.00 |
| Union PSD | 544655 | 119 | 70.00 |
| Union Williams PSD | 544687 | 134 | 50.00 |
| Union, Town of | 544815 | 172 | 25.00 |
| Vienna Utility Board | 544758 | 159 | 45.00 |
| Walton PSD | 544166 | 29 | 140.00 |
| Wardensville, Town of | 544648 | 123 | 65.00 |
| Warm Springs PSSD | 544810 | 195 | 20.00 |
| Wayne, Town of | 544759 | 70 | 115.00 |
| Webster Springs PSD (Phase I) | 544689 | 77 | 100.00 |
| Weirton Sanitary Board | 544650 | 196 | 20.00 |
| Welch, City of | 544812 | 10 | 170.00 |
| Wellsburg Sanitary Board | 544577 | 11 | 170.00 |
| West Union, Town of | 544760 | 30 | 140.00 |
| Westover Sanitary Sewer Board, City of | 544811 | 160 | 45.00 |
| White Oak PSD | 544762 | 44 | 125.00 |
| White Sulphur Springs, City of | 544606 | 64 | 120.00 |

| Project | SRF #C | Ranking | PriorityPoints |
|---|---|---|---|
| Williamson, City of | 544544 | 161 | 45.00 |

# Wastewater Treatment Needs Categories Definitions

| | |
|---|---|
| **I** | **CWT- SECONDARY TREATMENT** |
| **II** | **CWT – ADVANCED TREATMENT** |
| **III** | **CWT – INFILTRATION/INFLOW** |
| **IV** | **CWT – SEWER SYSTEM REHABILITATION** |
| **V** | **CWT – NEW COLLECTOR SEWERS** |
| **VI** | **CWT – NEW INTERCEPTORS** |
| **VII** | **CWT – CSO CORRECTION** |
| **VIII** | **STORMWATER – GRAY INFRASTRUCTURE** |
| **IX** | **STORMWATER – GREEN INFRASTRUCTURE** |
| **X** | **ENERGY CONSERVATION – ENERGY EFFICIENCY** |
| **XI** | **ENERGY CONSERVATION – RENEWABLE ENERGY** |
| **XII** | **WATER CONSERVATION – WATER EFFICIENCY** |
| **XIII** | **WATER CONSERVATION – WATER REUSE** |
| **XIV** | **NPS – AGRICULTURAL BMP'S, CROPLAND** |
| **XV** | **NPS – AGRICULTURAL BMP'S, ANIMALS** |
| **XVI** | **BROWNFIELDS** |
| **XVII** | **INDIVIDUAL/DECENTRALIZED SYSTEMS** |

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 1

**McDowell County PSD (Iaeger)** — $1,500,000 — $7,900,000

**SRF #C:** 544513

**County:** McDowell

**NPDES #WV:** 0000000

**Binding Date:** 12/31/2023

**Points** 215.00

**Needs Categories:**
NPS-Individual/Decentralized Systems

**Problem**
Elimination of failing on-site wastewater treatment units.

**Solution**
Phase I will provide service to approximately 118 potential customers (295 persons) in the Town of Iaeger and surrounding areas of McDowell County. The proposed project consists of the construction of approximately 15,830 feet of 8-inch and smaller diameter gravity pipe, 7,165 feet of 6-inch and smaller diameter force main, 2,890 feet of 4-inch service laterals, four pumping stations, two grinder pumping stations, one 21,000 gallon per day treatment plant, modifications to an existing package treatment plant, 90 manholes, cleanouts and other related appurtenances.

**Rank** 2

**Logan, City of (Stollings, McConnell and Dingess Run)** — $13,000,000 — $20,000,000

**SRF #C:** 544804

**County:** Logan

**NPDES #WV:** 0033821

**Binding Date:** 6/30/2024

**Points** 190.00

**Needs Categories:**
CWT-Secondary Treatment
CWT-New Collector Sewers

**Problem**
Currently, there is no sanitary sewer service in the Stollings, McConnell, and Dingess Run area. This project would eliminate the raw sewage discharges into the Guyandotte River. These discharges are a short distance upstream of not only the City of Logan's raw water intake, but also the Logan County PSD's raw water intake. This project would greatly improve the water quality in the Guyandotte River and this project would be part of an updated Long Term Control Plan to improve water quality.

**Solution**
The project proposed would provide sanitary sewer service to unserved customers and eliminate raw sewage discharges. The analysis of how to treat the wastewater will dictate whether a decentralized system is more cost effective than pumping the wastewater to the City of Logan wastewater treatment plant.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 3

**Pea Ridge PSD (Holiday Park)** — $2,345,000 — $2,345,000

**SRF #C:** 544609

**County:** Cabell

**NPDES #WV:** 0103110

**Binding Date:** 6/30/2024

**Points** 190.00

**Needs Categories:** NPS-Individual/Decentralized Systems

**Problem**

The Holiday Park WWTP is past the end of its useful life and is in deplorable condition. Treatment equipment is failing to function properly across the board and is, in general, beyond repair. Untreated wastewater is flowing directly into the lower Guyandotte River. Moreover, Holiday Park's collection system is incompletely documented. The location of gravity sewer mains, forcemains, and manholes is only known for a few small sections of the project area. This means that the condition of the collection system is unknown and cannot be effectively assessed.

**Solution**

This project proposes to decommission the existing Holiday Park WWTP and replace it with a new package WWTP to be installed on the same site. This project further proposes to completely replace the Holiday Park wastewater collection system. Cleanouts will be installed at the property lines of each customer in order to improve ease of maintenance.

**Rank** 4

**Auburn, Town of** — $2,482,850 — $2,482,850

**SRF #C:** 547201-02

**County:** Ritchie

**NPDES #WV:** 0000000

**Binding Date:** 12/31/2023

**Points** 185.00

**Needs Categories:** NPS-Individual/Decentralized Systems

**Problem**

Raw sewage discharges to roadside ditches and to Bone Creek. Discharges are degrading water quality of Bone Creek and creating a certified health hazard.

**Solution**

Installation of 50 individual Orenco AX20 treatment units and appurtenances to serve the Town of Auburn.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 5

**Huntington Sanitary Board (Route 10)** — $6,000,000 — $13,000,000

**SRF #C:** 544780

**Needs Categories:** CWT-New Collector Sewers

**County:** Cabell

**NPDES #WV:** 0023159

**Binding Date:** 6/30/2024

**Points** 180.00

**Problem**

The HSB has submitted a plan of corrective action (POCA) to the WVDEP for the operation and maintenance of an abandoned package WWTP serving the Green Valley Heights development. Some septic systems have reached the end of their useful life and the Green Valley Package Plant is also failing. The POCA outlines a three-year timeline within which the HSB must either bring the package WWTP into compliance with its NPDES permit or provide an alternative means of serving the residents of Green Valley Heights.

**Solution**

Decommissioning Green Valley WWTP and constructing a conventional gravity sewer system with four pump stations. Several hundred manholes need to be installed for maintenance and direction changes. The new system would have less grinder pump stations. HSB's WWTP will receive upgrades to existing Route 10 Pump Station and Infocision Pump Station, which would receive wastewater from current and future project areas. The stations need to be fitted with larger pumps for flows from current project areas, while providing reserve capacity for future extensions.

**Rank** 6

**Huntington Sanitary Board (WWTP)** — $134,900,000 — $143,500,000

**SRF #C:** 544788

**Needs Categories:** CWT-Advanced Treatment
Stormwater-Green Infrastructure
Energy Conservation-Energy Efficiency
Water Conservation-Water Reuse

**County:** Cabell/Wayne

**NPDES #WV:** 0023159

**Binding Date:** 6/30/2024

**Points** 175.00

**Problem**

Most of the existing WWTP was designed and constructed between the late 1950s and early 1980s. The majority of the processes and equipment at the WWTP have surpassed their expected useful life, and need replacement, modification, or rehabilitation. Operation and maintenance of the WWTP is costly and labor intensive.

**Solution**

Based on age and capacity of the existing facilities, as well as the future anticipated regulatory changes governing discharges from the WWTP, a comprehensive upgrade to the facility is needed to continue to meet permit limits and provide uninterrupted treatment.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 7

**Benwood, City of (Phase III)** — $2,749,200 — $2,749,200

**SRF #C:** 544716

**Needs Categories:** CWT-CSO Correction

**County:** Marshall

**NPDES #WV:** 0023230

**Binding Date:** 6/30/2024

**Points** 170.00

**Problem**

Large amount of infiltration and inflow associated with the combined sewer system creates CSO events.

**Solution**

Sewer separation of the combined sewers to make separate sanitary and storm sewers. Includes the removal of four CSO's from the system.

**Rank** 8

**Benwood, City of (Phase IV)** — $4,759,000 — $4,759,000

**SRF #C:** 544717

**Needs Categories:** CWT-CSO Correction

**County:** Marshall

**NPDES #WV:** 0023230

**Binding Date:** 6/30/2024

**Points** 170.00

**Problem**

Large amount of infiltration and inflow associated with the combined sewer system creates CSO events.

**Solution**

Sewer separation of the combined sewers to make separate sanitary and storm sewers. Includes the removal of three CSO's from the system.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 9

**Elkins Sanitary Board, City of** — $9,804,000 — $9,804,000

**SRF #C:** 544778

**Needs Categories:** CWT-Secondary Treatment; CWT-CSO Correction

**County:** Randolph

**NPDES #WV:** 0020028

**Binding Date:** 6/30/2024

**Points** 170.00

**Problem**

Through the current long-term control plan, the City of Elkins has been separating sewers to reduce the amount of clean water reaching the sewer system. Current project will continue this trend. Additionally, improvements are required to address equipment issues at the treatment plant.

**Solution**

Design and construct the Steward Avenue Sewer Separation, Relocation of the South Interceptor, Teaberry Hills Sewer Improvements, and the initial phase of wastewater treatment plant (WWTP) improvements.

**Rank** 10

**Welch, City of** — $2,500,000 — $4,479,000

**SRF #C:** 544812

**Needs Categories:** CWT-CSO Correction

**County:** Wyoming

**NPDES #WV:** 0024589

**Binding Date:** 6/30/2024

**Points** 170.00

**Problem**

The City is under EPA Consent Order to remove all CSOs from its wastewater system. Welch has been removing CSOs from its system and only has two remaining CSOs operational. One at the wastewater treatment plant, called CSO#002, and one near the bridge over McDowell St., called CSO#005. The Environmental Protection Agency Consent Order requires that CSO#002 be removed by December 2027 and CSO#005 by December 2024. The City has requested of EPA to move the CSO#005 due date to also be December 2027. To date, a formal response has not been received from the EPA.

**Solution**

The City proposes to upgrade approximately 9,100 LF of the transmission line from CSO #005 to the WWTP to a 36" diameter pipe.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 11 — **Wellsburg Sanitary Board** — $14,000,000 — $15,000,000

**SRF #C:** 544577

**Needs Categories:** CWT-CSO Correction

**County:** Brooke

**NPDES #WV:** 0026832

**Binding Date:** 6/30/2024

**Points** 170.00

**Problem**

City of Wellsburg and Wellsburg Sanitary Board was placed under Administrative Order No. 5860 to eliminate CSOs that remained in the city. Over time Wellsburg has complied with this order and have eliminated six of the original ten. Due to Covid-19 and a FEMA project not being funded, the date on Phase III of the administrative order has passed and Wellsburg is working diligently to remove the remaining four CSOs. One of the remaining four CSOs takes approximately half of the city's flows and needs to be corrected immediately.

**Solution**

In this project a new gravity sewer system is being proposed to eliminate the influence of stormwater infiltrating the existing sanitary sewer lines. The existing sanitary sewer lines will be utilized to convey the stormwater collected within the city. Approximately 37,000 linear feet of gravity sewer line will be placed and approximately 2,500 linear feet of new storm sewer line will be placed in areas where existing storm sewer line is damaged.

**Rank** 12 — **Davis, Town of** — $1,974,000 — $6,974,000

**SRF #C:** 544726

**Needs Categories:** CWT-Sewer System Rehabilitation
CWT-CSO Correction

**County:** Tucker

**NPDES #WV:** 0024848

**Binding Date:** 6/30/2024

**Points** 165.00

**Problem**

1) Reduce the volume of extraneous flows from entering the collection system causing sewer backups and discharges. 2) Elimination of the permitted CSO's. 3) The Town is currently under a consent order and has received various notices of violation. 4) The WWTP will eventually be decommissioned and the collection system will become part of the newly formed Blackwater PSD. It is critical to remove I&I from the system before this happens and to treat the sewage to the best possible level without completing significant and costly upgrades to the WWTP in the meantime.

**Solution**

An I&I Study has been completed for the Town's system which resulted in the recommendation to replace the sanitary sewer and utilize the existing sewer for stormwater in order to separate the two systems. Design is currently underway for this effort. Flow meters and SCADA will be installed at both pump stations for monitoring flows. Rehabilitation in the newer sections of the system will occur to remove I&I. Interim improvements in accordance with DEP recommendations will be completed at the WWTP including installation of baffle curtain and aeration.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 13

**Huntington Sanitary Board (Outfall Backflow)** — $870,000 — $8,500,000

**SRF #C:** 544817

**Needs Categories:** CWT-CSO Correction

**County:** Cabell/Wayne

**NPDES #WV:** 0023159

**Binding Date:** 6/30/2024

**Points** 165.00

**Problem**

The goal of the HSB Backflow Prevention Project is to reduce Combined Sewer Overflow (CSO) events at 22 outfalls and reduce river water inflow, including sediment and other debris, from the Four Pole, Guyandotte and Ohio Rivers during moderate to high river levels. The inflow events result in excessive flow and river sediment being pumped and treated at the WWTP, increasing costs, as well as inundating the collection system and increasing CSO events.

**Solution**

1) Installation of inline check valves which can withstand the pressure from the Ohio River during extreme flood level conditions. 2) Removal of the existing tide gates and closure of the on-shore tide gate boxes. 3) Installation of outfall pipes from the existing on-shore tide gate boxes at shallower slopes and new outfalls above elev 515. 4) Installation of new headwalls to serve as a retaining wall and protect fill material around the pipe from scour or undermining during variations in river water levels. 5) Lining of existing outfall pipes by either slip lining with HDPE or cured in place pipe (CIPP).

**Rank** 14

**Page-Kincaid PSD** — $2,920,000 — $4,638,525

**SRF #C:** 544508-02

**Needs Categories:** NPS-Individual/Decentralized Systems

**County:** Fayette

**NPDES #WV:** 0000000

**Binding Date:** 6/30/2024

**Points** 165.00

**Problem**

The community of Robson in Fayette County, near the district's existing service area does not currently have public wastewater service. Residents in Robson rely on individual septic systems for wastewater treatment, but these systems often struggle to provide effective treatment due to adverse soil conditions. These loosely regulated individual systems pose a public health risk.

**Solution**

This project proposes to construct a package WWTP and collection system to provide wastewater collection and treatment services to approximately 52 new customers in Robson. The collection system shall be a proprietary Septic Tank Effluent Pump/Septic Tank Effluent Gravity (STEP/STEG) system which will pump or gravity flow gray water from the existing septic systems through the collection system to the new package WWTP. The package WWTP itself shall have a treatment capacity of 20,000 GPD.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 15

**Huntington Sanitary Board (3rd & 5th St.)** — $2,500,000 — $10,000,000

**SRF #C:** 544816

**County:** Cabell/Wayne

**NPDES #WV:** 0023159

**Binding Date:** 6/30/2024

**Points** 160.00

**Needs Categories:**
CWT-CSO Correction
Stormwater-Green Infrastructure
Energy Conservation-Energy Efficiency

**Problem**

The intent of this project is to eliminate or reduce the frequent flooding at two intersections, the 3rd Avenue and 24th Street intersection and the 5th Avenue and 25th Street intersection, by separating portions of the local storm sewers from the combined sanitary sewer and installing pump station/force main systems to convey runoff from these two low lying areas to the Ohio River. The project will remove the storm water of approximately 40 acres of drainage area from the HSB sewer system and treatment plant.

**Solution**

The proposed project is to construct two storm sewer systems that each consist of a storm water collection system, a 100,000 cubic foot storm water storage tank, a 3,000 gpm duplex pump station and forcemain to the Ohio River. The proposed footage of storm sewer pipe is 4,800 feet of 30", 24", 18" and 12" pipe, along with 1,500 feet of 16" forcemain and 3,000 feet of 18" forcemain, one railroad crossing and various drop inlets and other components.

**Rank** 16

**Ansted, Town of (WWTP)** — $5,690,000 — $7,376,000

**SRF #C:** 544783

**County:** Fayette

**NPDES #WV:** 0020672

**Binding Date:** 6/30/2024

**Points** 150.00

**Needs Categories:**
CWT-Secondary Treatment

**Problem**

While the existing plant provides adequate treatment during average flow periods, it is unable to reliably treat high flows because solids are lost from the clarifiers. The plant is currently violating its WVNPDES permit limit for flow. Accepting additional flows from outlying areas could overload the plant both hydraulically and organically.

**Solution**

Replace grit removal unit, blowers in the aeration basins, damaged mechanical equipment in secondary clarifiers, digester blowers, HVAC equipment, electrical controls, and effluent flow meter. Additional clarification capacity to meet the required discharge limits. The existing chlorine contact tank will also be upsized for flows regularly recieved. Construct new chlorine treatment building and refurbish existing lab building.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 17

**Clarksburg Sanitary Board, City of (Phase V-A)** — $5,500,000 — $7,730,000

**SRF #C:** 544824

**Needs Categories:** CWT-CSO Correction

**County:** Harrison

**NPDES #WV:** 0023302

**Binding Date:** 6/30/2024

**Points** 145.00

**Problem**

-Some process equipment at the wastewater treatment plant is at the end of its useful life, tanks/basins are in need of repair, roofs are in need of replacement, the boiler system needs replaced, and new samplers are required for the lab.
-The existing sewer system is combined storm and sanitary. Wet weather conditions cause CSOs to discharge and bring larger flows to the wastewater treatment plant.

**Solution**

Phase V-A will consist of continued upgrades to the Clarksburg WWTP, address storm sewer separation in the Downtown area, and relocate a portion of the interceptor along the West Fork River. Upgrades at the WWTP are necessary for normal operations. The storm sewer separation in the Downtown area is located in an area prone to flooding between the Milford St. bridge and North 6th St along WV Rt. 20. A portion of the interceptor that is prone to clogging appears to have been installed at a slope lower than recommended minimum grade.

**Rank** 18

**Crab Orchard-MacArthur PSD** — $2,612,602 — $10,260,000

**SRF #C:** 544630

**Needs Categories:** CWT-New Collector Sewers

**County:** Raleigh

**NPDES #WV:** 0082309

**Binding Date:** 6/30/2024

**Points** 145.00

**Problem**

The proposed project will eliminate approximately 330 failing and inadequate on-site treatment units and direct discharges throughout the communities of Harper and Eccles.

**Solution**

The proposed project will install a public wastewater collection system consisting of approximately 60,000 LF of 8-inch and smaller diameter gravity collection lines, 3,500 LF of 4-inch and smaller diameter forcemain, three pumping stations, 15 grinder pumping stations, 190 manholes and other related appurtenances. The proposed collection system extension will connect the Crab-Orchard MacArthur's existing Fitzpatrick wastewater collection and treatment system.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 19 — **Delbarton, Town of** — $7,655,000 — $8,155,000

**SRF #C:** 544201

**County:** Mingo

**NPDES #WV:** 0042374

**Binding Date:** 6/30/2024

**Points** 145.00

**Needs Categories:**
CWT-New Collector Sewers
CWT-New Interceptors

**Problem**
Failing on-site wastewater treatment systems.

**Solution**
Installation of a centralized gravity wastewater collection system, serving 200 new customers.

**Rank** 20 — **Greater Saint Albans PSD** — $16,091,000 — $20,591,000

**SRF #C:** 544406-04

**County:** Kanawha

**NPDES #WV:** 0035068

**Binding Date:** 6/30/2024

**Points** 145.00

**Needs Categories:**
CWT-New Collector Sewers
CWT-New Interceptors

**Problem**
Residents in several areas of the Greater St. Albans PSD's service area remain on failing individual septic systems, malfunctioning package treatment plants or have no wastewater treatment system at all and some are contributing to raw sewage in the Coal River.

**Solution**
The PSD has opted to provide sewer service for approximately 347 new customers. These customers would be served via gravity sewer extensions that will also utilize pumping stations. Additional pumping stations, a bar screen, and approximately 3 miles of force main will be constructed to pump wastewater to the City of St. Albans Municipal Utility Commission for wastewater treatment.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 21

**Hinton, City of (CSO Abatement -Phase I)** — $1,270,000 — $4,820,000

**SRF #C:** 544550

**Needs Categories:** CWT-CSO Correction

**County:** Summers

**NPDES #WV:** 0024732

**Binding Date:** 9/30/2023

**Points** 145.00

**Problem**

Reduction in the frequency and duration of the discharge from permitted discharge CSO 007 and CSO 006.

**Solution**

Replacement of existing outdated wastewater collection system and pumping station.

**Rank** 22

**Hinton, City of (CSO Abatement -Phase II)** — $2,000,000 — $6,550,000

**SRF #C:** 544698

**Needs Categories:** CWT-CSO Correction

**County:** Summers

**NPDES #WV:** 0024732

**Binding Date:** 6/30/2024

**Points** 145.00

**Problem**

Reduce inflow & infiltration in the wastewater system to reduce the frequency and duration of the combined sewer/storm water discharge from permitted discharges CSO 007 and CSO 006 into the New River in the Bellepoint area to comply with the submitted LTCP that is currently being reviewed by WVDEP.

**Solution**

This CSO Abatement-Phase 2 Project in the Greenbrier Drive area of Bellepoint proposes to reduce inflow and infiltration by (1) upgrading the existing wastewater collection system in the Greenbrier Drive (WV Route 3) area of Bellepoint which is generally located along Route 3 adjacent to the Greenbrier River, and (2) removing existing storm drain connections from the wastewater collection system.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 23 — **Mingo County PSD (Chattaroy)** — $1,000,000 — $3,595,000

**SRF #C:** 544312

**County:** Mingo

**NPDES #WV:** 0037699

**Binding Date:** 9/30/2023

**Points** 145.00

**Needs Categories:**
CWT-Sewer System Rehabilitation
CWT-New Collector Sewers

**Problem**

Eastern Chattaroy and surrounding areas do not currently have public sanitary sewer service. Most residents in the area rely on individual home septic systems. Local soils are classed as udorthent and urban land soils which are ill suited to support septic systems. The existing Chattaroy system is in poor condition and in need of rehabilitation and replacement, I&I rate is almost 60%. Also, a landfill near eastern Chattaroy is currently transporting its leachate overland to the Williamson WWTP for treatment and disposal, creating a risk of environmental exposure should leachate leak out in transit.

**Solution**

Project proposes to rehabilitate or remove and replace approximately 3,200 LF of 8" gravity sewer main, 1,700 LF of 4" gravity sewer main, 75 manholes, and all necessary appurtenances as well as the main Chattaroy Pump Station. It further proposes to extend wastewater service along US Route 52 through eastern Chattaroy to the landfill. Extension will entail the installation of approximately 8,700 LF of 8" gravity sewer main, 1,750 LF of 4" gravity sewer main, 41 manholes, 200 LF of 1-1/4" forcemain, one grinder PS, and all necessary appurtenances.

**Rank** 24 — **Monongah, Town of** — $1,000,000 — $1,000,000

**SRF #C:** 544738

**County:** Marion

**NPDES #WV:** 0027324

**Binding Date:** 6/30/2024

**Points** 145.00

**Needs Categories:**
CWT-Sewer System Rehabilitation

**Problem**

Portions of the town of Monongah's existing sanitary sewer collection system are in poor condition and allow inflow and infiltration (I&I) into the collection system. The increase in I&I causes the town's CSO's to overflow on a regular basis during rain events.

**Solution**

An I&I study has been completed to identify locations and the severity of the issues. Measures have been designed to repair the issues in the sanitary sewer collection system and reduce the frequency of CSO events. A portion of the gravity sewer system will be rehabilitated to remove I&I and allow for more efficient operation of the system.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 25

**Moundsville Sanitary/Stormwater Utility Bd** | $4,452,100 | $4,452,100

**SRF #C:** 544739

**Needs Categories:** CWT-Secondary Treatment; CWT-CSO Correction

**County:** Marshall

**NPDES #WV:** 0023264

**Binding Date:** 6/30/2023

**Points** 145.00

**Problem**

Gas handling equipment for the anaerobic digesters at the WWTP is beyond its design life. Combined sewers upstream of the WWTP are noted in the LTCP to require inflow source removal.

**Solution**

Replacing the sludge heating system for the anaerobic digesters at the WWTP and cleaning the digester. Replacing trunk sewers upstream from the WWTP, sewer lining for select sewers and rehabilitating the junction chamber at the WWTP.

**Rank** 26

**Nutter Fort, Town of (Phase IV)** | $1,000,000 | $2,000,000

**SRF #C:** 544693

**Needs Categories:** CWT-Sewer System Rehabilitation

**County:** Harrison

**NPDES #WV:** 0100901

**Binding Date:** 9/30/2023

**Points** 145.00

**Problem**

-The existing sanitary sewer line in the blocks of WV Ave from Washington St. to Franklin St. has been found to be in extremely poor condition and is causing a multitude of operation and maintenance issues for the Town.
-The 36" storm sewer line along WV Route 20 has also been found to be in failing condition and is at risk of collapse. Multiple sections of this line lie underneath existing buildings. If these sections of line collapse, the Town would have no way to divert the flows, causing serious backups and damage to the surrounding buildings and private property.

**Solution**

This project is Phase IV of the Town of Nutter Fort's Draft Long Term Control Plan which was submitted to the WVDEP for review in December 2012. This project proposes to replace approximately 2,000 LF of 8" sanitary sewer line in the WV Ave block from Washington St. to Franklin St. The project will also replace and reroute approximately 500 LF of 36" line. The existing 36" line will be grout filled and abandoned.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 27 — **Pennsboro, City of** — $2,000,000 — $4,780,000

**SRF #C:** 544748

**County:** Ritchie

**NPDES #WV:** 0025739

**Binding Date:** 6/30/2024

**Points** 145.00

**Needs Categories:**
CWT-Infiltration/Inflow
CWT-Sewer System Rehabilitation

**Problem**

Currently the City of Pennsboro is experiencing large amounts of inflow & infiltration (I&I) into their system, accounting for approximately 87% of the flow that is being sent to the WWTP currently. Due to this the City's WWTP is experiencing Overflow or Surges at the WWTP which is not allowing for proper treatment of the Wastewater that is being sent to the plant. Along with improper treatment the plant is not sized to handle the large amounts of I&I and is exceeding its design max flow on a normal basis.

**Solution**

-Preliminary I&I study that will include Flow Monitoring, CCTV Camera Evaluation and Smoke testing of the system to determine overall health of sanitary sewer collection system and determine areas of heavy I&I.
-Once areas of concern have been determined construction plans will be designed and produced for reduction in I&I and sanitary sewer rehabilitation. Construction plans include: Remove and replace existing sanitary sewer line and manholes, sanitary sewer pipe and manhole lining, manhole rehabilitation and evaluation and existing pump stations upgrades.

**Rank** 28 — **Shady Spring PSD (Grandview Sewer)** — $1,668,631 — $9,772,705

**SRF #C:** 544774

**County:** Raleigh

**NPDES #WV:** 0080403

**Binding Date:** 6/30/2024

**Points** 140.00

**Needs Categories:**
CWT-New Collector Sewers

**Problem**

The homes in the study area rely on individual septic systems for sewage disposal, several of which do not function properly due to the very shallow bedrock. Some homeowners have installed advanced on-site treatment systems to combat this problem.

**Solution**

The proposed plan consists of constructing a grinder pump pressure sewer system to a long force main that will connect the proposed Grandview collection system to the existing Shady Spring PSD's wastewater collection system at Crow. The Phase 1 Project Area is located on the southern end of the Community of Grandview near the Interstate 64 Interchange. The remaining 311 homes are located to the north of the Phase 1 Study Area. The plan is to provide public sewer service to these homes in the next project phase(s).

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 29 — **Walton PSD** — $4,265,000 — $9,265,000

**SRF #C:** 544166

**County:** Roane

**NPDES #WV:** 0000000

**Binding Date:** 3/31/2024

**Points** 140.00

**Needs Categories:**
NPS-Individual/Decentralized Systems

**Problem**
The discharge of raw sewage into roadside ditches, area creeks and Pocatalico River has created the potential for health hazard conditions within the PSD's service area. The water quality of the Pocatalico River, Silcott Fork and Biglick Run is being degraded, especially during dry periods that produce low stream flows, by those discharges. The Pocatalico River was listed by the WVDEP as a degraded waterway on their 303d list from River Mile 45 to its headwaters due to unidentified biological (sewage) contamination.

**Solution**
Installation of a conventional collection and treatment system at Walton PSD.

**Rank** 30 — **West Union, Town of** — $4,000,000 — $16,740,000

**SRF #C:** 544760

**County:** Doddridge

**NPDES #WV:** 0020109

**Binding Date:** 6/30/2024

**Points** 140.00

**Needs Categories:**
CWT-Secondary Treatment
CWT-Sewer System Rehabilitation

**Problem**
Existing WWTP has been in service since 1998, discharging to Middle Island Creek. Plant is undersized for expected growth in local prison and has experienced great operation & maintenance costs. WWTP with normal wear and tear and expected flow increase, is not expected to keep up with demand. Existing collection system is currently under sized and is deteriorating leading to increased I&I and higher flows are occurring within WWTP during large storm events. Proposed project would replace these lines with a 6" HDPE FM. Existing WWTP upgrade is to accommodate increased flow and better treat incoming wastewater.

**Solution**
-West Union currently provides wastewater collection and treatment service to approximately 514 customers including the WV North Central Regional Jail.
-Project will replace 4.26 miles of existing collection force main, 100 linear feet of gravity main, and three manholes to meet the needs of current customers and anticipated demand from future expansion at WV North Central Regional Jail.
-Project also includes demolition and replacement of existing WWTP. The current 200,000 GPD plant will be replaced with WWTP capable of treating 750,000 GPD.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 31

**Huntington Sanitary Board (13th St. PS)** | $13,500,000 | $19,500,000

**SRF #C:** 544790

**County:** Cabell/Wayne

**NPDES #WV:** 0023159

**Binding Date:** 6/30/2024

**Points** 135.00

**Needs Categories:**
CWT - Sewer System Rehabilitation
Energy Conservation - Energy Efficiency

**Problem**

Most of the existing 13th St. Pump Station was designed and constructed in the mid-1950s. The majority of equipment at the station have surpassed their expected useful life, and are in need of replacement, modification, or rehabilitation. Operation and maintenance of the station is costly and labor intensive. Based on age and capacity of existing facilities, as well as the future anticipated regulatory requirements relative to combined sewer collection systems, a comprehensive upgrade to this facility is needed to continue to adequately serve the combine sewer system and provide uninterrupted conveyance.

**Solution**

The existing pump station facility will undergo significant renovations. Improvements are anticipated to include new pumping equipment, discharge piping, and valving; upgraded equipment and wet well access; new heating, ventilation, and air condition equipment and appurtenances; influent debris handling considerations; and upgraded controls and instrumentation. Additional improvements include new administration facilities and site electrical. Energy efficient and water reuse practices will be incorporated into the design and selection of new equipment.

**Rank** 32

**Huntington Sanitary Board (4th St. PS)** | $13,500,000 | $15,500,000

**SRF #C:** 544789

**County:** Cabell/Wayne

**NPDES #WV:** 0023159

**Binding Date:** 6/30/2024

**Points** 135.00

**Needs Categories:**
CWT-Sewer System Rehabilitation
Energy Conservation-Energy Efficiency

**Problem**

Most of the existing 4th St. Pump Station was designed and constructed in the mid-1950s. The majority of equipment at the station have surpassed their expected useful life, and are in need of replacement, modification, or rehabilitation. Operation and maintenance of the station is costly and labor intensive. Based on age and capacity of existing facilities, as well as the future anticipated regulatory requirements relative to combined sewer collection systems, a comprehensive upgrade to this facility is needed to continue to adequately serve the combine sewer system and provide uninterrupted conveyance.

**Solution**

The existing pump station facility will undergo significant renovations. Improvements are anticipated to include new pumping equipment, discharge piping, and valving; upgraded equipment and wet well access; new heating, ventilation, and air condition equipment and appurtenances; influent debris handling considerations; and upgraded controls and instrumentation. Additional improvements include new administration facilities and site electrical. Energy efficient and water reuse practices will be incorporated into the design and selection of new equipment.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 33

**Mineral Wells PSD** — $8,523,150 — $9,023,150

**SRF #C:** 544639

**Needs Categories:** CWT-Sewer System Rehabilitation

**County:** Wood

**NPDES #WV:** 0081141

**Binding Date:** 9/30/2023

**Points** 135.00

**Problem**

System has issues with age and capacity. Project will address age issues with the grinder system and remove bottlenecks associated with undersized lift stations and force mains.

**Solution**

Project includes: Extending the force main from the Stoops Rd Lift Station to the Jackson Run Lift Station; extending 12" gravity sewer across Tygart Creek and SR 21 to the proposed Route 21 Lift Station; improvements to 148 grinder stations; improvements to the Bonnivale Lift Station; extending a new force main across I-77 from the Jackson Run Lift Station to the WWTP; and installing a second headworks at the WWTP.

**Rank** 34

**Parkersburg Utility Board (Interceptor)** — $22,039,600 — $26,039,600

**SRF #C:** 544827

**Needs Categories:** CWT-New Interceptors
Energy Conservation-Energy Efficiency

**County:** Wood

**NPDES #WV:** 0023213

**Binding Date:** 6/30/2024

**Points** 130.00

**Problem**

The recommended pumping station replacement project with deep interceptors was part of an overall SSO abatement strategy developed by PUB and submitted as an engineering report to satisfy Administrative Order No. 4566. The existing Kanawha and Summers Street pumping stations are undersized for the flows required to be handled and at the end of their useful life. An analysis was performed that compared the 20 year capacity improvements/rehabilitation and operational costs of continuing to use the pumping stations versus elimination of the pumping stations in lieu of deeper intercepting sewers.

**Solution**

As documented in the 2018 SSO Abatement Report Update, a desk top study identified the deeper interceptors as a feasible alternative to replacing the pumping stations (PS's). Since the report was submitted in 2018, PUB authorized Strand to prepare a Pre-design Investigation for the Neil Run and Little Kanawha Interceptors (Pre-design Report). The Pre-Design Report concluded that elimination of the two PS's with deep interceptors was more cost effective.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 35

**Paw Paw, Town of (Phase II)** — $1,438,047 — $2,438,047

**SRF #C:** 544747

**County:** Morgan

**NPDES #WV:** 0027405

**Binding Date:** 12/31/2023

**Points** 130.00

**Needs Categories:**
CWT-Sewer System Rehabilitation

**Problem**
Reduce the volume of extraneous flows from entering the collection system causing sewer backups and operational issues at the WWTP.

**Solution**
The Town is in the process of completing an I/I Study of the collection system to identify points of non-sanitary sewer entering the collection system. The results from the I/I Study will be used to define a rehabilitation project for the existing collection system which will consist of manhole rehab/replacement, and sewer line rehab/replacement.

**Rank** 36

**Richwood, City of (Phase I)** — $3,700,000 — $7,450,000

**SRF #C:** 544579

**County:** Nicholas

**NPDES #WV:** 0022004

**Binding Date:** 3/31/2024

**Points** 130.00

**Needs Categories:**
CWT-Infiltration/Inflow
CWT-Sewer System Rehabilitation

**Problem**
The city of Richwood's current collection and treatment system is experiencing large amounts of I&I. The large amount of I&I is being experienced due to two main reasons, having a combined sewer and storm system and the immense damage that the collection system obtained during the June 2016 flood event. This resulted in the plant is not complying with the NPDES permit and the city has unpermitted discharge to the Cherry River daily. Richwood currently has multiple notices of violation and is currently under consent order by the WVDEP.

**Solution**
The project being proposed is phase 1 of a two phased project. This phase 1 project will consist of repairing damage within the existing collection system. These repairs will include the removal and replacement of sanitary sewer lines, installation of new sewer interceptors in locations less susceptible to damage from flooding where practical, installation of a new lift station, and replacement of flow meters that were damaged during the June 2016 flood.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 37

**Clay, Town of (Project #1)** — $1,086,500 — $7,091,500

**SRF #C:** 544614

**County:** Clay

**NPDES #WV:** 0022055

**Binding Date:** 12/31/2023

**Points** 125.00

**Needs Categories:**
CWT-Secondary Treatment
CWT-Sewer System Rehabilitation

**Problem**

As much as 90% of the Town's influent comes from I&I, however which parts are unknown due to lack of mapping and flow data. Some of the pump stations have failed and caused discharges directly into the river. The plant itself has major mechanical and electrical issues relating to the Zimpro Countercurrent, so much so that only one of the units is currently being used and it is failing mechanically. There have been several instances of the plant exceeding permitted capacity and discharge limits. The sludge processing is currently inadequate.

**Solution**

The sewage collection system will undergo smoke testing to determine which parts are causing the most I&I issues. The pumping stations will be upgraded to address the mechanical and electrical issues and the plant will also be upgraded to return it to reliable service.

**Rank** 38

**Mason County PSD (Sand Hill Rd Sewer)** — $2,000,000 — $14,076,713

**SRF #C:** 544771

**County:** Mason

**NPDES #WV:** 0086886

**Binding Date:** 3/31/2023

**Points** 125.00

**Needs Categories:**
CWT-New Collector Sewers
CWT-New Interceptors

**Problem**

Sand Hill Road, with its two small sewer systems and hundreds of private septic tanks, has been a top environmental concern in Mason County. The densely populated area has rapidly developed, with hundreds of new homes being built in the last twenty years, challenging the Crooked Creek watershed that runs due south of the project area, along Point Pleasant to the east and into the Ohio River there. There is documentation of coliform in waterways and standing water in this area. There is additional documentation of a substantial amount of failing septic tanks.

**Solution**

The proposed facilities after improvement include approximately 82,000 LF of gravity and pressure sewer, approximately 180 grinder pumps, five lift stations and approximately 16,600 LF of transmission force main to provide for a centralized sewer system collecting sewage from the project area and transmitting it to the District's existing Camp Conley wastewater treatment plant. The existing package plant at Rolling Acres will be decommissioned and a new collection system with service reconnects will be provided there.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 39

**North Beckley PSD (Phase I)** — $3,778,000 — $3,838,000

**SRF #C:** 544617-01

**County:** Raleigh

**NPDES #WV:** 0027740

**Binding Date:** 12/31/2023

**Points** 125.00

**Needs Categories:** CWT-Sewer System Rehabilitation

**Problem**

I&I and sanitary sewer overflows in the wastewater collection system and overflows at the WWTP.

**Solution**

1. Perform I&I study of wastewater collection system to identify problem areas.
2. Upgrade existing Sprague LS and FM, sewer lines, and manholes to reduce sanitary sewer overflows in wastewater collection system, especially in the Whitestick Creek watershed area where spills most commonly occur.

**Rank** 40

**North Beckley PSD (Phase II)** — $12,110,000 — $14,150,000

**SRF #C:** 544617-02

**County:** Raleigh

**NPDES #WV:** 0027740

**Binding Date:** 6/30/2023

**Points** 125.00

**Needs Categories:** CWT-Advanced Treatment

**Problem**

1. I&I and sanitary sewer overflows in the wastewater collection system and overflows at the WWTP.
2. Existing WWTP equipment and metal pretreatment building are at the end of their useful life.
3. Increase sludge dewatering capabilities.
4. Some of the plant facilities are single trains that cannot be taken out of service for maintenance and repairs unless the flow is bypassed.

**Solution**

Upgrade existing WWTP to increase capacity for future demands and to treat peak flows, provide additional parallel treatment units, and replace worn out plant equipment, metal pretreatment building, and other related work.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 41

**Oak Hill Sanitary Board** — $3,705,000 — $7,163,000

**SRF #C:** 544623

**Needs Categories:** CWT-Infiltration/Inflow

**County:** Fayette

**NPDES #WV:** 0020281

**Binding Date:** 3/31/2024

**Points** 125.00

**Problem**

Oak Hill currently experiences I&I at an elevated rate of 60% (approx. 654,501 GPD) due to aging collection infrastructure in both its original Minden and Route 621 systems, and the former Arbuckle system. It's allowable I&I, based on the diameter and length of its gravity sewer mains and BPH regulations is only 102,530 GPD, more than six-fold less than reality. In addition, Oak Hill's Minden pump stations are in poor condition and are in need of repair in order to continue providing effective service.

**Solution**

This project proposes to remove and replace various sections of gravity sewer main in the Minden system to reduce and/or eliminate I&I. It further proposes to rehabilitate two of Oak Hill's existing Minden pump stations to prolong their useful life. Another two pump stations will be decommissioned and replaced by constructing a new gravity sewer line feeding a single pump designed to handle the flows of both previous stations.

**Rank** 42

**Oceana, Town of** — $361,000 — $1,805,000

**SRF #C:** 544694

**Needs Categories:** CWT-Sewer System Rehabilitation

**County:** Wyoming

**NPDES #WV:** 0024431

**Binding Date:** 6/30/2024

**Points** 125.00

**Problem**

A smoke testing study was completed in the summer of 2020 that identified a number of deficiencies in the collection system, including storm sewer cross connections, broken sewer mains and laterals and leaking manholes.

**Solution**

Replace approximately 3000 LF of 6-inch, 8-inch, and 10-inch GSP, install 1900 LF of 18-inch storm drain and replace 10 manholes.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 43 — **Preston County PSD** — $1,500,000 — $3,600,000

**SRF #C:** 544750

**County:** Preston

**NPDES #WV:** 0025101

**Binding Date:** 6/30/2024

**Points** 125.00

**Needs Categories:**
CWT-Advanced Treatment
CWT-Infiltration/Inflow
CWT-Sewer System Rehabilitation

**Problem**

1) The PSD currently utilizes outdated pumping operations that are in constant need of repair and have deteriorated to a point rehabilitation is not an option. The Hobbits Glenn pump station requires upgrades to ensure reliable operations. 2) The PSD experiences excessive inflow and infiltration in the system that needs addressed to ensure the pump stations and newly constructed WWTP are not overburdened and can operate efficiently. 3) The PSD has received NOVs for not meeting effluent metals requirements. 4) The PSD currently holds meetings and conducts business in a board member's house.

**Solution**

1) Construct two new pump stations to replace outdated pumping operations currently utilized by the PSD. Hobbits Glen pump station will have improvements such as SCADA telemetry and a manual transfer switch installed. 2) An I&I study will be performed, and improvements will be made based upon the study to reduce I&I in the system. 3) A building will be constructed that will house the disk filter operation and act as an office building for the PSD. This will allow the PSD to meet their effluent metals requirements, as well as give the PSD a proper place to hold meetings and conduct business.

**Rank** 44 — **White Oak PSD** — $3,000,000 — $7,933,699

**SRF #C:** 544762

**County:** Fayette

**NPDES #WV:** 0044041

**Binding Date:** 3/31/2024

**Points** 125.00

**Needs Categories:**
CWT-Secondary Treatment
CWT-Infiltration/Inflow

**Problem**

Sanitary sewer overflow at the existing wastewater treatment plant.

**Solution**

Existing sanitary sewer overflow will be removed by routing bypass flow through a new auxiliary treatment process at the existing WWTP to satisfy discharge permit requirements. The new auxiliary process will be configured in such a way that it may be utilized as a normal treatment process, during periods of flow rates not exceeding the plant's capacity, to provide a higher level of treatment if required. Also, project will produce a sanitary sewer evaluation survey to better enable the PSD to work on I/I reduction within their existing sanitary sewer collection system.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 45

**Bluefield Sanitary Board (Midway)** — $1,632,000 — $2,960,000

**SRF #C:** 544493

**County:** Mercer

**NPDES #WV:** 0023141

**Binding Date:** 6/30/2024

**Points** 120.00

**Needs Categories:**
CWT-Sewer System Rehabilitation

**Problem**
Area 1 (Midway)-Inflow and infiltration issues in the overall system.

Area 2 (Thompson Pump Station Area)-Dated forcemain lift stations.

**Solution**
Area 1 (Midway)-Replacement of the Midway sewer system.

Area 2 (Thompson Pump Station Area)-Feasible solution is to replace forcemain with new gravity lines, eliminating two forcemain lift stations and upgrade existing main pump station. This would add 21 potential customers to this area along Nichols Road.

**Rank** 46

**Bluewell PSD** — $12,605,000 — $17,605,000

**SRF #C:** 544594

**County:** Mercer

**NPDES #WV:** 002813

**Binding Date:** 6/30/2024

**Points** 120.00

**Needs Categories:**
CWT-Secondary Treatment
CWT-Infiltration/Inflow
CWT-Sewer System Rehabilitation

**Problem**
1) Replace Bluewell PSD's four wetwell/drywell lift stations in the Montcalm area. They are 58 years old and are at the end of their useful life and present safety isses in maintaining the pumping and electrical equipment. 2) Reduce inflow and infiltration (I&I) in Bluewell's existing gravity sewer collection system to reduce sanitary sewer overflow condidtions. 3) Replace existing pumps, vacuum valves, blowers, and flow meters and make repairs to the Bramwell WWTP.

**Solution**
1) Upgrade the existing Montcalm WWTP capacity from 400,000 gpd to 600,000 gpd. 2) Replace the four existing lift stations in the Montcalm area with wetwell type lift station structures with submersible sewage pumps. 3) Replace/upgrade sections of Bluewell PSD's existing gravity collection system to reduce I&I. 4) Replace grinder pumps, lift station pumps, vacuum pumps, and air valves in Bramwell's sewer collection system. 5) At the existing Bramwell WWTP, replace blowers, mixer pumps, and flow meters and make structural concrete repairs to the plant.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 47 — **Boone County PSD** — $6,254,350 — $6,288,550

**SRF #C:** 544494

**County:** Boone

**NPDES #WV:** 0035939

**Binding Date:** 6/30/2024

**Points** 120.00

**Needs Categories:**
CWT-Secondary Treatment
CWT-Sewer System Rehabilitation

**Problem**
Certain items at the WWTP have outlived their useful life and it is time to replace these units. Also, there is inflow and infiltration in the West Madison system that causes excessive flows when rain events occur. These two areas are the main concerns.

**Solution**
Upgrade certain collection system components in/near West Madison and upgrade the Danville WWTP by replacing mechanical bar screen, upgrade the Orbal unit, replacing UV unit, replacing belt filter with fan press and upgrading capacity via addition of third clarifier. Measures implemented will help the Long Term Control Plan (LTCP) compliance.

**Rank** 48 — **Clay, Town of (Project #2)** — $2,200,000 — $2,200,000

**SRF #C:** 544723

**County:** Clay

**NPDES #WV:** 0020672

**Binding Date:** 6/30/2024

**Points** 120.00

**Needs Categories:**
CWT-Sewer System Rehabilitation

**Problem**
A smoke testing study identified several defects in the existing collection system including broken and root infested interceptors, damaged and leaking manholes and storm sewer cross connections. Seventy five percent of flows treated at the WWTP are I/I related. Repairs and/or replacement of damaged pipe and manholes will reduce the quantities of extraneous water entering the collection system.

**Solution**
Replace 2000 LF of existing 8-inch and 1500 LF of existing 4-inch GSP, replace 2700 LF of 10-inch GSP by pipebursting, replace 35 manholes, install 300 LF 18-inch storm sewer pipe and 4 drop inlets and other required appurtenances.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 49 — **Flatwoods-Canoe Run PSD** — $2,997,752 — $4,497,752

**SRF #C:** 544729

**Needs Categories:** CWT-New Collector Sewers

**County:** Braxton

**NPDES #WV:** 0084042

**Binding Date:** 6/30/2024

**Points** 120.00

**Problem**

Failing on-site treatment systems

**Solution**

The project will propose sewer to extend to the Holly Gray Park area and provide approximately 77 residents, one public authority, and one recreational area with public sewer services.

**Rank** 50 — **Gilbert, Town of** — $4,446,000 — $5,946,000

**SRF #C:** 544502

**Needs Categories:** CWT-New Collector Sewers
CWT-New Interceptors

**County:** Mingo

**NPDES #WV:** 0103748

**Binding Date:** 6/30/2024

**Points** 120.00

**Problem**

Failing on-site wastewater treatment systems.

**Solution**

New centralized gravity collection system to replace the existing failing on-site treatment systems, serving 83 new customers.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 51

**Keyser, City of (I&I)** — $1,500,000 — $3,000,000

**SRF #C:** 544764

**Needs Categories:**
CWT-Infiltration/Inflow
CWT-Sewer System Rehabilitation

**County:** Mineral

**NPDES #WV:** 0024392

**Binding Date:** 6/30/2024

**Points** 120.00

**Problem**

From September 2019 to September 2021, the City treated an average of 1.042 MGD, but during storm events the City treated up to 5.3331 MGD. The City recorded 36.57% I&I for the year of 2020. The City's WWTP is permitted to treat 2.4 MGD, but the collection system is not capable of handling the same high flows, resulting in capacity problems. Some problem areas have been identified, including Lynmar St., Water St., and Thunder Hill Run, but further investigation is needed. A bottleneck has been identified along the main gravity line on Water St. which causes backups and prevents flow from entering the PS.

**Solution**

The proposed project consists of a comprehensive inflow and infiltration study, sewer model of the existing system, preliminary engineering report, and upgrading of 7,500 LF and 43 MHs along the main gravity line along Water Street to the pump station. The I&I Study is comprised of comprehensive mapping of the collection system, flow monitoring, manhole inspections, acoustic inspection of all sewer lines, review of previous smoke testing reports, additional smoke testing as needed, and preparation of comprehensive I/I report and map book.

**Rank** 52

**Logan County PSD (North Mitchell Heights)** — $3,278,000 — $3,578,000

**SRF #C:** 544793

**Needs Categories:**
CWT-New Collector Sewers

**County:** Logan

**NPDES #WV:** 0105171

**Binding Date:** 6/30/2024

**Points** 120.00

**Problem**

Approximately 15 residents are served by a small failing package plant. In addition it is believed that other customers have failing septic systems.

**Solution**

The project proposes to install and construct public sewer to provide service to approximately 80 potential customers.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 53

**Malden PSD** — $5,910,000 — $1,100,000

**SRF #C:** 544736

**Needs Categories:** CWT-New Collector Sewers

**County:** Kanawha

**NPDES #WV:** 0050610

**Binding Date:** 6/30/2024

**Points** 120.00

**Problem**

Malden has identified two major neighborhoods within its service territory which do not currently have access to public sanitary sewer service, Driftwood Drive neighborhood in the unincorporated community of Rand, WV, and Simmons Creek neighborhood north of Belle, WV. Residents and churches in these communities rely on individual septic systems, the condition of which is currently unknown and likely to vary considerably. Between the 2 neighborhoods, approximately 80 residences are affected.

**Solution**

Extend sanitary sewer to Simmons Creek and Driftwood Dr. Approx. 1,600 LF of gravity sewer mains, 15 manholes (MH), and all necessary appurtenances will be installed in Driftwood Dr., allowing wastewater to flow by gravity into Malden's existing coll. syst. in Rand. Construct approx. 12,000 LF of gravity sewer mains, 14,000 LF of forcemain, one new pump station (PS), 50 MH, and all necessary appurtenances to convey wastewater from Simmons Creek to Malden. Wastewater will flow by gravity to PS near neighborhood entrance. PS will pump wastewater north along US Rt 60 to Malden's existing coll. Syst. in Dupont City.

**Rank** 54

**Mason County PSD (Apple Grove)** — $1,500,000 — $20,975,000

**SRF #C:** 544699

**Needs Categories:** CWT-Secondary Treatment
CWT-New Collector Sewers

**County:** Mason

**NPDES #WV:** 0000000

**Binding Date:** 12/31/2023

**Points** 120.00

**Problem**

The Apple Grove area of Mason County does not currently have public sanitary sewer service. This poses an impediment to economic development in the area. Local businesses own and operate expensive package wastewater treatment plants while residents rely on individual septic systems of variable condition and quality. New businesses are hesitant to locate in the area due to the lack of sewer service, despite the availability of large tracts of prime industrial land. This project aims to provide the area with sanitary sewer service through the PSD.

**Solution**

This project will construct a third wastewater collection and treatment system in Apple Grove. Gravity sewer mains, manholes, pump stations, forcemains, and all necessary appurtenances will be constructed to conduct wastewater from homes and businesses in Apple Grove to a new centralized WWTP which shall have adequate capacity for the current residents and anticipated future industrial customers.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 55 — **Mount Zion PSD** — $3,368,500 — $3,368,500

**SRF #C:** 544521

**County:** Calhoun

**NPDES #WV:** 0101702

**Binding Date:** 6/30/2024

**Points** 120.00

**Needs Categories:**
NPS-Individual/Decentralized Systems

**Problem**
-The steel treatment plant tankage is severely corroded, and the blowers, pumps, controls and instrumentation are failing. The pumps and controls have reached the end of their useful lives and are failing. Neither the treatment plant nor the pumping stations have telemetry equipment or emergency generators.
-Spills of raw sewage have occurred because of equipment failures.

**Solution**
Replace the existing package plant with new HDPE tankage (MBBR treatment technology) and replace existing pumps and controls. Also, install telemetry equipment and emergency generators.

**Rank** 56 — **New Creek PSD** — $1,000,000 — $7,421,000

**SRF #C:** 544740

**County:** Mineral

**NPDES #WV:** 0085456

**Binding Date:** 12/31/2024

**Points** 120.00

**Needs Categories:**
CWT-Infiltration/Inflow
CWT-Sewer System Rehabilitation
CWT-New Collector Sewers

**Problem**
Proposed projects completion will reduce operation and maintenance costs by reducing the amount of inflow and infiltration entering the sewer system along with serving previously unserved areas with failing septics.

**Solution**
Project will consist of rehabilitation efforts to existing collection system as well as line extensions serving unserved areas. Rehabilitation efforts will consist of manhole lining, installing new watertight frame and cover, flushing/jetting sewer lines, and other miscellaneous manhole repairs for reducing the amount of inflow and infiltration entering the sewer system. Sewer line extension will consist of approx. 30,000 LF of 8” PVC sewer line, 100 manholes, and a new pump station serving approximately 100± new customers in the Great Oak Valley Subdivision, Pine Point Subdivision and Pine Swamp Road.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 57

**Nitro Regional Wastewater Utility** — $3,600,000 — $3,600,000

**SRF #C:** 544652

**Needs Categories:**
CWT-Sewer System Rehabilitation
CWT-CSO Correction

**County:** Kanawha/Putnam

**NPDES #WV:** 0023299

**Binding Date:** 6/30/2024

**Points** 120.00

**Problem**

-Pump Stations No. 2 & 4 are antiquated and replacement parts are not easily found.
-The main gravity sewer line from the Rock Branch area is in poor condition and needs up-sized. The gravity line crossing the backwater area is attached to a WVDOH bridge and is in poor condition and undersized.
-The gravity sewer line at Sattes Circle is currently combined with the storm water and is in poor condition. As part of the Long-Term Control Plan, the storm water needs separated out and the sewer line needs replaced.

**Solution**

The project proposes to replace Pump Stations No. 2 & 4, replace 5,500 LF of gravity sewer line in the Rock Branch area and install a new Pump Station to pump flow directly to the WWTP relieving some pressure to Pump Station No. 8, and replace 1,000 LF of gravity sewer line at Sattes Circle.

**Rank** 58

**Parkersburg Utility Bd (Hill Ave)** — $1,660,000 — $1,660,000

**SRF #C:** 544745

**Needs Categories:**
CWT-New Collector Sewers

**County:** Wood

**NPDES #WV:** 0023213

**Binding Date:** 6/30/2024

**Points** 120.00

**Problem**

Potential development for area without sanitary sewer service.

**Solution**

Extend new sewers to collect wastewater for treatment.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 59

**Parkersburg Utility Bd (Marrtown Road)** — $1,193,500 — $3,443,500

**SRF #C:** 544654

**Needs Categories:** CWT-New Collector Sewers

**County:** Wood

**NPDES #WV:** 0023213

**Binding Date:** 6/30/2024

**Points** 120.00

**Problem**

Potential development for area without sanitary sewer service.

**Solution**

Extend new sewers to collect wastewater for treatment.

**Rank** 60

**Rowlesburg, Town of (WWTP)** — $1,500,000 — $11,150,000

**SRF #C:** 544644

**Needs Categories:** CWT-Secondary Treatment
CWT-CSO Correction

**County:** Preston

**NPDES #WV:** 0027481

**Binding Date:** 6/30/2024

**Points** 120.00

**Problem**

The wastewater treatment plant is very old and in desperate need of upgrades. The treatment ponds are in poor condition and in need of sludge removal. The aeration system needs replaced. The plant needs a new chlorination/dechlorination system. The collection system is old and, in many cases, has to be repaired periodically. The Town is proposing to separate locations where storm flow is combined with sanitary sewer flow.

**Solution**

The Town of Rowlesburg proposes to replace the failing treatment facility with a new wastewater treatment plant with a flow equalization basin, and replace the main lift station at the River crossing and lay new sanitary sewer through the Town Park to the proposed lift station.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 61

**Salem, City of (WWTP Upgrade Phase III)** — $2,000,000 — $10,400,000

**SRF #C:** 544752

**Needs Categories:** CWT-Secondary Treatment

**County:** Harrison

**NPDES #WV:** 0020257

**Binding Date:** 6/30/2024

**Points** 120.00

**Problem**

The Salem wastewater treatment plant is a 400,000 gpd oxidation ditch with a chlorination disinfection process that discharges into the Salem Fork Creek. The WWTP had an average monthly flow of 605,000 gpd and an average maximum daily flow of 1,000,000 gpd from April 2020 to March 2021.

**Solution**

Currently, the Salem wastewater treatment plant is experiencing high flows on a frequent basis and has exceeded the average monthly flow allowed by the current permit parameters multiple times over the past couple of years. In addition, the plants current operating components need updated to maintain efficient treatment of the wastewater and accurate records of the process. These will need to be addressed with the proposed alternative project.

**Rank** 62

**Sistersville, City of (Virginia Terrace)** — $2,600,000 — $2,600,000

**SRF #C:** 544696

**Needs Categories:** CWT-New Collector Sewers

**County:** Tyler

**NPDES #WV:** 0021814

**Binding Date:** 6/30/2024

**Points** 120.00

**Problem**

The Virginia Terrace area is filled with outdated and failing septic tank systems. The failing systems are draining high volumes of fecal material into the nearby ditches and streams causing unsanitary conditions throughout the neighborhood. This sanitary sewer line would eliminate the need for these small ineffective systems and provide a healthy community to the residents of the area.

**Solution**

The project proposes construction of 1,200 LF of 8 inch gravity sewer, 2,900 LF of 6 inch gravity sewer, 650 LF of 3 inch PVC force main, 950 LF of 2 inch PVC force main, 375 LF of 1 1/4" force main, 1,250 LF of 4" service laterals along with 35 manholes, 3 pump stations, and 2 grinder pump stations.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 63

**Sun Valley PSD (Phase IIIB)** — $5,600,000 — $9,100,000

**SRF #C:** 544776

**County:** Harrison

**NPDES #WV:** 0104663

**Binding Date:** 6/30/2024

**Points** 120.00

**Needs Categories:**
CWT-New Collector Sewers
CWT-New Interceptors

**Problem**

The Fletcher Heights, Old Davisson Run Road and Marion Heights communities of Harrison County, West Virginia do not currently have a public sewer collection system and/or treatment system. The residents of the area are served via aging septic systems. The Fletcher Heights and Marion Heights areas were originally included in the Phase I and Phase II Sanitary Sewer Extension projects but had to be removed due to project budget constraints. During the first two phases there were numerous requests for service from residents.

**Solution**

The Sun Valley Public Service District is looking to extend service to unserved areas in Harrison County that were previously planned in prior projects. The PSD has evaluated multiple areas for potential sanitary sewer extensions and have selected the Fletcher Heights, Old Davisson Run Road and Marion Heights areas. These areas will add approximately 150 customers with the potential for many more.

**Rank** 64

**White Sulphur Springs, City of** — $3,083,000 — $3,083,000

**SRF #C:** 544606

**County:** Greenbrier

**NPDES #WV:** 0084000

**Binding Date:** 6/30/2024

**Points** 120.00

**Needs Categories:**
CWT-New Collector Sewers

**Problem**

Untreated and partially treated wastewater discharging to the Greenbrier River.

**Solution**

Provide public wastewater collection and treatment services and eliminate current on-site treatment for approximately 95 residence in the community of Caldwell.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 65 — **Big Bend PSD** — $1,806,000 — $2,280,000

**SRF #C:** 544627

**County:** Summers

**NPDES #WV:** 0102776

**Binding Date:** 6/30/2024

**Points** 115.00

**Needs Categories:**
CWT-Secondary Treatment

**Problem**
The plants have been poorly maintained and operated.

**Solution**
Proposed project will replace the existing lift station and WWTP at Pence Springs, downsizing to 12,500 GPD. In addition, the scope also includes refreshing the cathodic protection, replacing existing galvanized grating with aluminum, replacing failing blower, cleaning, and painting exposed portions of plant, and replace manual bar screen at the Pine Hill plant. The current limits can be met with a packed bed filter plant.

**Rank** 66 — **Burnsville Public Utility Board (I&I)** — $1,919,000 — $3,508,000

**SRF #C:** 544578

**County:** Braxton

**NPDES #WV:** 0024945

**Binding Date:** 6/30/2024

**Points** 115.00

**Needs Categories:**
CWT-Infiltration/Inflow
CWT-Sewer System Rehabilitation

**Problem**
Removing excess inflow and infiltration from the existing wastewater collection system due to connected drop inlets and outdated wastewater collection lines in low lying areas near waterways.

**Solution**
Upgrade and modification of the existing wastewater collection system to remove connected drop inlets and relocation of existing outdated wastewater collection lines in low lying areas to an area where infiltration will be of less significance.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 67 — **Fort Gay, Town of (Phase I)** — $1,500,000 — $4,660,000

**SRF #C:** 544607

**County:** Wayne

**NPDES #WV:** 0085359

**Binding Date:** 6/30/2024

**Points** 115.00

**Needs Categories:**
CWT-Secondary Treatment
CWT-Infiltration/Inflow

**Problem**

Collection System: Replace existing gravity line to reduce I/I and upgrade existing pump stations (PS). Not all PS are operational, some duplex PS only have one pump and Cass Street A was completely down for several months. Wastewater Treatment Facility: Aerated lagoon requires six aerators to provide treatment. Facility only has three operational and several repairs have been made. Existing baffle dividers have been damaged and have been removed, reducing contact time in lagoon. Existing force main enters lagoon in bottom and does not provide screening. Lagoon dike previously failed and required emergency repair.

**Solution**

The proposed project will consist of mapping the collection system, various upgrades, and rehabilitation to nine existing wastewater pump stations and three existing wastewater grinder pump stations. Also included in this project is the installation of a new 70,000 gpd packaged wastewater treatment plant.

**Rank** 68 — **Gary, City of** — $1,019,000 — $2,769,000

**SRF #C:** 544501

**County:** McDowell

**NPDES #WV:** 0020044

**Binding Date:** 6/30/2024

**Points** 115.00

**Needs Categories:**
CWT-Secondary Treatment
CWT-New Interceptors

**Problem**

The Gary 60+ year old wastewater system has exceeded its useful life and experiences excessive I&I which overloads the WWTP. These overloads result in untreated discharges either from the plant or from manholes in the system. In addition, breaks in the mains allow for exfiltration into the surrounding soil during periods of low water table.

**Solution**

-Use a decentralized sewer system, for treatment of solids, then send to treatment plant for treatment of effluent, or "grey water".
-The treatment option is to collect the effluent in a pump station that is constructed on the grounds of the existing wastewater plant and then pump to a connection point on the City of Welch's wastewater system. The City of Welch will provide treatment of the effluent and has provided a capacity letter.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 69 — **Kingwood, City of** — $4,000,000 — $6,650,000

**SRF #C:** 544735

**County:** Preston

**NPDES #WV:** 0021881

**Binding Date:** 6/30/2024

**Points** 115.00

**Needs Categories:**
CWT-Secondary Treatment
CWT-Advanced Treatment

**Problem**

The existing sanitary sewer treatment plant has needed repairs for years due to years of service. The four Rotating Biological Contactor (RBC) units and wet well needs repairs. Additionally, because flow must be pumped from the influent wet well to the primary clarifier, issues arise where maintenance is required. The piping layout of the plant needs changed. The AC units that are currently undersized are also malfunctioning. A contact basin and disinfection are needed to prevent any contamination of the waterway during high water events. The current collection system needs improvements to its gravity service.

**Solution**

The proposed project will completely rehab all four RBC units. The Pre-Treatment Headworks building improvements will include the installation of a new gravity sewer influent line from the influent channel of the wet-well to the primary clarifier. This will allow for the existing wet-well to be utilized to hold wet weather influent flows more than the ADF where it can be pumped to the primary clarifier at a constant rate. The project will install a new access hatch to the wet-well on the "RBC side" of the wet-well to allow for improved maintenance access and replace the existing undersized and broken AC units.

**Rank** 70 — **Wayne, Town of** — $6,000,000 — $18,350,000

**SRF #C:** 544759

**County:** Wayne

**NPDES #WV:** 0024562

**Binding Date:** 6/30/2024

**Points** 115.00

**Needs Categories:**
CWT-Secondary Treatment
CWT-Sewer System Rehabilitation
CWT-New Collector Sewers
CWT-New Interceptors

**Problem**

1) Several WWTP components have reached the end of their useful life and require rehabilitation, replacement, or upgrade to continue successful operation. 2) Collection system has several areas where main collection pipeline has deteriorated and broken due to slips in the ground and must be repaired to allow continued use of collection system. 3) Several package treatment plants serving various areas are old and in disrepair, some needing replacement. 4) Some parts of Town have no sanitary sewer system; residents use septic tanks for sewage treatment, many areas, tanks are failing and require replacement.

**Solution**

1) Upgrade existing plant to a Sequencing Batch Reactor treatment process including headworks, flow equalization, disinfection, new operations/controls/lab bldg., emergency power, and system wide SCADA System. 2) Decommission and replace five existing package treatment plants with pump stations and required force mains and collection system upgrades that would send sewage to the Town's main WWTP. 3) Several sewer service extensions are planned to reduce number of residents using septic tanks.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 71

**Bradley PSD** — $4,194,849 — $4,694,849

**SRF #C:** 544663

**Needs Categories:** CWT-Advanced Treatment

**County:** Raleigh

**NPDES #WV:** 0000000

**Binding Date:** 6/30/2024

**Points** 105.00

**Problem**

Four treatment facilities collect and treat wastewater for communities of Eunice, Walhonde Village, and Home School Village. Existing Coll. Syst. for each treatment facility are in poor condition. Most piping is made of clay and experiencing high I&I. Remaining communities don't have a public sanitary sewer syst. and currently discharge wastewater directly into individual septic tanks or into creeks and other waterways. Tracts of land are very small and do not have appropriate space for a septic tank or leech field and septic systems do not work properly due to poor soil conditions and wastewater flows to nearby waterways.

**Solution**

Address wastewater collection and treatment problems the District is experiencing in the NW portion of Raleigh Co. District owns and operates three existing packaged wastewater treatment facilities in Eunice and Walhonde Village, and one existing facultative pond treatment facility in Home School Village (near Dorothy). Will provide wastewater collection and treatment services to communities of Eunice, Pettus, Jarrolds Valley, Leevale, Walhonde Village, Gardner Branch, Dorothy, Colcord, and Ameagle. Once wastewater collection system is constructed, District will abandon and dispose of existing packaged treatment facilities.

**Rank** 72

**Fort Gay, Town of (Phase II)** — $1,500,000 — $4,660,000

**SRF #C:** 544786

**Needs Categories:** CWT-Sewer System Rehabilitation

**County:** Wayne

**NPDES #WV:** 0085359

**Binding Date:** 6/30/2024

**Points** 100.00

**Problem**

The Town of Fort Gay's sanitary sewer system currently experiences high levels of infiltration and inflow due to the deteriorated condition of the collection system.

The wastewater treatment plant and pump station modifications will be phase 1. The collection system modifications described herewith will be phase 2.

**Solution**

The proposed project will consist of mapping the collection system, replacing deficient sections of pipe and making repairs or full replacement of existing manholes.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 73 — **Grantsville, Town of** — $1,200,000 — $3,400,000

**SRF #C:** 544634

**County:** Calhoun

**NPDES #WV:** 0041181

**Binding Date:** 6/30/2024

**Points** 100.00

**Needs Categories:**
CWT-Secondary Treatment
CWT-Sewer System Rehabilitation

**Problem**

All the mechanical equipment in the sewage treatment plant is in poor condition or is totally inoperable. Sludge has not been removed from the facility in over 5 years because of pump failures and sludge line clogs. Similarly, pumping stations are in poor mechanical condition, and several have only a single pump that can be operated. The stairs to the elevated control panels are rotten and very dangerous; similarly, there are numerous electrical hazards at both the treatment plant and at the pumping stations.

**Solution**

The basins and piping at the sewage treatment plant will be cleaned and all the electrical and mechanical equipment will be refurbished or replaced. Similarly, the electrical and mechanical equipment at all the pumping stations will be replaced or refurbished. An Asset Management Plan and a detailed set of O&M Procedures will also be developed.

**Rank** 74 — **Hancock County PSD (Route 2)** — $6,518,000 — $7,018,000

**SRF #C:** 544691

**County:** Hancock

**NPDES #WV:** 0101729

**Binding Date:** 6/30/2024

**Points** 100.00

**Needs Categories:**
CWT-Secondary Treatment
CWT-Sewer System Rehabilitation

**Problem**

Aging facilities and components at the Rt. 2 WWTP, Rt. 8 WWTP, Turkey Lick and Lick Run Vacuum PS's, and at 19 other PS's in the existing collection systems, including: The Rt. 2 WWTP's headworks, SBR tanks, dewatering equipment, and the interior doors, roof, and garage doors at the building; the Rt. 8 WWTP's influent screen and access road; the equipment and buildings at Turkey Lick and Lick Run PS's; the structures, controls, pumps, and/or electrical at 19 PS's.

**Solution**

Evaluate current equip. at the two WWTP's, two vacuum pumping stations (PS's) and PS's. Due to Rte. 2 WWTP conditions, replacement of assets is considered Priority 1 including new process equip. (SBR tanks, diffusers, dewatering equipment, UV disinfection, etc.). Selection of equip. in design phase will provide an affordable system that lasts an additional 20 years. Will also include rehabilitation of both vacuum PS's and collection system repairs to extend life expectancy and address odor concerns. Priority 2 involves further investigations at Rte. 8 WWTP to extend life expectancies of influent screening and generator.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 75

**McMechen, City of** | * | $13,560,000

**SRF #C:** N/A

**County:** Marshall

**NPDES #WV:** 0020141

**Binding Date:** 6/30/2024

**Points** 100.00

**Needs Categories:**
CWT-Secondary Treatment
CWT-Infiltration/Inflow
CWT-CSO Correction

**Problem**

The existing treatment and pumping facilities are 40 years old, and some of the equipment has failed (clarigester and mechanical bar screen) and others are marginally functional (trickling filter, pumping stations and controls). The CSO-LTCP needs to be upgraded, and violations of the WV NPDES permit are occuring on a regular basis.

**Solution**

Replace existing trickling filter with a 0.3 MGD SBR type treatment plant, upgrade remainder of WWTP, replace both existing sewage pumping stations, smoke test, and inspect the collection system and upgrade CSO.

*Project is included for earmark eligibility.

**Rank** 76

**Richwood, City of (WWTP Replacement)** | $1,500,000 | $17,450,000

**SRF #C:** 544801

**County:** Nicholas

**NPDES #WV:** 0045730

**Binding Date:** 6/30/2024

**Points** 100.00

**Needs Categories:**
CWT-Secondary Treatment

**Problem**

The City's water and sewer infrastructure previously experienced a major flood event in the summer of 2016. Following the flood, it was concluded that the treatment plant shows signs of significant damage to above ground structures. The location of the existing WWTP puts the facility at risk of major flood hazard, as it is located in the FEMA floodway. Richwood is currently under Order by WVDEP to reduce unpermitted overflows in the sewer system and to make improvements to the treatment plant in order for the discharged effluent to comply with the limits in their WV/NPDES Permit.

**Solution**

This project focuses on a wastewater treatment plant replacement to attempt to mitigate the potential for flood damage and address the shortfalls and inefficiencies in the City's existing WWTP. The selected alternative decommissions the existing 0.5 MGD WWTP and proposes the installation of a new 0.8 MGD Sequencing Batch Reactor (SBR) WWTP. The replacement of the WWTP will relocate the facility out of the FEMA Floodway. The WWTP replacement would accommodate WV/NPDES effluent discharge requirements and help the City in complying with their current Consent Orders issued by the WVDEP.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 77

**Webster Springs PSD (Phase I)** | $2,000,000 | $3,150,000

**SRF #C:** 544689

**County:** Webster

**NPDES #WV:** 0049875

**Binding Date:** 6/30/2024

**Points** 100.00

**Needs Categories:**
CWT-Secondary Treatment
CWT-Sewer System Rehabilitation

**Problem**
System has been in place for nearly 40 years. Several components within the treatment plant and pump stations have surpassed their useful life, needing replacement. Sludge storage facility and bypass conditions must be addressed. The wastewater collection lines are experiencing I&I problems, due to infrastructure being aged and large portion of VCP that can be found throughout the system. A gravity collection line located along some places in the Elk River is determined to be the most troublesome line. It has a high probability of both gravity collection line failure and a major I&I contributor.

**Solution**
The WWTP, pump stations, and collection lines will be updated with this proposed project.

**Rank** 78

**Clarksburg Sanitary Board, City of (Phase V-B)** | $4,235,000 | $4,235,000

**SRF #C:** 544823

**County:** Harrison

**NPDES #WV:** 0023302

**Binding Date:** 6/30/2024

**Points** 95.00

**Needs Categories:**
CWT-CSO Correction

**Problem**
The existing sewer system is combined storm and sanitary. Wet weather conditions cause CSOs to discharge and bring larger flows to the wastewater treatment plant.

**Solution**
Phase V-B will continue storm sewer separation in the East End/Rt. 50 Area. The lower portion of this storm system was constructed during the LTCP Phase IV project and sized to accommodate a 25-yr flood for the entire watershed. The existing combined sewer in this area regularly flows full during wet weather events. Separation of storm sewer throughout the watershed will help alleviate CSO discharges. WWTP work is part of Phase V-A.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 79 — **Elizabeth, Town of** — $2,000,000 — $2,800,000

**SRF #C:** 544819

**County:** Wirt

**NPDES #WV:** 0041505

**Binding Date:** 6/30/2024

**Points** 95.00

**Needs Categories:**
CWT-Infiltration/Inflow

**Problem**
Population in the area is expected to grow. However, the Town's existing collection system is already in poor shape. In many areas, according to Inflow and Infiltration test results, sewage has the potential to leak directly into the ground water system. Residents of the area could potentially be exposed to sanitary sewage in the ground water and/or surface water due to the existing condition of sewer lines and manholes. The improvements proposed by this portion of the project are designed to lower the risk of sewage leaking into the water supply. These improvements represent a benefit to both public health and sanitation.

**Solution**
1) Amos Acre Dr. work will consist of approximately 900-LF of 6" and 2400-LF of 8" PVC gravity sewer line, 3000-LF of PVC forcemain, 12 manholes, 1 air release valve, 10 cleanouts, 1 submersible grinder pump station, and 150-LF of 4" PVC service laterals. This portion of the project will provide service to current and future customers. 2) The inflow and Infiltration portion of the project involves removal and replacement of 3400-LF of 8" PVC gravity sewer line, removal and replacement of 20 manholes, spraylining of 2 manholes, and rehabbing 750-LF of pipe with 8" slip lining.

**Rank** 80 — **Flemington, Town of (I&I)** — $500,000 — $1,000,000

**SRF #C:** 544665

**County:** Taylor

**NPDES #WV:** 0105406

**Binding Date:** 6/30/2024

**Points** 95.00

**Needs Categories:**
CWT-Infiltration/Inflow
CWT-Sewer System Rehabilitation

**Problem**
Flemington's wastewater collection system is under influence of inflow and infiltration during wet weather events which result in high flows which exceed the WWTP's treatment capacity. Flemington is taking active steps in reducing the amount along with the impacts of the contribution.

**Solution**
Engineer will help Owner develop flow data provided with flow monitors and will conduct supplemental flow monitoring to verify findings of this data. Town of Flemington believes some violations are due to inaccurate flow measurements. Town has identified an issue resulting in elevated flow measurements that were not accurate. Town has remedied the situation, and is currently monitoring flows that are much less than those previously reported, but needs to replace the existing flow monitoring device to ensure long-term compliance.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 81 — **Marlinton, Town of** — $6,200,000 — $11,679,900

**SRF #C:** 544670

**County:** Pocahontas

**NPDES #WV:** 0024473

**Binding Date:** 3/31/2024

**Points** 95.00

**Needs Categories:**
CWT-Secondary Treatment
CWT-Sewer System Rehabilitation

**Problem**

Wastewater system's lagoon has not been able to meet its BOD limits recently, and it has no way to treat for Nitrogen and Phosphorus. The pumping stations have reached the end of their useful lives and need to be replaced/upgraded, namely the mechanical and electrical components.

**Solution**

The proposed project will upgrade five existing pump stations, relocate a CSO, replace deteriorated gravity line and manholes in the downtown area, and upgrade the bar screen, disinfection system, and effluent flow meter at the WWTP as well as install an emergency generator at the WWTP. This project is in accordance with the Plan of Corrective Action that resulted from DEP Orders 8455 and 8996. The scope of work will also help address the 74% of I/I in the existing system.

**Rank** 82 — **Marshall County Sewerage District** — $2,600,000 — $4,100,000

**SRF #C:** 544806

**County:** Marshall

**NPDES #WV:** 0081612

**Binding Date:** 12/31/2023

**Points** 95.00

**Needs Categories:**
CWT-Sewer System Rehabilitation
CWT-New Collector Sewers

**Problem**

The problem that is being solved is that one of the eight package plants owned and operated by the MCSD is currently on the brink of failure and could cause an environmental issue at any point. The Pin Oak Hills Subdivision package plant is costing the Sewerage District money in maintenance and upkeep costs and needs addressed. The collection system within Pin Oaks Subdivision is Terra Cotta pipe and has numerous breaks and root balls throughout the lines causing back-ups and issues for the District. There are residents who do not currently have access to public sewer who have septic tanks.

**Solution**

The project to fix these issues will consist of replacing the old collection system with a new collection system within Pin Oaks. This new collection system will include a pump station that will be placed in the same area where the existing package plant is located. In order to convey flows from the Pin Oaks Subdivision, a brand new collection system will be installed in the areas of Fremont Drive and Allendale Road to convey the flow from Phase II of this project to Wheelings sewer collection system. An approximate 25 new customers will be added as a result of this project.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 83 — **Montgomery, City of** — $2,000,000 — $3,000,000

**SRF #C:** 544779

**County:** Fayette

**NPDES #WV:** 0020621

**Binding Date:** 6/30/2024

**Points** 95.00

**Needs Categories:**
CWT-CSO Correction

**Problem**
This project proposes to reduce the amount of storm water entering the sanitary sewer collection system. New storm sewer piping would be installed to route the storm water to receiving streams. New sanitary sewer piping is being installed and lined to tighten up the collection system to reduce the amount of Inflow and Infiltration entering the collection system as well.

**Solution**
This project proposes to separate the sanitary and storm sewer systems throughout Montgomery. This will be the first of several phases to eliminate all of the sanitary sewer overflows in Montgomery's collection system. The project consists of installing various sizes of storm sewer piping, drop inlets, storm manholes, and outfalls to route storm water to the Kanawha River. The project also consists of lining and removing and replacing various sections of new sanitary sewer piping and manholes. Virtually all of the work will take place in city streets throughout Montgomery.

**Rank** 84 — **Paw Paw, Town of (Phase I)** — $1,500,000 — $3,427,100

**SRF #C:** 544684

**County:** Morgan

**NPDES #WV:** 0027405

**Binding Date:** 12/31/2023

**Points** 95.00

**Needs Categories:**
CWT-Secondary Treatment
CWT-Infiltration/Inflow
CWT-Sewer System Rehabilitation

**Problem**
Quarterly I&I reports not submitted. Dechlorination bldg. needs repaired. Electrical wiring is a hazard as well as weights and feeders are corroded or not operable. Visible foam and scum discharges. Failing to comply with effluent limitations. Only one chlorine contact chamber is used, second needs replaced. Lagoon aeration system providing insufficient DO. Manual bar screen basket needs replaced. Outfall into Dawson Run, designed for 0.2 MGD, has green scum in receiving stream. CS experiencing various I&I issues, nearly doubling after rain events. Need LS upgrades and SCADA system needs installed.

**Solution**
Propose upgrade to WWTP's electrical issues, bldg. deficiencies, add copper removal system, install new manual bar screen, make various improvements to the outfall, and improve aeration system at the plant. Partial I&I study including reports, mapping, manhole inspections, flow monitoring, smoke testing, and misc. I&I testing, leading to various repairs to reduce amount of I&I in the sewer collection system. Collection system improvements will include rehabilitation/replacement, if necessary, of manholes and sewer line. Also, install a SCADA system to provide alarm notifications and monitoring from the LS.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 85

**Rowlesburg, Town of (Lift Station)** — $1,950,000 — $2,650,000

**SRF #C:** 544785

**Needs Categories:** CWT-Sewer System Rehabilitation

**County:** Preston

**NPDES #WV:** 0027481

**Binding Date:** 6/30/2024

**Points** 95.00

**Problem**

Rowlesburg's main lift station has only one working pump in service, as neither the backup pump nor the grit pump function. Additionally, replacement parts for this lift station have been difficult to find, so maintenance and repair have been challenging for the Town. The existing gravity line between the Town Park and the main lift station continually gets clogged and must frequently be pumped out or "jetted". The combination of these factors is suspected to be causing the discharges at the Town Park. Finally, the flow meter at the WWTP has been producing inaccurate flow readings.

**Solution**

The Town of Rowlesburg is proposing to replace the main lift station at its current location, replace the existing gravity sewer line (from the Town Park to the lift station), and replace the existing force main river crossing. The project also proposes to install a new flow meter at the Wastewater Treatment Plant (WWTP). The project will eliminate the discharge at the Town Park, for which the Town has received multiple NOV's and most recently Consent Order No. 10091. Finally, the project will install a grit removal system prior to the pump station.

**Rank** 86

**Ansted, Town of (Sewer Line)** — $14,955,950 — $14,955,950

**SRF #C:** 544584

**Needs Categories:** CWT-CSO Correction

**County:** Fayette

**NPDES #WV:** 0020672

**Binding Date:** 6/30/2024

**Points** 90.00

**Problem**

A smoke testing study identified 56 defects in the Town's collection system, including a significant segment of combined storm and sanitary sewer that drains to the downtown area of Ansted. An unpermitted 550 discharges of excess storm flows from the system during wet-weather. A total of 22 sewer line repairs, 15 storm sewer cross connections and 13 manhole leaks will be addressed by the project.

**Solution**

Install 2900 LF 24-inch storm sewers, 13 drop inlets, replace 7900 LF 8-inch GSP and 2900LF 4-inch GSP, 1 simplex E-1 grinder station, 250 LF 1 1/4-inch force main and appurtenances.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 87 — **Bradshaw, Town of** — $800,000 — $6,208,000

**SRF #C:** 544595

**County:** McDowell

**NPDES #WV:** 0103110

**Binding Date:** 9/30/2023

**Points** 90.00

**Needs Categories:**
CWT-Secondary Treatment
CWT-Sewer System Rehabilitation
Energy Conservation-Energy Efficiency

**Problem**
Problematic vacuum collection system located throughout a large portion of Town, significant number of grinder pumping stations resulting in a reduction of power consumption and operation and maintenance cost, and address deferred operation and maintenance items at the wastewater treatment plant.

**Solution**
Replace vacuum collection system with a conventional gravity wastewater collection system. The reduction in the amount of grinder pumping stations will be achieved by eliminating individual grinders for each residence and providing more of a "cluster" type system by utilizing a single grinder pumping station to provide service to several of customers. Deferred operation and maintenance items at the WWTP will be included to replace the outdated nearly 25-year-old components to promote energy efficiency and power savings.

**Rank** 88 — **Cameron Sanitary Board, City of** — $1,500,000 — $2,500,000

**SRF #C:** 544769

**County:** Marshall

**NPDES #WV:** 0020125

**Binding Date:** 6/30/2024

**Points** 90.00

**Needs Categories:**
CWT-Sewer System Rehabilitation
CWT-Infiltration/Inflow

**Problem**
The City was issued an NOV on 08/04/21. Based upon the 2020 PSC Annual Report, the City's collection system experienced 84.97% I&I. High amounts of I&I attributed to storm sewer system interconnected with the sewer system. Issues with open/exposed pipes connected to the system as well as compromised drain inlets & sanitary MHs were identified via smoke testing. Camera investigation identified sagging, cracks, and offset joints in portions of concrete and vitrified clay pipe. Excess I&I leads to WWTP not able to handle high volumes & untreated discharges from Outlet 002.

**Solution**
Wastewater collection system where storm sewer system connects to sanitary sewer system will be disconnected and provide independent collection systems. Sewer system lines that need replaced because of sagging, cracking, or offset joints will be replaced or relined to reduce inflow and infiltration (I&I). Areas include portions of Maple Ave, Main St., State St., Railroad St., Upton Ave, Howard St., High St., Columbia Ave, Crawford Ave, and Fleming Ave. I&I reduction will correlate to decrease of untreated wastewater discharging from outlet 002 and should allow Cameron to become compliant with NOV.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 89

**Charles Town Utility Board** | $3,561,000 | $8,100,000

**SRF #C:** 544686

**County:** Jefferson

**NPDES #WV:** 0022349

**Binding Date:** 3/31/2024

**Points** 90.00

**Needs Categories:**
CWT-Sewer System Rehabilitation
CWT-New Interceptors
Energy Conservation-Energy Efficiency

**Problem**

Relieve the Old Town Ranson gravity line, the Evitt's Run gravity line, and the Jefferson Park gravity line of flow. Consolidate and modify pump stations to reduce operation and maintenance costs with rerouting flows to the new Route 9 gravity line. Increase the capacity of the Flowing Springs Pump Station to accommodate additional flows.

**Solution**

Old Town Ranson gravity sewer system project will relieve flow and improve conditions of various infrastructure within the system. Project consists of improvements to the Burr East Pump Station, Moose Lodge Pump Station, Jett's Farm Pump Station and force main, and Flowing Springs Pump Station. Also, included is decommissioning Forrest Avenue and 11th Street Pump Stations, construction of Lakeland Place Pump Station, extension of Clarence Drive Pump Station force main through Jefferson Memorial Park, and upgrade of Evitt's Run gravity line.

**Rank** 90

**Hamlin PSD** | $1,105,000 | $4,325,000

**SRF #C:** 544799

**County:** Lincoln

**NPDES #WV:** 0027693

**Binding Date:** 6/30/2024

**Points** 90.00

**Needs Categories:**
CWT-Secondary Treatment
CWT-Sewer System Rehabilitation
CWT-New Collector Sewers

**Problem**

The Hamlin PSD has found problematic areas in its collection system through Inflow & Infiltration smoke testing of the sewer lines. The Waste Water Treatment Plant (WWTP) is eroding along its embankments and equipment is aging. The embankment is eroded in various places with plant and tree root penetration through the berm. The District is also proposing a line extension to the unserved portion of the Lincoln County Industrial Park.

**Solution**

The proposed project consists of the removal and replacement of approximately 2,060 LF of gravity sewer line, 600 LF of lateral service line, 15 sanitary manholes, 40 service reconnections, two (2) tie-ins to existing storm drains, and all other necessary appurtenances. The rehabilitation portion of this project also include an upgrade to three (3) existing Lift Stations. The planned upgrades to the WWTP include the replacement of the chlorine gas system, and the lagoon's effluent valves. The embankment will be restored by creating a toe key and installing a concrete block to stabilize the sloped embankment.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 91

**Preston County Sewer PSD (Hazelton)** | $5,238,000 | $5,400,000

**SRF #C:** 544751

**County:** Preston

**NPDES #WV:** 0025101

**Binding Date:** 6/30/2024

**Points** 90.00

**Needs Categories:**
CWT-Secondary Treatment
CWT-Advanced Treatment

**Problem**

Currently Hazelton Wastewater Treatment Plant (WWTP) is barely meeting its copper and zinc limits. Due to the large Hazelton Prison Complex, much of the equipment needs replacement. Damages to the influent mechanical bar screen, ventilation in both the headworks/lab building as well as the sludge press building has deteriorated and is no longer functioning, potable water piping near the headworks has corroded, the belt filter press needs a new air regulator valve/aspirator as well as other miscellaneous damage across the entire wastewater treatment facility.

**Solution**

This project will implement a new metals removal system to meet their current and future NPDES Permit limits for copper, implement a new influent lift station mechanical screening system, a new sludge transfer station to receive sludge from the Bruceton Mills WWTP. This project will also replace failing equipment at the WWTP including headworks mechanical bar screen, Trojan UV parts and other miscellaneous mechanical and electrical upgrades mentioned. The project also proposes the addition of a fourth SBR basin to be constructed and added due to the Hazelton Prison Complex plans to expand in the future.

**Rank** 92

**Beckley Sanitary Board (Pinecrest)** | $5,344,000 | $5,344,000

**SRF #C:** 544624

**County:** Raleigh

**NPDES #WV:** 0023183

**Binding Date:** 6/30/2024

**Points** 85.00

**Needs Categories:**
Stormwater-Gray Infrastructure
Stormwater-Green Infrastructure

**Problem**

The stormwater infrastructure is drastically undersized and at the end of its service life. Vegetative overgrowth, sediment deposition, and sections of piping restrict channel flows. As the stormwater structures backup during rainfall events, drop inlets overflow and flood surrounding areas contributing I&I into the sanitary sewer collection system which negatively impacts cost of treatment, water quality, and carrying capacity of the sanitary sewer system. Frequent flooding of residential properties and roads, as well as excess sheet flow, occurs in this project area.

**Solution**

Upgrade and rehabilitation of the Pinecrest area stormwater and sewer system. The purpose of this is to improve conveying capacity in the stormwater system. The project will consist of removing a section of pipe and channeling discharge into a free-flowing, functional channel at Pinecrest. The channel will be dredged out for proper conveying capacity. This project will also replace sections of existing storm drains with new, adequately sized storm drains to convey stormwater being received at the Beckley Little League, Hartley Ave, and the Pinecrest area. The project will also implement various locations of green infrastructure.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 93

**Claywood Park PSD (Newark)** — $2,344,000 — $6,465,410

**SRF #C:** 544498

**County:** Wood/Wirt

**NPDES #WV:** 0043991

**Binding Date:** 9/30/2024

**Points** 85.00

**Needs Categories:**
CWT-Sewer System Rehabilitation
CWT-New Collector Sewers
CWT-New Interceptors

**Problem**
Old, derelict sewer lines and an inactive lagoon with a potentially weakened dam wall.

**Solution**
All existing lines will be replaced with new lines and services will be reconnected. Customers whose lines currently flow to the Spring Valley lift station will be served. Spring Valley lagoon will be decommissioned. Private septic tanks will not be replaced.

**Rank** 94

**Beckley Sanitary Board (Rail Trail)** — $2,006,000 — $2,006,000

**SRF #C:** 544625

**County:** Raleigh

**NPDES #WV:** 0000000

**Binding Date:** 6/30/2024

**Points** 80.00

**Needs Categories:**
Stormwater-Gray Infrastructure
Stormwater-Green Infrastructure

**Problem**
Near Piney Ave intersection, existing stormwater system is undersized to handle a 10-year storm and catastrophically failed on July 3, 2019 storm event and 3 properties flooded. System continues to be undersized downstream to discharge point at Little Whitestick Creek, causing intersection of Robert C. Byrd and Ewart Ave to flood frequently. When area floods, combined sewer receives additional flows resulting in manhole surcharges and additional discharge out the combined sewer overflow outfall, carrying pollutant loads contributing to impairment of Little Whitestick Creek and downstream receiving waterbodies.

**Solution**
The Railtrail Stormwater Diversion and Control System will assist in mitigating stormwater related issues by constructing a series of intercepting open channels, culverts, and pipes along the existing Rail Trail rights-of-way. As part of this project BSB will remove and replace existing stormwater culverts that run under the Rail Trail. Approximately five culverts will be replaced to handle additional flow and mitigate potential flooding. The proposed project will replace stormwater infrastructure on a portion of Canterbury Dr. that is adjacent to the Rail Trail.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 95

**Beverly, Town of (WWTP Phase II)** — $9,161,000 — $11,610,000

**SRF #C:** 544828

**County:** Randolph

**NPDES #WV:** 0045136

**Binding Date:** 6/30/2024

**Points** 80.00

**Needs Categories:**
CWT-Secondary Treatment

**Problem**
The existing plant is in need of maintenance due to the aging infrastructure of critical plant components. Upgrades are recommended to help receive additional flows to the plant.

**Solution**
The proposed project includes the construction of the new headworks building and equipment, the new SBR treatment units, conversion of the existing oxidation ditch and clarifier to equalization basins, new UV disinfection building and equipment, new sludge digestor, new sludge processing equipment and all other related items and appurtenances.

**Rank** 96

**Canaan Valley PSD (Zone A WWTP)** — $1,500,000 — $9,500,000

**SRF #C:** 544721

**County:** Tucker

**NPDES #WV:** 0106011

**Binding Date:** 6/30/2024

**Points** 80.00

**Needs Categories:**
CWT-Advanced Treatment
CWT-New Collector Sewers

**Problem**
The Blackwater River has been listed as an impaired waterway for failure to maintain a dissolved oxygen level of at least 6.0 mg/L according to WVDEP water quality standards. The existing package treatment facilities in Canaan Valley Resort State Park have received notices of violation for failing to maintain treatment within permit conditions, and as a result have been subject to significant fines. There is a need to improve wastewater collection and treatment in this area to improve the quality of the river and support future area growth.

**Solution**
This project proposes to construct a new wastewater treatment plant in the State Park area to replace the existing package treatment facilities. The WWTP will have a capacity of 120,000 GPD. The new facility will improve treatment and be able to support future growth and development in the area. A force main extension will also be installed to provide sewer service to the Blackwater Center and Land of Canaan areas.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 97

**Flemington, Town of (UV)** — $500,000 — $500,000

**SRF #C:** 544767

**Needs Categories:** CWT-Advanced Treatment

**County:** Taylor

**NPDES #WV:** 0105406

**Binding Date:** 6/30/2024

**Points** 80.00

**Problem**

Flemington would like to consider changing its disinfection process to UV Disinfection. The Town believes that the UV disinfection process will not only treat the wastewater effectively, but will be used to address any emerging contaminants in the Wastewater system.

**Solution**

The project will consist of the installation of a new effluent flow meter, via a parshall flume and ultrasonic meter and a new UV Disinfection system on the effluent side of the WWTP to replace the current chlorination system.

**Rank** 98

**Kanawha PSD (Lens Creek Phase I)** — $2,575,000 — $11,650,000

**SRF #C:** 544643

**Needs Categories:** CWT-Secondary Treatment
CWT-Sewer System Rehabilitation
CWT-New Collector Sewers

**County:** Kanawha

**NPDES #WV:** 0021784

**Binding Date:** 6/30/2024

**Points** 80.00

**Problem**

The Lens Creek area is filled with outdated and failing septic tank systems which drain into Lens Creek causing high volumes of fecal material being transported to the Kanawha River at Marmet. This sanitary sewer line would eliminate the need for these small ineffective systems and provide a healthy community to the residents of the area. The WWTP headworks and UV disinfection system are aged and failing, requiring excessive operation and maintenance effort.

**Solution**

The project proposes construction of 3,600 LF of 10 inch gravity sewer, 27,320 LF of 8 inch gravity sewer, 11,000 LF of 6 inch PVC gravity sewer, 8,260 LF of 4 inch PVC laterals and 27,500 LF of 8 inch Force Main along with 241 manholes, 1 Pump Station, 2 stream crossings, an upgrade of Winifrede Hollow Pump Station and force main, and an upgrade of headworks and UV disinfection at Kanawha PSD's WWTP.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 99

**Hancock County PSD (Newell)** — $3,600,000 — $10,700,000

**SRF #C:** 544733

**County:** Hancock

**NPDES #WV:** 0101729

**Binding Date:** 6/30/2024

**Points** 75.00

**Needs Categories:**
CWT-New Collector Sewers

**Problem**
The Hancock County PSD, per order WV PSC Case #20-1033-WS-P, has been in negotiations with the Newell Wastewater System to take over their sewer operations.

**Solution**
Install a new pump station to replace the Newell WWTP and repair and replace the sewer collection system.

**Rank** 100

**Oakvale Road PSD** — $4,718,000 — $6,218,000

**SRF #C:** 544682

**County:** Princeton

**NPDES #WV:** 0080489

**Binding Date:** 6/30/2024

**Points** 75.00

**Needs Categories:**
CWT-New Interceptors
CWT-New Collector Sewers

**Problem**
Areas described to receive service consist of unserved residents and undeveloped lands. Green Acres WWTP wishes to discontinue providing sewer treatment to the Green Acres Subdivision. Sewer effluent from Green Acres WWTP discharges to a tributary of Christian Fork.

**Solution**
Extension of existing sewer collection mains to unserved areas and construction of multiple lift stations. Connection of the Green Acres subdivision to the new extensions and abandonment of the existing Green Acres WWTP.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 101 — **Ronceverte, City of** — $3,383,575 — $4,383,575

**SRF #C:** 544611

**Needs Categories:** CWT-Infiltration/Inflow

**County:** Greenbrier

**NPDES #WV:** 0024236

**Binding Date:** 3/31/2024

**Points** 75.00

**Problem**

Several areas of the wastewater collection system have broken pipes, offset joints, and roots. Other issues include I&I in main lines and laterals. Several manholes need replaced, and some areas have no manholes and require manholes to be installed, due to maintenance issues resulting from too few manholes. Additionally, the interceptor which carries flow from Greenbrier PSD No. 1 needs a railroad crossing to be upgraded (it is undersized and has no casing). The crossing has a pipe size smaller than the rest of the line which is also not cased.

**Solution**

There are several thousand feet of gravity sewer pipe which will be replaced to combat I&I issues and issues regarding service life. More than 50 manholes will be added to the system, and more than 10 will be replaced. There are two railroad crossings which will be addressed, with the interceptor being done through a micro tunnel and the other crossing being done with a bore and jack.

**Rank** 102 — **Barboursville Sanitary Board, Village of** — $7,633,000 — $7,633,000

**SRF #C:** 544615

**Needs Categories:** CWT-Sewer System Rehabilitation
CWT-New Interceptors

**County:** Cabell

**NPDES #WV:** 0024481

**Binding Date:** 3/31/2024

**Points** 70.00

**Problem**

The condition of the lagoon is declining. It has not been cleaned out in approx. 50 years and it is unlined. Barboursville has expressed interest in replacing the lagoon entirely due to the increasing difficulty for the lagoon to meet capacity, water quality standards and design standards for groundwater protection. Additionally, there are several pumping stations which are 20 or more years old and in need of upgrades due to reaching the end of their useful lives.

**Solution**

For this project, 6 of the aging pumping stations will be upgraded. The lagoon will be decommissioned, cleaned, and filled. Wastewater will be pumped to the treatment plant at Pea Ridge PSD. This will require installing a new pumping station and more than 6000 linear feet of 10-inch force main. A payment of $2.5 million will be made to the Pea Ridge PSD for them to expand their treatment plant.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 103

**Beckley Sanitary Board (Cranberry)** — $2,256,000 — $2,256,000

**SRF #C:** 544701

**Needs Categories:** Stormwater-Gray Infrastructure

**County:** Raleigh

**NPDES #WV:** 0000000

**Binding Date:** 6/30/2024

**Points** 70.00

**Problem**

The existing primary storm sewer system, which is limited in the area, is undersized and at its capacity. These storm sewers are also at the end of their service life. The Sanitary Sewer overflows are caused by the direct inflow connections and indirect stormwater infiltration into the system. Street rights-of-way drainage, as well as the upstream surface channel, flood regularly that impact ponds, private properties, several local roads, and side streets. High stormsewer flows and flooding create conditions which allow additional inflow and infiltration in the combined sewer system.

**Solution**

The Cranberry project will mitigate these issues by implementing a rehabilitation project in the stormwater system as well as establish a stormwater control facility in the area. Installation of an enclosed stormwater conveyance system will better handle the drainage capacity necessary in this area. Development of open channels within rights-of-way will be implemented to improve drainage conveyance and reduce residential flooding. Existing pipe will be replaced as needed and inlets will be installed within road rights-of-way.

**Rank** 104

**Beckley Sanitary Board (Hedrick St.)** — $1,678,000 — $1,678,000

**SRF #C:** 544704

**Needs Categories:** CWT-Sewer System Rehabilitation
Stormwater-Gray Infrastructure

**County:** Raleigh

**NPDES #WV:** 0023183

**Binding Date:** 6/30/2024

**Points** 70.00

**Problem**

-The stormwater system in this area is beyond its usable life span. This section of the system has poor geometry and is undersized for the area being served, therefore, flooding is frequent which results in erosion along the rights-of-way and asphalt deterioration.
-The sanitary sewer system in this area is outdated and beyond its usable life span. The poor condition of the pipes and sewer structures in this area makes it subject to significant I&I.

**Solution**

The proposed Hedrick Street project will mitigate these issues by implementing a rehabilitation project of the existing stormwater drainage system and sanitary sewer system in this area. Culverts will be resized and replaced to better handle the drainage capacity and conveyance necessary for this area. Existing sanitary sewer pipes will be replaced and structures will be installed as needed within existing rights-of-way and easements.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 105

**Beckley Sanitary Board (Koch Ave)** — $2,854,000 — $2,854,000

**SRF #C:** 544706

**County:** Raleigh

**NPDES #WV:** 0023183

**Binding Date:** 6/30/2024

**Points** 70.00

**Needs Categories:**
CWT-Sewer System Rehabilitation
Stormwater-Gray Infrastructure

**Problem**

-Existing stormwater system in project area is beyond its usable life span. System has drainage pipe that is undersized and with poor geometry for the area being served, flooding is frequent resulting in erosion along the rights-of-way and asphalt deterioration. Sanitary sewer system is in close proximity to existing stormwater system.
-Sanitary sewer system in project area is outdated and beyond its usable life span. The poor condition of pipes and sewer structures in this area makes it subject to leaks and breaks resulting in insufficient conveyance of sewage to treatment facility.

**Solution**

The proposed Koch Avenue project will mitigate these issues by implementing a rehabilitation project of the existing stormwater drainage system and sanitary sewer system in the project area. Culverts will be resized and replaced to better handle the drainage capacity and conveyance necessary for the area. Existing sanitary sewer pipes will be replaced and structures will be installed as needed within existing rights-of-way and easements.

**Rank** 106

**Beckley Sanitary Board (Maplewood Lane)** — $2,668,400 — $2,668,400

**SRF #C:** 544707

**County:** Raleigh

**NPDES #WV:** 0023183

**Binding Date:** 6/30/2024

**Points** 70.00

**Needs Categories:**
CWT-Sewer System Rehabilitation
Stormwater-Gray Infrastructure

**Problem**

-Existing stormwater system in project area is beyond its usable life span. System has drainage pipe that is undersized and with poor geometry for the area being served, flooding is frequent resulting in erosion along the rights-of-way and asphalt deterioration. Sanitary sewer system is in close proximity to existing stormwater system.
-Sanitary sewer system in project area is outdated and beyond its usable life span. Poor condition of pipes and sewer structures in this area makes it subject to leaks and breaks resulting in insufficient conveyance of sewage to treatment facility.

**Solution**

The proposed Maplewood Lane project will mitigate these issues by implementing a rehabilitation project of the existing stormwater drainage system and sanitary sewer system in the project area. Culverts will be resized and replaced to better handle the drainage capacity and conveyance necessary for the area. Existing sanitary sewer pipes will be replaced and structures will be installed as needed within existing rights-of-way and easements.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 107

**Beckley Sanitary Board (Northwestern)** $3,753,400 $3,753,400

**SRF #C:** 544709

**County:** Raleigh

**NPDES #WV:** 0023183

**Binding Date:** 6/30/2024

**Points** 70.00

**Needs Categories:**
CWT-Sewer System Rehabilitation
Stormwater-Gray Infrastructure

**Problem**
Much of infrastructure in project area is nearing or past its useful service life and undersized for current flows. Stormwater structures frequently experience backups during wet weather events leading to water ponding on streets and yards. Due to age and condition of sewer infrastructure, sewer system is a source of inflow and infiltration. Existing infrastructure would be removed and replaced correcting inefficiencies in the system.

**Solution**
The project proposes to remove and replace sanitary sewer and stormwater along Travelers Lane, Perdue Street, Phillips Street, and Sigmund Street; sanitary sewer from Dexter Avenue to Harper Road; and stormwater from Fairview Avenue to Harper Road. Stormwater and sanitary sewer conveyance structures would be properly sized for current and future flows.

**Rank** 108

**Beckley Sanitary Board (Robert C. Byrd Dr.)** $7,140,000 $7,140,000

**SRF #C:** 544712

**County:** Raleigh

**NPDES #WV:** 0023183

**Binding Date:** 6/30/2024

**Points** 70.00

**Needs Categories:**
CWT-Sewer System Rehabilitation
Stormwater-Gray Infrastructure

**Problem**
-Wastewater conveyance system is degraded and nearing or past its useful service life. Stormwater infrastructure in vicinity of Gate St. runs under commercial and residential properties and needs increased in size and rerouted.
-Stormwater infrastructure at Ewart Ave along Robert C. Byrd Dr. is undersized and nearing past its useful service life. Frequent flooding occurs in vicinity of Ewart Ave and Robert C. Byrd Dr. leading to dangerous road conditions and travel disruptions.

**Solution**
Remove and replace sanitary sewer infrastructure along Ewart Ave from Lundy Lane to Robert C. Byrd Dr.; reroute and upgrade stormwater infrastructure in vicinity of Gate St. adjacent to Robert C. Byrd Dr.; and upgrade stormwater infrastructure from Ewart Ave and Robert C. Byrd Dr. to Little Whitestick Creek. Appropriately sized box culverts will be installed at intersection of Ewart Ave and Robert C. Byrd Dr., an open channel will be developed adjacent to Robert C. Byrd Dr. behind Beckley Welding and sized to handle at least a 10-year storm. The open-channel will tie into a new box culvert at Ollie's shopping center parking lot.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 109

**Beckley Sanitary Board (Whitestick)** — $6,584,500 — $6,584,500

**SRF #C:** 544713

**County:** Raleigh

**NPDES #WV:** 0023183

**Binding Date:** 6/30/2024

**Points** 70.00

**Needs Categories:**
CWT-Sewer System Rehabilitation
Stormwater-Gray Infrastructure

**Problem**
Culverts are undersized and many improperly installed or at end of service life. Stream banks show erosion and lack of conveyance capacity and rights-of-way runoff is impacting private properties, leading to stream sedimentation. Roadway flooding regularly occurs and may be impacting adjacent sanitary sewer systems. Stream crossings are failing and undersized and roadway surface drainage on New River Dr. causes asphalt deterioration. Flooding impacts assets of Maxwell Woods and Pikeview Manor Communities.

**Solution**
The proposed project will involve stormwater system upgrades and rehabilitation in the vicinities of Maxwell Woods from Teel Rd to Pikeview Drive, North Forrest Rd, North Lilly Street, and Pikeview Manor. Sewer and Stormwater infrastructure will be upgraded along New River Drive.

**Rank** 110

**Bluefield Sanitary Board (Brushfork)** — $2,420,000 — $2,420,000

**SRF #C:** 544719

**County:** Mercer

**NPDES #WV:** 0023141

**Binding Date:** 6/30/2024

**Points** 70.00

**Needs Categories:**
CWT-Sewer System Rehabilitation
CWT-New Collector Sewers

**Problem**
There are approximately 60 homes in the area that have access to public water but do not have access to public sewer. Several homes in the area have individual septic systems which are failing resulting in raw sewage being present in yards and ditches. This project will provide these homes with public sewer access.

**Solution**
1) Replace the Thompson Pumping Station
2) Replace the force mains corresponding to the Thompson Pumping Station
3) Extend sewer services to all the residents along Nichols Road and residents on the north side of Brush Fork Road
4) Install a mechanical screen downstream of the new station to remove all the non-flushable materials from this system

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 111

**Central Hampshire PSD** | $5,250,000 | $11,000,000

**SRF #C:** 544773

**County:** Hampshire

**NPDES #WV:** 0081850

**Binding Date:** 6/30/2024

**Points** 70.00

**Needs Categories:**
CWT-Advanced Treatment
CWT-Sewer System Rehabilitation
CWT-New Interceptors

**Problem**

The inability for the Frenchburg and Harvest Hills wastewater treatments plant to effectively treat wet weather flows and accordingly result in pollution of waterways, and failing components at various existing lift stations and collection system components like manholes.

**Solution**

1. Decommissioning the existing Harvest Hills wastewater treatment plant and the existing lift station, providing a new lift station and 4 inch force main from it to the existing collection system on US Route 50, and providing a new overflow vault at the High School lift station site.
2. Upgrading existing Frenchburg wastewater treatment plant with a new biological nutrient removal (BNR) unit, lift station, grit removal chamber, blowers, and tertiary treatment.
3. Rehabilitating 3 lift stations and misc. system components.

**Rank** 112

**Greater Paw Paw Sanitary District** | $6,100,000 | $6,100,000

**SRF #C:** 544820

**County:** Marion

**NPDES #WV:** 0084310

**Binding Date:** 6/30/2024

**Points** 70.00

**Needs Categories:**
CWT - Sewer System Rehabilitation

**Problem**

The problem that is being solved includes the rehabilitation of 6 of the 9 main pump stations throughout Greater Paw Paw Sanitary District's service area. These pumps are reaching their useful life period and are in need of replacement. The Sanitary District has also encountered numerous breaks and backups in their gravity sewer lines, and these are also in need of replacement.

**Solution**

The project being proposed to counteract these issues will include the rehabilitation of the six pump stations and will included all new pumps, wet wells, valve vaults and electrical components and boards. There will be the installation of approximately 3,000 linear feet of gravity sewer lines to counteract problem areas throughout Greater Paw Paw's service district. The new gravity sewer line will be installed with new manholes and all necessary appurtenances to make the system function efficiently.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 113

**Kanawha PSD (Lens Creek Phase II)** — $4,000,000 — $7,860,000

**SRF #C:** 544734

**County:** Kanawha

**NPDES #WV:** 0021784

**Binding Date:** 6/30/2024

**Points** 70.00

**Needs Categories:**
CWT-New Collector Sewers
CWT-New Interceptors

**Problem**
Additional residences in the Lens Creek and Whitcher Hollow areas of the PDS remain without access to adequate sanitary sewer service. The homes are currently served by under performing septic systems or direct discharges to nearby streams. The extension of the sanitary sewer collection system to these areas would eliminate the need for individual septic systems and protect the health and welfare of the residents.

**Solution**
The Lens Creek Ph. II project proposes construction of 34,000 LF of 8 inch gravity sewer, 7,300 LF of 6 inch gravity sewer, 9,270 LF of 4 inch PVC laterals and 1,000 LF of 4 inch Force Main, 200 LF of 2 inch Force Main, along with 215 manholes, 1 Pump Station, 2 Grinder Pump Stations and an upgrade of an existing pump station.

**Rank** 114

**Matewan, Town of** — $5,160,000 — $6,160,000

**SRF #C:** 544482

**County:** Mingo

**NPDES #WV:** 0024783

**Binding Date:** 6/30/2024

**Points** 70.00

**Needs Categories:**
CWT-Secondary Treatment

**Problem**
The existing RBC Wastewater Treatment Facility is not meeting discharge permit limits.

**Solution**
Upgrade the existing wastewater treatment facility to address more stringent discharge limits.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 115

**Mercer County PSD (Matoaka)** — $1,748,000 — $2,748,000

**SRF #C:** 544671

**County:** Mercer

**NPDES #WV:** 0024864

**Binding Date:** 7/31/2023

**Points** 70.00

**Needs Categories:**
CWT-Secondary Treatment
CWT-Infiltration/Inflow
CWT-Sewer System Rehabilitation

**Problem**
Collection system is experiencing I&I problems throughout the system. The system is nearly 50 years old and sags, holes, and other deformities were found throughout the pipe sections by camera inspections performed in early 2020.

**Solution**
The proposed project will involve the replacement and rehabilitation of sanitary sewer lines and sanitary sewer manholes. In addition, the WWTP and lift station will be updated.

**Rank** 116

**Shady Spring PSD (Glen Morgan)** — $4,146,379 — $8,944,210

**SRF #C:** 544645

**County:** Raleigh

**NPDES #WV:** 0080403

**Binding Date:** 9/30/2023

**Points** 70.00

**Needs Categories:**
CWT-Secondary Treatment

**Problem**
Replacing deteriorating treatment units and increasing wastewater treatment plant capacity.

**Solution**
Wastewater Treatment Plant Upgrade - The Plan is to increase the plant capacity from 1,200,000 gpd to 1,600,000 gpd with the addition of a treatment unit. Also includes the replacement of existing treatment units that have deteriorated due to their age.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 117

**Sistersville, City of** — $150,000 — $4,085,200

**SRF #C:** 544653

**County:** Tyler

**NPDES #WV:** 0021814

**Binding Date:** 3/31/2024

**Points** 70.00

**Needs Categories:**
CWT-Secondary Treatment
CWT-Infiltration/Inflow

**Problem**

Existing WWTP constructed in 1985 has many components reaching the end of useful lives or are inoperable. Plant treats dry weather flows but can't handle excessive wet weather flows (I/I). Collection system suffers from age and is suspected VCP gravity line and brick manholes are contributing to significant portions of I/I. Two pump stations (PS) are aged and outdated, resulting in difficult maintenance and failure during flood events. Additionally, holes and cracks in PS allow I/I to enter the system. City plans to repair/update operations and equip. to extend service life expectancy 15-20 yrs.

**Solution**

The project proposes replacement of the existing bar screen, non-potable water system, existing belt filter press, sludge polymer system, and flow meter. Various repairs will be made to the existing grit removal system, oxidation ditch aeration diffusers, UV disinfection system, boat clarifier, and the existing electrical system throughout the plant. The oxidation ditch will be cleaned of debris, the boat clarifier will be cleaned and inspected and new sludge drying beds will be constructed. A Sanitary Sewer Evaluation Study will be completed to determine the scope of work for Phase 2.

**Rank** 118

**Star City, Town of** — $7,643,000 — $7,643,000

**SRF #C:** 544775

**County:** Monongalia

**NPDES #WV:** 0103918

**Binding Date:** 6/30/2024

**Points** 70.00

**Needs Categories:**
CWT-Infiltration/Inflow
Stormwater-Green Infrastructure

**Problem**

Improvements have not been made to the Town's systems since initial construction and the Town does not have existing comprehensive mapping of the systems. Because the system is a combined system, the Town has a large amount of inflow and infiltration (I&I), and an I&I study is needed. In addition, the Town has experienced severe flooding during storm events, especially during 2021, leading to the need for improvements to the storm system.

**Solution**

Comprehensive mapping, a study of the existing sewer systems, and stormwater modeling are currently underway. A stormwater model of the Fenwick Street drainage area is being completed to determine the improvements needed to resolve flooding. Separation and replacement of the storm and sanitary sewers is needed.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 119

**Union PSD** — $5,605,000 — $5,605,000

**SRF #C:** 544655

**Needs Categories:**
CWT-Secondary Treatment
CWT-Sewer System Rehabilitation

**County:** Kanawha

**NPDES #WV:** 0037486

**Binding Date:** 3/31/2024

**Points** 70.00

**Problem**

1. Experiencing very high levels of inflow and infiltration (I&I), 50% of total inflows. Smoke testing and video inspection of collection system identified widespread deterioration of lines and manholes, contributing to I&I. These need a phased approach rehabilitation. 2. Doc Bailey Lift Station (LS) and its associated forcemain (FM) are nearing end of their useful life. LS is undersized for current inflows, and FM has failed on numerous occasions. Repair is difficult due to location in residential backyards. 3. 40th St. WWTP is experiencing hydraulic backups during high inflow periods. 4. Union's office bldg. is undersized for its operations.

**Solution**

Remove and replace 4,500 LF of gravity sewer mains and 20 manholes in Brookhaven subdivision, and the Doc Bailey LS and its force main. Replacement of existing rectangular effluent weir with a v-notch weir, installation of isolation gates on secondary clarifiers, removal and replacement of clarification equipment and yard hydrants, and modification of clarifier effluent at the 40th St. WWTP. Building a new office space, replacing the windows, doors, and roof, and modernizing electrical and HVAC systems at the PSD's existing building.

**Rank** 120

**Pax, Town of** — $500,000 — $1,000,000

**SRF #C:** 544685

**Needs Categories:**
CWT-Secondary Treatment
CWT-New Collector Sewers

**County:** Fayette

**NPDES #WV:** 0040541

**Binding Date:** 6/30/2024

**Points** 65.00

**Problem**

The Town has decided to serve seven customers that were removed from the Willis Branch Sewer Extension Project, and install telemetry to all lift stations as well as upgrade the ultraviolet disinfection units.

**Solution**

The seven customers will be served by a gravity sewer system with approximately 3,300 feet of 6" gravity sewer main, 20 manholes, 2 cleanouts, lift station telemetry, and ultraviolet disinfection unit upgrade.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 121 — **Romney, Town of** — $3,200,000 — $3,700,000

**SRF #C:** 544807

**County:** Hampshire

**NPDES #WV:** 0020699

**Binding Date:** 6/30/2024

**Points** 65.00

**Needs Categories:**
CWT-Infiltration/Inflow
CWT-Sewer System Rehabilitation

**Problem**

1) This project will replace lines and manholes to address Inflow and Infiltration (I&I), upgrade sewer pump stations, and multiple issues at the plant. Romney's old terracotta lines have surpassed their useful life and need replaced. The excessive I&I can be contributed to these old lines with breaks in the pipe, old manholes, and poor connections. The additional I&I is causing additional stress on pumping and treatment equipment. 2) Equipment at the wastewater treatment plant is due to be upgraded or replaced to improve operations. 3) Pump stations require upgrades for controls and operation.

**Solution**

1) The proposed project will remove and replace portions of terracotta pipe and old manholes contributing to I&I in the system. Infrastructure will also be considered to improve management of excess flows. 2) Upgrades to the plant include updates to control system, installation of heaters, improvements to the Chlorine Room, and replacement of pumping equipment. 3) Upgrades to the pump stations include updates to control system and replacement of pumps and piping to improve operation.

**Rank** 122 — **Sophia Sanitary Board** — $1,500,000 — $16,000,000

**SRF #C:** 544085

**County:** Raleigh

**NPDES #WV:** 0024422

**Binding Date:** 6/30/2024

**Points** 65.00

**Needs Categories:**
CWT-Secondary Treatment

**Problem**

The chlorine contact chamber, dechlorination chamber, post aeration and settling chamber are in need of maintenance and repair, and the baffle walls are visibly crumbling. The mechanical bar screen was broken during inspection and two NOVs were issued due to the failure to meet permitted effluent discharge limitations and failure to properly operate and maintain treatment and control at all times. The watersheds in the area of the WWTP do not meet water quality standards for fecal coliform and are now designated as impaired streams. Also, the WWTP is located within the 100-year floodplain.

**Solution**

One alternative solution would be to upgrade the existing plant to improve water quality in the streams nearby and to reduce exceedances of effluent discharge limitations. The preferred alternative is to construct a new WWTP above the 100-year floodplain and anticipate the additional flow from the neighboring community of Coal City. Coal City has approximately 440 residents that utilize septic tanks and leach fields to treat their sewage. The close proximity of these tanks and fields are also contributing to the levels of fecal coliform in the streams nearby.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 123

**Wardensville, Town of** — $1,985,000 — $4,034,600

**SRF #C:** 544648

**County:** Hardy

**NPDES #WV:** 0045501

**Binding Date:** 12/31/2023

**Points** 65.00

**Needs Categories:**
CWT-Secondary Treatment
CWT-Infiltration/Inflow
CWT-Sewer System Rehabilitation

**Problem**

Mechanical bar screen at WWTP is inoperable, bypass manual bar screen is utilized currently at the plant. Stabilization ponds at WWTP have encountered issues with duck weed. Cacapon River outfall, designed for .12 MGD and during periods of high water becomes submerged. Headworks bldg. at WWTP is in disrepair with corrosion throughout and needs replaced. Electrical service at plant is single phase and there is no onsite generator for emergencies. Collection syst. has been experiencing I&I issues, 56.66% of flow treated from I&I. Various upgrades are needed at lift stations and a SCADA system needs to be installed.

**Solution**

1) Upgrade WWTP's electrical service, install emergency generator, replace existing headworks bldg., install new mechanical bar screen, make improv. to outfall and improve aeration syst. at plant. I&I Study that includes reports, mapping, manhole insp., flow monitoring, smoke testing, and misc. I&I testing, leading to repairs reducing I&I in sewer coll. syst. 2) LS improv. include transfer switch and bypass connections at both stations, Pine St. top replacement, pump guide rail brackets, FM realignment, and control panel replacement. Both PSs will be fitted with permanent generator. 3) Install a SCADA system.

**Rank** 124

**Morgantown Utility Board (Cheat Lake)** — $23,977,040 — $29,971,300

**SRF #C:** 544831

**County:** Monongalia

**NPDES #WV:** 0083071

**Binding Date:** 6/30/2023

**Points** 60.00

**Needs Categories:**
CWT-Secondary Treatment
Energy Conservation-Energy Efficiency

**Problem**

Project will upgrade the existing Cheat Lake Wastewater Treatment Plant to meet the capacity demands of the growing Cheat Lake system. The upgrade will increase the plant capacity, from 0.75 MGD to 1.75 MGD.

**Solution**

Cheat Lake Wastewater Treatment Plant Upgrade Project - Install new oxidation ditch, new secondary clarifier, and related equipment necessary to complete upgrade. The project will also include an upgrade/expansion at the Whites Run Pump Station.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 125

**Beckley Sanitary Board (Dry Hill)** — $3,850,000 — $3,850,000

**SRF #C:** 544626

**Needs Categories:** Stormwater-Gray Infrastructure; Stormwater-Green Infrastructure

**County:** Raleigh

**NPDES #WV:** 0000000

**Binding Date:** 6/30/2024

**Points** 55.00

**Problem**

Culverts undersized, improperly installed, or at end of service life. Stream banks show erosion and lack of conveyance capacity & rights-of-way runoff is impacting properties and leading to stream sedimentation. Much of infrastructure is piecemeal, at capacity, and at end of service life. Existing stormwater culverts are undersized & failing. Downstream channel at Jamescrest has limited capacity due to profile, low gradient, and prior channel realignment. Upstream surface channel has lost definition due to sedimentation & prior modifications. Street rights-of-way drainage conveyance is insufficient & impacting properties.

**Solution**

Stormwater syst. upgrades and rehabilitation in Jamescrest, Oakley Rd, Morgan Hills, and Pine Hills. Project will install a regional detention basin capturing runoff and stormflow at Morgan Hills, resize and replace culverts to handle drainage capacity, and stream bank restoration and stream modifications will increase conveyance capacity. Riparian buffer around channels will be re-established. Green infrastructure development within rights-of-way will be implemented to improve drainage conveyance and reduce residential flooding. Existing pipe replacement as needed and inlets installed within road rights-of-way.

**Rank** 126

**Charles Town, City of** — $1,391,657 — $1,391,657

**SRF #C:** 544813

**Needs Categories:** Stormwater-Gray Infrastructure; Stormwater-Green Infrastructure

**County:** Jefferson

**NPDES #WV:** 0000000

**Binding Date:** 6/30/2024

**Points** 55.00

**Problem**

The existing area of Liberty Street lacks appropriate drainage and is causing flooding issues during any storm intensity greater than the 2 year 24 hour storm as defined by NOAA atlas 14 and WVDOH guidance. It has also been documented there is ponding water present during almost any rain storm. This design improves the existing storm sewer pipe along Liberty to improve capacity where possible. In addition to the improved storm sewer, bio-retention and permeable pavers are utilized to allow for some filtration and improve inlet capacities above the present condition.

**Solution**

This plan proposes the construction of new storm sewer facilities. These facilities will improve the current drainage issues along Liberty Street between N George Street and N Samuel Street. The facilities consist of new storm sewer pipe/ box culverts, bio-retention areas, and permeable pavers.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 127

**Kanawha Falls PSD** — $12,249,000 — $12,249,000

**SRF #C:** 544798

**Needs Categories:** CWT-New Collector Sewers

**County:** Fayette

**NPDES #WV:** 0034991

**Binding Date:** 6/30/2024

**Points** 50.00

**Problem**

-Sanitary sewer infrastructure along the streams and stream banks in the Cannelton Hollow and Scrabble Creek areas were affected by the rain events in Summer 2022. This has caused sewer lines, manholes, and related appurtenances to be washed out, damaged, and disconnected from the existing system.
-Cannelton Hollow and Scrabble Creek has approximately 200 customers (including Mount Olive Correctional Complex) that were affected by the infrastructure damage and loss.

**Solution**

The project proposes to construct and install new sewer infrastructure that will replace the affected parts of the sewer system in the Cannelton Hollow and Scrabble Creek areas (including Mount Olive Correctional Complex). The layout in these areas will also be modified to minimize concerns with future rain events that affected these areas in Summer 2022 (For example: moving sewer alignments away from stream banks/streams where applicable).

**Rank** 128

**Marmet Sanitary Board, Town of** — $275,000 — $1,075,000

**SRF #C:** 544737

**Needs Categories:** CWT-CSO Correction

**County:** Kanawha

**NPDES #WV:** 0021750

**Binding Date:** 6/30/2024

**Points** 50.00

**Problem**

The parts of the collection system that drain into the Town's 87th Street Pump Station, where one of the Town's permitted CSO's exists are subject to surcharging during heavy precipitation events. During these events, manholes along Maryland Ave are surcharged and raw sewage overflows into the street. These streets are heavily traveled, leading to concerns of increased potential of public exposure to disease causing organisms.

**Solution**

The Town is proposing to abate the overflow on Maryland Ave by increasing the capacity of the collection system in this area and reconfiguring a permitted overflow to the river to increase the capacity of the overflow. The Town is also proposing to reduce the infiltration and inflow entering this part of the collection system by replacing the sanitary sewer lines on Long Alley between 87th Street and 89th Street.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 129

**New Martinsville, City of (AAA MHP)** — $1,500,000 — $2,769,000

**SRF #C:** 544741

**Needs Categories:** CWT-Sewer System Rehabilitation

**County:** Wetzel

**NPDES #WV:** 0027472

**Binding Date:** 3/31/2024

**Points** 50.00

**Problem**

Sewers in the AAA Mobile Home Park located in the Steelton Area of the City are located under mobile homes and are not readily accessible for maintenance activities. Additionally, the lift station serving the mobile home park is beyond its useful life and needs replaced.

**Solution**

Construct new sewers and lift station to serve the AAA Mobile Home Park.

**Rank** 130

**Parsons, City of** — $1,960,000 — $4,010,000

**SRF #C:** 544800

**Needs Categories:** CWT-Infiltration/Inflow
CWT-Sewer System Rehabilitation

**County:** Tucker

**NPDES #WV:** 0022063

**Binding Date:** 6/30/2024

**Points** 50.00

**Problem**

The City of Parsons experiences a high volume of I&I which causes wear and tear on the pumps and wastewater treatment plant. Based on the information from the 2020 PSC Annual Report, provided by the City of Parsons, it is understood that a large portion of the sanitary sewer lines are either terracotta or vitrified clay pipe, which over the years deteriorate and allow large amounts of I&I into the system through cracks, misalignments, root insertion, collapses, etc. A reduction in I&I would reduce run time on the pumps, reduce treatment costs at the WWTP, and provide the system and equipment with a longer lifespan.

**Solution**

This project proposes to remove and replace sanitary sewer mains along Memorial Drive, River Street, Billings Avenue and Jameson Avenue, that are collapsed, cracked, and/or misaligned. The selected proposed sewer system improvements are deemed to be the best option to ensure the longevity of the sanitary sewer system equipment, remain within the hydraulic capacity of the system, and for the WWTP to receive lower average daily flows to enable effective treatment. At the conclusion of the proposed project Parsons should be able to notice the reduction of influent flows received at the WWTP during rain events.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 131

**Ravenswood, City of (Phase I)** — $5,271,500 — $5,271,500

**SRF #C:** 544428

**County:** Jackson

**NPDES #WV:** 0021989

**Binding Date:** 3/31/2024

**Points** 50.00

**Needs Categories:**
CWT-Sewer System Rehabilitation

**Problem**
The lagoons have had recurring problems with meeting the design effluent ammonia limit of 15 mg/l; the 2017 WV/NPDES permit lowered the limit to 4.7 mg/l and contained a compliance schedule that mandates a facility upgrade. The equipment and controls in the 8 sewage pumping stations has exceeded their useful lives and need to be replaced. The stations lack telemetry or emergency power generation equipment.

**Solution**
The pumps and controls in all 8 pumping stations will be replaced and telemetry and emergency generation equipment will be installed. The new WWTP will be designed, but construction will take place during a separate phase. Smoke testing was recently completed and collection system upgrades are proposed to address the smoke test findings and limit I&I in the collection system.

**Rank** 132

**Romney, Town of (Phase II)** — $1,567,000 — $3,567,000

**SRF #C:** 544656

**County:** Hampshire

**NPDES #WV:** 0020699

**Binding Date:** 9/30/2023

**Points** 50.00

**Needs Categories:**
CWT-Infiltration/Inflow
Stormwater-Green Infrastructure

**Problem**
Romney sanitary sewer system has a history of impacts due to inflow and infiltration (I&I). During storm events, system flows are observed to increase. Romney is taking a phased approach to resolve these issues to keep them from resulting in overflow events. Phase I of project included the replacement of collection system lines, manholes, and cleanouts to reduce I&I. In addition a portion of the storm collection/catchment system has indicated issues encompassing distressed pipes, stream bank deterioration, surface subsidence, viaduct leakage and viaduct alignment under a residential property.

**Solution**
The sanitary system portion of project will consist of installation of approx. 540 LF of parallel forcemain to improve pump station operation, replacement of approx. 11,540 LF gravity sewer lines, multiple manhole replacements, laterals reconnections, replacement of a 50-kW portable diesel generator, installation of WWTP gate valves, and other necessary appurtenances. Also, the storm rehabilitation portion of project consists of installation of a storm water management structure, approx. 180 LF 15" storm pipe, 350 LF 48" reinforced concrete pipe culvert, new storm manholes, and 300 LF grouting/backfill of existing viaduct.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 133

**Sissonville PSD** — $3,090,000 — $4,170,000

**SRF #C:** 544570

**County:** Kanawha

**NPDES #WV:** 0029530

**Binding Date:** 12/31/2023

**Points** 50.00

**Needs Categories:**
CWT-Secondary Treatment
CWT-Sewer System Rehabilitation

**Problem**

The WWTP and most of the wastewater collection system in the Sissonville area was constructed in the 1980s. Portions of the WWTP have reached the end of their useful life and require rehabilitation, replacement, and/or system improvements to continue successful operation of the WWTP. Wastewater collection system problems include (1) the pumps at the Lakeland Pump Station are being clogged with excessive rags, and (2) the Middle School and Shasta Pump Station wet wells are in need of rehabilitation.

**Solution**

-WWTP improv. include rehabilitation of clarifiers, disinfection system upgrade, chlorine tank rehabilitation, replacing existing plant generator and transfer switch, control bldg. rehabilitation, preliminary treatment upgrade and reconfiguration, oxidation ditch improvements and metal grating replacement.
-Wastewater collection system improv. include constructing mechanical bar screen and bldg., preceding existing Lakeland Pump Station (PS), relocating lines at PS site, installation of odor control unit, and cleaning, and coating the Middle School and Shasta PS wet wells.

**Rank** 134

**Union Williams PSD** — $7,454,200 — $7,454,200

**SRF #C:** 544687

**County:** Wood/Pleasants

**NPDES #WV:** 0101443

**Binding Date:** 3/31/2024

**Points** 50.00

**Needs Categories:**
CWT-Secondary Treatment
CWT-Sewer System Rehabilitation

**Problem**

Septicity in the system which has led to corrosion and degradation of facilities is the primary issue, mostly due to the oversized force mains coming from the Town of North Hills, which leads to sewage retention times magnitudes greater than what would be needed to cause the sewage to become septic.

**Solution**

Sewer system renovations to the following: Pump Station upgrades to Jesterville, Simex, and Hoagland, fine screen installation and spare pumps at the Hoagland PS, manhole lining/repair at Hoagland Rd, sewer line repair at Reeds Bend, minor modifications at Northwood Village LS and Mullinex LS, vac station modifications, headworks and digester modifications at the treatment plant.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 135 — **Alderson, Town of** — $1,599,000 — $1,599,000

**SRF #C:** 544700

**County:** Greenbrier/Monroe

**NPDES #WV:** 0024881

**Binding Date:** 6/30/2024

**Points** 45.00

**Needs Categories:**
CWT-Sewer System Rehabilitation
Stormwater-Gray Infrastructure

**Problem**

Along Linden Ave, there is 1500 LF of 12" combination sanitary/storm sewer piping constructed of terracotta. This combined system produces unnecessary additional flow that must be treated prior to discharge. Due to the age of the terracotta, structure soundness is of high concern. Cracking, root infiltration, and line collapse are all common issues found in terracotta pipe. Environmental contamination is also a severe concern in regard to this section of line. Structural faults allow untreated sanitary sewer to leak into the surrounding soils, and area floods can result in direct surface discharge of this untreated wastewater.

**Solution**

Replacement and separation of 1500 LF section of combination sewer piping. In place of existing 12" line, installation of 24" HDPE line will handle area stormwater flows, and installation of 8" PVC gravity line will handle area sanitary sewer demands. Manholes, existing customer reconnects, and clean-outs will be included on sanitary sewer section of system. Drop-inlets will be constructed along stormwater section of system. By dividing the system and installing updated products, stormwater flows directed to WWTP will be eliminated. Area contamination potential and risk of system failure will be greatly reduced.

**Rank** 136 — **Beckley Sanitary Board (FC12 PS)** — $970,000 — $970,000

**SRF #C:** 544702

**County:** Raleigh

**NPDES #WV:** 0023183

**Binding Date:** 6/30/2024

**Points** 45.00

**Needs Categories:**
CWT-Sewer System Rehabilitation

**Problem**

The existing FCI #2 pump station is degraded and nearing or past its useful service life. If the pump station is not upgraded and rehabilitated, it will most likely experience failure and potentially lead to untreated sewage being released into soils and waterways. Pump station failure may also result in sewer backups and result in a need for a bypass pump until the pump station can be repaired.

**Solution**

Proposing a project to rehabilitate the FCI #2 sanitary sewer pump station located off Industrial Park Road in Beaver, WV. This pump station services sanitary sewer from the Federal Correctional Institution. This will include new pumps, wet well rehabilitation and upgrades, control upgrades, and other necessary appurtenances.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 137

**Beckley Sanitary Board (Harper Crescent)** $5,789,000 $5,789,000

**SRF #C:** 544703

**County:** Raleigh

**NPDES #WV:** 0023183

**Binding Date:** 6/30/2024

**Points** 45.00

**Needs Categories:**
CWT-Sewer System Rehabilitation
Stormwater-Gray Infrastructure

**Problem**

-Existing stormwater system in project area is beyond its usable life span. The system has a drainage pipe that is undersized and with poor geometry for the area being served, therefore, flooding is frequent which results in erosion along the rights-of-way and asphalt deterioration. The sanitary sewer system is in close proximity to the existing stormwater system.
-Sanitary sewer system in project area is outdated and beyond its usable life span. The poor condition of pipes and sewer structures in this area makes it subject to significant I&I.

**Solution**

The proposed Harper Park/Crescent Road project will mitigate these issues by implementing a rehabilitation project of the existing stormwater drainage system and sanitary sewer system in the project area. Culverts will be resized and replaced to better handle the drainage capacity and conveyance necessary for the area. Existing sanitary sewer pipes will be replaced, and structures will be installed as needed within existing rights-of-way and easements.

**Rank** 138

**Beckley Sanitary Board (Woodcrest)** $2,462,000 $2,462,000

**SRF #C:** 544714

**County:** Raleigh

**NPDES #WV:** 0000000

**Binding Date:** 6/30/2024

**Points** 45.00

**Needs Categories:**
Stormwater-Gray Infrastructure

**Problem**

The existing primary storm sewer system is undersized and at its capacity. The existing channel has incorrect geometry that results in a lack on conveyance capacity. The culverts that are in place are piecemeal, improperly installed, and undersized. The Sanitary Sewer overflows are caused by the direct inflow connections and indirect stormwater infiltration into the system. Water exceeds the banks of the existing channel and floods regularly effecting private properties, several local roads and side streets. High storm sewer flows and flooding create conditions which allow additional inflow and infiltration in the combined sewer system.

**Solution**

The Woodcrest project will mitigate these issues by implementing a rehabilitation project in the stormwater system. Development of open channels within rights-of-way will be implemented to improve drainage conveyance and reduce residential flooding. Existing pipe will be replaced as needed and inlets will be installed within road rights-of-way. Existing culverts will be replaced to correct the sizing and installation of existing culverts in the area.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 139 — **Belington, City of** — $1,750,000 — $2,750,000

**SRF #C:** 544796

**Needs Categories:** CWT-Infiltration/Inflow

**County:** Barbour

**NPDES #WV:** 0029289

**Binding Date:** 6/30/2024

**Points** 45.00

**Problem**

Vital sections of the sewer system is experiencing inflow and infiltration (I&I) problems. The aging infrastructure is the suspected cause for the I&I problems.

**Solution**

The project proposes to replace vital sections of the sewer system that is experiencing I&I problems. The new infrastructure should minimize I&I in these areas.

**Rank** 140 — **Buffalo Creek PSD** — $16,602,500 — $16,602,500

**SRF #C:** 544555

**Needs Categories:** CWT-Secondary Treatment
CWT-New Collector Sewers

**County:** Logan

**NPDES #WV:** 0003851

**Binding Date:** 6/30/2024

**Points** 45.00

**Problem**

Increasing the available capacity of the WWTP for future system extension projects. Failing and below on-site treatment units will be eliminated by providing service to approximately 178 new customers in the areas of Greenville and Landville.

**Solution**

Upgrade of the existing WWTP and extension of a centralized wastewater collection system in the areas of Greenville and Landville.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 141

**Burnsville Public Utility Board (Trailer Park Connection)** — $1,400,000 — $1,400,000

**SRF #C:** 544720

**Needs Categories:** CWT-New Collector Sewers; CWT-New Interceptors

**County:** Braxton

**NPDES #WV:** 0024945

**Binding Date:** 6/30/2024

**Points** 45.00

**Problem**

Burnsville Trailer Park sits just outside the Town of Burnsville and the extent of the service area of the Burnsville Public Utility Board's existing service area. The Burnsville Trailer Park consists of roughly 40 mobile home sites, with approximately 25 existing residences and is provided wastewater treatment services via failing package treatment facility. The existing facility is in ruins, with the owner not being able to financially remedy the issue.

**Solution**

The proposed project would consist of the installation of a pumping station, connecting to the existing wastewater collection system at Burnsville Trailer Park, abandonment of the existing failing package treatment facility and extension of a forcemain to connect the existing customers to the existing Burnsville Public Utility Board's collection system.

**Rank** 142

**Carpendale, Town of** — $1,300,000 — $3,700,000

**SRF #C:** 544722

**Needs Categories:** CWT-New Collector Sewers; CWT-New Interceptors

**County:** Mineral

**NPDES #WV:** 0101567

**Binding Date:** 12/31/2023

**Points** 45.00

**Problem**

Problems to be solved:
1) Abandonment of existing force main located within abandoned, condemned railroad tunnel
2) Unreliable pump stations

**Solution**

Convey sewage from Carpendale to Cumberland, MD for treatment via a new force main (FM) installed outside the railroad tunnel, not being subject to potential rock falls. The new FM would tie into the existing FM on Carpendale's property in Maryland. The project would eliminate usage of 2 Carpendale problematic pump stations (PS's) consolidating flows into a single new PS with reliable controls. Proposed 8" gravity collection piping and manholes would gather flows and transfer them to a new primary PS for transfer to Maryland via new proposed FM piping located outside the tunnel in a more stable area.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 143

**Enlarged Hepzibah PSD** — $4,000,000 — $4,000,000

**SRF #C:** 544664

**County:** Harrison

**NPDES #WV:** 0081001

**Binding Date:** 6/30/2024

**Points** 45.00

**Needs Categories:**
CWT-Sewer System Rehabilitation
CWT-New Collector Sewers

**Problem**

-The residences and businesses along Route 24 (Meadowbrook Road) currently do not have access to a sanitary sewer system and rely on the use of septic tanks or HAU's to treat their wastewater.
-The system has aging infrastructure which is being repaired by the PSD as needed but many of the components are beyond their useful life. Many of the lift stations throughout the system do not currently have telemetry capabilities, have aging pumps beyond their useful life, and both of the WWTP's have aging infrastructure which is being evaluated.

**Solution**

The two pump stations at the Pete Dye Golf Course are being evaluated for replacement or upgrades with duplex submersible stations with concrete wet wells and valve vaults. A standard gravity sewer collection system is proposed to be installed in the Route 24 area to serve residences and businesses. Three pump stations will be installed to convey sewer into the Spelter collection system. All newly collected sewage is currently intended to be treated at the Spelter WWTP.

**Rank** 144

**Greenbrier PSD #2** — $29,068,200 — $29,068,200

**SRF #C:** 544732

**County:** Greenbrier

**NPDES #WV:** 0040525

**Binding Date:** 6/30/2024

**Points** 45.00

**Needs Categories:**
CWT-Secondary Treatment
CWT-Sewer System Rehabilitation

**Problem**

PSD's collection system is old and reaching end of its useful life. Portions of gravity sewer mains are constructed of outdated truss pipe that is known to deteriorate. Video inspections have confirmed this is an ongoing issue in PSD's collection system. PSD's pump stations (PS) need rehabilitation to replace old pumps and controls with new units to meet current operating conditions. PS 4 and 5 currently use outdated and inefficient pneumatic pumps which have reached end of their useful life and are difficult to maintain or repair due to scarcity of parts. WWTP equipment is nearing the end of its useful life and needs replaced.

**Solution**

1) Old and deteriorating gravity sewer lines, manholes and other appurtenances in Quinwood, WV will be removed and replaced with units constructed of modern materials and designs. 2)Pump stations in the PSD's collection system will have pumps and controls upgraded, except for PS 4 and 5, which shall be decommissioned and replaced by the construction of a single submersible PS at the location of PS 5 and the installation of a new forcemain from the new PS to the current discharge manhole for PS 4. 3) Various equipment at WWTP will be upgraded to prolong useful life of the facility.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 145

**Harpers Ferry-Bolivar PSD** — $3,915,066 — $3,915,066

**SRF #C:** 544772

**County:** Jefferson

**NPDES #WV:** 0039136

**Binding Date:** 6/30/2024

**Points** 45.00

**Needs Categories:**
CWT-Infiltration/Inflow

**Problem**
The collection system is nearly 40 years old and is experiencing I&I problems. In the summer of 2019, the District retained a contractor to clean and televise approximately 2000' of the interceptor sewer line above the Old Furnace Rd Lift Station. As a result, 3 house lateral connections to the interceptor were found to be broken and leaking and 3 manholes out of 7 were leaking. They also found a cracked pipe in the creek that was leaking 24-7 and two manhole lids that leaked during hard rain. All of these issues were repaired and the pumping quantity dramatically decreased in the lift station.

**Solution**
-The District proposes to perform an I&I study on the existing collection system by cleaning and televising the lines and physically inspecting the manholes. Some flow measurements may also be included.
-Based on the findings, a Facility Plan will be prepared to provide a description of a construction project to eliminate as much I&I as possible, either by digging up the problems or by lining the pipe using a CIPP process.

**Rank** 146

**Harrisville, Town of** — $1,840,000 — $3,925,000

**SRF #C:** 544803

**County:** Ritchie

**NPDES #WV:** 0022357

**Binding Date:** 6/30/2024

**Points** 45.00

**Needs Categories:**
CWT-Secondary Treatment
CWT-Sewer System Rehabilitation

**Problem**
The Hughes River Lift Station, Smithville Lift Station, and West End Lift Station were put into service in 1991, and their pumps have reached the end of their useful life. The Wastewater Treatment Plant contains many failing and insufficient components. Among these components are the mechanically failing headworks unit, failing clarifier components, failing pump stations, insufficient lighting, and other miscellaneous plant components. The objective of this project is to increase the efficiency and reliability of the system to ensure proper transmission and treatment of sanitary sewer.

**Solution**
The project includes the replacement of the Hughes River Lift Station, Smithville Lift Station, and West End Lift Station, along with replacement of a mechanically failed headworks unit, clarifier paddle rehabilitation, improved treatment plant lighting, and other miscellaneous improvements to the plant.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 147

**Logan County PSD (WWTP)** — $4,792,000 — $8,792,000

**SRF #C:** 544791

**Needs Categories:** CWT-Secondary Treatment

**County:** Logan

**NPDES #WV:** 0105171

**Binding Date:** 6/30/2024

**Points** 45.00

**Problem**

The existing WWTP is operating with old and deteriorated equipment that has aged beyond its useful life and will need replaced to maintain the effluent discharge limits. Additionally, the areas served by Logan County PSD are expected to grow as new wastewater system extension projects are constructed to reach current residents with no sewage service and are operating with septic tanks which pose public health concerns. This growth will create the need for WWTP upgrades to increase the capacity of the existing plant to bear the additional loading of these future projects.

**Solution**

The project proposes to upgrade the existing Logan County PSD WWTP by performing upgrades to the headworks equipment, storage building, sludge handling equipment, UV disinfection equipment, telemetry/SCADA equipment, adding/replacing blowers, yard piping, electrical equipment, and SBR Basins and hardware. Also, performing site grading and ground stabilization.

**Rank** 148

**Masontown, Town of** — $500,000 — $1,075,000

**SRF #C:** 544825

**Needs Categories:** CWT-Secondary Treatment

**County:** Preston

**NPDES #WV:** 0105627

**Binding Date:** 6/30/2024

**Points** 45.00

**Problem**

The WV DEP has urged the Town to construct a sludge storage facility in order to properly store dewatered sludge during the months where land application is not permitted. This sludge storage building will provide a designated area for sludge to be stored and prevent sludge runoff from entering the environment.

**Solution**

The Town proposes a project to include the installation and implementation of a new sludge storage building capable of storing sludge during months where land application is not permitted, as well as a new post aeration basin complete with new blower, D.O. probe, and controls. This upgrade is recommended due to the Town's need for proper sludge storage recommended by the WVDEP as well as the need for the Town to provide the highest quality discharge to the surrounding area.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 149

**New Martinsville, City of (WWTP)** — $3,258,700 — $3,258,700

**SRF #C:** 544777

**Needs Categories:** CWT-Secondary Treatment

**County:** Wetzel

**NPDES #WV:** 0027472

**Binding Date:** 6/30/2024

**Points** 45.00

**Problem**

Wastewater treatment plant was completed in the mid-1990s and some equipment needs to be updated.

**Solution**

Replace existing equipment in the WWTP including grit removal system, non-potable water system, motor control center, belt filter press control panel, oxidation ditch rotor rehabilitation, influent screen, and miscellaneous improvements.

**Rank** 150

**Newburg, Town of** — $1,500,000 — $3,275,000

**SRF #C:** 544742

**Needs Categories:** CWT-Secondary Treatment
CWT-Advanced Treatment
CWT-Infiltration/Inflow

**County:** Preston

**NPDES #WV:** 0024597

**Binding Date:** 6/30/2023

**Points** 45.00

**Problem**

WWTP has exceeded its operational capacity due to large amount of I&I, resulting in operational and maintenance issues. If events which operational capacity is exceeded continue, unrepairable damage may occur. According to the 2020 WV PSC Annual Report, Newburg is treating 14.37% I&I. Maximum gallons treated for any one day was recorded at 95,000 gallons (2.7 times design capacity). Treatment plant also needs upgrades to sand filter basins, site piping, and disinfection technology. They are becoming worn down due to use over time and are not performing to proper standard, inhibiting treatment effectiveness.

**Solution**

1. Project will abandon in place existing damaged PVC and Ductile Iron piping and replace with new PVC and D.I. piping to reduce I&I in system, reducing load on the current treatment facility. 2. Upgrades to existing wastewater treatment plant. New mixed media filters replacing current sand filters at the plant. Upgrades also include new Ultraviolet disinfection system, new air piping and diffusers, new sludge return piping, and a new independent post aeration system. Upgrades are necessary to improve the treatment capabilities and will allow Town to meet all current and future NPDES permit requirements.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 151

**Pea Ridge PSD (B Plant)** — $3,966,100 — $3,966,100

**SRF #C:** 544657

**Needs Categories:**
CWT-New Collector Sewers
CWT-New Interceptors

**County:** Cabell

**NPDES #WV:** 0027413

**Binding Date:** 6/30/2024

**Points** 45.00

**Problem**

Much of the equipment at Pea Ridge's B WWTP is past the end of its useful life and needs replacement. The headwall on the effluent line which discharges to the Guyandotte River has also been washed out by severe flooding and needs major repairs in the form of an expensive retaining wall. The electrical motor control center is dilapidated and would require a major overhaul to be brought into conformity with modern standards.

**Solution**

This project proposes to decommission Pea Ridge's existing B WWTP and convey all flows from the site to Pea Ridge's A WWTP for treatment via forcemain. The A WWTP will have adequate capacity to receive these flows as a result of the aforementioned project to extend service elsewhere and expand treatment capacity.

**Rank** 152

**Philippi, City of** — $5,687,000 — $5,687,000

**SRF #C:** 544797

**Needs Categories:**
CWT-Infiltration/Inflow

**County:** Barbour

**NPDES #WV:** 0021857

**Binding Date:** 6/30/2024

**Points** 45.00

**Problem**

A sanitary sewer survey was performed and found that critical sections of the sanitary sewer system is experiencing Inflow and Infiltration (I&I) problems.

**Solution**

The project proposes to replace areas that experience I&I problems that were found during the sanitary sewer survey.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 153

**Point Pleasant, City of** — $1,624,100 — $1,624,100

**SRF #C:** 544749

**Needs Categories:** CWT-Secondary Treatment

**County:** Mason

**NPDES #WV:** 0022039

**Binding Date:** 6/30/2024

**Points** 45.00

**Problem**

Existing facility is nearing the end of the useful life and the secondary clarifier condition continues to deteriorate. Operators are having issues with rags reaching the aeration tanks and clarifiers due to the inefficient arc screen. During cold weather, pressed sludge is unable to be stored overnight and causes issues with meeting the landfill dump schedule.

**Solution**

Project includes removing the existing inefficient arc screen and replacing with a new finer screen, enclosing the existing sludge storage area to allow solids to be stored during cold weather, and rehabilitating the existing secondary clarifiers.

**Rank** 154

**Ripley Utility Board, City of** — $2,000,000 — $3,000,000

**SRF #C:** 544821

**Needs Categories:** Stormwater-Gray Infrastructure

**County:** Jackson

**NPDES #WV:** 0045543

**Binding Date:** 6/30/2024

**Points** 45.00

**Problem**

-The City's aging storm sewer is beginning to cause sinkholes and flooding issues. The bottoms of the corrugated metal pipes are eroding away. The bottoms of the concrete/brick culverts have heaved and water now flows beneath the culverts.
-A portion of the storm sewer which parallels Viking Lane was upgraded from 42" CMP to 48" HDPE, sinkholes along the alignment were repaired, the 42" CMP was filled with grout, and a new outfall was constructed at Mill Creek. These improvements have improved drainage in the area, but only accounted for approximately half of the existing Viking Lane storm sewer.

**Solution**

This project will continue storm sewer upgrades for the Viking Lane storm sewer system and address other problem areas in town. The proposed project will upgrade the existing infrastructure between the end of the Viking Lane Phase I project, the head of the storm sewer on 2nd Avenue and the Charleston Drive storm sewer.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 155

**Salt Rock Sewer PSD (WWTP)** — $2,050,000 — $2,050,000

**SRF #C:** 544818

**Needs Categories:** CWT-Secondary Treatment

**County:** Cabell

**NPDES #WV:** 0024538

**Binding Date:** 6/30/2024

**Points** 45.00

**Problem**

Salt Rock Sewer PSD's WWTP is nearing 20 years old. The existing UV system model has been discontinued, and the belt filter press needs replaced. In addition, SBR 2 needs cleaned and rehabilitated.

**Solution**

The project proposed to:
1) Replace the UV unit and belt filter press.
2) Clean and rehabilitate SBR 2.

**Rank** 156

**South Charleston Sanitary Board, City of** — $4,960,000 — $4,960,000

**SRF #C:** 544808

**Needs Categories:** CWT-Secondary Treatment

**County:** Kanawha

**NPDES #WV:** 0023116

**Binding Date:** 6/30/2024

**Points** 45.00

**Problem**

The South Charleston Sanitary Board wastewater treatment plant's electrical and control systems are outdated and in need of upgrades. Medium voltage is distributed throughout the plant to substations to provide the utilization voltage of 480V to equipment. The South Charleston Sanitary Board wants to reduce the amount of medium voltage facilities and substations required throughout the plant and distribute low voltage from one substation. The existing Motor Control Centers are in need of replacement. There are also power poles along the Kanawha River that are in need of replacement due to age and poor stability.

**Solution**

The project that is being proposed is to replace the major electrical components in the plant. There will be numerous replacements of Motor Control Centers (MCC) Units, the installation of a new substation to reduce the distributed volated to 480V and eliminate the distribution of medium voltage, and installation of new power poles to support the main electrical feed into the plant's substation. New electrical wiring and equipment will be installed throughout the entire WWTP Site.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 157

**South Charleston Sanitary Board, City of** — $3,508,850 — $3,508,850

**SRF #C:** 544829

**Needs Categories:** CWT-Sewer System Rehabilitation

**County:** Kanawha

**NPDES #WV:** 0023116

**Binding Date:** 9/30/2023

**Points** 45.00

**Problem**

The Liberty Street lift station has suffered severe H2S corrosion and is structurally unsound.

**Solution**

The proposed project is a structural rehabilitation of the lift station's wet well chambers. Work will include, removal and replacement of concrete that has been weakened by H2S corrosion, lining of effluent manholes, replacement of slide gates, and replacement of the odor/H2S control system.

**Rank** 158

**Summit Park PSD** — $1,600,000 — $1,600,000

**SRF #C:** 544754

**Needs Categories:** CWT-Secondary Treatment
CWT-Infiltration/Inflow

**County:** Harrison

**NPDES #WV:** 0084476

**Binding Date:** 6/30/2024

**Points** 45.00

**Problem**

Existing sanitary sewer collection system operated by Summit Park PSD has been experiencing issues in a section of line and existing lift station which has become deteriorated and needs replacement so wastewater can be conveyed to Clarksburg's WWTP for treatment. Without upgrades and improvements, existing collection line and lift station will continue to deteriorate. Also, some existing gravity sewer lines and manholes are in need of replacement due to their age and amount of I&I that enters the system.

**Solution**

Proposed project will involve replacement of existing failing lift station with a new lift station, and evaluation and replacement of necessary sections of failing collection lines allowing for continued conveyance of wastewater for the customers to the Clarksburg WWTP for treatment. Without these necessary improvements, Summit Park PSD will continue to have issues with wastewater conveyance, and with continued wear and tear, may fail to convey wastewater all together. Approximately 3,000 LF of gravity sewer piping will be replaced along with 50 sanitary sewer manholes.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 159 — **Vienna Utility Board** — $12,072,600 — $12,072,600

**SRF #C:** 544758

**Needs Categories:** CWT-Sewer System Rehabilitation

**County:** Wood

**NPDES #WV:** 0023221

**Binding Date:** 6/30/2024

**Points** 45.00

**Problem**

Bottlenecks in the system can lead to surcharging of the collection system during storm flows.

**Solution**

Sewer and force main replacements within the collection system.

**Rank** 160 — **Westover Sanitary Sewer Board, City of** — $8,025,000 — $10,400,000

**SRF #C:** 544811

**Needs Categories:** CWT-Sewer System Rehabilitation
Stormwater-Gray Infrastructure

**County:** Monongalia

**NPDES #WV:** 0024449

**Binding Date:** 6/30/2024

**Points** 45.00

**Problem**

Holland Avenue located within The City of Westover is having an issue where both sanitary sewer lines and stormwater lines are coexisting beneath Holland Avenue. The Dunkard Ave Lift Station has been inspected and is showing signs of collapsing on the inside of the wet well. The integrity of each line has been compromised and is creating an Inflow & Infiltration issue for Westover. The proposed project will successfully eliminate the I&I issue that is ongoing along Holland Avenue and replace the collapsing lift station along Dunkard Avenue.

**Solution**

The proposed project will consist of removing approximately 3,050 linear feet of gravity sewer line, approximately 3,250 linear feet of storm sewer line, approximately 7,000 feet of forcemain, and a new lift station. The project will be completed in near proximity to a retaining wall along Holland Avenue. This retaining wall has become damaged due to poor foundation drains. If the retaining wall was to fail it would cause significant damage to Holland Avenue. With Holland Avenue being a gateway into Morgantown and a significant bus route, the need for an upgrade is necessary.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 161 — **Williamson, City of** — $5,286,000 — $5,286,000

**SRF #C:** 544544

**County:** Mingo

**NPDES #WV:** 0026271

**Binding Date:** 6/30/2024

**Points** 45.00

**Needs Categories:**
CWT-Secondary Treatment
CWT-New Collector Sewers
CWT-Sewer System Rehabilitation

**Problem**
Structural failure of wastewater pumping stations, structural issues at WWTP facilities and working components, and failing on-site treatment for 3 unserved customers.

**Solution**
Installation of new pumping stations, structural repairs to facilities and components at the WWTP, and a small collection system extension to provide service to currently unserved customers.

**Rank** 162 — **Hillsboro, Town of** — $1,033,200 — $1,033,200

**SRF #C:** 544667

**County:** Pocahontas

**NPDES #WV:** 0054283

**Binding Date:** 6/30/2024

**Points** 40.00

**Needs Categories:**
CWT-Secondary Treatment
CWT-Sewer System Rehabilitation

**Problem**
Excessive duckweed is within the lagoon and security fence around the treatment plant is in bad condition. The area has been experiencing increased rainfall intensity and longer storm durations, causing I&I problems of the wastewater system. This is putting overwhelming pressure on the lift station to work properly and efficiently, also causing need for increased routine maintenance. Flow monitoring was performed but no conclusive evidence was found on where the main cause of increase I&I was coming from.

**Solution**
-Disinfection system will be replaced with a new bulk liquid chemical dosing system. The security fence will be replaced. A new skimming system and triploid carp will be added to the lagoon. Reduce duckweed amounts in lagoon, lowering the carbon, nitrogen, phosphorus, pathogens, and toxins in the water.
-Replacement of lift station to have increased capacity to aid in increased flows while further study of the system will be performed to locate I&I problem areas and causes. Also, replacement of backup generator and a new maintenance building.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 163

**Ravenswood, City of** — $25,063,250 — $45,063,250

**SRF #C:** 544782

**Needs Categories:** CWT-Secondary Treatment

**County:** Jackson

**NPDES #WV:** 0021989

**Binding Date:** 6/30/2024

**Points** 40.00

**Problem**

Wastewater is treated and discharged into Sandy Creek which flows into the Ohio River. The proposed new sewer extension to the Jackson County Business Park (the old Century Aluminum site) will allow the current treatment facility (and eventually a new WWTP) to begin receiving an estimated 150,000 GPD (4.5 million gallons/month) by July 1, 2024, from new and existing industrial customers.

**Solution**

A new Waste Water Treatment Plant will be constructed to replace the existing three-cell treatment lagoons. The existing plant will be decommissioned after the complete construction of the new 2 MGD Waste Water Treatment Plant. This is part of a 2-phased project currently proposed to provide wastewater service to the Jackson County Business Park. The sewer system improvements and construction of the new WWTP, Phases 2A and 2B respectively, are intended to take place concurrently. The new plant will operate with SBR treatment process. The disinfection process will take place by UV light treatment.

**Rank** 164

**Canaan Valley PSD (Phase II)** — $2,905,000 — $3,405,000

**SRF #C:** 544560

**Needs Categories:** CWT-New Interceptors

**County:** Tucker

**NPDES #WV:** 0106011

**Binding Date:** 9/30/2023

**Points** 35.00

**Problem**

This project is the second phase of a multi-phased regional sewer system in the Valley. The proposed Phase II project will incorporate the Zone B area into the PSD's system. The Zone B area consists of the communities of Deerfield, Windwood and Canaan Village, which own and operate private sewer systems. Currently, these systems suffer from deteriorating wastewater collection and treatment systems and have a history of NOV's being issued.

**Solution**

Canaan Valley PSD is proposing to take over treatment of flows from Zone B communities. To transport flows from Zone B facilities to recently constructed Zone D WWTP, two sewer lift stations are needed at existing Deerfield facility that will service the Deerfield, Windwood and Canaan Village communities. With lift stations, proposed project will include installation of forcemains, gravity sewer, grinder pumps and all necessary appurtenances to convey flow from the communities to the existing forcemain infrastructure and ultimately the Zone D Treatment Plant. The District does not propose to take over the collection systems.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 165 — **Center PSD** — $2,000,000 — $5,974,000

**SRF #C:** 544787

**County:** Wyoming

**NPDES #WV:** 0027138

**Binding Date:** 6/30/2024

**Points** 30.00

**Needs Categories:** CWT-Secondary Treatment

**Problem**

1) North Pineville, Rock View, and Bearhole areas currently rely on private septic and 2 package plants for their wastewater treatment and disposal. Private septic systems not well installed or maintained have a potential to contaminate ground and surface waters in the immediate and surrounding areas. The Marsh Fork, Rockcastle Creek and Bearhole Fork streams pass through the project area.

**Solution**

The Center PSD proposes to utilize the option of using a decentralized sewer system, which provides for the treatment of solids at or near the customer locations. The effluent, or "grey water", that is produced at these decentralized locations is then sent to the treatment plant for treatment of the effluent.

**Rank** 166 — **Beckley Sanitary Board (Kanawha)** — $888,000 — $888,000

**SRF #C:** 544705

**County:** Raleigh

**NPDES #WV:** 0000000

**Binding Date:** 6/30/2024

**Points** 25.00

**Needs Categories:** Stormwater-Gray Infrastructure

**Problem**

Existing primary storm sewer system is undersized and is at the end of its service life. The system experiences regular flooding events due to old infrastructure and conveyance systems that are too small to handle the necessary capacity of stormwater. The Sanitary Sewer overflows are caused by direct inflow connections and indirect stormwater infiltration into the system. High storm sewer flows and flooding create conditions which allow additional inflow and infiltration (I&I) in the combined sewer system. This area is a major contributor of I&I in the Beckley Sanitary Board's sanitary sewer system.

**Solution**

The N Kanawha East project will mitigate these issues by implementing a rehabilitation project in the stormwater system. This project proposes to implement a stormwater diversion system that would result in a percentage of runoff and discharge to be diverted along the Rail Trail to Whitestick Creek, rather than entering the existing sanitary sewer. Installation of an enclosed stormwater conveyance system will better handle the drainage capacity necessary in this area. Existing pipe will be replaced as needed and inlets will be installed within road rights-of-way.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 167

**Beckley Sanitary Board (Woodlawn)** — $2,780,000 — $2,780,000

**SRF #C:** 544715

**Needs Categories:** Stormwater-Gray Infrastructure

**County:** Raleigh

**NPDES #WV:** 0000000

**Binding Date:** 6/30/2024

**Points** 25.00

**Problem**

The existing primary storm sewer system is undersized and at its capacity. These storm sewers are also at the end of their service life. The sanitary sewer overflows are caused by the direct inflow connections and indirect stormwater infiltration into the system including discharge from Park Middle School. Regular flooding impacts private properties and several local roads and side streets. The storm sewer flows and flooding create conditions which allow additional inflow and infiltration in the combined sewer system.

**Solution**

The Woodlawn project will mitigate these issues by implementing a rehabilitation project in the area stormwater system along the east and west sides of Woodlawn Ave. Culverts will be resized and replaced to better handle the drainage capacity necessary in this area. Existing culverts located under buildings will also be relocated. Additional property will be purchased to construct the open stormwater channel as necessary. Existing pipe will be replaced as needed and inlets will be installed within road rights-of-way.

**Rank** 168

**Capon Bridge, Town of** — $875,000 — $1,750,000

**SRF #C:** 544766

**Needs Categories:** CWT-Infiltration/Inflow

**County:** Hampshire

**NPDES #WV:** 0103110

**Binding Date:** 6/30/2024

**Points** 25.00

**Problem**

The 2021 Public Service Commission Annual Report reported an I&I rate of 23.4%. After Contract 2 work completion of the I&I portion, monthly rainfall data submitted shows the WWTP is still receiving significant peaks in flow after rain events. A Manhole inspection in March 2022 found many indications of Infiltration through seams and lids/frames of manholes. In May of 2022 a camera investigation of the Town's system identified many areas with infiltration stains and leaking connections and one section of line had soil protruding into the pipe causing deformation and infiltration of the pipe.

**Solution**

Continue the Town's sanitary sewer collection system improvements, consisting of repairing the remaining sixty manholes by removing and replacing the lids and frames, sealing these manholes with an application of spray on epoxy lining, removal and replacement of 350 linear feet of damaged and deformed 6” sewer line, and repairs to four other sewer lines where leaks were identified. This project also proposes to install an elevated emergency generator at the River Pump Station (PS) and replace the pump and controls as well as add emergency generators at three grinder PSs within the collection system.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 169

**Cowen PSD** — $5,985,000 — $6,985,500

**SRF #C:** 544724

**Needs Categories:** CWT-Sewer System Rehabilitation; CWT-New Collector Sewers

**County:** Webster

**NPDES #WV:** 0037397

**Binding Date:** 6/30/2024

**Points** 25.00

**Problem**

Unincorporated communities of Donaldson and Erbacon near Cowen do not have public sanitary sewer service. Residents and businesses in these communities rely upon individual septic systems of varying condition. Lack of public utilities in these areas pose a potential risk to public health, and acts as an impediment to economic development. Also, Cowen's existing collection system suffers from excessive rates of inflow and infiltration (I&I), 70% of total inflows. This I&I increases both magnitude and volatility of total inflows to Cowen's WWTP, making it more difficult to provide appropriate treatment.

**Solution**

Rehabilitate existing wastewater collection system and extension to serve approx. 150 new customers in Erbacon and Donaldson. Approx. 15,000 LF of gravity sewer mains, 55 MH, and various appurtenances will be removed/replaced in existing wastewater collection system. Extensions entail construction of approx. 37,000 LF of gravity sewer mains, 10,500 LF of FM, 130 MH, one PS, and all necessary appurtenances. Wastewater from Donaldson will flow by gravity to existing Williams River PS, wastewater from Erbacon will flow into new PS then to existing collection system near Webster Nursing and Rehab Center.

**Rank** 170

**Paden City Sanitary Disposal Board** — $3,000,000 — $3,000,000

**SRF #C:** 544822

**Needs Categories:** CWT-Infiltration/Inflow

**County:** Wetzel/Tyler

**NPDES #WV:** 0020613

**Binding Date:** 6/30/2024

**Points** 25.00

**Problem**

Historically, the collection system has been heavily impacted by I&I. The combined sewer and storm is causing flooding issues and issues at the WWTP. This project is proposing additional I&I investigations and replacement of sewer lines and structures found to be most impacted.

**Solution**

Collection system upgrades will occur in the following areas: Main Street, Sturgeon Alley, and alleys on each side of E. Robinson Street, and along Van Camp Street. Additional previously conducted camera work was used to determine the condition of these lines.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 171

**St. Marys, City of** — $3,480,000 — $3,480,000

**SRF #C:** 544753

**County:** Pleasants

**NPDES #WV:** 0020168

**Binding Date:** 6/30/2024

**Points** 25.00

**Needs Categories:**
CWT-Secondary Treatment
CWT-Sewer System Rehabilitation

**Problem**
Existing lift stations do not have backup power in case of outage, which can lead to surcharging of the system during power outages. Equalization basin at the WWTP can fill with solids as there is no mixing mechanism, which leads to issues with odors and solids in the effluent. Various gravity sewers and force mains are at the end of the design life and have increased emergency maintenance associated with them.

**Solution**
Add permanent generators to the lift stations. Install mixing system in the EQ basin at the WWTP. Replace various sewers and force mains.

**Rank** 172

**Union, Town of** — $2,740,000 — $2,740,000

**SRF #C:** 544815

**County:** Monroe

**NPDES #WV:** 0024368

**Binding Date:** 6/30/2024

**Points** 25.00

**Needs Categories:**
CWT-Infiltration/Inflow

**Problem**
The existing Town of Union collection system has significant Inflow and Infiltration (I&I) problems. This project will include a study and report phase of the existing collection system as well as replacing aging sections of pipe, manholes and related appurtenances of the in-town system. This project will also significantly reduce Inflow and Infiltration (I&I) into the system that results from the existing collection system approaching the end of its useful life. The reduction in I&I will allow for future expansion under the current WWTP capacity.

**Solution**
The work will include a study and report phase on the current system that will identify problem areas that the Town of Union will target for replacement. The project will also include the replacement of problem areas throughout the existing system. This work will significantly reduce the Town's I&I problems.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 173

**Anmoore, Town of** — $2,000,000 — $3,000,000

**SRF #C:** 544802

**Needs Categories:** CWT-Infiltration/Inflow

**County:** Harrison

**NPDES #WV:** 0086860

**Binding Date:** 6/30/2024

**Points** 20.00

**Problem**

The Town of Anmoore has evaluated their gravity collection system and found areas of the system are in need of replacement. None of the gravity lines have been replaced since their original construction and have been contributing to significant Inflow and Infiltration (I&I) issues. The purpose of this project is to reduce the amount of I&I entering the collection system.

**Solution**

The project proposes to replace sections of gravity sewer line that have been evaluated and deemed in need of replacement. The project will work to reduce the amount of I&I that enters the gravity collection system.

**Rank** 174

**Beckley Sanitary Board (Operations Facility)** — $4,754,000 — $4,754,000

**SRF #C:** 544710

**Needs Categories:** CWT-Sewer System Rehabilitation
Stormwater-Gray Infrastructure

**County:** Raleigh

**NPDES #WV:** 0023183

**Binding Date:** 6/30/2024

**Points** 20.00

**Problem**

Beckley Sanitary Board needs a new operations facility. The current office complex is undersized for the current staff and the layout is inadequate for operations. The current office building has no ADA accessibility, parking is limited, storage areas are undersized, and there is no room for growth. In addition, the building is aging and in need of upgrades and repairs.

**Solution**

Project proposes to design and construct a new operations facility along New River Drive. The project would include a new operations building, laydown yard, areas for gravel/sand storage, fuel tanks, vehicle storage areas, rain gardens, utilities, and all other necessary components. The building itself is approximately 9,200 SF and would include office space, maintenance garage bays, and storage space. There is parking and a laydown/storage yard behind the facility.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 175

**Beckley Sanitary Board (Ragland)** — $1,719,000 — $1,719,000

**SRF #C:** 544711

**County:** Raleigh

**NPDES #WV:** 0000000

**Binding Date:** 6/30/2024

**Points** 20.00

**Needs Categories:**
Stormwater-Gray Infrastructure

**Problem**
Existing stormwater system infrastructure in the project area is undersized and at the end of service life. Currently the existing drainage infrastructure is limited towards the East Beckley Bypass. Due to increased impervious surface and additional commercial developments in the area, stormwater runoff into the conveyance system has increased and infiltration has decreased. This leads to water pooling along roadways and properties and bankfull open-channels. The current drainage situation may be impacting adjacent sanitary sewer systems and can lead to inflow and infiltration.

**Solution**
The Ragland Road project will mitigate these issues by implementing a stormwater rehabilitation project. The project proposes removal of undersized structures and replacement of appropriately sized pipes and culverts to increase drainage capacity.

**Rank** 176

**Boone County PSD (Foster-Phase IA)** — $563,000 — $4,563,000

**SRF #C:** 544826

**County:** Boone

**NPDES #WV:** 0035939

**Binding Date:** 6/30/2024

**Points** 20.00

**Needs Categories:**
CWT-New Collector Sewers
CWT-New Interceptors

**Problem**
The Little Coal River, Rock Creek, Right Fork/Rock Creek, Left Fork/Rock Creek, and Hubbard Fork have a TMDL for fecal coliform. The 2006 TMDL report identified that 100% reduction in failing on-site system was required to bring the streams into compliance with the TMDL.

**Solution**
Extend sanitary sewer service along Rock Creek/State Route 3 to:
1. Help address the TMDL issue for fecal coliform by eliminating on-site systems.
2. Improve utility viability.

The Foster - Phase 1A Sanitary Sewer Extension would include approximately 12,000 LF of gravity line, 2,000 LF of force main, and four pump stations.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 177

**Clarksburg, City of** — $2,000,000 — $5,335,000

**SRF #C:** 544809

**County:** Harrison

**NPDES #WV:** 0023302

**Binding Date:** 6/30/2024

**Points** 20.00

**Needs Categories:**
CWT-New Collector Sewers
CWT-New Interceptors

**Problem**

Arlington is an unincorporated community along the West Fork River in Harrison County, WV and is part of the West Fork Co-Op (WFCO). The WFCO has a goal to provide public sewer collection and treatment service to the residents of Arlington; however, the WFCO is not a public utility. Arlington is assumed to currently rely on septic tanks for sewer and pumping trucks for removal and cleaning of the tanks, or no sewer at all.

**Solution**

This project proposes installing a conventional gravity sanitary sewer system in Arlington and pumping flows to Clarksburg's sewer system for treatment. This will also consist of installing 3 new lift stations. This project also consists of upgrading existing lift station within Clarksburg's system and installing sanitary sewer systems in other WFCO communities in later phases.

**Rank** 178

**Fayetteville, Town of** — $1,610,000 — $1,610,000

**SRF #C:** 544814

**County:** Fayette

**NPDES #WV:** 0000000

**Binding Date:** 6/30/2024

**Points** 20.00

**Needs Categories:**
Stormwater-Gray Infrastructure

**Problem**

The channel and the culverts in the stream along Lively Street are inadequately sized to handle heavy rainfall events, as demonstrated in the past by numerous overflowing problems. There are four problem areas included with this project: Heselp Avenue, Mahan Street, the Underwood Property, and Lively Street. The four areas of concern were analyzed using stormwater modeling software, and it was concluded that none of the existing culverts are capable of adequately conveying flows from a 25-year event, thus resulting in flooding when heavy rainfall events occur.

**Solution**

This project proposes the complete upgrade of the Lively Street project area, including the removal and replacement of stormwater culverts and open channels throughout the unnamed stream along Lively Street in the Heslep Avenue, Mahan Street, and Lively Street areas. The project will result in the reduction or elimination of future flood damages caused by significant rain events.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 179

**Grafton, City of** — $2,000,000 — $2,600,000

**SRF #C:** 544805

**County:** Taylor

**NPDES #WV:** 0021822

**Binding Date:** 6/30/2024

**Points** 20.00

**Needs Categories:**
CWT-New Collector Sewers

**Problem**
The City of Grafton has an unserved area of approximately 35 residents less than half of a mile from the 2.3 MGD Wastewater Treatment Plant. These residents currently use septic systems and are requesting sanitary sewer service. The Taylor County Commission has also proposed a sewer extension to the City of Grafton that would provide sewer to an unserved area.

**Solution**
This project proposes serving residents that neighbor the existing 2.3 MGD WWTP and extend sewer service to an unserved area, including the Fairgrounds and other businesses.

**Rank** 180

**Greater Harrison Co. PSD (Quiet Dell)** — $8,200,000 — $25,000,000

**SRF #C:** 544730

**County:** Harrison

**NPDES #WV:** 0084301

**Binding Date:** 6/30/2024

**Points** 20.00

**Needs Categories:**
CWT-Advanced Treatment
CWT-New Collector Sewers

**Problem**
The community of Quiet Dell and its surrounding area do not currently have a public sanitary sewer system. Parts of the area currently rely on failing package treatment plants, while the remaining areas rely on septic tanks.

**Solution**
The Greater Harrison County PSD is proposing to construct a new 250,000 gallon per day treatment plant and a new sanitary sewer collection system to service the Quiet Dell area.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 181

**Greater Harrison Co. PSD (River Crossing)** | $1,250,000 | $1,250,000

**SRF #C:** 544635

**Needs Categories:** CWT-Sewer System Rehabilitation

**County:** Harrison

**NPDES #WV:** 0084301

**Binding Date:** 6/30/2024

**Points** 20.00

**Problem**

Once the dams were removed from the West Fork River, three river crossings previously under the water level became exposed. These exposed crossings are at risk of breaks, as they could be damaged from floating debris in the river. The dams were removed to encourage recreational activities, but these exposed lines prevent the river from being easily navigable and pose a safety risk.

**Solution**

The PSD is proposing to directional drill under the West Fork riverbed and remove the exposed river crossings. The West Milford dosing structure will have to be converted to a traditional pump station.

**Rank** 182

**Greater Harrison Co. PSD (Woodstock HTS)** | $500,000 | $1,000,000

**SRF #C:** 544731

**Needs Categories:** CWT-New Interceptors

**County:** Harrison

**NPDES #WV:** 0084301

**Binding Date:** 6/30/2024

**Points** 20.00

**Problem**

The current sludge ponds at Woodstock Heights pose a serious risk to public health and the environment. The ponds have the potential to overflow due to increased demand or an unexpected wet weather event. An overflow of sewage could contaminate surface water and groundwater sources in the area, which would be detrimental to public health and local wildlife. The area is surrounded by undeveloped land and has recently attracted more visitors due to the operation of a local winery. However, existing ponds have capacity limitations that could not support any future population growth in the area.

**Solution**

This project proposes to decommission the ponds and install a pump station to tie the Woodstock Heights collection system into the Greater Harrison County PSD's existing sanitary sewer system. All flows from Woodstock Heights would be conveyed to the West Milford WWTP. The ponds would be decommissioned after the pump station is put into service so as not to interrupt sewer service to the Woodstock Heights area customers.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 183

**Logan County PSD (Curtis Lorado)** — $2,495,000 — $2,495,000

**SRF #C:** 544794

**Needs Categories:** CWT-New Collector Sewers

**County:** Logan

**NPDES #WV:** 0105171

**Binding Date:** 6/30/2024

**Points** 20.00

**Problem**

Potential customers in the Lorado/Curtis Areas are believed to have failing septic systems.

**Solution**

The project proposes to construct and install public sewer to serve approximately 28 potential customers.

**Rank** 184

**Logan County PSD (Holden)** — $4,870,000 — $11,370,000

**SRF #C:** 544669

**Needs Categories:** CWT-New Collector Sewers
CWT-New Interceptors

**County:** Logan

**NPDES #WV:** 0105171

**Binding Date:** 6/30/2024

**Points** 20.00

**Problem**

Failing on-site wastewater treatment systems.

**Solution**

Construction of a centralized wastewater collection system, serving 315 new customers.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 185

**Logan County PSD (Mud Fork)** — $5,325,000 — $7,814,000

**SRF #C:** 544460-02

**County:** Logan

**NPDES #WV:** 0105171

**Binding Date:** 6/30/2024

**Points** 20.00

**Needs Categories:**
CWT-New Collector Sewers
CWT-New Interceptors

**Problem**

Virtually all 223 potential customers in the project area do not have access to a public wastewater system. According to the Logan Co. Health Department, approximately 10 percent of residents to be served by the project utilize private on-site septic systems and approximately 90 percent discharge directly into area streams. In certain areas, sewage is discharged into "community sewer lines" which then discharge into the Guyandotte River and its tributaries. The current sewerage disposal methods in the area are a potential health threat and negatively contribute to the water quality of the Guyandotte River and its tributaries.

**Solution**

Will provide sewer service to approximately 223 customers (557 persons) in the communities of Mud Fork, Verdunville, Shegon, and surrounding areas of Logan County.

**Rank** 186

**Lubeck PSD** — $3,587,000 — $3,587,000

**SRF #C:** 544621

**County:** Wood

**NPDES #WV:** 0032590

**Binding Date:** 6/30/2024

**Points** 20.00

**Needs Categories:**
CWT-New Collector Sewers

**Problem**

Providing sanitary sewer service to two commercial customers in the Washington Bottom area of Wood County.

**Solution**

Extending service to the two potential customers by connecting to the existing Lubeck PSD system.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 187

**Mercer County PSD** — $27,555,000 — $27,555,000

**SRF #C:** 544784

**County:** Mercer

**NPDES #WV:** 0024864

**Binding Date:** 6/30/2024

**Points** 20.00

**Needs Categories:**
CWT-New Collector Sewers
CWT-New Interceptors

**Problem**

The Rock District Study Area (Route 10 [Springton Road - Lake Bottom], Matoaka, Lashmeet, Kegley, Route 19) was found to have approximately 1646 Customers. Currently the Rock District area has approximately 7 wastewater treatment systems (Smaller/Decentralized Sewer Systems), serving approximately 155 customers.

**Solution**

This project is the proposed first phase to help provide sewer service to a portion of the Rock District study area.

**Rank** 188

**North Beckley PSD (Piney View)** — $1,500,000 — $8,052,620

**SRF #C:** 544832

**County:** Raleigh

**NPDES #WV:** 0027740

**Binding Date:** 6/30/2024

**Points** 20.00

**Needs Categories:**
CWT-New Collector Sewers

**Problem**

There are 216 homes in the project area (Piney View) that are not served by a public sewer system and are currently served by septic systems. Reportedly, there are surface discharges and odor problems during the summer months. A standard practice with individual septic systems is to separate the gray water and discharge it through a separate line with no treatment. This project will eliminate the possibility of surface discharges and degradation of the streams water quality in the area draining into the New River and the National Park Service.

**Solution**

Gravity collection system consisting of 22,679 lf of 6" PVC, 8,860 lf of 8" PVC, 1,450 lf of 1 1/4" force main, 975 lf of 1 1/2" force main, 485 lf of 2" force main, 485 lf of 2 1/2" force main, 1,400 lf of 3" force main, 6,575 lf of 4" force main, 125 lf of 4" casing, 57 lf of 8" casing, 472 lf of 12" casing, 170 lf of 16" casing, 4 air/vacuum valves, 180 manholes, 9 cleanouts, 225 wye connections, 7 lift stations with generator sets, upgrade of Lanark #1 lift station, telemetry for 7 lift stations, 5 E-One grinder units, 880 lf of stone based road and all appurtenances.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 189

**Nutter Fort, Town of (Phase V)** — $1,000,000 — $2,000,000

**SRF #C:** 544768

**Needs Categories:** CWT-Secondary Treatment

**County:** Harrison

**NPDES #WV:** 0100901

**Binding Date:** 6/30/2024

**Points** 20.00

**Problem**

The Lifepointe Church area is not connected to the Town's public sanitary sewer system. Therefore the area residents and commercial entities are assumed to rely on septic tanks for sewage collection. It is also possible that some sewage is directly discharged into Elk Creek.

**Solution**

This project proposes to extend the Town's sanitary sewer collection system to add 24 new customers in the Lifepointe Church area. The proposed extension includes the installation of 3,390 LF of eight (8) inch gravity sewer line, 5,430 LF of four (4) inch force main sewer line, 1,050 LF of 1.25-inch force main sewer line, 540 LF of four (4) inch service lateral line, 25 manholes, and all necessary appurtenances to serve 24 new customers. One (1) pump station and three (3) package duplex stations will also be installed.

**Rank** 190

**Pea Ridge PSD (Guyan Ests)** — $1,500,000 — $3,000,000

**SRF #C:** 544781

**Needs Categories:** CWT-Sewer System Rehabilitation

**County:** Cabell

**NPDES #WV:** 0027413

**Binding Date:** 6/30/2024

**Points** 20.00

**Problem**

The piping of the system has become worn down over time. For years, complaints to the Cabell County Commission have been filed regarding wastewater flooding into residential homes. The District acted in August and launched Inflow & Infiltration (I&I) inspections in response. These tests revealed that the sanitary sewer system is not flowing properly and flooding basements of residents as a result. Over the years the pipes have shifted and breaks, cracks, infiltration, and obstructions along the length of the system have formed.

**Solution**

Existing gravity sewer lines in the area will be replaced using cured-in-place pipe (CIPP). This project will require the draining and cleaning of the existing pipeline. Manholes and clean-outs will be utilized as access points for the work to be done.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 191 — **Prichard PSD** — $3,597,000 — $3,597,000

**SRF #C:** 544298

**County:** Wayne

**NPDES #WV:** 0105732

**Binding Date:** 6/30/2024

**Points** 20.00

**Needs Categories:**
CWT-New Collector Sewers
CWT-New Interceptors

**Problem**
Failing or non-existent on-site wastewater treatment systems.

**Solution**
Construction of a centralized wastewater collection system to replace failing septic tanks in Centerville, serving 55 new customers. Treatment to be provided at the existing 0.100 MGD Prichard PSD wastewater treatment plant.

**Rank** 192 — **Princeton Sanitary Board** — $857,500 — $857,500

**SRF #C:** 544795

**County:** Mercer

**NPDES #WV:** 0023094

**Binding Date:** 6/30/2024

**Points** 20.00

**Needs Categories:**
CWT-New Collector Sewers
CWT-New Interceptors

**Problem**
Approximately 22 residents in the Shop Hollow area of Princeton, WV do not have access to public sewer. Many of the homes are subject to aging septic systems that are in either poor or unknown condition. Lot sizes in the area are small and absorption fields may be undersized.

**Solution**
The project proposes to extend sanitary sewer service to the homes in the Shop Hollow area, eliminating the need for maintenance on the septic tanks and greatly reduce the likelihood of contamination in the nearby Brush Creek.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 193

**Putnam PSD (Bills Creek)** | * | $6,869,556

**SRF #C:** N/A

**Needs Categories:** CWT-New Collector Sewers

**County:** Putnam

**NPDES #WV:** 0028045

**Binding Date:** 6/30/2024

**Points** 20.00

**Problem**

Because the Bill's Creek area is not served by a centralized sanitary sewer system, the Putnam County Board of Education operates a small package plant to service East Brooke Elementary School. Also, in the Bill's Creek area, the Springlea subdivision is served by a failing lagoon sewage treatment system. Other residents in the area are expected to install and maintain their own septic systems, but many are poorly maintained.

**Solution**

This project proposes to construct 40,000 feet of gravity sewer line, 3,000 feet of force mains, 230 manholes and one new lift station. The proposed extension will provide service to 236 Putnam County customers and will eliminate the need for Putnam County Board of Education's small package plant as well as the failing lagoon system at the Springlea subdivision.
*Project is included for earmark eligibility.

**Rank** 194

**Salt Rock Sewer PSD (Phase II)** | $284,000 | $1,700,000

**SRF #C:** 544660

**Needs Categories:** CWT-Sewer System Rehabilitation

**County:** Cabell

**NPDES #WV:** 0024538

**Binding Date:** 6/30/2024

**Points** 20.00

**Problem**

Milton is planning an expansion and upgrades of their system that will necessitate the need for an upgrade to the Phase II Pump Station. In addition, Phase II Pump Station wet well concrete is severely deteriorated and in need of rehabilitation.

**Solution**

The project proposes to:
1) Rehabilitate the concrete of the Phase II wet well using a geopolymer, with potential rehabilitation of the pretreatment facilities being bid as an alternate.
2) Upgrade the capacity of the Phase II Pump Station by increasing capacity of the triplex pumps from 85 HP pumps to 105 HP pumps.

# CLEAN WATER STATE REVOLVING FUND 2024 PRIORITY LIST

| Rank/Points | Project | SRF Loan Amount | Total Costs |
|---|---|---|---|

**Rank** 195 — **Warm Springs PSSD** — $580,000 — $4,829,000

**SRF #C:** 544810

**County:** Morgan

**NPDES #WV:** 0027707

**Binding Date:** 6/30/2024

**Points** 20.00

**Needs Categories:** CWT-Sewer System Rehabilitation

**Problem**

Due to excessive inflow and infiltration of the existing collection and transmission system, Warm Springs bills 75,722,000 gallons per year but collects, transmits, and treats 430,899,000 gallons per year. Approximately 82% of the water treated by Warms Springs is stormwater and/or ground water. Based on the results of smoke testing, flow metering, and videotaping throughout portions of the Warm Springs system, the areas that appear to contribute the most are Biser Street, Greenway Drive, and WV Route 9.

**Solution**

1) WV Route 9 - Due to the overall condition of the pipe, and the location being under or alongside WV Route 9, relining the existing sewer line will be implemented rather than removal and replacement. 2) Biser Street - Due to the current U.S. 522 By-Pass increasing the development east of Biser Street, this project will increase this line size from 8" to 12" gravity sewer to account for future sanitary sewer flow and to reduce I&I. 3) Greenway Drive - This project proposes to reline, or remove and replace the existing sewer collection system in this area to reduce I&I.

**Rank** 196 — **Weirton Sanitary Board** — $17,963,610 — $29,958,610

**SRF #C:** 544650

**County:** Brooke

**NPDES #WV:** 0023108

**Binding Date:** 12/31/2023

**Points** 20.00

**Needs Categories:** CWT-Secondary Treatment

**Problem**

Weirton's average daily inflows are very close to their permitted limit. During wet months, the average daily flows frequently exceed this limit. This is an obvious regulatory compliance issue, and the lack of reserve capacity means that Weirton is ill-equipped to provide service to new customers. Lastly, the 5th Street Lift Station currently has an unpermitted sanitary sewer overflow that needs to be removed.

**Solution**

Increase treatment capacity of WWTP to 8.0 MGD. Construct second treatment train using SBR technology, consisting of headworks bldg. with mechanical bar screen and vortex grit removal unit, 2 SBR basins with all necessary equip. and controls, 2 EQ and post-EQ basins, and new blower bldg. to provide SBR's and EQ basins with air. Upsize existing UV disinfection and discharge piping to handle greater flows. Upgrade existing equip. that has reached end of its useful life. Pumps, blowers, air diffusers, sludge collection mechanisms, remove/replace existing equip., and eliminate sanitary sewer overflow at 5th St. Lift Station.

# APPENDIX B

# PROJECTS BUDGETED FOR IUP AVAILABLE FUNDS

Appendix B - Binding Commitments and Cash Draw Proportionality
Projects Budgeted for the Federal FY 2023 Base ($11,694,000) and BIL Grants ($32,493,000)

| Name | Project Scope | Proj Num C-544___ | Activity Code/ Est. BCL | Equivalency Designation | Base Program $11,694,000 | BIL General Supplemental $16,571,430 | BIL Principal Forgiveness $15,921,570 | BIL Emerging Contaminants $3,315,000 |
|---|---|---|---|---|---|---|---|---|
| Bradshaw* | WWTP & Collection System Upgrade | 595 | D3 | E | | | $1,459,500 | |
| Canaan Valley PSD* | Sewer Extension | 560 | D3 | E | | | $1,500,000 | |
| Greater St. Albans PSD* | Sewer Extension | 406-04 | P | NE | $16,091,000 | | | |
| Hancock Co. PSD | WWTP & Collection System Upgrade | 691 | D | NE | $5,961,840 | | | |
| Hinton* | CSO Project | 550 | D3 | NE | $1,382,000 | | | |
| Huntington* | WWTP | 788 | P | E | $128,900,000 | | | $6,000,000 |
| Marlinton* | WWTP & Collection System Upgrade | 670 | D | NE | $6,200,000 | | | |
| Marshall Co. Sewerage District | Sewer Extension and Upgrade | 770 | D2 | E | $1,137,930 | | $1,462,070 | |
| Mason Co. PSD (Apple Grove) | Sewer Extension | 699 | D | E | | | $1,500,000 | |
| Mason Co. PSD (Sand Hill) | Sewer Extension | 771 | D | E | | | $2,000,000 | |
| Mingo Co. PSD (Chattaroy) | Sewer Extension | 312 | D3 | NE | $1,762,480 | | | |
| Mount Zion PSD* | Decentralized WWTP Upgrade | 521 | D | NE | $3,080,500 | | | |
| New Creek PSD | Sewer Extension | 740 | D2 | E | | $1,286,100 | $1,000,000 | |
| Oak Hill* | I/I Rehabilitation Project | 623 | D2 | E | $3,205,000 | | $500,000 | |
| Paw Paw (Phase 1) | WWTP Upgrade | 684 | D2 | NE | $1,000,000 | | | |
| Paw Paw (Phase 2) | Collection System Upgrade | 747 | D2 | NE | $1,581,500 | | | |
| Ravenswood* | WWTP & Collection System Upgrade | 428 | D | NE | $3,340,650 | | | |
| Richwood* | I/I Rehabilitation Project | 579 | D2 | E | | $2,100,000 | $1,000,000 | |
| Shady Spring PSD (Glen Morgan) | WWTP Upgrade | 645 | D3 | E | | $2,246,379 | $1,500,000 | |
| Sissonville | WWTP Upgrade | 570-01 | D2 | NE | $2,948,500 | | | |
| South Charleston | Pump Station Upgrade | 829 | D2 | NE | $3,508,850 | | | |
| Union Williams PSD* | WWTP & Collection System Upgrade | 687 | D | E | | $5,814,500 | $1,000,000 | |
| Walton PSD* | New Decentralized System | 166 | D | NE | $7,793,600 | | | |
| Wardensville | WWTP & Collection System Upgrade | 648 | D2 | E | | $485,000 | $1,500,000 | |
| Weirton | WWTP Upgrade | 617 | D2 | E | $12,839,159 | $3,139,451 | | |
| White Oak PSD | WWTP Upgrade & SSES | 762 | D | E | | $1,500,000 | $1,500,000 | |
| Total Projects | | | | | $200,733,009 | $16,571,430 | $15,921,570 | $6,000,000 |
| | | | | | | | 49.00% | |

Activity Codes and Binding Commitment dates
P - facilities planning underway - Summer 2023
D - design underway - Winter 2023
D2 - design under review at DEP - Fall 2022
D3 - design approved by DEP/bid process underway - Summer 2022 unless a specific date is provided

Equivalency Designation
E - Equivalency (See Section V. J. of the IUP for federal requirements)
NE - Non-Equivalency

* Appears eligible for principal forgiveness based upon PPL information

Appendix B - Binding Commitments and Cash Draw Proportionality
Projects Budgeted for the Federal FY 2022 Base ($18,037,000) and BIL Grants ($27,745,000)

| Name | Project Scope | Proj Num C-544___ | Equivalency Designation | Base Program | BIL General Supplemental $14,149,950 | BIL Principal Forgiveness $13,595,050 | BIL Emerging Contaminants $1,457,000 | Binding Commitment |
|---|---|---|---|---|---|---|---|---|
| Barboursville | WWTP & Collection System Upgrade | 615 | E | | $7,748,450 | | | |
| Clay * | WWTP & Pump Station Upgrade | 614 | E | $0 | | $1,455,000 | | 8/2/2022 |
| Claywood Park PSD* | I/I Rehabilitation Project | 498 | E | | $1,344,000 | $1,000,000 | | 3/1/2023 |
| Flemington | Replacing Chlorination with UV disinfection | 767 | E | | | | $500,000 | |
| McDowell Co. PSD (Iaeger)* | New WWTP & Collection System | 513 | E | | $0 | $1,500,000 | | 12/1/2020 |
| Mercer Co. PSD* | WWTP & Collection System Upgrade | 671 | E | | $0 | $2,000,000 | | 4/13/2022 |
| Mineral Wells PSD* | WWTP & Collection System Upgrade | 639 | E (2023 Base + BIL) | $4,010,500 | $4,372,600 | $140,050 | | 5/26/2022 |
| North Beckley PSD | Pump Station and Forcemain Upgrade | 617-01 | E (2023 Base) | $3,778,000 | | | | 9/7/2022 |
| Nutter Fort | CSO Project | 693 | E | | | $1,000,000 | | |
| Pea Ridge PSD (R2P2) - Ph. I | Sewer Extension | 576-01 | E (2023 Base) | $8,152,000 | | | | 3/29/2023 |
| Pea Ridge PSD (R2P2)- Ph. II | Sewer Extension | 576-02 | E (2023 Base) | $8,191,600 | | | | 3/29/2023 |
| Romney | I/I Rehabilitation Project | 656 | E | | | $2,000,000 | | |
| Projects closed to date | | | | $21,839,092 | $684,900 | $4,500,000 | | |
| Total Projects | | | | $45,971,192 | $14,149,950 | $13,595,050 | $500,000 | |
| | | | | | | 49.00% | | |

# APPENDIX C

# PUBLIC MEETING SUMMARY

The FY2024 IUP Public Meeting was scheduled for June 15, 2023, at 9:30am. The meeting took place at the WV DEP's Headquarters in Charleston, WV. An option to attend remotely or call-in was also given. Eleven members of the public and nine SRF staff were in the meeting. Kathy Emery read the highlights of the FY2024 IUP. The following comments were received via email and three questions were asked during the meeting.

**Question No. 1** – Elijah Schultz with the Thrasher Group submitted an application for the Town of Elizabeth Infiltration and Inflow Project for inclusion on the FY2024 Priority List.

**Answer to Question No. 1** – The Town of Elizabeth Infiltration and Inflow Project was included in the FY2024 Priority List.

**Question No. 2** – Alan Tomson with the Town of Davis reviewed the Draft FY2024 Priority List and thanked SRF for the continued support. The Town of Davis Collection System Project is moving forward, and they have formed the Blackwater PSD for the treatment side. Alan Tomson was appointed to the new PSD and looks forward to working with the SRF team.

**Question No. 3** – Mark Muir with The Eads Group submitted an application for the Town of Carpendale Sewer Project for inclusion on the FY2024 Priority List.

**Answer to Question No. 3** – The Town of Carpendale Sewer Project was included in the FY2024 Priority List.

**Question No. 4** – Richard Rogers with the Morgantown Utility Board submitted an application for inclusion on the FY2024 Priority List.

**Answer to Question No. 4** – The Morgantown Utility Board Sewer Project was included in the FY2024 Priority List.

**Question No. 5** – Are the BABA requirements starting July 1st with the FY2024 IUP or did it start with the FY2023 IUP?

**Answer to Question No. 5** – BABA requirements started with the passage of the Bipartisan Infrastructure Law (BIL). However, EPA has created several waivers, one is the planning and design adjustment period waiver. If you started your design or your planning prior to May 14,

2022, then your project would qualify underneath that waiver in which it would require AIS, not BABA, to be applied to that project.

**Question No. 6** – DBE is also a federal equivalency requirement. Do the projects that are not on the equivalency list have to do DBE?

**Answer to Question No. 6** – Technically speaking, no. However, the program is requesting as a matter of policy for all projects to bid with DBE requirements so they can be eligible for funding like the WDA EEGF program for any bid overruns.

**Question No. 7** – Concerning deferred loan scenarios, are there any particular triggers at which we will consider those?

**Answer to Question No. 7** – That is generally a case-by-case basis. We do not have any hard and fast rules or policies regarding eligibility for a deferred loan.

**Question No. 8** –Michael Lawson with Lawson Engineering & Technical Services, Inc. submitted an application for the North Beckley PSD Piney View extension Project for inclusion on the FY2024 Priority List.

**Answer to Question No. 8** – The North Beckley PSD Piney View extension Project was included in the FY2024 Priority List.


# WV Clean Water State Revolving Fund FY2024
# IUP Public Meeting Attendance Sheet

## June 15, 2023 – 9:30am

| Name | Organization |
|---|---|
| Michelle Brenner – In person | WV DEP |
| Kathy Emery – In person | WV DEP |
| Mary Napier – In person | Griffith & Associates |
| Austin Gillenwater – In person | Griffith & Associates |
| John Giroir – In person | WV DEP |
| Samme Gee – In person | Jackson Kelly PLLC |
| Dominique Madison – In person | WV DEP |
| Thomas Cazad – In person | WV DEP |
| Jonathan Carpenter – In person | The Thrasher Group |
| Eric Hartwell – In person | New River Engineers, Inc. |
| Elizabeth Fletcher – Virtual | WV RWA |
| Josh Nichols – Virtual | Flatwoods-Canoe Run PSD |
| Rodney Pritt – Virtual | Flatwoods-Canoe Run PSD |
| Mike Kenneth – Virtual | Mercer County PSD |
| Daniel Bailey – Virtual | WV DEP |
| Jesse Rupe – Virtual | WV DEP |
| Brandon Tomblin – Virtual | WV DHHR |
| Paul Daniels – Virtual | WV DEP |
| Wayne Morgan – Virtual | WV IJDC |
| Brad Sergent – Virtual | WV WDA |
| Marie Prezioso | WV WDA |

# APPENDIX D

# MEDIAN HOUSEHOLD INCOME BY COUNTY AND MAGISTERIAL DISTRICT

WEST VIRGINIA MEDIAN HOUSEHOLD INCOME
2020 CENSUS
COUNTY & MAGISTERIAL DISTRICTS

| Magisterial District | 2020 MHI | 1.25% | 1.50% | 1.75% | 2.00% | 2.50% |
|---|---|---|---|---|---|---|
| Barbour | $38,906 | 40.53 | 48.63 | 56.74 | 64.84 | 81.05 |
| North district, Barbour County | $37,148 | 38.70 | 46.44 | 54.17 | 61.91 | 77.39 |
| South district, Barbour County | $40,087 | 41.76 | 50.11 | 58.46 | 66.81 | 83.51 |
| West district, Barbour County | $39,470 | 41.11 | 49.34 | 57.56 | 65.78 | 82.23 |
| Berkeley | $65,286 | 68.01 | 81.61 | 95.21 | 108.81 | 136.01 |
| Adam Stephens district, Berkeley County | $41,773 | 43.51 | 52.22 | 60.92 | 69.62 | 87.03 |
| Norborne district, Berkeley County | $68,544 | 71.40 | 85.68 | 99.96 | 114.24 | 142.80 |
| Potomac district, Berkeley County | $63,184 | 65.82 | 78.98 | 92.14 | 105.31 | 131.63 |
| Shenandoah district, Berkeley County | $68,007 | 70.84 | 85.01 | 99.18 | 113.35 | 141.68 |
| Tuscarora district, Berkeley County | $68,874 | 71.74 | 86.09 | 100.44 | 114.79 | 143.49 |
| Valley district, Berkeley County | $72,155 | 75.16 | 90.19 | 105.23 | 120.26 | 150.32 |
| Boone | $45,297 | 47.18 | 56.62 | 66.06 | 75.50 | 94.37 |
| District 1, Boone County | $47,530 | 49.51 | 59.41 | 69.31 | 79.22 | 99.02 |
| District 2, Boone County | $38,274 | 39.87 | 47.84 | 55.82 | 63.79 | 79.74 |
| District 3, Boone County | $51,151 | 53.28 | 63.94 | 74.60 | 85.25 | 106.56 |
| Braxton | $43,819 | 45.64 | 54.77 | 63.90 | 73.03 | 91.29 |
| Eastern district, Braxton County | $41,019 | 42.73 | 51.27 | 59.82 | 68.37 | 85.46 |
| Northern district, Braxton County | $39,803 | 41.46 | 49.75 | 58.05 | 66.34 | 82.92 |
| Southern district, Braxton County | $43,945 | 45.78 | 54.93 | 64.09 | 73.24 | 91.55 |
| Western district, Braxton County | $51,295 | 53.43 | 64.12 | 74.81 | 85.49 | 106.86 |
| Brooke | $48,168 | 50.18 | 60.21 | 70.25 | 80.28 | 100.35 |
| Follansbee district, Brooke County | $43,149 | 44.95 | 53.94 | 62.93 | 71.92 | 89.89 |
| Weirton district, Brooke County | $51,392 | 53.53 | 64.24 | 74.95 | 85.65 | 107.07 |
| Wellsburg district, Brooke County | $47,863 | 49.86 | 59.83 | 69.80 | 79.77 | 99.71 |
| Cabell | $41,472 | 43.20 | 51.84 | 60.48 | 69.12 | 86.40 |
| District 1, Cabell County | $44,500 | 46.35 | 55.63 | 64.90 | 74.17 | 92.71 |
| District 2, Cabell County | $26,474 | 27.58 | 33.09 | 38.61 | 44.12 | 55.15 |
| District 3, Cabell County | $30,835 | 32.12 | 38.54 | 44.97 | 51.39 | 64.24 |
| District 4, Cabell County | $50,013 | 52.10 | 62.52 | 72.94 | 83.36 | 104.19 |
| District 5, Cabell County | $53,699 | 55.94 | 67.12 | 78.31 | 89.50 | 111.87 |
| Calhoun | $38,668 | 40.28 | 48.34 | 56.39 | 64.45 | 80.56 |
| District 1, Calhoun County | $45,029 | 46.91 | 56.29 | 65.67 | 75.05 | 93.81 |
| District 2, Calhoun County | $40,556 | 42.25 | 50.70 | 59.14 | 67.59 | 84.49 |
| District 3, Calhoun County | $40,921 | 42.63 | 51.15 | 59.68 | 68.20 | 85.25 |
| District 4, Calhoun County | $38,125 | 39.71 | 47.66 | 55.60 | 63.54 | 79.43 |
| District 5, Calhoun County | $35,521 | 37.00 | 44.40 | 51.80 | 59.20 | 74.00 |
| Clay | $35,154 | 36.62 | 43.94 | 51.27 | 58.59 | 73.24 |
| District A, Clay County | $33,542 | 34.94 | 41.93 | 48.92 | 55.90 | 69.88 |
| District B, Clay County | $26,362 | 27.46 | 32.95 | 38.44 | 43.94 | 54.92 |
| District C, Clay County | $42,750 | 44.53 | 53.44 | 62.34 | 71.25 | 89.06 |
| Doddridge | $51,300 | 53.44 | 64.13 | 74.81 | 85.50 | 106.88 |
| Beech district, Doddridge County | $37,807 | 39.38 | 47.26 | 55.14 | 63.01 | 78.76 |
| Maple district, Doddridge County | $69,620 | 72.52 | 87.03 | 101.53 | 116.03 | 145.04 |

WEST VIRGINIA MEDIAN HOUSEHOLD INCOME
2020 CENSUS
COUNTY & MAGISTERIAL DISTRICTS

| Magisterial District | 2020 MHI | 1.25% | 1.50% | 1.75% | 2.00% | 2.50% |
|---|---|---|---|---|---|---|
| Oak district, Doddridge County | $50,935 | 53.06 | 63.67 | 74.28 | 84.89 | 106.11 |
| Pine district, Doddridge County | $57,833 | 60.24 | 72.29 | 84.34 | 96.39 | 120.49 |
| Fayette | $43,722 | 45.54 | 54.65 | 63.76 | 72.87 | 91.09 |
| New Haven district, Fayette County | $46,316 | 48.25 | 57.90 | 67.54 | 77.19 | 96.49 |
| Plateau district, Fayette County | $42,921 | 44.71 | 53.65 | 62.59 | 71.54 | 89.42 |
| Valley district, Fayette County | $42,268 | 44.03 | 52.84 | 61.64 | 70.45 | 88.06 |
| Gilmer | $42,883 | 44.67 | 53.60 | 62.54 | 71.47 | 89.34 |
| Center district, Gilmer County | $39,693 | 41.35 | 49.62 | 57.89 | 66.16 | 82.69 |
| City district, Gilmer County | $34,250 | 35.68 | 42.81 | 49.95 | 57.08 | 71.35 |
| De Kalb-Troy district, Gilmer County | $44,280 | 46.13 | 55.35 | 64.58 | 73.80 | 92.25 |
| Glenville district, Gilmer County | $48,750 | 50.78 | 60.94 | 71.09 | 81.25 | 101.56 |
| Grant | $43,313 | 45.12 | 54.14 | 63.16 | 72.19 | 90.24 |
| Grant district, Grant County | $41,649 | 43.38 | 52.06 | 60.74 | 69.42 | 86.77 |
| Milroy district, Grant County | $41,321 | 43.04 | 51.65 | 60.26 | 68.87 | 86.09 |
| Union district, Grant County | $52,152 | 54.33 | 65.19 | 76.06 | 86.92 | 108.65 |
| Greenbrier | $39,807 | 41.47 | 49.76 | 58.05 | 66.35 | 82.93 |
| Central district, Greenbrier County | $45,283 | 47.17 | 56.60 | 66.04 | 75.47 | 94.34 |
| Eastern district, Greenbrier County | $35,338 | 36.81 | 44.17 | 51.53 | 58.90 | 73.62 |
| Western district, Greenbrier County | $41,261 | 42.98 | 51.58 | 60.17 | 68.77 | 85.96 |
| Hampshire | $48,528 | 50.55 | 60.66 | 70.77 | 80.88 | 101.10 |
| Bloomery district, Hampshire County | $66,930 | 69.72 | 83.66 | 97.61 | 111.55 | 139.44 |
| Capon district, Hampshire County | $62,228 | 64.82 | 77.79 | 90.75 | 103.71 | 129.64 |
| Gore district, Hampshire County | $54,732 | 57.01 | 68.42 | 79.82 | 91.22 | 114.03 |
| Mill Creek district, Hampshire County | $50,547 | 52.65 | 63.18 | 73.71 | 84.25 | 105.31 |
| Romney district, Hampshire County | $33,943 | 35.36 | 42.43 | 49.50 | 56.57 | 70.71 |
| Sherman district, Hampshire County | $47,578 | 49.56 | 59.47 | 69.38 | 79.30 | 99.12 |
| Springfield district, Hampshire County | $42,159 | 43.92 | 52.70 | 61.48 | 70.27 | 87.83 |
| Hancock | $48,140 | 50.15 | 60.18 | 70.20 | 80.23 | 100.29 |
| Butler district, Hancock County | $55,773 | 58.10 | 69.72 | 81.34 | 92.96 | 116.19 |
| Clay district, Hancock County | $45,966 | 47.88 | 57.46 | 67.03 | 76.61 | 95.76 |
| Grant district, Hancock County | $44,854 | 46.72 | 56.07 | 65.41 | 74.76 | 93.45 |
| Hardy | $46,513 | 48.45 | 58.14 | 67.83 | 77.52 | 96.90 |
| Capon district, Hardy County | $45,756 | 47.66 | 57.20 | 66.73 | 76.26 | 95.33 |
| Lost River district, Hardy County | $51,406 | 53.55 | 64.26 | 74.97 | 85.68 | 107.10 |
| Moorefield district, Hardy County | $47,500 | 49.48 | 59.38 | 69.27 | 79.17 | 98.96 |
| Old Fields district, Hardy County | $42,034 | 43.79 | 52.54 | 61.30 | 70.06 | 87.57 |
| South Fork district, Hardy County | $47,207 | 49.17 | 59.01 | 68.84 | 78.68 | 98.35 |
| Harrison | $52,134 | 54.31 | 65.17 | 76.03 | 86.89 | 108.61 |
| Eastern district, Harrison County | $75,050 | 78.18 | 93.81 | 109.45 | 125.08 | 156.35 |
| Northern district, Harrison County | $53,343 | 55.57 | 66.68 | 77.79 | 88.91 | 111.13 |
| North Urban district, Harrison County | $40,375 | 42.06 | 50.47 | 58.88 | 67.29 | 84.11 |

WEST VIRGINIA MEDIAN HOUSEHOLD INCOME
2020 CENSUS
COUNTY & MAGISTERIAL DISTRICTS

| Magisterial District | 2020 MHI | 1.25% | 1.50% | 1.75% | 2.00% | 2.50% |
|---|---|---|---|---|---|---|
| Southern district, Harrison County | $55,080 | 57.38 | 68.85 | 80.33 | 91.80 | 114.75 |
| South Urban district, Harrison County | $52,275 | 54.45 | 65.34 | 76.23 | 87.13 | 108.91 |
| Southwest district, Harrison County | $50,752 | 52.87 | 63.44 | 74.01 | 84.59 | 105.73 |
| Jackson | $49,115 | 51.16 | 61.39 | 71.63 | 81.86 | 102.32 |
| Eastern district, Jackson County | $45,818 | 47.73 | 57.27 | 66.82 | 76.36 | 95.45 |
| Northern district, Jackson County | $49,528 | 51.59 | 61.91 | 72.23 | 82.55 | 103.18 |
| Western district, Jackson County | $53,156 | 55.37 | 66.45 | 77.52 | 88.59 | 110.74 |
| Jefferson | $82,551 | 85.99 | 103.19 | 120.39 | 137.59 | 171.98 |
| Charles Town district, Jefferson County | $67,962 | 70.79 | 84.95 | 99.11 | 113.27 | 141.59 |
| Harpers Ferry district, Jefferson County | $76,905 | 80.11 | 96.13 | 112.15 | 128.18 | 160.22 |
| Kabletown district, Jefferson County | $115,469 | 120.28 | 144.34 | 168.39 | 192.45 | 240.56 |
| Middleway district, Jefferson County | $72,136 | 75.14 | 90.17 | 105.20 | 120.23 | 150.28 |
| Shepherdstown district, Jefferson County | $88,523 | 92.21 | 110.65 | 129.10 | 147.54 | 184.42 |
| Kanawha | $47,122 | 49.09 | 58.90 | 68.72 | 78.54 | 98.17 |
| District 1, Kanawha County | $43,831 | 45.66 | 54.79 | 63.92 | 73.05 | 91.31 |
| District 2, Kanawha County | $51,916 | 54.08 | 64.90 | 75.71 | 86.53 | 108.16 |
| District 3, Kanawha County | $50,204 | 52.30 | 62.76 | 73.21 | 83.67 | 104.59 |
| District 4, Kanawha County | $42,112 | 43.87 | 52.64 | 61.41 | 70.19 | 87.73 |
| Lewis | $43,894 | 45.72 | 54.87 | 64.01 | 73.16 | 91.45 |
| Courthouse-Collins Settlement district, Lewis | $34,800 | 36.25 | 43.50 | 50.75 | 58.00 | 72.50 |
| Freemans Creek district, Lewis County | $49,030 | 51.07 | 61.29 | 71.50 | 81.72 | 102.15 |
| Hackers Creek-Skin Creek district, Lewis County | $46,667 | 48.61 | 58.33 | 68.06 | 77.78 | 97.22 |
| Lincoln | $42,064 | 43.82 | 52.58 | 61.34 | 70.11 | 87.63 |
| District 1, Lincoln County | $55,826 | 58.15 | 69.78 | 81.41 | 93.04 | 116.30 |
| District 2, Lincoln County | $33,011 | 34.39 | 41.26 | 48.14 | 55.02 | 68.77 |
| District 3, Lincoln County | $36,772 | 38.30 | 45.97 | 53.63 | 61.29 | 76.61 |
| Logan | $36,250 | 37.76 | 45.31 | 52.86 | 60.42 | 75.52 |
| Central district, Logan County | $38,605 | 40.21 | 48.26 | 56.30 | 64.34 | 80.43 |
| Eastern district, Logan County | $33,014 | 34.39 | 41.27 | 48.15 | 55.02 | 68.78 |
| Western district, Logan County | $45,396 | 47.29 | 56.75 | 66.20 | 75.66 | 94.58 |
| Marion | $52,856 | 55.06 | 66.07 | 77.08 | 88.09 | 99.11 |
| Middletown district, Marion County | $45,274 | 47.16 | 56.59 | 66.02 | 75.46 | 94.32 |
| Palatine district, Marion County | $60,511 | 63.03 | 75.64 | 88.25 | 100.85 | 126.06 |
| West Augusta district, Marion County | $53,660 | 55.90 | 67.08 | 78.25 | 89.43 | 111.79 |
| Marshall | $48,179 | 50.19 | 60.22 | 70.26 | 80.30 | 100.37 |
| District 1, Marshall County | $53,311 | 55.53 | 66.64 | 77.75 | 88.85 | 111.06 |
| District 2, Marshall County | $36,161 | 37.67 | 45.20 | 52.73 | 60.27 | 75.34 |
| District 3, Marshall County | $56,442 | 58.79 | 70.55 | 82.31 | 94.07 | 117.59 |
| Mason | $51,820 | 53.98 | 64.78 | 75.57 | 86.37 | 107.96 |

WEST VIRGINIA MEDIAN HOUSEHOLD INCOME
2020 CENSUS
COUNTY & MAGISTERIAL DISTRICTS

| Magisterial District | 2020 MHI | 1.25% | 1.50% | 1.75% | 2.00% | 2.50% |
|---|---|---|---|---|---|---|
| Arbuckle district, Mason County | $34,234 | 35.66 | 42.79 | 49.92 | 57.06 | 71.32 |
| Clendenin district, Mason County | $40,938 | 42.64 | 51.17 | 59.70 | 68.23 | 85.29 |
| Cologne district, Mason County | $55,476 | 57.79 | 69.35 | 80.90 | 92.46 | 115.58 |
| Cooper district, Mason County | $56,473 | 58.83 | 70.59 | 82.36 | 94.12 | 117.65 |
| Graham district, Mason County | $51,073 | 53.20 | 63.84 | 74.48 | 85.12 | 106.40 |
| Hannan district, Mason County | $66,319 | 69.08 | 82.90 | 96.72 | 110.53 | 138.16 |
| Lewis district, Mason County | $55,025 | 57.32 | 68.78 | 80.24 | 91.71 | 114.64 |
| Robinson district, Mason County | $57,232 | 59.62 | 71.54 | 83.46 | 95.39 | 119.23 |
| Union district, Mason County | $51,278 | 53.41 | 64.10 | 74.78 | 85.46 | 106.83 |
| Waggener district, Mason County | $34,779 | 36.23 | 43.47 | 50.72 | 57.97 | 72.46 |
| McDowell | $26,072 | 27.16 | 32.59 | 38.02 | 43.45 | 54.32 |
| Big Creek district, McDowell County | $24,688 | 25.72 | 30.86 | 36.00 | 41.15 | 51.43 |
| Browns Creek district, McDowell County | $24,663 | 25.69 | 30.83 | 35.97 | 41.11 | 51.38 |
| North Elkin district, McDowell County | $31,959 | 33.29 | 39.95 | 46.61 | 53.27 | 66.58 |
| Sandy River district, McDowell County | $27,590 | 28.74 | 34.49 | 40.24 | 45.98 | 57.48 |
| Mercer | $40,716 | 42.41 | 50.90 | 59.38 | 67.86 | 84.83 |
| District I, Mercer County | $36,048 | 37.55 | 45.06 | 52.57 | 60.08 | 75.10 |
| District II, Mercer County | $44,071 | 45.91 | 55.09 | 64.27 | 73.45 | 91.81 |
| District III, Mercer County | $41,144 | 42.86 | 51.43 | 60.00 | 68.57 | 85.72 |
| Mineral | $51,723 | 53.88 | 64.65 | 75.43 | 86.21 | 107.76 |
| District 1, Mineral County | $50,583 | 52.69 | 63.23 | 73.77 | 84.31 | 105.38 |
| District 2, Mineral County | $49,922 | 52.00 | 62.40 | 72.80 | 83.20 | 104.00 |
| District 3, Mineral County | $53,750 | 55.99 | 67.19 | 78.39 | 89.58 | 111.98 |
| Mingo | $35,454 | 36.93 | 44.32 | 51.70 | 59.09 | 73.86 |
| Beech Ben Mate district, Mingo County | $27,634 | 28.79 | 34.54 | 40.30 | 46.06 | 57.57 |
| Kermit Harvey district, Mingo County | $35,338 | 36.81 | 44.17 | 51.53 | 58.90 | 73.62 |
| Lee district, Mingo County | $39,388 | 41.03 | 49.24 | 57.44 | 65.65 | 82.06 |
| Magnolia district, Mingo County | $30,313 | 31.58 | 37.89 | 44.21 | 50.52 | 63.15 |
| Stafford district, Mingo County | $42,154 | 43.91 | 52.69 | 61.47 | 70.26 | 87.82 |
| Tug Hardee district, Mingo County | $36,325 | 37.84 | 45.41 | 52.97 | 60.54 | 75.68 |
| Williamson district, Mingo County | $27,267 | 28.40 | 34.08 | 39.76 | 45.45 | 56.81 |
| Monongalia | $54,198 | 56.46 | 67.75 | 79.04 | 90.33 | 112.91 |
| Central district, Monongalia County | $43,545 | 45.36 | 54.43 | 63.50 | 72.58 | 90.72 |
| Eastern district, Monongalia County | $56,628 | 58.99 | 70.79 | 82.58 | 94.38 | 117.98 |
| Western district, Monongalia County | $58,311 | 60.74 | 72.89 | 85.04 | 97.19 | 121.48 |
| Monroe | $44,828 | 46.70 | 56.04 | 65.37 | 74.71 | 93.39 |
| Central district, Monroe County | $37,703 | 39.27 | 47.13 | 54.98 | 62.84 | 78.55 |
| Eastern district, Monroe County | $43,500 | 45.31 | 54.38 | 63.44 | 72.50 | 90.63 |
| Western district, Monroe County | $49,631 | 51.70 | 62.04 | 72.38 | 82.72 | 103.40 |

WEST VIRGINIA MEDIAN HOUSEHOLD INCOME
2020 CENSUS
COUNTY & MAGISTERIAL DISTRICTS

| Magisterial District | 2020 MHI | 1.25% | 1.50% | 1.75% | 2.00% | 2.50% |
|---|---|---|---|---|---|---|
| Morgan | $57,116 | 59.50 | 71.40 | 83.29 | 95.19 | 118.99 |
| District 1, Morgan County | $43,813 | 45.64 | 54.77 | 63.89 | 73.02 | 91.28 |
| District 2, Morgan County | $59,213 | 61.68 | 74.02 | 86.35 | 98.69 | 123.36 |
| District 3, Morgan County | $69,643 | 72.54 | 87.05 | 101.56 | 116.07 | 145.09 |
| Nicholas | $40,318 | 42.00 | 50.40 | 58.80 | 67.20 | 84.00 |
| Beaver district, Nicholas County | $39,628 | 41.28 | 49.54 | 57.79 | 66.05 | 82.56 |
| Grant district, Nicholas County | $26,392 | 27.49 | 32.99 | 38.49 | 43.99 | 54.98 |
| Hamilton district, Nicholas County | $45,045 | 46.92 | 56.31 | 65.69 | 75.08 | 93.84 |
| Jefferson district, Nicholas County | $35,278 | 36.75 | 44.10 | 51.45 | 58.80 | 73.50 |
| Kentucky district, Nicholas County | $37,020 | 38.56 | 46.28 | 53.99 | 61.70 | 77.13 |
| Summersville district, Nicholas County | $42,946 | 44.74 | 53.68 | 62.63 | 71.58 | 89.47 |
| Wilderness district, Nicholas County | $44,096 | 45.93 | 55.12 | 64.31 | 73.49 | 91.87 |
| Ohio | $48,056 | 50.06 | 60.07 | 70.08 | 80.09 | 100.12 |
| District 1, Ohio County | $64,075 | 66.74 | 80.09 | 93.44 | 106.79 | 133.49 |
| District 2, Ohio County | $34,227 | 35.65 | 42.78 | 49.91 | 57.05 | 71.31 |
| District 3, Ohio County | $50,934 | 53.06 | 63.67 | 74.28 | 84.89 | 106.11 |
| Pendleton | $46,358 | 48.29 | 57.95 | 67.61 | 77.26 | 96.58 |
| Central district, Pendleton County | $48,350 | 50.36 | 60.44 | 70.51 | 80.58 | 100.73 |
| Eastern district, Pendleton County | $38,750 | 40.36 | 48.44 | 56.51 | 64.58 | 80.73 |
| Western district, Pendleton County | $50,357 | 52.46 | 62.95 | 73.44 | 83.93 | 104.91 |
| Pleasants | $55,508 | 57.82 | 69.39 | 80.95 | 92.51 | 115.64 |
| District A, Pleasants County | $65,457 | 68.18 | 81.82 | 95.46 | 109.10 | 136.37 |
| District B, Pleasants County | $56,463 | 58.82 | 70.58 | 82.34 | 94.11 | 117.63 |
| District C, Pleasants County | $48,191 | 50.20 | 60.24 | 70.28 | 80.32 | 100.40 |
| District D, Pleasants County | $77,386 | 80.61 | 96.73 | 112.85 | 128.98 | 161.22 |
| Pocahontas | $37,642 | 39.21 | 47.05 | 54.89 | 62.74 | 78.42 |
| Edray district, Pocahontas County | $30,543 | 31.82 | 38.18 | 44.54 | 50.91 | 63.63 |
| Greenbank district, Pocahontas County | $38,178 | 39.77 | 47.72 | 55.68 | 63.63 | 79.54 |
| Huntersville district, Pocahontas County | $63,370 | 66.01 | 79.21 | 92.41 | 105.62 | 132.02 |
| Little Levels district, Pocahontas County | $47,768 | 49.76 | 59.71 | 69.66 | 79.61 | 99.52 |
| Preston | $51,992 | 54.16 | 64.99 | 75.82 | 86.65 | 108.32 |
| Fifth district, Preston County | $49,677 | 51.75 | 62.10 | 72.45 | 82.80 | 103.49 |
| First district, Preston County | $54,167 | 56.42 | 67.71 | 78.99 | 90.28 | 112.85 |
| Fourth district, Preston County | $49,205 | 51.26 | 61.51 | 71.76 | 82.01 | 102.51 |
| Second district, Preston County | $57,649 | 60.05 | 72.06 | 84.07 | 96.08 | 120.10 |
| Third district, Preston County | $44,367 | 46.22 | 55.46 | 64.70 | 73.95 | 92.43 |
| Putnam | $63,954 | 66.62 | 79.94 | 93.27 | 106.59 | 133.24 |
| District 1, Putnam County | $50,563 | 52.67 | 63.20 | 73.74 | 84.27 | 105.34 |
| District 2, Putnam County | $79,152 | 82.45 | 98.94 | 115.43 | 131.92 | 164.90 |

WEST VIRGINIA MEDIAN HOUSEHOLD INCOME
2020 CENSUS
COUNTY & MAGISTERIAL DISTRICTS

| Magisterial District | 2020 MHI | 1.25% | 1.50% | 1.75% | 2.00% | 2.50% |
|---|---|---|---|---|---|---|
| District 3, Putnam County | $68,599 | 71.46 | 85.75 | 100.04 | 114.33 | 142.91 |
| Raleigh | $43,283 | 45.09 | 54.10 | 63.12 | 72.14 | 90.17 |
| District 1, Raleigh County | $43,343 | 45.15 | 54.18 | 63.21 | 72.24 | 90.30 |
| District 2, Raleigh County | $40,816 | 42.52 | 51.02 | 59.52 | 68.03 | 85.03 |
| District 3, Raleigh County | $44,582 | 46.44 | 55.73 | 65.02 | 74.30 | 92.88 |
| Randolph | $45,206 | 47.09 | 56.51 | 65.93 | 75.34 | 94.18 |
| Beverly district, Randolph County | $50,750 | 52.86 | 63.44 | 74.01 | 84.58 | 105.73 |
| Dry Fork district, Randolph County | $25,804 | 26.88 | 32.26 | 37.63 | 43.01 | 53.76 |
| Huttonsville district, Randolph County | $38,287 | 39.88 | 47.86 | 55.84 | 63.81 | 79.76 |
| Leadsville district, Randolph County | $41,330 | 43.05 | 51.66 | 60.27 | 68.88 | 86.10 |
| Middle Fork district, Randolph County | $40,703 | 42.40 | 50.88 | 59.36 | 67.84 | 84.80 |
| Mingo district, Randolph County | $37,052 | 38.60 | 46.32 | 54.03 | 61.75 | 77.19 |
| New Interest district, Randolph County | $51,667 | 53.82 | 64.58 | 75.35 | 86.11 | 107.64 |
| Roaring Creek district, Randolph County | $48,018 | 50.02 | 60.02 | 70.03 | 80.03 | 100.04 |
| Valley Bend district, Randolph County | $65,625 | 68.36 | 82.03 | 95.70 | 109.38 | 136.72 |
| Ritchie | $44,328 | 46.18 | 55.41 | 64.65 | 73.88 | 92.35 |
| Clay district, Ritchie County | $55,094 | 57.39 | 68.87 | 80.35 | 91.82 | 114.78 |
| Grant district, Ritchie County | $46,486 | 48.42 | 58.11 | 67.79 | 77.48 | 96.85 |
| Murphy district, Ritchie County | $35,304 | 36.78 | 44.13 | 51.49 | 58.84 | 73.55 |
| Union district, Ritchie County | $41,531 | 43.26 | 51.91 | 60.57 | 69.22 | 86.52 |
| Roane | $38,895 | 40.52 | 48.62 | 56.72 | 64.83 | 81.03 |
| District I, Roane County | $38,483 | 40.09 | 48.10 | 56.12 | 64.14 | 80.17 |
| District II, Roane County | $29,778 | 31.02 | 37.22 | 43.43 | 49.63 | 62.04 |
| District III, Roane County | $45,225 | 47.11 | 56.53 | 65.95 | 75.38 | 94.22 |
| Summers | $37,769 | 39.34 | 47.21 | 55.08 | 62.95 | 78.69 |
| Bluestone River district, Summers County | $41,432 | 43.16 | 51.79 | 60.42 | 69.05 | 86.32 |
| Greenbrier River district, Summers County | $34,907 | 36.36 | 43.63 | 50.91 | 58.18 | 72.72 |
| New River district, Summers County | $35,634 | 37.12 | 44.54 | 51.97 | 59.39 | 74.24 |
| Taylor | $52,958 | 55.16 | 66.20 | 77.23 | 88.26 | 110.33 |
| Eastern district, Taylor County | $49,788 | 51.86 | 62.24 | 72.61 | 82.98 | 103.73 |
| Tygart district, Taylor County | $41,808 | 43.55 | 52.26 | 60.97 | 69.68 | 87.10 |
| Western district, Taylor County | $61,250 | 63.80 | 76.56 | 89.32 | 102.08 | 127.60 |
| Tucker | $47,527 | 49.51 | 59.41 | 69.31 | 79.21 | 99.01 |
| Black Fork district, Tucker County | $43,935 | 45.77 | 54.92 | 64.07 | 73.23 | 91.53 |
| Clover district, Tucker County | $41,250 | 42.97 | 51.56 | 60.16 | 68.75 | 85.94 |
| Davis district, Tucker County | $45,833 | 47.74 | 57.29 | 66.84 | 76.39 | 95.49 |
| Dry Fork district, Tucker County | $52,121 | 54.29 | 65.15 | 76.01 | 86.87 | 108.59 |
| Fairfax district, Tucker County | $44,063 | 45.90 | 55.08 | 64.26 | 73.44 | 91.80 |
| Licking district, Tucker County | $50,515 | 52.62 | 63.14 | 73.67 | 84.19 | 105.24 |

WEST VIRGINIA MEDIAN HOUSEHOLD INCOME
2020 CENSUS
COUNTY & MAGISTERIAL DISTRICTS

| Magisterial District | 2020 MHI | 1.25% | 1.50% | 1.75% | 2.00% | 2.50% |
|---|---|---|---|---|---|---|
| St. George district, Tucker County | $46,202 | 48.13 | 57.75 | 67.38 | 77.00 | 96.25 |
| Tyler | $47,598 | 49.58 | 59.50 | 69.41 | 79.33 | 99.16 |
| Central district, Tyler County | $46,875 | 48.83 | 58.59 | 68.36 | 78.13 | 97.66 |
| North district, Tyler County | $49,295 | 51.35 | 61.62 | 71.89 | 82.16 | 102.70 |
| South district, Tyler County | $45,590 | 47.49 | 56.99 | 66.49 | 75.98 | 94.98 |
| West district, Tyler County | $45,208 | 47.09 | 56.51 | 65.93 | 75.35 | 94.18 |
| Upshur | $40,802 | 42.50 | 51.00 | 59.50 | 68.00 | 85.00 |
| First district, Upshur County | $41,353 | 43.08 | 51.69 | 60.31 | 68.92 | 86.15 |
| Second district, Upshur County | $38,750 | 40.36 | 48.44 | 56.51 | 64.58 | 80.73 |
| Third district, Upshur County | $42,837 | 44.62 | 53.55 | 62.47 | 71.40 | 89.24 |
| Wayne | $43,710 | 45.53 | 54.64 | 63.74 | 72.85 | 91.06 |
| Butler district, Wayne County | $50,849 | 52.97 | 63.56 | 74.15 | 84.75 | 105.94 |
| Ceredo district, Wayne County | $43,477 | 45.29 | 54.35 | 63.40 | 72.46 | 90.58 |
| Stonewall district, Wayne County | $32,314 | 33.66 | 40.39 | 47.12 | 53.86 | 67.32 |
| Union district, Wayne County | $48,571 | 50.59 | 60.71 | 70.83 | 80.95 | 101.19 |
| Westmoreland district, Wayne County | $52,073 | 54.24 | 65.09 | 75.94 | 86.79 | 108.49 |
| Webster | $33,358 | 34.75 | 41.70 | 48.65 | 55.60 | 69.50 |
| Central district, Webster County | $23,540 | 24.52 | 29.43 | 34.33 | 39.23 | 49.04 |
| Northern district, Webster County | $38,729 | 40.34 | 48.41 | 56.48 | 64.55 | 80.69 |
| Southern district, Webster County | $39,453 | 41.10 | 49.32 | 57.54 | 65.76 | 82.19 |
| Wetzel | $44,539 | 46.39 | 55.67 | 64.95 | 74.23 | 92.79 |
| District 1, Wetzel County | $37,144 | 38.69 | 46.43 | 54.17 | 61.91 | 77.38 |
| District 2, Wetzel County | $51,418 | 53.56 | 64.27 | 74.98 | 85.70 | 107.12 |
| District 3, Wetzel County | $45,303 | 47.19 | 56.63 | 66.07 | 75.51 | 94.38 |
| Wirt | $45,315 | 47.20 | 56.64 | 66.08 | 75.53 | 94.41 |
| Central district, Wirt County | $36,761 | 38.29 | 45.95 | 53.61 | 61.27 | 76.59 |
| Northeast district, Wirt County | $45,750 | 47.66 | 57.19 | 66.72 | 76.25 | 95.31 |
| Southwest district, Wirt County | $47,065 | 49.03 | 58.83 | 68.64 | 78.44 | 98.05 |
| Wood | $48,711 | 50.74 | 60.89 | 71.04 | 81.19 | 101.48 |
| Clay district, Wood County | $58,935 | 61.39 | 73.67 | 85.95 | 98.23 | 122.78 |
| Harris district, Wood County | $64,464 | 67.15 | 80.58 | 94.01 | 107.44 | 134.30 |
| Lubeck district, Wood County | $58,692 | 61.14 | 73.37 | 85.59 | 97.82 | 122.28 |
| Parkersburg district, Wood County | $38,432 | 40.03 | 48.04 | 56.05 | 64.05 | 80.07 |
| Slate district, Wood County | $63,893 | 66.56 | 79.87 | 93.18 | 106.49 | 133.11 |
| Steele district, Wood County | $56,983 | 59.36 | 71.23 | 83.10 | 94.97 | 118.71 |
| Tygart district, Wood County | $40,867 | 42.57 | 51.08 | 59.60 | 68.11 | 85.14 |
| Union district, Wood County | $73,304 | 76.36 | 91.63 | 106.90 | 122.17 | 152.72 |
| Walker district, Wood County | $41,288 | 43.01 | 51.61 | 60.21 | 68.81 | 86.02 |
| Williams district, Wood County | $66,761 | 69.54 | 83.45 | 97.36 | 111.27 | 139.09 |

WEST VIRGINIA MEDIAN HOUSEHOLD INCOME
2020 CENSUS
COUNTY & MAGISTERIAL DISTRICTS

| Magisterial District | 2020 MHI | 1.25% | 1.50% | 1.75% | 2.00% | 2.50% |
|---|---|---|---|---|---|---|
| Wyoming | $44,095 | 45.93 | 55.12 | 64.31 | 73.49 | 91.86 |
| District 1, Wyoming County | $42,449 | 44.22 | 53.06 | 61.90 | 70.75 | 88.44 |
| District 2, Wyoming County | $40,907 | 42.61 | 51.13 | 59.66 | 68.18 | 85.22 |
| District 3, Wyoming County | $46,215 | 48.14 | 57.77 | 67.40 | 77.03 | 96.28 |

2020 ACS Tables, U.S. Census Bureau

# APPENDIX D1

# MEDIAN HOUSEHOLD INCOME BY MUNICIPALITY

**WEST VIRGINIA MEDIAN HOUSEHOLD INCOME**
**2020 CENSUS**
**MUNICIPALITIES**

| MUNICIPALITIES | 2020 MHI | 1.25% | 1.50% | 1.75% | 2.00% | 2.50% |
|---|---|---|---|---|---|---|
| Addison (Webster Springs), town | $22,062 | 22.98 | 27.58 | 32.17 | 36.77 | 45.96 |
| Albright, town | $58,750 | 61.20 | 73.44 | 85.68 | 97.92 | 122.40 |
| Alderson , town | $26,053 | 27.14 | 32.57 | 37.99 | 43.42 | 54.28 |
| Anawalt, town | $22,778 | 23.73 | 28.47 | 33.22 | 37.96 | 47.45 |
| Anmoore, town | $23,100 | 24.06 | 28.88 | 33.69 | 38.50 | 48.13 |
| Ansted, town | $38,261 | 39.86 | 47.83 | 55.80 | 63.77 | 79.71 |
| Athens, town | $52,760 | 54.96 | 65.95 | 76.94 | 87.93 | 109.92 |
| Auburn, town (2014) | $23,000 | 23.96 | 28.75 | 33.54 | 38.33 | 47.92 |
| Bancroft, town | $59,750 | 62.24 | 74.69 | 87.14 | 99.58 | 124.48 |
| Barboursville, village | $57,599 | 60.00 | 72.00 | 84.00 | 96.00 | 120.00 |
| Barrackville, town | $59,333 | 61.81 | 74.17 | 86.53 | 98.89 | 123.61 |
| Bath (Berkeley Springs), town | $42,686 | 44.46 | 53.36 | 62.25 | 71.14 | 88.93 |
| Bayard, town | $27,273 | 28.41 | 34.09 | 39.77 | 45.46 | 56.82 |
| Beckley, city | $42,972 | 44.76 | 53.72 | 62.67 | 71.62 | 89.53 |
| Beech Bottom, village | $42,500 | 44.27 | 53.13 | 61.98 | 70.83 | 88.54 |
| Belington, town | $36,944 | 38.48 | 46.18 | 53.88 | 61.57 | 76.97 |
| Belle, town | $50,972 | 53.10 | 63.72 | 74.33 | 84.95 | 106.19 |
| Belmont, city | $50,083 | 52.17 | 62.60 | 73.04 | 83.47 | 104.34 |
| Benwood, city | $35,685 | 37.17 | 44.61 | 52.04 | 59.48 | 74.34 |
| Bethany, town | $57,500 | 59.90 | 71.88 | 83.85 | 95.83 | 119.79 |
| Bethlehem, village | $71,042 | 74.00 | 88.80 | 103.60 | 118.40 | 148.00 |
| Beverly, town | $28,750 | 29.95 | 35.94 | 41.93 | 47.92 | 59.90 |
| Blacksville, town | $52,917 | 55.12 | 66.15 | 77.17 | 88.20 | 110.24 |
| Bluefield, city | $35,650 | 37.14 | 44.56 | 51.99 | 59.42 | 74.27 |
| Bolivar, town | $77,000 | 80.21 | 96.25 | 112.29 | 128.33 | 160.42 |
| Bradshaw, town | $19,142 | 19.94 | 23.93 | 27.92 | 31.90 | 39.88 |
| Bramwell, town | $49,063 | 51.11 | 61.33 | 71.55 | 81.77 | 102.21 |
| Brandonville, town | $73,250 | 76.30 | 91.56 | 106.82 | 122.08 | 152.60 |
| Bridgeport, city | $84,295 | 87.81 | 105.37 | 122.93 | 140.49 | 175.61 |
| Bruceton Mills, town | $39,306 | 40.94 | 49.13 | 57.32 | 65.51 | 81.89 |
| Buckhannon, city | $42,287 | 44.05 | 52.86 | 61.67 | 70.48 | 88.10 |
| Buffalo, town | $50,568 | 52.68 | 63.21 | 73.75 | 84.28 | 105.35 |
| Burnsville, town | $72,375 | 75.39 | 90.47 | 105.55 | 120.63 | 150.78 |
| Cairo, town | $24,215 | 25.22 | 30.27 | 35.31 | 40.36 | 50.45 |
| Camden-on-Gauley, town | $38,889 | 40.51 | 48.61 | 56.71 | 64.82 | 81.02 |
| Cameron, city | $24,167 | 25.17 | 30.21 | 35.24 | 40.28 | 50.35 |
| Capon Bridge, town | $57,734 | 60.14 | 72.17 | 84.20 | 96.22 | 120.28 |
| Carpendale, town | $70,172 | 73.10 | 87.72 | 102.33 | 116.95 | 146.19 |
| Cedar Grove, town | $52,313 | 54.49 | 65.39 | 76.29 | 87.19 | 108.99 |

**WEST VIRGINIA MEDIAN HOUSEHOLD INCOME**
**2020 CENSUS**
**MUNICIPALITIES**

| MUNICIPALITIES | 2020 MHI | 1.25% | 1.50% | 1.75% | 2.00% | 2.50% |
|---|---|---|---|---|---|---|
| Ceredo, city | $36,731 | 38.26 | 45.91 | 53.57 | 61.22 | 76.52 |
| Chapmanville, town | $30,337 | 31.60 | 37.92 | 44.24 | 50.56 | 63.20 |
| Charleston, city | $49,769 | 51.84 | 62.21 | 72.58 | 82.95 | 103.69 |
| Charles Town, city | $77,552 | 80.78 | 96.94 | 113.10 | 129.25 | 161.57 |
| Chesapeake, town | $40,650 | 42.34 | 50.81 | 59.28 | 67.75 | 84.69 |
| Chester, city | $47,993 | 49.99 | 59.99 | 69.99 | 79.99 | 99.99 |
| Clarksburg, city | $41,226 | 42.94 | 51.53 | 60.12 | 68.71 | 85.89 |
| Clay, town | $17,708 | 18.45 | 22.14 | 25.82 | 29.51 | 36.89 |
| Clearview, village | $69,643 | 72.54 | 87.05 | 101.56 | 116.07 | 145.09 |
| Clendenin, town | $42,778 | 44.56 | 53.47 | 62.38 | 71.30 | 89.12 |
| Cowen, town | $27,813 | 28.97 | 34.77 | 40.56 | 46.36 | 57.94 |
| Danville, town | $43,125 | 44.92 | 53.91 | 62.89 | 71.88 | 89.84 |
| Davis, town | $42,019 | 43.77 | 52.52 | 61.28 | 70.03 | 87.54 |
| Davy, town | $28,750 | 29.95 | 35.94 | 41.93 | 47.92 | 59.90 |
| Delbarton, town | $28,140 | 29.31 | 35.18 | 41.04 | 46.90 | 58.63 |
| Dunbar, city | $39,688 | 41.34 | 49.61 | 57.88 | 66.15 | 82.68 |
| Durbin, town | $47,917 | 49.91 | 59.90 | 69.88 | 79.86 | 99.83 |
| East Bank, town | $46,645 | 48.59 | 58.31 | 68.02 | 77.74 | 97.18 |
| Eleanor, town | $64,625 | 67.32 | 80.78 | 94.24 | 107.71 | 134.64 |
| Elizabeth, town | $23,098 | 24.06 | 28.87 | 33.68 | 38.50 | 48.12 |
| Elk Garden, town | $41,250 | 42.97 | 51.56 | 60.16 | 68.75 | 85.94 |
| Elkins, city | $38,910 | 40.53 | 48.64 | 56.74 | 64.85 | 81.06 |
| Ellenboro, town | $50,625 | 52.73 | 63.28 | 73.83 | 84.38 | 105.47 |
| Fairmont, city | $45,540 | 47.44 | 56.93 | 66.41 | 75.90 | 94.88 |
| Fairview, town | $54,265 | 56.53 | 67.83 | 79.14 | 90.44 | 113.05 |
| Falling Spring, town | $38,750 | 40.36 | 48.44 | 56.51 | 64.58 | 80.73 |
| Farmington, town | $66,000 | 68.75 | 82.50 | 96.25 | 110.00 | 137.50 |
| Fayetteville, town | $52,083 | 54.25 | 65.10 | 75.95 | 86.81 | 108.51 |
| Flatwoods, town | $42,411 | 44.18 | 53.01 | 61.85 | 70.69 | 88.36 |
| Flemington, town | $56,250 | 58.59 | 70.31 | 82.03 | 93.75 | 117.19 |
| Follansbee, city | $41,870 | 43.61 | 52.34 | 61.06 | 69.78 | 87.23 |
| Fort Gay, town | $18,667 | 19.44 | 23.33 | 27.22 | 31.11 | 38.89 |
| Franklin, town | $57,857 | 60.27 | 72.32 | 84.37 | 96.43 | 120.54 |
| Friendly, town | $26,667 | 27.78 | 33.33 | 38.89 | 44.45 | 55.56 |
| Gary, city | $32,663 | 34.02 | 40.83 | 47.63 | 54.44 | 68.05 |
| Gassaway, town | $53,073 | 55.28 | 66.34 | 77.40 | 88.46 | 110.57 |
| Gauley Bridge, town | $27,313 | 28.45 | 34.14 | 39.83 | 45.52 | 56.90 |
| Gilbert, town | $42,917 | 44.71 | 53.65 | 62.59 | 71.53 | 89.41 |
| Glasgow, town | $49,412 | 51.47 | 61.77 | 72.06 | 82.35 | 102.94 |
| Glen Dale, city | $64,779 | 67.48 | 80.97 | 94.47 | 107.97 | 134.96 |
| Glenville, town | $31,779 | 33.10 | 39.72 | 46.34 | 52.97 | 66.21 |

**WEST VIRGINIA MEDIAN HOUSEHOLD INCOME**
**2020 CENSUS**
**MUNICIPALITIES**

| MUNICIPALITIES | 2020 MHI | 1.25% | 1.50% | 1.75% | 2.00% | 2.50% |
|---|---|---|---|---|---|---|
| Grafton, city | $34,555 | 35.99 | 43.19 | 50.39 | 57.59 | 71.99 |
| Grantsville, town | $28,750 | 29.95 | 35.94 | 41.93 | 47.92 | 59.90 |
| Grant Town, town | $45,352 | 47.24 | 56.69 | 66.14 | 75.59 | 94.48 |
| Granville, town | $27,457 | 28.60 | 34.32 | 40.04 | 45.76 | 57.20 |
| Hambleton, town | $35,000 | 36.46 | 43.75 | 51.04 | 58.33 | 72.92 |
| Hamlin, town | $36,136 | 37.64 | 45.17 | 52.70 | 60.23 | 75.28 |
| Handley, town | $45,923 | 47.84 | 57.40 | 66.97 | 76.54 | 95.67 |
| Harman, town | $22,788 | 23.74 | 28.49 | 33.23 | 37.98 | 47.48 |
| Harpers Ferry, town | $94,914 | 98.87 | 118.64 | 138.42 | 158.19 | 197.74 |
| Harrisville, town | $36,161 | 37.67 | 45.20 | 52.73 | 60.27 | 75.34 |
| Hartford City, town | $50,245 | 52.34 | 62.81 | 73.27 | 83.74 | 104.68 |
| Hedgesville, town | $70,813 | 73.76 | 88.52 | 103.27 | 118.02 | 147.53 |
| Henderson, town | $20,179 | 21.02 | 25.22 | 29.43 | 33.63 | 42.04 |
| Hendricks, town | $43,409 | 45.22 | 54.26 | 63.30 | 72.35 | 90.44 |
| Hillsboro, town | $20,833 | 21.70 | 26.04 | 30.38 | 34.72 | 43.40 |
| Hinton, city | $35,042 | 36.50 | 43.80 | 51.10 | 58.40 | 73.00 |
| Hundred, town | $35,208 | 36.68 | 44.01 | 51.35 | 58.68 | 73.35 |
| Huntington, city | $33,012 | 34.39 | 41.27 | 48.14 | 55.02 | 68.78 |
| Hurricane, city | $62,308 | 64.90 | 77.89 | 90.87 | 103.85 | 129.81 |
| Huttonsville, town (2015) | $27,396 | 28.54 | 34.25 | 39.95 | 45.66 | 57.08 |
| Iaeger, town | $39,063 | 40.69 | 48.83 | 56.97 | 65.11 | 81.38 |
| Jane Lew, town | $45,944 | 47.86 | 57.43 | 67.00 | 76.57 | 95.72 |
| Junior, town | $25,000 | 26.04 | 31.25 | 36.46 | 41.67 | 52.08 |
| Kenova, city | $29,921 | 31.17 | 37.40 | 43.63 | 49.87 | 62.34 |
| Kermit, town | $28,750 | 29.95 | 35.94 | 41.93 | 47.92 | 59.90 |
| Keyser, city | $44,679 | 46.54 | 55.85 | 65.16 | 74.47 | 93.08 |
| Keystone, city (2015) | $22,125 | 23.05 | 27.66 | 32.27 | 36.88 | 46.09 |
| Kimball, town | $48,750 | 50.78 | 60.94 | 71.09 | 81.25 | 101.56 |
| Kingwood, city | $54,190 | 56.45 | 67.74 | 79.03 | 90.32 | 112.90 |
| Leon, town (2015) | $31,786 | 33.11 | 39.73 | 46.35 | 52.98 | 66.22 |
| Lester, town | $26,202 | 27.29 | 32.75 | 38.21 | 43.67 | 54.59 |
| Lewisburg, city | $31,851 | 33.18 | 39.81 | 46.45 | 53.09 | 66.36 |
| Logan, city | $40,980 | 42.69 | 51.23 | 59.76 | 68.30 | 85.38 |
| Lost Creek, town | $50,750 | 52.86 | 63.44 | 74.01 | 84.58 | 105.73 |
| Lumberport, town | $62,578 | 65.19 | 78.22 | 91.26 | 104.30 | 130.37 |
| Mabscott, town | $33,021 | 34.40 | 41.28 | 48.16 | 55.04 | 68.79 |
| McMechen, city | $36,915 | 38.45 | 46.14 | 53.83 | 61.53 | 76.91 |
| Madison, city | $40,938 | 42.64 | 51.17 | 59.70 | 68.23 | 85.29 |
| Man, town | $53,125 | 55.34 | 66.41 | 77.47 | 88.54 | 110.68 |
| Mannington, city | $54,605 | 56.88 | 68.26 | 79.63 | 91.01 | 113.76 |
| Marlinton, town | $31,400 | 32.71 | 39.25 | 45.79 | 52.33 | 65.42 |

**WEST VIRGINIA MEDIAN HOUSEHOLD INCOME**
**2020 CENSUS**
**MUNICIPALITIES**

| MUNICIPALITIES | 2020 MHI | 1.25% | 1.50% | 1.75% | 2.00% | 2.50% |
|---|---|---|---|---|---|---|
| Marmet, city | $41,875 | 43.62 | 52.34 | 61.07 | 69.79 | 87.24 |
| Martinsburg, city | $44,363 | 46.21 | 55.45 | 64.70 | 73.94 | 92.42 |
| Mason, town | $27,500 | 28.65 | 34.38 | 40.10 | 45.83 | 57.29 |
| Masontown, town | $34,704 | 36.15 | 43.38 | 50.61 | 57.84 | 72.30 |
| Matewan, town | $16,176 | 16.85 | 20.22 | 23.59 | 26.96 | 33.70 |
| Matoaka, town | $40,000 | 41.67 | 50.00 | 58.33 | 66.67 | 83.33 |
| Meadow Bridge, town | $30,536 | 31.81 | 38.17 | 44.53 | 50.89 | 63.62 |
| Middlebourne, town | $43,929 | 45.76 | 54.91 | 64.06 | 73.22 | 91.52 |
| Mill Creek, town | $39,352 | 40.99 | 49.19 | 57.39 | 65.59 | 81.98 |
| Milton, town | $35,145 | 36.61 | 43.93 | 51.25 | 58.58 | 73.22 |
| Mitchell Heights, town | $66,406 | 69.17 | 83.01 | 96.84 | 110.68 | 138.35 |
| Monongah, town | $48,750 | 50.78 | 60.94 | 71.09 | 81.25 | 101.56 |
| Montgomery, city | $27,045 | 28.17 | 33.81 | 39.44 | 45.08 | 56.34 |
| Montrose, town | $66,250 | 69.01 | 82.81 | 96.61 | 110.42 | 138.02 |
| Moorefield, town | $44,299 | 46.14 | 55.37 | 64.60 | 73.83 | 92.29 |
| Morgantown, city | $42,474 | 44.24 | 53.09 | 61.94 | 70.79 | 88.49 |
| Moundsville, city | $33,399 | 34.79 | 41.75 | 48.71 | 55.67 | 69.58 |
| Mount Hope, city | $29,444 | 30.67 | 36.81 | 42.94 | 49.07 | 61.34 |
| Mullens, city | $50,688 | 52.80 | 63.36 | 73.92 | 84.48 | 105.60 |
| Newburg, town | $41,853 | 43.60 | 52.32 | 61.04 | 69.76 | 87.19 |
| New Cumberland, city | $30,078 | 31.33 | 37.60 | 43.86 | 50.13 | 62.66 |
| New Haven, town | $39,295 | 40.93 | 49.12 | 57.31 | 65.49 | 81.86 |
| New Martinsville, city | $45,303 | 47.19 | 56.63 | 66.07 | 75.51 | 94.38 |
| Nitro, city | $43,564 | 45.38 | 54.46 | 63.53 | 72.61 | 90.76 |
| Northfork, town | $20,750 | 21.61 | 25.94 | 30.26 | 34.58 | 43.23 |
| North Hills, town | $114,861 | 119.65 | 143.58 | 167.51 | 191.44 | 239.29 |
| Nutter Fort, town | $50,598 | 52.71 | 63.25 | 73.79 | 84.33 | 105.41 |
| Oak Hill, city | $43,083 | 44.88 | 53.85 | 62.83 | 71.81 | 89.76 |
| Oakvale, town (2014) | $21,354 | 22.24 | 26.69 | 31.14 | 35.59 | 44.49 |
| Oceana, town | $40,000 | 41.67 | 50.00 | 58.33 | 66.67 | 83.33 |
| Paden City, city | $50,739 | 52.85 | 63.42 | 73.99 | 84.57 | 105.71 |
| Parkersburg, city | $37,933 | 39.51 | 47.42 | 55.32 | 63.22 | 79.03 |
| Parsons, city | $42,109 | 43.86 | 52.64 | 61.41 | 70.18 | 87.73 |
| Paw Paw, town | $53,074 | 55.29 | 66.34 | 77.40 | 88.46 | 110.57 |
| Pax, town (2015) | $33,625 | 35.03 | 42.03 | 49.04 | 56.04 | 70.05 |
| Pennsboro, city | $41,673 | 43.41 | 52.09 | 60.77 | 69.46 | 86.82 |
| Petersburg, city | $40,387 | 42.07 | 50.48 | 58.90 | 67.31 | 84.14 |
| Peterstown, town | $40,868 | 42.57 | 51.09 | 59.60 | 68.11 | 85.14 |
| Philippi, city | $36,371 | 37.89 | 45.46 | 53.04 | 60.62 | 75.77 |
| Piedmont, town | $35,250 | 36.72 | 44.06 | 51.41 | 58.75 | 73.44 |
| Pine Grove, town | $53,438 | 55.66 | 66.80 | 77.93 | 89.06 | 111.33 |

**WEST VIRGINIA MEDIAN HOUSEHOLD INCOME**
**2020 CENSUS**
**MUNICIPALITIES**

| MUNICIPALITIES | 2020 MHI | 1.25% | 1.50% | 1.75% | 2.00% | 2.50% |
|---|---|---|---|---|---|---|
| Pineville, town | $60,938 | 63.48 | 76.17 | 88.87 | 101.56 | 126.95 |
| Pleasant Valley, city | $53,994 | 56.24 | 67.49 | 78.74 | 89.99 | 112.49 |
| Poca, town | $59,167 | 61.63 | 73.96 | 86.29 | 98.61 | 123.26 |
| Point Pleasant, city | $42,927 | 44.72 | 53.66 | 62.60 | 71.55 | 89.43 |
| Pratt, town | $54,722 | 57.00 | 68.40 | 79.80 | 91.20 | 114.00 |
| Princeton, city | $41,925 | 43.67 | 52.41 | 61.14 | 69.88 | 87.34 |
| Pullman, town | $48,125 | 50.13 | 60.16 | 70.18 | 80.21 | 100.26 |
| Quinwood, town (2015) | $24,063 | 25.07 | 30.08 | 35.09 | 40.11 | 50.13 |
| Rainelle, town | $29,536 | 30.77 | 36.92 | 43.07 | 49.23 | 61.53 |
| Ranson Town, corporation of | $69,544 | 72.44 | 86.93 | 101.42 | 115.91 | 144.88 |
| Ravenswood, city | $37,012 | 38.55 | 46.27 | 53.98 | 61.69 | 77.11 |
| Reedsville, town | $47,614 | 49.60 | 59.52 | 69.44 | 79.36 | 99.20 |
| Reedy, town | $28,125 | 29.30 | 35.16 | 41.02 | 46.88 | 58.59 |
| Rhodell, town (2015) | $37,813 | 39.39 | 47.27 | 55.14 | 63.02 | 78.78 |
| Richwood, city | $27,327 | 28.47 | 34.16 | 39.85 | 45.55 | 56.93 |
| Ridgeley, town | $32,813 | 34.18 | 41.02 | 47.85 | 54.69 | 68.36 |
| Ripley, city | $34,107 | 35.53 | 42.63 | 49.74 | 56.85 | 71.06 |
| Rivesville, town | $58,458 | 60.89 | 73.07 | 85.25 | 97.43 | 121.79 |
| Romney, city | $32,880 | 34.25 | 41.10 | 47.95 | 54.80 | 68.50 |
| Ronceverte, city | $43,482 | 45.29 | 54.35 | 63.41 | 72.47 | 90.59 |
| Rowlesburg, town | $39,306 | 40.94 | 49.13 | 57.32 | 65.51 | 81.89 |
| Rupert, town | $26,989 | 28.11 | 33.74 | 39.36 | 44.98 | 56.23 |
| St. Albans, city | $50,969 | 53.09 | 63.71 | 74.33 | 84.95 | 106.19 |
| St. Marys, city | $49,836 | 51.91 | 62.30 | 72.68 | 83.06 | 103.83 |
| Salem, city | $40,114 | 41.79 | 50.14 | 58.50 | 66.86 | 83.57 |
| Sand Fork, town | $52,857 | 55.06 | 66.07 | 77.08 | 88.10 | 110.12 |
| Shepherdstown, town | $80,610 | 83.97 | 100.76 | 117.56 | 134.35 | 167.94 |
| Shinnston, city | $59,215 | 61.68 | 74.02 | 86.36 | 98.69 | 123.36 |
| Sistersville, city | $40,125 | 41.80 | 50.16 | 58.52 | 66.88 | 83.59 |
| Smithers, city | $40,135 | 41.81 | 50.17 | 58.53 | 66.89 | 83.61 |
| Smithfield, town | $15,000 | 15.63 | 18.75 | 21.88 | 25.00 | 31.25 |
| Sophia, town | $28,255 | 29.43 | 35.32 | 41.21 | 47.09 | 58.86 |
| South Charleston, city | $51,021 | 53.15 | 63.78 | 74.41 | 85.04 | 106.29 |
| Spencer, city | $21,139 | 22.02 | 26.42 | 30.83 | 35.23 | 44.04 |
| Star City, town | $51,450 | 53.59 | 64.31 | 75.03 | 85.75 | 107.19 |
| Stonewood, city | $45,236 | 47.12 | 56.55 | 65.97 | 75.39 | 94.24 |
| Summersville, town | $43,287 | 45.09 | 54.11 | 63.13 | 72.15 | 90.18 |
| Sutton, town | $40,469 | 42.16 | 50.59 | 59.02 | 67.45 | 84.31 |
| Sylvester, town | $56,000 | 58.33 | 70.00 | 81.67 | 93.33 | 116.67 |
| Terra Alta, town | $40,774 | 42.47 | 50.97 | 59.46 | 67.96 | 84.95 |
| Thomas, city | $51,429 | 53.57 | 64.29 | 75.00 | 85.72 | 107.14 |

**WEST VIRGINIA MEDIAN HOUSEHOLD INCOME**
**2020 CENSUS**
**MUNICIPALITIES**

| MUNICIPALITIES | 2020 MHI | 1.25% | 1.50% | 1.75% | 2.00% | 2.50% |
|---|---|---|---|---|---|---|
| Thurmond, town (2000) | $23,750 | 24.74 | 29.69 | 34.64 | 39.58 | 49.48 |
| Triadelphia, town | $50,119 | 52.21 | 62.65 | 73.09 | 83.53 | 104.41 |
| Tunnelton, town | $48,571 | 50.59 | 60.71 | 70.83 | 80.95 | 101.19 |
| Union, town | $26,151 | 27.24 | 32.69 | 38.14 | 43.59 | 54.48 |
| Valley Grove, village | $32,750 | 34.11 | 40.94 | 47.76 | 54.58 | 68.23 |
| Vienna, city | $55,181 | 57.48 | 68.98 | 80.47 | 91.97 | 114.96 |
| War, city | $16,563 | 17.25 | 20.70 | 24.15 | 27.61 | 34.51 |
| Wardensville, town | $42,500 | 44.27 | 53.13 | 61.98 | 70.83 | 88.54 |
| Wayne, town | $24,000 | 25.00 | 30.00 | 35.00 | 40.00 | 50.00 |
| Weirton, city | $50,822 | 52.94 | 63.53 | 74.12 | 84.70 | 105.88 |
| Welch, city | $25,227 | 26.28 | 31.53 | 36.79 | 42.05 | 52.56 |
| Wellsburg, city | $43,152 | 44.95 | 53.94 | 62.93 | 71.92 | 89.90 |
| West Hamilin, town | $33,646 | 35.05 | 42.06 | 49.07 | 56.08 | 70.10 |
| West Liberty, town (2014) | $27,708 | 28.86 | 34.64 | 40.41 | 46.18 | 57.73 |
| West Logan, town | $33,542 | 34.94 | 41.93 | 48.92 | 55.90 | 69.88 |
| West Milford, town | $53,750 | 55.99 | 67.19 | 78.39 | 89.58 | 111.98 |
| Weston, city | $36,728 | 38.26 | 45.91 | 53.56 | 61.21 | 76.52 |
| Westover, city | $51,304 | 53.44 | 64.13 | 74.82 | 85.51 | 106.88 |
| West Union, town | $68,839 | 71.71 | 86.05 | 100.39 | 114.73 | 143.41 |
| Wheeling, city | $41,911 | 43.66 | 52.39 | 61.12 | 69.85 | 87.31 |
| White Hall, town | $63,250 | 65.89 | 79.06 | 92.24 | 105.42 | 131.77 |
| White Sulphur Springs, city | $32,125 | 33.46 | 40.16 | 46.85 | 53.54 | 66.93 |
| Whitesville, town | $20,313 | 21.16 | 25.39 | 29.62 | 33.86 | 42.32 |
| Williamson, city | $25,707 | 26.78 | 32.13 | 37.49 | 42.85 | 53.56 |
| Williamstown, city | $71,442 | 74.42 | 89.30 | 104.19 | 119.07 | 148.84 |
| Windsor Heights, village | $37,750 | 39.32 | 47.19 | 55.05 | 62.92 | 78.65 |
| Winfield, town | $69,432 | 72.33 | 86.79 | 101.26 | 115.72 | 144.65 |
| Womelsdorf (Coalton), town | $41,250 | 42.97 | 51.56 | 60.16 | 68.75 | 85.94 |
| Worthington, town | $20,750 | 21.61 | 25.94 | 30.26 | 34.58 | 43.23 |

2020 ACS Tables, U.S. Census Bureau

# APPENDIX E

# SOURCES AND USES CHART
# (FOR EPA USE ONLY)

West Virginia Clean Water State Revolving Fund
Intended Use Plan - Sources and Uses of Funds
(for EPA use only)

**Cumulative Sources as of December 31, 2022**

| | | | | |
|---|---|---|---|---|
| Capitalization Grants (34) | $ | 776,884,586 | | |
| State Match | $ | 143,182,073 | | |
| BIL Capitalization Grants | $ | 27,745,000 | | |
| BIL State Match | $ | 2,774,500 | | |
| Emerging Contaminants Grants | $ | 1,457,000 | | |
| Repayments (P + I; 212 + 319) | $ | 634,986,015 | | |
| Investment Earnings | $ | 58,134,704 | | |
| Sources sub-total (a) | | | $ | 1,645,163,878 |

**Cumulative Uses as of December 31, 2022**

| | | | | |
|---|---|---|---|---|
| Loan Assistance (212+319) | $ | 1,461,112,091 | | |
| DEP Administration (4%) | $ | 14,143,540 | | |
| Uses sub-total (b) | | | $ | 1,475,255,631 |

**FY2023 Sources of Funds**

| | | | | |
|---|---|---|---|---|
| Available funds from prior IUPs (a - b) | $ | 169,908,247 | | |
| Base Capitalization Grant #35 (FFY2023 Funds) | $ | 11,694,000 | | |
| Base State Match | $ | 2,338,800 | | |
| BIL Capitalization Grant #2 (FFY 2023 Funds) | $ | 32,493,000 | | |
| BIL State Match | $ | 3,249,300 | | |
| Emerging Contaminants Grant | $ | 3,315,000 | | |
| Earnings (estimate) | $ | 5,517,432 | | |
| Repayments (estimate) | $ | 40,143,053 | | |
| Sources of Funds ( c ) | | | $ | 268,658,832 |

**Less**

| | | | | |
|---|---|---|---|---|
| Appendix B Projects* | $ | 313,442,201 | | |
| Loan Closings Between 12/31/2022 - 6/30/23 | $ | 3,971,997 | | |
| AgWQLP Reserves | $ | 500,000 | | |
| OSLP Reserve | $ | 500,000 | | |
| Total | | | $ | 318,414,198 |

* Projects don't always go as planned and the project expenses are spread over the life of construction

# APPENDIX F

# POSSIBLE GREEN TECHNOLOGY PROJECTS

**CLEAN WATER STATE REVOLVING FUND**

## "Green" Infrastructure Project Solicitation for FY2023 IUP

| Project | Category | Description | Total Project Cost Estimate | Total Green Cost |
|---|---|---|---|---|
| Auburn, Town of | decentralized sewer system | Decentralized individual treatment units | $2,482,850 | $2,482,850 |
| Beckley Sanitary Board (Dry Hill) | storm water | Green technology to improve a portion of the storm water system | $3,850,000 | $300,000 |
| Beckley Sanitary Board (Pinecrest) | storm water | Green technology to improve a portion of the storm water system | $5,344,000 | $399,000 |
| Beckley Sanitary Board (Rail Trail) | storm water | Innovative green technology - Continuous Monitoring and Adaptive Control System | $2,006,000 | $350,000 |
| Big Bend PSD | decentralized sewer system | Replacement of WWTP and rehabilitation of another WWTP | $2,280,000 | $2,260,000 |
| Bradley PSD | energy efficiency | Replacement of 3 package treatment plants and one lagoon with STEP system | $4,694,849 | $2,715,200 |
| Bradshaw, Town of | energy efficiency | Replacement of vacuum Sewer system with gravity system | $6,208,000 | $5,518,000 |
| Charles Town Utility Board | energy efficiency | Pump Station rehab, replacement and decommissioning | $8,100,000 | $2,150,600 |
| Davis, Town of | storm water | Stormwater bioswales | $6,974,000 | $2,495,000 |
| Fort Gay, Town of (Phase 1) | energy efficiency | System rehab and WWTP replacement | $4,660,000 | $936,500 |
| Gary, City of (Phase 1) | decentralized sewer system | STEG/STEP system | $2,769,000 | $2,769,000 |
| Huntington Sanitary Board (3rd & 5th Ave.) | storm water and energy efficiency | Separate storm system with infiltration, storage tanks, and pump stations | $10,000,000 | $3,950,000 |
| Huntington Sanitary Board (4th St. PS) | energy efficiency | Improvements to exsting pump station | $15,500,000 | $1,400,000 |
| Huntington Sanitary Board (13 St. W. PS) | energy efficiency | Improvements to exsting pump station | $19,500,000 | $3,200,000 |
| Huntington Sanitary Board (Rt. 10 Extension) | energy efficiency | Decommissioning Green Valley WWTP and upgrades to existing stations | $13,000,000 | $900,000 |
| Huntington Sanitary Board (WWTP Upgrade) | energy efficiency, water reuse, and storm water | Upgrades to equipment and controls at WWTP, new nonpotable source, and site storm controls | $143,500,000 | $64,549,000 |
| Kanawha PSD (Lens Creek - Phase 1) | energy efficiency | LED lighting and WWTP Improvements | $10,200,000 | $575,000 |
| McDowell Co. PSD - Iaeger | decentralized sewer system | Decentralized system for unsewered area | $7,900,000 | $7,900,000 |
| Morgantown Utility Board (Cheat Lake) | energy efficiency, water reuse, and storm water | WWTP and pump station upgrade | $29,971,300 | $4,000,000 |
| Mount Zion PSD | decentralized sewer system | Treatment plant replacement | $3,368,500 | $3,368,500 |

| | | | | |
|---|---|---|---|---|
| Page Kincaid PSD | decentralized sewer system | Decentralized system for unsewered area | $4,638,525 | $4,638,525 |
| Parkersburg Utility Board (Interceptor) | energy efficiency | Demolition of existing stations and SSO abatement project | $26,039,600 | $6,521,500 |
| Pea Ridge PSD (Holiday Park) | decentralized sewer system | Decentralized Wastewater Treatment Plant | $2,345,000 | $2,345,000 |
| Star City, Town of | storm water | Storm water bioswales | $7,643,000 | $1,111,525 |
| Union PSD | energy efficiency | Replacing lift station and its forcemain and improvements at 40th St. WWTP and PSD building | $5,605,000 | $1,037,850 |
| Walton PSD | decentralized sewer system | WWTP and collection system | $8,161,300 | $8,161,300 |
| | | TOTAL | $356,740,924 | $136,034,350 |

# APPENDIX G

# UNEMPLOYMENT DATA

| Labor Force Data by County<br>2022 | |
|---|---|
| **County** | **Percentage** |
| Barbour | 4.4 |
| Berkeley | 2.7 |
| Boone | 4.9 |
| Braxton | 6.9 |
| Brooke | 5.1 |
| Cabell | 3.5 |
| Calhoun | 10.8 |
| Clay | 6.5 |
| Doddridge | 3.2 |
| Fayette | 5.0 |
| Gilmer | 5.6 |
| Grant | 3.8 |
| Greenbrier | 3.7 |
| Hampshire | 2.5 |
| Hancock | 5.1 |
| Hardy | 4.3 |
| Harrison | 3.8 |
| Jackson | 4.6 |
| Jefferson | 2.3 |
| Kanawha | 3.9 |
| Lewis | 5.6 |
| Lincoln | 5.4 |
| Logan | 4.8 |
| McDowell | 4.3 |
| Marion | 5.9 |
| Marshall | 4.4 |
| Mason | 6.4 |
| Mercer | 4.8 |
| Mineral | 3.8 |
| Mingo | 6.8 |
| Monongalia | 3.2 |
| Monroe | 2.9 |
| Morgan | 2.7 |
| Nicholas | 5.0 |
| Ohio | 4.2 |
| Pendleton | 2.6 |
| Pleasants | 6.0 |
| Pocahontas | 3.5 |
| Preston | 3.9 |
| Putnam | 3.3 |
| Raleigh | 3.9 |
| Randolph | 4.9 |
| Ritchie | 4.4 |
| Roane | 8.0 |
| Summers | 3.8 |
| Taylor | 4.0 |
| Tucker | 4.7 |
| Tyler | 6.7 |
| Upshur | 5.1 |
| Wayne | 4.1 |
| Webster | 5.2 |
| Wetzel | 5.9 |
| Wirt | 7.2 |
| Wood | 4.3 |
| Wyoming | 4.1 |
| WV | 4.0 |
| Source: from www.workforcewv.org | |

# APPENDIX H

# POPULATION DATA

## Population Data

| County | 2015 Estimate | 2020 Estimate | delta | % Change *red reflects negative |
|---|---|---|---|---|
| Barbour | 16,731 | 16,543 | 188 | 1.12 |
| Berkeley | 108,724 | 117,615 | 8,891 | 8.18 |
| Boone | 24,000 | 21,897 | 2,103 | 8.76 |
| Braxton | 14,466 | 14,032 | 434 | 3.00 |
| Brooke | 23,665 | 22,162 | 1,503 | 6.35 |
| Cabell | 96,824 | 93,328 | 3,496 | 3.61 |
| Calhoun | 7,557 | 7,185 | 372 | 4.92 |
| Clay | 9,141 | 8,599 | 542 | 5.93 |
| Doddridge | 8,201 | 8,499 | 298 | 3.63 |
| Fayette | 45,534 | 43,087 | 2,447 | 5.37 |
| Gilmer | 8,644 | 7,970 | 674 | 7.80 |
| Grant | 11,815 | 11,565 | 250 | 2.12 |
| Greenbrier | 35,666 | 34,893 | 773 | 2.17 |
| Hampshire | 23,542 | 23,304 | 238 | 1.01 |
| Hancock | 30,201 | 29,118 | 1,083 | 3.59 |
| Hardy | 13,936 | 13,789 | 147 | 1.05 |
| Harrison | 68,998 | 67,620 | 1,378 | 2.00 |
| Jackson | 29,256 | 28,793 | 463 | 1.58 |
| Jefferson | 55,214 | 56,922 | 1,708 | 3.09 |
| Kanawha | 190,781 | 181,014 | 9,767 | 5.12 |
| Lewis | 16,434 | 16,024 | 410 | 2.49 |
| Lincoln | 21,560 | 20,617 | 943 | 4.37 |
| Logan | 35,760 | 32,593 | 3,167 | 8.86 |
| McDowell | 20,802 | 18,083 | 2,719 | 13.07 |
| Marion | 56,790 | 56,233 | 557 | 0.98 |
| Marshall | 32,480 | 30,900 | 1,580 | 4.86 |
| Mason | 27,177 | 26,700 | 477 | 1.76 |
| Mercer | 61,891 | 59,370 | 2,521 | 4.07 |
| Mineral | 27,755 | 27,047 | 708 | 2.55 |
| Mingo | 25,931 | 23,808 | 2,123 | 8.19 |
| Monongalia | 101,668 | 106,196 | 4,528 | 4.45 |
| Monroe | 13,525 | 13,344 | 181 | 1.34 |
| Morgan | 17,475 | 17,800 | 325 | 1.86 |
| Nicholas | 25,930 | 24,857 | 1,073 | 4.14 |
| Ohio | 43,637 | 41,875 | 1,762 | 4.04 |
| Pendleton | 7,402 | 6,968 | 434 | 5.86 |
| Pleasants | 7,636 | 7,457 | 179 | 2.34 |
| Pocahontas | 8,697 | 8,382 | 315 | 3.62 |
| Preston | 33,809 | 33,610 | 199 | 0.59 |
| Putnam | 56,596 | 56,604 | 8 | 0.01 |
| Raleigh | 78,493 | 74,452 | 4,041 | 5.15 |
| Randolph | 29,365 | 28,763 | 602 | 2.05 |
| Ritchie | 10,140 | 9,747 | 393 | 3.88 |
| Roane | 14,636 | 13,831 | 805 | 5.50 |
| Summers | 13,544 | 12,710 | 834 | 6.16 |
| Taylor | 16,977 | 16,817 | 160 | 0.94 |
| Tucker | 6,972 | 6,943 | 29 | 0.42 |
| Tyler | 9,033 | 8,736 | 297 | 3.29 |
| Upshur | 24,560 | 24,451 | 109 | 0.44 |
| Wayne | 41,499 | 39,952 | 1,547 | 3.73 |
| Webster | 8,927 | 8,289 | 638 | 7.15 |
| Wetzel | 16,157 | 15,291 | 866 | 5.36 |
| Wirt | 5,841 | 5,764 | 77 | 1.32 |
| Wood | 86,559 | 84,387 | 2,172 | 2.51 |
| Wyoming | 22,866 | 20,890 | 1,976 | 8.64 |

Source:https://data.census.gov/cedsci/table?g=0400000US54%240500000_0500000US54039&tid=ACSST5Y2020.S0101&tp=true