

**West Virginia
Clean Water State Revolving Fund**



FY2021 Intended Use Plan

Submitted to the
U.S. Environmental Protection Agency
Region III
xxx, 2020



west virginia department of environmental protection

TABLE OF CONTENTS

Glossary.....	1
Preface.....	2
SECTION I	
Introduction.....	3
SECTION II	
Funds Identification.....	3
SECTION III	
Goals.....	5
SECTION IV	
Project Priority List.....	6
SECTION V	
Fund Activities.....	7
SECTION VI	
Assurances.....	16
SECTION VII	
Criteria and Method for Distribution of Funds.....	16
SECTION VIII	
Public Participation.....	17
SECTION IX	
Agreement.....	17

Appendices

- A - Project Priority List
- B - Proposed Binding Commitments – by Quarter
- C - Projects Budgeted for IUP Available Funds
- D - Public Hearing Summary
- E - Median Household Income by County and Magisterial District
- E1 - Median Household Income by Municipality
- F - Sources and Uses Chart (for EPA use only)
- G - Possible Green Technology Projects
- H - Unemployment Data
- I - Population Data

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

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

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

POTW – Publicly Owned Treatment Works

PSC – Public Service Commission of West Virginia

USDA – United States Department of Agriculture

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.

Division of Water and Waste Management

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

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 2021 (July 1, 2020 – June 30, 2021 (FY2021)). 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, 2020, there have been 32 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 F, 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 FY2021 (July 1, 2020 – June 30, 2021)

Available funds as of March 31, 2020

Cash balance in CWSRF account =	\$146,089,574	
Federal funds accounts payable (base grants) =	<u>\$ 0</u>	
		<u>\$146,089,574</u>

New funds available during state FY2021:

Next Federal EPA Grant	\$ 24,773,000	
Next State Match	\$ 4,954,600	
Est. Repayments (principal) (to 6/30/21)* =	\$ 34,640,019	
Est. Repayments (interest) (to 6/30/21)* =	\$ 2,934,844	
Est. Investment Earnings (to 6/30/21)* =	<u>\$ 5,781,331</u>	
		<u>\$ 73,083,794</u>

Less:

Existing project loans payables (3/31/20) =	\$ 50,350,731	
Existing binding commitments (3/31/20) =	\$ 48,238,821	
AgWQLP reserve =	\$ 150,000	
OSLP reserve =	\$ 300,000	
DEP Administration =	<u>\$ 0</u>	
		<u>\$99,039,552</u>

Net available funds during FY2021 = \$120,133,816

Notes:

The match should be received by July 2020.

WV plans to apply for any additional stimulus funding that may be appropriated by Congress later in the year. Projects will be added to this IUP from the PPL 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.

* These are estimates at this time. Project funding will be adjusted to accommodate the actual funds received. COVID-19 may impact these estimates.

SECTION III

Goals

A. Long term goals

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.

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

Objective 2 – Maximize investment opportunities.

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

Objective 4 – 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. Short term goals

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 in McDowell County.
5. Utilized flexibilities available within the CWSRF to monitor and work with loan recipients that have been financially impacted by the COVID-19 pandemic.
6. Re-evaluate and potentially restructure the AgWQLP to entice applicants back to the program.
7. Partner with DHHR and USGS to determine what, if any impacts, PFAS will have on wastewater treatment systems and non-point projects in WV.

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. Appendix C contains a quarterly outlay estimate for all NPS activities expected to be funded this fiscal year.

SECTION V

Fund Activities

A. Interest rates on POTW loans

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: 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: 0.25% interest rate, .25% annual admin fee, 31 - 40-year term

The MHI data is derived from the 2015 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 0.25%. 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 E. Municipal MHI data is contained in Appendix E1.

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.

B. Additional subsidization for disadvantaged communities

This year’s Clean Water Act Title VI funding allocation for West Virginia is \$24,773,000. 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 \$2,477,300. 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 25% of the capitalization grant in the amount of \$6,193,250 to be used as 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 2015 Census data for 3,400 gallons of water usage.

<u>MHI</u>	<u>Points</u>
1.75% - 1.99%	50
2.0% or greater	75

Unemployment Data – As published by WorkForce West Virginia, the State’s average unemployment rate was 4.9% in 2019. See Appendix H.

<u>Locality’s Unemployment Rate (UR)</u>	<u>Points</u>
UR < West Virginia’s UR	0
UR 0% - 2% above West Virginia’s UR	5
UR > 2% above West Virginia’s UR	10

Population Trends – Based upon the percentage change for the period from 2015 to 2018 (calendar years) by county as published by American Fact Finder. See Appendix I.

<u>Change in Population</u>	<u>Points</u>
Greater than +2%	0
0 to +2%	5
Less than 0%	10

For applicants that receive at least 60 points, the project is eligible for the lesser of 50% of the total eligible CWSRF project costs or \$1,000,000 in principal forgiveness.

For applicants that receive at least 90 points, the project is eligible for the lesser of 100% of the total eligible CWSRF project costs or \$1,500,000 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 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 G of this document. These projects were submitted in response to a DEP solicitation for green projects that occurred in November and December 2019

simultaneously with the project priority list solicitation. The CWSRF program will further evaluate these projects to determine funding eligibility.

D. 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 March 31, 2020 was \$14,201,752. 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. The CWSRF is also funding a position with the WV Rural Water Association that provides technical and project support to West Virginia communities. This position also provides asset management support and educates local utilities on energy and water efficiency technologies. This fund will also be used to provide funding in partnership with the WV DHHR and USGS to support a PFAS study over the next two years. It may also be used for additional project funding.

E. Maximum allowable loans

In FY2021, 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.

F. 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.

G. 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 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. 40-year bonds

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.

H. 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.

I. 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, 2018, 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 \$150,000 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 \$300,000 as a set-aside for this program this fiscal year. Funds from the administrative fee account may also be used to fund this program. As of June 30, 2019, more than \$3.1 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.

J. 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 following projects have been selected to comply with federal requirements including, but not limited to, the Single Audit Act, FFATA, etc. This project totals more than the FFY 2020 capitalization grant which is \$24,773,000.

Project Sponsor	Project Description	CWSRF Amount
Pea Ridge PSD	WWTP Upgrade/Sewer Extension	\$28,500,000

SECTION VI

Assurances

DEP has provided the necessary assurances and certifications as part of the operating agreement with EPA. The Operating Agreement 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 FY2021 until June 27, 2020. 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 mailing directly to consulting engineers, regional councils and other interested parties.

Appendix D contains 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 2021
PROJECT PRIORITY LIST

2021 Priority List

Project	SRF #C	Ranking	PriorityPoints
Albright, Town of	C-544592	70	65.00
Ansted, Town of	C-544584	27	125.00
Athens, Town of	C-544622	87	15.00
Auburn, Town of	C-547201-02	2	175.00
Barboursville Sanitary Board, Village of	C-544615	71	65.00
Beckley Sanitary Board (Little Whitestick)	C-544626	59	85.00
Beckley Sanitary Board (Pinecrest)	C-544624	60	85.00
Beckley Sanitary Board (Railtrail)	C-544625	61	85.00
Benwood, City of	C-544613	3	170.00
Beverly, Town of	C-544336-02	48	95.00
Big Bend PSD	C-544627	41	115.00
Bluefield Sanitary Board (Midway)	C-544493	28	120.00
Bluefield Sanitary Board (West Side)	C-544462	49	95.00
Bluewell PSD	C-544594	57	90.00
Boone Raleigh PSD	C-544628	42	115.00
Bradshaw, Town of	C-544595	62	75.00
Brooke County PSD	C-544006-04	29	120.00
Buffalo Creek PSD	C-544555	30	120.00
Burnsville Public Utility Board	C-544578	76	45.00
Camden-On-Gauley	C-544610	80	40.00
Canaan Valley PSD	C-544560	77	45.00
Cedar Grove, Town of	C-544596	22	135.00
Clarksburg Sanitary Board, City of	C-544549	9	145.00
Clay, Town of	C-544614	46	100.00
Claywood Park PSD	C-544498	63	75.00
Crab Orchard-MacArthur PSD	C-544630	50	95.00
Craigsville PSD	C-544597	58	90.00

Project	SRF #C	Ranking	PriorityPoints
Delbarton, Town of	C-544201	10	145.00
Elkins, City of	C-544585	4	170.00
Follansbee, City of	C-544599	51	95.00
Fort Gay, Town of	C-544607	43	115.00
Gary, City of	C-544501	81	40.00
Gilbert, Town of	C-544502	31	120.00
Grafton, City of	C-544633	52	95.00
Grantsville, Town of	C-544634	72	65.00
Greater Harrison Co. PSD	C-544296	11	145.00
Greater Harrison Co. PSD	C-544635	84	20.00
Greenbrier PSD No. 2	C-544636	65	70.00
Harpers Ferry-Bolivar PSD (I&I Study)	C-544638	66	70.00
Harpers Ferry-Bolivar PSD (Prospect Ave)	C-544637	83	25.00
Hinton, City of	C-544550	12	145.00
Huttonsville PSD	C-544569	44	115.00
Kanawha PSD	C-544643	67	70.00
Logan County PSD	C-544460-02	32	120.00
Logan County PSD	C-544619	34	120.00
Logan County PSD	C-544460-03	33	120.00
Lubeck PSD	C-544621	85	20.00
Mason County PSD	C-544616	13	145.00
Matewan, Town of	C-544482	73	65.00
McDowell County PSD (Coalwood)	C-547302	7	165.00
McDowell County PSD (laeger)	C-544513	1	180.00
Mineral Wells PSD	C-544639	23	135.00
Mingo County PSD	C-544312	35	120.00
Monongah, Town of	C-544565	14	145.00
Mount Zion PSD	C-544521	36	120.00

Project	SRF #C	Ranking	PriorityPoints
Nitro Regional Wastewater Utility	544652	24	135.00
North Beckley PSD	C-544617	37	120.00
North Beckley PSD (Piney View)	C-544522	38	120.00
Oak Hill Sanitary Board	C-544623	53	95.00
Page Kincaid PSD	C-544508-02	15	145.00
Parkersburg Utility Board	C-544654	8	165.00
Pea Ridge PSD (B Plant)	C-544576	26	130.00
Pea Ridge PSD (Holiday Park)	C-544609	5	170.00
Pocahontas County PSD	C-544604	20	140.00
Preston County PSD	C-544538	16	145.00
Prichard PSD	C-544298	47	100.00
Ravenswood, City of	C-544428	74	65.00
Richwood, City of	C-544579	17	145.00
Ripley Sanitary Board, City of	C-544575	54	95.00
Ronceverte, City of	C-544611	68	70.00
Rowlesburg, Town of	C-544644	21	140.00
Shady Spring PSD (Glen Morgan WWTP)	C-544645	69	70.00
Sissonville PSD	C-544570	75	50.00
Sistersville, City of	544653	25	135.00
Smithers Sanitary Board, City of	C-544583	64	75.00
South Charleston Sanitary Board	C-544646	39	120.00
Southern Jackson County PSD	C-544246	45	110.00
Stonewood, City of	C-544647	86	20.00
Walton PSD	C-544166	40	120.00
Wardensville, Town of	C-544648	78	45.00
Warm Springs PSD	C-544649	55	95.00
Webster Springs PSD	C-544612	56	95.00
Weirton Sanitary Board	C-544650	82	40.00

Project	SRF #C	Ranking	PriorityPoints
Wellsburg Sanitary Board	C-544651	6	170.00
West Fork Onsite Community Cooperative, Inc.	C-544605	18	145.00
White Sulphur Springs, City of	C-544606	19	145.00
Williamson, City of	C-544544	79	45.00

CLEAN WATER STATE REVOLVING FUND 2021 PRIORITY LIST

Rank / Points Project	SRF Loan Amount	Total Costs
<p>Rank 1</p> <p>McDowell County PSD (laeger)</p> <p>SRF #C: C-544513</p> <p>County: McDowell</p> <p>NPDES #WV: 0000000</p> <p>Binding Date: 3/31/2021</p> <p>Points 180.00</p>	\$6,000,000	\$7,900,000
<p>Needs Categories: CWT-Secondary Treatment CWT-New Collector Sewers CWT-New Interceptors</p>	<p>Problem Elimination of failing on-site wastewater treatment units.</p> <p>Solution The proposed laeger Regional Sewer Project – Phase I will provide service to approximately 118 potential customers (295 persons) in the Town of laeger 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 (4) pumping stations, two (2) 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.</p>	
<p>Rank 2</p> <p>Auburn, Town of</p> <p>SRF #C: C-547201-02</p> <p>County: Ritchie</p> <p>NPDES #WV: 0000000</p> <p>Binding Date: 3/31/2021</p> <p>Points 175.00</p>	\$2,714,725	\$2,714,725
<p>Needs Categories: NPS-Individual/Decentralized Systems</p>	<p>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.</p> <p>Solution Installation of 50 individual Orenco AX20 treatment units and appurtenances to serve the Town of Auburn.</p>	

CLEAN WATER STATE REVOLVING FUND 2021 PRIORITY LIST

Rank / Points	Project	SRF Loan Amount	Total Costs
3	<p>Benwood, City of</p> <p>SRF #C: C-544613</p> <p>County: Marshall</p> <p>NPDES #WV: 0023230</p> <p>Binding Date: 12/31/2020</p> <p>Needs Categories: CWT-CSO Correction</p>	\$2,000,000	\$2,357,500
170.00	<p>Problem</p> <p>Large amount of infiltration and inflow associated with the combined sewer system overwhelming Lift Stations C and D, creating CSO events.</p> <p>Solution</p> <p>Installation of a new sanitary sewer system with the existing combined sewer system left in place to serve as a storm drainage system. Includes the removal of three CSOs from the system and eliminates the CSOs associated with Lift Stations C and D.</p>		
4	<p>Elkins, City of</p> <p>SRF #C: C-544585</p> <p>County: Randolph</p> <p>NPDES #WV: 0020028</p> <p>Binding Date: 12/31/2020</p> <p>Needs Categories: CWT-CSO Correction</p>	\$4,264,800	\$4,264,800
170.00	<p>Problem</p> <p>Significant I/I associated with combined sewers. Addressing issues associated with the issues detected from previous CCTV of the Buffalo Creek Culvert.</p> <p>Solution</p> <p>Separate sewers upstream of existing CSO 016 by installing a new separate storm sewer system. Existing combined sewers will remain as sanitary sewers. Various improvements to the combined sewers running adjacent to the Buffalo Creek Culvert.</p>		

CLEAN WATER STATE REVOLVING FUND 2021 PRIORITY LIST

Rank / Points	Project	SRF Loan Amount	Total Costs
5	<u>Pea Ridge PSD (Holiday Park)</u>	\$2,345,000	\$2,345,000
	<p>SRF #C: C-544609</p> <p>County: Cabell</p> <p>NPDES #WV: 0103110</p> <p>Binding Date: 6/30/2021</p> <p>Points 170.00</p>	<p>Needs Categories: NPS-Individual/Decentralized Systems</p>	<p>Problem The Holiday Park wastewater treatment plant (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, in violation of Holiday Park's NPDES permit. Moreover, Holiday Park's collection system is incompletely mapped. The alignment of lines and location of 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.</p> <p>Solution Propose decommissioning existing Holiday Park WWTP and replace with new package WWTP (on same site). Further propose to completely replace Holiday Park wastewater collection system, involving removal and replacement of approx. 5,240 LF of 8" PVC gravity sewer line, 200 LF of 2" CL-250 FM, 23 48" MH's, 45 VF of MH riser pipe, 53 LF of 4" customer service laterals, 53 8" by 4" PVC wye connections, an influent sewage LS, and all necessary appurtenances. Cleanouts will be installed at the property lines of each customer in order to improve ease of maintenance.</p>
6	<u>Wellsburg Sanitary Board</u>	\$4,120,000	\$4,120,000
	<p>SRF #C: C-544651</p> <p>County: Brooke</p> <p>NPDES #WV: 0026832</p> <p>Binding Date: 6/30/2021</p> <p>Points 170.00</p>	<p>Needs Categories: CWT-CSO Correction</p>	<p>Problem During wet weather events, Wellsburg's combined sewer overflows (CSOs) discharge untreated wastewater into the Ohio River, reducing water quality and creating a public health hazard for the citizens of Wellsburg and communities downstream.</p> <p>Solution This project would separate Wellsburg's wastewater and stormwater collection systems by constructing approximately 22,000 lineal feet (LF) of gravity storm sewer line and all necessary appurtenances and redirecting all stormwater flows into this new system to be discharged to area channels. Wastewater will continue to be conveyed to Wellsburg's WWTP for treatment and eventual discharge, eliminating Wellsburg's CSOs.</p>

CLEAN WATER STATE REVOLVING FUND 2021 PRIORITY LIST

Rank / Points	Project	SRF Loan Amount	Total Costs
7	<p>McDowell County PSD (Coalwood)</p> <p>SRF #C: C-547302</p> <p>County: McDowell</p> <p>NPDES #WV: 0000000</p> <p>Binding Date: 9/30/2020</p> <p>Points: 165.00</p>	\$1,250,000	\$3,250,000
<p>Needs Categories: NPS-Individual/Decentralized Systems</p>		<p>Problem Failing on-site wastewater treatment systems and old orphan mining community sewer collection systems with no treatment resulting in health and sanitary hazards which could lead to health risks associated with the possible bacteriological contamination of ground and surface waters in the area.</p> <p>Solution Construct Coalwood Sewer System (Phase 1) consisting of 5,000 feet of 8" gravity sewer mains, 700 feet of 6" gravity sewer mains, 38 manholes, 7 cleanouts, 72 sewer laterals, 3,200 feet of 4" forcemain, one 80 gpm lift station, one 17,500 gpd package MBBR WWTP, and other related items to provide public sewer service to 71 dwellings and one business.</p>	
8	<p>Parkersburg Utility Board</p> <p>SRF #C: C-544654</p> <p>County: Wood</p> <p>NPDES #WV: 0023213</p> <p>Binding Date: 6/30/2021</p> <p>Points: 165.00</p>	\$3,000,000	\$3,000,000
<p>Needs Categories: CWT-New Collector Sewers</p>		<p>Problem In the Marrtown Road area, a majority of properties don't have adequate space for construction of an on-site septic system. Several properties have "straight-pipe" discharges of septic waste. The office complex (Twin Rivers) is serviced by an on-site treatment facility.</p> <p>The Marrtown Road area including the discharge from the office complex, drains to an unnamed tributary of the Ohio River at a location approximately 1,800 feet downstream of the mouth of the Little Kanawha River.</p> <p>Solution Construction of a gravity wastewater collection system with lift station and force main to serve the Marrtown Road area. The flows from the service area will be conveyed to the Parkersburg collection system on Marrtown Road southwest of the intersection with Hill Avenue.</p>	

CLEAN WATER STATE REVOLVING FUND 2021 PRIORITY LIST

Rank / Points	Project	SRF Loan Amount	Total Costs
9	<p>Clarksburg Sanitary Board, City of</p> <p>SRF #C: C-544549</p> <p>County: Harrison</p> <p>NPDES #WV: 0023302</p> <p>Binding Date: 8/31/2020</p> <p>Points 145.00</p>	\$7,500,000	\$7,530,000
<p>Needs Categories: CWT-Secondary Treatment CWT-CSO Correction</p>		<p>Problem -Some equipment at WWTP is at the end of its usable life. Currently, septage haulers unload into a pipe that bypasses the influent screening at the influent LS. Large solids passing through the pumps can cause issues. A septage receiving unit was proposed to be installed in previous phase of project, but was not chosen to be included within the final design. -The existing sewer system is combined storm and sanitary. Wet weather conditions cause CSOs to discharge and bring larger flows to the WWTP. -An abandoned ash lagoon has not been filled in at the plant.</p> <p>Solution Equipment at the end of its reusable life will be upgraded and a septage receiving building will be installed at the wastewater treatment plant. Storm water will be diverted from the combined sewer system into a new storm sewer. This will lighten wet weather flows at the plant and reduce CSO discharges. Some damaged concrete sewer pipe will also be replaced.</p> <p>The abandoned ash lagoon will be cleared/grubbed and filled in, allowing the property to be utilized for other uses.</p>	
10	<p>Delbarton, Town of</p> <p>SRF #C: C-544201</p> <p>County: Mingo</p> <p>NPDES #WV: 0024732</p> <p>Binding Date: 6/30/2021</p> <p>Points 145.00</p>	\$4,597,000	\$5,097,000
<p>Needs Categories: CWT-New Collector Sewers CWT-New Interceptors</p>		<p>Problem Failing on-site wastewater treatment systems.</p> <p>Solution The proposed Ragland Wastewater Collection System Extension Project-Phase I will make service available to approximately 200 residential customers in the Mingo County Community of Ragland and areas along WV County Highway 65/18.</p> <p>The proposed project consists of the construction of approximately 22,300 feet of 8-inch and smaller gravity pipe, 800 feet of 6-inch and smaller diameter forcemain, 5,900 feet of 4-inch service lateral, seven new pumping stations, 180 manholes, cleanouts, and other related items. Treatment will be provided by the Town's existing Wastewater Treatment Facility.</p>	

CLEAN WATER STATE REVOLVING FUND 2021 PRIORITY LIST

Rank / Points Project

SRF Loan Amount

Total Costs

Rank	Greater Harrison Co. PSD	<input type="text" value="\$8,424,500"/>	<input type="text" value="\$9,424,500"/>
<input type="text" value="11"/>			
SRF #C:	Needs Categories:	Problem	
<input type="text" value="C-544296"/>	<input type="text" value="CWT-New Collector Sewers
CWT-New Interceptors"/>	<input type="text" value="The community of Enterprise is lacking a public sewage collection system. Residences rely on septic systems or directly discharge into the local streams and tributaries of the West Fork River. Samples taken by the DEP from the river tested positive for fecal matter."/>	
County:		Solution	
<input type="text" value="Harrison"/>		<input type="text" value="The Greater Harrison County Public Service District is proposing to construct a standard gravity sewer collection system to serve the area of Enterprise. This project would provide sewer service to approximately 383 customers. The collected sewage will be pumped to the Town of Worthington's Wastewater Treatment Plant for treatment."/>	
NPDES #WV:			
<input type="text" value="0084301"/>			
Binding Date:			
<input type="text" value="8/31/2020"/>			
Points			
<input type="text" value="145.00"/>			

Rank	Hinton, City of	<input type="text" value="\$500,000"/>	<input type="text" value="\$3,550,000"/>
<input type="text" value="12"/>			
SRF #C:	Needs Categories:	Problem	
<input type="text" value="C-544550"/>	<input type="text" value="CWT-CSO Correction"/>	<input type="text" value="Reduction in the frequency and duration of the discharge from permitted discharge CSO 007."/>	
County:		Solution	
<input type="text" value="Summers"/>		<input type="text" value="Replacement of existing outdated wastewater collection system and pumping station."/>	
NPDES #WV:			
<input type="text" value="0024732"/>			
Binding Date:			
<input type="text" value="6/30/2021"/>			
Points			
<input type="text" value="145.00"/>			

CLEAN WATER STATE REVOLVING FUND 2021 PRIORITY LIST

Rank / Points Project	SRF Loan Amount	Total Costs
Rank 13 Mason County PSD SRF #C: C-544616 County: Mason NPDES #WV: 0086886 Binding Date: 6/30/2021 Points 145.00	\$12,900,000	\$14,300,000
Needs Categories: CWT-Secondary Treatment CWT-New Collector Sewers CWT-New Interceptors		Problem No public sanitary sewer service is currently available in the communities of Apple Grove, Mercers Bottom, and Ashton. Residents in the area rely upon individual septic systems for wastewater treatment. The Mason County Sanitarian has reported that these septic systems and home aeration units have issues that pose a risk to the local water quality. Solution New WWTP in Apple Grove to serve approx. 281 residential, commercial, industrial, and public authority customers in Apple Grove, Mercers Bottom, and Ashton, as well as WWCTS to convey local wastewater flows thereto. This will allow for elimination of Ashton Elementary School and Rivers Edge Campground Inc. WWTPs, HAU's, septic tanks and modification of APG Polytech, LLC WWTP to no longer treat sanitary wastewater. Also, collection system will consist of approx. 43,030 LF of 8" gravity sewer line, 7,100 LF of 4" service lateral pipe, 110 MH's, 22,550 LF off our 4" FM, 1,420 LF of 1.5" FM, 1 GPS, 10 PS's, and all necessary appurtenances. WWTP treating up to 75,000 GPD of wastewater, with potential increase capacity in the event of future growth.
Rank 14 Monongah, Town of SRF #C: C-544565 County: Marion NPDES #WV: 0027324 Binding Date: 6/30/2021 Points 145.00	\$4,100,000	\$4,125,000
Needs Categories: CWT-CSO Correction		Problem Portions of the Town of Monongah's existing sanitary sewer collection system is in poor condition and allows inflow and infiltration into the collection system. The increase in I&I causes the Town's CSO's to overflow on a regular basis. Solution An I&I study has been completed to identify locations and the severity of the issues. Measures are being designed to repair the issues in the sanitary sewer collection system and eliminate the frequency of CSO overflows. A portion of the gravity sewer system will be rehabilitated to remove I&I and allow for more efficient operation of the system. Also a new lift station will be placed in order to eliminate a section of line running through Booth's Creek that is the largest contributor of I&I into the system.

CLEAN WATER STATE REVOLVING FUND 2021 PRIORITY LIST

Rank / Points	Project	SRF Loan Amount	Total Costs
15	<p>Page Kincaid PSD</p> <p>SRF #C: C-544508-02</p> <p>County: Fayette</p> <p>NPDES #WV: 0084425</p> <p>Binding Date: 6/30/2021</p> <p>Points: 145.00</p> <p>Needs Categories: NPS-Individual/Decentralized Systems</p>	\$3,000,000	\$3,000,000
<p>Problem</p> <p>The community of Robson within the PSD's service area is not currently served by a centralized wastewater collection and treatment system and is believed to be served by individual septic systems. The Fayette County Health Department (Health Department) has indicated that older homes in this area likely do not have septic systems. The Health Department has also observed pipes discharging directly into adjacent waterways during routine evaluations of septic systems. This presents an ongoing risk to the local environment and public health.</p>		<p>Solution</p> <p>Construct 20,000 GPD WWTP in Robson, with upgrade capability to 40,000 GPD, accommodating future expansions. Also, construct WWCTS along WV Rt. 61 and Loop Creek through Robson area. Collection system will consist of approx. 9,200 LF of 4" gravity sewer line, 5,100 LF of 3" gravity sewer line, 2,500 LF of 2" FM, 15 MH, and all necessary appurtenances. 52 customers, will be connected to gravity collection system via proprietary STEP/STEG system (2 septic tank effluent pumping units, 50 septic tank effluent gravity units, and all necessary appurtenances) from Orenco. System allows customers to pump gray water from existing septic tanks directly into gravity sewer, without decommissioning systems.</p>	
16	<p>Preston County PSD</p> <p>SRF #C: C-544538</p> <p>County: Preston</p> <p>NPDES #WV: 0025101</p> <p>Binding Date: 6/30/2021</p> <p>Points: 145.00</p> <p>Needs Categories: CWT-Advanced Treatment CWT-Sewer System Rehabilitation</p>	\$4,696,000	\$5,761,000
<p>Problem</p> <p>The Bruceton Mills WWTP is operating on out of date and failing equipment which is affecting the quality of the WWTP's effluent.</p> <p>The PCPSD is also under Consent Order No. 8269 which stipulates the closure and remediation of the abandoned Valley Point wastewater lagoon.</p>		<p>Solution</p> <p>The project includes the construction of a new 100,000 gpd ICEAS SBR WWTP which includes new, state of the art equipment to include metals removal process to ensure compliance with NPDES effluent discharge requirements. Also included, the closure of the Valley Point wastewater lagoon, in accordance with Consent Order No. 8269.</p>	

CLEAN WATER STATE REVOLVING FUND 2021 PRIORITY LIST

Rank / Points	Project	SRF Loan Amount	Total Costs
17	Richwood, City of	\$6,370,000	\$7,450,000
	<p>SRF #C: C-544579</p> <p>County: Nicholas</p> <p>NPDES #WV: 0022004</p> <p>Binding Date: 6/30/2021</p>	<p>Needs Categories: CWT-Secondary Treatment CWT-Sewer System Rehabilitation CWT-CSO Correction</p>	<p>Problem The City of Richwood's wastewater collection and treatment system were terribly damaged by the June 2016 flood. Sections of the wastewater collection mains were damaged beyond repair and some were completely washed away. Due to the damaged collection mains, extremely high levels of I&I are entering into the wastewater system. These high levels of I&I are causing the wastewater collection system to continuously overflow from the CSO(s) and causes the existing plant to comply with the existing NPDES permit limits.</p> <p>Solution The City of Richwood is proposing to rehabilitate sections of the collection system and make necessary repairs at the wastewater treatment plant including a new belt press, belt press mitigation and a new headworks facility.</p>
Points	145.00		
18	West Fork Onsite Community Cooperative, Inc.	\$1,683,380	\$4,018,380
	<p>SRF #C: C-544605</p> <p>County: Harrison</p> <p>NPDES #WV: 0000000</p> <p>Binding Date: 3/31/2021</p>	<p>Needs Categories: NPS-Individual/Decentralized Systems</p>	<p>Problem Primary problems to be rectified by the proposed project are those acute health and environmental consequences of the discharge of raw or partially treated sewage in the local waterways.</p> <p>Solution Provide sanitary sewer service to 135 residential and 2 commercial users in and around Arlington. Utilize STEP systems to collect and transport primarily treated "gray" water to on-site treatment facility, treating sewage and meeting permit limits. Individual septic tanks will be owned and maintained by the Cooperative, being cleaned out periodically and sludge transported to larger POTW for further treatment and disposal. Also, two phases proposed in conjunction with USACE grant money, available in two funding cycles. Phase I (this project) will design and construct majority of treatment plant and provide service to Arlington. Phase II finishes build out of treatment plant, providing service to remaining communities.</p>
Points	145.00		

CLEAN WATER STATE REVOLVING FUND 2021 PRIORITY LIST

Rank / Points	Project	SRF Loan Amount	Total Costs
19	<u>White Sulphur Springs, City of</u>	\$3,083,000	\$3,083,000
	<p>SRF #C: C-544606</p> <p>County: Greenbrier</p> <p>NPDES #WV: 0084000</p> <p>Binding Date: 6/30/2021</p> <p>Points 145.00</p>	<p>Needs Categories: CWT-New Collectors Sewers CWT-New Interceptors</p>	<p>Problem The objective of the proposed project is to construct the necessary facilities to provide wastewater collection services for approximately 95 residence in the community of Caldwell.</p> <p>Solution The proposed project would provide public wastewater collection and treatment services and eliminate current on-site treatment at residences which allowed untreated and partially treated wastewater to discharge to the Greenbrier River.</p>
20	<u>Pocahontas County PSD</u>	\$3,040,000	\$3,640,000
	<p>SRF #C: C-544604</p> <p>County: Pocahontas</p> <p>NPDES #WV: 0082937</p> <p>Binding Date: 9/30/2020</p> <p>Points 140.00</p>	<p>Needs Categories: CWT-New Collector Sewers CWT-New Interceptors</p>	<p>Problem Constructing a public wastewater collection system to serve the customers in Frank and Bartow will decrease the amount of raw sewage and inadequately treated wastewater that is currently being discharged into the local waterways and expand the customer base, thereby reducing the per customer operating cost and cushioning any future expenses that the system might incur.</p> <p>Solution The project will provide public wastewater collection and treatment service to approximately 104 customers in the communities of Frank and Bartow as well as improving aesthetics and water quality in the area. Treatment provided by the community of Durbin.</p>

CLEAN WATER STATE REVOLVING FUND 2021 PRIORITY LIST

Rank / Points	Project	SRF Loan Amount	Total Costs
21	Rowlesburg, Town of	\$2,500,000	\$7,000,000
	<p>SRF #C: C-544644</p> <p>County: Preston</p> <p>NPDES #WV: 0027481</p> <p>Binding Date: 6/30/2021</p> <p>Points 140.00</p>	<p>Needs Categories: CWT-Secondary Treatment CWT-Infiltration/Inflow CWT-Sewer System Rehabilitation</p>	<p>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 has a lift station that is in desperate need of repairs and in many cases is not able to function probably. The Town is proposing to separate locations where storm flow is combined with sanitary sewer flow.</p> <p>Solution The Town of Rowlesburg proposes to install a new chlorination/dechlorination station, install a WWTP liner for both ponds, WWTP sludge removal for both ponds, install a WWTP aeration system, replace three (3) pump stations, and replace/separate approximately 25,000 LF of sanitary and storm sewer lines.</p>
22	Cedar Grove, Town of	\$1,625,000	\$1,625,000
	<p>SRF #C: C-544596</p> <p>County: Kanawha</p> <p>NPDES #WV: 0035637</p> <p>Binding Date: 12/31/2020</p> <p>Points 135.00</p>	<p>Needs Categories: CWT-CSO Correction CWT-Sewer System Rehabilitation</p>	<p>Problem Excessive I/I due to majority of annual costs to operate system. Treatment costs not sustainable, due to ability of Town's customers to pay their monthly sewer bills. Town has not updated its CSO LTCP, which is required by their WV NPDES permit. Existing pump stations are experiencing operational failures that need corrected soon, and equipment has exceeded its useful life. Several instances of mechanical and electrical failure have resulted in direct discharges of untreated sewage into the Kanawha River.</p> <p>Solution The system will need to undergo smoke testing as an initial phase of the project to locate and identify the sources of the I/I. A Phase II project will involve repairing the most significant deficiencies within the collection system. Also, the pump stations will undergo major upgrades to ensure additional failure (and their attendant raw sewage overflows) are not experienced with regularity in the future. An asset management plan and long term control plan will also be completed.</p>

CLEAN WATER STATE REVOLVING FUND 2021 PRIORITY LIST

Rank / Points	Project	SRF Loan Amount	Total Costs
23	Mineral Wells PSD	\$4,470,500	\$4,970,500
SRF #C: C-544639	Needs Categories: CWT-Sewer System Rehabilitation	Problem Issues of surcharging of sewer upstream from major lift stations, including a sanitary sewer overflow (SSO) located upstream of the Jackson Run Lift Station. Issues of flow reaching the station and insufficient pumping capacity was also noted. Stress on the wastewater system associated with surcharging is a problem to be solved.	
County: Wood		Solution Wastewater System Improvements project scope – 1) Extending the FM associated with the Stoops Rd LS from current discharge point on Blair Ave to direct connection with Jackson Run LS wet well. 2) Extending another 12" gravity sewer across Tygart Creek to the Rte. 21 LS. 3) Making improvements to various individual GPS's. 4) Converting Bonnivale LS to larger submersible LS. 5) Converting Rte. 21 LS to larger submersible LS. 6) Extending new FM from Rte. 21 LS to WWTP. 7) Converting Jackson Run LS to larger submersible LS. 8) Install second headworks at WWTP to handle flows from rerouted Jackson Run LS.	
NPDES #WV: 0081141			
Binding Date: 6/30/2021			
Points 135.00			
24	Nitro Regional Wastewater Utility	\$6,750,000	\$6,750,000
SRF #C: 544652	Needs Categories: CWT-Sewer System Rehabilitation CWT-CSO Correction	Problem Major 42" interceptor is in poor condition and needs relined. PS's No. 2 & 4 are antiquated and replacement parts are not easily found. The gravity sewer line between Hickory & Gum Streets is in poor condition and needs relined. 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 is undersized. An area of the river bank on the Pocatocalico River near PS No. 23 is failing, causing damage to the existing FM resulting in frequent repairs. The gravity sewer line at Martin's Court is in poor condition and needs replaced.	
County: Kanawha/Putnam		Solution The project proposes to reline 1,100 LF of the 42" interceptor and 700 LF of 12" gravity sewer line between Hickory and Gum Streets, 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, replace 1,000 LF of gravity sewer line at Martin's Court, and relocate 1,100 LF of 3" force main from Pump Station No. 23.	
NPDES #WV: 0023299			
Binding Date: 6/30/2021			
Points 135.00			

CLEAN WATER STATE REVOLVING FUND 2021 PRIORITY LIST

Rank / Points	Project	SRF Loan Amount	Total Costs
25	Sistersville, City of	\$15,000,000	\$3,600,000
	<p>SRF #C: 544653</p> <p>County: Tyler</p> <p>NPDES #WV: 0021814</p> <p>Binding Date: 6/30/2021</p> <p>Points 135.00</p>	<p>Needs Categories: CWT-Infiltration/Inflow CWT-Sewer System Rehabilitation</p>	<p>Problem WWTP components are reaching end of useful lives or inoperable. City plans to repair and improve WWTP operations and equip., extending service life 15-20 yrs. Plant is unable to handle excessive wet weather flows from Coll. Syst. I/I and system's VCP gravity line is suspected of contributing to excessive wet weather flows, attributed to clean water connections. Aged brick MH's, poorly fitting MH covers, unsecured MH rings, and holes and cracks in PS structures provide path for I/I to enter system. Two City's wet well/dry well PS's suffer from age and outdated design, resulting in difficult maintenance and station failure during flood events.</p> <p>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 (SSES) will be completed to determine the scope of work for Phase 2.</p>
26	Pea Ridge PSD (B Plant)	\$2,230,000	\$2,230,000
	<p>SRF #C: C-544576</p> <p>County: Cabell</p> <p>NPDES #WV: 0027413</p> <p>Binding Date: 6/30/2021</p> <p>Points 130.00</p>	<p>Needs Categories: CWT-New Interceptors</p>	<p>Problem The majority of equipment at the PRPSD's B WWTP is past the end of its useful life and is in need of replacement. The headwall on the effluent line which discharges to the Guyandotte River has also been washed out by severe flooding and is in need of major repairs in the form of an expensive retaining wall. The electrical motor control center is dilapidated and would require a major overhaul in order to be brought into conformity with modern standards.</p> <p>Solution This project proposes to decommission the PRPSD's existing B WWTP and convey all flows from the site there of to PRPSD's A WWTP for treatment via forcemain. The A WWTP will have adequate capacity to receive these flows as a result of the on going R2P2 project being undertaken by the district.</p>

CLEAN WATER STATE REVOLVING FUND 2021 PRIORITY LIST

Rank / Points	Project	SRF Loan Amount	Total Costs
27	Ansted, Town of	\$3,635,000	\$3,635,000
Points	125.00		
SRF #C:	C-544584	Needs Categories:	CWT-Secondary Treatment CWT-Sewer System Rehabilitation
County:	Fayette		
NPDES #WV:	0020672		
Binding Date:	6/30/2021		
		Problem	Gravity sewers currently experiencing excessive I/I that accounts for up to 75% of treated flows. Pumping equipment needs replaced due to aging and failures. The treatment plant is in need of maintenance upgrades and equipment replacement, it has exceeded its useful life, as well as being undersized for current flow rates.
		Solution	Maintenance equipment will be purchased for the treatment plant, such as a jetter, a portable diesel pump, and a new dump truck. Six of the existing pumping stations will be upgraded, and two will be replaced entirely. Design for an upgrade to the treatment plant will also be done as part of the project. Smoke testing will be done to identify sources of excess I/I in the system.
28	Bluefield Sanitary Board (Midway)	\$3,220,000	\$4,220,000
Points	120.00		
SRF #C:	C-544493	Needs Categories:	CWT-Sewer System Rehabilitation
County:	Mercer		
NPDES #WV:	0023141		
Binding Date:	6/30/2021		
		Problem	Area 1 (Midway)-Reduce I&I, reducing inflows into Midway PS, to comply with WV DEP administrative orders for development and implement measures to reduce number of upsets and spills. Studies show major I&I issues contributing to station back up. Replacement of Midway System will eliminate majority of these problems. Area 2 (Thompson PS Area)-Eliminate FM (end of useful life) and 2 existing LS's. FM could be replaced with new gravity lines (existing topo shows feasible). Installation of gravity lines eliminating 2 FM LS'S and upgrade existing main PS. 21 potential customers along Nichols Road.
		Solution	Replace sewer system in Midway area, proposing replacement of 13,100 LF of 8" Gravity Sewer, 2,500 LF of 6" Sewer Laterals, 80 Manholes, 162 Lateral Connections, Connection to existing FM, and other related work. Also, perform work in Thompson PS Area, proposing replacement of 4,300 LF 10" Gravity Sewer, 2,600 LF 8" Gravity Sewer, 32 Manholes, Abandonment of 2 PS's, PS Upgrade, and other related appurtenances.

CLEAN WATER STATE REVOLVING FUND 2021 PRIORITY LIST

Rank / Points Project	SRF Loan Amount	Total Costs
<p>Rank 29</p> <p>Brooke County PSD</p> <p>SRF #C: C-544006-04</p> <p>County: Brooke</p> <p>NPDES #WV: 0084182</p> <p>Binding Date: 6/30/2021</p> <p>Points 120.00</p>	\$4,000,000	\$5,000,000
<p>Needs Categories: CWT-New Collector Sewers CWT-New Interceptors</p>	<p>Problem No public sewer service available in the areas proposed to be served, with exception of package plant serving a small mobile home park. Residents currently utilize individual septic tanks and drain fields and in some cases discharge into streams or drainage areas.</p> <p>Cross Creek, Bosely Run, Harmon Creek, and Allegheny Steel Run, located in or near the Project area, will benefit from the removal of raw, untreated sewage.</p> <p>Solution This Phase IIC project proposes to serve 168 customers along St. John's Road including the side roads from the end of the Phase I project to the intersection of Eldersville Road. The proposed customers currently do not have a public sewer collection and treatment system except for a small mobile home park served by a failing package plant.</p> <p>Phase IIC will tie into the Phase IIA collection system in two different locations and extend service further into Brooke County. Three pump stations will be constructed to serve this area.</p>	
<p>Rank 30</p> <p>Buffalo Creek PSD</p> <p>SRF #C: C-544555</p> <p>County: Logan</p> <p>NPDES #WV: 0038351</p> <p>Binding Date: 6/30/2021</p> <p>Points 120.00</p>	\$13,555,500	\$13,555,500
<p>Needs Categories: CWT-Secondary Treatment CWT-New Collector Sewers CWT-New Interceptors</p>	<p>Problem Increasing the available capacity of the wastewater treatment plant 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.</p> <p>Solution Upgrade of the existing wastewater treatment plant and extension of a centralized wastewater collection system in the areas of Greenville and Landville.</p>	

CLEAN WATER STATE REVOLVING FUND 2021 PRIORITY LIST

Rank / Points Project	SRF Loan Amount	Total Costs
<p>Rank 31</p> <p>Gilbert, Town of</p> <p>SRF #C: C-544502</p> <p>County: Mingo</p> <p>NPDES #WV: 0103748</p> <p>Binding Date: 6/30/2021</p> <p>Points 120.00</p>	\$4,428,000	\$4,428,000
<p>Needs Categories: CWT-New Collector Sewers CWT-New Interceptors</p>	<p>Problem Failing on-site wastewater treatment systems.</p> <p>Solution Will provide service to approximately 83 residential and commercial customers (220 persons) in the Mingo County community of Sprattsville and the area along U.S. 52 between the Town of Gilbert and the community of Justice.</p>	
<p>Rank 32</p> <p>Logan County PSD</p> <p>SRF #C: C-544460-02</p> <p>County: Logan</p> <p>NPDES #WV: 0105171</p> <p>Binding Date: 6/30/2021</p> <p>Points 120.00</p>	\$5,325,000	\$5,625,000
<p>Needs Categories: CWT-New Collector Sewers CWT-New Interceptors</p>	<p>Problem Virtually all of the 223 potential customers in the project area do not have access to a public wastewater system. According to the Logan County Health Department, approximately 10 percent of the 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.</p> <p>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.</p>	

CLEAN WATER STATE REVOLVING FUND 2021 PRIORITY LIST

Rank / Points	Project	SRF Loan Amount	Total Costs
33	Logan County PSD	\$4,580,000	\$4,780,000
Points	120.00		
SRF #C:	C-544460-03	Needs Categories:	CWT-New Collector Sewers CWT-New Interceptors
County:	Logan		
NPDES #WV:	0105171		
Binding Date:	6/30/2021		
		Problem	Failing on-site wastewater treatment systems.
		Solution	The proposed Logan County Public Service District's Phase III-B3 Wastewater Extension Project will provide service to approximately 115 potential customers (290 persons) in the Logan County communities of Lower Island Creek, Monitor, Monaville, and surrounding areas.
34	Logan County PSD	\$4,600,000	\$4,900,000
Points	120.00		
SRF #C:	C-544619	Needs Categories:	CWT-New Collector Sewers CWT-New Interceptors
County:	Logan		
NPDES #WV:	0105171		
Binding Date:	6/30/2021		
		Problem	Failing on-site wastewater treatment systems.
		Solution	Will provide sewer service to the areas of Wilkinson, Monaville, and Rossmore on Rt. 44 in Logan County.

CLEAN WATER STATE REVOLVING FUND 2021 PRIORITY LIST

Rank / Points	Project	SRF Loan Amount	Total Costs
35	Mingo County PSD	\$1,000,000	\$3,595,000
Points	120.00		
SRF #C:	C-544312	Needs Categories:	
County:	Mingo	CWT-Sewer System Rehabilitation CWT-New Collector Sewers CWT-New Interceptors	
NPDES #WV:	0037699		
Binding Date:	6/30/2021		
		Problem	The PSD's existing sanitary sewer system experiences significant I/I which obliges them to excessive costs in order to purchase wastewater treatment services from Williamson. No major upgrades to the Chattaroy collection system since installation. Individual septic systems in the area are unreliable and several residences lack sewer systems of any kind. Also, the Mingo County Solid Waste Authority hauls its leachate overland to Williamson's WWTP, presenting risk that leachate will accidentally be released into the environment in transit.
		Solution	Extend service along US Rte 52 through eastern Chattaroy to Landfill. This extension will serve approx. 61 customers, including the Landfill. This will entail installation of approx. 8,700 LF of 8" PVC gravity sewer line, 41 manholes, 200 LF of 1-1/4" PVC FM, 1 grinder PS, and all necessary appurtenances and site restoration. Also, proposing to rehabilitate portions of existing Chattaroy collection system. This involves removal and replacement of approx. 3,200 LF of 8" PVC gravity sewer line, 1,700 LF of 4" PVC gravity sewer line, various upgrades to Chattaroy PS and all necessary appurtenances and site restoration.
36	Mount Zion PSD	\$2,310,000	\$2,310,000
Points	120.00		
SRF #C:	C-544521	Needs Categories:	
County:	Calhoun	CWT-Secondary Treatment CWT-Sewer System Rehabilitation	
NPDES #WV:	0101702		
Binding Date:	6/30/2021		
		Problem	The steel treatment plant tankage is severely corroded and the blowers, pumps, control's 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 and the PSD has been ordered by the WVDEP (Order No. 8770) to remedy the situation.
		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.

CLEAN WATER STATE REVOLVING FUND 2021 PRIORITY LIST

Rank / Points	Project	SRF Loan Amount	Total Costs
37	North Beckley PSD	\$12,732,000	\$13,232,000
	<p>SRF #C: C-544617</p> <p>County: Raleigh</p> <p>NPDES #WV: 0027740</p> <p>Binding Date: 3/31/2021</p>	<p>Needs Categories: CWT-Secondary Treatment CWT-Infiltration/Inflow</p>	<p>Problem 1) Reduce inflow and infiltration and sanitary sewer overflows in the wastewater collection system and overflows at the WWTP. 2) Replace existing WWTP equipment and metal pretreatment building that are at the end of their useful life. 3) Increase sludge dewatering capabilities. 4) Some of the plant facilities are single trains that can not be taken out of service for maintenance and repairs unless the flow is bypassed.</p> <p>Solution 1) WWTCs I&I study to identify problem areas & categorize them into which problem areas can be corrected by PSD personnel & equipment, and which problem areas need financial assistance for outside contract work. 2) Upgrade existing Sprague LS & FM, sewer lines, and MH to reduce sanitary sewer overflows in WWTCs, especially in Whitestick Creek watershed area where spills mostly occur. 3) Upgrade existing WWTP increasing capacity for future demands, provide additional parallel treatment units for flexibility during maintenance, and increase capacity to treat peak flows during high I&I, associated with heavy rain & snow melting. 4) Replace worn out plant equipment, metal pretreatment building, and other related work.</p>
120.00			
38	North Beckley PSD (Piney View)	\$4,119,500	\$5,619,500
	<p>SRF #C: C-544522</p> <p>County: Raleigh</p> <p>NPDES #WV: 0027740</p> <p>Binding Date: 6/30/2021</p>	<p>Needs Categories: CWT-New Collector Sewers CWT-New Interceptors</p>	<p>Problem Eliminating discharge of domestic waste and wash water discharge into the small streams and drains in the Piney View area of Raleigh County that will eventually enter Piney Creek and the New River.</p> <p>Solution Installation of a gravity collection to collect and transport the flow from approximately 142 residences and convey to a lift station that will pump the sewage into the existing collection system plant for treatment prior to discharge.</p>
120.00			

CLEAN WATER STATE REVOLVING FUND 2021 PRIORITY LIST

Rank / Points	Project	SRF Loan Amount	Total Costs
39	<p>South Charleston Sanitary Board</p> <p>SRF #C: C-544646 County: Kanawha NPDES #WV: 0023116 Binding Date: 6/30/2021</p> <p>Needs Categories: CWT-Sewer System Rehabilitation</p> <p>Points: 120.00</p>	\$5,000,000	\$5,000,000
<p>Problem</p> <p>South Charleston is addressing inflow and infiltration (I&I) to reduce the number of overflows throughout the collection system. South Charleston has a permit modification application to redesignate parts of the system to a combined system. The work being proposed is for the Green Valley Sewer Shed.</p> <p>Solution</p> <p>The work will include a study and report phase on their current system, I&I reduction, replacement of existing sewer line, and possible issues in transportation capacity.</p>			
40	<p>Walton PSD</p> <p>SRF #C: C-544166 County: Roane NPDES #WV: 0000000 Binding Date: 6/30/2021</p> <p>Needs Categories: NPS-Individual/Decentralized Systems</p> <p>Points: 120.00</p>	\$6,147,660	\$6,147,660
<p>Problem</p> <p>The discharge of raw sewage into roadside ditches, area creeks and the Pocatalico River has created the potential for health hazard conditions within the PSD's service area, and 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 WV Department of Environmental Protection as a degraded waterway on their 303d list from River Mile 45 to its headwaters due to unidentified biological (sewage) contamination.</p> <p>Solution</p> <p>This project will only address Walton as a phase 1; Gandeeville will be addressed as a separate phase at a later time. For Walton, a conventional collection and treatment system will be installed. This will include 18,500 linear feet of 6 and 8 inch gravity sewers, 5,000 linear feet of 2 and 4 inch force mains, 4 duplex pumping stations, 5 grinder stations, a subsurface effluent disposal system, and a 30,000 gallon per day extended aeration (MBBR) treatment plant.</p>			

CLEAN WATER STATE REVOLVING FUND 2021 PRIORITY LIST

Rank / Points	Project	SRF Loan Amount	Total Costs
41	Big Bend PSD	\$500,000	\$1,192,500
Points	115.00		
SRF #C:	C-544627	Needs Categories:	CWT-Secondary Treatment
County:	Summers		
NPDES #WV:	0102776		
Binding Date:	6/30/2021		
		Problem	The plants have been poorly maintained and operated and the Environmental Enforcement section of the WVDEP has been seeking a consent order to force corrective action.
		Solution	Proposed project will replace existing LS and WWTP at Pence Springs, downsizing to 12,500 GPD. Operator requested disinfection be switched from chlorine tablets to UV. The existing steel units haven't lasted as long as expected. In addition, the scope also includes making some improvements to plant at Pine Hill, including, refreshing the cathodic protection, replacing existing galvanized grating with aluminum, replacing failing blower, and cleaning and painting exposed portions of plant.
42	Boone Raleigh PSD	\$5,964,400	\$7,646,400
Points	115.00		
SRF #C:	C-544628	Needs Categories:	CWT-Secondary Treatment CWT-Sewer System Rehabilitation
County:	Boone		
NPDES #WV:	0086525		
Binding Date:	6/30/2021		
		Problem	Approximately 75% of the flows treated are extraneous water (I/I). The pumps, controls and emergency generators are 27 years old and beginning to fail; failures have resulted in SSO's. The WWTP has experienced numerous equipment failures, and did not have an operator for several years. The equipment failures have made satisfactory operation impossible, and has resulted in the DEP issuing numerous NOV's and Order 8835.
		Solution	Refurbish and upgrade existing wastewater treatment plant and refurbish and upgrade 9 duplex submersible pumping stations and 1 grinder pumping station. Also, purchase a new trailer mounted sewer vacuum and a new dump truck (for sludge disposal). In addition, the gravity sewage collection system would be smoke tested and inspected.

CLEAN WATER STATE REVOLVING FUND 2021 PRIORITY LIST

Rank / Points	Project	SRF Loan Amount	Total Costs
Rank 43 Points 115.00	Fort Gay, Town of SRF #C: C-544607 County: Wayne NPDES #WV: 0085359 Binding Date: 12/31/2020 Needs Categories: CWT-Secondary Treatment CWT-Sewer System Rehabilitation	\$2,500,000	\$3,400,000
		Problem Collection System-Replacement of existing gravity line to reduce I/I and upgrade of existing PS's. Not all PS's are completely operational, some duplex PS's only have one pump and Cass Street A was down for several months. Wastewater Treatment Facility-Although aerated lagoon requires 6 aerators to provide treatment, facility only has 3 operational aerators, and have made several repairs to existing aerators. Existing baffle dividers have been severely damaged and have been removed, this reduces contact time in lagoon. Existing force main enters lagoon in the bottom and does not provide screening.	
		Solution Project will consist of mapping collection system, rehabilitation of existing manholes, replacement of approximately 2,500 LF of 8" gravity sewer, various upgrades and rehab to 9 existing wastewater PS's and 3 existing wastewater grinder PS's. Also included are improvements to WWTP, such as replacement of existing flow meter, flow meter calibration, replacement of 6 existing surface aerators in the lagoon, cleaning the lagoon, installation of 2 new floating baffle dividers, installation of a new T-skimmer, security fence repair, installation of dichlorination drip feed, installation of new headworks and cleaning existing chlorine contact tank.	
Rank 44 Points 115.00	Huttonsville PSD SRF #C: C-544569 County: Randolph NPDES #WV: 0080535 Binding Date: 3/31/2021 Needs Categories: CWT-Advanced Treatment	\$2,940,000	\$4,000,000
		Problem Two primary goals are: 1) Provide the existing treatment plant capability to treat ammonia-nitrogen as required by the NPDES Permit. The plant will also undergo some rehabilitation of the piping system and increase the wet weather flow capacity. 2) Install flow monitoring equipment that will gather data of wastewater pumped, wastewater spills (if any), and rainfall in the communities of East Daily, Daily and Valley Bend that will generate accurate information to design a system that will eliminate all sewer overflows. The project to implement the elimination of overflows will be undertaken at a future date.	
		Solution The piping rehabilitation at the treatment plant will involve new Influent Flow Splitter structure, replacement of all valves controlling flow among the four cells of the Aerated Lagoon treatment plant, and new Effluent Flow Channel. The project will also retro-fit 130 units of Bio-Domes in each of the last 2 cells complete will blowers and air piping to facilitate the treatment for Ammonia-Nitrogen. New Baffles (to reduce short circuiting of wastewater flow) in the aeration pond and floating covers (to reduce algae growth) will also be installed.	

CLEAN WATER STATE REVOLVING FUND 2021 PRIORITY LIST

Rank / Points	Project	SRF Loan Amount	Total Costs
45	Southern Jackson County PSD	\$8,204,400	\$9,704,400
Points	110.00		
SRF #C:	C-544246	Needs Categories:	CWT-Advanced Treatment
County:	Jackson		
NPDES #WV:	0084468		
Binding Date:	12/31/2020		
		Problem	Due to the imposition of more stringent discharge limitations for the So. Jackson Co. PSD VVWTP, the facility has been unable to meet the discharge parameters of their NPDES permit specifically, for ammonia nitrogen, biochemical oxygen demand, and total suspended solids. Effluent limitations were reduced by the WVDEP due to updated discharge limitation allocations, that this type of treatment facility was not designed to attain. The PSD is currently negotiating a draft consent order with the WVDEP stating the PSD must take all measures needed to initiate compliance with their discharge permit parameters.
		Solution	Propose upgrade to existing treatment plant that will feature higher efficiency treatment equipment allowing plant to meet discharge parameters of its NPDES permit. Upgrade would consist of screening and grit removal equipment, headwork's shelter, lagoon aeration system and covers, a polishing reactor with attached growth media, tertiary membrane ultrafiltration system, membrane building, ultraviolet disinfection unit, and emergency generator. The central feature of plant upgrade is that one of two existing treatment lagoons will house higher efficiency treatment equipment while the other lagoon can be used for flow equalization or storage.
46	Clay, Town of	\$2,046,000	\$5,746,000
Points	100.00		
SRF #C:	C-544614	Needs Categories:	CWT-Secondary Treatment CWT-Sewer System Rehabilitation
County:	Clay		
NPDES #WV:	0022055		
Binding Date:	3/31/2021		
		Problem	As much as 90% of the Town's influent comes from I/I. The parts which are experiencing I/I however 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.

CLEAN WATER STATE REVOLVING FUND 2021 PRIORITY LIST

Rank / Points Project	SRF Loan Amount	Total Costs
<p>Rank 47</p> <p>Prichard PSD</p> <p>SRF #C: C-544298</p> <p>County: Wayne</p> <p>NPDES #WV: 0105732</p> <p>Binding Date: 6/30/2021</p> <p>Points 100.00</p>	\$2,361,000	\$2,361,000
<p>Needs Categories: CWT-New Collector Sewers CWT-New Interceptors</p>	<p>Problem Providing service to residence with failing or non-existent on-site wastewater treatment systems.</p> <p>Solution Construction of a centralized wastewater collection system to replace the failing on-site wastewater treatment systems in the area of Centerville.</p>	
<p>Rank 48</p> <p>Beverly, Town of</p> <p>SRF #C: C-544336-02</p> <p>County: Randolph</p> <p>NPDES #WV: 0045136</p> <p>Binding Date: 6/30/2021</p> <p>Points 95.00</p>	\$6,500,000	\$10,500,000
<p>Needs Categories: CWT-Secondary Treatment CWT-Sewer System Rehabilitation</p>	<p>Problem The proposed project will alleviate flow restrictions within the system, modify outdated components at a number of its pumping stations, and upgrade their wastewater treatment facility which is frequently pushed well beyond its permitted capacity.</p> <p>Solution The proposed project consists of the construction of approximately 4,250 feet of 12-inch and smaller diameter forcemain reconfiguration, replacement of approximately 50 manholes, and upgrades to five pumping stations to alleviate existing collection system capacity constraints. The project also proposes a 1.0 MGD wastewater treatment facility to accommodate continued development over the years since the original collection and treatment systems initial construction. This will alleviate the current issue of the treatment facility frequently surpassing their permitted capacity.</p>	

CLEAN WATER STATE REVOLVING FUND 2021 PRIORITY LIST

Rank / Points	Project	SRF Loan Amount	Total Costs
49	Bluefield Sanitary Board (West Side)	\$3,090,212	\$14,959,231
SRF #C: C-544462	Needs Categories: CWT-Secondary Treatment CWT-Infiltration/Inflow CWT-Sewer System Rehabilitation	Problem Generally the facilities are aged and experiencing maintenance problems. Recent failures include standby generator (Westside WWTP), pumps (Deerfield PS, Bluestone Holding Facility & Westside WWTP), and Traveling Bridge Filters (Westside WWTP). Additional long standing issues include ineffective grit removal system, substantially worn and poor performing screening (Westside WWTP), and inability to remove solids from the process (Westside WWTP). Other items being addressed include excessive I/I causing collection system surcharging (College Avenue) and lack of standby power (Deerfield Pump Station).	
County: Mercer		Solution Specific items included to correct deficiencies: Westside WWTP-2 new standby generators, new screening & grit removal system, replacement and recoating of clarifier components, replacement of existing diffusers in aeration basins, new disk tertiary filters, 2 additional sludge presses, and new main pumps & associated piping. Bluestone-New PS, new diversion gates, and add influent screening. Deerfield PS-Complete replacement of PS, including pumps, wet well, control panel, piping, standby generator, site fencing, and access road. Construction completed. College Avenue Sewer-Removal of existing VCP pipe and replacement with PVC. Construction completed.	
NPDES #WV: 0023141			
Binding Date: 7/31/2020			
Points 95.00			
50	Crab Orchard-MacArthur PSD	\$6,075,000	\$9,075,000
SRF #C: C-544630	Needs Categories: CWT-New Collector Sewers CWT-New Interceptors	Problem The proposed project will provide safe, dependable public sewer service to approximately 375 potential new customers. Residents in the project area are currently required to install private septic tanks and in some areas the sewage is straight piped into residential yards or streams. This of course is not sanitary, and an upgrade is needed to protect from future instances of this.	
County: Raleigh		Solution Existing sewer system extension to approximate 375 potential customers. New system would be connected to existing system through two lift stations. Proposing to construct Harper Eccles Sewer extension of the following: 44,000 LF of 8" gravity sewer, 5,300 2,500 LF of 6" sewer laterals, 180 manholes 375 lateral connections, connection to existing gravity, 2 sewer lift stations, and other related work.	
NPDES #WV: 0082309			
Binding Date: 6/30/2021			
Points 95.00			

CLEAN WATER STATE REVOLVING FUND 2021 PRIORITY LIST

Rank / Points	Project	SRF Loan Amount	Total Costs
51	<u>Follansbee, City of</u>	\$9,269,865	\$10,269,865
	<p>SRF #C: C-544599</p> <p>County: Brooke</p> <p>NPDES #WV: 0020273</p> <p>Binding Date: 6/30/2021</p> <p>Points 95.00</p>	<p>Needs Categories: CWT-Secondary Treatment CWT-Sewer System Rehabilitation CWT-CSO Correction</p>	<p>Problem -The primary goals of the project is to drastically reduce the number of CSO's toward the ultimate goal of the total elimination. -Additionally, some of the PS's have reached their end of life and need to be replaced. These stations are North, South, Brooke St., Center St., and Lee St. -Some equipment in the treatment plant need to be upgraded and/or replaced for another 20-years of trouble free operation.</p> <p>Solution Replacement of 5 sewage pumping stations, replacement/rehabilitation of targeted treatment equipment and construction of new storm and sanitary sewer lines in the collection system to facilitate the primary natural waterways from the hills to the Ohio River without mixing with the sanitary sewer collection lines. This is targeted separation of storm and sanitary sewer lines.</p>
52	<u>Grafton, City of</u>	\$3,750,000	\$3,750,000
	<p>SRF #C: C-544633</p> <p>County: Taylor</p> <p>NPDES #WV: 0021822</p> <p>Binding Date: 6/30/2021</p> <p>Points 95.00</p>	<p>Needs Categories: CWT-CSO Correction</p>	<p>Problem The City of Grafton is a CSO community, therefore during rain events sewer exits the system into the environment. Investigators from the Department of Environmental Protection ordered the City of Grafton to enter a Long Term Control Plan to eliminate all sewer overflows.</p> <p>Solution This project proposes to eliminate the CSO's in the system by replacing the entire system with a new system. The area between Grafton City Hospital and Bridge Street bridge will be addressed, eliminating two CSOs East of Beech Street bridge.</p> <p>This includes about 23,000 feet of line between 6" diameter to 12" diameter and 60 new manholes. The existing system will be left strictly as a storm drain system.</p>

CLEAN WATER STATE REVOLVING FUND 2021 PRIORITY LIST

Rank / Points	Project	SRF Loan Amount	Total Costs
53	Oak Hill Sanitary Board	\$3,488,000	\$5,988,000
SRF #C: C-544623	Needs Categories: CWT-Infiltration/Inflow CWT-Sewer System Rehabilitation	<p>Problem</p> <p>The former APSD collection system experiences significant inflow and infiltration (I&I). This I&I increases the flow experienced by the Minden WWTP over and above what would be expected from APSD's former customer base. This places unnecessary strain on the Minden WWTP's treatment process and increases Oak Hill's operation and maintenance expenses as dilute stormwater flushes out the biological agents on which the treatment process depends.</p> <p>Solution</p> <p>This project will rehabilitate portions of the former APSD wastewater collection system now under the ownership and operation of Oak Hill. A section of gravity sewer line will be relocated, and various manholes will be rehabilitated. Two (2) pump stations will be decommissioned, and two (2) pump stations will be upgraded. A new pump station will also be constructed to reduce excess flows at the Arbuckle Pump Station which transports the former APSD's flows from the site of their since decommissioned WWTP to the Minden WWTP.</p>	
County: Fayette			
NPDES #WV: 0020281			
Binding Date: 6/30/2021			
Points 95.00			
54	Ripley Sanitary Board, City of	\$14,100,000	\$22,860,000
SRF #C: C-544575	Needs Categories: CWT-Advanced Treatment CWT-New Interceptors	<p>Problem</p> <p>Both sewer systems are under Order to upgrade the treatment plants. The existing treatment facilities are unable to consistently meet the permitted effluent limits resulting in violations of the NPDES permits. Ripley has recently upgraded the Ripley and Evans collection systems to address deficiencies in the systems such as inflow and infiltration, and deterioration of the pumps. Ripley has also taken interim measures at each treatment plant to improve existing effluent limits, however this is not a long term solution. The next phase (Phase II) is to upgrade the wastewater treatment plants to meet more strict effluent limitations.</p> <p>Solution</p> <p>The project consists of constructing a new, centralized wastewater treatment facility that will treat flows collected from both Ripley and Evans. The new treatment facility will utilize sequential batch reactor or vertical loop reactor technology. Sewage from the Evans system will be pumped to the new facility. The existing ponds in Ripley and Evans will be closed after the new facility is placed in service. This will consist of dewatering, and sludge removal and disposal.</p>	
County: Jackson			
NPDES #WV: 0045543			
Binding Date: 3/31/2021			
Points 95.00			

CLEAN WATER STATE REVOLVING FUND 2021 PRIORITY LIST

Rank / Points	Project	SRF Loan Amount	Total Costs
55	<u>Warm Springs PSD</u>	\$3,500,000	\$3,500,000
Points 95.00	<p>SRF #C: C-544649</p> <p>County: Morgan</p> <p>NPDES #WV: 0027707</p> <p>Binding Date: 6/30/2021</p>	<p>Needs Categories: CWT-Secondary Treatment CWT-Infiltration/Inflow</p>	<p>Problem Berkeley Springs WWTP-Treatment facility unable to operate at 100% during power outages due to undersized standby generator, resulting in untreated sanitary flows discharging through outlet(s). Both clarifiers boundary walls experience snow built up during inclement weather causing walkways and arms to stop turning. Snow is being removed by system operators along wall using shovels. Collection System-I/I accounts for 82.43% of system flow to WWTP. Due to I/I as part of the PSD NPDES permit, a written report is required on a semi-annual basis detailing implementation and accomplishments of I&I reduction.</p> <p>Solution Berkeley Springs WWTP-Installation of a new standby generator with Automatic Transfer Switch sized to operate the whole WWTP during power outages, installation of embedded heat trace system into both clarifiers boundary walls, a garage, and a sludge holding tank. Collection System-Rehabilitation of existing collections system and manholes highlighted during smoke testing conducted by the engineer, November 2016. To remove and/or reduce the high Inflow and Infiltration and potentially remove the written progress report permitting requirements.</p>
56	<u>Webster Springs PSD</u>	\$1,650,000	\$1,650,000
Points 95.00	<p>SRF #C: C-544612</p> <p>County: Webster</p> <p>NPDES #WV: 0049875</p> <p>Binding Date: 6/30/2021</p>	<p>Needs Categories: CWT-Secondary Treatment CWT-Sewer System Rehabilitation</p>	<p>Problem Upgrade of existing wastewater treatment plant components which have surpassed their useful life as well as upgrades to wastewater pumping stations throughout the system which have surpassed their useful life and require modifications for ease of operation.</p> <p>Solution Rehabilitation of the wastewater treatment plant main pump station, upgrade of the wastewater treatment plant headworks, replacement of the treatment systems clarifier's. Upgrade pumps at the pumping stations as well as electrical controls and providing a generator for a pump station which currently has no back up power supply.</p>

CLEAN WATER STATE REVOLVING FUND 2021 PRIORITY LIST

Rank / Points Project	SRF Loan Amount	Total Costs
Rank 57 Bluewell PSD SRF #C: C-544594 County: Mercer NPDES #WV: 0028134 Binding Date: 6/30/2021 Points 90.00	\$9,600,000	\$12,500,000
Needs Categories: CWT-Advanced Treatment CWT-Sewer System Rehabilitation	Problem 1. The existing 400,000 gpd wastewater treatment plant located at Montcalm, which is ~53 years old and is at the end of its useful life. 2. Four existing lift stations in the Montcalm area are at the end of their useful life. These existing wet well/underground dry pump pit stations present safety issues for personnel in maintaining the pumping and electrical equipment. 3. Reduce I/I in existing gravity sewer collection system to reduce sanitary sewer overflows.	Solution 1. Upgrade the existing 400,000 gpd WWTP to a 600,000 gpd WWTP. 2. Replace the four (4) existing sewer lift stations in the Montcalm area with wetwell type lift stations with submersible pumps. 3. Replace sections of the existing gravity sewer collection system to reduce inflow and infiltration to reduce the flow to the WWTP and to reduce sanitary sewer overflows.
Rank 58 Craigsville PSD SRF #C: C-544597 County: Nicholas NPDES #WV: 0045730 Binding Date: 12/31/2020 Points 90.00	\$5,135,000	\$5,135,000
Needs Categories: CWT-Secondary Treatment CWT-Sewer System Rehabilitation	Problem Craigsville's collection system was constructed in the mid-1980's and many portions are nearing or have passed the end of their useful life. Upgrades are required to preempt and prevent line failures. Without upgrades, it will become increasingly possible for wastewater to leach out of the collection system and into the local groundwater. Craigsville is also experiencing significant I&I, accounting for approximately 43% of all wastewater flows to the WWTP. This I&I dilutes the influent wastewater, making the treatment process less efficient and increasing the possibility of exceeding the WWTP's treatment capacity.	Solution Proposing to decommission 2 existing lift stations, rerouting the gravity sewer lines and upgrading the remaining 8 lift stations. Rerouting will require the installation of approximately 1,250 LF of 8 inch PVC SDR-35 gravity sewer line, 2,950 LF of 6 inch PVC SDR-35 gravity sewer line, 10,000 LF of 6 inch PVC forcemain, 15 manholes, and the removal and replacement of 25 manholes. Also, proposing to upgrade the treatment capacity of its WWTP in order to accommodate increased flow. This upgrade consists of installation of a 30' diameter circular clarifier, new mechanical bar screen, grit screen air lift pump, 230 kW generator, various electrical system upgrades, and a 20-ton dump truck.

CLEAN WATER STATE REVOLVING FUND 2021 PRIORITY LIST

Rank / Points	Project	SRF Loan Amount	Total Costs
59	Beckley Sanitary Board (Little Whitestick)	\$2,195,000	\$2,669,758
	<p>SRF #C: C-544626</p> <p>County: Raleigh</p> <p>NPDES #WV: 0023183</p> <p>Binding Date: 6/30/2021</p> <p>Points 85.00</p>	<p>Needs Categories: Stormwater-Gray Infrastructure</p>	<p>Problem Culverts are undersized and many improperly installed or at end of service life. This causes runoff impacting private properties. Stream banks show signs of prevalent erosion and sedimentation causing limited conveyance capacity. This may be impacting the sanitary systems in which they are crossing or running parallel with the streams which limit to the sizing of the system. Some infrastructure is piecemeal, at capacity, and at end of service life with very little cover. Downstream and upstream channels at Jamescrest has limited capacity due to profile, low gradient, and prior channel realignment.</p> <p>Solution Little Whitestick project will mitigate these issues by implementing a rehab project at Jamescrest, Morgan Hills, Pine Hills, and Oakley Rd neighborhoods in the Dry Hill Rd area. In addition, the Pikeview Manor, and along New River Dr. project will consist of installing a regional detention basin to capture runoff and stormflow at Morgan Hills. Culverts and existing pipe will be resized and replaced to handle the capacity necessary in this area. Restoration of stream banks and modifications of stream will increase capacity. Development of green infrastructure within rights-of-way will be implemented to improve drainage and reduce flooding.</p>
60	Beckley Sanitary Board (Pinecrest)	\$3,474,000	\$3,739,000
	<p>SRF #C: C-544624</p> <p>County: Raleigh</p> <p>NPDES #WV: 0023183</p> <p>Binding Date: 6/30/2021</p> <p>Points 85.00</p>	<p>Needs Categories: CWT-Infiltration/Inflow Stormwater-Gray Infrastructure</p>	<p>Problem Improvements to wastewater and stormwater infrastructure in Pinecrest Beckley, WV area. Much of stormwater piping adjacent to project area is undersized and at end of service life. Vegetative overgrowth, sediment deposition, and sections of piping restrict channel flows. As stormwater structures backup during rainfall events, drop inlets overflow and flood surrounding areas contributing I&I into sanitary sewer collection system which negatively impacts cost of treatment, water quality, and carrying capacity of sanitary sewer system. Frequent flooding of residential properties and roads, as well as excess sheet flow, occurs in the project area.</p> <p>Solution Full-scale replacement and rehab of Pinecrest area stormwater system, improving conveying capacity to mitigate recurrent flooding that contributes to sanitary sewer I&I problems and regularly impacts the treatment capacity at wastewater treatment facility, removing a section of pipe and channeling discharge into a free-flowing, functional channel that will be dredged out for proper conveying capacity. Also replace sections of existing pipe with new pipe adequately sized to convey stormwater being received at the Beckley Little League, along Hartley Ave, Wildwood Ave, Jonathan Dr, and Hedrick St. A non-submergible discharge point will be constructed to prevent system backup. Project implements green infrastructure and a detention basin.</p>

CLEAN WATER STATE REVOLVING FUND 2021 PRIORITY LIST

Rank / Points	Project	SRF Loan Amount	Total Costs
61	Beckley Sanitary Board (Railtrail)	\$219,500	\$219,500
	<p>SRF #C: C-544625</p> <p>County: Raleigh</p> <p>NPDES #WV: 0000000</p> <p>Binding Date: 6/30/2021</p> <p>Points 85.00</p>	<p>Needs Categories: Stormwater-Green Infrastructure</p>	<p>Problem Along Robert C. Byrd Drive, primary storm sewer system is undersized. Gathering subsystems are much the same. Storm sewers are at end of service life. A portion of system catastrophically failed in July 2019. Failure needs to be repaired, but downstream system does not have capacity to accommodate flows. Regular flooding impacts private properties, State Route 16, and several local roads and side streets. Stormsewer system carries pollutants that contribute to impairment of Little Whitestick Creek. High stormsewer flows and flooding create conditions which allow additional I&I in combined sewer system and result in additional CSO discharges.</p> <p>Solution Rail Trail Stormwater Diversion and Control System will help alleviate issues by constructing a series of intercepting open channels, culverts, and pipes along the existing Rail Trail right of way. This diversion system can potentially be built from Prince Street (upstream) and drain into Whitestick Creek (downstream). The new storm drain diversion system will divert approximately 1/3 of existing rainfall away from Robert C. Byrd culvert system and provide stormwater runoff reduction, I&I reduction and pollutant load reduction through implementation of an innovative stormwater real-time control solution to better handle rain events.</p>
62	Bradshaw, Town of	\$5,208,000	\$6,208,000
	<p>SRF #C: C-544595</p> <p>County: McDowell</p> <p>NPDES #WV: 0103110</p> <p>Binding Date: 3/31/2021</p> <p>Points 75.00</p>	<p>Needs Categories: CWT-Sewer System Rehabilitation</p>	<p>Problem The proposed project will eliminate the problematic vacuum collection system located throughout a large portion of Town, eliminate a 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.</p> <p>Solution The vacuum collection system will be replaced 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 a number of customers. Deferred operation and maintenance items at the wastewater treatment plant will be included to replace the outdated nearly 25 year old components to promote energy efficiency and power savings.</p>

CLEAN WATER STATE REVOLVING FUND 2021 PRIORITY LIST

Rank / Points	Project	SRF Loan Amount	Total Costs
63	Claywood Park PSD	\$2,334,000	\$5,319,000
	<p>SRF #C: C-544498</p> <p>County: Wood</p> <p>NPDES #WV: 0043991</p> <p>Binding Date: 12/31/2020</p>	<p>Needs Categories: CWT-Sewer System Rehabilitation</p>	<p>Problem Existing sewer lines that are polluting local waterways are being replaced, and the existing lagoon which poses an environmental hazard will be fully decommissioned.</p> <p>Solution Combined new gravity & pressure system including, pressure along Blossom Way, gravity collection from Meadowbrook Way to Eagle View Way, combined gravity lines with smaller diameter pressure spurs with GP's in middle of community along Mockingbird Way to Bluebell Way, Navajo LS at Navajo Way will collect sewage (mostly gravity lines) from Catfish Way to Cherokee Way (with some small diameter pressure spurs with GP's), and two transmission lines (Phase I), one from Spring Valley LS to new WWTP and other from Newark and Little Kanawha ESTS to new WWTP, tapping in on areas with GP's providing services to homes. Also, decommission Spring Valley lagoon with land fill of sludge with belt press dewatering.</p>
75.00			
64	Smithers Sanitary Board, City of	\$677,549	\$1,377,549
	<p>SRF #C: C-544583</p> <p>County: Fayette</p> <p>NPDES #WV: 0045730</p> <p>Binding Date: 6/30/2021</p>	<p>Needs Categories: CWT-CSO Correction</p>	<p>Problem Smithers' combined sewer collection system continues to experience significant I&I in its eastern portion, increasing the cost of securing wastewater treatment from the PSD. During wet weather events, various CSOs are prone to discharge untreated wastewater into the Kanawha River, posing a public health risk for communities downstream of Smithers. In addition, the existing collection system is undersized in various locations and has very few manholes and cleanouts from which to perform needed maintenance.</p> <p>Solution This project intends to complete Phase II of Smithers' plan to completely separate their wastewater and stormwater sewer systems. This would entail the removal and replacement or new installation of approximately 2,150 lineal feet (LF) of 12 inch, eight (8) inch, and six (6) inch gravity sewer line, 16 48 inch diameter manholes, four (4) cleanouts, 2,140 LF of 30 inch, 24 inch, 18 inch, and 12 inch gravity storm sewer, 18 drop inlets, five (5) 60 inch diameter storm manholes, one (1) storm sewer outfall, and all necessary appurtenances.</p>
75.00			

CLEAN WATER STATE REVOLVING FUND 2021 PRIORITY LIST

Rank / Points	Project	SRF Loan Amount	Total Costs
65	Greenbrier PSD No. 2	\$17,711,525	\$17,711,525
	<p>SRF #C: C-544636</p> <p>County: Greenbrier</p> <p>NPDES #WV: 0040525</p> <p>Binding Date: 6/30/2021</p> <p>Points 70.00</p>	<p>Needs Categories: CWT-Secondary Treatment</p>	<p>Problem PSD's collection and treatment systems have not had a significant upgrade in 40 years, since initial construction of WWTP in 1980. While staff has taken good care of system, repairs and upgrades are needed as large portion of collection system and WWTP equipment reaches or passes end of its useful life. I&I is a major issue, increasing likelihood of untreated sewage discharging into Greenbrier watershed via PSD's 1 CSO. PSD's systems need an upgrade in order to improve public health and ensure that PSD continues to provide effective wastewater collection and treatment services for customers in its service area into the future.</p> <p>Solution Upgrade existing PSD WWTP with new equipment while maintaining existing capacity. The WWTP will receive a screen for the influent pump station, a new headworks with vortex grit removal and an automatic vertical step screen, refurbishments to the existing clarifiers, new motors and controls within the oxidation ditches, upgrades to the chlorine disinfection system, new roofs on most buildings, and new generators for two pump stations. This project also proposes to conduct a thorough I&I study in order to determine the most problematic portions of the collection system which will be prioritized for replacement in future projects.</p>
66	Harpers Ferry-Bolivar PSD (I&I Study)	\$3,276,103	\$3,276,103
	<p>SRF #C: C-544638</p> <p>County: Jefferson</p> <p>NPDES #WV: 0039136</p> <p>Binding Date: 6/30/2021</p> <p>Points 70.00</p>	<p>Needs Categories: CWT-Infiltration/Inflow</p>	<p>Problem Collection system is nearly 40 years old and experiencing I&I problems. In the summer of 2019, District retained contractor to clean and televise approx. 2000' of interceptor sewer line above Old Furnace Road LS. Three house lateral connections to interceptor were found to be broken and leaking, 3 manholes out of 7 were leaking, cracked pipe in the creek was leaking 24-7 and two manhole lids leaked water whenever hard rain raised creek level above top elevation of lids. These issues were repaired and pumping quantity and time has decreased dramatically in the LS. District decided a system wide study should be considered.</p> <p>Solution The District proposes to perform an I and I study on the existing collection system by cleaning and televising the lines and physically inspecting the manholes, with a goal to arrive at the most cost effective way to solve the problem. Plans and specifications will be prepared and construction will utilize the identified alternative to remove the I and I.</p>

CLEAN WATER STATE REVOLVING FUND 2021 PRIORITY LIST

Rank / Points	Project	SRF Loan Amount	Total Costs
67	<u>Kanawha PSD</u>	\$2,575,000	\$7,875,000
Points 70.00	<p>SRF #C: C-544643</p> <p>County: Kanawha</p> <p>NPDES #WV: 0021784</p> <p>Binding Date: 6/30/2021</p>	<p>Needs Categories: CWT-Secondary Treatment CWT-New Collector Sewers CWT-New Interceptors</p>	<p>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.</p> <p>Solution The project proposes construction of 5,000 LF of 10 inch gravity sewer, 27,350 LF of 8 inch gravity sewer, 3,700 LF of 6 inch PVC, 6,630 LF of 4 inch PVC laterals and 5,000 LF of 6 inch Force Main along with 185 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 KPSD's WWTP.</p>
68	<u>Ronceverte, City of</u>	\$4,700,000	\$4,700,000
Points 70.00	<p>SRF #C: C-544611</p> <p>County: Greenbrier</p> <p>NPDES #WV: 0024236</p> <p>Binding Date: 6/30/2021</p>	<p>Needs Categories: CWT-Infiltration/Inflow</p>	<p>Problem There are several areas of the wastewater collection system which have broken pipes, offset joints, and roots. Other issues include I/I in main lines and laterals. Several manholes are in need of replacement, 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, which could lead to structural problems regarding the railroad.</p> <p>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.</p>

CLEAN WATER STATE REVOLVING FUND 2021 PRIORITY LIST

Rank / Points	Project	SRF Loan Amount	Total Costs
69	<p>Shady Spring PSD (Glen Morgan WWTP)</p> <p>SRF #C: C-544645 County: Raleigh NPDES #WV: 0080403 Binding Date: 6/30/2021</p> <p>Needs Categories: CWT-Secondary Treatment</p>	\$3,753,200	\$3,753,200
70	<p>Albright, Town of</p> <p>SRF #C: C-544592 County: Preston NPDES #WV: 0103110 Binding Date: 6/30/2021</p> <p>Needs Categories: CWT-Secondary Treatment CWT-Sewer System Rehabilitation</p>	\$1,397,500	\$2,195,000

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 gallons per day to 1,600,000 gallons per day with the addition of treatment units. Also includes the replacement of existing treatment units that have deteriorated due to their age.

Problem
 Existing collection system receives significant I&I during periods of wet weather, resulting in becoming overburdened with high influent flows. In addition, the existing WWTP needs significant upgrades due to aged and failing equipment, making it difficult to effectively treat wastewater to consistently meet the required effluent permit limits. Three existing PS's are also in need of upgrades with most major equipment in need of replacement. Sources in collection system have been identified as contributing to I&I issues. These areas have been targeted for rehabilitation to effectively reduce amounts of I&I entering the collection system.

Solution
 Collection system rehab reducing I&I entering system and being conveyed to WWTP for treatment. Replacing MH frames and lids, laterals, service wye connections, capping open connections, eliminating break-in connections, and cleaning existing lines. Upgrade 3 grinder PS's including pumps, controls, new guide rail assemblies, PS monitoring telemetry, and electrical improvements. Replace failing equipment, piping, valves, chlorine contact tank, concrete basin coating, aeration blowers, outlet weir and leveling plates, waste water drain pump basin, clarifier tank improvements, aerated sludge holding tank upgrades, influent flow splitter tank, basin grating, and installation of new WWTP effluent flow meter with chart recorder.

CLEAN WATER STATE REVOLVING FUND 2021 PRIORITY LIST

Rank / Points	Project	SRF Loan Amount	Total Costs
71	Barboursville Sanitary Board, Village of	\$13,998,450	\$13,998,450
	<p>SRF #C: C-544615</p> <p>County: Cabell</p> <p>NPDES #WV: 0024481</p> <p>Binding Date: 3/31/2021</p> <p>Points 65.00</p>	<p>Needs Categories: CWT-Sewer System Rehabilitation CWT-New Interceptors</p>	<p>Problem The condition of the lagoon is declining. It has not been cleaned out in approximately 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.</p> <p>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.</p>
72	Grantsville, Town of	\$3,000,000	\$5,300,000
	<p>SRF #C: C-544634</p> <p>County: Calhoun</p> <p>NPDES #WV: 0041181</p> <p>Binding Date: 6/30/2021</p> <p>Points 65.00</p>	<p>Needs Categories: CWT-Secondary Treatment CWT-Sewer System Rehabilitation</p>	<p>Problem All of the mechanical equipment in the sewage treatment plant is in poor to very 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, the 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.</p> <p>Solution The basins and piping at the sewage treatment plant will be cleaned and all of the electrical and mechanical equipment will be refurbished or replaced. Similarly, the electrical and mechanical equipment at all of the pumping stations will be replaced or refurbished. An Asset Management Plan and a detailed set of O & M Procedures will also be developed.</p>

CLEAN WATER STATE REVOLVING FUND 2021 PRIORITY LIST

Rank / Points	Project	SRF Loan Amount	Total Costs
73	<p>Rank <u>73</u></p> <p>Project <u>Matewan, Town of</u></p> <p>SRF #C: <u>C-544482</u></p> <p>County: <u>Mingo</u></p> <p>NPDES #WV: <u>0024783</u></p> <p>Binding Date: <u>6/30/2021</u></p> <p>Points <u>65.00</u></p> <p>Needs Categories: <u>CWT-Secondary Treatment</u></p>	\$6,160,000	\$6,160,000
<p>Problem</p> <p>The existing RBC Wastewater Treatment Facility is not meeting discharge permit limits and is the subject of DEP Enforcement Action.</p> <p>Solution</p> <p>Upgrade the existing wastewater treatment facility to address more stringent discharge limits and comply with DEP requirements.</p>			
74	<p>Rank <u>74</u></p> <p>Project <u>Ravenswood, City of</u></p> <p>SRF #C: <u>C-544428</u></p> <p>County: <u>Jackson</u></p> <p>NPDES #WV: <u>0021989</u></p> <p>Binding Date: <u>6/30/2021</u></p> <p>Points <u>65.00</u></p> <p>Needs Categories: <u>CWT-Sewer System Rehabilitation</u></p>	\$3,800,000	\$3,800,000
<p>Problem</p> <p>The lagoons have had recurring problems with meeting the design (and previously permitted) effluent ammonia limit of 15 mg/l; the 2017 WVNPDES 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.</p> <p>Solution</p> <p>The pumps and controls in all 8 pumping stations will be replaced and telemetry and emergency generation equipment will be installed. The new wastewater treatment plant will be designed, but construction will take place during a separate phase. Smoke testing will also be done due to the system never having been smoke tested.</p>			

CLEAN WATER STATE REVOLVING FUND 2021 PRIORITY LIST

Rank / Points	Project	SRF Loan Amount	Total Costs
75	Sissonville PSD	\$2,948,500	\$2,955,000
SRF #C: C-544570	Needs Categories: CWT-Secondary Treatment CWT-Sewer System Rehabilitation	<p>Problem</p> <p>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.</p> <p>Solution</p> <p>WWTP improvements include rehab of clarifiers, disinfection system upgrade, chlorine tank rehab, replacing existing plant generator and transfer switch, control building rehab, preliminary treatment upgrade and reconfiguration, oxidation ditch improvements and metal grating replacement. Also, wastewater collection system improvements include constructing a mechanical bar screen and building (i.e., Lakeland Screen Building) preceding existing Lakeland PS, and relocating lines at the PS site, and installation of odor control unit. Minor collection system improvements include cleaning and coating the Middle School and Shasta PS wet wells.</p>	
County: Kanawha			
NPDES #WV: 0029530			
Binding Date: 3/31/2021			
Points 50.00			
76	Burnsville Public Utility Board	\$1,250,000	\$2,839,000
SRF #C: C-544578	Needs Categories: CWT-Infiltration/Inflow CWT-Sewer System Rehabilitation	<p>Problem</p> <p>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.</p> <p>Solution</p> <p>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.</p>	
County: Braxton			
NPDES #WV: 0024945			
Binding Date: 6/30/2021			
Points 45.00			

CLEAN WATER STATE REVOLVING FUND 2021 PRIORITY LIST

Rank / Points	Project	SRF Loan Amount	Total Costs
77	Canaan Valley PSD	\$2,235,000	\$2,295,000
Points	45.00		
SRF #C:	C-544560	Needs Categories:	CWT-New Interceptors
County:	Tucker		
NPDES #WV:	0106011		
Binding Date:	3/31/2021		
		Problem	This project is the second phase of a multi-phased regional sewer system in the Valley. The proposed Phase II 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 three systems suffer from deteriorating wastewater collection and treatment systems and have a history of NOVs being issued.
		Solution	Take over treatment of flows from Zone B communities. In order to transport flows from Zone B facilities to the recently constructed Zone D WWTP, two sewer LS's are needed, one at existing Deerfield facility and the other at existing Windwood facility. Canaan Village flow can be transported to Deerfield by a standard gravity flow system. Both LS's will pump sewer flows through separate forcemains to County Route 35 where the separate forcemains will combine into one forcemain to follow Route 35 north to the Zone D plant.
78	Wardensville, Town of	\$1,442,000	\$1,442,000
Points	45.00		
SRF #C:	C-544648	Needs Categories:	CWT-Secondary Treatment CWT-Infiltration/Inflow CWT-Sewer System Rehabilitation
County:	Hardy		
NPDES #WV:	0045501		
Binding Date:	6/30/2021		
		Problem	WWTP mechanical bar screen is inoperable. Bypass manual bar screen is utilized currently at plant. Stabilization ponds at WWTP encountered issues with duck weed. Outfall into Cacapon River is designed for 0.12 MGD. The outfall becomes submerged during periods of high water. Headworks building at WWTP has significant corrosion throughout and needs replaced. Plant service is single phase and has no onsite generator for emergencies. Collection system has been experiencing various I&I issues resulting in 56.66% treated flow from I&I. Also, various upgrades are needed at LS's and a SCADA system needs installed.
		Solution	Upgrade WWTP's electrical service, install emergency generator, replace headworks building, install new mechanical bar screen, make improvements to outfall, and improve aeration system. Also include I&I Study including reports, mapping, manhole inspections, flow monitoring, smoke testing, and misc. I&I testing, leading to various repairs reducing I&I in sewer collection system. LS improvements including transfer switch and bypass connections at both stations, Pine Street top replacement, pump guide rail brackets, force main realignment, and control panel replacement. Both PS's will be fitted with permanent generator. Install a SCADA system to provide alarm notifications and monitoring from the LS's.

CLEAN WATER STATE REVOLVING FUND 2021 PRIORITY LIST

Rank / Points	Project	SRF Loan Amount	Total Costs
79	<p>Williamson, City of</p> <p>SRF #C: C-544544</p> <p>County: Mingo</p> <p>NPDES #WV: 0026271</p> <p>Binding Date: 6/30/2021</p> <p>Points 45.00</p>	\$4,024,000	\$4,024,000
<p>Problem Structural failure of wastewater pumping stations, structural issues at wastewater treatment plant facilities and working components, and failing on-site treatment for 3 unserved customers.</p> <p>Solution Installation of new pumping stations, structural repairs to facilities and components at the wastewater treatment plant, and a small collection system extension to provide service to currently unserved customers.</p>			
80	<p>Camden-On-Gauley</p> <p>SRF #C: C-544610</p> <p>County: Webster</p> <p>NPDES #WV: 0024961</p> <p>Binding Date: 9/30/2020</p> <p>Points 40.00</p>	\$700,000	\$1,200,000
<p>Problem Collection system was constructed in 1994, and several sections are in poor condition. The engineer performed a smoke test and identified several points within collection system prone to leaking, allowing excess flow to PSD for treatment. The engineer estimated wet weather I&I at PSD's WWTP to be approximately 165,000 GPD of which the Town is estimated to contribute up to 37,000 GPD. This is a significant portion of total flow from the Town to the PSD, increasing expense by the Town to purchase treatment services from the PSD. I&I issues in the existing collection system also represent risk that sewage might leak into local groundwater supply.</p> <p>Solution Remove and replace approximately 2,400 LF of gravity sewer line with new 8 inch PVC pipe along Greenbrier Street, Mayer Avenue, Buckhannon Road, and Maple Inn Road, as well as the removal and replacement of approximately 500 LF of 4 inch PVC service lateral piping, and 16 manholes. Various manholes throughout the Town's collection system will also have their lids replaced with watertight frames and covers. Repairs will also be made to the Town's two lift stations in order to address potential leaks.</p>			

CLEAN WATER STATE REVOLVING FUND 2021 PRIORITY LIST

Rank / Points	Project	SRF Loan Amount	Total Costs
81	<u>Gary, City of</u>	\$1,000,000	\$2,568,000
SRF #C: C-544501	Needs Categories: CWT-New Collector Sewers CWT-New Interceptors	<p>Problem</p> <p>The Gary wastewater system experiences excessive Inflow and Infiltration which overloads the wastewater treatment plant. 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.</p> <p>The age of the system is 60+ years. It is clear to see that it has far exceeded the industry standard for its useful life.</p> <p>Solution</p> <p>The City of Gary 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 a treatment plant that is designed specifically for the treatment of effluent.</p> <p>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 pumped to a connection point on the City of Welch's wastewater system.</p>	
County: McDowell			
NPDES #WV: 0020044			
Binding Date: 6/30/2021			
Points 40.00			
82	<u>Weirton Sanitary Board</u>	\$13,130,000	\$25,730,000
SRF #C: C-544650	Needs Categories: CWT-Secondary Treatment	<p>Problem</p> <p>Experiencing daily flows in excess of permit limits. Average daily flows were greater than 90% of permit limit between Oct. 2018 and June 2019 and exceeded permit limits between Oct. 2018 and Feb. 2019. Weirton is obliged by permit and fiduciary responsibility to its customers to upgrade facilities to easily treat its current flows.</p> <p>Solution</p> <p>Divert wastewater flows arriving at the WWTP via FM from the 5th St. LS (in the vicinity of which most new development is expected to take place) from existing activated sludge treatment train to a set of SBRs capable of treating up to 4 MGD. These SBRs are to be constructed on the existing WWTP property and on adjacent land to be purchased by Weirton and will operate in parallel with existing activated sludge process. Weirton also proposes replacement of equipment in existing headworks, primary clarifiers, odor control system, and UV building, and upgrade existing aerobic digesters to handle increased sludge volumes.</p>	
County: Brooke			
NPDES #WV: 0023108			
Binding Date: 3/31/2021			
Points 40.00			

CLEAN WATER STATE REVOLVING FUND 2021 PRIORITY LIST

Rank / Points	Project	SRF Loan Amount	Total Costs
83	Harpers Ferry-Bolivar PSD (Prospect Ave)	\$1,408,745	\$1,408,745
	<p>SRF #C: C-544637</p> <p>County: Jefferson</p> <p>NPDES #WV: 0039136</p> <p>Binding Date: 6/30/2021</p>	<p>Needs Categories: CWT-New Collector Sewers</p>	<p>Problem Prospect Ave is the highest street in Bolivar and is the location of the water tanks for the Harpers Ferry Water system. To the east of the water tanks, there are 11 residences that are still on septic tanks because they can not flow by gravity to the existing sewer system. The District has looked into this situation and believes that the series of grinder pumps or a combination of gravity lines and a pump station may be able to be installed to eliminate the septic systems.</p> <p>Solution The District proposes to prepare a PER and FP studying the area and situation, with a goal to arrive at the most cost effective way to solve the problem. Plans and specifications will be prepared and construction will utilize the identified alternative to remove the septic tanks and get the houses into the collection system.</p>
25.00			
84	Greater Harrison Co. PSD	\$1,500,000	\$2,000,000
	<p>SRF #C: C-544635</p> <p>County: Harrison</p> <p>NPDES #WV: 0084301</p> <p>Binding Date: 6/30/2021</p>	<p>Needs Categories: CWT-Secondary Treatment CWT-Sewer System Rehabilitation</p>	<p>Problem The PSD is proposing to relocate the river crossings to underneath the river bed and remove sludge from Pond #1.</p> <p>Solution The PSD is proposing to directional drill under the West Fork River bed and remove the exposed river crossings. The West Milford dosing structure will have to be converted to a traditional pump station. The PSD is also proposing to remove sludge from Pond #1.</p>
20.00			

CLEAN WATER STATE REVOLVING FUND 2021 PRIORITY LIST

Rank / Points Project	SRF Loan Amount	Total Costs
<p>Rank 85</p> <p>SRF #C: C-544621</p> <p>County: Wood</p> <p>NPDES #WV: 0032590</p> <p>Binding Date: 6/30/2021</p> <p>Points 20.00</p> <p>Project: Lubeck PSD</p>	\$2,312,000	\$2,312,000
<p>Needs Categories: CWT-New Collector Sewers</p>	<p>Problem Providing sanitary sewer service to two (2) commercial customers in the Washington Bottom area of Wood County.</p> <p>Solution Extending service to the two (2) potential customers by connecting to the existing Lubeck Public Service District system with approximately 5,000 feet of 10-inch and smaller diameter gravity pipe, 15,410 feet of 6-inch and smaller diameter forcemain, 19 manholes, one major pumping station, one duplex grinder pumping station, service laterals and other related appurtenances.</p>	
<p>Rank 86</p> <p>SRF #C: C-544647</p> <p>County: Harrison</p> <p>NPDES #WV: 0087971</p> <p>Binding Date: 6/30/2021</p> <p>Points 20.00</p> <p>Project: Stonewood, City of</p>	\$2,500,000	\$2,500,000
<p>Needs Categories: CWT-Infiltration/Inflow CWT-Sewer System Rehabilitation</p>	<p>Problem The City of Stonewood is currently experiencing high amounts of Inflow and Infiltration along with aging and failing portions of their existing collection system.</p> <p>Solution The City is working with the engineer to identify areas that are failing and allowing inflow and infiltration into the collection system. The City then plans to remove and replace these sections. The City also plans to rehabilitate one of their existing pump stations.</p>	

CLEAN WATER STATE REVOLVING FUND 2021 PRIORITY LIST

Rank / Points	Project	SRF Loan Amount	Total Costs
87	Athens, Town of	\$628,121	\$728,121
	<p>SRF #C: C-544622</p> <p>County: Mercer</p> <p>NPDES #WV: 0020338</p> <p>Binding Date: 12/31/2020</p> <p>Points 15.00</p>	<p>Needs Categories: CWT-Sewer System Rehabilitation</p>	<p>Problem The Town of Athens experienced a “microburst” rain event on May 27, 2018, around the existing WWTP. Rainfall was measured at 4.53 inches in 8-hours causing substantial erosion damage to the creek banking around the plant and the gravity collection line along McKenzie Hollow.</p> <p>The National Resources Conservation Service (NRCS), as part of the Conservation Technical Assistance Program, developed alternative solutions for stabilizing the banking around the wastewater plant.</p> <p>Solution The proposed project will protect the Athens Wastewater Treatment Plant from additional erosion utilizing a combination of anchored gabion baskets and grouted riprap along the banks of the creek around the plant. The project will also repair the damaged waterline that feeds the plant, replace the transformer, replace fencing and paving damaged during the floods, and evaluate the subsurface along the tributary side of the plant. McKenzie Hollow will also be replaced by an 8-inch PVC wastewater collection line, manholes, and related appurtenances. The total project cost is estimated at \$728,121.</p>

APPENDIX B

PROPOSED BINDING COMMITMENTS
BY QUARTER

Appendix B - Binding Commitments and Cash Draw Proportionality
Projects Budgeted for the Federal FY 2020 Grant

Name	Project Scope	Proj Num C-544___	Activity Code	State Fiscal Year 2020 (\$1,000)			
				1st Qtr July-Sept	2nd Qtr Oct-Dec	3rd Qtr Jan-Mar	4th Qtr Apr-June
Pea Ridge PSD	Sewer Ext./WWTP Upgrade	576	D3	\$28,500			
Elkins	CSO Project	585	D3		\$4,265		
DEP Administration*	n/a	n/a	n/a		\$0		
Total Projects and Admin				\$28,500	\$4,265	\$0	\$0

Federal Share (0.8333)				\$23,749	\$3,554	\$0	\$0	\$27,303
State Share (0.1667)				\$4,751	\$711	\$0	\$0	\$5,462
Total**				\$28,500	\$4,265	\$0	\$0	\$32,765

Payment Schedule for the CWSRF Program: CS-540001-20

Federal Quarter	Payment Date	CWSRF Amount	Cumulative Amount
FFY 2020-Quarter 4	7/1/2020	\$24,773,000	\$24,773,000

Activity Codes

P - facilities planning underway

D - design underway

D2 - design under review at DEP

D3 - design approved by DEP/bid process underway

* No administrative costs will be used in this grant.

** Any amounts exceeding the grant amount will come from repayments.

APPENDIX C

PROJECTS BUDGETED
FOR IUP AVAILABLE FUNDS

Appendix C - Projects Budgeted for the Intended Use Plan Available Funds

Name	Project Scope	Proj Num C-54__	Activity Code	State Fiscal Year 2021 (\$1,000)			
				1st Qtr July-Sept	2nd Qtr Oct-Dec	3rd Qtr Jan-Mar	4th Qtr Apr-June
Athens	WWTP & Collection System Upgrade	4622	D2			\$628	
Auburn	New Decentralized WWTP	7201-02	D2			\$2,411	
Barboursville	WWTP decommissioning/Connect to Pea Ridge	4615	P				\$13,998
Benwood	CSO Project	4531	D				\$3,404
Camden On Gauley	I/I Rehabilitation Project	4610	D3	\$700			
Cedar Grove	Sewer System Upgrade	4596	D3	\$812			
Clarksburg	CSO Project	4549	D3	\$7,500			
Claywood Park PSD	I/I Rehabilitation Project	4498	D2			\$2,344	
Craigsville PSD	WWTP & Collection System Upgrade	4597	D2		\$5,135		
Elkins	CSO Project	4585	D3		\$4,265		
Greater Harrison Co. PSD	New WWTP/Sewer Extension	4296	D3	\$8,424			
Kanawha Falls PSD	WWTP & Collection System Upgrade	4562	D3	\$6,498			
McDowell Co. PSD (Coalwood)	New WWTP/Sewer Extension	7302	D3		\$750		
North Beckley PSD	WWTP & Collection System Upgrade	4617	P				\$13,232
Pea Ridge PSD	WWTP Upgrade/Sewer Extension	4576	D3	\$28,500			
Pocahontas Co. PSD	Sewer Extension	4604	D3	\$1,800			
Preston Co. PSD	WWTP Upgrade/Sewer Extension	4538	D3				\$4,696
Ripley	WWTP Upgrade/Sewer Extension	4575	D2			\$12,100	
Sissonville	WWTP Upgrade	4570	D				\$2,949
Southern Jackson PSD	WWTP Upgrade/Sewer Extension	4246	D2			\$9,204	
DEP Administration	n/a	n/a	n/a				
NPS - Agriculture	various	n/a	n/a	\$25	\$25	\$25	\$25
NPS - Onsite	various	n/a	n/a	\$300			
Sub-total				\$54,559	\$10,175	\$26,712	\$38,304
						Grand total	\$129,750
<p>The projects identified above are forecasted based upon the known current status of the project and individual knowledge as to readiness to proceed to construction within six months of receiving a binding commitment. Other projects not identified here may also receive a binding commitment if they proceed on a faster pace than expected or receive funding commitments from other agencies which requires a CWSRF commitment.</p> <p><u>Activity Codes</u> P - facilities planning underway D - design underway D2 - design under review at DEP D3 - design approved by DEP/bid process underway R - refinancing</p>							

PUBLIC COMMENT

SUMMARY

Comments were received on the CWSRF IUP for FY2021 until June 27, 2020. 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 mailing directly to consulting engineers, regional councils and other interested parties.

Comments will be listed here at a later date.

APPENDIX E

MEDIAN HOUSEHOLD INCOME BY
COUNTY AND MAGISTERIAL DISTRICT

**WEST VIRGINIA MEDIAN HOUSEHOLD INCOME
2015 CENSUS
COUNTY & MAGISTERIAL DISTRICTS**

County/Magisterial District	Median HH Income			
		1.50%	1.75%	2.00%
Barbour	37,066	46.33	54.05	61.78
North district	30,994	38.74	45.20	51.66
South district	39,421	49.28	57.49	65.70
West district	45,206	56.51	65.93	75.34
Berkeley	55,239	69.05	80.56	92.07
Adam Stephens district	35,137	43.92	51.24	58.56
Norborne district	73,240	91.55	106.81	122.07
Potomac district	56,184	70.23	81.94	93.64
Shenandoah district	57,319	71.65	83.59	95.53
Tuscarora district	55,729	69.66	81.27	92.88
Valley district	56,250	70.31	82.03	93.75
Boone	39,958	49.95	58.27	66.60
District 1	38,725	48.41	56.47	64.54
District 2	40,042	50.05	58.39	66.74
District 3	41,075	51.34	59.90	68.46
Braxton	32,750	40.94	47.76	54.58
Eastern district	31,583	39.48	46.06	52.64
Northern district	38,832	48.54	56.63	64.72
Southern district	31,946	39.93	46.59	53.24
Western district	32,563	40.70	47.49	54.27
Brooke	46,215	57.77	67.40	77.03
Follansbee district	48,375	60.47	70.55	80.63
Weirton district	46,887	58.61	68.38	78.15
Wellsburg district	41,804	52.26	60.96	69.67
Cabell	38,344	47.93	55.92	63.91
District 1	38,410	48.01	56.01	64.02
District 2	23,014	28.77	33.56	38.36
District 3	29,743	37.18	43.38	49.57
District 4	46,574	58.22	67.92	77.62
District 5	48,610	60.76	70.89	81.02
Calhoun	35,568	44.46	51.87	59.28
District 1	31,300	39.13	45.65	52.17
District 2	32,222	40.28	46.99	53.70
District 3	42,390	52.99	61.82	70.65
District 4	41,111	51.39	59.95	68.52
District 5	33,885	42.36	49.42	56.48
Clay	31,325	39.16	45.68	52.21
District A	34,688	43.36	50.59	57.81
District B	25,383	31.73	37.02	42.31
District C	33,446	41.81	48.78	55.74
Doddridge	39,974	49.97	58.30	66.62

**WEST VIRGINIA MEDIAN HOUSEHOLD INCOME
2015 CENSUS
COUNTY & MAGISTERIAL DISTRICTS**

County/Magisterial District	Median HH Income			
		1.50%	1.75%	2.00%
Beech district	42,875	53.59	62.53	71.46
Maple district	39,301	49.13	57.31	65.50
Oak district	45,363	56.70	66.15	75.61
Pine district	34,750	43.44	50.68	57.92
Fayette	36,293	45.37	52.93	60.49
New Haven district	38,339	47.92	55.91	63.90
Plateau district	34,320	42.90	50.05	57.20
Valley district	34,683	43.35	50.58	57.81
Gilmer	37,536	46.92	54.74	62.56
Center district	34,148	42.69	49.80	56.91
City district	33,315	41.64	48.58	55.53
De Kalb - Troy district	39,259	49.07	57.25	65.43
Glenville district	40,673	50.84	59.31	67.79
Grant	39,088	48.86	57.00	65.15
Grant district	44,146	55.18	64.38	73.58
Milroy district	32,102	40.13	46.82	53.50
Union district	37,805	47.26	55.13	63.01
Greenbrier	39,746	49.68	57.96	66.24
Central district	44,606	55.76	65.05	74.34
Eastern district	37,617	47.02	54.86	62.70
Western district	36,543	45.68	53.29	60.91
Hampshire	27,995	34.99	40.83	46.66
Bloomery district	33,591	41.99	48.99	55.99
Capon district	25,578	31.97	37.30	42.63
Gore district	30,995	38.74	45.20	51.66
Mill Creek district	35,595	44.49	51.91	59.33
Romney district	29,375	36.72	42.84	48.96
Sherman district	23,739	29.67	34.62	39.57
Springfield district	29,926	37.41	43.64	49.88
Hancock	39,959	49.95	58.27	66.60
Butler district	42,852	53.57	62.49	71.42
Clay district	38,306	47.88	55.86	63.84
Grant district	39,258	49.07	57.25	65.43
Hardy	40,303	50.38	58.78	67.17
Capon district	37,344	46.68	54.46	62.24
Lost River district	52,159	65.20	76.07	86.93
Moorefield district	37,313	46.64	54.41	62.19
Old Fields district	32,454	40.57	47.33	54.09
South Fork district	40,595	50.74	59.20	67.66
Harrison	43,987	54.98	64.15	73.31
Eastern district	60,777	75.97	88.63	101.30

**WEST VIRGINIA MEDIAN HOUSEHOLD INCOME
2015 CENSUS
COUNTY & MAGISTERIAL DISTRICTS**

County/Magisterial District	Median HH Income			
		1.50%	1.75%	2.00%
Northern district	39,554	49.44	57.68	65.92
North Urban district	31,951	39.94	46.60	53.25
Southern district	46,911	58.64	68.41	78.19
South Urban district	44,450	55.56	64.82	74.08
Southwest district	41,443	51.80	60.44	69.07
Jackson	41,314	51.64	60.25	68.86
Eastern district	35,275	44.09	51.44	58.79
Northern district	32,016	40.02	46.69	53.36
Western district	56,220	70.28	81.99	93.70
Jefferson	66,677	83.35	97.24	111.13
Charles Town district	51,318	64.15	74.84	85.53
Harpers Ferry district	66,920	83.65	97.59	111.53
Kabletown district	90,929	113.66	132.60	151.55
Middleway district	60,354	75.44	88.02	100.59
Shepherdstown district	75,274	94.09	109.77	125.46
Kanawha	45,882	57.35	66.91	76.47
District 1	40,602	50.75	59.21	67.67
District 2	51,167	63.96	74.62	85.28
District 3	48,819	61.02	71.19	81.37
District 4	42,912	53.64	62.58	71.52
Lewis	37,849	47.31	55.20	63.08
Courthouse - Collins Settlement district	34,452	43.07	50.24	57.42
Freemans Creek district	36,160	45.20	52.73	60.27
Hackers Creek - Skin Creek district	43,981	54.98	64.14	73.30
Lincoln	35,800	44.75	52.21	59.67
Carroll district (2012)	38,348	47.94	55.92	63.91
Duval district (2012)	34,256	42.82	49.96	57.09
Harts district (2012)	37,431	46.79	54.59	62.39
Jefferson district (2011)	25,417	31.77	37.07	42.36
Laurel Hill district (2012)	29,010	36.26	42.31	48.35
Sheridan district (2012)	30,347	37.93	44.26	50.58
Union district (2011)	33,826	42.28	49.33	56.38
Washington district (2012)	33,196	41.50	48.41	55.33
Logan	36,763	45.95	53.61	61.27
Central district	36,569	45.71	53.33	60.95
Eastern district	39,054	48.82	56.95	65.09
Western district	34,975	43.72	51.01	58.29
Marion	43,165	53.96	62.95	71.94
Middletown district	34,750	43.44	50.68	57.92
Palatine district	53,678	67.10	78.28	89.46
West Augusta district	42,347	52.93	61.76	70.58

**WEST VIRGINIA MEDIAN HOUSEHOLD INCOME
2015 CENSUS
COUNTY & MAGISTERIAL DISTRICTS**

County/Magisterial District	Median HH Income			
		1.50%	1.75%	2.00%
Marshall	45,182	56.48	65.89	75.30
District 1	48,181	60.23	70.26	80.30
District 2	37,885	47.36	55.25	63.14
District 3	47,977	59.97	69.97	79.96
Mason	36,448	45.56	53.15	60.75
Arbuckle district	45,844	57.31	66.86	76.41
Clendenin district	32,616	40.77	47.57	54.36
Cologne district	25,132	31.42	36.65	41.89
Cooper district	54,623	68.28	79.66	91.04
Graham district	34,525	43.16	50.35	57.54
Hannan district	22,178	27.72	32.34	36.96
Lewis district	35,930	44.91	52.40	59.88
Robinson district	40,417	50.52	58.94	67.36
Union district	50,977	63.72	74.34	84.96
Waggener district	36,265	45.33	52.89	60.44
McDowell	24,921	31.15	36.34	41.54
Big Creek district	24,558	30.70	35.81	40.93
Browns Creek district	26,263	32.83	38.30	43.77
North Elkin district	30,069	37.59	43.85	50.12
Sandy River district	19,844	24.81	28.94	33.07
Mercer	36,195	45.24	52.78	60.33
District I	33,933	42.42	49.49	56.56
District II	37,309	46.64	54.41	62.18
District III	36,775	45.97	53.63	61.29
Mineral	31,790	39.74	46.36	52.98
District 1	30,985	38.73	45.19	51.64
District 2	26,837	33.55	39.14	44.73
District 3	38,157	47.70	55.65	63.60
Mingo	33,221	41.53	48.45	55.37
Beech Ben Mate district	28,284	35.36	41.25	47.14
Kermit Harvey district	36,288	45.36	52.92	60.48
Lee district	30,676	38.35	44.74	51.13
Magnolia district	28,780	35.98	41.97	47.97
Stafford district	29,560	36.95	43.11	49.27
Tug Hardee district	48,723	60.90	71.05	81.21
Williamson district	34,827	43.53	50.79	58.05
Monongalia	45,467	56.83	66.31	75.78
Central district	33,539	41.92	48.91	55.90
Eastern district	50,876	63.60	74.19	84.79
Western district	48,735	60.92	71.07	81.23
Monroe	36,918	46.15	53.84	61.53

**WEST VIRGINIA MEDIAN HOUSEHOLD INCOME
2015 CENSUS
COUNTY & MAGISTERIAL DISTRICTS**

County/Magisterial District	Median HH Income			
		1.50%	1.75%	2.00%
Central district	39,000	48.75	56.88	65.00
Eastern district	34,383	42.98	50.14	57.31
Western district	38,010	47.51	55.43	63.35
Morgan	39,324	49.16	57.35	65.54
District 1	33,426	41.78	48.75	55.71
District 2	39,255	49.07	57.25	65.43
District 3	43,643	54.55	63.65	72.74
Nicholas	39,171	48.96	57.12	65.29
Beaver district	31,233	39.04	45.55	52.06
Grant district (2014)	48,171	60.21	70.25	80.29
Hamilton district	44,736	55.92	65.24	74.56
Jefferson district	35,817	44.77	52.23	59.70
Kentucky district	46,441	58.05	67.73	77.40
Summersville district	41,791	52.24	60.95	69.65
Wilderness district	44,833	56.04	65.38	74.72
Ohio	40,569	50.71	59.16	67.62
District 1	47,810	59.76	69.72	79.68
District 2	32,878	41.10	47.95	54.80
District 3	44,553	55.69	64.97	74.26
Pendleton	36,953	46.19	53.89	61.59
Central district	36,380	45.48	53.05	60.63
Eastern district	41,458	51.82	60.46	69.10
Western district	31,641	39.55	46.14	52.74
Pleasants	44,288	55.36	64.59	73.81
District A	42,727	53.41	62.31	71.21
District B	42,239	52.80	61.60	70.40
District C	40,439	50.55	58.97	67.40
District D	54,643	68.30	79.69	91.07
Pocahontas	36,827	46.03	53.71	61.38
Edray district	39,479	49.35	57.57	65.80
Greenbank district	32,569	40.71	47.50	54.28
Huntersville district	32,727	40.91	47.73	54.55
Little Levels district	39,537	49.42	57.66	65.90
Preston	45,064	56.33	65.72	75.11
Fifth district	45,050	56.31	65.70	75.08
First district	44,920	56.15	65.51	74.87
Fourth district	43,295	54.12	63.14	72.16
Second district	51,804	64.76	75.55	86.34
Third district	40,644	50.81	59.27	67.74
Putnam	56,774	70.97	82.80	94.62
Buffalo - Union district	46,288	57.86	67.50	77.15

**WEST VIRGINIA MEDIAN HOUSEHOLD INCOME
2015 CENSUS
COUNTY & MAGISTERIAL DISTRICTS**

County/Magisterial District	Median HH Income			
		1.50%	1.75%	2.00%
Curry district	46,275	57.84	67.48	77.13
Pocatalico district	44,982	56.23	65.60	74.97
Scott district	62,282	77.85	90.83	103.80
Teays district	76,175	95.22	111.09	126.96
Raleigh	41,032	51.29	59.84	68.39
District 1	41,317	51.65	60.25	68.86
District 2	37,351	46.69	54.47	62.25
District 3	44,367	55.46	64.70	73.95
Randolph	39,457	49.32	57.54	65.76
Beverly district	41,200	51.50	60.08	68.67
Dry Fork district	32,614	40.77	47.56	54.36
Huttonsville district	29,545	36.93	43.09	49.24
Leadsville district	40,971	51.21	59.75	68.29
Middle Fork district	37,009	46.26	53.97	61.68
Mingo district	42,736	53.42	62.32	71.23
New Interest district	54,688	68.36	79.75	91.15
Roaring Creek district	36,842	46.05	53.73	61.40
Valley Bend district	38,810	48.51	56.60	64.68
Ritchie	37,636	47.05	54.89	62.73
Clay district	37,153	46.44	54.18	61.92
Grant district	37,333	46.67	54.44	62.22
Murphy district	42,303	52.88	61.69	70.51
Union district	37,171	46.46	54.21	61.95
Roane	31,813	39.77	46.39	53.02
District 1	37,549	46.94	54.76	62.58
District 2	28,727	35.91	41.89	47.88
District 3	32,699	40.87	47.69	54.50
Summers	36,651	45.81	53.45	61.09
Bluestone River district	34,125	42.66	49.77	56.88
Greenbrier River district	37,913	47.39	55.29	63.19
New River district	37,056	46.32	54.04	61.76
Taylor	43,970	54.96	64.12	73.28
Eastern district	38,338	47.92	55.91	63.90
Tygart district	39,833	49.79	58.09	66.39
Western district	55,305	69.13	80.65	92.18
Tucker	40,533	50.67	59.11	67.56
Black Fork district	41,281	51.60	60.20	68.80
Clover district	27,750	34.69	40.47	46.25
Davis district	38,750	48.44	56.51	64.58
Dry Fork district	47,000	58.75	68.54	78.33
Fairfax district	37,344	46.68	54.46	62.24

**WEST VIRGINIA MEDIAN HOUSEHOLD INCOME
2015 CENSUS
COUNTY & MAGISTERIAL DISTRICTS**

County/Magisterial District	Median HH Income			
		1.50%	1.75%	2.00%
Licking district (2014)	8,676	10.85	12.65	14.46
St. George district	27,016	33.77	39.40	45.03
Tyler	38,854	48.57	56.66	64.76
Central district	37,708	47.14	54.99	62.85
North district	41,397	51.75	60.37	69.00
South district	35,294	44.12	51.47	58.82
West district	40,833	51.04	59.55	68.06
Upshur	40,330	50.41	58.81	67.22
First district	37,524	46.91	54.72	62.54
Second district	39,080	48.85	56.99	65.13
Third district	43,613	54.52	63.60	72.69
Wayne	36,318	45.40	52.96	60.53
Butler district	43,936	54.92	64.07	73.23
Ceredo district	36,822	46.03	53.70	61.37
Stonewall district	28,829	36.04	42.04	48.05
Union district	30,814	38.52	44.94	51.36
Westmoreland district	42,880	53.60	62.53	71.47
Webster	29,086	36.36	42.42	48.48
Central district	27,632	34.54	40.30	46.05
Northern district	28,415	35.52	41.44	47.36
Southern district	34,330	42.91	50.06	57.22
Wetzel	39,096	48.87	57.02	65.16
District 1	34,025	42.53	49.62	56.71
District 2	43,036	53.80	62.76	71.73
District 3	40,039	50.05	58.39	66.73
Wirt	39,352	49.19	57.39	65.59
Central district	38,269	47.84	55.81	63.78
Northeast district	36,875	46.09	53.78	61.46
Southwest district	44,375	55.47	64.71	73.96
Wood	41,884	52.36	61.08	69.81
Clay district	47,452	59.32	69.20	79.09
Harris district	38,657	48.32	56.37	64.43
Lubeck district	49,139	61.42	71.66	81.90
Parkersburg district	35,098	43.87	51.18	58.50
Slate district	61,463	76.83	89.63	102.44
Steele district	37,813	47.27	55.14	63.02
Tygart district	30,420	38.03	44.36	50.70
Union district	50,288	62.86	73.34	83.81
Walker district	23,988	29.99	34.98	39.98
Williams district	55,439	69.30	80.85	92.40
Wyoming	33,730	42.16	49.19	56.22

**WEST VIRGINIA MEDIAN HOUSEHOLD INCOME
2015 CENSUS
COUNTY & MAGISTERIAL DISTRICTS**

County/Magisterial District	Median HH Income			
		1.50%	1.75%	2.00%
District 1	36,620	45.78	53.40	61.03
District 2	27,009	33.76	39.39	45.02
District 3	34,583	43.23	50.43	57.64

Source: US Census Bureau American Fact Finder

http://factfinder2.census.gov/faces/nav/jsf/pages/guided_search.xhtml

APPENDIX E1

MEDIAN HOUSEHOLD INCOME BY
MUNICIPALITY

**WEST VIRGINIA MEDIAN HOUSEHOLD INCOME
2015 CENSUS
MUNICIPALITIES**

MUNICIPALITIES	Median HH Income	Average Bill based on % MHI		
		1.50%	1.75%	2.00%
A				
Addison (Webster Springs), town	35,595	44.49	51.91	59.33
Albright, town	28,438	35.55	41.47	47.40
Alderson , town	24,643	30.80	35.94	41.07
Anawalt, town	24,219	30.27	35.32	40.37
Anmoore, town	26,429	33.04	38.54	44.05
Ansted, town	41,000	51.25	59.79	68.33
Athens, town	33,542	41.93	48.92	55.90
Auburn, town (2014)	17,083	21.35	24.91	28.47
B				
Bancroft, town	75,278	94.10	109.78	125.46
Barboursville, village	39,068	48.84	56.97	65.11
Barrackville, town	47,344	59.18	69.04	78.91
Bath (Berkeley Springs), town	36,250	45.31	52.86	60.42
Bayard, town	31,875	39.84	46.48	53.13
Beckley, city	34,944	43.68	50.96	58.24
Beech Bottom, village	39,464	49.33	57.55	65.77
Belington, town	34,438	43.05	50.22	57.40
Belle, town	44,583	55.73	65.02	74.31
Belmont, city	39,375	49.22	57.42	65.63
Benwood, city	29,276	36.60	42.69	48.79
Bethany, town	56,364	70.46	82.20	93.94
Bethlehem, village	63,587	79.48	92.73	105.98
Beverly, town	22,917	28.65	33.42	38.20
Blacksville, town	46,250	57.81	67.45	77.08
Bluefield, city	34,972	43.72	51.00	58.29
Bolivar, town	49,236	61.55	71.80	82.06
Bradshaw, town	28,750	35.94	41.93	47.92
Bramwell, town	40,417	50.52	58.94	67.36
Brandonville, town	64,286	80.36	93.75	107.14
Bridgeport, city	79,324	99.16	115.68	132.21
Bruceton Mills, town	45,179	56.47	65.89	75.30
Buckhannon, city	30,833	38.54	44.96	51.39
Buffalo, town	37,115	46.39	54.13	61.86
Burnsville, town	34,000	42.50	49.58	56.67
C				
Cairo, town	32,500	40.63	47.40	54.17
Camden-on-Gauley, town	27,500	34.38	40.10	45.83
Cameron, city	31,250	39.06	45.57	52.08
Capon Bridge, town	27,500	34.38	40.10	45.83
Carpendale, town	39,659	49.57	57.84	66.10
Cedar Grove, town	38,958	48.70	56.81	64.93
Ceredo, city	41,146	51.43	60.00	68.58

**WEST VIRGINIA MEDIAN HOUSEHOLD INCOME
2015 CENSUS
MUNICIPALITIES**

MUNICIPALITIES	Median HH Income	Average Bill based on % MHI		
		1.50%	1.75%	2.00%
Chapmanville, town	34,469	43.09	50.27	57.45
Charleston, city	48,442	60.55	70.64	80.74
Charles Town, city	59,483	74.35	86.75	99.14
Chesapeake, town	40,286	50.36	58.75	67.14
Chester, city	34,508	43.14	50.32	57.51
Clarksburg, city	37,036	46.30	54.01	61.73
Clay, town	24,073	30.09	35.11	40.12
Clearview, village	60,625	75.78	88.41	101.04
Clendenin, town	42,461	53.08	61.92	70.77
Cowen, town	35,240	44.05	51.39	58.73
D				
Danville, town	26,875	33.59	39.19	44.79
Davis, town	36,250	45.31	52.86	60.42
Davy, town	23,667	29.58	34.51	39.45
Delbarton, town	30,833	38.54	44.96	51.39
Dunbar, city	41,287	51.61	60.21	68.81
Durbin, town	31,477	39.35	45.90	52.46
E				
East Bank, town	52,083	65.10	75.95	86.81
Eleanor, town	51,414	64.27	74.98	85.69
Elizabeth, town	31,691	39.61	46.22	52.82
Elk Garden, town	17,813	22.27	25.98	29.69
Elkins, city	38,214	47.77	55.73	63.69
Ellenboro, town	35,694	44.62	52.05	59.49
F				
Fairmont, city	36,086	45.11	52.63	60.14
Fairview, town	34,583	43.23	50.43	57.64
Falling Spring, town	55,000	68.75	80.21	91.67
Farmington, town	46,518	58.15	67.84	77.53
Fayetteville, town	36,429	45.54	53.13	60.72
Flatwoods, town	30,625	38.28	44.66	51.04
Flemington, town	30,417	38.02	44.36	50.70
Follansbee, city	51,144	63.93	74.59	85.24
Fort Gay, town	12,454	15.57	18.16	20.76
Franklin, town	42,361	52.95	61.78	70.60
Friendly, town	23,929	29.91	34.90	39.88
G				
Gary, city	31,667	39.58	46.18	52.78
Gassaway, town	34,375	42.97	50.13	57.29
Gauley Bridge, town	37,344	46.68	54.46	62.24
Gilbert, town	43,333	54.17	63.19	72.22
Glasgow, town	41,648	52.06	60.74	69.41
Glen Dale, city	52,262	65.33	76.22	87.10

**WEST VIRGINIA MEDIAN HOUSEHOLD INCOME
2015 CENSUS
MUNICIPALITIES**

MUNICIPALITIES	Median HH Income	Average Bill based on % MHI		
		1.50%	1.75%	2.00%
Glenville, town	30,474	38.09	44.44	50.79
Grafton, city	34,844	43.56	50.81	58.07
Grantsville, town	28,646	35.81	41.78	47.74
Grant Town, town	33,750	42.19	49.22	56.25
Granville, town	32,242	40.30	47.02	53.74
H				
Hambleton, town	26,250	32.81	38.28	43.75
Hamlin, town	36,250	45.31	52.86	60.42
Handley, town	35,250	44.06	51.41	58.75
Harman, town	28,750	35.94	41.93	47.92
Harpers Ferry, town	65,714	82.14	95.83	109.52
Harrisville, town	40,900	51.13	59.65	68.17
Hartford City, town	33,625	42.03	49.04	56.04
Hedgesville, town	55,938	69.92	81.58	93.23
Henderson, town	25,250	31.56	36.82	42.08
Hendricks, town	45,000	56.25	65.63	75.00
Hillsboro, town	27,614	34.52	40.27	46.02
Hinton, city	31,019	38.77	45.24	51.70
Hundred, town	32,778	40.97	47.80	54.63
Huntington, city	29,873	37.34	43.56	49.79
Hurricane, city	52,347	65.43	76.34	87.25
Huttonsville, town	27,396	34.25	39.95	45.66
I				
laeger, town	20,313	25.39	29.62	33.86
J				
Jane Lew, town	34,464	43.08	50.26	57.44
Junior, town	32,222	40.28	46.99	53.70
K				
Kenova, city	32,140	40.18	46.87	53.57
Kermit, town	48,333	60.42	70.49	80.56
Keyser, city	24,450	30.56	35.66	40.75
Keystone, city	22,125	27.66	32.27	36.88
Kimball, town	38,250	47.81	55.78	63.75
Kingwood, city	44,886	56.11	65.46	74.81
L				
Leon, town	31,786	39.73	46.35	52.98
Lester, town	43,750	54.69	63.80	72.92
Lewisburg, city	49,904	62.38	72.78	83.17
Logan, city	29,712	37.14	43.33	49.52
Lost Creek, town	53,250	66.56	77.66	88.75
Lumberport, town	38,750	48.44	56.51	64.58
M				
Mabscott, town	54,856	68.57	80.00	91.43

**WEST VIRGINIA MEDIAN HOUSEHOLD INCOME
2015 CENSUS
MUNICIPALITIES**

MUNICIPALITIES	Median HH Income	Average Bill based on % MHI		
		1.50%	1.75%	2.00%
McMechen, city	41,000	51.25	59.79	68.33
Madison, city	46,559	58.20	67.90	77.60
Man, town	55,250	69.06	80.57	92.08
Mannington, city	43,750	54.69	63.80	72.92
Marlinton, town	28,633	35.79	41.76	47.72
Marmet, city	36,382	45.48	53.06	60.64
Martinsburg, city	37,843	47.30	55.19	63.07
Mason, town	33,859	42.32	49.38	56.43
Masontown, town	46,488	58.11	67.80	77.48
Matewan, town	14,135	17.67	20.61	23.56
Matoaka, town	26,875	33.59	39.19	44.79
Meadow Bridge, town	35,192	43.99	51.32	58.65
Middlebourne, town	31,250	39.06	45.57	52.08
Mill Creek, town	29,702	37.13	43.32	49.50
Milton, town	35,500	44.38	51.77	59.17
Mitchell Heights, town	64,583	80.73	94.18	107.64
Monongah, town	36,739	45.92	53.58	61.23
Montgomery, city	24,716	30.90	36.04	41.19
Montrose, town	58,125	72.66	84.77	96.88
Moorefield, town	32,775	40.97	47.80	54.63
Morgantown, city	34,090	42.61	49.71	56.82
Moundsville, city	34,628	43.29	50.50	57.71
Mount Hope, city	21,218	26.52	30.94	35.36
Mullens, city	43,942	54.93	64.08	73.24
N				
Newburg, town	46,875	58.59	68.36	78.13
New Cumberland, city	25,045	31.31	36.52	41.74
New Haven, town	36,750	45.94	53.59	61.25
New Martinsville, city	40,039	50.05	58.39	66.73
Nitro, city	43,434	54.29	63.34	72.39
Northfork, town	31,786	39.73	46.35	52.98
North Hills, town	92,344	115.43	134.67	153.91
Nutter Fort, town	39,583	49.48	57.73	65.97
O				
Oak Hill, city	39,316	49.15	57.34	65.53
Oakvale, town (2014)	25,625	32.03	37.37	42.71
Oceana, town	29,125	36.41	42.47	48.54
P				
Paden City, city	35,898	44.87	52.35	59.83
Parkersburg, city	31,876	39.85	46.49	53.13
Parsons, city	35,450	44.31	51.70	59.08
Paw Paw, town	29,821	37.28	43.49	49.70
Pax, town	33,625	42.03	49.04	56.04

**WEST VIRGINIA MEDIAN HOUSEHOLD INCOME
2015 CENSUS
MUNICIPALITIES**

MUNICIPALITIES	Median HH Income	Average Bill based on % MHI		
		1.50%	1.75%	2.00%
Pennsboro, city	29,038	36.30	42.35	48.40
Petersburg, city	31,792	39.74	46.36	52.99
Peterstown, town	34,875	43.59	50.86	58.13
Philippi, city	21,698	27.12	31.64	36.16
Piedmont, town	22,353	27.94	32.60	37.26
Pine Grove, town	19,750	24.69	28.80	32.92
Pineville, town	53,375	66.72	77.84	88.96
Pleasant Valley, city	45,563	56.95	66.45	75.94
Poca, town	49,464	61.83	72.14	82.44
Point Pleasant, city	31,827	39.78	46.41	53.05
Pratt, town	48,472	60.59	70.69	80.79
Princeton, city	30,856	38.57	45.00	51.43
Pullman, town	17,917	22.40	26.13	29.86
Q				
Quinwood, town	24,063	30.08	35.09	40.11
R				
Rainelle, town	25,000	31.25	36.46	41.67
Ranson Town, corporation of	43,464	54.33	63.39	72.44
Ravenswood, city	30,546	38.18	44.55	50.91
Reedsville, town	34,943	43.68	50.96	58.24
Reedy, town	48,438	60.55	70.64	80.73
Rhodell, town	37,813	47.27	55.14	63.02
Richwood, city	27,234	34.04	39.72	45.39
Ridgeley, town	21,389	26.74	31.19	35.65
Ripley, city	31,162	38.95	45.44	51.94
Rivesville, town	41,741	52.18	60.87	69.57
Romney, city	25,925	32.41	37.81	43.21
Ronceverte, city	37,898	47.37	55.27	63.16
Rowlesburg, town	29,766	37.21	43.41	49.61
Rupert, town	30,125	37.66	43.93	50.21
S				
St. Albans, city	44,758	55.95	65.27	74.60
St. Marys, city	42,664	53.33	62.22	71.11
Salem, city	35,438	44.30	51.68	59.06
Sand Fork, town	72,578	90.72	105.84	120.96
Shepherdstown, town	31,583	39.48	46.06	52.64
Shinnston, city	47,039	58.80	68.60	78.40
Sistersville, city	31,042	38.80	45.27	51.74
Smithers, city	28,333	35.42	41.32	47.22
Smithfield, town	20,781	25.98	30.31	34.64
Sophia, town	33,929	42.41	49.48	56.55
South Charleston, city	46,390	57.99	67.65	77.32
Spencer, city	22,453	28.07	32.74	37.42

**WEST VIRGINIA MEDIAN HOUSEHOLD INCOME
2015 CENSUS
MUNICIPALITIES**

MUNICIPALITIES	Median HH Income	Average Bill based on % MHI		
		1.50%	1.75%	2.00%
Star City, town	40,833	51.04	59.55	68.06
Stonewood, city	45,000	56.25	65.63	75.00
Summersville, town (2012)	34,924	43.66	50.93	58.21
Sutton, town	35,938	44.92	52.41	59.90
Sylvester, town	52,500	65.63	76.56	87.50
T				
Terra Alta, town	36,513	45.64	53.25	60.86
Thomas, city	33,000	41.25	48.13	55.00
Thurmond, town (2000 again)	23,750	29.69	34.64	39.58
Triadelphia, town	29,063	36.33	42.38	48.44
Tunnelton, town	46,042	57.55	67.14	76.74
U				
Union, town	28,409	35.51	41.43	47.35
V				
Valley Grove, village	35,357	44.20	51.56	58.93
Vienna, city	46,968	58.71	68.50	78.28
W				
War, city	20,625	25.78	30.08	34.38
Wardensville, town	35,000	43.75	51.04	58.33
Wayne, town	17,559	21.95	25.61	29.27
Weirton, city	39,832	49.79	58.09	66.39
Welch, city	28,112	35.14	41.00	46.85
Wellsburg, city	31,288	39.11	45.63	52.15
West Hamilin, town	16,094	20.12	23.47	26.82
West Liberty, town (2014)	21,250	26.56	30.99	35.42
West Logan, town	40,750	50.94	59.43	67.92
West Milford, town	48,125	60.16	70.18	80.21
Weston, city	31,776	39.72	46.34	52.96
Westover, city	35,792	44.74	52.20	59.65
West Union, town	30,583	38.23	44.60	50.97
Wheeling, city	36,989	46.24	53.94	61.65
White Hall, town	63,333	79.17	92.36	105.56
White Sulphur Springs, city	30,363	37.95	44.28	50.61
Whitesville, town	24,375	30.47	35.55	40.63
Williamson, city	33,872	42.34	49.40	56.45
Williamstown, city	49,890	62.36	72.76	83.15
Windsor Heights, village	41,607	52.01	60.68	69.35
Winfield, town	56,300	70.38	82.10	93.83
Womelsdorf (Coalton), town	47,222	59.03	68.87	78.70
Worthington, town	26,875	33.59	39.19	44.79

Source: US Census Bureau American Fact Finder

<http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>

APPENDIX F

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, 2019

Capitalization Grants (32)	\$ 709,305,586	
State Matches (actual)	\$ 129,666,273	
Repayments (P + I; 212 + 319)	\$ 501,251,686	
Investment Earnings	<u>\$ 50,732,446</u>	
Sources sub-total (a)		<u>\$ 1,390,955,991</u>

Cumulative Uses as of December 31, 2019

Loan Assistance (212+319)	\$ 1,304,653,985	
DEP Administration (4%)	<u>\$ 14,143,540</u>	
Uses sub-total (b)		<u>\$ 1,318,797,525</u>

FY2021 Sources of Funds

Available funds from prior IUPs (a - b)	\$ 72,158,466	
Capitalization Grant #32 (FFY2020 Funds)	\$ 24,773,000	
State Match (estimate)	\$ 4,954,600	
Earnings (estimate)	\$ 5,781,331	
Repayments (estimate)	<u>\$ 37,574,863</u>	
Sources of Funds (c)		<u>\$ 145,242,260</u>

Less

Appendix C Projects	\$ 129,750,000	
Loan Closings Between 12/31/2019 - 6/30/20	\$ 22,930,665	
AgWQLP Reserves	\$ 150,000	
OSLP Reserve	<u>\$ 300,000</u>	
Total		<u>\$ 153,130,665</u>

APPENDIX G

POSSIBLE GREEN TECHNOLOGY PROJECTS

CLEAN WATER STATE REVOLVING FUND

"Green" Infrastructure Project Solicitation for FY2021 IUP

Project	Category	Description	Total Project Cost Estimate
Auburn, Town of	decentralized sewer system	Decentralized individual treatment units	\$2,714,725
Beckley Sanitary Board (Little Whiteshtick)	storm water	Green technology to improve a portion of the storm water system	\$2,669,758
Beckley Sanitary Board (Pinecrest)	storm water	Green technology to improve a portion of the storm water system	\$3,739,000
Beckley Sanitary Board (Railtrail)	storm water	Innovative green technology - Continuous Monitoring and Adaptive Control System	\$219,500
Big Bend PSD	decentralized sewer system	Replacement of wwtp and rehabilitation of another wwtp	\$1,192,500
Bradshaw, Town of	energy efficiency	Replacement of Vacuum Sewer system with Gravity system	\$6,208,000
Fort Gay, Town of	energy efficiency	Treatment plant rehabilitation	\$3,400,000
McDowell Co. PSD - Coalwood	decentralized sewer system	Packaged MBBR plant and collection system	\$3,250,000
McDowell Co. PSD - laeger	decentralized sewer system	Decentralized system for unsewered area	\$7,900,000
Mount Zion PSD	decentralized sewer system	Treatment plant replacement	\$2,310,000
Page Kincaid PSD	decentralized sewer system	Decentralized system for unsewered area	\$3,000,000
Pea Ridge PSD (Holiday Park)	decentralized sewer system	Decentralized Wastewater Treatment Plant	\$2,345,000
West Fork Cooperative	decentralized sewer system	STEG/STEP system	\$4,018,380
		TOTAL	\$42,966,863

APPENDIX H

UNEMPLOYMENT DATA

**Labor Force Data by County
2019**

County	Percentage
Barbour	6.1
Berkeley	3.5
Boone	5.4
Braxton	7.4
Brooke	5.3
Cabell	4.2
Calhoun	13.3
Clay	8.5
Doddridge	4.3
Fayette	5.7
Gilmer	6.7
Grant	5.5
Greenbrier	4.7
Hampshire	3.8
Hancock	5.2
Hardy	5.1
Harrison	4.3
Jackson	3.4
Jefferson	3.0
Kanawha	4.6
Lewis	6.2
Lincoln	6.4
Logan	6.3
McDowell	9.1
Marion	5.1
Marshall	6.0
Mason	6.1
Mercer	5.7
Mineral	5.7
Mingo	6.7
Monongalia	3.7
Monroe	4.4
Morgan	3.8
Nicholas	6.2
Ohio	4.3
Pendleton	3.9
Pleasants	7.0
Pocahontas	5.8
Preston	4.6
Putnam	4.4
Raleigh	4.7
Randolph	5.9
Ritchie	5.7
Roane	9.7
Summers	5.6
Taylor	4.8
Tucker	5.1
Tyler	7.8
Upshur	5.9
Wayne	5.4
Webster	6.4
Wetzel	7.1
Wirt	8.0
Wood	5.1
Wyoming	6.9
WV	4.9

APPENDIX I

POPULATION DATA

Population Data

County	2015	2018		% Change
	Estimate	Estimate	delta	*red reflects negative
Barbour	16731	16730	1	0.01
Berkeley	108724	113495	4771	4.39
Boone	24000	22817	1183	4.93
Braxton	14466	14282	184	1.27
Brooke	23665	22772	893	3.77
Cabell	96824	95318	1506	1.56
Calhoun	7557	7396	161	2.13
Clay	9141	8785	356	3.89
Doddridge	8201	8536	335	4.08
Fayette	45534	44126	1408	3.09
Gilmer	8644	8205	439	5.08
Grant	11815	11641	174	1.47
Greenbrier	35666	35347	319	0.89
Hampshire	23542	23363	179	0.76
Hancock	30201	29680	521	1.73
Hardy	13936	13842	94	0.67
Harrison	68998	68209	789	1.14
Jackson	29256	29018	238	0.81
Jefferson	55214	56179	965	1.75
Kanawha	190781	185710	5071	2.66
Lewis	16434	16276	158	0.96
Lincoln	21560	21078	482	2.24
Logan	35760	33801	1959	5.48
McDowell	20802	19217	1585	7.62
Marion	56790	56497	293	0.52
Marshall	32480	31645	835	2.57
Mason	27177	26939	238	0.88
Mercer	61891	60486	1405	2.27
Mineral	27755	27278	477	1.72
Mingo	25931	24741	1190	4.59
Monongalia	101668	105252	3584	3.53
Monroe	13525	13467	58	0.43
Morgan	17475	17624	149	0.85
Nicholas	25930	25324	606	2.34
Ohio	43637	42547	1090	2.50
Pendleton	7402	7056	346	4.67
Pleasants	7636	7507	129	1.69
Pocahontas	8697	8531	166	1.91
Preston	33809	33837	28	0.08
Putnam	56596	56652	56	0.10
Raleigh	78493	76232	2261	2.88
Randolph	29365	29065	300	1.02
Ritchie	10140	9932	208	2.05
Roane	14636	14205	431	2.94
Summers	13544	13018	526	3.88
Taylor	16977	16951	26	0.15
Tucker	6972	7027	55	0.79
Tyler	9033	8909	124	1.37
Upshur	24560	24605	45	0.18
Wayne	41499	40708	791	1.91
Webster	8927	8518	409	4.58
Wetzel	16157	15614	543	3.36
Wirt	5841	5797	44	0.75
Wood	86559	85556	1003	1.16
Wyoming	22866	21711	1155	5.05

Source: https://data.census.gov/cedsci/table?g=0400000US54,54.050000&text=population&tid=ACSDT5Y2018.B01003&hidePreview=false&cid=B01003_001E&vintage=2018&tp=true&moe=false