PENNSYLVANIA 42 (STATE) (NUMBER)

PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY AND DEPARTMENT OF ENVIRONMENTAL PROTECTION CLEAN WATER STATE REVOLVING FUND FEDERAL FY2023 APPROPRIATION - PROJECT PRIORITY LIST UPDATED FOR THE APRIL 19, 2023 PENNVEST BOARD MEETING

EXPLANATION OF HEADINGS

NEEDS CATEGORY:

- I SECONDARY TREATMENT
- II TREATMENT MORE STRINGENT THAN SECONDARY
- **IIIA INFILTRATION/INFLOW CORRECTION**
- **IIIB MAJOR SEWER SYSTEM REHABILITATION**
- **IVA NEW COLLECTOR SEWERS AND APPURTENANCES**
- **IVB NEW INTERCEPTORS AND APPURTENANCES**
 - **V CORRECTION OF COMBINED SEWER OVERFLOWS**

PROJECT TYPE:

STP - SEWAGE TREATMENT PLANT

- STPMOD SEWAGE TREATMENT PLANT MODIFICATION
 - INT INTERCEPTOR
 - **PS PUMP STATION**
 - FM FORCE MAIN
 - SS SEWER SYSTEM
- SSREH SEWER SYSTEM REHABILITATION

NPDES #:NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM PERMIT NUMBERPROJECT NUMBER:DEP PROJECT IDENTIFICATION NUMBERLOAN #:PENNVEST LOAN NUMBER OF FUNDED PROJECTELIG. COST:ESTIMATED ELIGIBLE NEEDS FOR PROJECTGPRGREEN PROJECT RESERVE

Note: Green Project Reserve pertains to categorical projects considered for funding after the issuance of EPA's "Procedures for Implementing Certain Provisions of EPA's Fiscal Year 2012 Appropriations Affecting the Clean Water and Drinking Water State Revolving Fund Programs". Additionally, per EPA's 2017 guidance update "Change to the Clean Water State Revolving Fund Green Project Reserve Guidance" inflow/Infiltration (I/I) projects no longer require a business case. Therefore, I/I project costs have been considered green project reserve and categorized under energy efficiency. If an applicant requests partial funding through PENNVEST, GPR funding will be proportioned accordingly for federal accounting purposes.

APPLICANT INFORMATION				NEED	S CATEGORIES	PROJECT INFORMATION		
Central Wayne RA Crestmont Area and Cherry Ridge Sewer Rehabilitation Projects	COUNTY:	Wayne	l:	\$0	IVA:	\$0	PROJECT NO.:	CS423295-01
574 Bucks Cove Road	REGION:	NE	II:	\$0	IVB:	\$0	PROJ. TYPE:	SSREH
Honesdale, PA 18431	NPDES #:	PA0023469	IIIA:	\$1,749,600	V:	\$0	DEP RATING:	4
	LOAN #:	71464	IIIB:	\$3,815,950	ELIG. COST:	\$5,565,550	DEP RANKING: PV RATING:	

- PROB DESC: This project includes two sewer systems of interest. The Crestmont Area sewer main and the Cherry Ridge collection system. The Crestmont Area sewer main is very old. It is made up of terra cotta sewer lines and brick manholes. It has numerous cracks, crushed pipes and separated joints. The significant amount of inflow and infiltration (I/I) into the system has resulted in overflows during wet weather and peak discharge to the wastewater treatment plant. Overall, the condition of the existing facilities in the Crestmont area is poor and may pose risks to public health and the environment. The Cherry Ridge collection system was installed more than 30 years ago. Inspection of the system revealed that the manhole frames and covers have deteriorated, resulting in inflow and infiltration (I/I) into the sewer system. Environmental benefits include eliminating the potential of untreated sewage discharges to the County's waterways.
- PROJ DESC: This project proposes to replace and/or rehabilitate sanitary sewer mains and manholes in the Crestmont Area sewer system and the Cherry Ridge sewer collection system. The Crestmont Area sewer main replacement project includes replacing approximately 10,550 linear feet (LF) of sanitary sewer main and 41 manholes. The Cherry Ridge sewer rehabilitation project includes cleaning and televising approximately 21,500 LF of 8-inch diameter sanitary sewer main, cleaning approximately 100 sanitary sewer manholes, installing new frames and covers on all manholes, and rehabilitating the remaining mains and manholes as required per the television inspection of the sewer system. Engineering for this project is funded under loan number 77112.

Green Project Reserve (GPR): Yes

GPR Category: Energy Efficiency

GPR Funding: \$5,565,550.00

APPLICANT INFORMATION				NEED	S CATEGORIES	PROJECT INFORMATION		
Forest Hills MA - South Fork RWWTP ATAD and UV Additions	COUNTY:	Cambria	I:	\$7,871,000	IVA:	\$0	PROJECT NO.:	CS423296-01
900 Locust Street.	REGION:	SW	II:	\$0	IVB:	\$0	PROJ. TYPE:	STPMOD
Saint Michael, PA 15951	NPDES #:	PA0216941	IIIA:	\$0	V:	\$0	DEP RATING:	2
	LOAN #:	0	IIIB:	\$0	ELIG. COST:	\$7,871,000	DEP RANKING: PV RATING:	

- PROB DESC: The existing belt filter press at the Forest Hills Municipal Authority South Fork Wastewater Treatment Plant is outdated and inefficient, causing poor sludge dewatering results of about 10-14% solids. Additionally, the authority is facing increasing landfill disposal fees which has resulted in high annual operation costs. Environmental benefits include eliminating the potential of releasing inadequately treated sewage to the municipality's waterways.
- PROJ DESC: This project consists of constructing a new autothermal thermophilic aerobic digestion (ATAD) system to improve sludge dewatering efficiency, as well as produce Class A Biosolids which can be reused as fertilizer. This will decrease the total amount of solids leaving the plant and eliminate the need for sludge disposal at a landfill. The ATAD system includes an ATAD basin, a storage nitrification denitrification reactor (SNDR) basin, a biofilter, pumps, blowers, a thickener, and an equipment building. Additionally, a new ultraviolet (UV) channel will be constructed next to the existing one. The new UV channel will utilize modern equipment and add redundancy to the disinfection process.

Green Project Reserve (GPR): No

GPR Category: N/A

APPLICANT INFORMATION				NEED	S CATEGORIES	PROJECT INFORMATION		
Orwigsburg Borough Municipal Authority - North Warren Street Sewer Main Replacement	COUNTY:	Schuylkill	l:	\$0	IVA:	\$0	PROJECT NO.:	CS423311-01
333 South Liberty Street	REGION:	NE	II:	\$0	IVB:	\$0	PROJ. TYPE:	SSREH
Orwigsburg, PA 17961	NPDES #:	PA0021547	IIIA:	\$0	V:	\$0	DEP RATING:	2
	LOAN #:	0	IIIB:	\$2,087,500	ELIG. COST:	\$2,087,500	DEP RANKING: PV RATING:	

PROB DESC: The existing sanitary system is made of verified clay pipe (VCP), some polyvinyl chloride (PVC) pipes, and precast concrete manholes. CCTV work performed in 2019 discovered cracked/crushed pipes and separated joints in the sanitary sewer main, resulting in significant inflow and infiltration (I&I) during wet weather. The manholes were also found to have deteriorated due to exposure to high flow conditions during wet weather events. Environmental benefits include eliminating the discharge of untreated sewage to the Borough's waterways. It also reduces the energy utilized at the treatment plant to treat the inflow runoff.

PROJ DESC: This project includes replacing 2,175 linear feet (LF) of sanitary sewer main along Marshall Drive and Ridge Road and 3,400 LF of sanitary sewer main along North Warren Street and Station Road. It also includes installing manholes, laterals, and cleanouts and lining approximately 460 LF of sanitary sewer main on Marshall Drive.

Green Project Reserve (GPR): Yes

GPR Category: Energy Efficiency

GPR Funding: \$2,087,500.00

APPLICANT INFO		NEED	S CATEGORIES	PROJECT INFORMATION				
Eldred Borough - Wastewater Treatment Plant Upgrades	COUNTY:	McKean	l:	\$14,328,104	IVA:	\$0	PROJECT NO.:	CS423282-01
3 Bennett Street, P.O. Box 270	REGION:	NW	II:	\$0	IVB:	\$450,000	PROJ. TYPE:	STP
Eldred, PA 16731	NPDES #:	PA0020052	IIIA:	\$0	V:	\$0	DEP RATING:	44
	LOAN #:	71454	IIIB:	\$0	ELIG. COST:	\$14,778,104	DEP RANKING: PV RATING:	

- PROB DESC: The current wastewater treatment plant was constructed in 1967 with the most recent upgrade being a comminutor in 2013. The wastewater treatment plant is showing signs of deterioration both mechanically and structurally. The wastewater treatment plant has had historical issues of not meeting effluent limits. A consent order from PA DEP has been issued. Environmental benefits include eliminating the potential discharge of untreated sewage to the Borough's waterways.
- PROJ DESC: This project is the construction of a new 0.35 million gallons per day (MGD) Sequencing Batch Reactor (SBR) with new pump station, headworks for grit control, aerobic digesters. ultraviolet (UV) disinfection, effluent aeration, and reed beds. This facility will be located approximately one mile north of the existing wastewater treatment plant and will discharge to the Allegheny River. Engineering for this project is funded under loan number 77106.

Green Project Reserve (GPR): No

GPR Category: N/A

APPLICANT INFORMATION				NEED	S CATEGORIES	PROJECT INFORMATION		
Borough of Carroll Valley - Wastewater Treatment Plant Upgrades Project	COUNTY:	Adams	l:	\$0	IVA:	\$0	PROJECT NO.:	CS423302-01
5685 Fairfield Road	REGION:	SC	II:	\$5,827,264	IVB:	\$0	PROJ. TYPE:	STPMOD
Fairfield, PA 17320	NPDES #:	PA0080039	IIIA:	\$0	V:	\$0	DEP RATING:	43
	LOAN #:	0	IIIB:	\$0	ELIG. COST:	\$5,827,264	DEP RANKING:	5 of 22
							PV RATING:	58

- PROB DESC: The Pennsylvania Department of Environmental Protection (DEP) sent the Authority a letter in March 2019 stating that, based on the Authority's Chapter 94 Report, the WWTP was hydraulically overloaded. The current system is old and outdated and, certain times of the year the flow is too high for the design capacity. In addition, insufficient equipment and facility space has resulted in the Authority paying for waste to be hauled to Harrisburg for further processing. The current facility is a 140,000 gallon/day extended aeration treatment facility that utilizes rectangular clarifiers with mechanical flights to move scum and sludge to discharge points. The borough has had issues finding parts for these aging clarifiers. During wet weather, the plant experiences high flows in exceedance of its capacity. Additionally, in the future, the Borough would like to extend sewer lines to eliminate some of the 90 holding tanks that are being utilized within the Borough. For these reasons, the facility needs expansion and improvements to provide for the future needs of the Borough. Environmental benefits include eliminating the potential discharge of untreated or indequately treated sewage to the Borough's waterways.
- PROJ DESC: This project includes the expansion of the Carrol Valley Wastewater Treatment Plant (WWTP). The proposed wastewater treatment facility has been designed for a total annual average hydraulic capacity of 250,000 gallons/day and a peak wet weather flow of 625,000 gallons/day. The treatment process will be an Intermittent Cycle Extended Aeration System (ICEAS) Sequencing Batch Reactor, manufactured by Xylem/Sanitaire. Raw wastewater will be pumped to a microscreen using a triplex suction lift pump station already constructed. Disinfection will be by ultraviolet light with discharge to Toms Creek via the existing 8-inch outfall line. Batch decant rates will be attenuated using a post-equalization basin and submersible pumping system. An aerobic digester will stabilize solids produced by the biological treatment process and provide storage for at least 30 days of solids production. Two proposed blowers will be used to provide aeration for the aerobic digester and post-equalization tank. Following construction and start-up, the existing treatment facility will be abandoned and demolished. A new control building will house blowers, emergency power generator, process control equipment, chemical feed equipment, and a laboratory.

Green Project Reserve (GPR): No

GPR Category: N/A

APPLICANT INFORI		NEED	S CATEGORIES	PROJECT INFORMATION				
Pittsburgh Water and Sewer Authority 2023- 2025 LDSR and 2024-2025 SDSR	COUNTY:	Allegheny	l:	\$0	IVA:	\$0	PROJECT NO.:	CS423312-01
1200 Penn Avenue	REGION:	SW	11:	\$0	IVB:	\$0	PROJ. TYPE:	SSREH
Pittsburgh, PA 15222	NPDES #:	PA0217611	IIIA:	\$0	V:	\$59,136,000	DEP RATING:	39
	LOAN #:	0	IIIB:	\$0	ELIG. COST:	\$59,136,000	DEP RANKING: PV RATING:	

- PROB DESC: The existing Pittsburgh Water and Sewer Authority's combined sewers, specifically the collection lines are more than 100 years old and nearing end of useful life. The age and deteriorated conditions of the pipes have resulted in wet weather sewage overflows. Environmental benefits include eliminating the potential discharge of untreated sewage to the city's waterways.
- PROJ DESC: This project will be implemented in several phases. Phase 1 includes rehabilitating 265 linear feet (LF) of 96-inch to 120-inch sewer main in the Corks Run (West Carson Street) area of the City of Pittsburgh. Phase 2 includes rehabilitating approximately 6.25 miles of sewer in the Knoxville area of the City of Pittsburgh, assessing and rehabilitating approximately 11.1 miles of sewer in the Westwood area of the City of Pittsburgh and assessing and rehabilitating approximately 11.5 miles of sewer in the Summer Hill area of the City of Pittsburgh. Phases 3 and 4 of the project include assessing and rehabilitating approximately 20 miles of sewer in areas of the city that are yet to be determined. Gunite, Geopolymer or other appropriate rehabilitation and/or lining methods will be used to eliminate the need for more costly and timely repairs and add an additional 50 year design life to the infrastructure.

Green Project Reserve (GPR): No

GPR Category: N/A

APPLICANT INFORMATION				NEED	S CATEGORIES	PROJECT INFORMATION		
Portage Area Sewer Authority : Ward 1&3 Sanitary Sewer Project	COUNTY:	Cambria	l:	\$0	IVA:	\$0	PROJECT NO.:	CS423297-01
606 Cambria Avenue	REGION:	SW	II:	\$0	IVB:	\$0	PROJ. TYPE:	SSREH
Portage, PA 15946	NPDES #:	PA0032611	IIIA:	\$0	V:	\$0	DEP RATING:	36
	LOAN #:	71462	IIIB:	\$8,658,430	ELIG. COST:	\$8,658,430	DEP RANKING: PV RATING:	

- PROB DESC: The existing sanitary sewer system in the Ward 1 and Ward 3 service areas of Portage Borough is more than 50 year old and is made of vitrified clay pipe (VCP) and brick manholes. The system has many cracks, resulting in significant infiltration and inflow (I/I). This and possible illegal connections to the sewer system have resulted in manhole surcharging, flooding in multiple areas during wet weather conditions and peak flows to the wastewater treament plant (WWTP). Environmental benefits include eliminating the potential of untreated sewage discharges to the Borough's waterways.
- PROJ DESC: This project involves installing approximately 19,000 linear feet (LF) of new collection sewer lines, rehabilitating approximately 2,700 LF of existing sewer lines, installing approximately 6,300 LF of laterals, 220 viewports, 100 manholes and other appurtenances in the Ward 1 service area of Portage Borough. Additionally, approximately 6,000 LF of laterals, 180 viewports, and other appurtenances will be installed in the Ward 3 service area of the Borough. Upon completion of the project, portions of the existing sanitary sewer system will be converted to a storm sewer system. Engineering for this project is funded under loan number 77110.

Green Project Reserve (GPR): Yes

GPR Category: Energy Efficiency

GPR Funding: \$8,658,430.00

APPLICANT INFORMATION				NEED	S CATEGORIES	PROJECT INFORMATION		
Lancaster Area Sewer Authority - Pro-Fi Capital Improvement Plan Projects	COUNTY:	Lancaster	l:	\$41,242,543	IVA:	\$0	PROJECT NO.:	CS423298-01
130 Centerville Road	REGION:	SC	II:	\$37,972,908	IVB:	\$0	PROJ. TYPE:	STPMOD SSREH
Lancaster, PA 17603	NPDES #:	PA0042269	IIIA:	\$670,000	V:	\$0	DEP RATING:	26
	LOAN #:	71463	IIIB:	\$31,329,549	ELIG. COST:	\$111,215,000	DEP RANKING:	8 of 22
							PV RATING:	41

PROB DESC: This project has several problem areas. 1) The Lower Little Conestoga interceptor consists of 42-inch and 48-inch reinforced concrete pipes that are at the end of their useful life. The pipes are deteriorated such that the reinforcement wire is either exposed and/or completely corroded. A section of the pipe collapsed in 2020, requiring emergency repairs. 2) The Silver Spring Pump Station located in West Hempfield Township exceeds design capacity during wet weather peak flow events. This results in surcharging within the wet well and sewer overflow. Additionally, the underground steel dry well has reached the end of its useful life and poses risk of failure. 3) The Landisville 1 Pump Station located in East Hempfield Township also exceeds design capacity during wet weather peak flow events. Sometimes the Authority is forced to request upstream industries to stop operations. The underground steel dry well has also reached the end of its useful life and poses risk of failure, 4) The Susquehanna Water Pollution Control Facility (SWPCF) located in Manor Township treats sewage from eight municipalities. Due to problems with treatment, including poor settling of sludge, inadequate denitrification, ineffective primary clarifier mechanisms etc., the facility is currently unable to remove sufficient total nitrogen to meet NPDES permit requirements. 5) The SWPCF trucked waste receiving facility in Manor Township is difficult to operate and maintain. Truck routing through the facility creates a safety hazard. It is also not convenient for multiple trucks to discharge sewage to the facility, resulting in delays for haulers. 6) The Farmdale Pump Station in West Hempfield Township was last upgraded about 20 years ago. The station experiences high flows during wet weather peak events. This results in surcharging in the wet well and interceptor. The pumps are susceptible to frequent breakdowns, and spare parts are either difficult or impossible to obtain, 7) The Blue Rock Pump Station in Manor Township was built in the early 1970's. The station pumps into a force main shared with the Charlestown Pump. Station. When the Charlestown Pump Station needs to pump at a higher rate due to wet weather, the Blue Rock Pump Station struggles against the higher pressure in the force main due to the pump exceeding its design capacity. Environmental benefits include eliminating the potential of untreated or inadequately treated sewage discharges to the County's waterways.

PROJ DESC: This project will be implemented in multiple phases. Phase 1 is the Lower Little Conestoga interceptor rehabilitation phase 4 project. This includes rehabilitating 4,118 linear feet (LF) of 42-inch and 48-inch diameter concrete interceptor and 17 manholes. The inceptor will be rehabilitated using either geopolymer or cured in place pipe lining (CIPP). Additionally, a temporary bypass sewage system will be constructed to allow for the interceptor to be drained, cleaned, and inspected. Phase 2 is the Silver Spring pump station upgrade and the Landisville 1 pump station upgrade. The Silver Spring pump station capacity from 590 gpm to 1,340 gpm. The Landisville 1 pump station upgrade includes increasing the pump station capacity from 590 gpm to 710 gpm. Phase 3 is the Susquehanna Water Pollution Control Facility (SWPCF) upgrade and the SWPCF Trucked Waste improvements. The SWPCF upgrade includes upgrading equipment that has reached the end of useful life. The SWPCF Trucked Waste improvements include the construction of a new facility with equipment for screening and pumping at the front of the existing plant. Phase 4 is the Farmdale pump station upgrade. This includes increasing the pump station capacity from 700 gpm to 1,010 gpm. Phase 4 is the Blue Rock pump station upgrade. This includes a complete upgrade or replacement of the pump station. Engineering for this project is funded under loan number 77111.

APPLICANT INFORMATION Green Project Reserve (GPR): Yes			NEEDS CATEGORIES GPR Category: Energy Efficiency				PROJECT IN GPR Funding:	NFORMATION \$31,999,549.00	
Borough of Steelton-Hoffer Street Pump Station Improvements	COUNTY:	Dauphin	l:		\$0	IVA:	\$0	PROJECT NO.:	CS423283-01
123 North Front Street	REGION:	SC	II:		\$0	IVB:	\$0	PROJ. TYPE:	PS
Steelton, PA 17113	NPDES #:	PA 0027197	IIIA:		\$0	V:	\$0	DEP RATING:	17
	LOAN #:	71456	IIIB:	\$2,390,	,000,	ELIG. COST:	\$2,390,000	DEP RANKING:	9 of 22
								PV RATING:	32

PROB DESC: This project consists of rehabilitating the pump station including but not limited to: (1) replacing the existing pumps with three (3) new centrifugal sewer pumps, one of which will serve as a back-up pump; (2) replacing the sump pump; (3) installing a new wet well mixing system; (4) installing a back-up generator; (5) replacing the motor control center (MCC) and installing new pump controls; (6) installing a remote alarm dialer. Environmental benefits include eliminating the potential discharge of untreated sewage to the Borough's waterways.

PROJ DESC: It has been 26 years since the last pump station upgrade and much of the equipment has reached the end of its useful life. In addition, the pump station does not have adequate stand-by capacity

Green Project Reserve (GPR): Yes

GPR Category: Energy Efficiency

GPR Funding: \$2,390,000.00

APPLICANT INFORMATION				NEED	S CATEGORIES	PROJECT INFORMATION		
Pittsburgh Water & Sewer Authority - Catch Basin Replacements - ProFi	COUNTY:	Allegheny	l:	\$0	IVA:	\$0	PROJECT NO.:	CS423285-01
1200 PENN AVENUE	REGION:	SW	11:	\$0	IVB:	\$0	PROJ. TYPE:	CSREH
Pittsburgh, PA 15222	NPDES #:	PA0217611	IIIA:	\$0	V:	\$46,054,410	DEP RATING:	17
	LOAN #:	71459	IIIB:	\$0	ELIG. COST:	\$46,054,410	DEP RANKING: PV RATING:	

- PROB DESC: Inlets/catch basins proposed to be replaced under this project are nearing the end of their usable life and are targeted due to imminent structural failure. Proactive replacement of these structures will mitigate the risk of sink holes, damage to other utilities, and impact to surrounding surface improvements. Environmental benefits include reducing the potential of infiltration to the combined sewer system.
- PROJ DESC: Replace approximately 1,200 basins per year for 2023 through 2025. The cost to do this work would be approximately \$12 million in construction and \$1.7 million for design and engineering for the 2023 contract year, with an anticipated escalation of 3% annually for the following two years.

Green Project Reserve (GPR): No

GPR Category: N/A

APPLICANT INFORMATION				NEED	S CATEGORIES	PROJECT INFORMATION		
Lewis Township - Wastewater System Upgrade & Expansion	COUNTY:	Union	l:	\$0	IVA:	\$402,086	PROJECT NO.:	CS423291-01
116 Maple Street	REGION:	NC	II:	\$1,456,114	IVB:	\$0	PROJ. TYPE:	STP SS
Millmont, PA 17845	NPDES #:	PA0114049	IIIA:	\$0	V:	\$0	DEP RATING:	12
	LOAN #:	71460	IIIB:	\$0	ELIG. COST:	\$1,858,200	DEP RANKING: PV RATING:	

- PROB DESC: The existing Lewis Township marsh and meadow 33,500 gallon per day (gpd) plant serving the villages of Millmont and Swengle is roughly 30 years old and is nearing the end of its useful life. Further, the plant is operating at about 87% of its capacity with instances of design flow exceedances. In addition, the capacity limits are preventing potential sewer extensions to meet future needs. The repair and operation cost of the existing Marsh and Meadow treatment system is extensive due to its unique nature and the process does not operate well in cold weather. Environmental benefits include eliminating the potential of untreated or inadequately treated sewage discharges to the Township's waterways.
- PROJ DESC: The project consists of the rehabilitation and expansion of the existing sewage treatment plant through conversion of the existing sequencing batch reactor (SBR) tanks into aerobic digesters and the elimination of the Marsh and Meadow System treatment process. The new treatment technology will follow the Virginia Initiative Process, and the hydraulic capacity will be increased from 33,500 gallons per day (gpd) to 44,000 gpd. This conversion requires roughly 55,000 gallons of new precast process tankage with necessary pumps, blowers, mixers, and other auxiliary equipment. Additional screening will be added to the headworks, a new influent pump station will be constructed, and primary disinfection will be changed to ultraviolet (UV) rather than chlorine. Additionally, the project consists of three sewer extensions servicing nine (9) equivalent dwelling units (EDUs) one of which is a confirmed malfunction. This will be accomplished by installing 3,060 linear feet of gravity sewer and 1,150 linear feet of low pressure forcemain. Engineering for this project is funded under loan number 77108.

Green Project Reserve (GPR): No

GPR Category: N/A

APPLICANT INFORMATION				NEED	S CATEGORIES	PROJECT INFORMATION		
Flemington Borough - Wright Street Sewer Project	COUNTY:	Clinton	l:	\$0	IVA:	\$0	PROJECT NO.:	CS423310-01
126 High Street, Suite 1	REGION:	NC	II:	\$0	IVB:	\$0	PROJ. TYPE:	SSREH
Flemington, PA 17745	NPDES #:	PA0025933	IIIA:	\$0	V:	\$0	DEP RATING:	9
	LOAN #:	0	IIIB:	\$486,445	ELIG. COST:	\$486,445	DEP RANKING: PV RATING:	

- PROB DESC: The Wright Street sewer lines in Flemington Borough currently allow significant inflow and infiltration (I/I), resulting in hydraulic surcharging in the Woods Avenue Trunk Line during wet weather. The Woods Avenue Trunk Line serves approximately eighty (80) percent of Clinton County and records flows of about ten (10) times higher during wet weather, resulting in overflows within the neighboring City of Lock Haven. Environmental benefits include elimination of raw sewage discharge into the Bald Eagle Canal and Bald Eagle Creek. It also reduces the energy utilized at the treatment plant to treat the inflow runoff.
- PROJ DESC: This project includes installing 2,080 linear feet (LF) of cured in place pipe (CIPP), replacing forty-two (42) 4-inch sewer laterals with associated cleanouts and replacing ten (10) manholes. Based on metering, this project will eliminate approximately 30,000 gallons per storm event from going to the treatment plant, which is approximately 10% of the hydraulic load, and 2 million gallons of illegal inflow and infiltration annually.

Green Project Reserve (GPR): Yes

GPR Category: Energy Efficiency

GPR Funding: \$486,445.00

APPLICANT INFORMATION			NEED	S CATEGORIES		PROJECT INFORMATION		
Perry Township (Mercer County) - Commodore Perry School District Sewer Extension	COUNTY:	Mercer	1:	\$0	IVA:	\$726,200	PROJECT NO.:	CS423315-01
1096 Fredonia Road	REGION:	NW	II:	\$0	IVB:	\$0	PROJ. TYPE:	SS
Hadley, PA 16130	NPDES #:	PA0271501	IIIA:	\$0	V:	\$ 0	DEP RATING:	9
	LOAN #:	0	IIIB:	\$0	ELIG. COST:	\$726,200	DEP RANKING:	13 of 22
							PV RATING:	14

PROB DESC: The Commodore Perry School District has an aging wastewater treatment facility that has reached the end of its useful life. The buried carbon steel treatment tanks are showing signs that structural integrity will soon become a concern. The structure housing the blowers and chemical feed system has fallen into disrepair and needs to be replaced or eliminated. The electrical control system needs repair, or replacement as well. Connecting to the Perry Township public wastewater system will eliminate the need for the aging treatment facility and will eliminate the discharge to the receiving stream. The existing sewage treatment plant, PA0030295, will be removed from use and demolished once the connection to public sewer has been made. In addition to the school, eight homes along the proposed sewer extension line will be connected. Environmental benefits include eliminating the discharge of inadequately treated sewage to the receiving stream.

PROJ DESC: Perry Township currently owns and operates a publicly owned treatment works in Perry Township, Mercer County that includes a wastewater collection and conveyance system to a treatment plant. The collection system will be expanded to the Commodore Perry School property located at 3002 Perry Highway (US Route 19) and will extend south to the existing planned sewer north of the intersection of Fredonia Road and US Route 19. The project consists of 5,800 linear feet of 3-inch pressure main, one quadplex grinder pump unit, six simplex grinder pump units, two duplex grinder pump stations, service lateral kits, one equalization tank, and one emergency generator.

Green Project Reserve (GPR): No

GPR Category: N/A

APPLICANT INFORMATION				NEED	S CATEGORIES	PROJECT INFORMATION		
Sandycreek Township - Pump Station Improvements	COUNTY:	Venango	I:	\$0	IVA:	\$0	PROJECT NO.:	CS423314-01
878 Pone Lane	REGION:	NW	II:	\$0	IVB:	\$0	PROJ. TYPE:	PS
Franklin, PA 16323	NPDES #:	PAS107000	IIIA:	\$0	V:	\$0	DEP RATING:	9
	LOAN #:	0	IIIB:	\$904,600	ELIG. COST:	\$904,600	DEP RANKING: PV RATING:	

PROB DESC: Sandycreek Township owns and operates a sanitary sewer system that consists of seven (7) main pump stations and nine (9) satellite pump stations serving approximately 550 customers. The controls for these pump stations are antiquated and due to their age, parts are becoming obsolete. In order to maintain consistent operation, it is necessary to upgrade the electrical components of the pump stations to a more reliable system. Environmental benefits include eliminating the discharge of untreated sewage to the township's waterways.

PROJ DESC: The proposed scope of work is to replace pump controls and enclosures in order to meet current electrical code requirements. A supervisory control and data acquisition (SCADA) system will be installed to allow remote monitoring of each pump station, providing a quicker response time for the Township staff to respond to issues that may occur.

Green Project Reserve (GPR): Yes

GPR Category: Energy Efficiency

GPR Funding: \$904,600.00

APPLICANT INFORMATION				NEED	S CATEGORIES	PROJECT INFORMATION		
City of Philadelphia 2024 Linear Assets - Sewer	COUNTY:	Philadelphia	I:	\$0	IVA:	\$0	PROJECT NO.:	CS423299-01
1401 John F. Kennedy Boulevard	REGION:	SE	11:	\$0	IVB:	\$0	PROJ. TYPE:	SSREH
Philadelphia, PA 19107	NPDES #:	PA0026662, P	IIIA:	\$0	V:	\$0	DEP RATING:	7
	LOAN #:	0	IIIB:	\$44,876,716	ELIG. COST:	\$44,876,716	DEP RANKING: PV RATING:	

- PROB DESC: Philadelphia has one of the oldest collection systems in the country. The existing combined sewer system constructed in the early 1900s is made of brick. The existing separate storm sewer system completed in the 1970s is made of reinforced concrete and vitrified clay pipes (VCP). Both systems are at the end of their useful lives with the combined sewer system making up over 60 percent of the collection system. Due to their age, the collection systems have major structural defects causing collapse and difficulty to rehabilitate. The systems are also approaching maximum hydraulic capacity. Environmental benefits include eliminating the potential of releasing untreated sewage to the City's waterways and also preventing basement backups due to sewer scstem collapse.
- PROJ DESC: The City to Philadelphia plans to install 33,007 linear feet (LF) of sanitary sewer line. This includes 24,665 feet of 18-inch pipe, 5,286 LF of 21-inch pipe, 677 LF of 24inch pipe, 652 LF of 27-inch pipe, 252 LF of 30-inch pipe, 860 LF of 36-inch pipe and 615 LF of 42-inch pipe. Additionally, the project includes lining of 3,375 LF of sewer pipe, manhole replacement or addition depending on the length of the sewer, replacement of the sewer slants to the curb trap, and surface restoration.

Green Project Reserve (GPR): Yes

GPR Category: Energy Efficiency

GPR Funding: \$44,876,716.00

APPLICANT INFORMATION				NEED	S CATEGORIES	PROJECT INFORMATION		
Ellwood City Borough -Wampum Pump Station	COUNTY:	Lawrence	l:	\$0	IVA:	\$0	PROJECT NO.:	CS423287-01
525 Lawrence Avenue	REGION:	NW	II:	\$0	IVB:	\$0	PROJ. TYPE:	PS SS
Ellwood City, PA 16117	NPDES #:	PA0026832	IIIA:	\$0	V:	\$0	DEP RATING:	7
	LOAN #:	71458	IIIB:	\$6,000,000	ELIG. COST:	\$6,000,000	DEP RANKING: PV RATING:	

- PROB DESC: The Existing 2nd Street siphon includes both an 8-inch and 10-inch line that cross the Connoquenessing Creek. The sewage collected by the 2nd Street siphon discharges into an 18-inch main interceptor that runs alongside a steep hillside above the Connoquenessing Creek. This interceptor is inaccessible and in disrepair with exposed and cracked clay pipe, exposed and broken cast iron pipe, deteriorating joints, and exposed aerial pipe on eroding stanchions with some sections of pipe no longer connected to the stanchions. Environmental benefits include eliminating the potential of untreated sewage discharges to the Borough's waterways.
- PROJ DESC: This project includes the elimination of a large portion of a deteriorating 18-inch interceptor by rerouting the flow from the 2nd Street siphon to a new pump station. A new 18-inch force main will convey sewage to a manhole at the old wastewater treatment plant (WWTP) site. The existing primary lift station will convey the sewage from the old WWTP site to the existing WWTP. Approximately 4,585 linear feet (LF) of sewer is being abandoned and replaced.

Green Project Reserve (GPR): Yes

GPR Category: Energy Efficiency

GPR Funding: \$6,000,000.00

APPLICANT INFORMATION				NEED	S CATEGORIES	PROJECT INFORMATION		
Logan Township- 2023 Sanitary Sewer Replacement	COUNTY:	Blair	I:	\$0	IVA:	\$0	PROJECT NO.:	CS423308-01
100 Chief Logan Circle	REGION:	SC	11:	\$0	IVB:	\$0	PROJ. TYPE:	SSREH
Altoona, PA 16602	NPDES #:	PA0027022, P	IIIA:	\$0	V:	\$0	DEP RATING:	7
	LOAN #:	0	IIIB:	\$4,417,375	ELIG. COST:	\$4,417,375	DEP RANKING: PV RATING:	

- PROB DESC: The collection systems within the Klock Development and Lakemont Phase 3B project area are made of vitrified clay pipe (VCP). Internal televising showed that the system leaks at the 2 feet and 3 feet pipe section connections. These areas and several of the lateral connections are known contributors of significant inflow & infiltration (I/I) to the system. Environmental benefits include eliminating the discharge of untreated sewage to the township's waterways. It also reduces the energy utilized at the treatment plant to treat the inflow runoff.
- PROJ DESC: The project includes replacing approximately 16,200 linear feet (LF) of existing sanitary sewer with new 8-inch polyvinyl chloride (PVC) sanitary sewer mains and laterals. The new sanitary sewer lines will be installed generally within the same proximity as the existing sanitary sewer lines.

Green Project Reserve (GPR): Yes

GPR Category: Energy Efficiency

GPR Funding: \$4,417,375.00

APPLICANT INFORMATION				NEED	S CATEGORIES	PROJECT INFORMATION		
Meadville Area Sewer Authority - Wastewater Treatment Plant Upgrades	COUNTY:	Crawford	I: \$2	20,000,000	IVA:	\$0	PROJECT NO.:	CS423281-01
984 Water Street	REGION:	NW	II:	\$0	IVB:	\$0	PROJ. TYPE:	STPMOD
Meadville, PA 16335	NPDES #:	PA0026271	IIIA:	\$0	V:	\$0	DEP RATING:	7
	LOAN #:	71457	IIIB:	\$0	ELIG. COST:	\$20,000,000	DEP RANKING: PV RATING:	

- PROB DESC: The existing plant was constructed 25 years ago. Mechanically, it has reached the end of it's useful life. Environmental benefits include eliminating the potential discharge of untreated sewage to the Authority's waterways.
- PROJ DESC: The Authority is proposing to install two mechanical bar screens, eight raw wastewater pumps, grit/grease chamber, grit washer, ten blowers, ultraviolet (UV) system, SBR will be updated, backup generator large enough to run the whole plant, and replacement of the existing roof system. Engineering for this project is funded under loan number 77107.

Green Project Reserve (GPR): No

GPR Category: N/A

APPLICANT INFORMATION				NEED	S CATEGORIES	PROJECT INFORMATION		
Stewartstown Borough Authority - WWTP Upgrade	COUNTY:	York	l:	\$0	IVA:	\$0	PROJECT NO.:	CS423307-01
6 N. Main Street	REGION:	SC	II:	\$2,980,000	IVB:	\$0	PROJ. TYPE:	STPMOD
Stewartstown, PA 17363	NPDES #:	PA0036269	IIIA:	\$0	V:	\$0	DEP RATING:	7
	LOAN #:	0	IIIB:	\$0	ELIG. COST:	\$2,980,000	DEP RANKING: PV RATING:	

- PROB DESC: The existing belt press, sludge pumps and control panels at the Stewartstown Borough Wastewater Treatment Plant are over 30 years old and replacement parts are increasingly more challenging to acquire. Environmental benefits include eliminating the discharge of inadequately treated sewage to the borough's waterways.
- PROJ DESC: This project includes replacing the existing belt filter press with a Schwing Model FSP703 Screw Press designed to treat up to 45,000 gallons of 1.5% solids weekly. The sludge dewatering improvements include replacing the existing sludge pumps with two (2) Borger Model PL200 Rotary Lobe Pumps rated for 95 gallon per minute (gpm) and the existing 12 feet and 16 feet conveyors with 12-inch augers that have a capacity of 80 cubic foot per hour. The controls for the sludge dewatering system shall include a new magnetic flow meter for the sludge feed rate to the reaction tank and integration with the existing polymer feed system and Bioset Class A sludge system. Building improvements include replacing the existing fuel oil boiler system with electrical unit heaters, replacing the existing wall mounted conditioning systems, renovating the existing restroom to accommodate unisex staffing and meet ADA requirements, and installing a new shower/locker room in the location of the existing boiler.

Green Project Reserve (GPR): No

GPR Category: N/A

APPLICANT INFORMATION				NEED	S CATEGORIES	PROJECT INFORMATION		
Bedford Township MA- Areas V & VI Sanitary Sewer Project	COUNTY:	Bedford	l:	\$0	IVA:	\$7,408,000	PROJECT NO.:	CS423294-01
1007 Shed Road, Suite 102	REGION:	SC	II:	\$0	IVB:	\$0	PROJ. TYPE:	SS PS
Bedford, PA 15522	NPDES #:	PA0022209	IIIA:	\$0	V:	\$0	DEP RATING:	6
	LOAN #:	75390	IIIB:	\$0	ELIG. COST:	\$7,408,000	DEP RANKING: PV RATING:	

- PROB DESC: Area V, which includes the Cara Heights Development, the homes along State Route Business 220 between the Bedford Springs Resort and the intersection with Cumberland Road, and the Sunrise Terrace Development, and Area VI, which includes the Sunnybrook Development, the Hafer Development, and the homes along Cumberland Road between the Sunnybrook and Hafer Developments do not currently have sewer service. Issues of contaminated drinking water in privately owned wells and malfunctioning on-lot disposal systems (OLDs) primarily necessitated the provision of sewer service to these areas. The extension of sewer service to Areas V and VI would be the final obligations of Bedford Township Municipal Authority's Act 537 Plans originally approved in 2002 and updated in 2005. Environmental benefits include eliminating the potential of untreated sewage discharges to the Township's waters.
- PROJ DESC: The Bedford Township Municipal Authority proposes to extend their sewer system. This sewer extension project includes the installation of approximately 38,080 linear feet (LF) of 8-inch polyvinyl chloride (PVC) gravity sewer, 1,120 LF of 2-inch high-density polyethylene (HDPE) low pressure sewer, and 168 manholes. Additionally, two sewage pumping stations and 4,100 LF of 6-inch HDPE force main are also being proposed. Each pump station site will include a precast concrete valve/metering vault. The southern pump station will also include a generator and a masonry generator housing building.

Green Project Reserve (GPR): No

GPR Category: N/A

APPLICANT INFORMATION				NEED	S CATEGORIES	PROJECT INFORMATION		
Central Delaware County Authority - Interceptor Rehabilitation 2022	COUNTY:	Delaware	I:	\$0	IVA:	\$0	PROJECT NO.:	CS423292-01
212 B Unity Terrace	REGION:	SE	II:	\$0	IVB:	\$0	PROJ. TYPE:	INT I/I
Rutledge, PA 19070	NPDES #:	PA0027103	IIIA:	\$0	V:	\$0	DEP RATING:	6
	LOAN #:	71461	IIIB:	\$16,452,900	ELIG. COST:	\$16,452,900	DEP RANKING: PV RATING:	

- PROB DESC: The existing 60 to 80 year old sanitary sewer interceptors are made of reinforced concrete pipe. As a result of their age they have many holes and longitudinal cracks resulting in infiltration and inflow (I/I). Annual inspections and maintenance costs has increased to a point where it is now viable to consider renewing these interceptors by re-lining them, rather than continuous repairs. Environmental benefits include eliminating the potential of untreated sewage discharges to the County's waterways during wet weather.
- PROJ DESC: This project involves the relining of approximately 60,000 linear feet of 8-inch to 54-inch diameter sewer interceptors with cured-in-place piping (CIPP) and the rehabilitation of 288 manholes. Engineering for this project is funded under loan number 77109.

Green Project Reserve (GPR): Yes

GPR Category: Energy Efficiency

GPR Funding: \$16,452,900.00

APPLICANT INFORMATION				NEED	S CATEGORIES	PROJECT INFORMATION		
City of Lebanon Authority - Wastewater Treatment Plant Improvements Project	COUNTY:	Lebanon	l:	\$0	IVA:	\$0	PROJECT NO.:	CS423309-01
2311 Ridgeview Road	REGION:	SC	II:	\$22,250,000	IVB:	\$0	PROJ. TYPE:	STPMOD
Lebanon, PA 17042	NPDES #:	PA0027316	IIIA:	\$0	V:	\$0	DEP RATING:	5
	LOAN #:	0	IIIB:	\$0	ELIG. COST:	\$22,250,000	DEP RANKING:	22 of 22
							PV RATING:	20

- PROB DESC: In 2014, City of Lebanon Authority (CoLA) completed a Wastewater Treatment Plant (WWTP) Upgrade Project designed to provide biological nutrient reduction (BNRs) capabilities. Due to time and budget constraints, not all identified WWTP needs were addressed through the 2014 WWTP Upgrade Project. CoLA staff identified several additional issues that need to be addressed for improved operation and reliability of the WWTP. These additional issues include (1) accumulation of grit within the primary clarifiers due to age of grit removal equipment, (2) overloading of one clarifier due to the uneven flow splitting by the primary clarifier distribution box to the two primary clarifiers, (3) excessive manual maintenance of the existing scum pits and pumping systems during high fats, oils, and grease (FOG) loading, (4) the internal equipment of the primary clarifier is old and ineffective, (5) treatment issues particularly with ammonia and phosphorus loading due to feeding back of centrate and decant to the head of the WWTP in slug loads, (6) digesters unable to maintain the sludge temperatures desired in the winter to breakdown the biosolids, (7) safety hazard of chlorine gas stored in the control building and other necessary upgrade to existing buildings etc. Environmental benefits include eliminating the potential discharge of inadequately treated sewage to the city's waterways.
- PROJ DESC: This project includes installing a new grit removal equipment, a primary distribution mixing system, a new pump station between the two existing primary clarifiers, a new primary clarifier equipment and rehabilitation of the clarifier tank and an 800,000 gallon equalization tank with a pumping system. Additionally, the project includes replacing the digester heat exchangers with larger heat exchangers, installing a disinfection backup system of liquid chlorine outside the control building, installing a larger methanol storage tank and renovating several buildings including HVAC installations etc.

Green Project Reserve (GPR): No

GPR Category: N/A