

**PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY AND DEPARTMENT OF ENVIRONMENTAL PROTECTION
DRINKING WATER STATE REVOLVING FUND
FEDERAL FY2020 - PROJECT PRIORITY LIST
UPDATED FOR THE APRIL 22, 2020 PENNVEST BOARD MEETING**

EXPLANATION OF HEADINGS (EXCEPT THOSE THAT ARE SELF-EXPLANATORY)

PROJECT TYPE:

- SRC - SOURCE
- TRANS - TRANSMISSION SYSTEM
- PS - PUMP STATION
- WS - WATER STORAGE
- DS - DISTRIBUTION SYTEM
- METERS- WATER METERS
- LDE - LEAK DETECTION SYSTEM

PWSID - PUBLIC WATER SYSTEM ID NUMBER

LEGEND FOR PROJECT TYPE:

SRC = SOURCE TRANS = TRANSMISSION SYSTEM TREAT=TREATMENT WS = WATER STORAGE DS = DISTRIBUTION SYSTEM

**PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY AND DEPARTMENT OF ENVIRONMENTAL PROTECTION
 DRINKING WATER STATE REVOLVING FUND
 FEDERAL FY2020 - PROJECT PRIORITY LIST
 UPDATED FOR THE APRIL 22, 2020 PENNVEST BOARD MEETING**

APPLICANT NAME: BRADFORD CITY WATER AUTHORITY - WATER TRANS MAIN	REGION: VI	DEP PROJECT RATING: 81
STREET ADDRESS: 28 KENNEDY STREET	PWSID: 6420014	PROJRANK: 1
CITY: BRADFORD	FUND SOURCE: DWSRF	PROJECT COST: \$11,520,000
COUNTY: MCKEAN	MTGDATE: 7/17/2019	PROJECT TYPE: DS

PROJ. DESCRIPTION: Bradford City Water Authority proposes installation of approximately 34,200 linear feet of 24-inch diameter water transmission main from the water treatment plant to Reservoir #4. Installation will also include functioning shutoff valves, hydrants and services.

PROB. DESCRIPTION: The existing 24-inch diameter finished water transmission main from the water treatment plant to Reservoir #4 had a catastrophic break resulting in a water outage which took several weeks to complete repairs and restore service and resume normal operations. Installation of the new 24-inch diameter waterline will provide redundant facilities and allow the existing main to serve in a reserve manner.

POPULATION: 18,000	PV RATING: 96
GREEN PROJECT: No	GREEN CATEGORY: N/A
BUSINESS CASE: N/A	GREEN AMOUNT: \$0

LEGEND FOR PROJECT TYPE:
 SRC = SOURCE TRANS = TRANSMISSION SYSTEM TREAT=TREATMENT WS = WATER STORAGE DS = DISTRIBUTION SYSTEM

**PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY AND DEPARTMENT OF ENVIRONMENTAL PROTECTION
DRINKING WATER STATE REVOLVING FUND
FEDERAL FY2020 - PROJECT PRIORITY LIST**

UPDATED FOR THE APRIL 22, 2020 PENNVEST BOARD MEETING

APPLICANT NAME: PINE GROVE BOROUGH WATER IMPROVEMENT PROJECT	REGION: II	DEP PROJECT RATING: 77
STREET ADDRESS: 17 MIFFLIN ST.	PWSID: 3540037	PROJRANK: 2
CITY: PINE GROVE	FUND SOURCE: DWSRF	PROJECT COST: \$5,479,764
COUNTY: SCHUYLKILL	MTGDATE: 7/18/2018	PROJECT TYPE: WS, TREAT, DS

PROJ. DESCRIPTION: Pine Grove Borough proposes replacement of approximately 2,700 LF of waterline, hydrants, valves, etc. on South Tulpehocken St. (SR 443); construction of a new 1.0 MG finished water storage tank; construction of corrosion control treatment facilities necessary per the Lead and Copper Rule and modified 4-log disinfection treatment facilities during construction; modification of SCADA system to control the new tank facilities; addition of automated chlorine control system to ensure 4-log compliance and better control chlorine residuals; and the rehabilitation of the existing 1.5 MG finished water storage tank. Improvements will enhance Pine Grove Borough's ability to operate and maintain the system.

PROB. DESCRIPTION: The Pine Grove water system is in need of additional storage capacity; is experiencing leaking and aging distribution system mains, has a storage tank in need of rehabilitation; requires corrosion control treatment per the Lead and Copper Rule; and requires automatic control modifications to their gas disinfection system for better chlorine residual control due to demand fluctuations. The Pine Grove PWS system (PWS ID No. 3540037) serves a population of 2,862 people via 1,500 service connections with one large industrial user (Guilford Mills). The industrial customer currently utilizes over half the water pumped in a day by the system and has huge unpredictable daily swings in demand. This customer also anticipates an increase of 7% in water usage in the next few years, which is taxing for the water system, especially the control for the disinfection facilities. Additional water storage (1.0 MG storage tank) is proposed to address the storage issue. Corrosion Control Treatment (pH adjustment via 50% NaOH) is needed to address high copper levels (2.1 mg/l) in the system which are above the action level of 1.3 mg/l per the Lead and Copper Rule which is over the One-Day Health Advisory (HA)/Ten-Day HA level per PENNVEST Guidance of 1.3 mg/l. Installation of an automatic flow control valve on their gas chlorination system to enhance operational control of chlorine residuals due to significant flow fluctuations is also proposed. The system is also faced with aging and leaking distribution system facilities (tank and waterlines) which are in need of repair and rehabilitation. Unaccounted for water loss is high, greater than 20%. Pressure at certain nodes in the system during peak demand periods were reported to be less than the required minimum of 20 psi. Additional finished water storage, rehabilitation of the existing 1.5 MG storage tank, and new/rehabilitated distribution system facilities (waterlines, hydrants, etc.) along SR 443 to adequately serve the existing residential and commercial customers of the PWS system are proposed.

POPULATION: 2,862	PV RATING: 92
GREEN PROJECT: No	GREEN CATEGORY: N/A
BUSINESS CASE: N/A	GREEN AMOUNT: \$0

LEGEND FOR PROJECT TYPE:

SRC = SOURCE TRANS = TRANSMISSION SYSTEM TREAT=TREATMENT WS = WATER STORAGE DS = DISTRIBUTION SYSTEM

**PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY AND DEPARTMENT OF ENVIRONMENTAL PROTECTION
DRINKING WATER STATE REVOLVING FUND
FEDERAL FY2020 - PROJECT PRIORITY LIST**

UPDATED FOR THE APRIL 22, 2020 PENNVEST BOARD MEETING

APPLICANT NAME: SPRINGDALE BOROUGH - WATER SYSTEM IMP	REGION: V	DEP PROJECT RATING: 74
STREET ADDRESS: 325 SCHOOL STREET	PWSID: 5020053	PROJRANK: 3
CITY: SPRINGDALE	FUND SOURCE: DWSRF	PROJECT COST: \$5,499,200
COUNTY: ALLEGHENY	MTGDATE: 1/31/2018	PROJECT TYPE: TREAT, DS

PROJ. DESCRIPTION: The Borough's planned improvements at the water treatment plant include the replacement of the horizontal greensand filters, the installation of new well pumps with variable frequency drives (VFDs), new raw water line, new high service pumps with VFDs, the addition of a cover over the existing clearwell, installation of electric actuators on the softener valves, new motors and VFDs for the air stripping tower pumps, new chemical pumps, a new caustic soda tank and mixer, new SCADA system and the construction of backwash settling basins so that the settled filter backwash water can be discharged to the Allegheny River. Water lines will also be replaced.

PROB. DESCRIPTION: The pressure filters at the water treatment plant are severely deteriorated, resulting in occasional exceedances in the limit for manganese in the drinking water. Equipment at the treatment plant has reached the end of their useful life (well pumps, high service pumps, raw water line, and chemical feed). The finished water clearwell inside the plant is uncovered allowing for the potential introduction of contaminants. Customers in the area of the distribution system that have unlined cast iron pipes have complained of dirty water. Springdale Borough is under a Consent Order & Agreement to correct the problems. Project will help system achieve regulatory compliance and will supply potable water to the service area.

POPULATION: 4,020	PV RATING: 89
GREEN PROJECT: No	GREEN CATEGORY: N/A
BUSINESS CASE: N/A	GREEN AMOUNT: \$0

LEGEND FOR PROJECT TYPE:

SRC = SOURCE TRANS = TRANSMISSION SYSTEM TREAT=TREATMENT WS = WATER STORAGE DS = DISTRIBUTION SYSTEM

**PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY AND DEPARTMENT OF ENVIRONMENTAL PROTECTION
DRINKING WATER STATE REVOLVING FUND
FEDERAL FY2020 - PROJECT PRIORITY LIST**

UPDATED FOR THE APRIL 22, 2020 PENNVEST BOARD MEETING

APPLICANT NAME: PITTSBURGH WSA - LEAD SERVICE LINE REPLACEMENT	REGION: V	DEP PROJECT RATING: 71
STREET ADDRESS: 441 SMITHFIELD ST.	PWSID: 5020038	PROJRANK: 4
CITY: PITTSBURGH	FUND SOURCE: DWSRF	PROJECT COST: \$49,710,104
COUNTY: ALLEGHENY	MTGDATE: 10/17/2018	PROJECT TYPE: DS

PROJ. DESCRIPTION: The project includes replacement of approximately 2,800 lead service line due to high lead levels. Approximately 7 miles of potable lead service lines will be replaced.

PROB. DESCRIPTION: Pittsburgh Water and Sewer Authority is under an Order to complete lead service line replacement. Project will help reduce/eliminate lead from drinking water.

POPULATION: 370,000	PV RATING: 106
GREEN PROJECT: No	GREEN CATEGORY: N/A
BUSINESS CASE: N/A	GREEN AMOUNT: \$0

APPLICANT NAME: PITTSBURGH WSA -SMALL DIAMETER WTR MAIN REPL. PRROGAM PRO-FI	REGION: V	DEP PROJECT RATING: 68
STREET ADDRESS: 441 SMITHFIELD ST.	PWSID: 5020038	PROJRANK: 5
CITY: PITTSBURGH	FUND SOURCE: DWSRF	PROJECT COST: \$202,720,00
COUNTY: ALLEGHENY	MTGDATE: 1/29/2020	PROJECT TYPE: DS

PROJ. DESCRIPTION: This is a three year, three phase project costing \$323,947,193, with phase one costing approximately \$64,635,907. This involves replacement of small diameter waterlines. Applicant indicated that there are no stream crossings or any other environmental impacts, the project proposes to replace waterlines in already developed areas or in public right-of-ways. As work for this project is being done, the lead service lines in these areas will be replaced.

PROB. DESCRIPTION: The PWSA has a significant number of miles of aging waterlines. Water main breaks are a significant issue throughout the year. Project will help reduce unaccounted water loss and system serve unirturepted potable water to the service area.

POPULATION: 370,000	PV RATING: 114
GREEN PROJECT: No	GREEN CATEGORY: N/A
BUSINESS CASE: N/A	GREEN AMOUNT: \$0

LEGEND FOR PROJECT TYPE:

SRC = SOURCE TRANS = TRANSMISSION SYSTEM TREAT=TREATMENT WS = WATER STORAGE DS = DISTRIBUTION SYSTEM

**PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY AND DEPARTMENT OF ENVIRONMENTAL PROTECTION
DRINKING WATER STATE REVOLVING FUND
FEDERAL FY2020 - PROJECT PRIORITY LIST**

UPDATED FOR THE APRIL 22, 2020 PENNVEST BOARD MEETING

APPLICANT NAME: MAHONING TOWNSHIP MUNICIPAL AUTH. WATER SYSTEM IMPROVEMENT	REGION: VI	DEP PROJECT RATING: 65
STREET ADDRESS: P.O.BOX 168	PWSID: 5030024	PROJRANK: 6
CITY: DISTANT	FUND SOURCE: APPLICATION PENDING	PROJECT COST: \$3,651,220
COUNTY: ARMSTRONG	MTGDATE:	PROJECT TYPE: DS, PS, WS

PROJ. DESCRIPTION: This water system improvements project consists of purchasing and installing a new meter vault, approximately 13,000 linear feet of 8-inch high density polyethylene waterline, a new booster pump station equipped with 100 horse power duplex pumps and an emergency generator. The project also includes purchasing and installing a new 200,000-gallon elevated composite storage tank with a mixing system to address occurrences of trihalomethanes maximum contaminant levels exceedances. This will increase water delivery rate, increase system pressures and reduce instances of total trihalomethanes (TTHM) violations.

PROB. DESCRIPTION: The existing Mahoning Township Municipal Authority water system is over 55 years old and has been plagued by insufficient water delivery rate, low system pressures and capacity issues. The existing booster station pumps are aged and the booster station does not have an emergency power back-up. The piping from the booster station to the existing 188,000-gallon standpipe is a 3-inch diameter watermain which lacks capacity and has experienced multiple leaks and breaks. The existing standpipe is not equipped with a mixing system and has caused the system operator to receive notices of violation (NOVs) for total trihalomethane disinfection by-product issues.

POPULATION: 9,000

PV RATING: 82

GREEN PROJECT: Yes

GREEN CATEGORY: Water & Energy Efficiency

BUSINESS CASE: Required

GREEN AMOUNT: \$1,758,420

LEGEND FOR PROJECT TYPE:

SRC = SOURCE TRANS = TRANSMISSION SYSTEM TREAT=TREATMENT WS = WATER STORAGE DS = DISTRIBUTION SYSTEM

**PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY AND DEPARTMENT OF ENVIRONMENTAL PROTECTION
DRINKING WATER STATE REVOLVING FUND
FEDERAL FY2020 - PROJECT PRIORITY LIST**

UPDATED FOR THE APRIL 22, 2020 PENNVEST BOARD MEETING

APPLICANT NAME: INDIANA COUNTY MSA - WR 20 MARION CENTER WTR PROJ.	REGION: V	DEP PROJECT RATING: 65
STREET ADDRESS: 602 KOLTER DRIVE	PWSID: 5320026	PROJRANK: 7
CITY: INDIANA	FUND SOURCE: STATE BYPASS	PROJECT COST: \$10,775,000
COUNTY: INDIANA	MTGDATE: 1/29/2020	PROJECT TYPE: TREAT, WS, DS

PROJ. DESCRIPTION: The Indiana County Municipal Services Authority proposes to construct a new water treatment plant that will serve Plumville Borough, install new waterlines to interconnect the Plumville System to the Crooked Creek water system, improve performance of the Crooked Creek water treatment plant, install new waterlines to service areas from Grove Chapel in the Village of Home to the Borough of Marion Center, install a water storage tank near Marion Center, install a waterline extension to service Spirit Life drug addiction treatment center, and install a new pressure reducing valve. In total, approximately 110,050 linear feet of new waterline will be installed.

PROB. DESCRIPTION: Marion Center has no public water system; therefore, the area has minimal fire protection. The Marion Center High School operates its own treatment system that is antiquated and has copper, lead and bacteria issues. Random sampling showed 41% of the properties tested positive for bacteria contamination in the form of total coliforms. The Spirit Life Area, which includes a drug rehabilitation facility has poor water quality. The current Plumville water treatment plant consists of a well that is chlorinated by sodium hypochlorite but provides no treatment for secondary contaminants. Recent raw water quality testing shows an upward trend in iron and manganese levels in the well. In addition, The Crooked Creek Water Treatment Plant is unable to make water to meet the demands of the service area without expanding the treatment plant by adding a third Actimen Unit and associated ancillaries. This project also proposes the addition of a greensand filtration system for iron and manganese removal at the Plumville water treatment plant.

POPULATION: 310	PV RATING: 100
GREEN PROJECT: No	GREEN CATEGORY: N/A
BUSINESS CASE: N/A	GREEN AMOUNT: \$0

LEGEND FOR PROJECT TYPE:

SRC = SOURCE TRANS = TRANSMISSION SYSTEM TREAT=TREATMENT WS = WATER STORAGE DS = DISTRIBUTION SYSTEM

**PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY AND DEPARTMENT OF ENVIRONMENTAL PROTECTION
DRINKING WATER STATE REVOLVING FUND
FEDERAL FY2020 - PROJECT PRIORITY LIST**

UPDATED FOR THE APRIL 22, 2020 PENNVEST BOARD MEETING

APPLICANT NAME: ERIE CITY WTR. AUTH-CHERRY ST PS IMP& MORE PRO-FI	REGION: VI	DEP PROJECT RATING: 64
STREET ADDRESS: 340 WEST BAYFRONT PARKWAY	PWSID: 6250028	PROJRANK: 8
CITY: ERIE	FUND SOURCE: DWSRF	PROJECT COST: \$32,000,000
COUNTY: ERIE	MTGDATE: 10/16/2019	PROJECT TYPE: PS, WS, TREAT

PROJ. DESCRIPTION: Proposed multiphase project includes Cheery Street Pumping Station replacement as a first project, this project is shovel ready and all permits are in-hand. The second project is treatment plant building rehabilitation. Also under the second project, Erie Water Works will alleviate storm water problems at the plant site. Approx. 21.5-acre site ends up conveying storm water from Scott Park (to the west) and residential areas (to the south) to Presque Isle Bay. An existing 84" storm sewer along Sommerheim Drive facilitates this conveyance. For many years, intense precipitation and flash floods have caused the pavement and gutters on Sommerheim Drive to be uplifted and damaged to the point where it is not feasible to repair the road without fixing the cause (storm water). The Third Project includes the replacement of the ASBURY tanks pump station replacement will require a PWS permit before work begin for this phase of the project. The Fourth project supports the studies that were completed for current and future demands in the north and southwest areas for the need of an additional storage tank. This project will also require a PWS permit before work begin for this phase of the project.

PROB. DESCRIPTION: This funding application is made in conjunction with the Programmatic Financing guidelines and addresses 4 specific projects in the Erie Water Works Capital Improvement Plan. **FIRST PROJECT:** The existing Cherry Street Pumping Station collectively consists of three pumping stations at the same site, the Cherry Street East Booster, Cherry Street West Booster, and Cherry Street South Booster stations. The Cherry Street PS was originally constructed in the 1920's and the electrical gear and equipment in the East Booster and West Booster stations was replaced in 1954 and modified again in 1974. Although maintenance has occurred on an as needed basis, the electrical gear at the East and West Booster stations is obsolete and spare parts are no longer available. The Cherry Street South Booster station was added in the early 1990's to provide service and accommodate growth to the south, although the East and West Booster stations were not updated at that time, and presently all three stations are in need of upgrades. The proposed upgrades at the Cherry Street PS will allow for the pump station to continue to provide suitable domestic and fire flow and associated pressures to the many residential, commercial, and industrial customers located within the project area. The project includes the replacement of the Cherry Street pumping station and the addition of chlorination facilities within the new station. EWW has obtained a PWS construction permit for the replacement of the Cherry Street booster pump station. **SECOND PROJECT:** Existing Richard S. Wasielewski (RSW) WTP is in need of restoration of the brick and mortar of the RSW WTP campus facilities, the interior historic architecture (such as the Rotunda) building dome, HVAC & lighting improvements, interior improvements to the restrooms, office areas, and other structural and architectural elements to maintain proper functioning of the building. Also, under this project, EWW will alleviate existing storm water problems at the plant site. Approx. 21.5-acre site ends up conveying storm water from Scott Park (to the west) and residential areas (to the south) to Presque Isle Bay. An existing 84" storm sewer along Sommerheim Drive facilitates this conveyance. For many years, intense precipitation and flash floods have caused the pavement and gutters on Sommerheim Drive to be uplifted and damaged to the point where it is not feasible to repair the road without fixing the cause (storm water). **THE THIRD PROJECT:** This project includes the Asbury Tanks Pump Station Replacement - The existing pump station is in need of updating of electrical, chemical feed, and pump bases. The anticipated cost to renovate the existing building would be as much as a new building and would not allow ease of use for this

LEGEND FOR PROJECT TYPE:

SRC = SOURCE TRANS = TRANSMISSION SYSTEM TREAT=TREATMENT WS = WATER STORAGE DS = DISTRIBUTION SYSTEM

**PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY AND DEPARTMENT OF ENVIRONMENTAL PROTECTION
DRINKING WATER STATE REVOLVING FUND
FEDERAL FY2020 - PROJECT PRIORITY LIST**

UPDATED FOR THE APRIL 22, 2020 PENNVEST BOARD MEETING

station while under construction. The station does not currently meet federal or local codes. It is anticipated that the replacement of this pump station will be ready for construction prior to 2023. The applicant needs to secure all permits before construction. **FOURTH PROJECT:** This project includes the construction of the South Booster' New Storage Tank - The Southwest Master Plan completed by Tetra Tech in 2011 identified a future need for additional storage in the South Booster Pressure District. The Master Plan provided by KLH Engineers supports this. Development southwest and north of the tank makes it an opportune time to acquire property adjacent to the existing 1.0 MG tank. A new 1.0MG tank will be constructed and the applicant is required to secure all permits before construction.

POPULATION: 180,000

PV RATING: 89

GREEN PROJECT: No

GREEN CATEGORY: N/A

BUSINESS CASE: N/A

GREEN AMOUNT: \$0

APPLICANT NAME: TOWANDA MUNICIPAL AUTHORITY WATER SYSTEM IMPROVEME

REGION: IV

DEP PROJECT RATING: 63

STREET ADDRESS: 724 MAIN STREET

PWSID: 2080029

PROJRANK: 9

CITY: TOWANDA

FUND SOURCE: DWSRF

PROJECT COST: \$4,736,700

COUNTY: BRADFORD

MTGDATE: 1/30/2019

PROJECT TYPE: SRC, TREAT, DS, W

PROJ. DESCRIPTION: Towanda Municipal Authority (TMA) proposes to construct a new membrane filter water treatment plant, three new groundwater source wells, approximately 8,600 feet of waterline, 106,000-gallon water storage tank, booster pump station rehabilitation and related appurtenances.

PROB. DESCRIPTION: The project intends to replace two existing groundwater sources with three new groundwater sources. The project will increase the reliability of the current system and eliminate the potential for adjacent industrial activity to negatively impact the Authority's raw water supply. The proposed improvements will also help to address an inadequate fire suppression system.

POPULATION: 5,000

PV RATING: 78

GREEN PROJECT: No

GREEN CATEGORY: N/A

BUSINESS CASE: N/A

GREEN AMOUNT: \$0

LEGEND FOR PROJECT TYPE:

SRC = SOURCE TRANS = TRANSMISSION SYSTEM TREAT=TREATMENT WS = WATER STORAGE DS = DISTRIBUTION SYSTEM

**PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY AND DEPARTMENT OF ENVIRONMENTAL PROTECTION
DRINKING WATER STATE REVOLVING FUND
FEDERAL FY2020 - PROJECT PRIORITY LIST**

UPDATED FOR THE APRIL 22, 2020 PENNVEST BOARD MEETING

APPLICANT NAME: WARRINGTON TOWNSHIP PFOS/PFOA REMEDIATION PROJECT	REGION: I	DEP PROJECT RATING: 63
STREET ADDRESS: 2210 SHETLAND DRIVE	PWSID: 1090070	PROJRANK: 10
CITY: WARRINGTON	FUND SOURCE: DWSRF	PROJECT COST: \$5,321,500
COUNTY: BUCKS	MTGDATE: 10/17/2018	PROJECT TYPE: TREAT

PROJ. DESCRIPTION: Warrington Township has PFOS and PFOA in Well Nos. 4,5,8 and 11 with an average of 37.5 ppt which is below the EPA health Advisory Level. Warrington is proposing to provide GAC filtration in conjunction with Ion Exchange units to treat to non-detectable levels. Warrington also has exceeded the MCLs for Gross Alpha and Uranium in Well No4. and is proposing an additional Ion Exchange unit at that well station for treatment of radionuclides. The 2016 annual averages are 32.6pCi/L for gross alpha and 29.6pCi/L for uranium. Enough information is available to present the system with a Consent Order and Agreement to lock in a timetable for installing treatment in order to bring this well back on line.

PROB. DESCRIPTION: Warrington Township has PFOS and PFOA in its Well Nos. 4,5,8 and 11. Other wells owned by Warrington are currently temporarily out of service due to the contamination. Water is being purchased from North Penn Water Authority to supplement the system. In an effort to provide a more reliable source, Warrington proposes to provide treatment to achieve non detectable levels in these wells. Warrington has exceeded the MCLs for Gross Alpha and Uranium at Well No.4. Project will improve sufficient source water to the system.

POPULATION: 11,688	PV RATING: 68
GREEN PROJECT: No	GREEN CATEGORY: N/A
BUSINESS CASE: N/A	GREEN AMOUNT: \$0

LEGEND FOR PROJECT TYPE:

SRC = SOURCE TRANS = TRANSMISSION SYSTEM TREAT=TREATMENT WS = WATER STORAGE DS = DISTRIBUTION SYSTEM

**PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY AND DEPARTMENT OF ENVIRONMENTAL PROTECTION
DRINKING WATER STATE REVOLVING FUND
FEDERAL FY2020 - PROJECT PRIORITY LIST**

UPDATED FOR THE APRIL 22, 2020 PENNVEST BOARD MEETING

APPLICANT NAME: TWIN LAKES UTILITIES SYSTEM UPGRADE	REGION: II	DEP PROJECT RATING: 62
STREET ADDRESS: P O BOX 217	PWSID: 2520051	PROJRANK: 11
CITY: MILFORD	FUND SOURCE: STATE BYPASS	PROJECT COST: \$4,964,600
COUNTY: PIKE	MTGDATE: 1/29/2020	PROJECT TYPE: SRC, DS, WS, METE

PROJ. DESCRIPTION: The project includes the replacement of the entire existing distribution system (approximately 27,000 LF of 2-inch, 3-inch and 4-inch HDPE watermain) and necessary appurtenances, rehabilitation of the existing PW#2, proper abandonment of collapsed PW#1, inspection/rehabilitation of the existing storage tank, installation of a new 20,000 gallon storage tank, construction of a new well (PW#3) and well station (with disinfection and contact segment facilities) with new transmission main from the well house to the new storage tank, inspection of existing PW#2 and rehabilitation, installation of back-up generators, new meters and meter pits are proposed to be installed at each residential connection (approximately 120), and system monitoring and security upgrades in Sagamore Estates, Milford and Shohola Townships, Pike County.

PROB. DESCRIPTION: The existing Twin Lakes Utilities, Inc. (Middlesex Water Co.) community water supply system serves the Sagamore Estates, which is a residential housing development in Shohola and Milford Township, Pike County, PA. The system includes two wells (one well has a collapsed borehole and is unusable), disinfection treatment, a 20,000-gallon ground storage tank, booster pumping station, distribution mains, and other appurtenances. Current issues and concerns with the existing water system include significant water leaks (>40% unaccounted for water loss) within the distribution piping, the loss of production from PW#1 due to a collapsed borehole, stress on the local aquifer because PW#2 must be continuously pumped to make up for the loss of PW#1, and the inability to rapidly repair and rehabilitate the distribution piping and PW#1. The existing wells are in proximity to each other and it appears the continuous operation of PW#2 has resulted in further collapse of PW#1 and the lowering of groundwater levels in both wells. If PW#2 were to be shut down for any reason, there would be no water supply for the community. New well development and distribution piping replacement were identified as necessary efforts to upgrade the system. Furthermore, the new distribution system would replace the current system that consists of a mixture of piping materials and appurtenances, some of which are leaking. The new meters proposed would allow for improved water loss control. The new emergency generators would allow for an uninterrupted supply of water in the case of a power outage. The new telemetry and security improvements would allow for a more reliable supply of water the residents of Sagamore Estates. The improvements would enhance the ability of the applicant to operate and maintain system facilities.

POPULATION: 300	PV RATING: 87
GREEN PROJECT: Yes	GREEN CATEGORY: Water Efficiency
BUSINESS CASE: Not Required	GREEN AMOUNT: \$360,300

LEGEND FOR PROJECT TYPE:

SRC = SOURCE TRANS = TRANSMISSION SYSTEM TREAT=TREATMENT WS = WATER STORAGE DS = DISTRIBUTION SYSTEM

**PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY AND DEPARTMENT OF ENVIRONMENTAL PROTECTION
DRINKING WATER STATE REVOLVING FUND
FEDERAL FY2020 - PROJECT PRIORITY LIST**

UPDATED FOR THE APRIL 22, 2020 PENNVEST BOARD MEETING

APPLICANT NAME: CLYMER BOROUGH MUNICIPAL AUTHORITY WATER PROJECT	REGION: V	DEP PROJECT RATING: 60
STREET ADDRESS: R.R.#1, BOX 1	PWSID: 5320009	PROJRANK: 12
CITY: CLYMER	FUND SOURCE: DWSRF	PROJECT COST: \$2,177,500
COUNTY: INDIANA	MTGDATE: 1/30/2019	PROJECT TYPE: TREAT, DS, WS

PROJ. DESCRIPTION: The Authority is proposing to install a forced draft aerator for the removal of hydrogen sulfide prior to filtration. In addition, due to the age and condition of the 200,000-gallon tank, it will be replaced along with the plant's above ground clearwell. Also, 7,750 linear feet of leaking transite waterline will be replaced with 8-inch C-900 PVC pipe. Installation of 7,750 linear feet of PVC waterline includes 150 service lines, 39 gate valves, 11 interconnections and seven fire hydrants. All waterline and appurtenances shall be in Clymer Borough. A new 250,000-gallon water storage tank will be constructed on Clymer Road in Cherry hill Township.

PROB. DESCRIPTION: The residents of Clymer Borough are experiencing unpleasant taste and odor issues caused by the presence of hydrogen sulfide in old pipes. The existing asbestos concrete pipes are leaking in several areas. This proposed project will correct the leakage and antiquated pipes. The new aerator scrubber will remove hydrogen sulfide at the existing water treatment plant. The existing clearwell's roof experienced holes and partial collapse exposing the finished water to contaminants. An emergency permit was issued to Clymer to repair holes and have an interconnection with Indiana County Municipal Service Authority (ICMSA) to provide finished water. The clearwell was out of operation for approximately 1 month.

POPULATION: 1,700	PV RATING: 83
GREEN PROJECT: No	GREEN CATEGORY: N/A
BUSINESS CASE: N/A	GREEN AMOUNT: \$0

LEGEND FOR PROJECT TYPE:

SRC = SOURCE TRANS = TRANSMISSION SYSTEM TREAT=TREATMENT WS = WATER STORAGE DS = DISTRIBUTION SYSTEM

**PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY AND DEPARTMENT OF ENVIRONMENTAL PROTECTION
DRINKING WATER STATE REVOLVING FUND
FEDERAL FY2020 - PROJECT PRIORITY LIST**

UPDATED FOR THE APRIL 22, 2020 PENNVEST BOARD MEETING

APPLICANT NAME: ST PETERSBURG BORO MA - WATER TREATMENT PLANT	REGION: VI	DEP PROJECT RATING: 57
STREET ADDRESS: BOX 235	PWSID: 6160013	PROJRANK: 13
CITY: ST PETERSBURG	FUND SOURCE: DWSRF	PROJECT COST: \$4,400,000
COUNTY: CLARION	MTGDATE: 10/16/2019	PROJECT TYPE: TREAT, DS

PROJ. DESCRIPTION: A new surface water treatment plant proposed as a package plant with two trains will be constructed within a new building, each train rated for a capacity of 100 gallons per minute. The building will also have rooms for an office, pumping facilities, chemical addition and storage, and a restroom. The new water plant will be connected to the existing water line supplying water to a water tank, and pumps in the new plant will pump treated drinking water into the distribution system at a rate of 225 gallons per minute. Approx. 7400 feet of water mains will be replaced. 4300 feet of new 8" PVC water main will replace 4" and 6" asbestos cement pipe, and 3100 feet of 6" PVC water main will replace additional asbestos cement pipe. To eliminate three dead ends on existing water main lines, 1550 feet of 6" PVC water main will be installed at the ends of those three pipelines. Connections to existing water lines will be made creating new water loops in the water system. 64 service connections and 8 fire hydrants will be replaced.

PROB. DESCRIPTION: The existing surface water treatment plant, a package plant with only one train, constructed in 1971, has been repaired on multiple occasions. The steel tank that contains the treatment unit has been welded to repair holes that have rusted through the structure. Paddles from the mixer have broken off and not replaced. The operating controls in the control panel are obsolete and very corroded. Only one treatment train exists which prevents normal maintenance procedures without declaring an emergency. The WTP received a "Needs Improvement" under the FPPE for numerous problems. The existing plant cannot be upgraded to meet the alarm and shut-down requirements being implemented by the Department of Environmental Protection beginning in August, 2019. The old existing asbestos-cement water lines are continuing to break, causing substantial water leaks. A pressure reducing valve vault is beyond repair and parts are no longer available for the existing materials.

POPULATION: 465	PV RATING: 92
GREEN PROJECT: No	GREEN CATEGORY: N/A
BUSINESS CASE: N/A	GREEN AMOUNT: \$0

LEGEND FOR PROJECT TYPE:
 SRC = SOURCE TRANS = TRANSMISSION SYSTEM TREAT=TREATMENT WS = WATER STORAGE DS = DISTRIBUTION SYSTEM

**PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY AND DEPARTMENT OF ENVIRONMENTAL PROTECTION
DRINKING WATER STATE REVOLVING FUND
FEDERAL FY2020 - PROJECT PRIORITY LIST**

UPDATED FOR THE APRIL 22, 2020 PENNVEST BOARD MEETING

APPLICANT NAME: CORRY MUN AUTHORITY PHASE 2 WATER SYSTEM IMP.	REGION: VI	DEP PROJECT RATING: 56
STREET ADDRESS: 100 SOUTH CENTER STREET	PWSID: 6250012	PROJRANK: 14
CITY: CORRY	FUND SOURCE: DWSRF	PROJECT COST: \$6,590,000
COUNTY: ERIE	MTGDATE: 7/17/2019	PROJECT TYPE: TREAT, WS, PS

PROJ. DESCRIPTION: The Authority proposes construction of a new garage/chlorination water treatment building off of Sciota Road. Construction activities also include the construction of a new 2.9-million-gallon (MG) finished water storage tank or two (2) 1.45-million-gallon each finished water storage tanks to replace the existing 3.0-million-gallon finished water storage reservoir. Replacement of two (2) existing in-ground booster pump stations located at Center Street and Union Street with new above ground pump stations is also proposed.

PROB. DESCRIPTION: The existing water treatment building is uninhabitable due to structural issues, roof collapse and mold. The new building will provide a secure location for the relocation of the liquid chlorination system, instrumentation, an office for personnel, and garage space for equipment maintenance. The existing water storage reservoir is over 90 years old and experiences leakage, has corroded steel roof supports which allow air borne debris to enter, and the existing valves are inoperable. Also, the existing reservoir is at the end of the runway at the Corry Regional Airport, directly in the flight path; therefore, the Federal Aviation Administration (FAA) has requested the reservoir be relocated outside of the airport runway flight path. The new tank(s), one (1) 2.9 MG or two (2) 1.45 MG, bid dependent, will address all existing deficiencies. The existing storage reservoir will be demolished following tank(s) construction. The existing booster stations, consisting of manholes, are equipped with only one (1) pump per station and do not have stand-by power, are unsafe, and unreliable. Each new booster station will be housed in a building equipped with two (2) pumps for redundancy plus a jockey pump and standby electric generator.

POPULATION: 7,800	PV RATING: 71
GREEN PROJECT: No	GREEN CATEGORY: N/A
BUSINESS CASE: N/A	GREEN AMOUNT: \$0

LEGEND FOR PROJECT TYPE:

SRC = SOURCE TRANS = TRANSMISSION SYSTEM TREAT=TREATMENT WS = WATER STORAGE DS = DISTRIBUTION SYSTEM

**PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY AND DEPARTMENT OF ENVIRONMENTAL PROTECTION
DRINKING WATER STATE REVOLVING FUND
FEDERAL FY2020 - PROJECT PRIORITY LIST**

UPDATED FOR THE APRIL 22, 2020 PENNVEST BOARD MEETING

APPLICANT NAME: NEW SEWICKLEY TWP MA - HRR AC WATERLINE REPL.	REGION: V	DEP PROJECT RATING: 55
STREET ADDRESS: 233 MILLER ROAD	PWSID: 5040085	PROJRANK: 15
CITY: ROCHESTER	FUND SOURCE: STATE BYPASS	PROJECT COST: \$717,654
COUNTY: BEAVER	MTGDATE: 4/17/2019	PROJECT TYPE: DS

PROJ. DESCRIPTION: The New Sewickley Township Municipal Authority proposes the installation of approximately 5,200 linear feet of 6-inch and 8-inch diameter ductile iron (DI) pipe to replace all asbestos cement (AC) pipe located in the Harvey Run Road system. New DI water mains will be installed parallel to the AC pipe while the AC pipe remains in service. Each replacement water main will be either the same size as or one size smaller than the water main it replaces, as appropriate. Reinstatement of water service laterals to customers in the project area will be included as part of the project. Due to health and environmental concerns with handling and disposal of pipe containing asbestos, completion of the project involves leaving the AC pipe undisturbed. The project is an in-kind replacement of existing water mains. No water main extensions or additional water customers are proposed with this project. Two new fire hydrants are proposed at water main dead-ends to facilitate system flushing.

PROB. DESCRIPTION: The New Sewickley Township Municipal Authority has approximately 5,200 linear feet of water distribution mains comprised of aging asbestos cement pipe. The main is old and deteriorating requiring replacement. Due to the asbestos in the existing pipe, repairs on the line are difficult. New distribution main will reduce breakage and will be easy to repair. New fire hydrants will help flush the dead-end distribution mains.

POPULATION: 1,894	PV RATING: 64
GREEN PROJECT: No	GREEN CATEGORY: N/A
BUSINESS CASE: N/A	GREEN AMOUNT: \$0

LEGEND FOR PROJECT TYPE:

SRC = SOURCE TRANS = TRANSMISSION SYSTEM TREAT=TREATMENT WS = WATER STORAGE DS = DISTRIBUTION SYSTEM

**PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY AND DEPARTMENT OF ENVIRONMENTAL PROTECTION
DRINKING WATER STATE REVOLVING FUND
FEDERAL FY2020 - PROJECT PRIORITY LIST**

UPDATED FOR THE APRIL 22, 2020 PENNVEST BOARD MEETING

APPLICANT NAME: CITY OF PHILADELPHIA TORRESDALE FILTERED WATER PS REHAB.	REGION: I	DEP PROJECT RATING: 55
STREET ADDRESS: 1101 MARKET STREET	PWSID: 1510001	PROJRANK: 16
CITY: PHILADELPHIA	FUND SOURCE: APPLICATION PENDING	PROJECT COST: \$60,000,000
COUNTY: PHILADELPHIA	MTGDATE:	PROJECT TYPE: PS

PROJ. DESCRIPTION: The PWD is proposing to install 6 new high service pumps to meet a 50MGD demand and 6 new low pressure pumps. to meet the 196MGD demand. Two transfer pumps will be installed to provide system flexibility and to reduce low service pumping if needed. Two new hydropneumatic surge tanks will also be installed along with new mag meters.

PROB. DESCRIPTION: The Torresdale Filtered Water Pumping Station was built in the 1940's provides water to the low and high pressure distribution areas. The station consists of 12 inefficient pumps that are at the end of their useful life. The pumps have been repaired many times and due to their age, spare parts are no longer available. The Philadelphia Water Department run the risk of an outage if these pumps remain in service. Project will improve operation of the system.

POPULATION: 1,755,0	PV RATING: 70
GREEN PROJECT: No	GREEN CATEGORY: N/A
BUSINESS CASE: N/A	GREEN AMOUNT: \$0

APPLICANT NAME: CRANBERRY TOWNSHIP SR 62 WATERLINE REPL. PROJECT	REGION: VI	DEP PROJECT RATING: 52
STREET ADDRESS: BOX 378	PWSID: 6610031	PROJRANK: 17
CITY: SENECA	FUND SOURCE: DWSRF	PROJECT COST: \$1,130,000
COUNTY: VENANGO	MTGDATE: 10/17/2018	PROJECT TYPE: DS

PROJ. DESCRIPTION: The Authority is proposing to install approximately 4,700 feet of 8-inch C900 PVC pipe and abandoned the existing lines in place. The new water distribution lines will be installed in the shoulder of SR-62 Penn-DOT right-of-way just east of the intersection with SR 257 in Cranberry Township – Venango County. The project will serve 77 existing customers.

PROB. DESCRIPTION: The water lines along State Route 62 has experienced numerous breaks over the past several years to a point beyond repairs. Project will supply uninterrupted finish water to the service area and will reduce unaccounted water loss.

POPULATION: 2,700	PV RATING: 57
GREEN PROJECT: No	GREEN CATEGORY: N/A
BUSINESS CASE: N/A	GREEN AMOUNT: \$0

LEGEND FOR PROJECT TYPE:

SRC = SOURCE TRANS = TRANSMISSION SYSTEM TREAT=TREATMENT WS = WATER STORAGE DS = DISTRIBUTION SYSTEM

**PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY AND DEPARTMENT OF ENVIRONMENTAL PROTECTION
DRINKING WATER STATE REVOLVING FUND
FEDERAL FY2020 - PROJECT PRIORITY LIST**

UPDATED FOR THE APRIL 22, 2020 PENNVEST BOARD MEETING

APPLICANT NAME: MEADVILLE AREA WA - 2019 WATER SYSTEM IMP	REGION: VI	DEP PROJECT RATING: 49
STREET ADDRESS: 984 WATER STREET	PWSID: 6200036	PROJRANK: 18
CITY: MEADVILLE	FUND SOURCE: DWSRF	PROJECT COST: \$3,000,000
COUNTY: CRAWFORD	MTGDATE: 1/30/2019	PROJECT TYPE: DS
 PROJ. DESCRIPTION: The Meadville Area Water Authority (MAWA) 2019 Water System Improvements project includes the replacement of approximately 5,885 LF of 6-inch and 2,800 LF of 8-inch aged cast iron waterlines, replacement of fire hydrants, service connections and the installation of 46 distribution system valves ranging in size from 3-inch to 12-inch.		
 PROB. DESCRIPTION: The existing aged cast iron water mains have experienced numerous breaks and most of the control/gate valves are non-operable. The valves are rusted and/are too old to repair. The malfunctioning of existing valves on the system results in a greater number of customers being affected by water outages due to defective valves. Once operated, the defective valves leak, causing additional water loss and potential freezing in winter months. Project will help reduce authority unaccounted for water loss.		
 POPULATION: 17,339		PV RATING: 83
GREEN PROJECT: Yes		GREEN CATEGORY: Water Efficiency
BUSINESS CASE: Required		GREEN AMOUNT: \$3,000,000

LEGEND FOR PROJECT TYPE:

SRC = SOURCE TRANS = TRANSMISSION SYSTEM TREAT=TREATMENT WS = WATER STORAGE DS = DISTRIBUTION SYSTEM

**PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY AND DEPARTMENT OF ENVIRONMENTAL PROTECTION
DRINKING WATER STATE REVOLVING FUND
FEDERAL FY2020 - PROJECT PRIORITY LIST**

UPDATED FOR THE APRIL 22, 2020 PENNVEST BOARD MEETING

APPLICANT NAME: ALTOONA WATER AUTHORITY - GOODS LANE WTR LINES REPLACEMENT	REGION: III	DEP PROJECT RATING: 48
STREET ADDRESS: 20 GREENWOOD ROAD	PWSID: 4070023	PROJRANK: 19
CITY: ALTOONA	FUND SOURCE: STATE BYPASS	PROJECT COST: \$2,100,000
COUNTY: BLAIR	MTGDATE: 1/29/2020	PROJECT TYPE: DS

PROJ. DESCRIPTION: The Authority has proposed to replace approximately 6,500 LF of existing 12" cast iron waterline along 58th Street (starting at the intersection with California Avenue) and continuing onto Rhode Island Avenue, Goods Lane, Orchard Avenue, and Arlaryd Street (ending at the intersection with Logan Boulevard), located in the City of Altoona and Logan Township, Blair County. The new waterline will consist of 12" diameter ductile iron mechanical joint pipe.

PROB. DESCRIPTION: The existing water line to be replaced was installed in the 1950's and has been subject to leaks and breaks, and has reached the end of its serviceable life. Project will help reduce unaccounted water loss and system serve uninterrupted potable water to the service area.

POPULATION: 62,500	PV RATING: 63
GREEN PROJECT: No	GREEN CATEGORY: N/A
BUSINESS CASE: N/A	GREEN AMOUNT: \$0

LEGEND FOR PROJECT TYPE:

SRC = SOURCE TRANS = TRANSMISSION SYSTEM TREAT=TREATMENT WS = WATER STORAGE DS = DISTRIBUTION SYSTEM

**PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY AND DEPARTMENT OF ENVIRONMENTAL PROTECTION
DRINKING WATER STATE REVOLVING FUND
FEDERAL FY2020 - PROJECT PRIORITY LIST**

UPDATED FOR THE APRIL 22, 2020 PENNVEST BOARD MEETING

APPLICANT NAME: HAZLETON CITY AUTHORITY 2019 TANK AND PUMP ST. REN	REGION: II	DEP PROJECT RATING: 48
STREET ADDRESS: 400 E. ARTHUR GARDNER PARKWAY	PWSID: 2408001	PROJRANK: 20
CITY: HAZLETON	FUND SOURCE: DWSRF	PROJECT COST: \$1,519,841
COUNTY: SCHUYLKILL	MTGDATE: 1/30/2019	PROJECT TYPE: WS, PS

PROJ. DESCRIPTION: HCA proposes the rehabilitation of the 0.5 MG Park Place Tank including interior and exterior painting, fencing, and all necessary appurtenance repairs/upgrades (vent, ladder, etc.) as well as the minor rehabilitation of all other finished water storage tanks ((Mckinley Tank #1 and #2, Lattimer Tank, Highland Tank, Council Crest Tank, Tomhicken Tank, Monges Street Tank, and Roan Tank) consisting of exterior coating maintenance, touch up, and minor appurtenance in-kind replacement if necessary. The finished water storage tanks are aging and in need of repair and rehabilitation. The Drifton and Barnes Run Pump Stations are also aging and in need of upgrading to more energy efficient units. The Drifton Pump Station currently has only a single pump to meet design discharge and no emergency power provisions. The upgraded station will provide two pumps for redundancy to meet design capacity, emergency power provisions, all necessary piping, electrical, and appurtenance modifications, and necessary building improvements. The Barnes Run Raw Water Booster Station currently provides water to the HCA WTP on a common main line. HCA has experienced reduced flow and capacity when multiple sources are brought on line on this common main. Due to limitations in the existing pump intake pipes this project is proposing increasing the pump capacity and discharge design pressure by 10% over current design. The new capacity will improve operating conditions without significant reconstruction and cost of water intake piping. Emergency power provisions will also be added to this station as well as building maintenance. Lastly, to reduce unaccounted for water loss in the distribution system, HCA is proposing acquiring a fixed base leak detection system along with required training and technical support necessary. Replacement of booster pumps with more energy efficient models will improve energy efficiency.

PROB. DESCRIPTION: HCA's existing finished water storage tanks (primarily the Park Place Tank) and their Drifton and Barnes Run Pump Stations are aging and in need of repair and rehabilitation. The 0.5MG Park Place finished water storage tank requires the most extensive rehabilitation. All other finished water storage tanks (McKinley Tank #1 and #2, Lattimer Tank, Highland Tank, Council Crest Tank, Tomhicken Tank, Monges Street Tank, and Roan Tank) will need minor appurtenance in-kind replacement if necessary, as they need minor rehabilitation. The tanks are located in remote locations and were subjected to vandalism over time. The Drifton and Barnes Run Pump Stations are also aging and in need of upgrading to more energy efficient units. The Drifton Pump Station currently has only a single pump to meet design discharge and no emergency power provisions. The upgraded station will provide two pumps for redundancy to meet design capacity, emergency power provisions, and necessary building improvements. The Barnes Run Raw Water Booster Station currently provides water to the HCA WTP on a common main line. HCA has experienced reduced flow and capacity when multiple sources are brought on line on this common main. Due to limitations in the existing pump intake pipes this project is proposing increasing the pump capacity and discharge design pressure by 10% over current design. The new capacity will improve operating conditions without significant reconstruction and cost of water intake piping. Emergency power provisions will also be added to this station as well as building maintenance. Lastly, to reduce unaccounted for water loss in the distribution system, HCA is proposing a fixed base leak detection system.

POPULATION: 45,000	PV RATING: 73
GREEN PROJECT: Yes	GREEN CATEGORY: Water Efficiency
BUSINESS CASE: Not Required	GREEN AMOUNT: \$200,000

LEGEND FOR PROJECT TYPE:
SRC = SOURCE TRANS = TRANSMISSION SYSTEM TREAT=TREATMENT WS = WATER STORAGE DS = DISTRIBUTION SYSTEM

**PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY AND DEPARTMENT OF ENVIRONMENTAL PROTECTION
DRINKING WATER STATE REVOLVING FUND
FEDERAL FY2020 - PROJECT PRIORITY LIST**

UPDATED FOR THE APRIL 22, 2020 PENNVEST BOARD MEETING

APPLICANT NAME: STONEBORO BORO - WATER SYSTEM INFRASTRUCTURE IMP	REGION: VI	DEP PROJECT RATING: 46
STREET ADDRESS: 59 LAKE STREET	PWSID: 6430056	PROJRANK: 21
CITY: STONEBORO	FUND SOURCE: DWSRF	PROJECT COST: \$5,590,000
COUNTY: MERCER	MTGDATE: 7/18/2018	PROJECT TYPE: WS, DS, PS

PROJ. DESCRIPTION: The proposed project will include a 500,000-gallon new reservoir and removal of existing 300,000 gallon reservoir, a new booster pumping station and the replacement of approximately 21,800 feet (3.7 miles) of water mains and 25 fire hydrants.

PROB. DESCRIPTION: The existing reservoir is over 80 years old and is in need of major repairs. The top three (3) feet of the concrete reservoir is falling apart. The hypalon cover has developed several tears and holes and needs replaced. The existing reservoir pump station is also showing major signs of age. The pumps are in need of a major overhaul or should be replaced. The pumps are installed below grade, making repairs and maintenance very difficult. The existing distribution system still has several asbestos-cement and steel water mains that are over 70 years. Breaks from these pipes are becoming more and more frequent. Also, several of these mains are undersized, with diameters ranging from 4 to 8 inches. The main line from the reservoir pump station to Mercer Road is only 4 inches in diameter. It is estimated 16,000 feet of asbestos cement pipes is still being used throughout the system, with most near its life expedience of 70 years. Project will help system supply potable water at proper pressure throughout the service area.

POPULATION: 1,104	PV RATING: 81
GREEN PROJECT: No	GREEN CATEGORY: N/A
BUSINESS CASE: N/A	GREEN AMOUNT: \$0

LEGEND FOR PROJECT TYPE:

SRC = SOURCE TRANS = TRANSMISSION SYSTEM TREAT=TREATMENT WS = WATER STORAGE DS = DISTRIBUTION SYSTEM

**PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY AND DEPARTMENT OF ENVIRONMENTAL PROTECTION
DRINKING WATER STATE REVOLVING FUND
FEDERAL FY2020 - PROJECT PRIORITY LIST**

UPDATED FOR THE APRIL 22, 2020 PENNVEST BOARD MEETING

APPLICANT NAME: MT PENN BMA - PERKIOMEN AVENUE WATER MAIN REPLACEMENT	REGION: III	DEP PROJECT RATING: 45
STREET ADDRESS: 200 NORTH 25TH ST	PWSID: 3060082	PROJRANK: 22
CITY: MT PENN	FUND SOURCE: APPLICATION PENDING	PROJECT COST: \$1,700,000
COUNTY: BERKS	MTGDATE:	PROJECT TYPE: DS

PROJ. DESCRIPTION: The Authority has proposed to replace 5,000 feet of existing 4-inch and 6-inch diameter waterlines, along Perkiomen Avenue, with 8-inch diameter ductile iron piping. The new waterline will be tied into the existing distribution system approximately 175 feet east of the intersection of Perkiomen Avenue and South 23rd Street.

PROB. DESCRIPTION: The existing waterline along Perkiomen Avenue is believed to have several leaks which have contributed to the systems overall water loss. PennDOT is in the process of rebuilding Perkiomen Avenue which will include the installation of a new storm sewer line that will interfere with the existing waterline. With the structural integrity of the existing waterline already in question and the proposed road construction that is to occur, the Authority has determined this to be a proper time to replace the waterline.

POPULATION: 10,400	PV RATING: 60
GREEN PROJECT: No	GREEN CATEGORY: N/A
BUSINESS CASE: N/A	GREEN AMOUNT: \$0

LEGEND FOR PROJECT TYPE:

SRC = SOURCE TRANS = TRANSMISSION SYSTEM TREAT=TREATMENT WS = WATER STORAGE DS = DISTRIBUTION SYSTEM

**PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY AND DEPARTMENT OF ENVIRONMENTAL PROTECTION
DRINKING WATER STATE REVOLVING FUND
FEDERAL FY2020 - PROJECT PRIORITY LIST**

UPDATED FOR THE APRIL 22, 2020 PENNVEST BOARD MEETING

APPLICANT NAME: STATE COLLEGE BOROUGH WATER AUTH- NIXON-KOCHER TP.	REGION: IV	DEP PROJECT RATING: 45
STREET ADDRESS: 1201 W. BRANCH ROAD	PWSID: 4140096	PROJRANK: 23
CITY: STATE COLLEGE	FUND SOURCE: DWSRF	PROJECT COST: \$24,950,000
COUNTY: CENTRE	MTGDATE: 7/17/2019	PROJECT TYPE: SRC, TREAT
PROJ. DESCRIPTION: State College Borough Water Authority (SCBWA) proposes to construct a new membrane filter water treatment plant and related appurtenances. The proposal will consist of the replacement of the well pumps in the Nixon and Kocher Wells and the construction of a new treatment plant, including chemical addition, ultraviolet disinfection, membrane/granular activated carbon filtration, and 4-log inactivation of viruses.		
PROB. DESCRIPTION: The project intends to allow for system redundancy to address potential concerns related to the effect of prolonged droughts and emerging contaminants such as pharmaceuticals, endocrine disrupters, various synthetic and organic compounds. Although the existing well fields are currently meeting all applicable regulations, SCBWA is taking a proactive approach to address the possibility that in the future the sources may be considered groundwater under the direct influence (GUDI) of surface water.		
POPULATION: 72,000		PV RATING: 60
GREEN PROJECT: No		GREEN CATEGORY: N/A
BUSINESS CASE: N/A		GREEN AMOUNT: \$0

LEGEND FOR PROJECT TYPE:

SRC = SOURCE TRANS = TRANSMISSION SYSTEM TREAT=TREATMENT WS = WATER STORAGE DS = DISTRIBUTION SYSTEM

**PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY AND DEPARTMENT OF ENVIRONMENTAL PROTECTION
DRINKING WATER STATE REVOLVING FUND
FEDERAL FY2020 - PROJECT PRIORITY LIST**

UPDATED FOR THE APRIL 22, 2020 PENNVEST BOARD MEETING

APPLICANT NAME: EAST STROUDSBURG BOROUGH-NEW WATER SUP INTAKE LINE	REGION: II	DEP PROJECT RATING: 43
STREET ADDRESS: PO BOX 303	PWSID: 2450023	PROJRANK: 24
CITY: EAST STROUDSBURG	FUND SOURCE: STATE BYPASS	PROJECT COST: \$2,416,000
COUNTY: MONROE	MTGDATE: 4/17/2019	PROJECT TYPE: TRANS

PROJ. DESCRIPTION: The Borough of East Stroudsburg is proposing to replace the existing raw water supply intake and transmission pipeline from the intake structure of Middle Dam to the East Stroudsburg Water Filtration Plant. This project is being undertaken in conjunction with major rehabilitation work on Middle Dam. The existing transmission line will be abandoned in place and replaced by the new pipeline.

PROB. DESCRIPTION: The Borough of East Stroudsburg owns and maintains Middle Dam across Sambo Creek. The dam impounds the Borough's water supply reservoir. The PA DEP Division of Dam Safety identified deficiencies with the dam, which are being addressed by upcoming major rehabilitation work. Existing water supply piping through the dam is over 100 years old and existing transmission piping from the dam to the water treatment plant is over 50 years old. Replacing this aging infrastructure can be cost-effectively accomplished in conjunction with the dam rehabilitation work.

POPULATION: 13,000	PV RATING: 58
GREEN PROJECT: No	GREEN CATEGORY: N/A
BUSINESS CASE: N/A	GREEN AMOUNT: \$0

LEGEND FOR PROJECT TYPE:

SRC = SOURCE TRANS = TRANSMISSION SYSTEM TREAT=TREATMENT WS = WATER STORAGE DS = DISTRIBUTION SYSTEM

**PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY AND DEPARTMENT OF ENVIRONMENTAL PROTECTION
DRINKING WATER STATE REVOLVING FUND
FEDERAL FY2020 - PROJECT PRIORITY LIST**

UPDATED FOR THE APRIL 22, 2020 PENNVEST BOARD MEETING

APPLICANT NAME: ELDRRED TOWNSHIP MUNICIPAL AUTHORITY WATER LINE EXT	REGION: VI	DEP PROJECT RATING: 42
STREET ADDRESS: PO BOX 83	PWSID: 6330840	PROJRANK: 25
CITY: SIGEL	FUND SOURCE: STATE BYPASS	PROJECT COST: \$4,594,123
COUNTY: JEFFERSON	MTGDATE: 7/17/2019	PROJECT TYPE: DS, METERS

PROJ. DESCRIPTION: Eldred Township Municipal Authority (ETMA) proposes to extend its water lines to portions of the surrounding township area include Beers Road, Fisher Road, SR 949 and SR 36. The installation will be completed using trenchless boring method. Approximately 34,400 linear feet of 6-inch diameter water main, fire (5) hydrants, air release valves, water sample taps, valves and customer connections will be installed to serve additional eighty (80) customers.

PROB. DESCRIPTION: The Authority conducted raw water sampling of the customer's individual sources of supply within the proposed extension service area. 36 customers were sampled, and 10 samples were shown to be contaminated by fecal coliforms (e-coli) or approximately 28% and 30 samples tested positive for total coliform or approximately 84%. Additionally, customer water surveys confirmed frequent water outage and problem with secondary contaminant such as iron (Fe).

POPULATION: 382	PV RATING: 67
GREEN PROJECT: Yes	GREEN CATEGORY: Water Efficiency
BUSINESS CASE: Not Required	GREEN AMOUNT: \$178,750

LEGEND FOR PROJECT TYPE:

SRC = SOURCE TRANS = TRANSMISSION SYSTEM TREAT=TREATMENT WS = WATER STORAGE DS = DISTRIBUTION SYSTEM

**PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY AND DEPARTMENT OF ENVIRONMENTAL PROTECTION
DRINKING WATER STATE REVOLVING FUND
FEDERAL FY2020 - PROJECT PRIORITY LIST**

UPDATED FOR THE APRIL 22, 2020 PENNVEST BOARD MEETING

APPLICANT NAME: EVANS CITY WATER & SEWER A.- MARS- EVANS CITY MAIN REPL.	REGION: VI	DEP PROJECT RATING: 42
STREET ADDRESS: 330 WAHL AVE	PWSID: 5100033	PROJRANK: 26
CITY: EVANS CITY	FUND SOURCE: APPLICATION PENDING	PROJECT COST: \$1,960,000
COUNTY: BUTLER	MTGDATE:	PROJECT TYPE: DS

PROJ. DESCRIPTION: Project includes the replacement of aged existing CI water mains by constructing approximately 4,800 LF of 10-inch diameter, 120 LF of 8-inch diameter, and 60 LF of 6-inch diameter DIP waterline, public water services connections, valves, and fire hydrants along South Jackson Street and Mars-Evans City Road in Evans City Borough and Forward Township, Butler County. The project also includes the installation of multiple insertion valves, removal and replacement of existing broken valves, and fire hydrants within the water distribution system.

PROB. DESCRIPTION: proposed project will help to reduce maintenance needed for the water distribution system by reducing line breaks, leaks, and unaccounted for water. Line breaks and the loss of water system pressure have resulted in the need for the Evans City Water and Sewer Authority to issue Boil Water Public Notices, with some outages lasting two days. System-wide unaccounted for water is calculated on a twelve month rolling average and is approximately 36%.

POPULATION: 2,400	PV RATING: 57
GREEN PROJECT: No	GREEN CATEGORY: N/A
BUSINESS CASE: N/A	GREEN AMOUNT: \$0

LEGEND FOR PROJECT TYPE:

SRC = SOURCE TRANS = TRANSMISSION SYSTEM TREAT=TREATMENT WS = WATER STORAGE DS = DISTRIBUTION SYSTEM

**PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY AND DEPARTMENT OF ENVIRONMENTAL PROTECTION
DRINKING WATER STATE REVOLVING FUND
FEDERAL FY2020 - PROJECT PRIORITY LIST**

UPDATED FOR THE APRIL 22, 2020 PENNVEST BOARD MEETING

APPLICANT NAME: HOUTZDALE MUN AUTH - WATER SYSTEM DISTR. REPL.	REGION: IV	DEP PROJECT RATING: 42
STREET ADDRESS: 612 BRISBIN ST.	PWSID: 6170023	PROJRANK: 27
CITY: HOUTZDALE	FUND SOURCE: DWSRF	PROJECT COST: \$22,222,400
COUNTY: CLEARFIELD	MTGDATE: 7/18/2018	PROJECT TYPE: DS, METERS

PROJ. DESCRIPTION: The project involves the replacement of approximately 185,000 linear feet of waterline and related appurtenances within HMA's water system. The Project also includes the replacement of approximately 1,200 service lines. The replaced portion of the service lines will be restricted to the portion of the service lines owned and maintained by HMA. The project will also involve the installation of meter pits on each service line, to further reduce unaccounted for water loss. New waterlines will range in size from 2 inches to 8 inches, and will consist of mostly PVC piping, with some polyethylene tubing. Several existing pipe segments will be replaced with larger diameter pipes, in order to ensure a reliable amount of potable water is available throughout the system for the useful life of the waterline.

PROB. DESCRIPTION: The Houtzdale Municipal Authority (HMA) maintains a public water system with aging infrastructure. The infrastructure consists of multiple pipe compositions throughout the system that are approaching their useful lifespan. Water leakage detection has proven to be very difficult as a result of the expansive, aging infrastructure. A reliable supply of safe drinking water can, at times, be a challenge for the authority.

POPULATION: 8,410	PV RATING: 57
GREEN PROJECT: No	GREEN CATEGORY: N/A
BUSINESS CASE: N/A	GREEN AMOUNT: \$0

LEGEND FOR PROJECT TYPE:
 SRC = SOURCE TRANS = TRANSMISSION SYSTEM TREAT=TREATMENT WS = WATER STORAGE DS = DISTRIBUTION SYSTEM

**PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY AND DEPARTMENT OF ENVIRONMENTAL PROTECTION
DRINKING WATER STATE REVOLVING FUND
FEDERAL FY2020 - PROJECT PRIORITY LIST**

UPDATED FOR THE APRIL 22, 2020 PENNVEST BOARD MEETING

APPLICANT NAME: LAPORTE BOROUGH WATER METER INSTALLATION	REGION: IV	DEP PROJECT RATING: 41
STREET ADDRESS: P.O. BOX 125	PWSID: 2570004	PROJRANK: 28
CITY: LAPORTE	FUND SOURCE: STATE BYPASS	PROJECT COST: \$344,775
COUNTY: SULLIVAN	MTGDATE: 1/30/2019	PROJECT TYPE: METERS

PROJ. DESCRIPTION: The LaPorte Borough Municipal Water Company proposes to construct new meters and meter pits to comply with conditions of their Water Allocation permit.

PROB. DESCRIPTION: The LaPorte Borough Municipal Water Company is proposing to install system meters to comply with their water allocation permit. Since the system is not currently metered, they are having issues determining what the residential usage is and if this is within normal limits for typical household usage.

POPULATION: 325	PV RATING: 56
GREEN PROJECT: Yes	GREEN CATEGORY: Water Efficiency
BUSINESS CASE: Not Required	GREEN AMOUNT: \$344,775

APPLICANT NAME: BEDFORD BOROUGH MA WATER IMPROVEMENTS PROJECT	REGION: III	DEP PROJECT RATING: 40
STREET ADDRESS: 244 WEST PENN STREET	PWSID: 4050002	PROJRANK: 29
CITY: BEDFORD	FUND SOURCE: DWSRF	PROJECT COST: \$3,880,000
COUNTY: BEDFORD	MTGDATE: 4/17/2019	PROJECT TYPE: DS

PROJ. DESCRIPTION: The Municipal Authority of the Borough of Bedford (MABB) is undertaking a project to upgrade their existing water distribution system. Approximately 18,450 linear feet of antiquated waterline will be replaced with new 4-inch to 12-inch C900 polyvinyl chloride pipe. Fire hydrants will be added or replaced where appropriate. Service lines reconnecting the customer to the new line will also be installed. Most of the utility replacements are to occur within the Bedford Borough limits with the remainder occurring in Bedford Township.

PROB. DESCRIPTION: The Authority's drinking water system is old, antiquated and leaking. Some sections of transite or asbestos-cement pipe and cast-iron pipe were installed prior to 1961 while others were installed between 1961-1989. The Authority has averaged an unaccounted-for-water usage of about 163,000 gallons per day since 2013.

POPULATION: 5,127	PV RATING: 55
GREEN PROJECT: No	GREEN CATEGORY: N/A
BUSINESS CASE: N/A	GREEN AMOUNT: \$0

LEGEND FOR PROJECT TYPE:

SRC = SOURCE TRANS = TRANSMISSION SYSTEM TREAT=TREATMENT WS = WATER STORAGE DS = DISTRIBUTION SYSTEM

**PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY AND DEPARTMENT OF ENVIRONMENTAL PROTECTION
DRINKING WATER STATE REVOLVING FUND
FEDERAL FY2020 - PROJECT PRIORITY LIST**

UPDATED FOR THE APRIL 22, 2020 PENNVEST BOARD MEETING

APPLICANT NAME: MCCONNELLSBURG BMA - LINCOLN WAY WATER MAIN REPLACEMENT	REGION: III	DEP PROJECT RATING: 40
STREET ADDRESS: 215 N. 3RD ST.	PWSID: 4290005	PROJRANK: 30
CITY: MCCONNELLSBURG	FUND SOURCE: APPLICATION PENDING	PROJECT COST: \$2,498,915
COUNTY: FULTON	MTGDATE:	PROJECT TYPE: DS

PROJ. DESCRIPTION: The project consists replacement of approximately 5,300 feet of existing 6-inch unlined cast iron waterline located along Lincoln Way (from west of the Borough line to approximately 300' east of the intersection with Buchanan Trail) and parts of Buchanan Trail, located in McConnellsburg Borough, Ayr Township, and Todd Township, Fulton County. The new waterline will consist of 12-inch and 8-inch diameter cement lined ductile iron piping.

PROB. DESCRIPTION: An existing 6-inch unlined cast iron waterline, which was installed in the early 1900's, has been subject to leaks, significant tuberculation, and the permittee has also discovered lead "gooseneck" service connections. According to the Department's Water Use Data System, the Authority had an average daily water loss of 38% from the entire system during 2018. Project will help system supply consistent water to the service area and help reduce unaccounted for water loss.

POPULATION: 2,000	PV RATING: 60
GREEN PROJECT: No	GREEN CATEGORY: N/A
BUSINESS CASE: N/A	GREEN AMOUNT: \$0

LEGEND FOR PROJECT TYPE:

SRC = SOURCE TRANS = TRANSMISSION SYSTEM TREAT=TREATMENT WS = WATER STORAGE DS = DISTRIBUTION SYSTEM

**PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY AND DEPARTMENT OF ENVIRONMENTAL PROTECTION
DRINKING WATER STATE REVOLVING FUND
FEDERAL FY2020 - PROJECT PRIORITY LIST**

UPDATED FOR THE APRIL 22, 2020 PENNVEST BOARD MEETING

APPLICANT NAME: WEST KITTANNING MA - 2019 WATER SYSTEM IMP	REGION: VI	DEP PROJECT RATING: 40
STREET ADDRESS: 204 ARTHUR STREET	PWSID: 5030045	PROJRANK: 31
CITY: WEST KITTANNING	FUND SOURCE: STATE BYPASS	PROJECT COST: \$305,000
COUNTY: ARMSTRONG	MTGDATE: 10/16/2019	PROJECT TYPE: METERS

PROJ. DESCRIPTION: The project will replace approximately 600 water meters and update telemetry in the master meter vault so to increase efficiency and reliability of recording water usage and service of the water meters.

PROB. DESCRIPTION: West Kittanning Municipal Water Authority is applying for funding to undertake the replacement of water meters due to an approximate 30% unaccounted for water loss, aging water meters throughout its service area and telemetry upgrades in the master meter vault for water purchased from the Kittanning Suburban Joint Water Authority. Project will help identify and reduce unaccounted for water loss.

POPULATION: 2,000	PV RATING: 55
GREEN PROJECT: Yes	GREEN CATEGORY: Water Efficiency
BUSINESS CASE: Not Required	GREEN AMOUNT: \$305,000

LEGEND FOR PROJECT TYPE:

SRC = SOURCE TRANS = TRANSMISSION SYSTEM TREAT=TREATMENT WS = WATER STORAGE DS = DISTRIBUTION SYSTEM

**PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY AND DEPARTMENT OF ENVIRONMENTAL PROTECTION
DRINKING WATER STATE REVOLVING FUND
FEDERAL FY2020 - PROJECT PRIORITY LIST**

UPDATED FOR THE APRIL 22, 2020 PENNVEST BOARD MEETING

APPLICANT NAME: WAYNESBORO BOROUGH AUTHORITY WTP UPGRADE	REGION: III	DEP PROJECT RATING: 38
STREET ADDRESS: P.O. BOX 310	PWSID: 7280032	PROJRANK: 32
CITY: WAYNESBORO	FUND SOURCE: DWSRF	PROJECT COST: \$5,743,200
COUNTY: FRANKLIN	MTGDATE: 7/17/2019	PROJECT TYPE: TREAT

PROJ. DESCRIPTION: The washwater pumps have diminished in capacity over time due to wear and have difficulty meeting the high-rate flow requirements during a backwash. The motors and impellers will be replaced. The raw water pumps are also aging and the motors will be replaced. Backwashes have been uneven due to problems with the filter underdrain system, which will be replaced. The filter media and support gravel is severely degraded and will be removed and replaced. The existing gaseous chlorine feed system is old and will be replaced with similar equipment. The existing diaphragm chemical feed pumps for all chemicals are old and will be replaced with peristaltic type pumps of similar capacity. The existing process control system is also 20 years old and no longer supported. The entire system will be replaced and the programming updated.

PROB. DESCRIPTION: Waynesboro Borough Authority has recognized a need for replacement, rehabilitation, and improvement of the water treatment plant facilities to maintain functionality, reliability, regulatory compliance, and finished water quality. The existing facilities have been in service for over 20 years and are aging. The Borough contracted Gannett Fleming, Inc. to evaluate the condition and performance of the treatment plant facilities and equipment. The evaluation provided a basis for recommended improvements to facilitate long-term compliance with water quality regulations and to achieve production and water quality goals.

POPULATION: 13,000	PV RATING: 58
GREEN PROJECT: No	GREEN CATEGORY: N/A
BUSINESS CASE: N/A	GREEN AMOUNT: \$0

LEGEND FOR PROJECT TYPE:

SRC = SOURCE TRANS = TRANSMISSION SYSTEM TREAT=TREATMENT WS = WATER STORAGE DS = DISTRIBUTION SYSTEM

**PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY AND DEPARTMENT OF ENVIRONMENTAL PROTECTION
DRINKING WATER STATE REVOLVING FUND
FEDERAL FY2020 - PROJECT PRIORITY LIST**

UPDATED FOR THE APRIL 22, 2020 PENNVEST BOARD MEETING

APPLICANT NAME: EASTON SUBURBAN WATER AUTH-LOWER NAZARETH WTR SYS	REGION: II	DEP PROJECT RATING: 38
STREET ADDRESS: CITY HALL 650 FERRY STREET	PWSID: 3480050	PROJRANK: 33
CITY: EASTON	FUND SOURCE: DWSRF	PROJECT COST: \$7,617,500
COUNTY: NORTHAMPTON	MTGDATE: 4/17/2019	PROJECT TYPE: PS, DS

PROJ. DESCRIPTION: The Easton Suburban Water Authority (ESWA) propose to construct the following facilities to alleviate the problems noted above: (a) construct a new 3.74 Million Gallon per Day (MGD) pumping station along Country Club Road to replace the current 1.7 MGD Butztown Pumping Station feeding the ESWA's Lower Nazareth Pressure Zone; (b) install approximately 2,600 LF of 16-inch suction main from the east side of State Route (SR) 33 to the new pumping station; (c) install approximately 6,900 LF of 16-inch discharge main from the new pumping station to an existing 16-inch suction main; transferring services from the existing 6-inch water main to the new 16-inch water main; and abandoning the existing 6-inch water main; and (d) install approximately 7,600 LF of 12-inch main on SR 191 (Nazareth Pike) from Newburg Road north to Christian Springs Road to improve water distribution within the pressure zone including improved reliability, fire flows, and overall pressure zone water age and water quality. The Project scope includes replacement and new fire hydrants (9) and gate valves along the project route. Approximately 75 service connections (up to curb box) will also be replaced as needed. Security cameras will be provided at the new pumping station to enhance site security. The project will increase the reliability of service and enhance ESWA's ability to maintain and operate their system.

PROB. DESCRIPTION: The project is proposed to address the following problems in the Easton Suburban Water Authority's (ESWA) Lower Nazareth Pressure Zone: (a) aging pumping station equipment and aging priority water mains that reduce reliability of water service, (b) water main breaks and service line leaks attributing to unaccounted for water losses (unaccounted for water loss of 14% in the most recent Annual Water Supply Report), (c) available fire flows throughout the service area of less than ISO recommended availability, (d) hydraulic limitations due to the existing pressure zone configuration, (e) projected water storage needs requiring a sustainable and cost effective solution while considering water quality impacts including disinfection byproducts (TTHM) [The system was required to submit a report for exceeding the TTHM operation evaluation level (OEL) of 0.080 mg/l under Stage 2 DDBP 109.701(2)(iii). At this time, there are no violations issued by the Department.], and (f) higher water age due to consecutive pressure zone at the end of the ESWA's system. The existing distribution system pumping station and priority water mains are aging and becoming more unreliable due to increased maintenance needs and leaks, and are in need of repair and rehabilitation. Several factors contribute to the limited available fire flow within the area including: water storage location at the extreme of the pressure zone, poor hydraulic connectivity of the water storage tank to the majority of the service area, main sizes, and pumping limitations. The current pumping station location requires drawing suction thousands of lineal feet through the Lower Nazareth Pressure Zone then discharging back to those same areas, causing increased water age and inefficiencies in the system. The new pumping station is to be located near the Knox Avenue Pressure Zone from which it pulls suction and therefore reduces inefficiencies. Demand and water storage requirement projections for the pressure zone indicate an estimated need for additional storage within a five (5) year timeframe. However, traditional methods of adding additional storage would increase already existing issues with water age, tank turnover, and disinfection byproducts. As noted above, ESWA proposes this distribution main replacement/installation and pump station construction project.

POPULATION: 93,400

PV RATING: 53

GREEN PROJECT: No

GREEN CATEGORY: N/A

LEGEND FOR PROJECT TYPE:

SRC = SOURCE TRANS = TRANSMISSION SYSTEM TREAT=TREATMENT WS = WATER STORAGE DS = DISTRIBUTION SYSTEM

**PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY AND DEPARTMENT OF ENVIRONMENTAL PROTECTION
DRINKING WATER STATE REVOLVING FUND
FEDERAL FY2020 - PROJECT PRIORITY LIST**

UPDATED FOR THE APRIL 22, 2020 PENNVEST BOARD MEETING

BUSINESS CASE: N/A	GREEN AMOUNT: \$0
---------------------------	--------------------------

APPLICANT NAME: TYRONE BOROUGH - WATER SYSTEM IMPROVEMENTS	REGION: III	DEP PROJECT RATING: 38
STREET ADDRESS: 1100 LOGAN AVE	PWSID: 4070021	PROJRANK: 34
CITY: TYRONE	FUND SOURCE: STATE BYPASS	PROJECT COST: \$5,710,200
COUNTY: BLAIR	MTGDATE: 1/29/2020	PROJECT TYPE: DS, WS, PS

PROJ. DESCRIPTION: The Borough has proposed to clean, repaint, and repair the 23rd Street storage tank and install new pumps at the 23rd Street pump station. The Borough also proposed distribution work which includes approximately 10,900 linear feet of waterline replacements along Pennsylvania Avenue and 15th Street, the replacement of seven (7) stream crossings, installing/replacing valves in significant locations of the distribution system to prevent disruptive waterline breaks. The Borough has also proposed to construct a chlorine booster station to increase the chlorine residual delivered to the Vail Industrial Park

PROB. DESCRIPTION: Many components of the water system were installed decades ago and are nearing or have exceeded their life expectancy. To prevent major equipment failures, storage and pump station facilities will be upgraded and sections of existing waterlines will be replaced. Project will increase reliability of consistent water supply to customers.

POPULATION: 6,500	PV RATING: 53
GREEN PROJECT: No	GREEN CATEGORY: N/A
BUSINESS CASE: N/A	GREEN AMOUNT: \$0

LEGEND FOR PROJECT TYPE:

SRC = SOURCE TRANS = TRANSMISSION SYSTEM TREAT=TREATMENT WS = WATER STORAGE DS = DISTRIBUTION SYSTEM

**PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY AND DEPARTMENT OF ENVIRONMENTAL PROTECTION
DRINKING WATER STATE REVOLVING FUND
FEDERAL FY2020 - PROJECT PRIORITY LIST**

UPDATED FOR THE APRIL 22, 2020 PENNVEST BOARD MEETING

APPLICANT NAME: WORTHINGTON-WEST FRANKLIN JMA - WATER SYSTEM IMP.	REGION: V	DEP PROJECT RATING: 38
STREET ADDRESS: P.O. BOX 0	PWSID: 5030027	PROJRANK: 35
CITY: WORTHINGTON	FUND SOURCE: DWSRF	PROJECT COST: \$2,100,000
COUNTY: ARMSTRONG	MTGDATE: 10/17/2018	PROJECT TYPE: DS

PROJ. DESCRIPTION: The proposed project will consist of the installation of 13,000 feet of 2-inch, 6-inch and 8-inch diameter waterline and appurtenances (Craigsville Waterline Extension Project). The project will also add approximately 62 customers in the Craigsville area of West Franklin Township.

PROB. DESCRIPTION: Residents of the Craigsville area of West Franklin Borough have poor water quality and quantity due to mining in the area, including high levels of iron, manganese, sulfate, total dissolved solids and low pH. Project will improve water quality and quantity within the service area.

POPULATION: 1,500	PV RATING: 61
GREEN PROJECT: No	GREEN CATEGORY: N/A
BUSINESS CASE: N/A	GREEN AMOUNT: \$0

LEGEND FOR PROJECT TYPE:

SRC = SOURCE TRANS = TRANSMISSION SYSTEM TREAT=TREATMENT WS = WATER STORAGE DS = DISTRIBUTION SYSTEM

**PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY AND DEPARTMENT OF ENVIRONMENTAL PROTECTION
DRINKING WATER STATE REVOLVING FUND
FEDERAL FY2020 - PROJECT PRIORITY LIST**

UPDATED FOR THE APRIL 22, 2020 PENNVEST BOARD MEETING

APPLICANT NAME: WILLIAMSBURG MUNICIPAL AUTHORITY WATER SYSTEM IMP	REGION: III	DEP PROJECT RATING: 37
STREET ADDRESS: 305 EAST SECOND STREET	PWSID: 4070022	PROJRANK: 36
CITY: WILLIAMSBURG	FUND SOURCE: DWSRF	PROJECT COST: \$4,384,420
COUNTY: BLAIR	MTGDATE: 4/17/2019	PROJECT TYPE: SRC, TREAT, PS, DS

PROJ. DESCRIPTION: Authority has proposed to install a new well pump at well number 1, construct a new disinfection system/building, install two new packaged water booster pump stations, replace existing water mains, and extend the distribution system. Approximately 3,400 linear feet and 3,900 linear feet of existing asbestos cement waterline in the Fayetteown and Sage Hill areas, respectively, will be replaced. Approximately 3,700 linear feet of new waterline will be installed along Ridge Road to connect to 14 additional customers.

PROB. DESCRIPTION: The existing facilities/equipment, which were installed in the late 1960s with minor upgrades made in the late 1990s, have met or exceeded their operational lifespan. To avoid major equipment failures or a total system shutdown, the Authority proposes to upgrade the plant to improve potable water supply reliability to the service area.

POPULATION: 1,800	PV RATING: 52	
GREEN PROJECT: No	GREEN CATEGORY: N/A	
BUSINESS CASE: N/A	GREEN AMOUNT: \$0	

APPLICANT NAME: SLIPPERY ROCK MUNICIPAL AUTHORITY WATER LINE REPL.	REGION: VI	DEP PROJECT RATING: 36
STREET ADDRESS: 514 SOUTH MAIN ST, PO BOX 83	PWSID: 5100079	PROJRANK: 37
CITY: SLIPPERY ROCK	FUND SOURCE: DWSRF	PROJECT COST: \$1,622,500
COUNTY: BUTLER	MTGDATE: 1/30/2019	PROJECT TYPE: DS

PROJ. DESCRIPTION: Approximately 5,500 linear feet of 8-inch C-900 water line and appurtenances will be installed as part of the project. Additionally new service laterals to the right-of-way (ROW) boundary will be installed.

PROB. DESCRIPTION: Slippery Rock Municipal Authority (SRMA) is proposing to upgrade portions of their waterlines on State Route (SR) 258 and SR 173. The water line upgrades are necessary to address frequent breaks and antiquated piping. Project will help authority reduce unaccounted for water loss.

POPULATION: 15,778	PV RATING: 51	
GREEN PROJECT: No	GREEN CATEGORY: N/A	
BUSINESS CASE: N/A	GREEN AMOUNT: \$0	

LEGEND FOR PROJECT TYPE:

SRC = SOURCE TRANS = TRANSMISSION SYSTEM TREAT=TREATMENT WS = WATER STORAGE DS = DISTRIBUTION SYSTEM

**PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY AND DEPARTMENT OF ENVIRONMENTAL PROTECTION
DRINKING WATER STATE REVOLVING FUND
FEDERAL FY2020 - PROJECT PRIORITY LIST**

UPDATED FOR THE APRIL 22, 2020 PENNVEST BOARD MEETING

APPLICANT NAME: MUN AUTH OF CITY OF SUNBURY - WATER FILTER PLANT REHAB.	REGION: IV	DEP PROJECT RATING: 36
STREET ADDRESS: 225 MARKET STREET	PWSID: 4490007	PROJRANK: 38
CITY: SUNBURY	FUND SOURCE: STATE BYPASS	PROJECT COST: \$1,550,000
COUNTY: NORTHUMBERLAND	MTGDATE: 1/29/2020	PROJECT TYPE: TREAT

PROJ. DESCRIPTION: The planned upgrades for the filter plant are: replace all valves in the filter gallery, replace turbidimeters in the filter area, replace all differential pressure filter head loss gauges, replace the filter to waste discharge line with a larger line, replace the surface wash rotating arm components, replace the filter media and upon favorable bids, clean and epoxy coat the concrete filters.

PROB. DESCRIPTION: The filters and other components being replaced have reached the end of their useful life. These items are not functioning at 100% and are causing operational issues within the plant. Project will help improve filter plant operations.

POPULATION: 13,000	PV RATING: 51
GREEN PROJECT: No	GREEN CATEGORY: N/A
BUSINESS CASE: N/A	GREEN AMOUNT: \$0

LEGEND FOR PROJECT TYPE:

SRC = SOURCE TRANS = TRANSMISSION SYSTEM TREAT=TREATMENT WS = WATER STORAGE DS = DISTRIBUTION SYSTEM

**PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY AND DEPARTMENT OF ENVIRONMENTAL PROTECTION
DRINKING WATER STATE REVOLVING FUND
FEDERAL FY2020 - PROJECT PRIORITY LIST**

UPDATED FOR THE APRIL 22, 2020 PENNVEST BOARD MEETING

APPLICANT NAME: LATROBE MUNICIPAL AUTH. WATERLINE REPLACEMENT	REGION: V	DEP PROJECT RATING: 30
STREET ADDRESS: P.O. BOX 88	PWSID: 5650060	PROJRANK: 39
CITY: LATROBE	FUND SOURCE: STATE BYPASS	PROJECT COST: \$2,691,060
COUNTY: WESTMORELAND	MTGDATE: 7/17/2019	PROJECT TYPE: DS

PROJ. DESCRIPTION: Proposed project includes replacement of 6,625 linear feet (l.f) of 12-inch diameter waterline and appurtenances, 300 l.f. of 8-inch diameter waterline and appurtenances, forty eight (48) 12" gate valves, Three 8" gate valves, ten (10) 12" diameter Interconnections one (1) 8-inch diameter Interconnection, nine (9) 6-inch diameter Interconnections, five (5) 4-inch interconnections, 4,557 square yard of ditchline paving, service reconnects 3,333 linear feet of work along state highway.

PROB. DESCRIPTION: The LMA will be working in conjunction with PennDOT to replace the existing antiquated cast iron waterlines (over 100 years old) in the area of the intersections on SR981 in the City of Latrobe prior to the road construction. PennDOT has scheduled reconstruction of the streets in the area for the Spring of 2020; therefore, waterlines need replaced prior to their work. In addition, the City of Latrobe will be installing traffic loop sensors at the intersections on SR 981.

POPULATION: 30,000	PV RATING: 45
GREEN PROJECT: No	GREEN CATEGORY: N/A
BUSINESS CASE: N/A	GREEN AMOUNT: \$0

LEGEND FOR PROJECT TYPE:

SRC = SOURCE TRANS = TRANSMISSION SYSTEM TREAT=TREATMENT WS = WATER STORAGE DS = DISTRIBUTION SYSTEM