

**PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY AND DEPARTMENT OF ENVIRONMENTAL PROTECTION
FEDERAL FY 2014
DRINKING WATER PROJECT PRIORITY LIST
APRIL 22, 2014**

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:

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APPLICANT NAME: UNION CITY MA - WATER SYSTEM IMPROVEME	REGION: VI	DEP PROJECT RATING: 61
STREET ADDRESS: 12 SOUTH MAIN STREET	PWSID: 6250064	PROJRANK: 1
CITY: UNION CITY	FUND SOURCE: DWSRF	PROJECT COST: \$7,500,000
COUNTY: ERIE	MTGDATE: 10/23/2013	PROJECT TYPE: TRANS, TREAT, STO

PROJ. DESCRIPTION: The project includes previously constructed facilities for which a Letter of No Prejudice was granted. These previously constructed facilities (known as Phase 1) include a new raw water transmission main, new finished water transmission main and new water storage tank. The project also includes proposed upgrades and expansion of the water treatment facilities including addition of a third treatment train to provide redundancy required by the PA DEP. The third treatment train will consist of a new mix tank, flocculator tank, sedimentation tank and filter. This is known as Phase 2. The existing treatment facilities are over 60 years old and will be upgraded to include new Headworks Building, chemical feed facilities, flocculator mixers, valves, piping and pumps. The 2 existing filters will be completely refurbished. A standby electric generator and plant computer monitoring/control system will be installed. The existing backwash water treatment system will be replaced. The prior and proposed construction has and will allow the Authority to comply with PA DEP drinking water standards. The new water storage tank (constructed in Phase 1) has also dramatically improved system fire fighting capabilities. The project will also include purchase of new water meters for all customers.

PROB. DESCRIPTION: The Authority water system serves a population of 5,126. The system is supplied by the Union City Reservoir. The current capacity of the treatment facility is 1.0 MGD, with a permitted safe yield of 0.7 MGD. The proposed project will allow the plant to have redundancy to assume that the systems demands could be met by operating two (2) treatment trains while the third is offline for any reason (repair/ maintenance, etc.)

The Municipal Authority of the Borough of Union City is mandated by the PA DEP through a Consent Order and Agreement to make improvements to its water system to comply with disinfection byproduct drinking water standards and upgrade its water treatment facilities to meet current design standards. The proposed project will address PA DEP requirements through construction of new water transmission mains, storage tank and water treatment facilities.

POPULATION: 3,900	PV RATING: 84
GREEN PROJECT: No	GREEN CATEGORY:
BUSINESS CASE:	GREEN AMOUNT: \$0

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APPLICANT NAME: NORTHERN CAMBRIA M.A.- WATER SYSTEM IM	REGION: V	DEP PROJECT RATING: 57
STREET ADDRESS: 1202 PHILADELPHIA AVE.	PWSID: 4110003	PROJRANK: 2
CITY: NORTHERN CAMBRIA	FUND SOURCE: DWSRF	PROJECT COST: \$3,458,776
COUNTY: CAMBRIA	MTGDATE: 10/23/2013	PROJECT TYPE: TREAT

PROJ. DESCRIPTION: The Authority is proposing to modify their existing water treatment plant. The proposed modifications will include the disconnection of the existing raw water sources into the plant, the elimination of the raw water softening system and the removal of the existing clearwell. Following completion of the modifications, the facility will be operated solely as a distribution system pumping and chlorine booster station. A new sodium hypochlorite chemical feed system will replace the existing gas chlorination system. Project will consist of 1. Krumenacker Test Well #2 - conversion to a production well with the capacity of 144,000 gpd. 2. Spangler Water Treatment Plant Capacity Expansion - increase treatment capacity from 208gpm to 400gpm. Add additional storage tank 128,700 gallon capacity. 3. Cherry Ridge Water High Service Water Tank Replacement - construct a new 500,000 gallon storage tank. 4. Northern Cambria Water Treatment Plant Modifications - disconnection of all existing raw water sources to the plant and elimination of the raw water softening system. The facility will now be operated solely as a distribution system pumping and chlorine booster station. 5. Water System Interconnections (4) - Construction of 4 interconnections between the Northern Cambria and Spangler distribution systems using approximately 1,000 L.F. of water main.

PROB. DESCRIPTION: The NCMA sources have consistently exceeded sulfate concentrations and have been deemed surface water effected. The Authority has experienced insufficient supply of water for its customers over periods of days, has 30% unaccounted for water loss, and has an unsafe finished water storage tank. The proposed project is a result of a consent order and agreement, dated March 8, 2011 and amended twice on January 10, 2012 and May 16, 2012 between the Northern Cambria Municipal Authority and the DEP. The COA established requirements for the development of an additional groundwater source or sources, expansion of the existing Spangler WTP to accommodate the additional sources, interconnection of the Northern Cambria and Spangler water systems and utilization, on an interim basis, the remaining Northern Cambria Municipal Authority sources to supplement the Spangler water supply.

POPULATION: 2,770	PV RATING: 84
GREEN PROJECT: No	GREEN CATEGORY: Water Efficiency
BUSINESS CASE: Not Required	GREEN AMOUNT: \$1,032,025

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APPLICANT NAME: BOGGS TOWNSHIP - OLD ERIE PIKE WATERLIN	REGION: IV	DEP PROJECT RATING: 48
STREET ADDRESS: P O BOX 707	PWSID: 4140087	PROJRANK: 3
CITY: PHILLIPSBURG	FUND SOURCE: DWSRF	PROJECT COST: \$3,100,000
COUNTY: CLEARFIELD	MTGDATE: 1/21/2014	PROJECT TYPE: DS

PROJ. DESCRIPTION: The project includes extending an 8 inch DI waterline along the Old Erie Pike to provide potable water to the residents that live along this road. The extension includes 25,500 l.f. of 8 inch DI waterline, 1,650 l.f. of 6 inch DI waterline, 20-8 inch gate valve assemblies, three-6 inch gate valve assemblies, 10 fire hydrants and four pressure reducing valve vaults. The waterline extension will connect to the PA American System at three points: Valley Road (in the west), Drane Highway and on Old Erie Pike in the east in West Decatur. Boggs Township will own the line and PA American will supply the water and operate the system. A contract to this effect has been entered into on November 7, 2013

PROB. DESCRIPTION: There are 46 residences on Old Erie Pike between West Decatur and Valley Road in Boggs Township, Clearfield County that use private wells and springs for potable water. 31 of the 46 residences (67%) responded to a survey regarding their water quantity and quality. 35% of the respondents had water outages that occurred for more than 72 hours. Two respondents provided water quality results. High iron and/or low pH seem to be the typical issues; with one well at 4.6 pH, another well at 9.7 mg/l Fe. Extensive coal mining occurs in the region and on both sides of Old Erie Pike. In addition, sewage disposal is accomplished by on-lot treatment; it is suspected that a number of these on-lot systems are malfunctioning.

POPULATION: 18,000	PV RATING: 61
GREEN PROJECT: No	GREEN CATEGORY:
BUSINESS CASE:	GREEN AMOUNT: \$0

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APPLICANT NAME: NORTH WARREN MUN AUTH- VILLAGE OF N W **REGION:** VI **DEP PROJECT RATING:** 45
STREET ADDRESS: 404 STATE STREET **PWSID:** 6620028 **PROJRANK:** 4
CITY: NORTH WARREN **FUND SOURCE:** DWSRF **PROJECT COST:** \$2,280,000
COUNTY: WARREN **MTGDATE:** 10/23/2013 **PROJECT TYPE:** DS

PROJ. DESCRIPTION: The project consists of the replacement of 17,500 LF water distribution pipelines via directional drilling method, 320 service connections, 18 fire hydrants and 35 gate valves.

PROB. DESCRIPTION: The existing distribution system within the Village of North Warren was installed in 1940 and consists of AC pipes. Due to frequent line breaks and age, AC pipes became brittle. The unaccounted for water is up to 50%. About 310 single family residences and business rely on the this PWS system. Project will supply consistant potable water to the service area without frequent line breakage and water outages.

POPULATION: 1,700 **PV RATING:** 50
GREEN PROJECT: Yes **GREEN CATEGORY:** Water Efficiency
BUSINESS CASE: Required **GREEN AMOUNT:** \$2,280,000

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APPLICANT NAME: NEW KENSINGTON CITY MA - 2013 CAP IMPRO **REGION:** V **DEP PROJECT RATING:** 45
STREET ADDRESS: P O BOX 577, 920 BARNES STREET **PWSID:** 5650070 **PROJRANK:** 5
CITY: NEW KENSINGTON **FUND SOURCE:** DWSRF **PROJECT COST:** \$6,739,150
COUNTY: WESTMORELAND **MTGDATE:** 10/23/2013 **PROJECT TYPE:** DS, TREAT

PROJ. DESCRIPTION: This project will consist of replacing approximately 38,250 feet of existing old waterline in the City of New Kensington, Lower Burrell and city of Arnold. The new waterlines in these areas will be 6-inch, 8-inch and 12 inch in diameter. The applicant will also extend about 10,200 feet of new 8-inch waterlines in Allegheny Township. The new waterline will serve 62 homes along Melwood Road, White Cloud Road and Small Road. Additionally, the filter control system will be upgraded at the plant.

PROB. DESCRIPTION: The existing cast iron waterlines in the City of New Kensington, City of Arnold and Lower Burrell are aged and condition of the lines and appurtenances are such that they have become a major liability to the Authority. The Authority's waterlines in the project areas have suffered numerous leaks (54) creating severe damage to the streets, unaccounted water losses (>23%) and service disruption to the users. The service lines in these areas include lead services which need upgraded. Also, there are about 62 homes in Allegheny Township that use private water wells. Water quality and quantity of wells in this area is significantly impacted.

POPULATION: 47,350 **PV RATING:** 70
GREEN PROJECT: No **GREEN CATEGORY:**
BUSINESS CASE: **GREEN AMOUNT:** \$0

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APPLICANT NAME: GLENDALE VLY MA - YEAROUND WATER INTER	REGION: V	DEP PROJECT RATING: 38
STREET ADDRESS: BOX 89	PWSID: 4110060	PROJRANK: 6
CITY: FLINTON	FUND SOURCE: DWSRF	PROJECT COST: \$1,290,000
COUNTY: CAMBRIA	MTGDATE: 4/22/2013	PROJECT TYPE: DS, PS

PROJ. DESCRIPTION: The proposed water interconnection will consist of approximately 8,000 linear feet of water main connecting the two systems. A booster pump station will also be installed to push water to the elevation of the existing year-around storage tank.

PROB. DESCRIPTION: Water quality issues have troubled the year-around system since purchase by the Authority in 2008. High levels of manganese, hydrogen sulfide and distribution line sediment are some of the issues causing water quality complaints. Efforts to treat these issues, primarily in the operation of a greensand filter, have been costly and ineffective. This project will eliminate the need for operation of the greensand filter in favor of purchase of finished water from the Reade Township Municipal Authority (RTMA). RTMA water will be purchased at the Reade/White Township boundary and will be used to serve all GVMA water customers.

POPULATION: 236	PV RATING: 47
GREEN PROJECT: No	GREEN CATEGORY:
BUSINESS CASE:	GREEN AMOUNT: \$0

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APPLICANT NAME: HEMLOCK FARMS COMMUNITY -WELL #4 TREA	REGION: II	DEP PROJECT RATING: 36
STREET ADDRESS: BOX 1007 HEMLOCK FARMS	PWSID: 2520033	PROJRANK: 7
CITY: HAWLEY	FUND SOURCE: DWSRF	PROJECT COST: \$1,200,000
COUNTY: PIKE	MTGDATE: 4/22/2014	PROJECT TYPE: TREAT

PROJ. DESCRIPTION: The applicant proposes the construction of an oxidation/filtration water treatment system for iron and manganese reduction at Well 4 including a 3,000 gallon buried sludge holding tank. Sludge will be pumped out of tank and properly disposed of at a POTW. It will also entail the relocation of the existing corrosion inhibitor feed system from the Well 4 building to the new filter building and relocate the feed point after the new iron and manganese treatment facilities.

PROB. DESCRIPTION: Hemlock Farms Community Association (HFCA) is served in part by Well 4. Well 4's raw and finished water have shown elevated levels of manganese in excess of the Department's secondary maximum contaminant level (SCML) of 0.05 mg/l despite existing corrosion control treatment at Well 4. Elevated levels of manganese and customer complaints have been documented in sample analysis results and in inspection reports by the Department's Pocono District Office. In 2013 elevated levels of manganese have been found in both the raw water and finished water after treatment with the existing corrosion control facilities (polyphosphate sequestration). EP Well 4 samples collected on 9/26/2013 showed a manganese level of 0.178 mg/l. Project will eliminate secondary MCL violation and will serve community with better quality potable water.

In accordance with Title 25, Section 109.202(b)(1), a PWS system shall supply drinking water that complies with the secondary MCLs adopted by the EQB under the act (except for pH, which represents a reasonable goal for water quality). For example, samples collected on 8/30/2011 showed manganese levels in excess of 4 times the SMCL at a concentration of 0.201 mg/l. In 2013, levels above the SCML for manganese have continued. If no action is taken, it is likely that the elevated levels in excess of SCML would continue in violation of the aforementioned section. Customer complaints would also continue to occur.

POPULATION: 7,518	PV RATING: 41
GREEN PROJECT: No	GREEN CATEGORY:
BUSINESS CASE:	GREEN AMOUNT: \$0

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APPLICANT NAME: SCMA - MAHANNOY BUSINESS PARK WATERLIN	REGION: II	DEP PROJECT RATING: 28
STREET ADDRESS: 221 S CENTRE STREET	PWSID: 3540038	PROJRANK: 8
CITY: POTTSVILLE	FUND SOURCE: DWSRF	PROJECT COST: \$4,000,000
COUNTY: SCHUYLKILL	MTGDATE: 1/21/2014	PROJECT TYPE: DS, WS

PROJ. DESCRIPTION: The proposed project consists of the installation of approximately 21,000 LF of 6-inch, 8-inch, and 12-inch waterline and shall start at the west end of the Village of New Boston and traverse along SR 1008 (Morea Rd.) into the Village of New Vulcan. The new waterline shall service the industrial lots along the north side of I-81, the residents of the Village of New Vulcan, and sporadic residential and commercial properties along the route. The project shall also consist of the construction of a 500,000 gallon finished water storage tank and fire hydrants.

PROB. DESCRIPTION: The Mahanoy Business Park is located in Mahanoy Township, Schuylkill County. The park has approximately 11 industrial lots available for development. The continued development of the park is dependent on providing public water and sewer to the area. SCMA evaluated several alternatives for providing these services to the park. The selected alternative proposed is to construct an extension of SCMA's Mount Laurel System through the Village of New Boston along Morea Rd. to the park. A 500,000 gallon finished water storage tank is also proposed. The project will provide protection for a potential water outage for which no water is available from the tap from the system's permitted sources (including private wells), in a proposed service area (Vulcan Village) affecting 10% or less of the service connections for periods less than 72 hours. Also, it will increase the availability of water (through the construction of the 500,000 gallon storage tank and adequately sized mains with fire hydrants) and the reliability of service to Vulcan Village which currently is served by inadequately sized 2-inch mains with no fire protection. It will provide increased water quantity and pressures to Vulcan Village.

POPULATION: 31,850	PV RATING: 48
GREEN PROJECT: No	GREEN CATEGORY:
BUSINESS CASE:	GREEN AMOUNT: \$0

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