

**PENNSYLVANIA INFRASTRUCTURE INVESTMENT AUTHORITY  
PENNVEST APPLICATION FORMS**

**City of Philadelphia**

**GSI in Packer Park, South Philly, Overbrook, Lawndale, and**

**Holmesburg**

**512033072112-CF**

**11/18/2021**

## DESCRIPTION

### PROJECT DESCRIPTION

What is the project type?	Stormwater
What is the project name?	Philadelphia City GSI in Packer Park, South Philly, Overbrook, Lawndale, and Holmesburg
What is the project's Primary County?	Philadelphia
What is the project's Primary Municipality?	Philadelphia City
What is the application type?	Traditional Construction
What is the project stage?	Construction
Is this related to a previous advanced funding application through PENNVEST?	No
If yes, enter the project name or number.	

### COMMENTS

The PWD GSI in Packer Park, South Philly, Overbrook, Lawndale, and Holmesburg PennVEST application includes a total of 5 projects distributed across the areas of Philadelphia served by combined sewers with a total of 27.1 greened acres created. The projects include a combination of green stormwater infrastructure (GSI) to address the City's Long Term Control Plan Update for Combined Sewer Overflow Control.

- 50203 Penrose Ave is composed of 7 GSI systems, a combination of rain gardens and infiltration trenches, managing 4 acres of drainage area from the right-of-way in the South Philadelphia. The project will result in approximately 7 greened acres (stormwater storage metric) to count towards Philadelphia's green stormwater compliance targets. The scope of work will be within the public right-of-way and includes excavation and infiltration testing; installation of inlets, piping, and stormwater storage features; new curbing, paving, and ADA ramps for the limits of disturbance; and the planting of trees and vegetation.
- 50210 24th Street Greening Improvements is composed of 7 GSI systems, a combination of rain gardens and infiltration trenches, managing 4 acres of drainage area from the right-of-way in the South Philadelphia. The project will result in over 10 greened acres (stormwater storage metric) to count towards Philadelphia's green stormwater compliance targets. The scope of work will be within the public right-of-way and includes excavation and infiltration testing; installation of inlets, piping, and stormwater storage features; new curbing, paving, and ADA ramps for the limits of disturbance; and the planting of trees and vegetation.
- 50213 Five Loaves Two Fish Streets Improvements is composed of 6 tree trench GSI systems, managing 4 acres of drainage area from the right-of-way in the Overbrook neighborhood. The project will result in over 2 greened acres (stormwater storage metric) to count towards Philadelphia's green stormwater compliance targets. The scope of work will be within the public right-of-way and includes excavation and infiltration testing; installation of inlets, piping, and stormwater storage features; new curbing, paving, and ADA ramps for the limits of disturbance; and the planting of trees and vegetation.
- 50247 Lawndale Streets West is composed of 10 GSI systems, a combination of stormwater bumpouts, tree trenches and infiltration trenches, managing over 3 acres of drainage area from the right-of-way in the Lawndale and Lawncrest neighborhoods. The project will result in over 4 greened acres (stormwater storage metric) to count towards Philadelphia's green stormwater compliance targets. The scope of work will be within the public right-of-way and includes excavation and infiltration testing; installation of inlets, piping, and stormwater storage features; new curbing, paving, and ADA ramps for the limits of disturbance; and the planting of trees and vegetation.
- 50267 Holmesburg Streets is composed of 7 GSI systems, a combination of tree trenches and infiltration trenches, managing 3 acres of drainage area from the right-of-way in the Lawndale and Holmesburg neighborhoods. The project will result in over 3 greened acres (stormwater storage metric) to count towards Philadelphia's green stormwater compliance targets. The scope of work will be within the public right-of-way and includes excavation and infiltration testing; installation of inlets, piping, and stormwater storage features; new curbing, paving, and ADA ramps for the limits of disturbance; and the planting of trees and vegetation.

## SYSTEM

### SYSTEM DESCRIPTION

What type of system is this?	Existing System
What is your NPDES number?	0026689, 0026662, 0026671, 0054712
What is your PWSID number?	PA1510001
Do you own the system?	Yes
If no, explain	
Do you operate the system?	Yes
if no, explain	
Do you maintain the system?	Yes
If no, explain	
Will you construct the system?	Yes
If no, explain	
Does this project include costs associated with the purchase of system capacity from another entity (i.e. capital contribution)?	No
If yes, explain	
Does this project include costs associated with the construction of capacity in your system for use and/or purchase by other entity (ies) (i.e. capital contribution)?	No
If yes, explain	
Is, or does the Applicant intend to be, a party to any inter-municipal agreements which affect this project or your system?	Yes
Has the applicant issued debt or borrowed money, or does the applicant intend to issue debt or borrow money, under a trust indenture (i.e. Bonds)?	Yes
Do you charge residential or commercial user fees?	Yes

COMMENTS

**FUNDING**

REQUESTED PENNVEST AMOUNT

This is your requested PENNVEST amount.

\$8,670,000.00

#### COMMITTED OTHER SOURCES OF FUNDS

Source Type	Source Name	Source Amount	Funding Comments
		\$	
	<b>Total:</b>	\$0.00	

#### ESTIMATED TOTAL PROJECT COST

This is your estimated total project cost.

\$8,670,000.00

#### COMMENTS

### PROJECT CONTACTS

City of Philadelphia		Legal Entity	
<b>Address:</b> 1401 John F. Kennedy Boulevard Philadelphia, PA 19107		<b>Email:</b> <b>Phone:</b> 2156854948	
<b>SAP Vendor Number:</b> 177575013	<b>DUNS:</b> 133889241	<b>Federal ID/FIN:</b> 236003047	

Allen, Valarie	Borrower Legal		
Ballard Spahr, LLP	<b>Email:</b>	allenv@ballardspahr.com	
	<b>Phone:</b>	2157041422	
	<b>Phone Ext:</b>		

Bowman, Matthew	Borrower's Admin		
City of Philadelphia	<b>Email:</b>	matthew.bowman@phila.gov	
	<b>Phone:</b>		
	<b>Phone Ext:</b>		

Breen, Joseph	Borrower Financial		
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Dunn, Jackie	Borrower's Admin		
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<b>Gupta, Tuhin</b>	Engineer Admin
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	<b>Phone:</b>
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<b>Hayden, Rebecca</b>	Project Specialist
	<b>Email:</b> rhayden@pa.gov
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	<b>Phone Ext:</b>

<b>Hovsepian, Vahe</b>	Engineer PE
Philadelphia Water Department	<b>Email:</b> vahe.hovsepian@phila.gov
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<b>Jameson, Jerry</b>	Engineer Admin
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<b>Linn, Chris</b>	Guest
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<b>Owen, Miles</b>	Guest
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	<b>Phone Ext:</b>

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<b>Rosini, Angela</b>	Engineer Admin
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	<b>Phone Ext:</b>

<b>Simmons, Jillian</b>	Engineer PE
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	<b>Phone:</b>
	<b>Phone Ext:</b>

<b>Wenrich, Philip</b>	DEP HQ
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	<b>Phone:</b>
	<b>Phone Ext:</b>

<b>Yangalay, Lawrence</b>	Borrower
Philadelphia Water Department	<b>Email:</b> Lawrence.yangalay@phila.gov
	<b>Phone:</b>
	<b>Phone Ext:</b>

PROJECT SITE(S)

City of Philadelphia		Primary Site	
<b>Address:</b> 1401 John F Kennedy Boulevard Philadelphia, PA 19102	<b>Latitude:</b> 39.9540966	<b>Longitude:</b> -75.1644793	

50203 Penrose Avenue			
<b>Address:</b> 2208 Siena Court Philadelphia, PA 19145	<b>Latitude:</b> 39.908184	<b>Longitude:</b> -75.188901	

50210 24th Street			
<b>Address:</b> 2100 South 24th Street Philadelphia, PA 19145	<b>Latitude:</b> 39.925687	<b>Longitude:</b> -75.186385	

50247 Lawndale Streets West			
<b>Address:</b> 472 Robbins Street Philadelphia, PA 19111	<b>Latitude:</b> 40.048957	<b>Longitude:</b> -75.097923	

50267 Holmesburg Streets			
<b>Address:</b> 3501 Welsh Road Philadelphia, PA 19136	<b>Latitude:</b> 40.044626	<b>Longitude:</b> -75.026275	

50213 Five Loaves Two Fish Streets			
<b>Address:</b> 5521 Hunter Street Philadelphia, PA 19131	<b>Latitude:</b> 39.977531	<b>Longitude:</b> -75.232928	

PROJECT PLAN

PROJECT PLAN

Planning Consultation Date	09/15/2021
Planning Completion Date	09/15/2021
Design Start Date	10/18/2020
Design Completed Date	10/18/2021
Date Obtained All Needed DEP Permits	
Anticipated Construction Start Date	10/19/2022
Anticipated Construction End Date	10/19/2023

Letter of No Prejudice Issued by PENNVEST

### PROJECT PHASE

Phase Name	Design Complete	Obtain All Permits	Start Construction	End Construction

### COMMENTS

PWD will not start construction on this project until funds are secured through PENNVEST. The project will be bid during the settlement Phase and awarded. Construction will not start until after the settlement is completed.

### NARRATIVE : DESCRIPTION

#### NARRATIVE DESCRIPTIONS

Describe the problem that this project will correct or resolve. Please be specific and include such discussion points as the cause and impact of the problem, permit exceedances or compliance related problems, if any and/or any additional operational issues caused or contributed by the identified problem(s).

This project will install green stormwater infrastructure (GSI) as part of the City of Philadelphia's Green City, Clean Waters program to meet Clean Water Act obligations to reduce combined sewer overflows. State and federal regulations require the City to reduce the amount of sewage discharged into our river when it rains. Philadelphia is taking many steps to meet these obligations, including GSI in areas served by combined sanitary and stormwater sewers. GSI include a range of soil-water-plant systems that intercept runoff, infiltrate or evaporate a portion, and in some cases, release a portion slowly back to the sewer system. This reduces the stormwater burden on the City's combined sewer system and, ultimately, decreases combined sewer overflows to receiving waterbodies.

Describe the scope of the project. List in quantitative terms what is planned to be constructed, rehabilitated and decommissioned. For Example: 'The 12,000 feet of 8-inch waterline will be replaced, one 200,000 gallon standpipe will be constructed, the current Market Street Pump Station will be decommissioned, a new 250 gallon per minute duplex pump station will be constructed on Leisure Street, 44 hydrants will be replaced...'

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- 50203 Penrose Ave is composed of 7 GSI systems, a combination of rain gardens and infiltration trenches, managing 4 acres of drainage area from the right-of-way in the South Philadelphia. The project will result in approximately 7 greened acres (stormwater storage metric) to count towards Philadelphia's green stormwater compliance targets. The scope of work will be within the public right-of-way and includes excavation and infiltration testing; installation of inlets, piping, and stormwater storage features; new curbing, paving, and ADA ramps for the limits of disturbance; and the planting of trees and vegetation.
- 50210 24th Street Greening Improvements is composed of 7 GSI systems, a combination of rain gardens and infiltration trenches, managing 4 acres of drainage area from the right-of-way in the South Philadelphia. The project will result in over 10 greened acres (stormwater storage metric) to count towards Philadelphia's green stormwater compliance targets. The scope of work will be within the public right-of-way and includes excavation and infiltration testing; installation of inlets, piping, and stormwater storage features; new curbing, paving, and ADA ramps for the limits of disturbance; and the planting of trees and vegetation.
- 50213 Five Loaves Two Fish Streets Improvements is composed of 6 tree trench GSI systems, managing 4 acres of drainage area from the right-of-way in the Overbrook neighborhood. The project will result in over 2 greened acres (stormwater storage metric) to count towards Philadelphia's green stormwater compliance targets. The scope of work will be within the public right-of-way and includes excavation and infiltration testing; installation of inlets, piping, and stormwater storage features; new curbing, paving, and ADA ramps for the limits of disturbance; and the planting of trees and vegetation.
- 50247 Lawndale Streets West is composed of 10 GSI systems, a combination of stormwater bumpouts, tree trenches and infiltration trenches, managing over 3 acres of drainage area from the right-of-way in the Lawndale and Lawncrest neighborhoods. The project will result in over 4 greened acres (stormwater storage metric) to count towards Philadelphia's green stormwater compliance targets. The scope of work will be within the public right-of-way and includes excavation and infiltration testing; installation of inlets, piping, and stormwater storage features; new curbing, paving, and ADA ramps for the limits of disturbance; and the planting of trees and vegetation.
- 50267 Holmesburg Streets is composed of 7 GSI systems, a combination of tree trenches and infiltration trenches, managing 3 acres of drainage area from the right-of-way in the Lawndale and Holmesburg neighborhoods. The project will result in over 3 greened acres (stormwater storage metric) to count towards Philadelphia's green stormwater compliance targets. The scope of work will be within the public right-of-way and includes excavation and infiltration testing; installation of inlets, piping, and stormwater storage features; new curbing, paving, and ADA ramps for the limits of disturbance; and the planting of trees and vegetation.

[Describe the cost effectiveness of this project. List physical and administrative alternatives and selected alternatives and justify proposed alternative. Include all issues discussed in Planning Consultation related to cost effectiveness.](#)

The Philadelphia Water Department GSI Unit has prepared a PWD GSI PennVEST Application Cost Effective Analysis and Project Useful Life document dated September 29, 2021 for this project. A copy of this document has been uploaded to this application as a Miscellaneous Document.

## COMMENTS

**NARRATIVE : STORMWATER SUPPORTING PROJECT INFORMATION**

STORMWATER/NPS SUPPORTING PROJECT INFORMATION

Category/Subcategory	Total
Storm Sewer Collection / Inlets (Number)	88
Other / Other	Trees and Vegetation
Other / Other	GSI Drainage Area 18 Acres
Street Flooding / Local Road(s) Flooding (Yes/No)	NO
Other / Other	27.1 Greened Acres

COMMENTS

**PROJECT SPECIFIC DATA : LAND USE**

LAND USE

Has the area served by this project been covered by an adopted municipal comprehensive plan?	Yes
Is this project located in an area where there is an adopted county comprehensive plan?	Yes
Is there an adopted multi-municipal or multi-county comprehensive plan for the area(s) covered by this project?	No
Is there an adopted county or municipal zoning ordinance or a joint municipal zoning ordinance for the area covered by this project?	Yes
Is the proposed project consistent with these comprehensive plans and/or zoning ordinances?	Yes
Is the project consistent with county agricultural preservation efforts.	No

COMMENTS

City of Philadelphia does not have an Agricultural Land Preservation Board.

## BENEFITS : STORMWATER

### STORMWATER COMPLIANCE WITH ACT 167 AND MS4

Is there a municipal stormwater ordinance in effect within the project area? Yes

Is the project within a Municipal Separate Storm Sewer System (MS4) designated area? No

Is the project designed to meet an MS4 permit requirement or part of an adopted Pollutant Reduction Plan?

Is the applicant a MS4 regulated entity? Yes

Upon completion of construction will the ownership, operation and maintenance for the stormwater project be conveyed to a MS4 entity? Yes

### SAFETY (STORMWATER)

If the project addresses a critical or on-going safety or health hazard, please explain.

This project will involve the planting of trees and other vegetation. According to recent studies, there is a correlation to increased tree canopy and the reduction of crime. Levels of aggression and violence have been shown to be significantly lower among individuals who have some nearby nature.

### COMMUNITY HEALTH (STORMWATER)

If this project provides a regional approach to stormwater management and facilities, please explain.

The trees and other vegetation being planted in these project locations will reduce the effects of priority heat vulnerability index locations by providing shade and overall absorption of heat. 2 out of 5 of the project locations are in at least 2nd priority heat vulnerability index areas. These projects will assist in decrease of the effects within those priority areas.

If this project addresses problems in multiple locations, please explain.

### AQUATIC HEALTH (STORMWATER)

If the project directly corrects a water quality problem, please explain.

No.

If this project provides secondary benefits which improve or prevent water quality problems, please explain.

Yes. This project will reduce the stormwater burden on the City's combined sewer system and ultimately decrease combined sewer overflows to receiving waterbodies.

If this project is located in an area of karst topography and susceptible to sinkhole development, please explain.

No.

If the project is located in areas having no natural watercourse, please explain.

No.

INFRASTRUCTURE HEALTH (STORMWATER)

If the existing stormwater system is at the end of its useful life, please explain.

No.

If the existing system is undersized, please explain

No.

Does the applicant and/or municipality monitor and enforce illegal dumping into the stormwater system? Yes

Does the applicant and/or municipality have an active Asset Management Plan? Yes

COMPLIANCE (STORMWATER)

Has DEP taken enforcement action with an order or issued a Notice of Violation which requires the project? Yes

Is there an approved Total Maximum Daily Load (TMDL) which requires reductions in the pollutant(s) to be controlled by the project? No

COMMENTS

BENEFITS : NON-POINT SOURCE

NPS SUB TYPES

Not Applicable

EXPLANATION FOR OTHER NON-POINT SOURCE SUB TYPE

NPS COMPLIANCE WITH ACT 167 AND MS-4

Is the project in an MS-4 regulated community (with either a draft or final permit?

If Yes, does the MS-4 permit require the work that is proposed in the funding application?

NPS PLANNING

Is your project addressing a Department of Environmental Protection approved 319 Watershed Implementation Plan (WIP), or contained in an Municipal Separate Storm Sewer System (MS4) Pollutant Reduction Plan (PRP), or Total Maximum Daily Load (TMDL) strategy plan that is submitted for an MS4 Notification of Intent (NOI) permit application.

If Yes, please explain:

If No, will your project implement Best Management Practices (BMP) identified as needed to improve water quality in a water quality plan?

If Yes, please explain:

#### URBAN RUNOFF PROJECTS

What is the total area treated by BMP in acres?

What is the impervious area treated by each BMP in acres?

What is the runoff or storage volume in acre-ft for each BMP?

#### AGRICULTURAL PROJECTS

How many animals are currently at the project site?

Explain what manure management controls or BMPs are currently being implemented and what is the state of their condition?

What is the name of the receiving stream and how far is the receiving stream from the project site?

Is the receiving stream impaired due to agriculture and/or sediment?

What is the estimated annual nitrogen reduction to the stream as a result of the project?

What is the estimated annual phosphorus reduction to the stream as a result of the project?

What is the estimated annual sediment reduction to the stream as a result of the project?

#### NPS SAFETY

If the project addresses a critical or on-going safety or health hazard, please explain.

## BROWNFIELDS SYSTEM INFORMATION

Who owns the property to be remediated?

Does the project site have ACT 2 Clearance, or will the project site obtain ACT 2 Clearance as a result of project?

Will the owner's company be completing any of the construction (force account)?

Can you provide evidence that all federal supercrosscutters have been met? If so, please upload any evidence of federal supercrosscutters compliance.

Is the cost of acquiring the land to be remediated as part of this project?

Do you have a survey and title search of the real estate to be used for collateral; including title insurance policies and endorsements?

Do you have 'as is', 'as remediated' or 'as developed' appraisals of any real estate to be used for collateral?

## NPS WATER QUALITY IMPACTS

Identify the receiving water(s) impacted by this project.

Describe the length stream or acres of lake that will show water quality improvement as a result of your project.

Is the receiving water(s) listed as impaired on the PA Integrated Water Quality and Assessment Report?

If Yes, list the causes of impairment.

If Yes, identify the benefits of the project on water quality.

If Yes, how are the benefits of the project linked to the impairment?

Is the receiving water(s) listed as high quality (HQ) or exceptional value (EV) by DEP?

If Yes, list the pollutant(s) to be a threat to the HQ/EV existing use.

If Yes, list the source of water quality data/report that documents the threat to HQ/EV.

If Yes, explain how the benefits of the project will remove the threat to HQ/EV.

The receiving water(s) or groundwater is not listed as impaired or HQ/EV by the DEP, but has identified water quality problems:

If Yes, list the source of water quality data, assessment report, or watershed plan that documents the water quality problems.

If Yes, explain how the project will have a direct and substantial benefit in addressing the documented water quality problems.

If Yes, will this project have direct pollutant benefits to waters beyond the immediate receiving waters (e.g. Chesapeake Bay Estuary, Gulf of Mexico, Lake Erie, or Delaware Estuary)? Please explain.

#### NPS COMPLIANCE

Has DEP taken enforcement action(order or consent order and agreement) or issued a Notice of Violation which requires the project?

Is there an approved Total Maximum Daily Load(TMDL) which requires reductions in the pollutants(s) to be controlled by the project?

#### COMMENTS

#### KEYSTONE BENEFITS

#### KEYSTONE BENEFITS

If any of the communities served by this project have been granted special economic designation by the Department of Community and Economic Development or by the Governor's Action Team, please identify the program and the municipality(ies) and county(ies).

N/A

If any of the communities served by this project have been designated as distressed under the Municipalities Financial Recovery Act 47 of 1987, please identify the municipality(ies) and county(ies).

N/A

If this project directly serves a Brownfield site as designated by the PA Department of Environmental Protection, please identify the site.

N/A

If this project serves a City, Borough or 1st Class Township, please identify.

This project serves a City, the City of Philadelphia.

COMMENTS

GREEN INFRASTRUCTURE COMPONENTS

GREEN INFRASTRUCTURE

If the project results in reduced (minimum 20%) water use, please explain.

No

If the project recycles water, please explain.

No

If the project reduces (minimum 20%) infiltration of water into sewer pipes being repaired/replaced, please explain.

No

If the project reduces (minimum 20%) leakage from the water pipes being repaired/replaced, please explain.

No

Will this project reduce facility and/or better manage energy consumption?

No

If the project saves energy (minimum 20%), please explain.

No

If this project generates energy, what percent?

No

If the project infiltrates evapo-transpires or controls stormwater, please explain.

Yes. See narrative for description of project. 5 GSI systems managing 18 acres of drainage area resulting in over 26 greened acres (stormwater storage metric).

If the project implements Ag BMP's, Low-Impact Development, wetland restoration or construction, greenhouse gas reduction, or applies differential uses of water treated to varying levels, please explain.

No

COMMENTS

**INCOME**

COUNTY MUNICIPALITY & APPLICATION LEGISLATIVE

Primary	County	Municipality	System Served	Project Served	Households Served	Bulk
<input checked="" type="checkbox"/>	Philadelphia	Philadelphia City	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	490,000	<input type="checkbox"/>
					<b>Total:</b>	
					490000	
Primary	District	Congress Name	District	House Name	District	Senate Name
<input checked="" type="checkbox"/>	2	Boyle, Brendan	152	Guenst, Nancy	1	Saval, Nikil

**BILLING**

	Last Completed Audited Year	First Full Year After Project is Completed
	2020	2025
Estimate Population	1,584,064	1,584,064
Households served by System	490,000	490,000
Total EDUs served by system	0	0
Residential EDUs served by system	0	0
Average annual Residential bill	\$801.00	\$801.00
Total residential bills levied	\$0.00	\$0.00
Total residential bills collected	\$676,498,000.00	\$676,498,000.00
Total Commercial/Industrial bills levied	\$0.00	\$0.00
Total Commercial/Industrial bills collected	\$43,164,000.00	\$43,164,000.00

**INCOME FOR GOVERNMENT ENTITY**

	Last Completed Fiscal Year	First Full Year After Project Completed
	2020	2025
Total Bills Collected	\$719,662,000.00	\$719,662,000.00
Other Charges Collected	\$13,656,000.00	\$13,656,000.00
Total Operating Revenues	\$733,318,000.00	\$733,318,000.00
Non-Operating Revenues	\$23,717,000.00	\$23,717,000.00
Total Income	\$757,035,000.00	\$757,035,000.00

**INCOME FOR PROFIT ENTITY**

	Last Completed Fiscal Year	First Full Year After Project Completed
	2020	2025
Sales of Products	\$0.00	\$0.00
Investment Income	\$0.00	\$0.00
Rental Income	\$0.00	\$0.00
Other Income	\$0.00	\$0.00
Total Income	\$0.00	\$0.00

#### INCOME FOR NON-PROFIT ENTITY

	Last Completed Fiscal Year	First Full Year After Project Completed
	2020	2025
Provisions of Services	\$0.00	\$0.00
Government Grants Subsidies	\$0.00	\$0.00
Program Services	\$0.00	\$0.00
Investment Income	\$0.00	\$0.00
Contribution from Donors	\$0.00	\$0.00
Rental Income	\$0.00	\$0.00
Other Income	\$0.00	\$0.00
Total Income	\$0.00	\$0.00

#### OPERATING EXPENSES

	Last Completed Fiscal Year	First Full Year After Project Completed
	2020	2025
Labor Salaries Benefits	\$299,356,000.00	\$299,356,000.00
Utilities	\$0.00	\$0.00
Rent	\$0.00	\$0.00
Materials/Supplies	\$38,465,000.00	\$38,465,000.00
Cost of Goods Sold	\$0.00	\$0.00
Program Expenses	\$0.00	\$0.00
Administration Expenses	\$3,189,000.00	\$3,189,000.00
Professional Fees	\$125,163,000.00	\$125,163,000.00
Depreciation Expense	\$125,834,000.00	\$125,834,000.00
Other Expenses	\$0.00	\$0.00
Outside Services	\$0.00	\$0.00
Total (Minus Depreciation Expense)	\$466,173,000.00	\$466,173,000.00

#### NON-OPERATING EXPENSES

	Last Completed Fiscal Year	First Full Year After Project Completed
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	2020	2025
Annual Debt Service Excluding This Project	\$87,106,000.00	\$87,106,000.00
Other Non-Operating Expenses	\$32,237,000.00	\$32,237,000.00
Total	\$119,343,000.00	\$119,343,000.00

NET CASH

	Last Completed Fiscal Year	First Full Year After Project Completed
	2020	2025
Total Cash	\$757,035,000.00	\$757,035,000.00
Total Cash Expenses	\$585,516,000.00	\$585,516,000.00
Total Cash (Minus Total Cash Expenses)	\$171,519,000.00	\$171,519,000.00

COMMENTS

Explain other charges, non-operating revenues and identify sources of the above information:  
 Bulk Agreements with FY20= Revenues totaling \$43.164.000 million and is listed as total commercial.  
 Other Operating Revenue FY20 = interest income + small grant  
 Other Non-Operating Expense FY20 = items removed from fixed assets of the system.  
 All Water and Wastewater Revenue Bonds (other than Subordinated Bonds) are equally and ratably secured under the General Ordinance. No Subordinated Bonds are Outstanding under the General Ordinance.  
 Pursuant to the General Ordinance, the City pledges and assigns to the Fiscal Agent, in trust, for the security and payment of all Water and Wastewater Revenue Bonds (other than Subordinated Bonds) issued under or subject to the General Ordinance, and grants to the Fiscal Agent, in trust, a lien on and security interest in all Project Revenues and amounts on deposit in or standing to the credit of the Water and Wastewater Funds (other than the Rebate Fund).  
 The Fiscal Agent must hold and apply the security interest in and lien on Project Revenues and funds and accounts, in trust, for the equal and ratable benefit and security of all present and future holders of Water and Wastewater Revenue Bonds (other than Subordinated Bonds). The General Ordinance provides that such pledge also may be for the benefit of the provider of a Credit Facility or a Qualified Swap (as defined therein), or any other person who undertakes to provide monies for the account of the City for the payment of principal or redemption price of and interest on any series of Water and Wastewater Revenue Bonds (other than Subordinated Bonds), on an equal and ratable basis with the holders of Water and Wastewater Revenue Bonds (other than Subordinated Bonds).

DEBT

DEBT

Note Holder	Date of Loan / Issued	Original Principal	Interest Rate	Term Months
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\$

COMMENTS

OUTSTANDING INDEBTEDNESS AND OTHER LONG-TERM AGREEMENTS

Outstanding Indebtedness

As set forth in the table below, \$2,279,749,157 aggregate principal amount of Water and Wastewater Revenue Bonds are outstanding.

Table 2  
Outstanding Indebtedness  
as of June 30, 2021\*

**Series of Bonds**

**Original Principal Amount**

**Outstanding Principal Amount**

**Fixed/  
Variable Rate**

**Year of Maturity**

Pennvest 2009B	\$ 42,886,030	\$ 15,792,778	Fixed 2032	Pennvest 2009C	57,268,193	27,228,852	Fixed 2032
2032 Pennvest 2009D	84,759,263	42,253,537	Fixed 2032	Pennvest 2010B	30,000,000	19,633,990	Fixed 2033
2011B	49,855,000	9,045,000	Fixed 2021	2013A	170,000,000	47,000,000	Fixed 2023
2014A	123,170,000			2014A	123,170,000		
50,615,000	Fixed 2026	2015B	141,740,000	120,475,000	Fixed 2035	2016A	192,680,000
174,010,000	Fixed 2035	2017A	279,865,000	239,865,000	Fixed 2052	2017B	174,110,000
165,225,000	Fixed 2034	2018A	276,935,000	256,935,000	Fixed 2053	2019A	68,335,000
67,995,000	Fixed 2040	2019B	250,660,000				
250,660,000	Fixed 2054	2020	127,740,000	127,740,000	Fixed 2040	2020A	201,530,000
201,530,000	Fixed 2050	2020B	95,025,000	95,025,000	Fixed 2035	2021B	368,720,000
368,720,000	Fixed 2045	Pennvest					
		2021A†					

80,821,155

-

Fixed 2044 **TOTAL \$2,816,099,641 \$2,279,749,157**

BUDGET INFORMATION

PROJECT BUDGET

Administrative Cost:	\$0.00
Legal Fees:	\$0.00
Financial/Accounting Charges:	\$0.00
Interest During Construction:	\$0.00
Engineering/Architecture Fees:	\$0.00
Permits:	\$0.00
Land	\$0.00
Construction	\$8,236,500.00
Contingency	\$433,500.00
Other Costs:	\$0.00
Total:	\$8,670,000.00

## COMMENTS

## RATES

### RATES

Metered:	Monthly
Flat:	Not Selected Yet
Other:	Not Selected Yet

Explain special rate structure or agreement. Indicate if no rates apply for this project.

#### General Rates, Special Rates and the TAP Program

Water rates for general service customers of the Water Department consist of a service charge related to the size of the meter, plus a schedule of quantity charges for water use. Sewer rates for general service customers are similar. To more fairly reflect the burden on the System, stormwater charges are calculated based on a customer's property size and its relative imperviousness. A uniform stormwater charge based on the average size and imperviousness of residential properties is billed to residential customers. Charges to non-residential and condominium customers are based on each property's specific size and impervious area. Special rates with partial discounts are established pursuant to the Water Department's Rates and Charges for the following customers: (1) public and private schools which provide instruction up to or below the twelfth grade; (2) institutions of "purely public charity;" (3) places used for religious worship; (4) residences of eligible senior citizens; (5) universities and colleges; and (6) public housing properties of the Philadelphia Housing Authority. In addition, the Rate Board approved discounts of 100% on stormwater rates for eligible community gardens in 2016 and an exemption from water, sewer and stormwater rates for unoccupied properties of the Philadelphia Land Bank in 2018. Some real estate also is exempt from stormwater charges, including, cemeteries, residential sideyards, City-owned or City-controlled vacant lots or improvements, portions of Fairmount Park, streets, medians, sidewalks, and rights-of-way. Water and sewer charges, including stormwater charges, terminate when any vacant or unoccupied premises are acquired by the City and when property is acquired by the Philadelphia Housing Development Corporation or

the Philadelphia Redevelopment Authority under provisions of the Philadelphia Code pertaining to vacant properties.

In addition to the special rates referenced above, the Water Department offers additional assistance and incentive programs to customers, which constitute either an Operating Expense of the Water Department or contra-revenue in the form of credits or reductions to customers' bills.

The Tiered Assistance Program ("TAP") program was launched on July 1, 2017 and assists low-income households at or below 150% of the federal poverty level ("FPL") and those experiencing a special hardship, as discussed herein. Under the TAP program bills are tied to household income and do not fluctuate based on actual consumption. Under the TAP program, monthly bills for water, sewer, and stormwater usage and service charges are as follows:

Income Fixed Charge %\*

50% of FPL or lower at 2% of the household income \$12.00 minimum bill

Above 50% and at or below 100% At 2.5% of the household income

Above 100% and at or below 150% FPL 3% of the household income

Above 150% FPL, with proof of hardship 4% of the household income A special hardship can be increase in household size, loss of a job lasting more than 4 months, serious illness lasting more than 9 months, death of primary wage earner, domestic violence, other circumstances that threaten household's access to necessities of life.

Residential Monthly Water and Sewer Rate Charges

The table below shows monthly water and sewer rate charges for Fiscal Years 2018 through 2022 and is based, in each case, on a typical residential customer with a 5/8-inch meter using 500 cubic feet per month.

Typical Residential

Monthly Water and Sewer and Stormwater Rate Charges

Effective Date Water Sewer

Stormwater Service Charge Total Percentage

Change

9/1/2021 \$23.34 \$16.85 \$16.86 \$12.10 \$69.15 3.6%

5/8" Meter Residential

500 Cu. Ft. Monthly 10/1/2020 22.69 16.02 15.80 12.22 66.73 -0.4

9/1/2019 22.76 16.21 15.80 12.22 66.99 1.0

9/1/2018 22.76 15.88 15.53 12.16 66.33 -0.3

## COMMENTS