U.S. ARMY CORPS OF ENGINEERS, PHILADELPHIA DISTRICT

# Southeastern Pennsylvania and Lower Delaware River Basin Environmental Improvement Program

**Authority:** Section 566 of the Water Resources Development Act of 1996, as amended by Section 552 of WRDA 1999 and Section 8376 of WRDA 2022

**Congressional District:** DE-At large, NJ-1, NJ-2, NJ 3, NJ4, NJ12, PA-1, PA-2., PA-3, PA-4, PA-5, PA-6, PA-7, PA-9

**SEPA Federal Funds Appropriated:** $16.6M (Authorized to $50M)

**Lower DE River Basin Federal Funds Appropriated:** $0 (Authorized to $20M)

**Non-Federal Share:** 25%

**SEPA Jurisdictions:**

Bucks County
Chester County
Delaware County
Montgomery County
Philadelphia County

**Lower Delaware River Basin Watersheds**

Schuylkill Valley
Upper Estuary
Lower Estuary
Delaware Bay


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Construction of a vault structure to control sewer overflow, Philadelphia, PA

The Southeastern Pennsylvania and Lower Delaware River Basin Environmental Improvements Program (566 Program) is authorized under Section 566 of the Water Resources Development Act (WRDA) of 1996, as amended by Section 552 of WRDA 1999 and Section 8376 of WRDA 2022.

Funding for this authority is provided to the Corps through appropriated funding under Environmental Infrastructure and distributed to specific projects through the annual Work Plan or Congressional Earmark. The 566 Program allows USACE to provide design and construction assistance to non-Federal interests for carrying out water related environmental infrastructure, resource protection and development projects in southeastern Pennsylvania, including projects for wastewater treatment and related facilities (including sewer overflow infrastructure improvements and other stormwater management), water supply and related facilities, surface water resource protection and development, and environmental restoration.

Section 552 of WRDA 1999 amended the authority to include environmental restoration as an authorized project purpose under this program. Section 8376 of WRDA 2022 amended the authority to expand the geographical area from Southeastern Pennsylvania to include the Lower Delaware River Basin in New Jersey and Delaware.

All phases are cost-shared with a non-Federal sponsor with the sponsor providing 25% of the total project costs. Implementation Guidance from USACE HQ is pending

# Southeastern Pennsylvania Environmental Improvement Program

The authority allows the Government to enter into agreements with a non-Federal sponsor to provide design assistance, construction assistance or both design and construction assistance. The authority also allows for the non-Federal sponsor to provide some or all of the work for design and/or construction. While sound judgment and prudent analytical approaches should be employed, the specific requirements for conducting and reporting on economic and environmental procedures as outlined in Principles and Guidelines (P&G) and Corps regulations based on P&G are not required. Because this is a service to non-Federal parties, the character and form of the Assistance should be established in partnership with the non-Federal partner.

| Active/Potential Projects | Sponsor | Status | Allocation/Budget Data (000) | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Prior to FY18 | FY18 | FY19 | FY20 | FY23 | FY24 |
| Abington Township Environmental Improvement | Abington Township | Design Phase | 200 | 500 | 0 | 2,100 | 1,000 | TBD |
| Roosevelt Boulevard Dam Removal | PWD | Design Phase | 1,400* | 0 | 1,000 | 0 | -1,000 | TBD |
| New Castle County, DE | TBD | Project Approval | 0 | 0 | 0 | 0 | 0 | TBD |
| Note: $1M transferred from Roosevelt Boulevard Dam Removal to Abington Township Environmental Improvement to support construction | | | | | | | | |

| Closed/Inactive Projects | Sponsor | Status | Federal Funds | Non-Fed Funds | Credits | Total |
|---|---|---|---|---|---|---|
| Cobbs Creek Fish Passage Restoration | PWD | Deferred | 733,732 | 239,847 | 306,578 | 1,280,158 |
| Cobbs Creek Habitat Restoration | PWD | Closed | 3,386,891 | 628,184 | 500,779 | 4,515,856 |
| Hatfield Borough Sewer Improvements | Hatfield Borough | Closed | 340,886 | 26,298 | 87,330 | 454,516 |
| Mill Creek Diversion | PWD | Closed | 671,618 | 112,740 | 112,041 | 896,401 |
| Tacony Creek Ecological Improvements | PWD | Closed | 1,900,794 | 283,253 | 350,344 | 2,534,393 |
| Chester, Delaware and Montgomery County Watershed | PADEP | Closed | 506,354 | 0 | 230,299 | 736,653 |
| Sandyford Run | PWD | Closed | 9,262 | 0 | 0 | 9,262 |
| Logan/Wissinoming Homes | PWD | Closed | 293,600 | 97,866 | | 391,466 |
| Philadelphia Incinerator | PWD | Closed | 3,277,825 | 1,092,608 | | 4,370,433 |
| Delaware Canal | None | Closed | 273,524 | 91,174 | | 364,698 |
| New Logan Homes | PWD | Closed | 27,808 | 9,269 | | 37,077 |

U.S. ARMY CORPS OF ENGINEERS, PHILADELPHIA DISTRICT

# Abington Township Environmental Infrastructure Improvement

**Authority:** Section 566 of the Water Resources Development Act of 1996, as amended by Section 552 of WRDA 1999

**Congressional District:** PA-4

**Non-Federal Sponsor:** Abington Township, Montgomery County, PA

**Date of Project Agreement:** Nov 2016

**Target Construction Date:** August 2023

**Target Completion Date:** 2024

**Total Estimated Cost:** $4.85M

**Federal Funds Appropriated:** $3.8M


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Existing concrete lined channel at Grove Park, Abington, PA

The Abington Environmental Infrastructure Improvement Project is a stream and habitat enhancement project in Abington Township, Pennsylvania adjacent to and along Sandy Run Creek. The project is authorized under Section 566 of the Water Resources Development Act (WRDA) of 1996 (Public Law 104-303), which was amended by Section 552 of WRDA 1999 (Public Law 106-53) to include environmental restoration as an authorized project purpose.

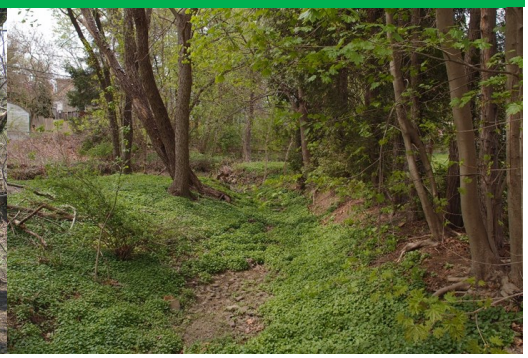
Sandy Run Creek (also referred to as Sandy Run), which is part of the Wissahickon Creek Watershed, has been adversely affected by development and land use practices over the past century. Due to high levels of impervious surfaces throughout the watershed, the creek responds quickly during rain events with erosive forces occurring almost immediately following the onset of storm events. These changes in hydrologic conditions within the watershed have caused severe channel destabilization and riparian habitat degradation within much of the watershed.

The project is needed to reduce erosion and improve habitat function along the upper reaches of Sandy Run Creek. The specific objectives are to enhance and restore aquatic, wetland, and riparian habitat, improve infiltration of flood waters, stabilize stream banks, control invasive species, and reconnect floodplains along the Sandy Run Creek in Roychester Park and Grove Park in Abington Township, Pennsylvania.

# Abington Township Environmental Infrastructure Improvement

- **Project Goals:** The purpose of this project is to provide design and construction assistance for carrying out water related environmental infrastructure and resource protection, including projects for waste water treatment, water supply and surface water resource protection.

  The project will result in an improved riparian buffer and stream corridor. Improvements to the stream bed and channel will improve habitat for benthic species such as dragonflies (spp.), which function as important food resources in stream ecosystems. Riparian buffers and stream corridors are key habitat and migration routes for many species, including migratory birds, reptiles and amphibians, and local resident mammalian species.



**Left:** Exposed manhole at Roychester Park
**Right:** Historic channel at Grove Park

At Roychester Park, opportunities exist to stabilize eroding banks, reconnect the floodplains, and restore riparian and wetland habitat along the eroded above ground reaches of the creek (approximately 800 linear feet). This would include restoring riparian and wetland habitat within Roychester Park where the stream banks are currently extremely eroded. The proposed action includes the following components: Bank Stabilization, Culvert Replacement, Sanitary Sewer Relocation, Riparian Enhancement, and Upland Native Planting.

At Grove Park, opportunities exist to reconnect the floodplains and restore riparian habitat by removing the concrete lining on approximately 400 linear feet of stream bed and gabion baskets lining the approximately 1,300 linear feet of stream banks. The use natural stream stabilization methods and native vegetation plantings will enhance the biodiversity of the stream. The forested floodplain south of Sandy Run contains wetlands and two ephemeral tributaries; parts of these may be remnants of the former main stem of Sandy Run Creek within Grove Park. The forested floodplains are dominated by invasive species (especially multiflora rose [*Rosa polyantha]*). The tributaries are degraded due to sedimentation, disconnection from regular flow, and predominance of invasive plants. The forested floodplain and wetland habitat will be enhanced by relocating a tributary through the forested floodplain to increase storm water storage within the forested floodplain.

| Total Estimated Project Cost ($000) | FEDERAL | NON-FEDERAL | TOTAL | | Summarized Federal Financial Data ($000) | | |
|---|---|---|---|---|---|---|---|
| Initial Appraisal | 10 | 0 | 0 | | FY 16 Allocation | 200 | |
| Design Agreement | 12 | 4 | 16 | | FY 18 Allocation | 500 | |
| Final Design | 400 | 133 | 533 | | FY 20 Work Plan | 2,100 | |
| Construction | 3,226 | 1,075 | 4,301 | | FY 23 Reallocation | 1,000 | |
| | | | | | Balance to Complete | 0 | |

# Boulevard Dam Removal

**Authority:** Section 566 of the Water Resources Development Act of 1996, as amended by Section 552 of WRDA 1999

**Congressional District:** PA-2

**Non-Federal Sponsor:** Philadelphia Water Department

**Date of Project Agreement:** Apr 2019

**Target Construction Date:** Sep 2024

**Target Completion Date:** 2025

**Total Estimated Cost:** $3.1M

**Federal Funds Appropriated:** $1.4M

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Roosevelt Boulevard Dam

The project site is located on Pennypack Creek, just west of the Roosevelt Boulevard bridge (old Bensalem Avenue bridge) and is within the park system managed by Philadelphia's Parks and Recreation Department. The Roosevelt Boulevard dam is located just upstream of the Roosevelt Boulevard bridge. The 56 square mile Pennypack Creek watershed is located in southeastern Pennsylvania with the creek flowing through Pennypack Park within the City of Philadelphia.

Boulevard dam was constructed in 1923 and was designed for recreational purposes. The dam is a concrete and embedded stone structure with a solid concrete foundation. The crest of the dam consists of cut granite capstones, although several of the original capstones have been dislodged and expose the underlying masonry. Flanked on both sides by masonry retaining walls, the existing dam has a wall-to-wall crest length of 112.3 feet and a height of 6.75 Feet. Currently, the dam inhibits fish passage and creates unsafe stream conditions in its vicinity that threaten public safety and local infrastructure. The project will eliminate the significant pool depth above the dam, reduce the drop below the structure, stabilize the existing eroding stream banks, and create in-stream conditions that favor fish passage.

Work efforts include the removal of the top 3.9 feet of dam, the construction of a rock ramp to provide fish passage over the remaining portion of the dam, the stabilization of the existing masonry wall, and the addition of scour protection.

Anadromous fish vary greatly in their swimming and jumping ability and therefore in their ability to pass physical obstacles during upstream migration. Design for upstream passage must therefore always be focused on passing the largest percentage possible of a particular species of type of fish (the target population) in order to ensure that the project is successful. For this project the design target species for upstream fish passage is the river herring (blueback herring [*Alosa aestivalis*] and alewife [*Alosa pseudoharengus*]).

# Boulevard Dam Removal

- **Project Goals:** The purpose of this project is to investigate, select, and construct the best alternative to reestablish fish passage on Pennypack Creek and to provide for streambank stabilization and protection of an existing sanitary sewer line.


To implement this project, the Philadelphia Water Department (PWD) will complete the project designs using an independent Architectural & Engineering firm. The USACE will provide technical assistance and review of the project designs, ensure compliance with the National Environmental Policy Act and other environmental regulations, and provide contract oversight (Supervision & Administration) during construction.

Permitting requirements resulted in a re-design to minimize the footprint of the project as well as delays in permit approval pushed construction of the project until FY24.

| Total Estimated Project Cost ($000) | FEDERAL | NON-FEDERAL | TOTAL | | Summarized Federal Financial Data ($000) | | |
|---|---|---|---|---|---|---|---|
| Initial Appraisal | 9 | 3 | 12 | | FY 19 Allocation | 2,400 | $1.4M transferred from Cobbs Fish Passage |
| Design Agreement | 18 | 6 | 24 | | FY 23 Allocation | -1,000 | $1M transferred to Abington |
| Review P&S | 75 | 25 | 100 | | FY 24 Budget | 1,000 | |
| Construction (Est.) | 2,300 | 775 | 3,100 | | Balance to Complete | 0 | |