REGION 3
PHILADELPHIA, PA 19103

ENVIRONMENTAL ASSESSMENT

Broad Top Township, Pennsylvania
Wastewater Treatment System Project

January 21, 2026

Introduction

The U.S. Environmental Protection Agency (EPA) prepared the following Environmental Assessment (EA) for the Broad Top Township, Pennsylvania Wastewater Treatment System project (the Proposed Action). This project will use federal grant funds from the Fiscal Year 2024 Consolidated Appropriations Act (PL 118-42). This grant will be managed by the EPA Region 3 Community Grants Program in coordination with Broad Top Township.

This EA has been prepared in compliance with Section 102 of the National Environmental Policy Act of 1969 (NEPA) and EPA's NEPA procedures for implementing NEPA under 40 C.F.R. Part 6. This EA discloses the direct, indirect, and cumulative environmental impacts that may result from the Proposed Action and the alternatives considered. The EA is organized into the following seven sections that document the EPA's findings:

1) **General Information**. This section includes the name of the Proposed Action, grant number, and point of contact information for the grant applicant and responsible EPA official.
2) **Proposed Action Description**. This section describes the Proposed Action, implementation timeline, and current environmental conditions within the project area.
3) **Alternatives Considered**. This section describes the alternatives to the Proposed Action, the potential environmental impacts of each, and why each alternative was not identified by the EPA as the Proposed Action.
4) **Cumulative Impacts**. This section describes the Proposed Action's potential to contribute to adverse cumulative impacts in combination with other past, present, and reasonably foreseeable actions citing to the applicable environmental laws.
5) **Required Mitigation**. This section presents the mitigation measures that are essential to render the impacts of the Proposed Action not significant and/or to avoid non-compliance with applicable environmental laws or executive orders.

6) **Individuals and Agencies Consulted**. This section presents a list of the individuals and agencies consulted during the development of the EA.

7) **List of Supporting Documents**. This section provides a list and brief description of the supporting documents attached to the EA.

This EA analyzes the adverse and beneficial environmental impacts of water infrastructure projects in compliance with NEPA and the required environmental crosscutters and other federal, state, and local environmental reviews, including the engineering documentation compiled by Keller Engineers in "Sewage Planning Module Component 3 for Cypher Beach Public Wastewater System in Broad Top Township, Bedford County Pennsylvania (Project Number 3463-5)." This EA presents general information on existing conditions and discusses potential impacts and mitigation measures that may generally occur during construction and operation of broad project types.

All supporting documents, including this EA, are available for review through the EPA NEPA Compliance Document website at https://cdxapps.epa.gov/cdx-enepa-II/public/action/nepa/search/search#results.

I. General Information		
Proposed Action Name	**Program / Funding Authority**	**Grant Number (if known)**
Broad Top Township for Wastewater Treatment System	EPA Community Grants	953A0167-0
Grant Applicant Organization		
Broad Top Township, PA		
Grant Applicant Contact Information		
Donald Hedge, Jr., Chairman	broadtop@comcast.net	(814) 928-5253
Stacy Woomer, Secretary / Treasurer	broadtop@comcast.net	(814) 928-5253
EPA Responsible Official		
Amie Howell, Chief, State Assistance & Partnerships Branch / EPA Region 3	howell.amie@epa.gov	(215) 814-5722
Prepared By		
Matthew Konfirst, EPA Project Officer	konfirst.matthew@epa.gov	(215) 814-5801

II. Proposed Action Description
Proposed Action Location and Site Description *Provide the address or general location of the Proposed Action (include state, county, and locality) and a brief description of the site characteristics. Examples of site characteristics include land use and zoning, population served by the existing water system, current infrastructure, and formally classified lands within the Proposed Action area.*
The EPA is proposing to award a grant to assist Broad Top Township, Bedford County, Pennsylvania with their Wastewater Treatment System project. Broad Top Township has selected the Village of Cypher Beach as the focus of its wastewater treatment improvement project because it is the last

village in the township with ineffective wastewater treatment. This project aims to provide proper wastewater services to Cypher Beach, addressing the various malfunctioning systems that currently discharge pollution into the Raystown Branch of the Juniata River.

Check all land uses that occur within or adjacent to the Proposed Action area:

☒ Agriculture	☐ Military	☐ Private	☐ Other (specify): _____
☐ Commercial	☐ Mixed Use	☒ Residential	
☒ Forest	☐ Open Space	☒ Water	
☐ Industrial	☐ Park/Recreation		

Description of Proposed Action

The Village of Cypher Beach is a seasonal riverfront community situated along the Raystown Branch of the Juniata River in Broad Top Township, Pennsylvania. The community includes 47 residences — 14 of which are occupied year-round, while the remaining serve as summer cottages and weekend retreats. At present, Cypher Beach lacks a centralized wastewater collection and treatment system. Instead, the community relies on aging, and in many cases failing, on-lot septic systems and privies. The estimated total wastewater flow generated by the community is approximately 13,000 gallons per day.

Due to increasing concerns regarding environmental degradation and public health risks, the Broad Top Township Supervisors are proposing the development of a public sewer system to serve the Cypher Beach community. The goal is to implement a solution that is financially responsible, environmentally sustainable, and operationally practical. An evaluation of wastewater management alternatives was performed, with detailed comparisons provided in the Alternatives Analysis below.

As a result of this evaluation, a solution using community biofilters and a septic tank effluent system has been identified as the preferred option. Under this alternative, wastewater from each residence will be pretreated through individual septic tanks for solids removal. The clarified effluent will then flow by gravity to a centralized pump station, which will convey the flow to a treatment system incorporating clustered biofilter units. The treatment process will include pre- and post-equalization for flow management, as well as ultraviolet (UV) disinfection to ensure effluent quality prior to discharge into the Raystown Branch of the Juniata River. The total area required for construction of the collection, conveyance, and treatment infrastructure is estimated at approximately three (3) acres.

Purpose of and Need for Proposed Action

By implementing this project, Broad Top Township will promote efficient water resource management and protect the health and safety of its citizens. It will replace the existing inadequate wastewater treatment systems, which pose a pollution threat to both residents and downstream communities, with an affordable and effective wastewater treatment system managed and operated by the township. This will effectively eliminate the current pollution problem.

The completion of this project is expected to positively impact economic development by ensuring that properties comply with wastewater treatment requirements. It will remove a known source of pollution from shallow well water sources and the Raystown Branch of the Juniata River, which is a key resource for the Lake Raystown Resort area.

Additionally, municipalities located downstream of the project, including Hopewell Borough, Hopewell Township, Liberty Township, and Saxton Borough, will benefit from the reduction of pollution flowing into the river, aiding their aging communities.

Anticipated Construction Cost, Start Date and Duration of Proposed Action

The EPA's funding for this action will focus on planning and construction of a wastewater treatment facility. The estimated total cost of the entire project is $885,985 which includes engineering (planning and design) and construction materials. All sources of funding are indicated as follows:

EPA Community Grant Amount:	$797,000
Community Grant Match (waived):	$0
Other Funds:	$88,985

Additionally, the Township will provide an in-kind contribution to the project by utilizing employees to construct the project.

The construction is projected to start in April 2026 and continue through July 2027.

Affected Environment in the Proposed Action Area

Provide a brief description of the current environmental conditions within the Proposed Action area. Topics discussed may include, but are not limited to, the following: topography, geology, and soils; water resources (surface waters, groundwater, wetlands, floodplains); natural resources (vegetation, wildlife, habitats); cultural resources (historic properties, archeological/tribal resources); air quality; transportation; energy and utilities; solid/hazardous wastes.

The Village of Cypher Beach is a seasonal riverfront community situated along the Raystown Branch of the Juniata River in Broad Top Township, Pennsylvania. Land use in this project area is primarily classified as developed and deciduous forest. The biofilter treatment system, pre- and post-equalization tanks and UV/control building will be sited on land classified as deciduous forest located just west of the neighborhood along Second Avenue. Much of the existing residential area falls within the base flood elevation; however, the site of the treatment facility will be located at an elevation above base flood height.

There is the potential for biological resources to be impacted. The natural flow regime and water quality in this watershed are important to maintaining habitats occupied by rare fish and mussels. The Pennsylvania Fish and Boat Commission (PFBC) recommends taking measures to maintain a natural flow regime and water quality and the avoidance of instream construction work to the maximum extent practicable. If instream work is anticipated, a mussel salvage using a qualified mussel surveyor is recommended to relocate mussels from the area of direct impact.

III Alternatives Considered

Briefly describe alternatives to the Proposed Action considered including other sites, design modifications, or no action. Summarize the beneficial and adverse impacts on the human environment (considering direct, indirect, and cumulative impacts) for each and the reason the alternative was not identified by EPA as the Proposed Action.

Alternative 1: No Action

The no-action alternative consists of not awarding the Community Grant to Broad Top Township for their Wastewater Treatment System project. If no action is taken, the system would be left as is, with privies, holding tanks, and malfunctioning on-lot septic systems. The township would continue to maintain the existing infrastructure as needed, but failing sewage systems will continue to discharge to the ground surface and nearby waterbodies. Due to the negative impacts of the no-action alternative, the EPA has found the no-action alternative to be untenable.

Alternative 2: Proposed Action: Community Biofilters and Septic Tank Effluent System

Under this alternative, wastewater from each residence will be pretreated through individual septic tanks for solids removal. The clarified effluent will then flow by gravity to a centralized pump station, which will convey the flow to a treatment system incorporating clustered biofilter units. The treatment process will include pre- and post-equalization for flow management, as well as ultraviolet (UV) disinfection to ensure effluent quality prior to discharge into the Raystown Branch of the Juniata River.

The treatment operations for this alternative are similar to Alternative 4, with a collection of biofilters and a lift station. The collection system will be composed of septic tanks and effluent gravity piping similar to Alternative 5.

The present worth cost of this alternative is $1,521,201.

This alternative, which combines individual residential septic tanks with a centralized biofilter treatment system, is the preferred alternative of the township. This option provides a compact footprint, relatively low operational oversight, and the ability to deliver consistent treatment across variable flow rates. This option is also the most financially viable among the analyzed alternatives. Considering these factors, this alternative is recommended as the preferred alternative, offering the best balance between capital cost, operational simplicity, and long-term sustainability.

Alternative 3: Community Sand Filter and Gravity Collection System

This alternative utilizes conventional gravity collection and conveyance followed by a recirculating sand filter (RSF). All wastewater will flow via gravity to a centralized point before flowing through a series of septic tanks for solids removal, since the RSF cannot function properly with heavy solids in the wastewater. Due to spatial concerns, all centralized treatment systems will need to be located on property adjacent to the Cypher Beach community. This will require a pump station. The pump station will discharge to a dosing tank to feed the RSF before being disinfected and discharged to the outfall. The optimal method of disinfection in this location is UV disinfection.

This alternative utilizes a gravity collection system, minimizing mechanical components and reducing operational complexity. However, one lift station is required due to base flood elevations and treatment facility siting. The RSF provides reliable treatment with moderate operational costs but requires a centralized septic tank system and a dosing station, both of which add maintenance needs. Additionally, RSFs typically require more space than other treatment options.

The present worth cost of this alternative is $1,856,823.

Alternative 4: Community Biofilters and Gravity Collection System

Similar to Alternative 3, this alternative utilizes conventional gravity collection systems to convey the flow to a centralized point. Since there is no residential primary treatment, this process will also require a collection of septic tanks before being pumped to the treatment system. The pumped flow will be discharged to a distribution box to transfer the wastewater to a collection of biofilters for treatment. The filtered water will then be disinfected via UV lamps and disposed of in the stream.

Like Alternative 3, this option includes a gravity collection system, offering ease of operation. Also, biofilters require less monitoring than RSFs but still depend on centralized septic tanks that need periodic pumping. Another drawback is that biofilters have a shorter lifespan, requiring more frequent media replacement compared to RSFs.

The present worth cost of this alternative is $1,577,516.

Alternative 5: Community Sand Filter and Septic Tank Effluent System

In this alternative, residential septic tanks are installed at each home, voiding the need for a centralized cluster of septic tanks. The effluent of the septic tanks will flow via small diameter gravity to a pump station before all flow is pumped to the RSF system. The RSF system will require UV disinfection before being sent to the stream outfall.

While treatment operations remain the same as in Alternative 3, the collection system differs. Instead of a centralized septic tank system, each residence has its own individual septic tank, eliminating the need for a central cluster. This results in more tanks requiring regular pumping, which can be operationally demanding. However, the smaller septic tanks serve only single households, and collection lines can be reduced in size since solids are removed before conveyance. Also, the construction of septic tank effluent systems is often less complex than conventional gravity collection systems.

The present worth cost of this alternative is $1,716,704.

Alternative 6: Biofilters and Clustered Septic Tank Effluent Pumping Systems

This alternative focuses on a decentralized approach to the collection and filtering of wastewater. The collection system will include individual residential septic tanks that are pumped instead of relying on gravity flow. The pumped wastewater will flow into a low-pressure force main and into a biofilter. Multiple biofilters will be strategically located around the village and will collect the wastewater from three to five septic tank pumps, resulting in multiple disconnected treatment

systems throughout Cypher Beach. The effluent of each filter will be disinfected via UV lamps and discharged into the stream.

This alternative relies on septic tanks with effluent pumps for collection and biofilters for treatment. Maintenance requirements primarily involve septic tank pumping, grinder pump repairs, and periodic media replacement for the biofilters. However, this option eliminates the need for lift stations and requires less space than a RSF. Additionally, fewer biofilter units are needed compared to Alternatives 2 and 4, reducing infrastructure complexity.

Given Cypher Beach's location as a riverfront community, much of the existing residential area falls within the base flood elevation. As a result, the placement of filter units presents significant logistical challenges, requiring strategic positioning at higher elevations. Consequently, this necessitates extended lengths of collection system piping to ensure proper conveyance to the treatment units. Additionally, this option would require multiple discharge locations, complicating permitting and increasing future compliance costs.

The present worth cost of this alternative is $1,899,755.

Alternative 7: Community Package Treatment Plant and Grinder Pump Low-Pressure Sewer Collection System

For this alternative, a low-pressure grinder pump system is used to collect and convey the flow to a centralized package treatment plant. The package treatment plant then treats the wastewater prior to stream outfall. Given the highly variable flow rate expected in the area, equalization infrastructure will be necessary for this method.

A package treatment plant with a grinder pump low-pressure sewer system was deemed impractical for Cypher Beach due to the community's highly variable wastewater flow. Biological treatment systems, such as those implemented in package treatment plants, require consistent flow and organic loading, which is difficult to maintain in a seasonal, vacation-based community without supplemental seeding. Filtration technologies are less susceptible to high flow variability.

Additionally, this alternative is energy-intensive, requiring continuous power for pumps, aerators, and other mechanical components within the packaged plant, making it less environmentally sustainable than other options.

IV. Cumulative Impacts

Cumulative impacts on an environmental resource area result from the impacts of the Proposed Action when considered in combination with the impacts caused by other past, present, and reasonably foreseeable actions affecting the same resource area. Provide a brief description of the Proposed Action's potential to contribute to adverse cumulative impacts on the human environment. Use the environmental resource areas to identify the resource area of concern. If there is no potential for adverse cumulative impacts, provide a brief justification below (e.g., absence of other past, present, or reasonably foreseeable actions).

The environmental impacts of the proposed action and its predictable consequences have been reviewed for a broad range of potential areas of concern. Note that several resources were not evaluated in this EA because additional investigation is not necessary to determine that implementation of the alternatives are unlikely to have any impacts.

- ***Land Use***

  Land use in this project area is primarily classified as developed and deciduous forest.

  The majority of the project area is located on developed land that is the site of a community called Cypher Beach. "Cypher Beach is a riverfront community on the banks of the Raystown Branch of the Juniata River which limits the options for wastewater infrastructure since the area is more susceptible to flooding" (Sewage Planning Package, pg. 53). Most of the structures located north of Walnut Street are in the flood zone (Figure 1), as are the property-specific septic systems described in the Preferred Alternative.

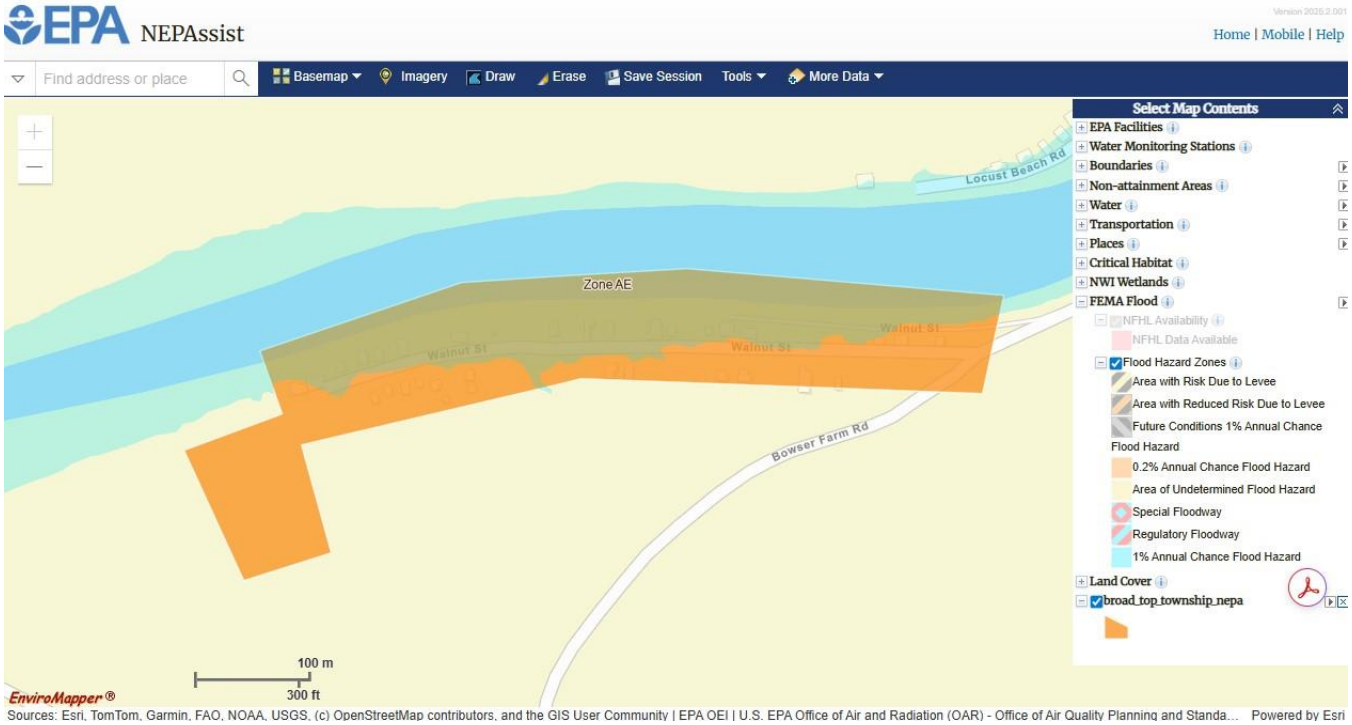

Figure 1 - Screenshot from the EPA NEPAssist tool showing the intersection of the 1% Annual Chance Flood Hazard area (transparent light blue) with the project area (orange). Treatment facilities will be constructed at the western end of the project area at a higher elevation than the existing residential area, parts of which lie in the 1% Annual Flood Hazard area.

Selecting the best sewage treatment alternative in this location requires balancing the installation and operations and maintenance (O&M) costs with the potential for damage to components of the wastewater treatment system and contamination of the Raystown Branch of the Juniata River that could occur during a flood event. Flood impacts to septic systems can potentially fill systems with silt and debris and in some cases damage the system to such an extent that it would need to be replaced. Additionally, specific steps need to be taken to protect septic systems from unintentional damage after a flood event. "Understanding the risks associated with developing a public sewer system in the area, the following alternatives were assessed for treatment and collection…" (Sewage Planning Package, pg. 53).

The biofilter treatment system, pre- and post-equalization tanks and UV/control building will be sited on land classified as deciduous forest located just west of the neighborhood along Second Avenue (Sewage Planning Package, pp 24, 72). The forested area is located above base flood elevation.

Additionally, the project is not located in or near any Wilderness areas; therefore, the requirements of 16 U.S.C. § 1131 do not apply.

- ***Air Quality***

  The proposed project will result in temporary construction related impacts, generating noise, dust, and construction related traffic impacts. Best management practices will be implemented to reduce these impacts to the community. The project is not located in a nonattainment or maintenance area for any relevant pollutants; therefore, the project is not subject to a conformity determination. Potential emissions may occur during project construction, though this will be temporary in nature and potential impacts will be minimized through best management practices.

- ***Noise and Vibration***

  Noise and vibration impact due to the construction of the proposed improvements are expected to be temporary in nature and typical for this type of project.

- ***Geological and Soil Resources***

  This project will involve the disturbance of land identified as "farmland of statewide importance." However, most of the project area is on previously developed land in a rural area; the biofilter treatment system, pre- and post-equalization tanks and UV/control building will be sited on land classified as deciduous forest located just west of the neighborhood along Second Avenue. Prime agricultural land protection issues have been settled through coordination with the Bedford County Agricultural Land Preservation Board, which states that "this project will have no impact on farming or result in the reduction of prime agricultural land in Bedford County" and furthermore, "that the proposed project is consistent with the applicable portions

of Bedford County's agricultural land use plan and all other county and local land use and agricultural preservation that impacts this area" (Sewage Planning Package, pp 9, 41 and associated maps pp 35-40).

- ***Water Resources***

  The project will not control or modify surface waters; therefore, the requirements of the Fish and Wildlife Coordination Act (16 U.S.C. § 661) do not apply.

  The project is located adjacent to the Raystown Branch of the Juniata River and portions are located in a 100-year floodplain. The parcel identifed for construction of the treatment facility is at a higher elevation than existing residential area and is not within the 1% annual chance flood hazard zone. Therefore, the project will not add any additional structures to the floodplain.

  While the project involves replacing existing septic systems within the floodplain, ground disturbing or excavation activities will be minimal, and the area will be returned to pre-construction conditions. Based on these considerations, the proposed project is not anticipated to result in a negative impact to the natural and beneficial floodplain values; therefore, the project is anticipated to conform to Executive Order No. 11988 (1977), as amended by Executive Order No. 12148 (1979).

  Given that the proposed project involves construction of an outfall structure, the applicants will pursue a Chapter 105 Encroachment Permit (GP-4 for Outfall) through the Pennsylvania Department of Environmental Protection, which incorporates a joint application process with the U.S. Army Corps of Engineers for Section 10 of the Rivers and Harbors Act permits.

  No sole source aquifers exist at or near the project location nor is it located within the coastal zone/barriers; therefore, the requirements of the 42 U.S.C. §§ 300F-300J-26, 16 U.S.C. §§ 1451-1466 and 3501-3510 do not apply.

  There are no Wild and Scenic Rivers within the project area; therefore, the requirements of 16 U.S.C. §§ 1271-1287 do not apply. This project also is not located within an essential fish habitat. Therefore, the requirements of 16 U.S.C. §§ 1801-1891 do not apply.

  Potential impacts to water resources resulting from the construction of the proposed improvements are expected to be adequately mitigated by the Soil Erosion and Sediment Control Measures proposed during construction and are typical for this type of improvement.

- ***Biological Resources***

  An endangered species list was verified using the U.S. Fish and Wildlife Service's Information for Planning and Consultation system on July 22, 2025. The project is not expected to significantly affect federally listed threatened or endangered species, however the following species are present: Indiana Bat (endangered), Northern Long-eared Bat (endangered), Eastern Hellbender (proposed endangered), Monarch Butterfly (proposed threatened), Northeastern Bulrush

(endanged), Bald Eagle (Non- Bird of Conservation Concern [BCC]), Black-capped Chickadee (BCC), Bobolink (BCC), Cerulean Warbler (BCC), Chimeny Swift (BCC), Eastern Whip-poor-will (BCC), Golden-winged Warbler (BCC), Prairie Warbler (BCC), Red-headed Woodpecker (BCC), and Wood Thrush (BCC). There are no critical habitats within the project area.

The proposed activity does not involve capture, transport, exhibition, collection, control or disturbance of eagles or eagle parts, nests, or eggs. Additionally, no construction is expected to occur in close proximity to eagle nests; therefore, the requirements of 16 U.S.C. §§ 668-668C do not apply. This project does not involve the taking, killing, possession, transportation, or importation of migratory birds, their eggs, parts, or nests. Beneficial practices to avoid and minimize the incidental take of migratory birds, including best management practices and conservation measures will be implemented when necessary; therefore, this project would not be in conflict with 16 U.S.C. §§ 703-712. Additionally, the project will not affect marine mammals; therefore, the requirements of the Marine Mammal Protection Act (16 U.S.C. §§ 1361-1407) do not apply.

The Pennsylvania Department of Conservation and Natural Resources prepared a Pennsylvania Natural Diversity Inventory (PNDI) project environmental review receipt (PNDI-835941) and determined that implementation of the following mitigation measures are required to avoid impacts (Sewage Planning Package, pg. 46).

- The natural flow regime and water quality in this watershed are important to maintaining habitats occupied by rare fish and mussels. It is recommended to take measures that maintain a natural flow regime, water quality, and avoid instream construction work to the maximum extent practicable. If instream work is anticipated, a mussel salvage using a qualified mussel surveyor is recommended to relocate mussels from the area of direct impact. Maintenance or restoration of the riparian corridor will aid in connecting habitats and improving water quality for fish and mussels. It is also recommended that a riparian buffer (100 to 300 feet, if possible) is retained (or restored, if not already present) on each side of the waterway (river, stream, creek). This buffer should be vegetated with native plant species. When adequately vegetated, this upland buffer will act to stabilize the streambanks (preventing or minimizing erosion), and filter pollutants (e.g., sediment, fertilizers, pesticides, road salt, oil). Where streambanks have become badly eroded (e.g., due to previous removal of native riparian vegetation), streambank fencing and/or bioengineering restoration techniques are recommended (geotextile, root wads, vegetative stabilization), rather than riprapping the streambanks; removing gravel bars; or attempting to dredge, ditch, channelize, or widen the stream. Stringent erosion and sedimentation controls should be used before, during, and after project implementation to ensure that sediment and contaminants do not enter any waterway(s) (rivers, creeks, streams, tributaries) or waterbodies (lakes, ponds).

- ***Cultural Resources and Historic Properties***

  The project does not appear to be in or cause impacts to Indian country. All tribes within Region 3 were notified of the project on August 18, 2025, by EPA Region 3, and were given an opportunity for a National Historic Preservation Act, Section 106 consultation (36 C.F.R. § 800). No additional consultation was requested. The EPA reviewed the National Register of Historic Places, and no nearby historical sites were identified. Broad Top's engineering consultant also received a "no effect" determination from the Pennsylvania State Historic Preservation Office on April 7, 2025 (Sewage Planning Package, pg. 50).

  The proposed activity is not located on federal or Indian lands; therefore, the requirements of the Archaeological Resources Protection Act (16 U.S.C. §§ 470AA-MM) do not apply. The project is also not located on Indian or Native Hawaiian lands where Native American human remains, funerary objects, sacred objects, and cultural items may be present; therefore, the requirements of 25 U.S.C. § 3001 do not apply.

- ***Transportation and Traffic***

  Temporary impacts to traffic consistent with developments of this type may be anticipated; however, no long-term transportation and traffic impacts anticipated as a result of the proposed improvements.

V. Required Mitigation Measures
Describe any mitigation measures that are essential to render the impacts of the Proposed Action not significant and/or to avoid non-compliance with applicable environmental laws or executive orders. Use the environmental resource areas listed previously to identify the resource area of concern. If no mitigation measures are required, type "N/A".

Environmental Resource Area	Mitigation
Biological Resources	The natural flow regime and water quality in this watershed are important to maintaining habitats occupied by rare fish and mussels. It is recommended to take measures that maintain a natural flow regime, water quality, and avoid instream construction work to the maximum extent practicable. If instream work is anticipated, a mussel salvage using a qualified mussel surveyor is recommended to relocate mussels from the area of direct impact. Maintenance or restoration of the riparian corridor will aid in connecting habitats and improving water quality for fish and mussels. It is also recommended that a riparian buffer (100 to 300 feet, if possible) is retained (or restored, if not already present) on each side of the waterway (river, stream, creek). This buffer should be vegetated with native plant species. When adequately vegetated, this upland buffer will act to stabilize the streambanks (preventing or minimizing erosion), and filter pollutants (e.g., sediment, fertilizers, pesticides, road salt, oil). Where streambanks have become badly eroded (e.g., due to previous removal of native riparian vegetation),

	streambank fencing and/or bioengineering restoration techniques are recommended (geotextile, root wads, vegetative stabilization), rather than riprapping the streambanks; removing gravel bars; or attempting to dredge, ditch, channelize, or widen the stream. Stringent erosion and sedimentation controls should be used before, during, and after project implementation to ensure that sediment and contaminants do not enter any waterway(s) (rivers, creeks, streams, tributaries) or waterbodies (lakes, ponds).

VI. Agencies and Persons Consulted

Provide a list of individuals, tribes, Federal, State, and local agencies consulted during the development of this EA. Provide the name, title, and agency of the individuals consulted.

- Stacy Woomer (Treasurer and Secretary, Broad Top Township) coordinated with Keller Engineers to provide documentation and answers to follow-up questions regarding technical specifications and considerations of the project.
- The EPA Region 3 NEPA Technical Assistance Branch was consulted to discuss potential vulnerabilities associated with the base flood elevation in the project area (Tim Whitman, Branch Chief; Melissa Mertz, NEPA Reviewer; Carrie Traver, NEPA Reviewer).
- The project plan was submitted to Tribes within EPA Region 3 on August 18, 2025, for review. No comments were received within the 30-day comment period (Melissa Mertz, NEPA Reviewer).

VII. List of Supporting Documents

Provide a list and brief description of the supporting documents attached to this EA.

Keller Engineers. June 2025. Sewage Planning Module Component 3 for Cypher Beach Public Wastewater System in Broad Top Township, Bedford County Pennsylvania (Project Number 3463-5).