

SEWAGE PLANNING MODULE COMPONENT 3

FOR

CYPHER BEACH PUBLIC WASTEWATER SYSTEM

IN

BROAD TOP TOWNSHIP, BEDFORD COUNTY PENNSYLVANIA

**PROJECT NUMBER 3463-5
JUNE 2025**

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PROJECT NARRATIVE

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, it 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. A comprehensive evaluation of wastewater management alternatives was performed, with detailed comparisons provided in the attached Alternatives Analysis.

As a result of this evaluation, **Alternative 4: Community Biofilters and Septic Tank Effluent System** has been identified as the preferred option. Under this approach, 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 Juniata River. The total area required for construction of the collection, conveyance, and treatment infrastructure is estimated at approximately three (3) acres.

Broad Top Township has been awarded \$797,000 in federally appropriated funding to support the implementation of the project. The Township will cover any additional costs necessary to complete the project beyond the awarded amount.

Environmental, agricultural, and historical resource reviews have been completed in support of the project and are included with this report to document potential impacts and confirm compliance with applicable regulatory requirements.

SEWAGE FACILITIES PLANNING MODULE – 3

**SEWAGE FACILITIES PLANNING MODULE****Component 3. Sewage Collection and Treatment Facilities***(Return completed module package to appropriate municipality)***DEP USE ONLY**

DEP CODE #	CLIENT ID #	SITE ID #	APS ID #	AUTH ID #

This planning module component is used to fulfill the planning requirements of Act 537 for the following types of projects: (1) a subdivision to be served by sewage collection, conveyance or treatment facilities, (2) a tap-in to an existing collection system with flows on a lot of 2 EDU's or more, or (3) the construction of, or modification to, wastewater collection, conveyance or treatment facilities that will require DEP to issue or modify a Clean Streams Law permit. Planning for any project that will require DEP to issue or modify a permit cannot be processed by a delegated agency. Delegated agencies must send their projects to DEP for final planning approval.

This component, along with any other documents specified in the cover letter, must be completed and submitted to the municipality with jurisdiction over the project site for review and approval. All required documentation must be attached for the Sewage Facilities Planning Module to be complete. Refer to the instructions for help in completing this component.

REVIEW FEES: Amendments to the Sewage Facilities Act established fees to be paid by the developer for review of planning modules for land development. These fees may vary depending on the approving agency for the project (DEP or delegated local agency). Please see section R and the instructions for more information on these fees.

NOTE: All projects must complete Sections A through I, and Sections O through R. Complete Sections J, K, L, M and/or N if applicable or marked .

A. PROJECT INFORMATION (See Section A of instructions)

1. Project Name Cypher Beach Sewage Planning
2. Brief Project Description Evaluation of alternatives to provide public sewer service to the village of Cypher Beach in Broad Top Township, Bedford County, PA.

B. CLIENT (MUNICIPALITY) INFORMATION (See Section B of instructions)

Municipality Name	County	City	Boro	Twp
Broad Top Township	Bedford County	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Municipality Contact Individual - Last Name	First Name	MI	Suffix	Title
Hedge	Donald		Jr.	
Additional Individual Last Name	First Name	MI	Suffix	Title
Municipality Mailing Address Line 1 124 Hitchens Road	Mailing Address Line 2 P.O. Box 57			
Address Last Line -- City Defiance	State PA	ZIP+4 16633		
Area Code + Phone + Ext. 814-928-5253	FAX (optional)	Email (optional)		

C. SITE INFORMATION (See Section C of instructions)

Site (Land Development or Project) Name

Cypher Beach

Site Location Line 1 Cypher Beach Road	Site Location Line 2			
Site Location Last Line -- City Hopewell	State PA	ZIP+4 16650	Latitude 40.084538	Longitude -78.297042

Detailed Written Directions to Site From Everett, PA turn right onto S.R. 0026 and continue for approximately 5 miles. Bear right onto West Cypher Road and continue for approximately 1.7 miles. Turn left onto Plank Road and continue for approximately 0.2 miles. Turn right onto East Cypher Road and continue for approximately 1.9 miles. Turn right onto Bowser Road and continue for approximately 0.3 miles. Cypher Beach Road will be on your right.

Description of Site The Village of Cypher Beach is a small community along Raystown Branch Juniata River with approximately 47 dwellings including both permanent and temporary residences.

Site Contact (Developer/Owner)

Last Name Hedge	First Name Donald	MI	Suffix Jr.	Phone	Ext.
Site Contact Title Chairman	Site Contact Firm (if none, leave blank)				
FAX	Email broadtop@gmail.com				
Mailing Address Line 1 124 Hitchens Road	Mailing Address Line 2 P.O. Box 57				
Mailing Address Last Line -- City Defiance	State PA	ZIP+4 16633			

D. PROJECT CONSULTANT INFORMATION (See Section D of instructions)

Last Name Cunningham	First Name David	MI	Suffix
Title	Consulting Firm Name		
Director Water/Wastewater, Vice President	Keller Engineer's Inc.		
Mailing Address Line 1 420 Allegheny Street	Mailing Address Line 2		
Address Last Line – City Hollidaysburg	State PA	ZIP+4 16648	Country USA
Email dcunningham@keller- engineers.com	Area Code + Phone 814-696-7430	Ext. 315	Area Code + FAX

E. AVAILABILITY OF DRINKING WATER SUPPLY

The project will be provided with drinking water from the following source: (Check appropriate box)

- Individual wells or cisterns.
- A proposed public water supply.
- An existing public water supply.

If existing public water supply is to be used, provide the name of the water company and attach documentation from the water company stating that it will serve the project.

Name of water company: NA

F. PROJECT NARRATIVE (See Section F of instructions)

- A narrative has been prepared as described in Section F of the instructions and is attached.

The applicant may choose to include additional information beyond that required by Section F of the instructions.

G. PROPOSED WASTEWATER DISPOSAL FACILITIES (See Section G of instructions)

Check all boxes that apply, and provide information on collection, conveyance and treatment facilities and EDU's served. This information will be used to determine consistency with Chapter 93 (relating to wastewater treatment requirements).

1. COLLECTION SYSTEM

a. Check appropriate box concerning collection system

<input checked="" type="checkbox"/> New collection system	<input checked="" type="checkbox"/> Pump Station	<input checked="" type="checkbox"/> Force Main
<input type="checkbox"/> Grinder pump(s)	<input type="checkbox"/> Extension to existing collection system	<input type="checkbox"/> Expansion of existing facility

Clean Streams Law Permit Number 0

b. Answer questions below on collection system

Number of EDU's and proposed connections to be served by collection system. EDU's 47

Connections 47

Name of:

existing collection or conveyance system NA

owner NA

existing interceptor NA

owner NA

2. WASTEWATER TREATMENT FACILITY

Check all boxes that apply, and provide information on collection, conveyance and treatment facilities and EDU's served. This information will be used to determine consistency with Chapter(s) 91 (relating to general provisions), 92 (relating to national Pollution Discharge Elimination System permitting, monitoring and compliance) and 93 (relating to water quality standards).

a. Check appropriate box and provide requested information concerning the treatment facility

<input checked="" type="checkbox"/> New facility	<input type="checkbox"/> Existing facility	<input type="checkbox"/> Upgrade of existing facility	<input type="checkbox"/> Expansion of existing facility
--	--	---	---

Name of existing facility NA

NPDES Permit Number for existing facility 0

Clean Streams Law Permit Number NA

Location of discharge point for a new facility. Latitude 40.084311 Longitude -78.302571

b. The following certification statement must be completed and signed by the wastewater treatment facility permittee or their representative.

As an authorized representative of the permittee, I confirm that the _____
(Name from above) sewage treatment facilities can accept sewage flows from this project without adversely affecting the facility's ability to achieve all applicable technology and water quality based effluent limits (see Section I) and conditions contained in the NPDES permit identified above.

Name of Permittee Agency, Authority, Municipality _____

Name of Responsible Agent _____

Agent Signature _____ Date _____

(Also see Section I. 4.)

G. PROPOSED WASTEWATER DISPOSAL FACILITIES (Continued)

3. PLOT PLAN

The following information is to be submitted on a plot plan of the proposed subdivision.

- a. Existing and proposed buildings.
- b. Lot lines and lot sizes.
- c. Adjacent lots.
- d. Remainder of tract.
- e. Existing and proposed sewerage facilities. Plot location of discharge point, land application field, spray field, COLDS, or LVCOLDS if a new facility is proposed.
- f. Show tap-in or extension to the point of connection to existing collection system (if applicable).
- g. Existing and proposed water supplies and surface water (wells, springs, ponds, streams, etc.)
- h. Existing and proposed rights-of-way.
- i. Existing and proposed buildings, streets, roadways, access roads, etc.
- j. Any designated recreational or open space area.
- k. Wetlands - from National Wetland Inventory Mapping and USGS Hydric Soils Mapping.
- l. Flood plains or Flood prone areas, floodways, (Federal Flood Insurance Mapping)
- m. Prime Agricultural Land.
- n. Any other facilities (pipelines, power lines, etc.)
- o. Orientation to north.
- p. Locations of all site testing activities (soil profile test pits, slope measurements, permeability test sites, background sampling, etc. (if applicable).
- q. Soils types and boundaries when a land based system is proposed.
- r. Topographic lines with elevations when a land based system is proposed

4. WETLAND PROTECTION

YES NO

- a. Are there wetlands in the project area? If yes, ensure these areas appear on the plot plan as shown in the mapping or through on-site delineation.
- b. Are there any construction activities (encroachments, or obstructions) proposed in, along, or through the wetlands? If yes, Identify any proposed encroachments on wetlands and identify whether a General Permit or a full encroachment permit will be required. If a full permit is required, address time and cost impacts on the project. Note that wetland encroachments should be avoided where feasible. Also note that a feasible alternative **MUST BE SELECTED** to an identified encroachment on an exceptional value wetland as defined in Chapter 105. Identify any project impacts on streams classified as HQ or EV and address impacts of the permitting requirements of said encroachments on the project.

5. PRIME AGRICULTURAL LAND PROTECTION

YES NO

- Will the project involve the disturbance of prime agricultural lands?

If yes, coordinate with local officials to resolve any conflicts with the local prime agricultural land protection program. The project must be consistent with such municipal programs before the sewage facilities planning module package may be submitted to DEP.

If no, prime agricultural land protection is not a factor to this project.

- Have prime agricultural land protection issues been settled?

6. HISTORIC PRESERVATION ACT

- Applicants shall coordinate with the State Historic and Preservation Office (SHPO) and the Pennsylvania Historic and Museum Commission (PHMC) using the PA-SHARE online consultation tool at <https://www.pa.gov/agencies/phmc/pa-share.html>. The planning submittal must include the response received by the applicant from PA-SHARE.

7. PROTECTION OF RARE, ENDANGERED OR THREATENED SPECIES

Check one:

The "Pennsylvania Natural Diversity Inventory (PNDI) Project Environmental Review Receipt" resulting from my search of the PNDI database and all supporting documentation from jurisdictional agencies (when necessary) is/are attached.

A Manual Project Submission Form was submitted to each jurisdictional agency and their responses are attached.

A concurrent review has been requested. I realize that all supporting documentation from each jurisdictional agency must be submitted to the DEP before the end of the technical review due date or my planning module may be denied.

Applicant or Consultant Initials DMC .

H. ALTERNATIVE SEWAGE FACILITIES ANALYSIS (See Section H of instructions)

An alternative sewage facilities analysis has been prepared as described in Section H of the attached instructions and is attached to this component.

The applicant may choose to include additional information beyond that required by Section H of the attached instructions.

I. COMPLIANCE WITH WATER QUALITY STANDARDS AND EFFLUENT LIMITATIONS (See Section I of instructions) (Check and complete all that apply.)

1. Waters designated for Special Protection

The proposed project will result in a new or increased discharge into special protection waters as identified in Title 25, Pennsylvania Code, Chapter 93. The Social or Economic Justification (SEJ) required by Section 93.4c. is attached.

2. Pennsylvania Waters Designated As Impaired

The proposed project will result in a new or increased discharge of a pollutant into waters that DEP has identified as being impaired by that pollutant. A pre-planning meeting was held with the appropriate DEP regional office staff to discuss water quality based discharge limitations.

3. Interstate and International Waters

The proposed project will result in a new or increased discharge into interstate or international waters. A pre-planning meeting was held with the appropriate DEP regional office staff to discuss effluent limitations necessary to meet the requirements of the interstate or international compact.

4. Tributaries To The Chesapeake Bay

The proposed project result in a new or increased discharge of sewage into a tributary to the Chesapeake Bay. This proposal for a new sewage treatment facility or new flows to an existing facility includes total nitrogen and total phosphorus in the following amounts: _____ pounds of TN per year, and _____ pounds of TP per year. Based on the process design and effluent limits, the total nitrogen treatment capacity of the wastewater treatment facility is _____ pounds per year and the total phosphorus capacity is _____ pounds per year as determined by the wastewater treatment facility permittee. The permittee has determined that the additional TN and TP to be contributed by this project (as modified by credits and/or offsets to be provided) will not cause the discharge to exceed the annual total mass limits for these parameters. Documentation of compliance with nutrient allocations is attached.

Name of Permittee Agency, Authority, Municipality _____

Initials of Responsible Agent (See Section G 2.b) _____

See *Special Instructions* (Form 3800-FM-BPNPSM0353-1) for additional information on Chesapeake Bay watershed requirements.

J. CHAPTER 94 CONSISTENCY DETERMINATION (See Section J of instructions)

Projects that propose the use of existing municipal collection, conveyance or wastewater treatment facilities, or the construction of collection and conveyance facilities to be served by existing municipal wastewater treatment facilities must be consistent with the requirements of Title 25, Chapter 94 (relating to Municipal Wasteload Management). If not previously included in Section F, include a general map showing the path of the sewage to the treatment facility. If more than one municipality or authority will be affected by the project, please obtain the information required in this section for each. Additional sheets may be attached for this purpose.

1. Project Flows _____ gpd

2. Total Sewage Flows to Facilities (pathway from point of origin through treatment plant)

When providing "treatment facilities" sewage flows, use Annual Average Daily Flow for "average" and Maximum Monthly Average Daily Flow for "peak" in all cases. For "peak flows" in "collection" and "conveyance" facilities, indicate whether these flows are "peak hourly flow" or "peak instantaneous flow" and how this figure was derived (i.e., metered, measured, estimated, etc.).

- a. Enter average and peak sewage flows for each proposed or existing facility as designed or permitted.
- b. Enter the average and peak sewage flows for the most restrictive sections of the existing sewage facilities.
- c. Enter the average and peak sewage flows, projected for 5 years (2 years for pump stations) through the most restrictive sections of the existing sewage facilities. Include existing, proposed (this project) and future project (other approved projects) flows.

To complete the table, refer to the instructions, Section J.

	a. Design and/or Permitted Capacity (gpd)		b. Present Flows (gpd)		c. Projected Flows in 5 years (gpd) (2 years for P.S.)	
	Average	Peak	Average	Peak	Average	Peak
Collection						
Conveyance						
Treatment						

3. Collection and Conveyance Facilities

The questions below are to be answered by the sewer authority, municipality, or agency responsible for completing the Chapter 94 report for the collection and conveyance facilities. These questions should be answered in coordination with the latest Chapter 94 annual report and the above table. The individual(s) signing below must be legally authorized to make representation for the organization.

YES NO

a. This project proposes sewer extensions or tap-ins. Will these actions create a hydraulic overload within five years on any existing collection or conveyance facilities that are part of the system?

If yes, this sewage facilities planning module will not be accepted for review by the municipality, delegated local agency and/or DEP until all inconsistencies with Chapter 94 are resolved or unless there is an approved Corrective Action Plan (CAP) granting an allocation for this project. A letter granting allocations to this project under the CAP must be attached to the module package.

If no, a representative of the sewer authority, municipality, or agency responsible for completing the Chapter 94 report for the collection and conveyance facilities must sign below to indicate that the collection and conveyance facilities have adequate capacity and are able to provide service to the proposed development in accordance with both §71.53(d)(3) and Chapter 94 requirements and that this proposal will not affect that status.

b. Collection System

Name of Agency, Authority, Municipality _____

Name of Responsible Agent _____

Agent Signature _____ Date _____

J. CHAPTER 94 CONSISTENCY DETERMINATION (See Section J of instructions)

c. Conveyance System

Name of Agency, Authority, Municipality _____

Name of Responsible Agent _____

Agent Signature _____

Date _____

4. Treatment Facility

The questions below are to be answered by a representative of the facility permittee in coordination with the information in the table and the latest Chapter 94 report. The individual signing below must be legally authorized to make representation for the organization.

YES NO

a. This project proposes the use of an existing wastewater treatment plant for the disposal of sewage. Will this action create a hydraulic or organic overload within 5 years at that facility?

If yes, this planning module for sewage facilities will not be reviewed by the municipality, delegated local agency and/or DEP until this inconsistency with Chapter 94 is resolved or unless there is an approved CAP granting an allocation for this project. A letter granting allocations to this project under the CAP must be attached to the planning module.

If no, the treatment facility permittee must sign below to indicate that this facility has adequate treatment capacity and is able to provide wastewater treatment services for the proposed development in accordance with both §71.53(d)(3) and Chapter 94 requirements and that this proposal will not impact that status.

b. Name of Agency, Authority, Municipality _____

Name of Responsible Agent _____

Agent Signature _____

Date _____

K. TREATMENT AND DISPOSAL OPTIONS (See Section K of instructions)

This section is for land development projects that propose construction of wastewater treatment facilities. Please note that, since these projects require permits issued by DEP, these projects may **NOT** receive final planning approval from a delegated local agency. Delegated local agencies must send these projects to DEP for final planning approval.

Check the appropriate box indicating the selected treatment and disposal option.

- 1. Spray irrigation (other than individual residential spray systems (IRISIS)) or other land application is proposed, and the information requested in Section K.1. of the planning module instructions are attached.
- 2. Recycle and reuse is proposed and the information requested in Section K-2 of the planning module instructions is attached.
- 3. A discharge to a dry stream channel is proposed, and the information requested in Section K.3. of the planning module instructions are attached.
- 4. A discharge to a perennial surface water body is proposed, and the information requested in Section K.4. of the planning module instructions are attached.

L. PERMEABILITY TESTING (See Section L of instructions)

- The information required in Section L of the instructions is attached.

M. PRELIMINARY HYDROGEOLOGIC STUDY (See Section M of instructions)

- The information required in Section M of the instructions is attached.

N. DETAILED HYDROGEOLOGIC STUDY (See Section N of instructions)

The detailed hydrogeologic information required in Section N. of the instructions is attached.

O. SEWAGE MANAGEMENT (See Section O of instructions)

(1-3 for completion by the developer(project sponser), 4-5 for completion by the non-municipal facility agent and 6 for completion by the municipality)

Yes No

1. Is connection to, or construction of, a DEP permitted, non-municipal sewage facility or a local agency permitted, community onlot sewage facility proposed.

If Yes, respond to the following questions, attach the supporting analysis, and an evaluation of the options available to assure long-term proper operation and maintenance of the proposed non-municipal facilities. If No, skip the remainder of Section O.

2. Project Flows _____ gpd

Yes No

3. Is the use of nutrient credits or offsets a part of this project?

If yes, attach a letter of intent to purchase the necessary credits and describe the assurance that these credits and offsets will be available for the remaining design life of the non-municipal sewage facility;

(For completion by non-municipal facility agent)

4. Collection and Conveyance Facilities

The questions below are to be answered by the organization/individual responsible for the non-municipal collection and conveyance facilities. The individual(s) signing below must be legally authorized to make representation for the organization.

Yes No

a. If this project proposes sewer extensions or tap-ins, will these actions create a hydraulic overload on any existing collection or conveyance facilities that are part of the system?

If yes, this sewage facilities planning module will not be accepted for review by the municipality, delegated local agency and/or DEP until this issue is resolved.

If no, a representative of the organization responsible for the collection and conveyance facilities must sign below to indicate that the collection and conveyance facilities have adequate capacity and are able to provide service to the proposed development in accordance with Chapter 71 §71.53(d)(3) and that this proposal will not affect that status.

b. Collection System

Name of Responsible Organization _____

Name of Responsible Agent _____

Agent Signature _____

Date _____

c. Conveyance System

Name of Responsible Organization _____

Name of Responsible Agent _____

Agent Signature _____

Date _____

5. Treatment Facility

The questions below are to be answered by a representative of the facility permittee. The individual signing below must be legally authorized to make representation for the organization.

Yes No

a. If this project proposes the use of an existing non-municipal wastewater treatment plant for the disposal of sewage, will this action create a hydraulic or organic overload at that facility?

If yes, this planning module for sewage facilities will not be reviewed by the municipality, delegated local agency and/or DEP until this issue is resolved.

If no, the treatment facility permittee must sign below to indicate that this facility has adequate treatment capacity and is able to provide wastewater treatment services for the proposed development in accordance with §71.53(d)(3) and that this proposal will not impact that status.

b. Name of Facility _____

Name of Responsible Agent _____

Agent Signature _____

Date _____

(For completion by the municipality)

6. The **SELECTED OPTION** necessary to assure long-term proper operation and maintenance of the proposed non-municipal facilities is clearly identified with documentation attached in the planning module package.

P. PUBLIC NOTIFICATION REQUIREMENT (See Section P of instructions)

This section must be completed to determine if the applicant will be required to publish facts about the project in a newspaper of general circulation to provide a chance for the general public to comment on proposed new land development projects. This notice may be provided by the applicant or the applicant's agent, the municipality or the local agency by publication in a newspaper of general circulation within the municipality affected. Where an applicant or an applicant's agent provides the required notice for publication, the applicant or applicant's agent shall notify the municipality or local agency and the municipality and local agency will be relieved of the obligation to publish. The required content of the publication notice is found in Section P of the instructions.

To complete this section, each of the following questions must be answered with a "yes" or "no". Newspaper publication is required if any of the following are answered "yes".

Yes No

1. Does the project propose the construction of a sewage treatment facility ?
2. Will the project change the flow at an existing sewage treatment facility by more than 50,000 gallons per day?
3. Will the project result in a public expenditure for the sewage facilities portion of the project in excess of \$100,000?
4. Will the project lead to a major modification of the existing municipal administrative organizations within the municipal government?
5. Will the project require the establishment of *new* municipal administrative organizations within the municipal government?
6. Will the project result in a subdivision of 50 lots or more? (onlot sewage disposal only)
7. Does the project involve a major change in established growth projections?
8. Does the project involve a different land use pattern than that established in the municipality's Official Sewage Plan?

P. PUBLIC NOTIFICATION REQUIREMENT cont'd. (See Section P of instructions)

9. Does the project involve the use of large volume onlot sewage disposal systems (Flow > 10,000 gpd)?
10. Does the project require resolution of a conflict between the proposed alternative and consistency requirements contained in §71.21(a)(5)(i), (ii), (iii)?
11. Will sewage facilities discharge into high quality or exceptional value waters?

Attached is a copy of:
 the public notice,
 all comments received as a result of the notice,
 the municipal response to these comments.

No comments were received. A copy of the public notice is attached.

Q. FALSE SWEARING STATEMENT (See Section Q of instructions)

I verify that the statements made in this component are true and correct to the best of my knowledge, information and belief. I understand that false statements in this component are made subject to the penalties of 18 PA C.S.A. §4904 relating to unsworn falsification to authorities.

Donald Hedge, Jr.

Name (Print)

Signature

Chairman

Title

Date

124 Hitchens Road, P.O. Box 57, Defiance, PA 16633

814-928-5253

Address

Telephone Number

R. REVIEW FEE (See Section R of instructions)

The Sewage Facilities Act establishes a fee for the DEP planning module review. DEP will calculate the review fee for the project and invoice the project sponsor **OR** the project sponsor may attach a self-calculated fee payment to the planning module prior to submission of the planning package to DEP. (Since the fee and fee collection procedures may vary if a "delegated local agency" is conducting the review, the project sponsor should contact the "delegated local agency" to determine these details.) Check the appropriate box.

I request DEP calculate the review fee for my project and send me an invoice for the correct amount. I understand DEP's review of my project will not begin until DEP receives the correct review fee from me for the project.

I have calculated the review fee for my project using the formula found below and the review fee guidance in the instructions. I have attached a check or money order in the amount of \$ _____ payable to "Commonwealth of PA, DEP". Include DEP code number on check. I understand DEP will not begin review of my project unless it receives the fee and determines the fee is correct. If the fee is incorrect, DEP will return my check or money order, send me an invoice for the correct amount. I understand DEP review will NOT begin until I have submitted the correct fee.

I request to be exempt from the DEP planning module review fee because this planning module creates **only** one new lot and is the **only** lot subdivided from a parcel of land as that land existed on December 14, 1995. I realize that subdivision of a second lot from this parcel of land shall disqualify me from this review fee exemption. I am furnishing the following deed reference information in support of my fee exemption.

County Recorder of Deeds for _____ County, Pennsylvania

Deed Volume _____ Book Number _____

Page Number _____ Date Recorded _____

R. REVIEW FEE (continued)

Formula:

1. For a new collection system (with or without a Clean Streams Law Permit), a collection system extension, or individual tap-ins to an existing collection system use this formula.

_____ Lots (or EDUs) X \$50.00 = \$ _____

The fee is based upon:

- The number of lots created or number of EDUs whichever is higher.
- For community sewer system projects, one EDU is equal to a sewage flow of 400 gallons per day.

2. For a surface or subsurface discharge system, use the appropriate one of these formulae.

- A. A new surface discharge greater than 2000 gpd will use a flat fee:

\$ 1,500 per submittal (non-municipal)
\$ 500 per submittal (municipal)

- B. An increase in an existing surface discharge will use:

_____ Lots (or EDUs) X \$35.00 = \$ _____

to a maximum of \$ 1,500 per submittal (non-municipal) or \$ 500 per submittal (municipal)

The fee is based upon:

- The number of lots created or number of EDUs whichever is higher.
- For community sewage system projects one EDU is equal to a sewage flow of 400 gallons per day.
- For non-single family residential projects, EDUs are calculated using projected population figures

- C. A sub-surface discharge system that requires a permit under The Clean Streams Law will use a flat fee:

\$ 1,500 per submittal (non-municipal)
\$ 500 per submittal (municipal)

SEWAGE FACILITIES PLANNING MODULE – 4A

COMPONENT 4A – MUNICIPAL PLANNING AGENCY

Broad Top Township does not have its own municipal planning agency and defers all planning reviews to the Bedford County Planning Agency. Accordingly, local planning review for this project will be conducted by the Bedford County Planning Agency.

As a result, a Sewage Facilities Planning Module – Component 4A is not applicable and will not be included with this plan amendment. Instead, Component 4B will provide all necessary information required for the planning agency's review and will serve in place of the 4A.

SEWAGE FACILITIES PLANNING MODULE – 4B

INSTRUCTIONS FOR COMPLETING COMPONENT 4B COUNTY PLANNING AGENCY REVIEW (or Planning Agency with Areawide Jurisdiction)

Remove and recycle these instructions prior to mailing component to the approving agency.

Background

This component, Component 4, is used to obtain the comments of planning agencies and/or health departments having jurisdiction over the project area. It is used in conjunction with other planning module components appropriate to the characteristics of the project proposed.

Who Should Complete the Component?

The component should be completed by any existing municipal planning agency, county planning agency, planning agency with areawide jurisdiction, and/or health department having jurisdiction over the project site. It is divided into sections to allow for convenient use by the appropriate agencies.

The project sponsor must forward copies of this component, along with supporting components and data, to the appropriate planning agency(ies) and health department(s) (if any) having jurisdiction over the development site. These agencies are responsible for responding to the questions in their respective sections of Component 4, as well as providing whatever additional comments they may wish to provide on the project plan. After the agencies have completed their review, the component will be returned to the applicant. The agencies have 60 days in which to provide comments to the applicant. If the agencies fail to comment within this 60 day period, the applicant may proceed to the next stage of the review without the comments. The use of registered mail or certified mail (return receipt requested) by the applicant when forwarding the module package to the agencies will document a date of receipt.

After receipt of the completed Component 4 from the planning agencies, or following expiration of the 60 day period without comments, the applicant must submit the entire component package to the municipality having jurisdiction over the project area for review and action. If approved by the municipality, the proposed plan, along with the municipal action, will be forwarded to the approving agency (Department of Environmental Protection or delegated local agency). The approving agency, in turn, will either approve the proposed plan, return it as incomplete, or disapprove the plan, based upon the information provided.

Instructions for Completing Planning Agency and/or Health Department Review Component

Section A. Project Name

Enter the project name as it appears on the accompanying sewage facilities planning module component (Component 2, 3, 3s or 3m).

Section B. Review Schedule

Enter the date the package was received by the reviewing agency, and the date that the review was completed.

Section C. Agency Review

1. Answer the yes/no questions and provide any descriptive information necessary on the lines provided. Attach additional sheets, if necessary.
2. Complete the name, title, and signature block.

Section D. Additional Comments

The Agency may provide whatever additional comment(s) it deems necessary, as described in the form. Attach additional sheets, if necessary.

SEWAGE FACILITIES PLANNING MODULE

COMPONENT 4B - COUNTY PLANNING AGENCY REVIEW

(or Planning Agency with Areawide Jurisdiction)

Note to Project Sponsor: To expedite the review of your proposal, one copy of your completed planning package and one copy of this *Planning Agency Review Component* should be sent to the county planning agency or planning agency with areawide jurisdiction for their comments.

SECTION A. PROJECT NAME (See Section A of instructions)

Project Name _____

SECTION B. REVIEW SCHEDULE (See Section B of instructions)

1. Date plan received by county planning agency _____
2. Date plan received by planning agency with areawide jurisdiction _____
Agency name _____
3. Date review completed by agency _____

SECTION C. AGENCY REVIEW (See Section C of instructions)

Yes No

<input type="checkbox"/> <input type="checkbox"/> 1. Is there a county or areawide comprehensive plan adopted under the Municipalities Planning Code (53 P.S. 10101 et seq.)? <input type="checkbox"/> <input type="checkbox"/> 2. Is this proposal consistent with the comprehensive plan for land use? <input type="checkbox"/> <input type="checkbox"/> 3. Does this proposal meet the goals and objectives of the plan? If no, describe goals and objectives that are not met _____
<input type="checkbox"/> <input type="checkbox"/> 4. Is this proposal consistent with the use, development, and protection of water resources? If no, describe inconsistency _____
<input type="checkbox"/> <input type="checkbox"/> 5. Is this proposal consistent with the county or areawide comprehensive land use planning relative to Prime Agricultural Land Preservation? If no, describe inconsistencies: _____
<input type="checkbox"/> <input type="checkbox"/> 6. Does this project propose encroachments, obstructions, or dams that will affect wetlands? If yes, describe impact _____
<input type="checkbox"/> <input type="checkbox"/> 7. Will any known historical or archeological resources be impacted by this project? If yes, describe impacts _____
<input type="checkbox"/> <input type="checkbox"/> 8. Will any known endangered or threatened species of plant or animal be impacted by the development project? If yes, describe impacts _____
<input type="checkbox"/> <input type="checkbox"/> 9. Is there a county or areawide zoning ordinance? <input type="checkbox"/> <input type="checkbox"/> 10. Does this proposal meet the zoning requirements of the ordinance? If no, describe inconsistencies _____

SECTION C. AGENCY REVIEW (continued)

Yes No

11. Have all applicable zoning approvals been obtained?

12. Is there a county or areawide subdivision and land development ordinance?

13. Does this proposal meet the requirements of the ordinance?
If no, describe which requirements are not met _____

14. Is this proposal consistent with the municipal Official Sewage Facilities Plan?
If no, describe inconsistency _____

15. Are there any wastewater disposal needs in the area adjacent to this proposal that should be considered by the municipality?
If yes, describe _____

16. Has a waiver of the sewage facilities planning requirements been requested for the residual tract of this subdivision?
If yes, is the proposed waiver consistent with applicable ordinances.
If no, describe the inconsistencies _____

17. Does the county have a stormwater management plan as required by the Stormwater Management Act?
If yes, will this project plan require the implementation of storm water management measures?

18. Name, Title and signature of person completing this section:

Name: _____

Title: _____

Signature: _____

Date: _____

Name of County or Areawide Planning Agency: _____

Address: _____

Telephone Number: _____

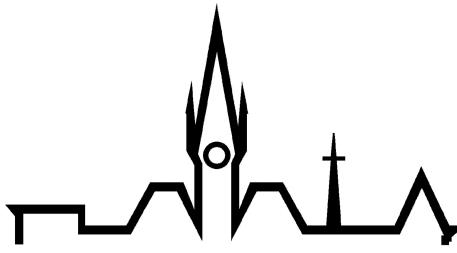
SECTION D. ADDITIONAL COMMENTS (See Section D of instructions)

This component does not limit county planning agencies from making additional comments concerning the relevancy of the proposed plan to other plans or ordinances. If additional comments are needed, attach additional sheets.

The county planning agency must complete this component within 60 days.

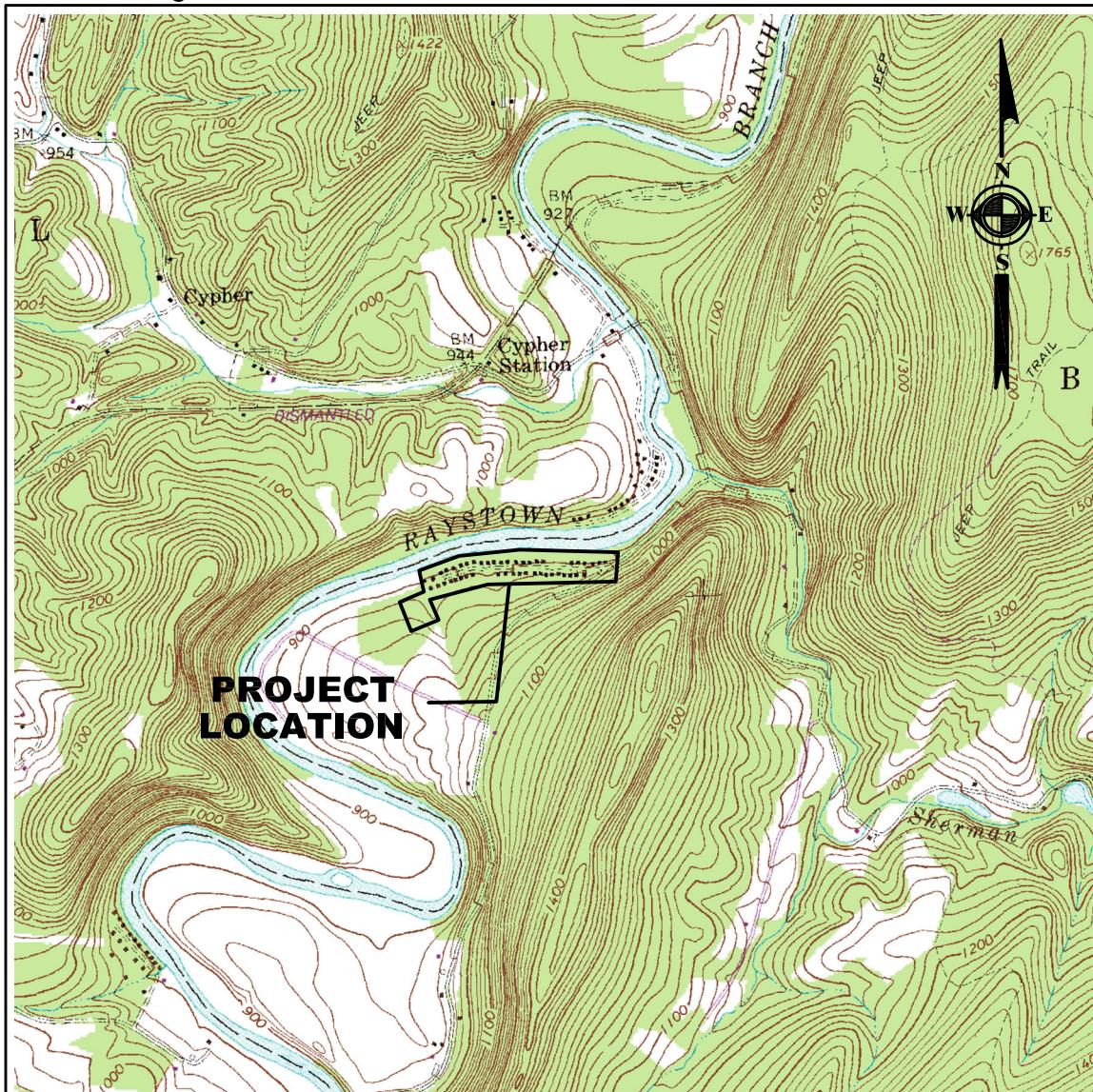
This component and any additional comments are to be returned to the applicant.

LOCATION MAP



KELLER ENGINEERS
CIVIL • STRUCTURAL • SURVEY
www.keller-engineers.com

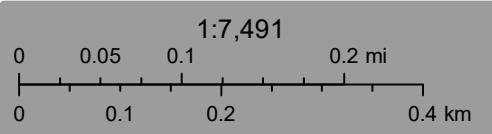
USGS



PROJECT:	CYPER BEACH SEWAGE PLANNING		
LOCATION:	BROAD TOP TOWNSHIP, BEDFORD COUNTY		
U.S.G.S. QUADRANGLE:	EVERETT EAST, PA		
PROJECT NO.:	3463-5	SCALE: 1"=2000' 2000' 0' 2000'	
FILE NAME:	LOCATION MAP.DWG		

WETLAND INVENTORY MAP

Cypher Beach



U.S. Fish and Wildlife Service, National Standards and Support Team,
wetlands_team@fws.gov

June 21, 2024

Wetlands

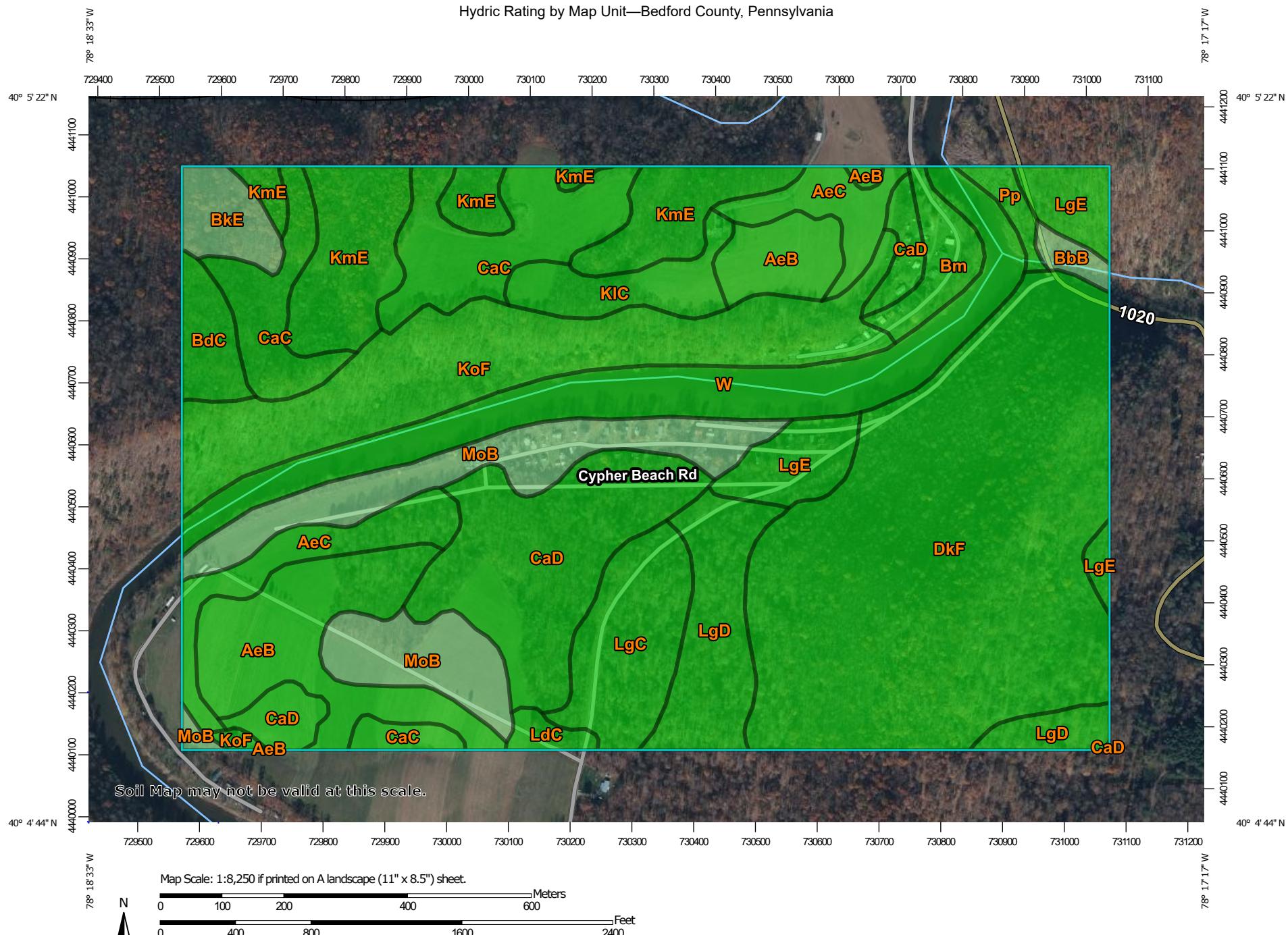
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

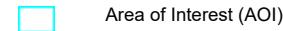
HYDRIC SOIL MAP

Hydric Rating by Map Unit—Bedford County, Pennsylvania



MAP LEGEND

Area of Interest (AOI)



Area of Interest (AOI)

Soils

Soil Rating Polygons

Hydric (100%)

Hydric (66 to 99%)

Hydric (33 to 65%)

Hydric (1 to 32%)

Not Hydric (0%)

Not rated or not available

Soil Rating Lines

Hydric (100%)

Hydric (66 to 99%)

Hydric (33 to 65%)

Hydric (1 to 32%)

Not Hydric (0%)

Not rated or not available

Soil Rating Points

Hydric (100%)

Hydric (66 to 99%)

Hydric (33 to 65%)

Hydric (1 to 32%)

Not Hydric (0%)

Not rated or not available

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Bedford County, Pennsylvania

Survey Area Data: Version 18, Sep 4, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Nov 8, 2020—Nov 9, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.



Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
AeB	Allegheny loam, 3 to 8 percent slopes	0	24.7	7.0%
AeC	Allegheny loam, 8 to 15 percent slopes	0	13.8	3.9%
BbB	Basher-Birdsboro complex, 0 to 8 percent slopes	5	1.6	0.5%
BdC	Bedington-Berks complex, 8 to 15 percent slopes, very stony	0	4.7	1.3%
BkE	Berks channery silt loam, 25 to 35 percent slopes	2	5.1	1.4%
Bm	Birdsboro silt loam, rarely flooded	0	5.1	1.4%
CaC	Calvin channery silt loam, 8 to 15 percent slopes	0	23.8	6.8%
CaD	Calvin channery silt loam, 15 to 25 percent slopes	0	29.8	8.5%
DkF	Dystrocrepts-Rock outcrop complex, 35 to 70 percent slopes	0	81.6	23.3%
KIC	Klinesville channery silt loam, 8 to 15 percent slopes	0	7.2	2.0%
KmE	Klinesville and Calvin soils, 25 to 50 percent slopes	0	23.1	6.6%
KoF	Klinesville-Rock outcrop complex, 35 to 80 percent slopes	0	34.8	9.9%
LdC	Laidig cobbley loam, 8 to 15 percent slopes	0	1.7	0.5%
LgC	Laidig cobbley loam, 8 to 15 percent slopes, extremely stony	0	13.1	3.7%
LgD	Laidig cobbley loam, 15 to 25 percent slopes, extremely stony	0	15.4	4.4%
LgE	Laidig cobbley loam, 25 to 35 percent slopes, extremely stony	0	10.6	3.0%

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
MoB	Monongahela silt loam, 3 to 8 percent slopes	3	25.3	7.2%
Pp	Pope fine sandy loam	0	1.9	0.5%
W	Water	0	27.6	7.9%
Totals for Area of Interest			350.8	100.0%

Description

This rating indicates the percentage of map units that meets the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor nonhydric components in the higher positions on the landform, and map units that are made up dominantly of nonhydric soils may have small areas of minor hydric components in the lower positions on the landform. Each map unit is rated based on its respective components and the percentage of each component within the map unit.

The thematic map is color coded based on the composition of hydric components. The five color classes are separated as 100 percent hydric components, 66 to 99 percent hydric components, 33 to 65 percent hydric components, 1 to 32 percent hydric components, and less than one percent hydric components.

In Web Soil Survey, the Summary by Map Unit table that is displayed below the map pane contains a column named 'Rating'. In this column the percentage of each map unit that is classified as hydric is displayed.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

References:

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.

Soil Survey Staff. 2006. Keys to soil taxonomy. 10th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.

Rating Options

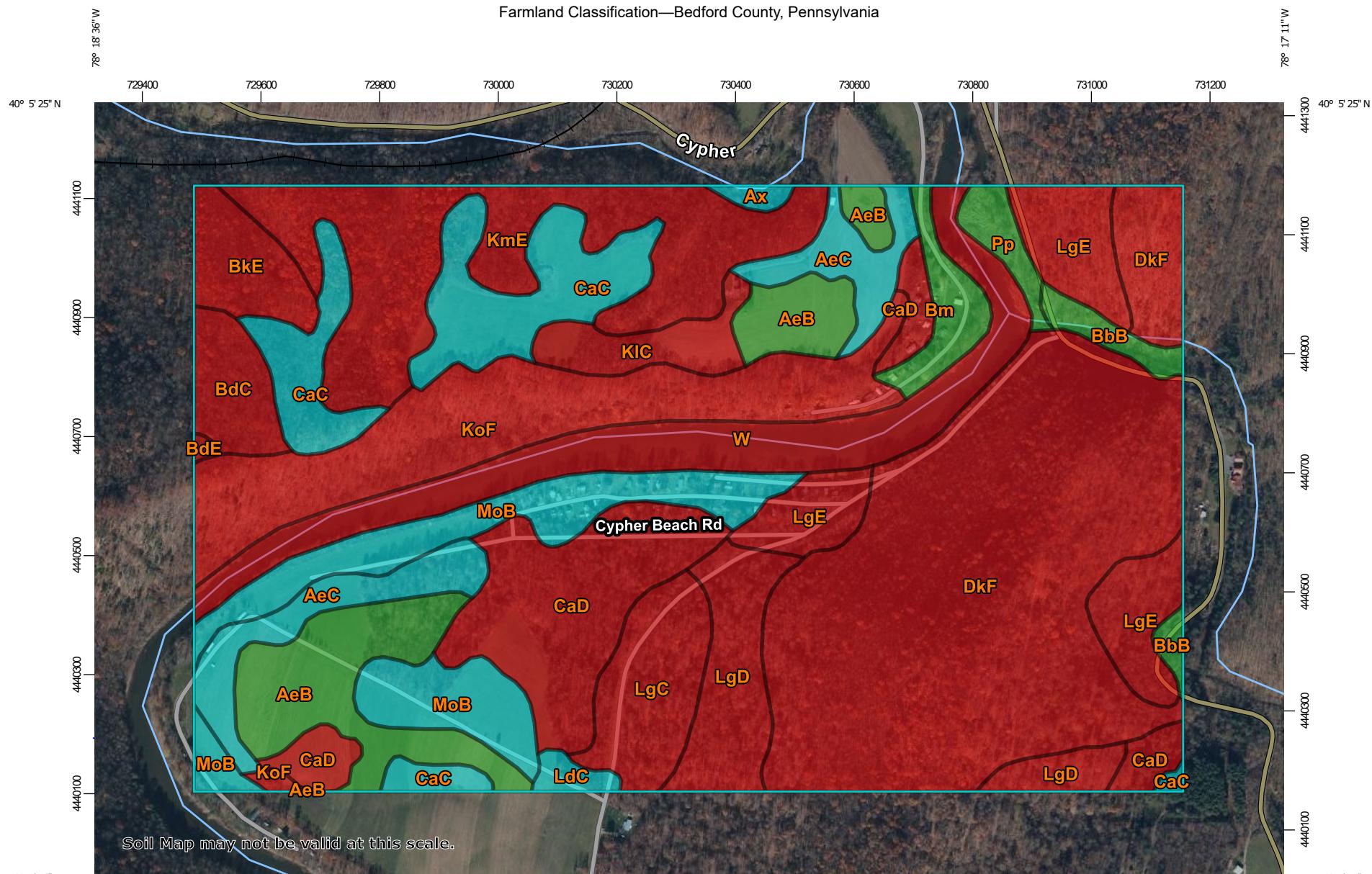
Aggregation Method: Percent Present

Component Percent Cutoff: None Specified

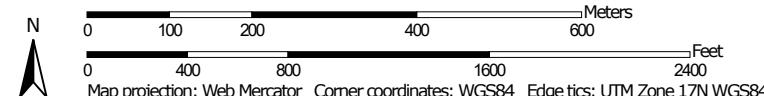
Tie-break Rule: Lower

PRIME AGRICULTURAL FARMLAND MAP AND CORRESPONDENCE

Farmland Classification—Bedford County, Pennsylvania



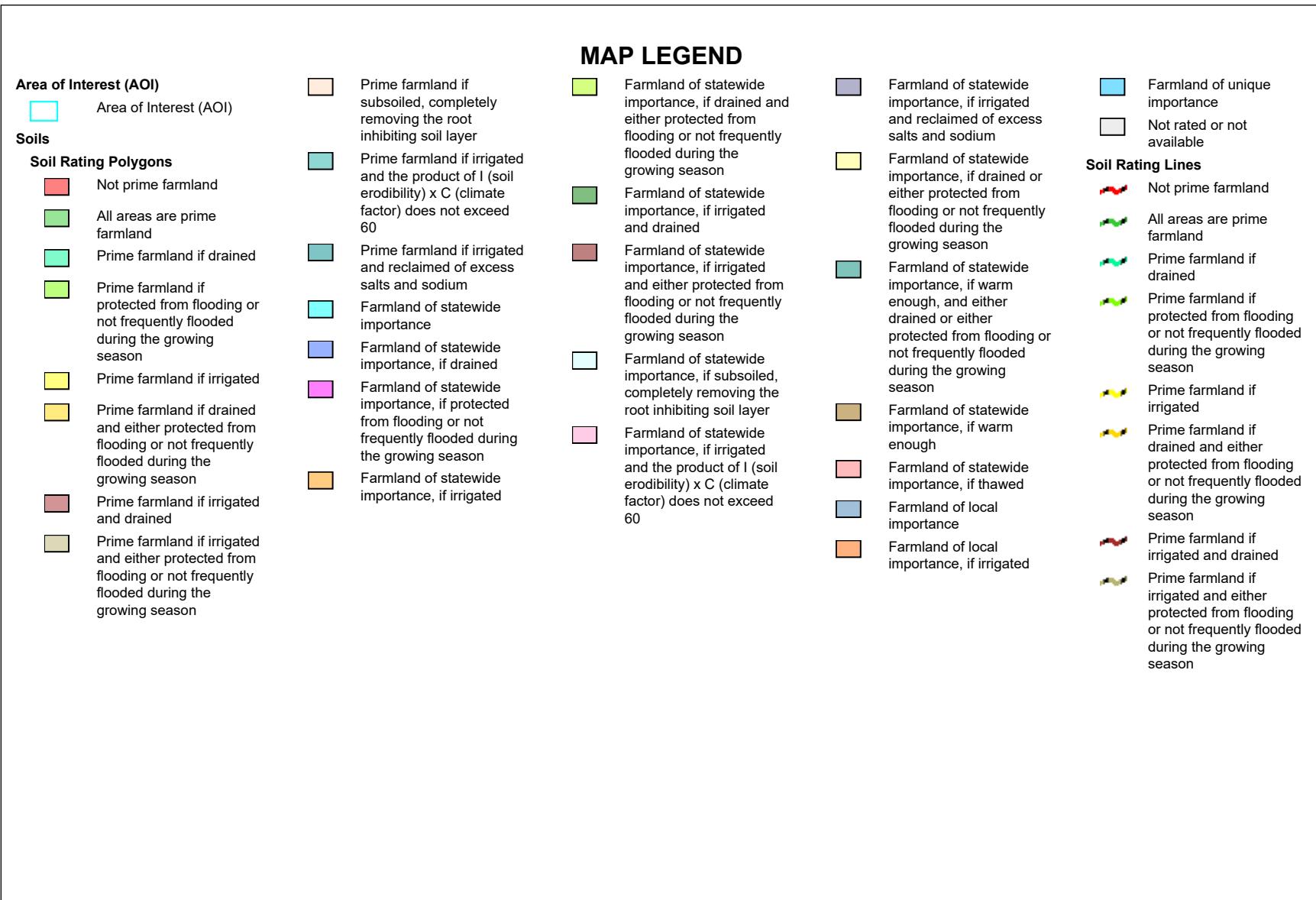
Map Scale: 1:9,170 if printed on A landscape (11" x 8.5") sheet.



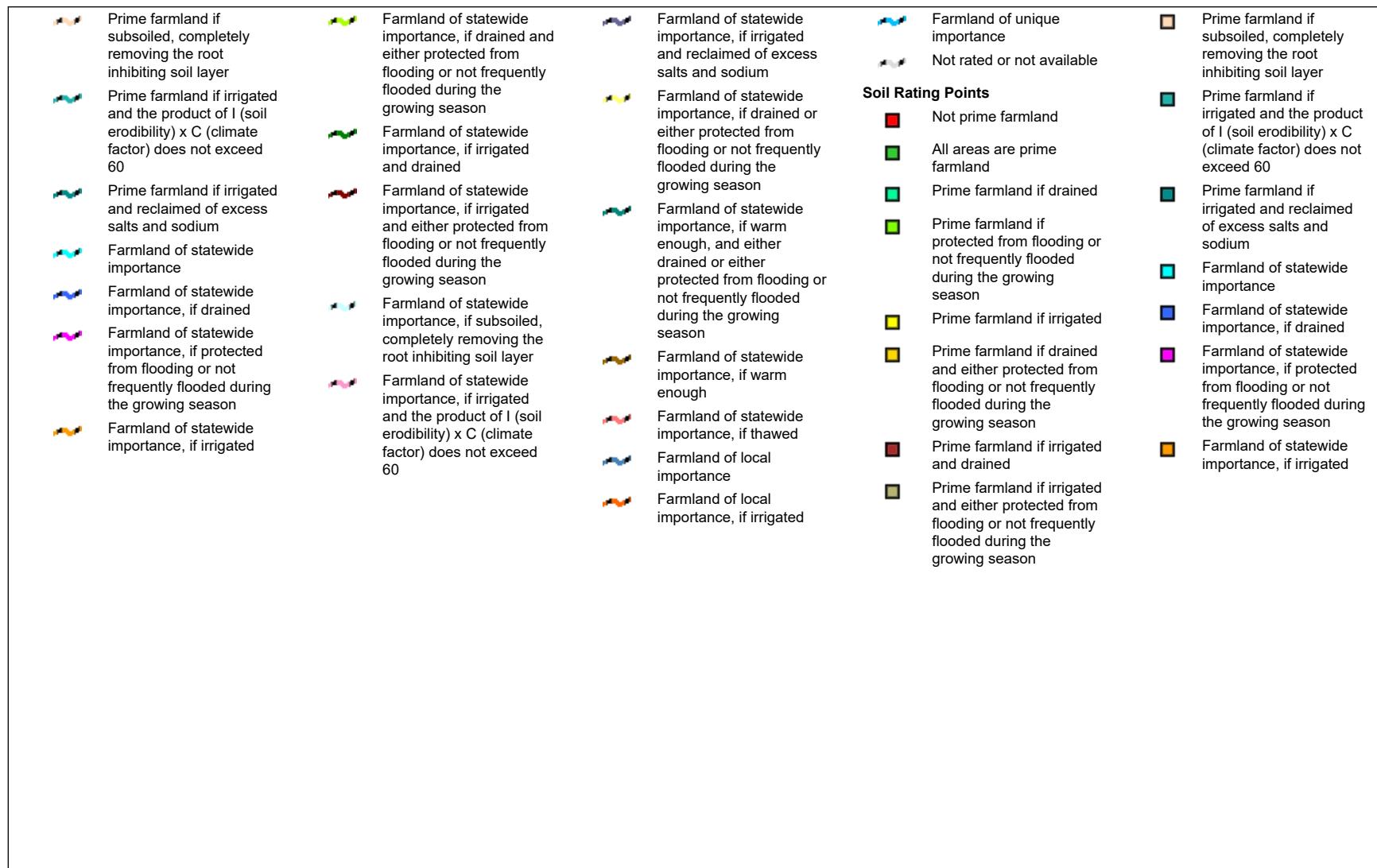
Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

6/24/2024
Page 1 of 6



Farmland Classification—Bedford County, Pennsylvania



Farmland Classification—Bedford County, Pennsylvania

<ul style="list-style-type: none"> Farmland of statewide importance, if drained and either protected from flooding or not frequently flooded during the growing season Farmland of statewide importance, if irrigated and drained Farmland of statewide importance, if irrigated and either protected from flooding or not frequently flooded during the growing season Farmland of statewide importance, if subsoiled, completely removing the root inhibiting soil layer Farmland of statewide importance, if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60 	<ul style="list-style-type: none"> Farmland of statewide importance, if irrigated and reclaimed of excess salts and sodium Farmland of statewide importance, if drained or either protected from flooding or not frequently flooded during the growing season Farmland of statewide importance, if warm enough, and either drained or either protected from flooding or not frequently flooded during the growing season Farmland of statewide importance, if warm enough Farmland of statewide importance, if thawed Farmland of local importance Farmland of local importance, if irrigated 	<ul style="list-style-type: none"> Farmland of unique importance Not rated or not available <p>Water Features</p>  <p>Streams and Canals</p> <p>Transportation</p>  <p>Rails</p>  <p>Interstate Highways</p>  <p>US Routes</p>  <p>Major Roads</p>  <p>Local Roads</p> <p>Background</p>  <p>Aerial Photography</p>	<p>The soil surveys that comprise your AOI were mapped at 1:24,000.</p> <p>Warning: Soil Map may not be valid at this scale.</p> <p>Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.</p> <p>Please rely on the bar scale on each map sheet for map measurements.</p> <p>Source of Map: Natural Resources Conservation Service Web Soil Survey URL: https://websoilsurvey.nrcs.usda.gov/ Coordinate System: Web Mercator (EPSG:3857)</p> <p>Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.</p> <p>This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.</p> <p>Soil Survey Area: Bedford County, Pennsylvania Survey Area Data: Version 18, Sep 4, 2023</p> <p>Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.</p> <p>Date(s) aerial images were photographed: Nov 8, 2020—Nov 9, 2020</p> <p>The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.</p>
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Farmland Classification

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
AeB	Allegheny loam, 3 to 8 percent slopes	All areas are prime farmland	26.1	6.2%
AeC	Allegheny loam, 8 to 15 percent slopes	Farmland of statewide importance	16.7	4.0%
Ax	Atkins-Ernest complex, 0 to 8 percent slopes	Farmland of statewide importance	1.1	0.3%
BbB	Basher-Birdsboro complex, 0 to 8 percent slopes	All areas are prime farmland	4.1	1.0%
BdC	Bedington-Berks complex, 8 to 15 percent slopes, very stony	Not prime farmland	7.2	1.7%
BdE	Bedington-Berks complex, 25 to 35 percent slopes, very stony	Not prime farmland	0.3	0.1%
BkE	Berks channery silt loam, 25 to 35 percent slopes	Not prime farmland	8.0	1.9%
Bm	Birdsboro silt loam, rarely flooded	All areas are prime farmland	5.6	1.3%
CaC	Calvin channery silt loam, 8 to 15 percent slopes	Farmland of statewide importance	26.1	6.2%
CaD	Calvin channery silt loam, 15 to 25 percent slopes	Not prime farmland	32.1	7.6%
DkF	Dystrocrepts-Rock outcrop complex, 35 to 70 percent slopes	Not prime farmland	100.1	23.8%
KIC	Klinesville channery silt loam, 8 to 15 percent slopes	Not prime farmland	7.2	1.7%
KmE	Klinesville and Calvin soils, 25 to 50 percent slopes	Not prime farmland	38.3	9.1%
KoF	Klinesville-Rock outcrop complex, 35 to 80 percent slopes	Not prime farmland	37.1	8.8%
LdC	Laidig cobbley loam, 8 to 15 percent slopes	Farmland of statewide importance	1.7	0.4%
LgC	Laidig cobbley loam, 8 to 15 percent slopes, extremely stony	Not prime farmland	13.1	3.1%

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
LgD	Laidig cobbly loam, 15 to 25 percent slopes, extremely stony	Not prime farmland	15.9	3.8%
LgE	Laidig cobbly loam, 25 to 35 percent slopes, extremely stony	Not prime farmland	20.4	4.9%
MoB	Monongahela silt loam, 3 to 8 percent slopes	Farmland of statewide importance	27.2	6.5%
Pp	Pope fine sandy loam	All areas are prime farmland	3.5	0.8%
W	Water	Not prime farmland	29.2	6.9%
Totals for Area of Interest			421.2	100.0%

Description

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

Rating Options

Aggregation Method: No Aggregation Necessary

Tie-break Rule: Lower





Bedford County Agricultural Land Preservation Board

County Commissioners
Mike Stiles, Chair
JR Winck, Vice Chair
Deb Baughman, Secretary

Members
Wayne Koontz, Chair
Frank Otto
Gary Cook
Doug Gayman
Richard Musselman
Andy Lang
Alan Frederick

March 26, 2025

Mr. Shane M. Ferko, E.I.T.
Water/Wastewater Department
Keller Engineers, Inc.
420 Allegheny Street
Hollidaysburg, PA 16648

RE: Broad Top Township Supervisors
Cypher Beach Sewage Planning
Agricultural Impact Review

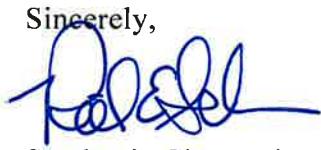
Dear Mr. Ferko:

Please be advised that on behalf of the Administrator of the Bedford County Agricultural Land Preservation Board, I have reviewed the area for the proposed Broad Top Township Cypher Beach sanitary sewer system. We understand that various public sewerage system alternatives are being considered for the residents of Cypher Beach. We are pleased to be a participant in the planning of this important infrastructure project.

We understand that this new system requires DEP Sewage Facilities Planning and this agricultural land review is a component of this process. We feel this project will have no impact on farming or result in the reduction of prime agricultural land in Bedford County. Our office has determined that the proposed project is consistent with the applicable portions of Bedford County's agricultural land use plan and all other county and local agricultural land use and agricultural preservation that impacts this area.

Should you have any questions, please feel free to call our office at 814-623-4827.

Sincerely,


fa **Stephanie Clevenstine**
Administrator

PNDI PROJECT ENVIRONMENTAL REVIEW RECEIPT

1. PROJECT INFORMATION

Project Name: **Cypher Beach Sewage Planning**

Date of Review: **3/7/2025 03:53:12 PM**

Project Category: **Waste Transfer, Treatment, and Disposal, Liquid waste/Effluent, Sewage module/Act 537 plan**

Project Area: **17.99 acres**

County(s): **Bedford**

Township/Municipality(s): **Broad Top Township**

ZIP Code:

Quadrangle Name(s): **EVERETT EAST**

Watersheds HUC 8: **Raystown**

Watersheds HUC 12: **Sandy Run-Raystown Branch Juniata River**

Decimal Degrees: **40.084373, -78.299093**

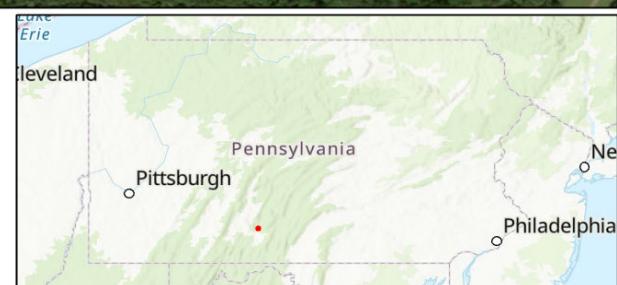
Degrees Minutes Seconds: **40° 5' 3.7430" N, 78° 17' 56.7357" W**

2. SEARCH RESULTS

Agency	Results	Response
PA Game Commission	No Known Impact	No Further Review Required
PA Department of Conservation and Natural Resources	No Known Impact	No Further Review Required
PA Fish and Boat Commission	Conservation Measure	No Further Review Required, See Agency Comments
U.S. Fish and Wildlife Service	No Known Impact	No Further Review Required

Pennsylvania Natural Diversity Inventory (PNDI) records indicate that while threatened and endangered and/or special concern species and resources are in the project vicinity and that recommended Conservation Measures should be implemented in their entirety to avoid and minimize impacts to these species, no further coordination is required with the jurisdictional agencies. If a DEP permit is required for this project, DEP has the discretion to incorporate one or more Conservation Measures into its permit. This response does not reflect potential agency concerns regarding potential impacts to other ecological resources, such as wetlands.

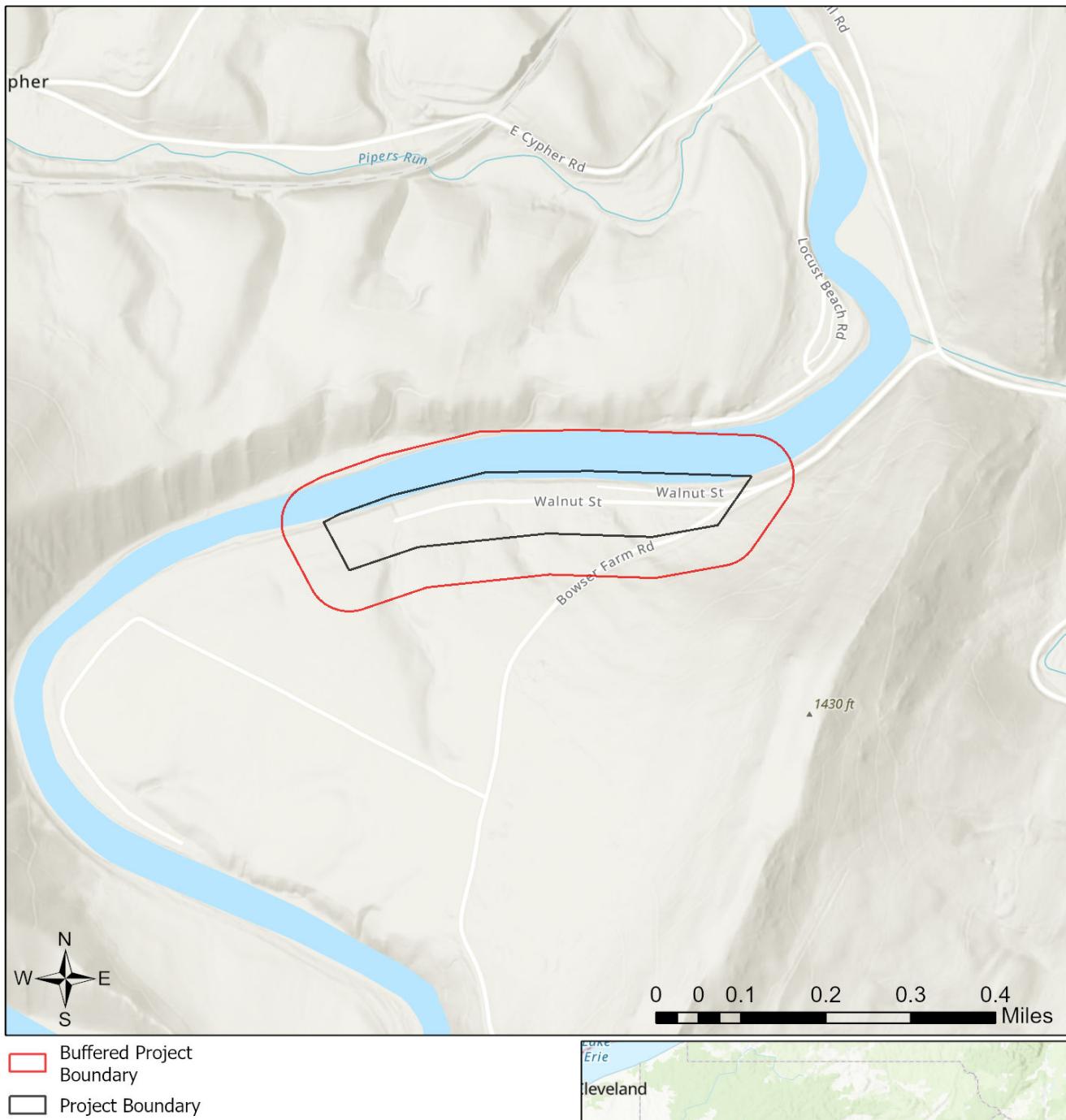
Cypher Beach Sewage Planning



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Cypher Beach Sewage Planning



Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Sources: Esri, Maxar, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA,

3. AGENCY COMMENTS

Regardless of whether a DEP permit is necessary for this proposed project, any potential impacts to threatened and endangered species and/or special concern species and resources must be resolved with the appropriate jurisdictional agency. In some cases, a permit or authorization from the jurisdictional agency may be needed if adverse impacts to these species and habitats cannot be avoided.

These agency determinations and responses are **valid for two years** (from the date of the review), and are based on the project information that was provided, including the exact project location; the project type, description, and features; and any responses to questions that were generated during this search. If any of the following change: 1) project location, 2) project size or configuration, 3) project type, or 4) responses to the questions that were asked during the online review, the results of this review are not valid, and the review must be searched again via the PNDI Environmental Review Tool and resubmitted to the jurisdictional agencies. The PNDI tool is a primary screening tool, and a desktop review may reveal more or fewer impacts than what is listed on this PNDI receipt. The jurisdictional agencies **strongly advise against** conducting surveys for the species listed on the receipt prior to consultation with the agencies.

PA Game Commission

RESPONSE:

No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

PA Department of Conservation and Natural Resources

RESPONSE:

No Impact is anticipated to threatened and endangered species and/or special concern species and resources.

PA Fish and Boat Commission

RESPONSE:

Conservation Measure: The natural flow regime and water quality in this watershed are important to maintaining habitats occupied by rare fish and mussels. PFBC recommends that you take measures to maintain a natural flow regime and high water quality. PFBC recommends that you avoid instream construction work to the maximum extent practicable. **If instream work is anticipated, then PFBC recommends a mussel salvage using a qualified mussel surveyor (<http://www.fishandboat.com/Resource/EnvironmentalServices/Pages/default...>) 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. PFBC recommends retaining (or restoring, if not already present) a riparian buffer (100 to 300 feet, if possible) 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 ripraping the streambanks; removing gravel bars; or attempting to dredge, ditch, channelize, or widen the stream. Use stringent erosion and sedimentation controls 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).

PFBC Species: (Note: The Pennsylvania Conservation Explorer tool is a primary screening tool, and a desktop review may reveal more or fewer species than what is listed below.)

Scientific Name	Common Name	Current Status
Alasmidonta marginata	Elktoe	Special Concern Species*
Alasmidonta varicosa	Brook Floater	Special Concern Species*

U.S. Fish and Wildlife Service

RESPONSE:

No impacts to **federally** listed or proposed species are anticipated. Therefore, no further consultation/coordination under the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq. is required. Because no take of federally listed species is anticipated, none is authorized. This response does not reflect potential Fish and Wildlife Service concerns under the Fish and Wildlife Coordination Act or other authorities.

* Special Concern Species or Resource - Plant or animal species classified as rare, tentatively undetermined or candidate as well as other taxa of conservation concern, significant natural communities, special concern populations (plants or animals) and unique geologic features.

** Sensitive Species - Species identified by the jurisdictional agency as collectible, having economic value, or being susceptible to decline as a result of visitation.

4. DEP INFORMATION

The Pa Department of Environmental Protection (DEP) requires that a signed copy of this receipt, along with any required documentation from jurisdictional agencies concerning resolution of potential impacts, be submitted with applications for permits requiring PNDI review. Two review options are available to permit applicants for handling PNDI coordination in conjunction with DEP's permit review process involving either T&E Species or species of special concern. Under sequential review, the permit applicant performs a PNDI screening and completes all coordination with the appropriate jurisdictional agencies prior to submitting the permit application. The applicant will include with its application, both a PNDI receipt and/or a clearance letter from the jurisdictional agency if the PNDI Receipt shows a Potential Impact to a species or the applicant chooses to obtain letters directly from the jurisdictional agencies. Under concurrent review, DEP, where feasible, will allow technical review of the permit to occur concurrently with the T&E species consultation with the jurisdictional agency. The applicant must still supply a copy of the PNDI Receipt with its permit application. The PNDI Receipt should also be submitted to the appropriate agency according to directions on the PNDI Receipt. The applicant and the jurisdictional agency will work together to resolve the potential impact(s). See the DEP PNDI policy at <https://conservationexplorer.dcnr.pa.gov/content/resources>.



5. ADDITIONAL INFORMATION

The PNDI environmental review website is a preliminary screening tool. There are often delays in updating species status classifications. Because the proposed status represents the best available information regarding the conservation status of the species, state jurisdictional agency staff give the proposed statuses at least the same consideration as the current legal status. If surveys or further information reveal that a threatened and endangered and/or special concern species and resources exist in your project area, contact the appropriate jurisdictional agency/agencies immediately to identify and resolve any impacts.

For a list of species known to occur in the county where your project is located, please see the species lists by county found on the PA Natural Heritage Program (PNHP) home page (www.naturalheritage.state.pa.us). Also note that the PNDI Environmental Review Tool only contains information about species occurrences that have actually been reported to the PNHP.

6. AGENCY CONTACT INFORMATION

PA Department of Conservation and Natural Resources

Bureau of Forestry, Ecological Services Section
400 Market Street, PO Box 8552
Harrisburg, PA 17105-8552
Email: RA-HeritageReview@pa.gov

PA Fish and Boat Commission

Division of Environmental Services
595 E. Rolling Ridge Dr., Bellefonte, PA 16823
Email: RA-FBPACENOTIFY@pa.gov

U.S. Fish and Wildlife Service

Pennsylvania Field Office
Endangered Species Section
110 Radnor Rd; Suite 101
State College, PA 16801
Email: IR1_ESPenn@fws.gov
NO Faxes Please

PA Game Commission

Bureau of Wildlife Management
Division of Environmental Review
2001 Elmerton Avenue, Harrisburg, PA 17110-9797
Email: RA-PGC_PNDI@pa.gov
NO Faxes Please

7. PROJECT CONTACT INFORMATION

Name: SHANE FERKO

Company/Business Name: KELLER ENGINEERS, INC.

Address: 420 ALLEGHENY STREET

City, State, Zip: HOLLIDAYSBURG, PA 16648

Phone: (814) 696-7430 Fax: (____)

Email: SFERKO@KELLER-ENGINEERS.COM

8. CERTIFICATION

I certify that ALL of the project information contained in this receipt (including project location, project size/configuration, project type, answers to questions) is true, accurate and complete. In addition, if the project type, location, size or configuration changes, or if the answers to any questions that were asked during this online review change, I agree to re-do the online environmental review.

Shane Ferko

applicant/project proponent signature

03/07/2025

date

SHPO CONSULTATION



Pennsylvania State Historic Preservation Office

PENNSYLVANIA HISTORICAL AND MUSEUM COMMISSION

April 7, 2025

Sent Via PA-SHARE

RE: ER Project # 2025PR01766.001, Cypher Beach Sewage Planning, Department of Environmental Protection, Broad Top Township, Bedford County

Dear Submitter,

Thank you for submitting information concerning the above referenced project. The Pennsylvania State Historic Preservation Office (PA SHPO) reviews projects in accordance with state and federal laws. Section 106 of the National Historic Preservation Act of 1966, and the implementing regulations (36 CFR Part 800) of the Advisory Council on Historic Preservation, is the primary federal legislation. The Environmental Rights amendment, Article 1, Section 27 of the Pennsylvania Constitution and the Pennsylvania History Code, 37 Pa. Cons. Stat. Section 500 et seq. (1988) is the primary state legislation. These laws include consideration of the project's potential effects on both historic and archaeological resources.

Above Ground Resources

No Above Ground Concerns - Environmental Review - No Effect - Archaeological

Based on the information received and available in our files, in our opinion, the proposed project should have No Effect on archaeological resources. Should the scope of the project be amended to include additional ground-disturbing activity and/or should you be made aware of historic property concerns regarding archaeological resources, you will need to reinitiate consultation with our office using PA-SHARE.

For questions concerning above ground resources, please contact Sara-Ladd Manley at samanley@pa.gov.

Archaeological Resources

No Archaeological Concerns - Environmental Review - No Effect - Archaeological

Based on the information received and available in our files, in our opinion, the proposed project should have No Effect on archaeological resources. Should the scope of the project be amended to include additional ground-disturbing activity and/or should you be made aware of historic property concerns regarding archaeological resources, you will need to reinitiate consultation with our office using PA-SHARE.

For questions concerning archaeological resources, please contact Sara-Ladd Manley at samanley@pa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Barbara Frederick".

Barbara Frederick

Environmental Review Division Manager

ALTERNATIVES ANALYSIS

ALTERNATIVE ANALYSIS NARRATIVE

Introduction

In efforts to determine the most effective and convenient public sewer system, various treatment and collection alternatives were analyzed which could appropriately transfer and treat wastewater from the Village of Cypher Beach. Cypher Beach is an area with many temporary residences such as “weekend getaways”, and thus, has widely variable wastewater flow rates at any given time. Additionally, 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. Understanding the risks associated with developing a public sewer system in the area, the following alternatives were assessed for treatment and collection:

1. Treatment Systems
 - a. System 1: Recirculating Sand Filter
 - b. System 2: EcoFlo Biofilters
 - c. System 3: Package Treatment Plant
2. Collection Systems
 - a. System A: Conventional Gravity Collection System
 - b. System B: Septic Tank Effluent Gravity Collection System
 - c. System C: Septic Tank Effluent Pumping System
 - d. System D: Low-Pressure Grinder Pump System

Description of Systems

1. System 1: Recirculating Sand Filter
 - a. Recirculating sand filters (RSFs), as the name suggests, cycles wastewater through a sand filter bed. The system is comprised of a pump station/dosing tank, a sand filter bed, and a system of underdrain piping. The influent waste stream flows into the dosing tank before being evenly distributed across the filter. Water then percolates through the filter effectively removing organic matter, suspended solids, and other such contaminants before being collected in the underdrain piping. The underdrain piping returns the treated flow to the dosing tank. The water in the dosing tank will then be either recycled back into the filter via the pump or discharged. Final disinfection would be required on the discharge line to remove any remaining microbes and pathogens.
2. System 2: EcoFlo Biofilters
 - a. Similar to System 1, EcoFlo Biofilters rely on filtration to remove harmful contaminants from the wastewater; however, instead of sand, biofilters utilize organic biodegradable filtering media such as peat and coconut husks. Ecoflo biofilters are a proprietary, self-contained unit which does not require recirculation. The unit does not contain equipment for disinfection, which would need to be

installed prior to discharge. Therefore, the system only contains the influent piping, biofilter unit, disinfection equipment, and effluent piping.

3. System 3: Package Treatment Plant

- a. Package treatment plants are common for smaller communities with consistent flow rates. These plants use various mechanical and biological mechanisms for treatment. Such plants can vary greatly in treatment, and can include extended aeration, membrane bioreactors, sequencing batch reactors, etc. The packaged units often include mechanisms for primary treatment and disinfection as well. Therefore, the entire treatment system is composed of influent piping, the package plant, and effluent piping.

4. System A: Conventional Gravity Collection System

- a. Conventional gravity collection systems utilize large (e.g. 8"-18") diameter pipe to transfer the wastewater without the use of pumps. Sewage flows from the residence using smaller piping (laterals) before flowing into the large diameter main line. The pipes are connected with intermittent manholes for maintenance purposes. Conventional gravity collection systems can facilitate larger solids, and do not need primary treatment before conveyance.

5. System B: Septic Tank Effluent Gravity Collection System

- a. Septic tank effluent gravity collection systems are similar to System A since gravity is the primary method of conveyance; however, this system uses residential septic tanks for primary treatment to remove larger solids before entering the system. Since the solids are removed, the collection lines can be downsized (e.g. 2"-6") to facilitate the clarified wastewater. Manholes are not necessary in this system since the maintenance can be completed via septic tanks.

6. System C: Septic Tank Effluent Pumping (STEP) System

- a. STEP systems are similar to System B, but instead of relying on gravity flow, the septic tank effluent is conveyed via small diameter, low-pressure force main using a pump.

7. System D: Low-Pressure Grinder Pump System

- a. Low-pressure grinder pump systems do not remove solids prior to collection, but instead, grind the solids into finer particles which can be pumped into a low-pressure force main. The pump is located in a small holding tank directly outside of the residence and is responsible for grinding and pumping the sewage.

Description of Alternatives

The alternatives evaluated in this study include various combinations of the treatment and collections systems mentioned. Additionally, alternatives were included which include both centralized and decentralized treatment methods. The evaluated alternatives are as follows:

1. Community Sand Filter and Gravity Collection System
2. Community Biofilters and Gravity Collection System
3. Community Sand Filter and Septic Tank Effluent System
4. Community Biofilters and Septic Tank Effluent System
5. Biofilters and Clustered Septic Tank Effluent Pumping Systems
6. Community Package Treatment Plant and Grinder Pump Low-Pressure Sewer Collection System
7. No Action

Alternative 1: Community Sand Filter and Gravity Collection System

This alternative utilizes conventional gravity collection and conveyance followed by an 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 ultraviolet (UV) disinfection.

Alternative 2: Community Biofilters and Gravity Collection System

Similar to Alternative 1, 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.

Alternative 3: Community Sand Filter and Septic Tank Effluent System

In this option, 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.

Alternative 4: Community Biofilters and Septic Tank Effluent System

This option utilizes a combination of residential septic tanks and a collection of biofilters. The residential septic tanks will remove the solids from the sewage and the effluent will flow via small

diameter gravity to the pump station. The pumped flow will be sent to a distribution box before being filtered, disinfected, and discharged.

Alternative 5: 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.

Alternative 6: 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.

Alternative 7: No Action

The final option is to leave the system as is, with privies, holding tanks, and malfunctioning on-lot septic systems. The Township would continue to maintain the existing infrastructure as needed.

Evaluation of Alternatives

Alternative 1: Community Sand Filter and Gravity Collection System

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 recirculating sand filter 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 2: Community Biofilters and Gravity Collection System

Like Alternative 1, 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 3: Community Sand Filter and Septic Tank Effluent System

While treatment operations remain the same as in Alternative 1, 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 4: Community Biofilters and Septic Tank Effluent System

The treatment operations for this alternative are similar to Alternative 2, 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 3.

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

Alternative 5: Biofilters and Clustered Septic Tank Effluent Pumping Systems

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 recirculating sand filter (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 6: Community Package Treatment Plant and Grinder Pump Low-Pressure Sewer Collection System

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.

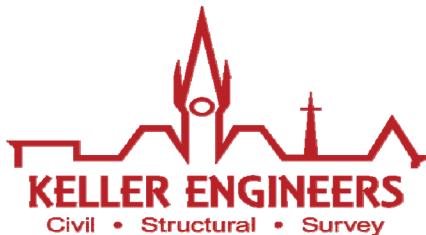
Alternative 7: No Action

A "no action" approach is not considered viable. While an in-depth home-by-home needs assessment was not conducted, Broad Top Township Supervisors have identified multiple failing on-lot septic systems and privies. Leaving the existing wastewater infrastructure as-is poses environmental and public health risks due to potential contamination and system failures.

Preferred Alternative

Alternative 4: Community Biofilters and Septic Tank Effluent System

Alternative 4, 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, Alternative 4 is recommended as the preferred alternative, offering the best balance between capital cost, operational simplicity, and long-term sustainability.



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BROAD TOP TOWNSHIP
CYPHER BEACH WASTEWATER SYSTEM
OPTION #1 - COMMUNITY SAND FILTER WITH STREAM DISCHARGE
AND GRAVITY COLLECTION SYSTEM
PROJECT MATERIAL ESTIMATE

Description	Quantity	Unit	Unit Cost	Total Cost
8" PVC Wastewater Collection Main	3,500.00	LF	\$10.00	\$35,000.00
8" X 4" PVC Wye	47.00	EA	\$250.00	\$11,750.00
4" PVC Wastewater Lateral	700.00	LF	\$2.50	\$1,750.00
Precast Reinforced Concrete Manhole	16.00	EA	\$1,850.00	\$29,600.00
3,500 Gallon Septic Tank	6.00	EA	\$8,700.00	\$52,200.00
Effluent Pumping Station	1.00	EA	\$250,000.00	\$250,000.00
2" PVC Force Main	2,100.00	LF	\$1.50	\$3,150.00
2,500 Gallon Effluent Dosing Tank	1.00	EA	\$7,250.00	\$7,250.00
Recirculating Sand Filter	6,000.00	SF	\$35.00	\$210,000.00
Filter Cover Structure	1.00	LS	\$65,000.00	\$65,000.00
2" PVC Underdrain Piping	500.00	LF	\$1.50	\$750.00
Filter Site Piping	1.00	LS	\$2,500.00	\$2,500.00
UV Disinfection Unit	1.00	EA	\$28,400.00	\$28,400.00
Flow Meter Manhole and Sampling Point	1.00	EA	\$1,900.00	\$1,900.00
8" PVC Outfall Piping	350.00	LF	\$10.00	\$3,500.00
Outfall Structure	1.00	EA	\$750.00	\$750.00
Site Fencing	1.00	LS	\$15,000.00	\$15,000.00
Electrical Service Drop w/ Generator Connection	2.00	EA	\$15,000.00	\$30,000.00
Control Panel and Enclosure	1.00	EA	\$5,000.00	\$5,000.00
Erosion Control	1.00	LS	\$28,900.00	\$28,900.00
Township Road/Driveway Paving	1.00	LS	\$99,000.00	\$99,000.00
Seeding Restoration	3,000.00	SY	\$10.00	\$30,000.00
Total Project Cost				\$911,400.00



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**BROAD TOP TOWNSHIP
CYpher Beach Wastewater System
OPTION #2 - COMMUNITY BIOFILTERS WITH STREAM DISCHARGE
AND GRAVITY COLLECTION SYSTEM
PROJECT MATERIAL ESTIMATE**

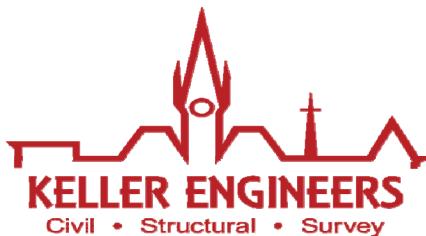
Description	Quantity	Unit	Unit Cost	Total Cost
8" PVC Wastewater Collection Main	3500.00	LF	\$10.00	\$35,000.00
8" X 4" PVC Wye	47.00	EA	\$250.00	\$11,750.00
4" PVC Wastewater Lateral	700.00	EA	\$2.50	\$1,750.00
Precast Reinforced Concrete Manhole	16.00	EA	\$1,850.00	\$29,600.00
3,500 Gallon Septic Tank	6.00	EA	\$8,700.00	\$52,200.00
Effluent Pumping Station	1.00	EA	\$250,000.00	\$250,000.00
2" PVC Force Main	2100.00	LF	\$1.50	\$3,150.00
Distribution Box	1.00	EA	\$2,000.00	\$2,000.00
Pre-Equalization Tank	1.00	LS	\$15,000.00	\$15,000.00
960 Gallon EcoFlo Coco Filter Units	14.00	EA	\$13,700.00	\$191,800.00
Filter Site Piping	1.00	LS	\$5,000.00	\$5,000.00
Post-Equalization Tank	1.00	LS	\$6,000.00	\$6,000.00
UV/Control Building	1.00	EA	\$35,000.00	\$35,000.00
Flow Meter Manhole and Sampling Point	1.00	EA	\$1,900.00	\$1,900.00
8" PVC Outfall Piping	350.00	LF	\$10.00	\$3,500.00
Outfall Structure	1.00	EA	\$750.00	\$750.00
Site Fencing	1.00	LS	\$15,000.00	\$15,000.00
Electrical Service Drop w/ Generator Connection	2.00	EA	\$15,000.00	\$30,000.00
Control Panel and Enclosure	1.00	EA	\$5,000.00	\$5,000.00
Erosion Control	1.00	LS	\$28,900.00	\$28,900.00
Township Road/Driveway Paving	1.00	LS	\$99,000.00	\$99,000.00
Seeding Restoration	3000.00	SY	\$10.00	\$30,000.00
Total Project Cost				\$852,300.00



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BROAD TOP TOWNSHIP
CYPHER BEACH WASTEWATER SYSTEM
OPTION #3 - COMMUNITY SAND FILTER WITH STREAM DISCHARGE
AND SEPTIC TANK EFFLUENT SYSTEM
PROJECT MATERIAL ESTIMATE

Description	Quantity	Unit	Unit Cost	Total Cost
6" PVC Wastewater Collection Main	3500.00	LF	\$5.50	\$19,250.00
6" X 4" PVC Wye	47.00	EA	\$55.00	\$2,585.00
4" PVC Wastewater Lateral	1400.00	LF	\$2.50	\$3,500.00
1,000 Gallon Septic Tank	47.00	EA	\$1,550.00	\$72,850.00
2" PVC Force Main	2100.00	LF	\$1.50	\$3,150.00
Effluent Pumping Station	1.00	EA	\$225,000.00	\$225,000.00
2,500 Gallon Effluent Dosing Tank	1.00	EA	\$7,250.00	\$7,250.00
Recirculating Sand Filter	6000.00	SF	\$35.00	\$210,000.00
Filter Cover Structure	1.00	LS	\$65,000.00	\$65,000.00
2" PVC Underdrain Piping	500.00	LF	\$1.50	\$750.00
Filter Site Piping	1.00	LS	\$2,500.00	\$2,500.00
UV Disinfection Unit	1.00	EA	\$28,400.00	\$28,400.00
Flow Meter Manhole and Sampling Point	1.00	EA	\$1,900.00	\$1,900.00
8" PVC Outfall Piping	350.00	LF	\$10.00	\$3,500.00
Outfall Structure	1.00	EA	\$750.00	\$750.00
Site Fencing	1.00	LS	\$15,000.00	\$15,000.00
Electrical Service Drop w/ Generator Connection	2.00	EA	\$15,000.00	\$30,000.00
Control Panel and Enclosure	1.00	EA	\$5,000.00	\$5,000.00
Erosion Control	1.00	LS	\$28,900.00	\$28,900.00
Township Road/Driveway Paving	1.00	LS	\$99,000.00	\$99,000.00
Seeding Restoration	3000.00	SY	\$10.00	\$30,000.00
Total Project Cost				\$854,285.00



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BROAD TOP TOWNSHIP
CYPHER BEACH WASTEWATER SYSTEM
OPTION #4 - COMMUNITY BIOFILTERS WITH STREAM DISCHARGE
AND SEPTIC TANK EFFLUENT SYSTEM
PROJECT MATERIAL ESTIMATE

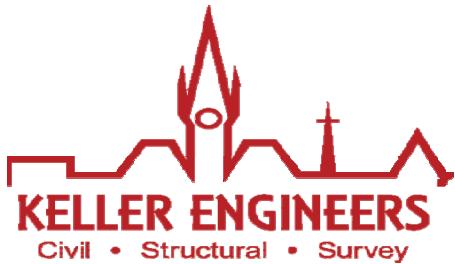
Description	Quantity	Unit	Unit Cost	Total Cost
6" PVC Wastewater Collection Main	3500.00	LF	\$5.50	\$19,250.00
6" X 4" PVC Wye	47.00	EA	\$55.00	\$2,585.00
4" PVC Wastewater Lateral	1400.00	LF	\$2.50	\$3,500.00
1,000 Gallon Septic Tank	47.00	EA	\$1,550.00	\$72,850.00
2" PVC Force Main	2100.00	LF	\$1.50	\$3,150.00
Effluent Pumping Station	1.00	EA	\$225,000.00	\$225,000.00
Distribution Box	1.00	EA	\$2,000.00	\$2,000.00
Pre-Equalization Tank	1.00	LS	\$15,000.00	\$15,000.00
960 Gallon EcoFlo Coco Filter Units	14.00	EA	\$13,700.00	\$191,800.00
Filter Site Piping	1.00	LS	\$5,000.00	\$5,000.00
Post-Equalization Tank	1.00	LS	\$6,000.00	\$6,000.00
UV/Control Building	1.00	EA	\$35,000.00	\$35,000.00
Flow Meter Manhole and Sampling Point	1.00	EA	\$1,900.00	\$1,900.00
8" PVC Outfall Piping	350.00	LF	\$10.00	\$3,500.00
Outfall Structure	1.00	EA	\$1,550.00	\$1,550.00
Site Fencing	1.00	LS	\$15,000.00	\$15,000.00
Electrical Service Drop w/ Generator Connection	2.00	EA	\$15,000.00	\$30,000.00
Control Panel and Enclosure	1.00	EA	\$5,000.00	\$5,000.00
Erosion Control	1.00	LS	\$28,900.00	\$28,900.00
Township Road/Driveway Paving	1.00	LS	\$99,000.00	\$99,000.00
Seeding Restoration	3000.00	SY	\$10.00	\$30,000.00
Total Project Cost				\$795,985.00



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Phone: 814.696.7430
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**BROAD TOP TOWNSHIP
CYpher BEACH WASTEWATER SYSTEM
OPTION #5 - BIOFILTERS WITH STREAM DISCHARGES
AND CLUSTERED SEPTIC TANK EFFLUENT PUMPING SYSTEMS
PROJECT MATERIAL ESTIMATE**

Description	Quantity	Unit	Unit Cost	Total Cost
1.5" Low-Pressure HDPE Sewer Main	4,500.00	LF	\$1.50	\$6,750.00
3" PVC Wastewater Collection Main	705.00	LF	\$2.25	\$1,586.25
1,000 Gallon Septic Tank w/ Pump	47.00	EA	\$2,750.00	\$129,250.00
1,050 Gallon Ecoflo Coco Filter Units	16.00	EA	\$12,100.00	\$193,600.00
1,350 Gallon EcoFlo Coco Filter Units	3.00	EA	\$13,700.00	\$41,100.00
UV Disinfection Unit	11.00	EA	\$28,400.00	\$312,400.00
6" PVC Outfall Piping	1,800.00	LF	\$5.50	\$9,900.00
Outfall Structure	11.00	EA	\$1,550.00	\$17,050.00
Electric Service Connection from House to Septic Pump	47.00	EA	\$2,000.00	\$94,000.00
Electrical Service Drop w/ Generator Connection	6.00	EA	\$15,000.00	\$90,000.00
Control Panel and Enclosure	6.00	EA	\$5,000.00	\$30,000.00
Erosion Control	1.00	LS	\$28,900.00	\$28,900.00
Township Road/Driveway Paving	1.00	LS	\$99,000.00	\$99,000.00
Seeding Restoration	2,300.00	SY	\$10.00	\$23,000.00
Total Project Cost				\$1,076,536.25



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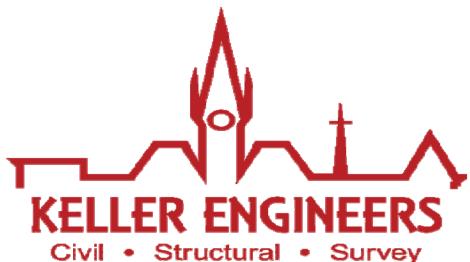
**BROAD TOP TOWNSHIP
CYPHER BEACH WASTEWATER SYSTEM
PRESENT WORTH ANALYSIS**

OPTION 1 - SAND FILTER GRAVITY

Total Estimated Project Cost	\$911,400
System Users	47
Annual System Operation and Maintenance	\$32,000
Annual Major Equipment Reserve	\$12,000
Total Annual Cost	\$44,000
Period of Evaluation	30 Years
Projected Inflation Rate	3%
P/A Factor	0.04654
Present Worth of Annualized Costs	\$945,423
Total Present Worth	\$1,856,823
Present Worth Cost per EDU	\$39,507

OPTION 2 - BIOFILTER GRAVITY

Total Estimated Project Cost	\$852,300
System Users	47
Annual System Operation and Maintenance	\$32,000
Annual Major Equipment Reserve	\$5,000
Total Annual Cost	\$37,000
Period of Evaluation	30 Years
Projected Inflation Rate	3%
P/A Factor	0.05102
Present Worth of Annualized Costs	\$725,216
Total Present Worth	\$1,577,516
Present Worth Cost per EDU	\$33,564



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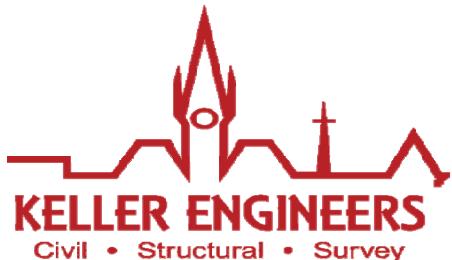
**BROAD TOP TOWNSHIP
 CYPHER BEACH WASTEWATER SYSTEM
 PRESENT WORTH ANALYSIS**

OPTION 3 - SAND FILTER SEPTIC

Total Estimated Project Cost	\$854,285
System Users	47
Annual System Operation and Maintenance	\$32,000
Annual Major Equipment Reserve	\$12,000
Total Annual Cost	\$44,000
Period of Evaluation	30 Years
Projected Inflation Rate	3%
P/A Factor	0.05102
Present Worth of Annualized Costs	\$862,419
Total Present Worth	\$1,716,704
Present Worth Cost per EDU	\$36,526

OPTION 4 - BIOFILTER SEPTIC

Total Estimated Project Cost	\$795,985
System Users	47
Annual System Operation and Maintenance	\$32,000
Annual Major Equipment Reserve	\$5,000
Total Annual Cost	\$37,000
Period of Evaluation	30 Years
Projected Inflation Rate	3%
P/A Factor	0.05102
Present Worth of Annualized Costs	\$725,216
Total Present Worth	\$1,521,201
Present Worth Cost per EDU	\$32,366



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**BROAD TOP TOWNSHIP
CYPHER BEACH WASTEWATER SYSTEM
PRESENT WORTH ANALYSIS**

OPTION 5 - CLUSTERED BIOFILTERS

Total Estimated Project Cost	\$1,076,536
System Users	47
Annual System Operation and Maintenance	\$36,000
Annual Major Equipment Reserve	\$6,000
Total Annual Cost	\$42,000
Period of Evaluation	30 Years
Projected Inflation Rate	3%
P/A Factor	0.05102
Present Worth of Annualized Costs	\$823,219
Total Present Worth	\$1,899,755
Present Worth Cost per EDU	\$40,420

PUBLIC NOTICE AND COMMENTS

PUBLIC NOTICE

Notice is hereby given that the Broad Top Township Supervisors are considering adoption of a special study Act 537 amendment to the Township's Act 537 Sewage Facilities Plan. The intent of this amendment is to provide for the construction of public sewer collection, conveyance, and treatment infrastructure at the Village of Cypher Beach. The proposed plan is to install a septic tank effluent gravity collection/conveyance system as well as a centralized pump station and force main. Additionally, a biofilter treatment system is to be constructed to serve the 47 homes in Cypher Beach. Each customer will be served with a septic tank which will flow into the public system. The total project cost is estimated at approximately \$796,000. The Broad Top Township Board of Supervisors will receive written comments on the proposed plan for a 30-day period following the publication of this notice. The proposed sewage planning module package will be available for review during regular business hours at the Township office located at 124 Hitchens Road, Defiance, PA 16633, telephone (814) 928-5253. All written comments will receive a response and be included in the final version of the planning document.

RESOLUTION ADOPTION

RESOLUTION 2025-_____
BROAD TOP TOWNSHIP, BEDFORD COUNTY
RESOLUTION FOR PLAN REVISION

**RESOLUTION OF THE SUPERVISORS OF BROAD TOP TOWNSHIP
BEDFORD COUNTY, PENNSYLVANIA (hereinafter "Municipality")**

WHEREAS, Section 5 of the Act of January 24, 1996, P.L. 1535, No. 537, known as the "Pennsylvania Sewage Facilities Act," as amended, and the Rules and Regulations of the Department of Environmental Protection (Department) adopted there under, Chapter 71 of Title 25 of the Pennsylvania Code, requires the Municipality to adopt an Official Sewage Facilities Plan providing for sewage services adequate to prevent contamination of water and/or environmental health hazards with sewage wastes, and to revise said plan whenever it is necessary to meet the sewage disposal needs of the municipality, and

WHEREAS, Broad Top Township has prepared a Sewage Facilities Planning Module which provides for sewage facilities to the Cypher Beach area of Broad Top Township. The alternative of choice to be implemented is a septic tank effluent gravity and pump station/force main collection system with a biofilter treatment system providing service to approximately forty-seven structures currently served by on-lot systems. Construction of the extension is estimated to begin in 2026.

WHEREAS, Broad Top Township finds that the Facility Plan described above conforms to applicable zoning, subdivision, other municipal ordinances and plans and to a comprehensive program of pollution control and water quality management.

NOW, THEREFORE, AND BE IT RESOLVED that the Supervisors of the Township of Broad Top hereby adopt and submit to the Department of Environmental Protection for its approval as a revision to the "Official Plan" of the Municipality, the above referenced Facility Plan. The Municipality hereby assures the Department of the complete and timely implementation of the said plan as required by law.

I, Stacy Woomer, Secretary, Broad Top Township Board of Supervisors hereby certify that the foregoing is a true copy of Resolution 2025-_____, adopted _____.

AUTHORIZED SIGNATURE

Stacy Woomer, Secretary

MUNICIPAL SEAL

PLOT PLAN

