

**Township of Willistown**  
**Chester County, PA**

**PA Department of Environmental Protection**  
**Special Study**

**Decommissioning of Deerfield Knoll**  
**Wastewater Treatment Plant**

September 2025  
*Revised October 13, 2025*

*Prepared For:*

**Aqua Pennsylvania Wastewater, Inc.**

762 W. Lancaster Ave  
Bryn Mawr, PA 19010



**PENNONI ASSOCIATES INC.**  
CONSULTING ENGINEERS

[www.pennoni.com](http://www.pennoni.com)

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## **3.0 SEWAGE TREATMENT FACILITY CLOSING PLAN**

1.0 TRANSMITTAL LETTER



**TRANSMITTAL LETTER  
 FOR SEWAGE FACILITIES PLANNING MODULE**

DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) USE ONLY				
DEP CODE #	CLIENT ID #	SITE ID #	APS ID #	AUTH. ID #

TO: Approving Agency (DEP or delegated local agency)  
 Pennsylvania DEP  
 2 East Main Street  
 Norristown, PA 19401

Date \_\_\_\_\_

Dear Sir/Madam:

Attached please find a completed sewage facilities planning module prepared by Pennoni Associates Inc.  
 \_\_\_\_\_ (Name)  
 \_\_\_\_\_ for \_\_\_\_\_  
 \_\_\_\_\_ (Title) \_\_\_\_\_ (Name)  
 a subdivision, commercial ,or industrial facility located in \_\_\_\_\_  
 \_\_\_\_\_ County.  
 \_\_\_\_\_ (City, Borough, Township)

**Check one**

(i) The planning module, as prepared and submitted by the applicant, is approved by the municipality as a proposed  revision  supplement for new land development to its Official Sewage Facilities Plan (Official Plan), and is  adopted for submission to DEP  transmitted to the delegated LA for approval in accordance with the requirements of 25 Pa. Code Chapter 71 and the *Pennsylvania Sewage Facilities Act* (35 P.S. §750),

OR

(ii) The planning module will not be approved by the municipality as a proposed revision or supplement for new land development to its Official Plan because the project described therein is unacceptable for the reason(s) checked below:

**Check Boxes**

- Additional studies are being performed by or on behalf of this municipality which may have an effect on the planning module as prepared and submitted by the applicant. Attached hereto is the scope of services to be performed and the time schedule for completion of said studies.
- The planning module as submitted by the applicant fails to meet limitations imposed by other laws or ordinances, officially adopted comprehensive plans and/or environmental plans (e.g., zoning, land use, 25 Pa. Code Chapter 71). Specific reference or applicable segments of such laws or plans are attached hereto.
- Other (attach additional sheet giving specifics).

*Municipal Secretary: Indicate below by checking appropriate boxes which components are being transmitted to the approving agency.*

- Resolution of Adoption
- Module Completeness Checklist
- 2 Individual and Community Onlot Disposal of Sewage
- 3 Sewage Collection/Treatment Facilities
- 3s Small Flow Treatment Facilities
- 4A Municipal Planning Agency Review
- 4B County Planning Agency Review
- 4C County or Joint Health Department Review

\_\_\_\_\_  
 Municipal Secretary (print)

\_\_\_\_\_  
 Signature

\_\_\_\_\_  
 Date

## 2.0 COMPONENT 3M MODULE



**SEWAGE FACILITIES PLANNING MODULE  
FOR  
MINOR ACT 537 UPDATE REVISION**

Code No.
----------

**Component 3m. Municipal or Authority Sponsored Minor Sewage Collection Project**  
(Return completed module package to appropriate municipality)

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

This document provides a simplified planning format for municipalities and municipal authorities proposing the construction of a sewer extension primarily serving existing development. Typically, this format would be used for projects involving the extension of sewer service to no more than 100 equivalent dwelling units (EDUs) and where the majority of the project serves existing development. For projects where more than 50 percent of the proposed customers will result from new land development, a Component 3 Sewage Facilities Planning Module would typically be used. For larger projects or if the project would involve the construction or modification of a wastewater treatment facility, then a general Act 537 Update Revision, meeting all of the requirements of Title 25 Pennsylvania Code, Chapter 71 § 71.21, is appropriate.

DEP staff will make a final determination as to the appropriate type of planning for a given project based on the review of a plan of study. Eligibility for a grant to offset the cost of planning will be determined by DEP staff based upon review of a *Task/Activity Report* (3850-FM-BCW0005). The project sponsor submits both documents. **DO NOT** use this form without coordinating with your local DEP staff. Refer to the instructions.

This planning document, 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.

**A. PROJECT INFORMATION** (See Section A of instructions)

- Project Name  
Deerfield Knoll Wastewater Treatment Plant Decommissioning
- Brief Project Description  
Abandonment of the existing WWTP and diversion to Willistown Woods WWTP.

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

Municipality Name	County	City	Boro	Twp
Willistown Township	Chester	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Municipality Contact - Last Name	First Name	MI	Suffix	Title
Lodge	Shanna			Township Manager
Additional Individual - Last Name	First Name	MI	Suffix	Title
O'Connor Zonning	Caroline			Interim Director of Planning and
Municipality Mailing Address Line 1	Mailing Address Line 2			
688 Sugartown Road				
Address Last Line - City	State	ZIP+4		
Malvern	PA	19355		
Phone + Ext.	FAX (optional)	Email (optional)		
610-647-5300		slodge@willistown.pa.us		

**C. SITE INFORMATION** (See Section C of instructions)

Site Name

Deerfield Knoll Wastewater Treatment Plant;

Site Location Line 1

Deerfield Knoll

Site Location Line 2

Site Location Last Line - City	State	ZIP+4	Latitude	Longitude
Willistown	PA	19380	39.965337	-75.495642

Detailed Written Directions to Site

Traveling West on West Chester Pike, north side of the roadway past the entrance to 6022 West Chester Pike.

Description of Site

Wastewater Treatment Plant with lift station, surge tank, treatment tank, and chlorination basin.

Site Contact - Last Name	First Name	MI	Suffix	Phone	Ext.
Carney	Sean				

Site Contact Title	Site Contact Firm (if none, leave blank)
Project Engineer	

FAX	Email
	scarney@aquaamerica.com

Mailing Address Line 1	Mailing Address Line 2
762 W. Lancaster Ave	

Mailing Address Last Line – City	State	ZIP+4
Bryn Mawr	PA	19010

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

Last Name	First Name	MI	Suffix
Campbell	Robert	M	

Title	Consulting Firm Name
Senior Engineer	Pennoni Associates Inc.

Mailing Address Line 1	Mailing Address Line 2
1900 Market Street	Suite 300

Address Last Line - City	State	ZIP+4	Country
Philadelphia	PA	19103	

Email	Phone	Ext.	FAX
rcampbell@pennoni.com	215-254-7747		

**E. AVAILABILITY OF DRINKING WATER SUPPLY** (See Section E of instructions)

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: Aqua - Pennsylvania, Inc. - No new connections proposed

**F. PROJECT NARRATIVE** (See Section F of instructions)

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

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

**G. SEWAGE DISPOSAL NEEDS IDENTIFICATION** (See Section G of instructions)

Conduct sanitary and water supply surveys per DEP's publication entitled *Sewage Disposal Needs Identification*. This is highly recommended for all projects. It is required if PENNVEST funding is to be sought for the project, or if required by DEP as indicated by the checked box opposite this item.

**H. EXISTING WASTEWATER FACILITIES** (See Section H of instructions)

**1. COLLECTION SYSTEM**

Provide requested information concerning the existing treatment facility.

- a. Name of existing collection system Aqua Pennsylvania: Deerfield Knoll & Proposed Discharge to Willistown Woods

Clean Streams Law Permit Number 1586408 T-3 & WQM 1583426 T-2

- b. Name of interceptor N/A

Clean Streams Law Permit Number \_\_\_\_\_

**2. WASTEWATER TREATMENT FACILITY**

Provide requested information concerning the existing treatment facility.

Name of existing facility Deerfield Knoll & Willistown Woods Wastewater Treatment Plant

NPDES Permit Number for existing facility 1586408 T-3 & WQM 1583426 T-2

**I. PROPOSED WASTEWATER FACILITIES** (See Section I of instructions)

1. Provide an estimate of the immediate and five year projected flow from the proposed sewer extension. Address the capacity for this flow in the existing conveyance and treatment facilities in terms of the most recent wasteload management annual report for these facilities.

**2. PLOT PLAN**

The following information is to be submitted on a plot plan or map of the proposed project that clearly reflects the relationship between the proposed facilities and the identified features.

- |  |  |
|--|--|
| a. Existing and proposed buildings.  | h. Existing and proposed streets, roadways, access roads, etc.   |
| b. Lot lines and lot sizes.  | i. Any designated recreational or open space area  |
| c. Adjacent lots.  | j. Wetlands - from National Wetland Inventory Mapping and USGS Hydric Soils Mapping.                                   |
| d. Existing and proposed sewerage facilities.  | k. Flood plains or Floodprone area soils, floodways, watercourses, water bodies (from Federal Flood Insurance Mapping) |
| e. Show tap-in or sewer extension to the point of connection to existing collection system.      | l. Prime Agricultural Land.  |
| f. Existing and proposed water supplies and surface water (wells, springs, ponds, streams, etc.) | m. Any other facilities (pipelines, power lines, etc.)   |
| g. Existing and proposed rights-of-way.  | n. Orientation to north.   |

## I. PROPOSED WASTEWATER FACILITIES (continued)

### 3. WETLAND PROTECTION

YES NO

- a.   Are there wetlands in the project area? If yes, indicate these areas 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 HQ or EV streams and address impacts of the permitting requirements of said encroachments on the project.

### 4. PRIMARY AGRICULTURAL LAND PROTECTION

- a.   Will your project involve the disturbance of any prime agricultural lands? If "yes" indicate any alternatives to this disturbance that were considered and the reasons they were not deemed feasible. Identify any primary or secondary impacts of the project on the Commonwealth's prime agricultural lands. Evaluate alternatives to avoid or mitigate undesirable impacts. The selected sewage facilities plan must be consistent with local measures in place to protect prime agricultural lands.

### 5. STORMWATER MANAGEMENT IMPACTS:

- a.   Will the project impact an area covered by a DEP approved County Stormwater Management Plan? If yes show that the proposed facilities are consistent with that plan.

### 6. PENNSYLVANIA NATURAL DIVERSITY INDEX (PNDI) CONSISTENCY:

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 RMC

### 7. COMPREHENSIVE PLAN CONSISTENCY:

- A narrative and mapping to show that the proposed project is consistent with any comprehensive plan developed under the Pennsylvania Municipalities Planning Code (Act 247) is attached. Document that the proposed project is consistent with land use and all other requirements stated in the comprehensive plan.

### 8. COOPERATION WITH PA. HISTORICAL AND MUSEUM COMMISSION (PHMC):

- 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. Note that the Commission may require archeological surveys if federal funds, including PENNVEST, will be used in the project. If PENNVEST funds are to be used, DEP cannot recommend the project to PENNVEST for consideration until any required surveys have been done and the project has been "cleared" by the Commission.

**9. ADDITIONAL REQUIREMENTS FOR PENNVEST PROJECTS:**

- A copy of the additional information is attached. If PENNVEST funding is to be sought for the project, address these additional items in terms of any project impacts and measures to avoid or mitigate same.
- Cost Effectiveness
  - Air quality
  - Floodplains
  - Wild and scenic rivers
  - Coastal zone management
  - Socio-economic impacts
  - Water supplies
  - Other environmentally sensitive areas

**J. ALTERNATIVE SEWAGE FACILITIES ANALYSIS** (See Section J of instructions)

- An alternative sewage facilities analysis has been prepared as described in Section J of the instructions and is attached.

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

**K. CHAPTER 94 CONSISTENCY DETERMINATION** (See Section K 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 Chapter 94 of DEP's rules and regulations (relating to Municipal Wasteload Management). 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 11000 gpd
2. Total Sewage Flows to Facilities
  - a. Enter average and peak sewage flows for each proposed or existing facility as designed or permitted.
  - b. Enter the present average and peak sewage flows for the critical sections of existing facilities.
  - c. Enter the average and peak sewage flows projected for 5 years through the critical sections of existing facilities which includes existing, proposed, or future projects.

To complete the table, refer to Section K of instructions.

	a. Design and/or Permitted Capacity (gpd)		b. Present Flows (gpd)		c. Projected Flows in 5 years (gpd)	
	Average	Peak	Average	Peak	Average	Peak
<b>Collection</b>	9700	11000	9700	11000	9700	11000
<b>Conveyance</b>						
<b>Treatment</b>	175000	210000	99500	110500	110500	122772

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.

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?  Yes  No

  - a. 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 plan and schedule granting an allocation for this project. A letter granting allocations to this project under the plan and schedule must be attached to the module package.

sb. If no, 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 Chapter 94 requirements and that this proposal will not affect this status.

c. Collection System

Name of Agency, Authority, Municipality Aqua Pennsylvania Wastewater, Inc.

Name of Responsible Agent Kyle Roberts

Agent Signature \_\_\_\_\_

Date \_\_\_\_\_

d. Conveyance System

Name of Agency, Authority, Municipality Aqua Pennsylvania Wastewater, Inc.

Name of Responsible Agent Kyle Roberts

Agent Signature \_\_\_\_\_

Date \_\_\_\_\_

**K. CHAPTER 94 CONSISTENCY DETERMINATION (continued)**

4. Treatment Facility

The questions below are to be answered by the facility permittee in coordination with the information in the table and the latest Chapter 94 report.

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?  Yes  No

a. 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 plan and schedule granting an allocation for this project. A letter granting allocations to this project under the plan and schedule must be attached to the planning module.

b. 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 Chapter 94 requirements and that this proposal will not impact this status

c. Name of Agency, Authority, Municipality Aqua Pennsylvania Wastewater, Inc.

Name of Responsible Agent Kyle Roberts

Agent Signature \_\_\_\_\_

Date \_\_\_\_\_

**L. INSTITUTIONAL EVALUATION (See Section L of instructions)**

An institutional evaluation is attached. Identify the entity which will design, obtain necessary permits, construct, own and operate the proposed facilities. If a low pressure vacuum or effluent sewer are proposed, discuss purchase, installation, operation and maintenance responsibilities for the individual pumping, valves, tanks, etc.

**M. PROJECT COST AND FUNDING ANALYSIS** (See Section M of instructions)

- A detailed cost estimate and present worth analysis for the project is attached. Provide a financing plan for the project, identifying the funding source(s) and identifying estimated tap fees and user rates. For projects proposing the use of PENNVEST funds, see Section I. 9. **ADDITIONAL REQUIREMENTS FOR PENNVEST PROJECTS**. Complete the following table:

Cost and Funding Information (Estimated)	(Financed by Aqua PA)
<b>COST</b>	
Construction cost	\$ 667,175.00
Administrative, legal, engineering cost	\$ 153,450.25
Total project cost	\$ 820,625.25
Annual O/M cost	\$
<b>FUNDING</b>	
Tap-in fees (\$ per EDU X no. EDUs)	\$ 0
Proceeds from primary funding source	\$
Proceeds from other funding sources	\$ 0
<b>USER COSTS</b>	
Initial user base	EDUs
Monthly debt service per EDU	\$ 0
Monthly O/M cost per EDU	\$ 0
Total estimated monthly user cost per EDU	\$ 0

**N. PROJECT IMPLEMENTATION SCHEDULE** (See Section N of instructions)

- A project implementation schedule showing milestone dates for submission of DEP permit applications, initiation and completion of construction and any other milestones significant to this particular project is attached to this component

**O. PUBLIC NOTIFICATION REQUIREMENT** (See Section O of instructions)

- Attached is a copy of the public notice. All comments received as a result of the notice are attached.
- Municipal response to these comments is attached.
- No comments were received. A copy of the public notice is attached.

**P. ADDITIONAL CHAPTER 71 PLANNING ELEMENTS** (See Section P of instructions)

a. Additional planning elements are required by DEP.

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

**Q. PLANNING AGENCY REVIEW** (See Section Q of instructions)

- Local Planning Commission comments or Component 4a are attached.
- County, Area, Or Region Planning Commission comments or Component 4b are attached.
- County or Joint County Health Department comments (if appropriate) or Component 4c are attached.

**R. RESOLUTION OF ADOPTION** (See Section R of instructions)

- An original, signed, and sealed Resolution of Adoption is attached.

SECTION F.  
PROJECT NARRATIVE

## Project Narrative – Component 3M Section F

Aqua Pennsylvania Wastewater's Deerfield Knoll Wastewater Treatment Plant (WWTP) serves the Deerfield Knoll residential community in Willistown Township, Chester County, Pennsylvania. Properties tributary to the wastewater treatment plant are residential, there are no commercial or industrial users. Aqua wishes to consolidate wastewater treatment operations and remove the Deerfield Knoll WWTP from service. The Deerfield Knoll WWTP is to be decommissioned, and pumping system improvements shall be undertaken to redirect flow to the Willistown Woods WWTP for treatment and disposal.

To convey Deerfield Knoll's wastewater to the Willistown Woods WWTP, a new pumping station must be added to the Deerfield Knoll collection system. The proposed solution is to first convert the Deerfield Knoll WWTP into a temporary pump station and then following the decommissioning of the treatment plant, the existing Cohasset pump station will be upgraded, and the temporary pump station will be removed.

In the first phase of the project, the existing equalization basin at the Deerfield Knoll WWTP will be reconfigured into a pumping station which will pump flow to the Willistown Woods WWTP via a proposed force main installed in PA Route 3. Willistown Woods WWTP will provide ultimate treatment and disposal of wastewater flow from the Deerfield Knoll subdivision. During this time, the existing Cohasset Pump Station, which currently conveys all of the wastewater flow from the Deerfield Knoll community to the treatment plant, will continue to convey flows to the Deerfield Knoll WWTP site. Following decommissioning of the Deerfield Knoll WWTP, the Cohasset Pump Station will be upgraded to allow direct pumping to the Willistown Woods WWTP. The new pumping station will subsequently convey flow to the Willistown Woods WWTP. A new force main will be constructed between this new Deerfield Knoll Pumping Station and the Willistown Woods WWTP. Once the new pump station is commissioned, the remainder of the Deerfield Knoll WWTP will be decommissioned and the temporary pump station installed in the first phase of the project will be removed.

The basis of design for the Deerfield Knoll Pump Station uses an average flow of 9,700 gpd which is based on the 5-year annual average effluent flow from the Deerfield Knoll WWTP from 2020 through 2024. Using a conservative peaking factor of 4.5, the minimum required flow rate for the proposed Deerfield Knoll Pump Station is 30.3 gpm. A higher flow rate may be required to meet DEP's design guideline criteria for scouring velocity in force mains. Scouring velocity is needed to prevent the buildup of solids in the force main, and the required flow rate to achieve scouring velocity is dependent on the pipe size. 3-inch and 4-inch nominal diameter pipe sizes are being considered for this proposed force main, but the final selection will be made during the design of the pump station and force main. The design will consider a variety of technical factors to determine the appropriate force main size including: the hydraulic condition of the pump station, pump availability, and considerations for potential future connections not included in this Special Study.

The new force main will be constructed along PA Route 3. The force main will be installed via directional drilling to the greatest extent possible. The alignment will be selected to avoid conflict with the existing water main, and minimize traffic and environmental impacts.

The PaDEP identified that Willistown Township had two (2) open items with the PaDEP. The first item is a Component 3M submitted by the Township regarding the potential connection of thirteen (13) existing properties located along West Chester Pike to public sewers. The area is referred to as the West Chester Pike service area. This item has been approved and no longer pending.

The second item involves a special study submitted by the Township to evaluate the need to provide sewer service to the Chesterdale Service Area. The Chesterdale Service Area would convey flow to the Willistown Woods WWTP. The evaluation concluded that conveying Deerfield Knoll's effluent to the Willistown Woods WWTP will not preclude the ability to maintain capacity to provide public sewer to the Chesterdale Service Area. As agreed with Willistown Township, Aqua will maintain capacity at the Willistown Woods WWTP to accommodate the potential 43,425 gpd average wastewater flow from the Chesterdale Service area.

SECTION I.  
PROPOSED WASTEWATER FACILITIES

U:\ACCOUNTS\PSWCX\PSWCX22003 - DEERFIELD ACT 537 PLAN UPDATE\DESIGN\SHEETS\DEERFIELD\_KNOLL\_AERIAL\_EXHIBIT\_25-07.31.DWG  
 PLOTTED: 8/4/2025 10:16:25 AM, BY: OLIVIA SZABO PLOTSTYLE: PENNONI\_NCS.STB, PROJECT STATUS: ----



**LEGEND:**

EXISTING	PROPOSED	
		SANITARY SEWER FM, PIPE
		EXISTING HOUSE
		PROPERTY LINE
		SANITARY SEWER, MANHOLE
		SANITARY SEWER, PIPE
		GAS, PIPE
		OVERHEAD ELECTRIC
		UTILITY POLE
		WATER MAIN, PIPE
		WATER MAIN, HYDRANT



**Pennoni**  
 Pennoni Associates Inc.  
 Engineers • Surveyors • Planners  
 Landscape Architects  
 1900 Market Street, Suite 300 • Philadelphia, PA 19103  
 T 215.222.3000 • F 215.222.3588

DRAWN BY: OMS	CHECKED BY: ML	PROJECT NO.
SCALE: 1"=300'	DATE: 2025-07-10	PSWCX22003

DEERFIELD KNOLL STP DIVERSION PLAN  
**WILLISTOWN TOWNSHIP**  
**537 PLAN UPDATE**  
 PREPARED FOR  
 AQUA PENNSYLVANIA WASTEWATER  
 762 WEST LANCASTER AVE  
 BRYN MAWR, PA 19010

DRAWING NO.	
<b>1.0</b>	

## 1. PROJECT INFORMATION

Project Name: **Deerfield Act 537**

Date of Review: **9/4/2025 10:46:10 AM**

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

Project Area: **5.34 acres**

County(s): **Chester**

Township/Municipality(s): **Willistown Township**

ZIP Code:

Quadrangle Name(s): **MEDIA; WEST CHESTER**

Watersheds HUC 8: **Lower Delaware**

Watersheds HUC 12: **Ridley Creek**

Decimal Degrees: **39.965230, -75.502422**

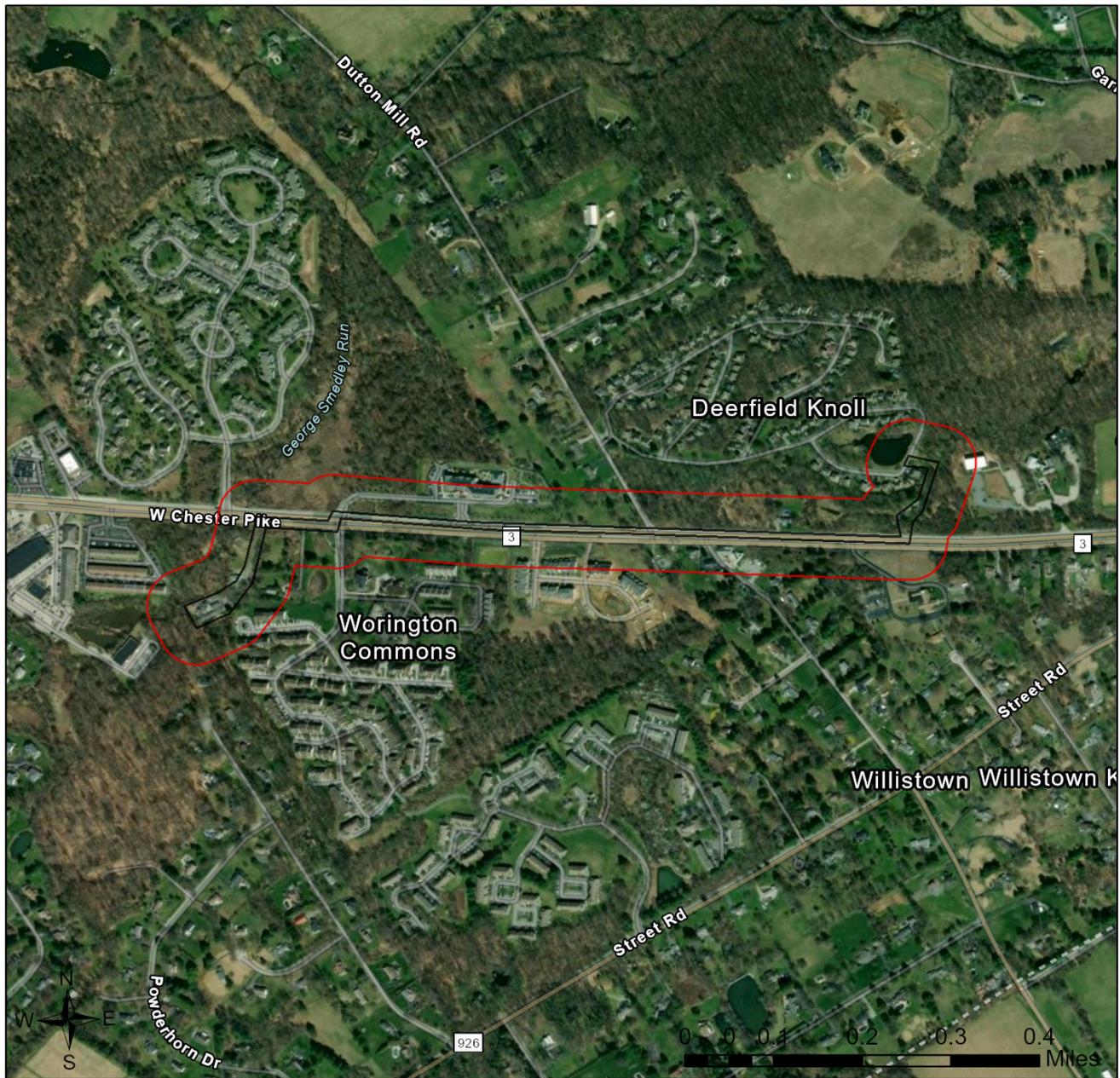
Degrees Minutes Seconds: **39° 57' 54.8289" N, 75° 30' 8.7193" W**

## 2. SEARCH RESULTS

Agency	Results	Response
PA Game Commission	<b>Conservation Measure</b>	<b>No Further Review Required, See Agency Comments</b>
PA Department of Conservation and Natural Resources	<b>Potential Impact</b>	<b>FURTHER REVIEW IS REQUIRED, See Agency Response</b>
PA Fish and Boat Commission	No Known Impact	No Further Review Required
U.S. Fish and Wildlife Service	<b>Potential Impact</b>	<b>MORE INFORMATION REQUIRED, See Agency Response</b>

As summarized above, Pennsylvania Natural Diversity Inventory (PNDI) records indicate there may be potential impacts to threatened and endangered and/or special concern species and resources within the project area. If the response above indicates "No Further Review Required" no additional communication with the respective agency is required. If the response is "Further Review Required" or "See Agency Response," refer to the appropriate agency comments below. Please see the DEP Information Section of this receipt if a PA Department of Environmental Protection Permit is required.

### Deerfield Act 537

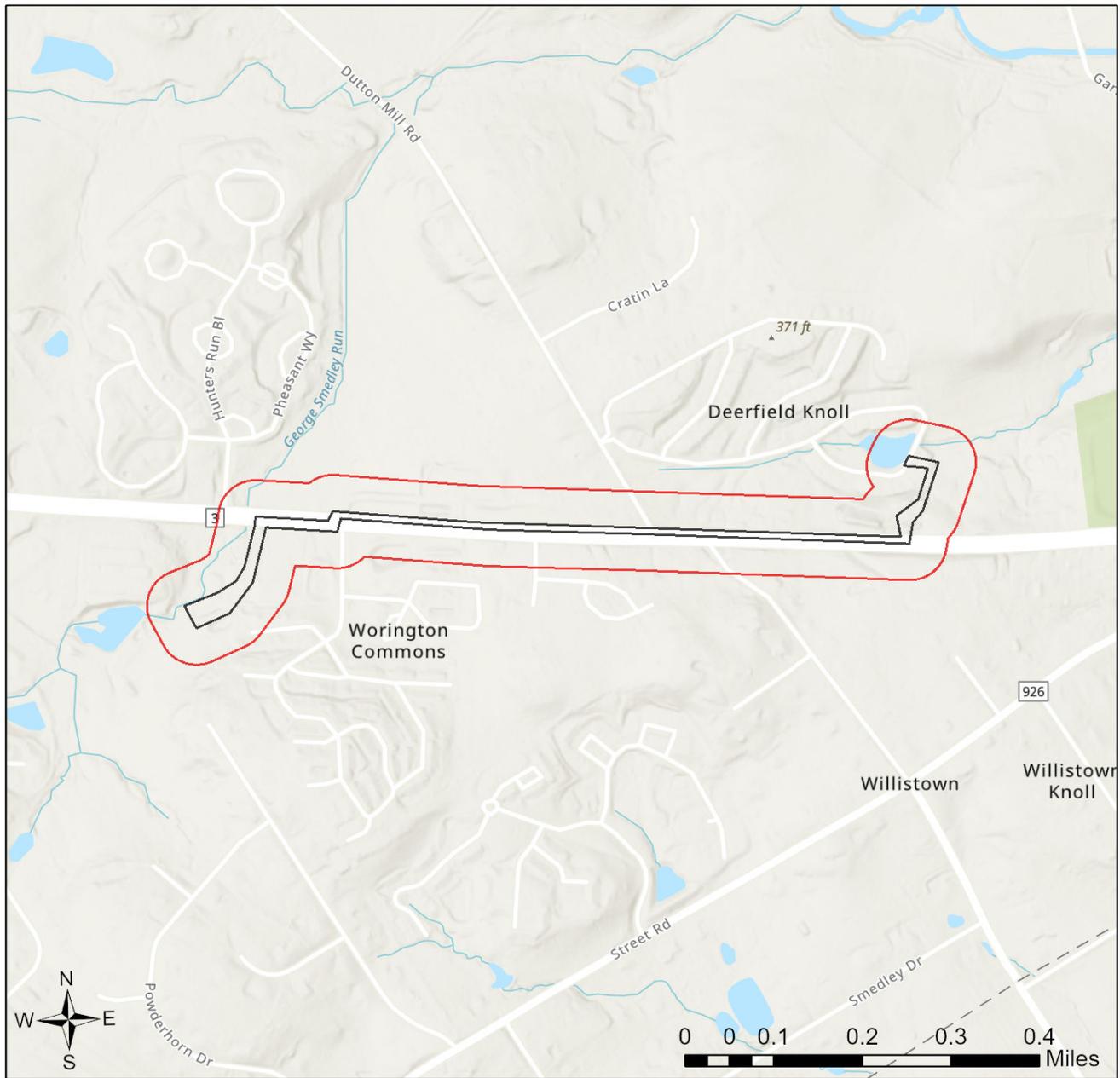


-  Buffered Project Boundary
-  Project Boundary



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

### Deerfield Act 537



-  Buffered Project Boundary
-  Project Boundary



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,

## RESPONSE TO QUESTION(S) ASKED

**Q1:** Will the action include disturbance to trees such as tree cutting (or other means of knocking down, or bringing down trees, tree topping, or tree trimming), pesticide/herbicide application or prescribed fire?

**Your answer is:** No

**Q2:** Does the action area contain any caves (or associated sinkholes, fissures, or other karst features), mines, rocky outcroppings, culverts, or tunnels that could provide habitat for hibernating bats?

**Your answer is:** No

**Q3:** Will the action include disturbance to trees such as tree cutting (or other means of knocking down, or bringing down trees, tree topping, or tree trimming), pesticide/herbicide application or prescribed fire?

**Your answer is:** No

**Q4:** Does the action area contain any caves (or associated sinkholes, fissures, or other karst features), mines, rocky outcroppings, culverts, or tunnels that could provide habitat for hibernating bats?

**Your answer is:** No

### 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:

Conservation Measure: Potential impacts to state and federally listed species which are under the jurisdiction of both the Pennsylvania Game Commission (PGC) and the U.S. Fish and Wildlife Service may occur as a result of this project. As a result, the PGC defers comments on potential impacts to federally listed species to the U.S. Fish and Wildlife Service. No further coordination with the Pennsylvania Game Commission is required at this time.

#### PA Department of Conservation and Natural Resources

##### RESPONSE:

Further review of this project is necessary to resolve the potential impact(s). Please send project information to this agency for review (see WHAT TO SEND).

**DCNR 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. After desktop review, if a botanical survey is required by DCNR, we recommend the DCNR Botanical Survey Protocols, available here:

<https://conservationexplorer.dcnr.pa.gov/content/survey-protocols>)

Scientific Name	Common Name	Current Status	Proposed Status	Survey Window
Dichanthelium oligosanthes var. scribnerianum	Scribner's Panicgrass	Special Concern Species*	Threatened	Vernal terminal panicles May - early July, or late summer or early fall
Sensitive Species**		Threatened	Threatened	Flowers remain open for few hours; flowers late June - July
Symphotrichum depauperatum	Serpentine Aster	Threatened	Threatened	Flowers August - October

## PA Fish and Boat Commission

### RESPONSE:

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

## U.S. Fish and Wildlife Service

### RESPONSE:

**Information Request:** Your project is within the range of the federally listed bog turtle. Enter project information into IPaC (<http://ecos.fws.gov/ipac/>). Follow the step-by-step process to review this project's potential effect on federally listed species. For step-by-step instructions, please see our Project Review Page (<https://www.fws.gov/office/pennsylvania-ecological-services/project-revi...>)

\* 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.

## WHAT TO SEND TO JURISDICTIONAL AGENCIES

**If project information was requested by one or more of the agencies above**, upload\* or email the following information to the agency(s) (see AGENCY CONTACT INFORMATION). Instructions for uploading project materials can be found [here](#). This option provides the applicant with the convenience of sending project materials to a single location accessible to all three state agencies (but not USFWS).

\*If information was requested by USFWS, applicants must submit their project using [IPaC](#), following the [USFWS Project Submission](#) Instructions. USFWS will not accept or review project materials uploaded via the Conservation Explorer.

### Check-list of Minimum Materials to be submitted:

\_\_\_ Project narrative with a description of the overall project, the work to be performed, current physical characteristics of the site and acreage to be impacted.

\_\_\_ A map with the project boundary and/or a basic site plan (particularly showing the relationship of the project to the physical features such as wetlands, streams, ponds, rock outcrops, etc.)

### In addition to the materials listed above, USFWS REQUIRES the following

\_\_\_ **SIGNED** copy of a Final Project Environmental Review Receipt

### The inclusion of the following information may expedite the review process.

\_\_\_ Color photos keyed to the basic site plan (i.e. showing on the site plan where and in what direction each photo was taken and the date of the photos)

\_\_\_ Information about the presence and location of wetlands in the project area, and how this was determined (e.g., by a qualified wetlands biologist), if wetlands are present in the project area, provide project plans showing the location of all project features, as well as wetlands and streams.

## 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](http://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](mailto:RA-HeritageReview@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](mailto:IR1_ESPenn@fws.gov)  
NO Faxes Please

**PA Fish and Boat Commission**  
Division of Environmental Services  
595 E. Rolling Ridge Dr., Bellefonte, PA 16823  
Email: [RA-FBPACENOTIFY@pa.gov](mailto:RA-FBPACENOTIFY@pa.gov)

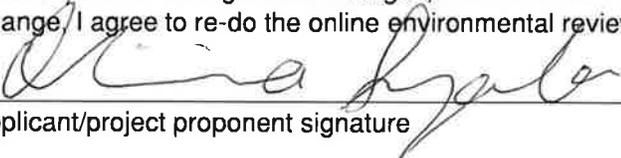
**PA Game Commission**  
Bureau of Wildlife Management  
Division of Environmental Review  
2001 Elmerton Avenue, Harrisburg, PA 17110-9797  
Email: [RA-PGC\\_PNDI@pa.gov](mailto:RA-PGC_PNDI@pa.gov)  
NO Faxes Please

### 7. PROJECT CONTACT INFORMATION

Name: Olivia Szabo  
Company/Business Name: Pennoni Associates Inc.  
Address: 1900 Market Street  
City, State, Zip: Philadelphia, PA, 19103  
Phone: ( 215 ) 222 - 3000 Fax: ( )  
Email: oszabo@pennoni.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.

  
applicant/project proponent signature

9.10.2025  
date



September 11, 2025

**PNDI Number: 800900**  
Version: Final\_2; 9/4/2025

**Olivia Szabo**

**Pennoni**

1900 Market Street, Suite 300

Philadelphia, PA 19103

Email: [oszabo@pennoni.com](mailto:oszabo@pennoni.com) (hard copy will not follow)

**Re: Deerfield Act 537**

**Willistown Township, Chester County, PA**

Dear Olivia Szabo,

Thank you for the submission of your field survey for Pennsylvania Natural Diversity Inventory (PNDI) Environmental Review Receipt Number 800900 (Final\_2) for review. PA Department of Conservation and Natural Resources screened this project for potential impacts to species and resources under DCNR's responsibility, which includes plants, terrestrial invertebrates, natural communities, and geologic features only.

**No Impact Anticipated per Survey**

PNDI records indicate species or resources under DCNR's jurisdiction are located in the vicinity of the project. DCNR requested a botanical survey for several species on January 16, 2024. A survey was conducted by Anthony Silva of DuBois on July 17 and September 27, 2024. No species of special concern were found on the project site. Therefore, DCNR has determined that no impact is likely. No further coordination with our agency is needed for this project.

**Recommended Best Management Practices:**

- Use a conservative approach to project design that minimizes permanent and temporary disturbances to soil and native vegetation. This will conserve habitat and limit opportunities for invasive plants.
- Clean boot treads, tools, construction equipment, watercraft, and vehicles thoroughly (especially the undercarriage and wheels) before they are brought on site. This will remove invasive plant seeds and invasive earthworms/cocoons that may have been picked up at other worksites.
- Use clean project materials (e.g., weed-free straw, topsoil, rock fill, etc.) or materials native to the worksite to avoid introducing invasive species from contaminated sources.
- Do not use seed mixes that include invasive species. More information about invasive plants in Pennsylvania can be found at the following link:  
<http://www.dcnr.pa.gov/Conservation/WildPlants/InvasivePlants/Pages/default.aspx>
- Use habitat appropriate seed mixes and, when available, use PA ecotypes. For example, use a riparian seed mix when reseeding along a waterway. The Bureau of Forestry Planting & Seeding Guidelines can be found at the following link for recommendations:  
[http://www.docs.dcnr.pa.gov/cs/groups/public/documents/document/dcnr\\_20031083.pdf](http://www.docs.dcnr.pa.gov/cs/groups/public/documents/document/dcnr_20031083.pdf)

- Use native plants for landscaping, revegetation, and stormwater management. Do not use nonnative invasive species. Reduce the area of lawn and impermeable surfaces to the fullest extent practicable in favor of native gardens or habitat restoration (e.g., forest, meadow, wetland, etc.). More information about lawn conversion can be found at the following link: <https://www.dcnr.pa.gov/Conservation/Water/LawnConversion/Pages/default.aspx>
- Plant forest buffers where trees were historically present along streams, wetlands, and bodies of water. Buffers should be a minimum of 35 feet in width (ideally at least 100 feet in width). Where trees are not appropriate (e.g., powerline rights-of-way), buffer with native shrubs and herbaceous plants. More information about riparian buffers can be found at the following link: <https://www.dcnr.pa.gov/Conservation/Water/RiparianBuffers/Pages/default.aspx>
- Manage road/utility rights-of-way, median strips, edges, and other green spaces for diverse native plant communities and wildlife (e.g., common and swamp milkweed for monarch butterfly). In seed mixes, include PA native wildflowers that have overlapping bloom periods and provide forage for pollinators throughout the growing season.
- Avoid blanket herbicide applications; instead, spot-treat undesirable tall woody vegetation and invasive weeds. Where mowing is necessary, reduce frequency to once every few years during the dormant season (i.e., after first frost in late fall and before bird nesting in early spring), leaving some refugia for overwintering wildlife.
- Monitor for invasive plants before, during, and after project activities and promptly control any identified infestations. Frequent monitoring allows for early detection and rapid response.

This response represents the most up-to-date review of the PNDI data files and is valid for two (2) years only. If project plans change or more information on listed or proposed species becomes available, our determination may be reconsidered. Should the proposed work continue beyond the period covered by this letter and a permit has not been acquired, please resubmit the project to this agency as an "Update" (including an updated PNDI receipt, project narrative, description of project changes and accurate map). As a reminder, this finding applies to potential impacts under DCNR's jurisdiction only. Visit the PNHP website for directions on contacting the Commonwealth's other resource agencies for environmental review.

**Should you have any questions or concerns, please contact Alexander Dogonniuck, Ecological Information Specialist, by phone (717-783-3913) or via email (c-adogonni@pa.gov).**

Sincerely,



Greg Podnieszinski, Section Chief  
Natural Heritage Section

conserve

sustain

enjoy



## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Pennsylvania Ecological Services Field Office  
110 Radnor Road Suite 101  
State College, PA 16801-7987  
Phone: (814) 234-4090 Fax: (814) 234-0748

In Reply Refer To:

09/04/2025 15:00:34 UTC

Project Code: 2025-0144755

Project Name: Decommissioning of Deerfield Knoll Wastewater Treatment Plant

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>

**Migratory Birds:** In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see <https://www.fws.gov/program/migratory-bird-permit/what-we-do>.

It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

- USFWS National Wildlife Refuges and Fish Hatcheries

## **OFFICIAL SPECIES LIST**

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Pennsylvania Ecological Services Field Office**

110 Radnor Road Suite 101

State College, PA 16801-7987

(814) 234-4090

## PROJECT SUMMARY

Project Code: 2025-0144755  
Project Name: Decommissioning of Deerfield Knoll Wastewater Treatment Plant  
Project Type: Wastewater Pipeline - New Constr - Below Ground  
Project Description: The Deerfield Knoll WWTP is to be decommissioned, and pumping system improvements shall be undertaken to redirect flow along PA Route 3 to the Willistown Woods WWTP for treatment and disposal.

### Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@39.965150550000004,-75.50025490786516,14z>



Counties: Chester County, Pennsylvania

## ENDANGERED SPECIES ACT SPECIES

There is a total of 5 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## MAMMALS

NAME	STATUS
Indiana Bat <i>Myotis sodalis</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/5949">https://ecos.fws.gov/ecp/species/5949</a>	Endangered
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Endangered
Tricolored Bat <i>Perimyotis subflavus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/10515">https://ecos.fws.gov/ecp/species/10515</a>	Proposed Endangered

## REPTILES

NAME	STATUS
Bog Turtle <i>Glyptemys muhlenbergii</i> Population: Wherever found, except GA, NC, SC, TN, VA No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/6962">https://ecos.fws.gov/ecp/species/6962</a>	Threatened

## INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> There is <b>proposed</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Proposed Threatened

## CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

## USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

## **IPAC USER CONTACT INFORMATION**

Agency: County of Chester  
Name: Olivia Szabo  
Address: 1900 Market Street  
Address Line 2: Suite 300  
City: Philadelphia  
State: PA  
Zip: 19103  
Email: [oszabo@pennoni.com](mailto:oszabo@pennoni.com)  
Phone: 2158579724



# United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Pennsylvania Ecological Services Field Office  
110 Radnor Road Suite 101  
State College, PA 16801-7987  
Phone: (814) 234-4090 Fax: (814) 234-0748

In Reply Refer To:

09/04/2025 17:02:47 UTC

Project code: 2025-0144755

Project Name: Decommissioning of Deerfield Knoll Wastewater Treatment Plant

Federal Nexus: no

Federal Action Agency (if applicable): County of Chester

**Subject:** Record of project representative's no effect determination for 'Decommissioning of Deerfield Knoll Wastewater Treatment Plant'

Dear Olivia Szabo:

This letter records your determination using the Information for Planning and Consultation (IPaC) system provided to the U.S. Fish and Wildlife Service (Service) on September 04, 2025, for 'Decommissioning of Deerfield Knoll Wastewater Treatment Plant' (here forward, Project). This project has been assigned Project Code 2025-0144755 and all future correspondence should clearly reference this number. **Please carefully review this letter.**

## Ensuring Accurate Determinations When Using IPaC

The Service developed the IPaC system and associated species' determination keys in accordance with the Endangered Species Act of 1973 (ESA; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and based on a standing analysis. All information submitted by the Project proponent into IPaC must accurately represent the full scope and details of the Project.

Failure to accurately represent or implement the Project as detailed in IPaC or the **Northern Long-eared Bat and Tricolored Bat Range-wide Determination Key (Dkey)**, invalidates this letter. ***Answers to certain questions in the DKey commit the project proponent to implementation of conservation measures that must be followed for the ESA determination to remain valid.***

## Determination for the Northern Long-Eared Bat and/or Tricolored Bat

Based upon your IPaC submission and a standing analysis, your project has reached the following effect determinations:

Species	Listing Status	Determination
Northern Long-eared Bat ( <i>Myotis septentrionalis</i> )	Endangered	No effect

Tricolored Bat (*Perimyotis subflavus*)Proposed  
Endangered

No effect

Federal agencies must consult with U.S. Fish and Wildlife Service under section 7(a)(2) of the Endangered Species Act (ESA) when an action *may affect* a listed species. Tricolored bat is proposed for listing as endangered under the ESA, but not yet listed. For actions that may affect a proposed species, agencies cannot consult, but they can *confer* under the authority of section 7(a)(4) of the ESA. Such conferences can follow the procedures for a consultation and be adopted as such if and when the proposed species is listed. Should the tricolored bat be listed, agencies must review projects that are not yet complete, or projects with ongoing effects within the tricolored bat range that previously received a NE or NLAA determination from the key to confirm that the determination is still accurate.

To make a no effect determination, the full scope of the proposed project implementation (action) should not have any effects (either positive or negative), to a federally listed species or designated critical habitat. Effects of the action are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action. (See § 402.17).

Under Section 7 of the ESA, if a federal action agency makes a no effect determination, no consultation with the Service is required (ESA §7). If a proposed Federal action may affect a listed species or designated critical habitat, formal consultation is required except when the Service concurs, in writing, that a proposed action "is not likely to adversely affect" listed species or designated critical habitat [50 CFR §402.02, 50 CFR§402.13].

### **Other Species and Critical Habitat that May be Present in the Action Area**

The IPaC-assisted determination key for the northern long-eared bat and tricolored bat does not apply to the following ESA-protected species and/or critical habitat that also may occur in your Action area:

- Bog Turtle *Glyptemys muhlenbergii* Threatened
- Indiana Bat *Myotis sodalis* Endangered
- Monarch Butterfly *Danaus plexippus* Proposed Threatened

You may coordinate with our Office to determine whether the Action may affect the animal species listed above and, if so, how they may be affected.

### **Next Steps**

If there are no updates on listed species, no further consultation/coordination for this project is required with respect to the species covered by this key. However, the Service recommends that project proponents re-evaluate the Project in IPaC if: 1) the scope, timing, duration, or location

of the Project changes (includes any project changes or amendments); 2) new information reveals the Project may impact (positively or negatively) federally listed species or designated critical habitat; or 3) a new species is listed, or critical habitat designated. If any of the above conditions occurs, additional coordination with the Service should take place to ensure compliance with the Act.

If you have any questions regarding this letter or need further assistance, please contact the Pennsylvania Ecological Services Field Office and reference Project Code 2025-0144755 associated with this Project.

## Action Description

You provided to IPaC the following name and description for the subject Action.

### 1. Name

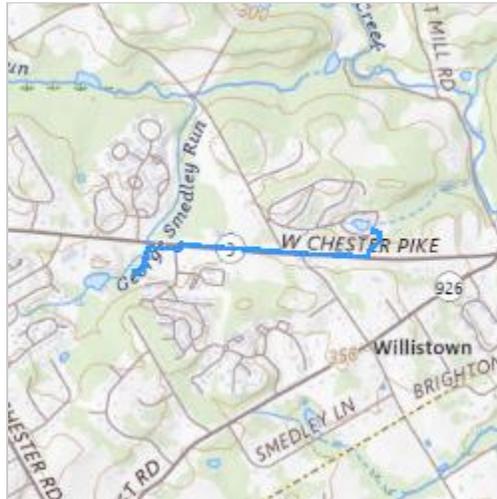
Decommissioning of Deerfield Knoll Wastewater Treatment Plant

### 2. Description

The following description was provided for the project 'Decommissioning of Deerfield Knoll Wastewater Treatment Plant':

The Deerfield Knoll WWTP is to be decommissioned, and pumping system improvements shall be undertaken to redirect flow along PA Route 3 to the Willistown Woods WWTP for treatment and disposal.

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@39.965150550000004,-75.50025490786516,14z>



## DETERMINATION KEY RESULT

Based on the information you provided, you have determined that the Proposed Action will have no effect on the species covered by this determination key. Therefore, no consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (87 Stat. 884, as amended 16 U.S.C. 1531 *et seq.*) is required for those species.

## QUALIFICATION INTERVIEW

1. Does the proposed project include, or is it reasonably certain to cause, intentional take of listed bats or any other listed species?

**Note:** Intentional take is defined as take that is the intended result of a project. Intentional take could refer to research, direct species management, surveys, and/or studies that include intentional handling/encountering, harassment, collection, or capturing of any individual of a federally listed threatened, endangered or proposed species?

*No*

2. Is the action area wholly within Zone 2 of the year-round active area for northern long-eared bat and/or tricolored bat?

**Automatically answered**

*No*

3. Does the action area intersect Zone 1 of the year-round active area for northern long-eared bat and/or tricolored bat?

**Automatically answered**

*No*

4. Does the proposed action involve **wind or solar energy**?

*No*

5. Is the proposed action authorized, permitted, licensed, funded, or being carried out by a Federal agency in whole or in part?

**Note for projects in Pennsylvania:** Projects requiring authorization under Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act would be considered as having a federal nexus. Since the U.S. Army Corps of Engineers (Corps) has issued the Pennsylvania State Programmatic General Permit (PASPGP), which may be verified by the PA Department of Environmental Protection or certain Conservation Districts, the need to receive a Corps authorization to perform the work under the PASPGP serves as a federal nexus. As such, if proposing to use the PASPGP, you would answer 'yes' to this question.

*No*

6. [Semantic] Is the action area located within 0.5 miles of a known bat hibernaculum or winter roost? Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your state wildlife agency.

**Automatically answered**

No

7. Does the action area contain any winter roosts or caves (or associated sinkholes, fissures, or other karst features), mines, rocky outcroppings, or tunnels that could provide habitat for hibernating bats?

No

8. Does the action area contain (1) talus or (2) anthropogenic or naturally formed rock shelters or crevices in rocky outcrops, rock faces or cliffs?

No

9. Will the action cause effects to a bridge?

**Note:** Covered bridges should be considered as bridges in this question.

No

10. Will the action result in effects to a culvert or tunnel at any time of year?

No

11. Are trees present within 1000 feet of the action area?

**Note:** If there are trees within the action area that are of a sufficient size to be potential roosts for bats answer "Yes". If unsure, additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: <https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines>.

Yes

12. Does the action include the intentional exclusion of bats from a building or building-like structure? **Note:** Exclusion is conducted to deny bats' entry or reentry into a building. To be effective and to avoid harming bats, it should be done according to established standards. If your action includes bat exclusion and you are unsure whether northern long-eared bats or tricolored bats are present, answer "Yes." Answer "No" if there are no signs of bat use in the building/structure. If unsure, contact your local Ecological Services Field Office to help assess whether northern long-eared bats or tricolored bats may be present. Contact a Nuisance Wildlife Control Operator (NWCO) for help in how to exclude bats from a structure safely without causing harm to the bats (to find a NWCO certified in bat standards, search the Internet using the search term "National Wildlife Control Operators Association bats"). Also see the White-Nose Syndrome Response Team's guide for bat control in structures.

No

13. Does the action involve removal, modification, or maintenance of a human-made building-like structure (barn, house, or other building) **known or suspected to contain roosting bats?**

*No*

14. Will the action cause construction of one or more new roads open to the public?

For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.).

*No*

15. Will the action include or cause any construction or other activity that is reasonably certain to increase average night-time traffic permanently or temporarily on one or more existing roads? **Note:** For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.). .

*No*

16. Will the action include or cause any construction or other activity that is reasonably certain to increase the number of travel lanes on an existing thoroughfare?

For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.).

*No*

17. Will the proposed Action involve the creation of a new water-borne contaminant source (e.g., leachate pond, pits containing chemicals that are not NSF/ANSI 60 compliant)?

**Note:** For information regarding NSF/ANSI 60 please visit <https://www.nsf.org/knowledge-library/nsf-ansi-standard-60-drinking-water-treatment-chemicals-health-effects>

*No*

18. Will the proposed action involve the creation of a new point source discharge from a facility other than a water treatment plant or storm water system?

*No*

19. Will the action include drilling or blasting?

*Yes*

20. Will the drilling or blasting produce noise or vibrations above existing background levels that will affect suitable summer habitat for northern long-eared bats and/or tricolored bats?

**Note:** Additional information defining suitable suitable summer habitat for the northern long-eared bat and/or tricolored bat, can be found in Appendix A in the USFWS' Range-wide Indiana Bat and Northern long-eared Bat Survey Guidelines at: <https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines>

*No*

21. Will the action involve military training (e.g., smoke operations, obscurant operations, exploding munitions, artillery fire, range use, helicopter or fixed wing aircraft use at night)?

*No*

22. Will the proposed action involve the use of herbicides or pesticides (e.g., fungicides, insecticides, or rodenticides)?

*No*

23. Will the action include or cause activities that are reasonably certain to cause chronic or intense nighttime noise (above current levels of ambient noise in the area) in suitable summer habitat for the northern long-eared bat or tricolored bat during the active season?

Chronic noise is noise that is continuous or occurs repeatedly again and again for a long time. Sources of chronic or intense noise that could cause adverse effects to bats may include, but are not limited to: road traffic; trains; aircraft; industrial activities; gas compressor stations; loud music; crowds; oil and gas extraction; construction; and mining.

**Note:** Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: <https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines>.

*No*

24. Does the action include, or is it reasonably certain to cause, the use of permanent or temporary artificial lighting within 1000 feet of suitable northern long-eared bat or tricolored bat roosting habitat?

**Note:** Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: <https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines>.

*No*

25. Will the action include tree cutting or other means of knocking down or bringing down trees, tree topping, or tree trimming?

*No*

26. Will the proposed action result in the use of prescribed fire?

**Note:** If the prescribed fire action includes other activities than application of fire (e.g., tree cutting, fire line preparation) please consider impacts from those activities within the previous representative questions in the key. This set of questions only considers impacts from flame and smoke.

*No*

27. Does the action area intersect the northern long-eared bat species list area?

**Automatically answered**

*Yes*

28. [Semantic] Is the action area located within 0.5 miles of radius of an entrance/opening to any known NLEB hibernacula or winter roost? **Note:** The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.

**Automatically answered**

*No*

29. [Semantic] Is the action area located within 0.25 miles of a culvert that is known to be occupied by northern long-eared or tricolored bats? **Note:** The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.

**Automatically answered**

*No*

30. [Semantic] Is the action area located within 150 feet of a documented northern long-eared bat roost site?

**Note:** The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency. Have you contacted the appropriate agency to determine if your action is within 150 feet of any documented northern long-eared bat roosts?

**Note:** A document with links to Natural Heritage Inventory databases and other state-specific sources of information on the locations of northern long-eared bat roosts is available here. Location information for northern long-eared bat roosts is generally kept in state natural heritage inventory databases – the availability of this data varies by state. Many states provide online access to their data, either directly by providing maps or by providing the opportunity to make a data request. In some cases, to protect those resources, access to the information may be limited.

**Automatically answered**

*No*

31. Is suitable summer habitat for the northern long-eared bat present within 1000 feet of project activities?

If unsure, answer "Yes."

**Note:** Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: <https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines>.

Yes

32. Does the action area intersect the tricolored bat species list area?

**Automatically answered**

Yes

33. Is the action area located within 0.5-mile of radius of an entrance/opening to any known tricolored bat hibernacula or winter roost?

Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your state wildlife agency.

**Automatically answered**

No

34. [Semantic] Is the action area located within 0.25 miles of a culvert that is known to be occupied by northern long-eared or tricolored bats? **Note:** The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.

**Automatically answered**

No

35. Has a presence/probable absence bat survey targeting the [tricolored bat and following the Service's Range-wide Indiana Bat and Northern Long-Eared Bat Survey Guidelines](#) been conducted within the project area?

No

36. Is suitable summer habitat for the tricolored bat present within 1000 feet of project activities?

(If unsure, answer ""Yes.""')

**Note:** If there are trees within the action area that may provide potential roosts for tricolored bats (e.g., clusters of leaves in live and dead deciduous trees, Spanish moss (*Tillandsia usneoides*), clusters of dead pine needles of large live pines) answer ""Yes."" For a complete definition of suitable summer habitat for the tricolored bat, please see Appendix A in the [Service's Range-wide Indiana Bat and Northern long-eared Bat Survey Guidelines](#).

Yes

37. Do you have any documents that you want to include with this submission?

No

# PROJECT QUESTIONNAIRE

## **IPAC USER CONTACT INFORMATION**

Agency: County of Chester  
Name: Olivia Szabo  
Address: 1900 Market Street  
Address Line 2: Suite 300  
City: Philadelphia  
State: PA  
Zip: 19103  
Email: [oszabo@pennoni.com](mailto:oszabo@pennoni.com)  
Phone: 2158579724



## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Pennsylvania Ecological Services Field Office  
110 Radnor Road Suite 101  
State College, PA 16801-7987  
Phone: (814) 234-4090 Fax: (814) 234-0748

In Reply Refer To:

09/04/2025 15:19:24 UTC

Project code: 2025-0144755

Project Name: Decommissioning of Deerfield Knoll Wastewater Treatment Plant

Federal Nexus: no

Federal Action Agency (if applicable): County of Chester

Subject: Technical assistance for 'Decommissioning of Deerfield Knoll Wastewater Treatment Plant'

Dear Olivia Szabo:

This letter records your determination using the Information for Planning and Consultation (IPaC) system provided to the U.S. Fish and Wildlife Service (Service) on September 04, 2025, for “Decommissioning of Deerfield Knoll Wastewater Treatment Plant” (here forward, Project). This project has been assigned Project Code 2025-0144755 and all future correspondence should clearly reference this number.

The Service developed the IPaC system and associated species’ determination keys in accordance with the Endangered Species Act of 1973 (ESA; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and based on a standing analysis. All information submitted by the Project proponent into the IPaC must accurately represent the full scope and details of the Project. Failure to accurately represent or implement the Project as detailed in IPaC or the Northeast Determination Key (Dkey), invalidates this letter. **Answers to certain questions in the DKey commit the project proponent to implementation of conservation measures that must be followed for the ESA determination to remain valid.**

To make a no effect determination, the full scope of the proposed project implementation (action) should not have any effects (either positive or negative effect(s)), to a federally listed species or designated critical habitat. Effects of the action are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action. (See § 402.17). Under Section 7 of the ESA, if a federal action agency makes a no effect determination, no further consultation with, or concurrence from, the Service is

required (ESA §7). If a proposed Federal action may affect a listed species or designated critical habitat, formal consultation is required (except when the Service concurs, in writing, that a proposed action "is not likely to adversely affect (NLAA)" listed species or designated critical habitat [50 CFR §402.02, 50 CFR§402.13]).

The IPaC results indicated the following species is (are) potentially present in your project area and, based on your responses to the Service's Northeast DKey, you determined the proposed Project will have the following effect determinations:

<b>Species</b>	<b>Listing Status</b>	<b>Determination</b>
Bog Turtle ( <i>Glyptemys muhlenbergii</i> )	Threatened	NLAA
Indiana Bat ( <i>Myotis sodalis</i> )	Endangered	NLAA

### **Conclusion**

Coordination with the Service is complete. This letter serves as technical assistance. All conservation measures should be implemented as proposed. Thank you for considering federally listed species during your project planning.

If no changes occur with the Project or there are no updates on listed species, no further consultation/coordination for this project is required for the species identified above. However, the Service recommends that project proponents re-evaluate the Project in IPaC if: 1) the scope, timing, duration, or location of the Project changes (includes any project changes or amendments); 2) new information reveals the Project may impact (positively or negatively) federally listed species or designated critical habitat; or 3) a new species is listed, or critical habitat designated. If any of the above conditions occurs, additional consultation with the Service should take place before project implements any changes which are final or commits additional resources.

### **Other Species and Critical Habitat that May be Present in the Action Area**

In addition to the species listed above, the following species and/or critical habitats may also occur in your project area and are not covered by this conclusion:

- Monarch Butterfly *Danaus plexippus* Proposed Threatened
- Northern Long-eared Bat *Myotis septentrionalis* Endangered
- Tricolored Bat *Perimyotis subflavus* Proposed Endangered

Please Note: If the Action may impact bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act (BGEPA) (54 Stat. 250, as amended, 16 U.S.C. 668a-d) by the prospective permittee may be required. Please contact the Migratory Birds Permit Office, (413) 253-8643, or PermitsR5MB@fws.gov, with any questions regarding potential impacts to Eagles.

If you have any questions regarding this letter or need further assistance, please contact the Pennsylvania Ecological Services Field Office and reference the Project Code associated with this Project.

## Action Description

You provided to IPaC the following name and description for the subject Action.

### 1. Name

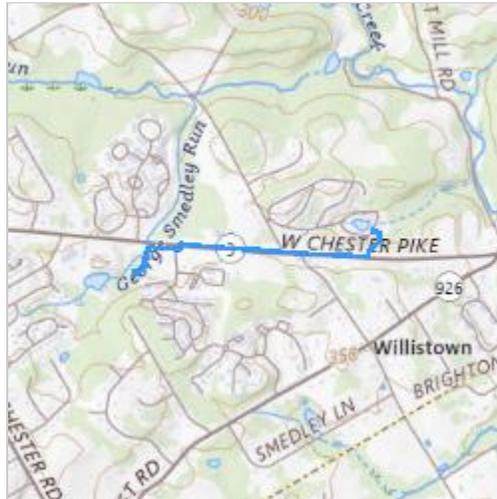
Decommissioning of Deerfield Knoll Wastewater Treatment Plant

### 2. Description

The following description was provided for the project 'Decommissioning of Deerfield Knoll Wastewater Treatment Plant':

The Deerfield Knoll WWTP is to be decommissioned, and pumping system improvements shall be undertaken to redirect flow along PA Route 3 to the Willistown Woods WWTP for treatment and disposal.

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@39.965150550000004,-75.50025490786516,14z>



## QUALIFICATION INTERVIEW

1. As a representative of this project, do you agree that all items submitted represent the complete scope of the project details and you will answer questions truthfully?

*Yes*

2. Does the proposed project include, or is it reasonably certain to cause, intentional take of listed species?

**Note:** This question could refer to research, direct species management, surveys, and/or studies that include intentional handling/encountering, harassment, collection, or capturing of any individual of a federally listed threatened, endangered, or proposed species.

*No*

3. Does the proposed action involve wind or solar energy?

*No*

4. Is the action authorized, permitted, licensed, funded, or being carried out by a Federal agency in whole or in part?

**Note:** for projects in Pennsylvania: Projects requiring authorization under Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act would be considered as having a federal nexus. Since the U.S. Army Corps of Engineers (Corps) has issued the Pennsylvania State Programmatic General Permit (PASPGP), which may be verified by the PA Department of Environmental Protection or certain Conservation Districts, the need to receive a Corps authorization to perform the work under the PASPGP serves as a federal nexus. As such, if proposing to use the PASPGP, you would answer 'yes' to this question.

*No*

5. Will the proposed project involve the use of herbicide where listed species are present?

*No*

6. Will the proposed project involve herbaceous native vegetation removal (including prescribed fire that would result in burning of plants) or mowing?

*No*

7. Will all activities occur within an area that is currently paved, graveled, routinely maintained lawn, and/or inside a structure?

*Yes*

8. Does any component of the project associated with this action include activities or structures that may pose a collision risk to **birds** (e.g., plane-based surveys, new or enlarged communication towers or broadcast towers, high voltage transmission lines, any type of towers with or without guy wires)?

*No*

9. Will the proposed project result in **permanent** changes to surface water or groundwater quantity, retention, quality or timing?

**Note:** Projects may affect stream flow, surface water, or groundwater through various activities such as; water withdrawal, water recharge, well drilling, infiltration impacts, stormwater outlets, hydropower production, water impoundments, intake structures, stream diversion, mining operations, dams, surface water drainage, or hydroelectric turbines.

If a project only involves temporary and limited reductions in water that will not displace listed species or significantly alter their water availability (meaning there are no changes to their feeding, breeding, or sheltering), you can answer "No" to this question.

This question specifically addresses the quantity of water in a stream. Other water quality issues, such as sedimentation and turbidity, will be covered in subsequent questions.

*No*

10. Does the project include activity in or within 300 feet of a freshwater wetland?

**Note:** This encompasses various project activities related to wetlands, including activities taking place within wetlands, activities occurring within 300 feet of wetlands that could impact them, and water withdrawals and/or discharge of contaminants, even if covered by a National Pollutant Discharge Elimination System (NPDES) permit

Examples of such activities include, but are not limited to; wetland draining, ditching, tilling, filling, excavation, stream diversion, impoundments, mowing, grazing vegetation, construction of access roads, creation of detention basins, installation of water or sewer lines, irrigation, increase of impervious surfaces, and application of pesticides, deicing agents, or fertilizers.

*Yes*

11. Will the proposed project involve earth moving or other ground disturbance that could cause erosion and sedimentation, and/or contamination within 300 feet of a freshwater wetland or along a stream or tributary of a stream where listed species may be present?

**Note:** Answer "Yes" to this question if erosion and sediment control measures will be used.

*Yes*

12. Will the proposed project impact streams or tributaries of streams where listed species may be present through activities such as, but not limited to, valley fills, large-scale vegetation removal that could result in ground destabilization, and/or change in site topography?

*No*

13. Will the proposed project involve vegetation removal within 300 feet of a perennial stream bank where aquatic listed species may be present?

*No*

14. Will erosion and sedimentation control Best Management Practices (BMPs) associated with applicable state and/or Federal permits, be applied to the project?

**Note:** If BMPs have been provided by and/or coordinated with and approved by the appropriate Ecological Services Field Office, answer "Yes" to this question.

*Yes*

15. Is the project being funded, lead, or managed in whole or in part by U.S Fish and Wildlife Restoration and Recovery Program (e.g., Partners, Coastal, Fisheries, Wildlife and Sport Fish Restoration, Refuges)?

*No*

16. Does the proposed project involve construction or installation of a non-commercial boat dock on a stream?

*No*

17. Does any component of the project associated with this action include activities or structures that may pose a collision risk to **bats** (e.g., plane-based surveys)?

*No*

18. Will the proposed project affect wetlands in areas where **bats** may be present?

*No*

19. Will the proposed project involve blasting where bats may be present?

*No*

20. Does the project intersect the Indiana bat species list area?

**Automatically answered**

*Yes*

21. Are there any caves, mines, or mine features that are suitable for hibernating Indiana bats within the area expected to be impacted by the project?

*No*

22. Are trees present within the action area?

**Note:** If there are trees within the action area that are of a sufficient size to be potential roosts for bats (i.e., live trees and/or snags  $\geq 5$  inches dbh (12.7 centimeter)), answer "Yes". If you are unsure, answer "Yes." Or refer to Appendix A of the Range-wide Indiana Bat and Northern Long-Eared Bat Survey Guidelines for definitions and an assessment form that will assist you in determining if suitable habitat is present within your project's action area. Suitable summer habitat for Indiana bat consists of a wide variety of forested/wooded habitats where they roost, forage, and travel and may also include some adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, old fields and pastures. This includes forests and woodlots containing potential roosts (i.e., live trees and/or snags  $\geq 5$  inches dbh (12.7 centimeter) that have exfoliating bark, cracks, crevices, and/or hollows), as well as linear features such as fencerows, riparian forests, and other wooded corridors. These wooded areas may be dense or loose aggregates of trees with variable amounts of canopy closure. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet (305 meters) of other forested/wooded habitat.

*Yes*

23. Has a presence/probable absence bat survey following the [Service's Range-wide Indiana Bat and Northern long-eared Bat Survey Guidelines](#) been conducted within the action area?

*No*

24. Does the project involve removal or modification of a human-made structure (barn, house, or other building) known or suspected to contain roosting bats? **Note:** Most maintenance and general human disturbance in and around structures will not affect Indiana bats as bats roosting in human structures are adjusted to a certain level of routine noise and are generally expected to roost away from areas with excessive disturbance. Answer 'no' if the proposed action will not include disturbance to human structures known or suspected to contain roosting bats or if the structure does not offer suitable roosting habitat for northern long-eared bats. If unsure, answer 'yes.'

*No*

25. Does the project include removal/modification of an existing bridge or culvert?

*No*

26. Will the project include tree cutting, other means of knocking down or bringing down trees, or tree trimming?

*No*

27. Will the project result in the use of prescribed fire?

*No*

28. Does the project include temporary or permanent lighting of roadway(s), facility(ies), and/or parking lot(s)?

*No*

29. Does the project intersect the Bog Turtle species list area?

**Automatically answered**

*Yes*

30. Does the project intersect the PA consultation area?

**Automatically answered**

*Yes*

31. Is this a PennDOT project in Pennsylvania covered under the [Programmatic Biological Opinion on the Effects of Transportation Actions on the Bog Turtle in PA](#)?

Note: If you answer yes, your Northeast Dkey generated letter will have a May Affect determination for bog turtle. This determination will be superceded by the concurrence on the bog turtle PBO project submittal form. Please see the [PennDOT Procedures for Completing Project Reviews](#) for more details.

*No*

32. Do you have any other documents that you want to include with this submission?

*No*

## PROJECT QUESTIONNAIRE

1. Approximately how many acres of trees would the proposed project remove?

*0*

2. Approximately how many total acres of disturbance are within the disturbance/  
construction limits of the proposed project?

*0.5*

3. Briefly describe the habitat within the construction/disturbance limits of the project site.

*Directional drilling within the right of way along Route 3*

## **IPAC USER CONTACT INFORMATION**

Agency: County of Chester  
Name: Olivia Szabo  
Address: 1900 Market Street  
Address Line 2: Suite 300  
City: Philadelphia  
State: PA  
Zip: 19103  
Email: [oszabo@pennoni.com](mailto:oszabo@pennoni.com)  
Phone: 2158579724



August 8, 2024

*Sent Via PA-SHARE*

RE: ER Project # 2024PR03704.001, Act 537 Planning Deerfield Knoll, Department of Environmental Protection, Willistown Township, Chester 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 - Historic Properties Present - Above Ground*

The following historic properties, listed in or eligible for the National Register of Historic Places, are located in the project area of potential effect: Okehocking Historic District (1989RE00191). Based on the information received and available in our files, in our opinion, the proposed project will have No Effect on these historic properties. Should the scope of the project change and/or should you be made aware of historic property concerns, you will need to reinitiate consultation with our office using PA-SHARE.

For questions concerning above ground resources, please contact Taylor Napoleon at [tnapoleon@pa.gov](mailto:tnapoleon@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 Taylor Napoleon at [tnapoleon@pa.gov](mailto:tnapoleon@pa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Emma Diehl". The signature is fluid and cursive, with a long horizontal stroke at the end.

Emma Diehl

Environmental Review Division Manager

SECTION J.  
ALTERNATIVE SEWAGE FACILITIES ANALYSIS

## **Alternative Analysis – Component 3M Section J**

### **Deerfield Knoll**

The Deerfield Knoll Wastewater Treatment Plant serves a residential community in Willistown Township, Chester County, Pennsylvania. Properties tributary to the wastewater treatment plant are residential, there are no commercial or industrial users. AQUA wishes to consolidate wastewater treatment operations by conveying the Deerfield Knoll wastewater to the Willistown Woods Wastewater Treatment Plant.

AQUA has identified three (3) alternatives for conveying flow to the Willistown Woods WWTP:

1. No Action
2. Pump to the existing Solana Pump Station
3. Pump to gravity collection system at the Willistown Point development.
4. Pump directly to the Willistown Woods WWTP

#### 1. No Action:

The Deerfield Knoll WWTP is an aging facility that is nearing the end of its useful life. The existing facilities will require significant remediation to extend their service life. Additionally, this facility requires significant operator attention. Undertaking a rehabilitation of the Deerfield Knoll WWTP will be more expensive and require more operator attention than consolidating operations. The No Action alternative is not an acceptable solution.

#### 2. Pump to the Existing Solana Pump Station:

By pumping to the existing Solana Pump Station, AQUA would be required to replace the existing pumps in the Cohasset Lift Station with higher head pumps to allow conveyance to the Solana Lift Station or construct a new pump station at the Deerfield Knoll WWTP. Additionally, the discharge force main will need to be replaced with a minimum 2.5-inch diameter force main to reduce discharge piping friction losses. Finally, the Solana Lift Station pumps will need to be upgraded in order to convey the additional flow for Deerfield Knoll.

#### 3 & 4. Pump to Willistown Woods WWTP:

Pumping to the Willistown Woods WWTP can be achieved by: upgrading the Cohasset Lift Station and force main, constructing a pumping station at the Deerfield Knoll WWTP to convey flow to the gravity collection system at Willistown Point, or constructing a pumping station at the Deerfield Knoll WWTP to convey flow directly to the Willistown Woods WWTP. To discharge into the gravity collection system, a construction easement would be required, however, no easement would be required if the proposed force main discharged directly into the Willistown Woods WWTP.

#### Discussion of Alternatives:

Options 2 through 4 allow the Deerfield Knoll WWTP to be removed from operation and convey flows to the Willistown Woods WWTP. Options 3 and 4 do not impact the Solana Lift Station. Additionally, Options 3 and 4 do not require additional flow to be pumped by the Solana Lift Station, thereby reducing operating and maintenance costs. Options 3 and 4 are the desirable option. For option 3, the proposed force main discharge would be into a manhole located in the Willistown Woods HOA open space. This would require the approval of and an easement from the HOA. The distance required to install the proposed force main directly to the Willistown Woods WWTP is only slightly longer than discharging into the manhole in the Willistown Woods HOA's open space, however, it will have less impact to the local communities and

minimize easements required for this project. Thus, we recommend Option 4: Pumping directly to the Willistown Woods WWTP.

Options 2 through 4 all include repurposing the equalization tank to serve as a wet well for a new pump station or building a new pumping station are viable temporary options to allow time to procure a construction easement for the Cohasset Pump Station upgrade. Construction of a new pump station at the Deerfield Knoll WWTP site to operate until the Cohasset Pump Station can be upgraded is the recommended scenario.

SECTION L.  
INSTITUTIONAL EVALUATION

Institutional Evaluation – Component 3M Section L

Aqua owns, operates, and maintains the Deerfield Knoll Wastewater Treatment Plant (WWTP) and the property on which the WWTP is located. Aqua has decided to decommission the WWTP and divert the flow to Willistown Woods WWTP. Aqua will operate and maintain a new pumping facility in the current location of the WWTP.

The Willistown Woods WWTP has a permitted average flow of 175,000 gpd and a hydraulic capacity of 210,000 gpd. The Willistown Woods WWTP must possess adequate capacity to meet their current flows, treat the new flows from the Deerfield Knoll system, and possess adequate capacity for potential connections from the Chesterdale area collection system. The following is a summary of the capacity requirements:

Willistown Woods 5-yr Avg:	99,500 gpd
Potential Chesterdale Flows:	43,425 gpd
<u>Deerfield Knoll 5-yr Avg:</u>	<u>9,700 gpd</u>
Total Demand:	152,625 gpd

The total projected flows are below the permitted average of 175,000 gpd. The Willistown Woods WWTP has the capacity to treat the flows generated by the Deerfield Knoll service area while maintaining adequate capacity to serve potential connections in the Chesterdale service areas.

SECTION M.  
PROJECT COST AND FUNDING ANALYSIS

### Project Cost and Funding Analysis - Component 3M, Section M

Aqua will fund the decommissioning of the Deerfield Knoll WWTP. The cost of these projects will be spread across Aqua's customers, however, these projects will eliminate the need for future capital expenses at the Deerfield Knoll WWTP. The Deerfield Knoll WWTP is near the end of its useful lives and would otherwise require major capital projects to rehabilitate or replace the existing facilities. Additionally, decommissioning the Deerfield Knoll WWTP and sending their flows to the Willistown Woods WWTP will increase operational efficiencies.

<b>Cost Estimate</b>				
	Quantity	Unit	Unit Price	Total Price
<b>Deerfield Knoll</b>				
Connection at EQ Tank	1	EA	\$ 6,000.00	\$ 6,000.00
Connection at Plant	1	EA	\$ 6,000.00	\$ 6,000.00
By-Pass Pumping	5	Month	\$ 2,500.00	\$ 12,500.00
Force Main - Directional Drill	4100	LF	\$ 75.00	\$ 307,500.00
Force Main - Open Cut	200	LF	\$ 250.00	\$ 50,000.00
Air Release valve W/Manhole	1	EA	\$ 11,000.00	\$ 11,000.00
Flushing Station	4	EA	\$ 9,000.00	\$ 36,000.00
EQ Tank conversion	1	EA	\$ 30,000.00	\$ 30,000.00
New pump Station	1	EA	\$ 50,000.00	\$ 50,000.00
Deerfield Knoll WWTP Demolition	1	LS	\$ 90,000.00	\$ 90,000.00
Gas Main Crossing	1	LS	\$ 20,000.00	\$ 20,000.00
Traffic Control	1	LS	\$ 40,000.00	\$ 40,000.00
Pavement Restoration PennDot Full Depth	33	SY	\$ 175.00	\$ 5,775.00
Gravel Drive Restoration	240	SY	\$ 10.00	\$ 2,400.00
<b>Subtotal</b>				\$ 667,175.00
Bonding and Insurance	3	%		\$ 20,015.25
Contingency	20	%		\$ 133,435.00
<b>Total Deerfield Knoll</b>				\$ 820,625.25

SECTION N.  
PROJECT IMPLEMENTATION SCHEDULE

Project Implementation Schedule – Component 3M Section N

ANTICIPATED IMPLEMENTATION SCHEDULE	
DESCRIPTION	DATE
PRELIMINARY DESIGN	COMPLETE
FINAL DESIGN	NOVEMBER 2025
537 SEWER PLANNING SUBMISSION	AUGUST 2025
537 SEWER PLANNING APPROVAL	NOVEMBER 2025
WQM PART II PERMIT SUBMISSION	DECEMBER 2025
WQM PART II PERMIT APPROVAL	FEBRUARY 2026
CONNECTION TO PUBLIC SEWER	APRIL 2026
BEGIN WWTP DECOMMISSIONING	SEPTEMBER 2026
COMPLETE WWTP DECOMMISSIONING	OCTOBER 2026
FINAL APPROVALS	OCTOBER 2026

SECTION O.  
PUBLIC NOTICE

## PUBLIC NOTICE

In accordance with the requirement of the Pennsylvania Sewage Facilities Act No. 537, Willistown Township, Chester County, Pennsylvania is preparing to submit to the Pennsylvania Department of Environmental Protection (PaDEP) Act 537 Special Study to address the decommissioning of the Deerfield Knoll Wastewater Treatment Plant and the diversion of flow to the Willistown Woods Wastewater Treatment Plant. Both plants are owned and operated by AQUA Pennsylvania Wastewater.

The Special Study is designed to provide for the decommissioning of the Deerfield Knoll Wastewater Treatment Plant, which provides wastewater service to all of the properties in the Deerfield Knoll Homeowner's Association, and conveyance of flows to the Willistown Woods WWTP by upgrading the existing pump station on Cohasset Ln and installing a new force main which will be located mostly within the West Chester Pike road right-of-way. These improvements will be reflected in a future rate case study AQUA Pennsylvania Wastewater intends to submit to the Pennsylvania Public Utility Commission which will render a decision regarding any rate increase which may be approved.

The 30-day public comment period has been established commencing on the date of this advertisement. The general public may review the Special Study between the hours of 9:00 a.m. and 5:00 p.m. at the Willistown Township Building, 688 Sugartown Road, Malvern, PA 19355. Please contact the Township at (610) 647-5300 to make an in-person appointment to review the Special Study. The Special Study is also available for review on the Township's website ([www.willistown.pa.us](http://www.willistown.pa.us)).

Written comments from the public regarding the Special Study can be forwarded to Shanna Lodge, Willistown Township Manager, at the above address or to [comments@willistown.pa.us](mailto:comments@willistown.pa.us). All written comments must be received prior to the end of the 30-day public comment period. All written comments will be addressed prior to submitting the Special Study to the PaDEP.

SECTION Q.  
PLANNING AGENCY REVIEW



DEP Code #: \_\_\_\_\_

**SEWAGE FACILITIES PLANNING MODULE  
 COMPONENT 4A - MUNICIPAL PLANNING AGENCY REVIEW**

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

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

Project Name  
 Decommissioning of Deerfield Knoll Wastewater Treatment Plant

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

1. Date plan received by municipal planning agency \_\_\_\_\_
2. 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 municipal comprehensive plan adopted under the Municipalities Planning Code (53 P.S. 10101, <i>et seq.</i> )?
<input type="checkbox"/>	<input type="checkbox"/>	2. Is this proposal consistent with the comprehensive plan for land use? If no, describe the inconsistencies _____
<input type="checkbox"/>	<input type="checkbox"/>	3. Is this proposal consistent with the use, development, and protection of water resources? If no, describe the inconsistencies _____
<input type="checkbox"/>	<input type="checkbox"/>	4. Is this proposal consistent with municipal land use planning relative to Prime Agricultural Land Preservation?
<input type="checkbox"/>	<input type="checkbox"/>	5. Does this project propose encroachments, obstructions, or dams that will affect wetlands? If yes, describe impacts _____
<input type="checkbox"/>	<input type="checkbox"/>	6. Will any known historical or archaeological resources be impacted by this project? If yes, describe impacts _____
<input type="checkbox"/>	<input type="checkbox"/>	7. Will any known endangered or threatened species of plant or animal be impacted by this project? If yes, describe impacts _____
<input type="checkbox"/>	<input type="checkbox"/>	8. Is there a municipal zoning ordinance?
<input type="checkbox"/>	<input type="checkbox"/>	9. Is this proposal consistent with the ordinance? If no, describe the inconsistencies _____
<input type="checkbox"/>	<input type="checkbox"/>	10. Does the proposal require a change or variance to an existing comprehensive plan or zoning ordinance?
<input type="checkbox"/>	<input type="checkbox"/>	11. Have all applicable zoning approvals been obtained?
<input type="checkbox"/>	<input type="checkbox"/>	12. Is there a municipal subdivision and land development ordinance?

**SECTION C. AGENCY REVIEW (continued)**

**Yes**

**No**

- |                          |                          |  |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | 13. Is this proposal consistent with the ordinance?<br>If no, describe the inconsistencies _____   |
| <input type="checkbox"/> | <input type="checkbox"/> | 14. Is this plan consistent with the municipal Official Sewage Facilities Plan?<br>If no, describe the inconsistencies _____                               |
| <input type="checkbox"/> | <input type="checkbox"/> | 15. Are there any wastewater disposal needs in the area adjacent to this proposal that should be considered by the municipality?<br>If yes, describe _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | 16. Has a waiver of the sewage facilities planning requirements been requested for the residual tract of this subdivision?                                 |
| <input type="checkbox"/> | <input type="checkbox"/> | If yes, is the proposed waiver consistent with applicable ordinances?<br>If no, describe the inconsistencies<br>_____                                      |

17. Name, title and signature of planning agency staff member completing this section:

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Municipal Planning Agency: \_\_\_\_\_

Address \_\_\_\_\_

Telephone Number: \_\_\_\_\_

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

This component does not limit municipal 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 planning agency must complete this component within 60 days.

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



DEP Code #: \_\_\_\_\_

**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

Decommissioning of Deerfield Knoll Wastewater Treatment Plant \_\_\_\_\_

**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 <i>et seq.</i> )?  |
| <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?<br>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?<br>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?<br>If no, describe inconsistencies: _____ |
| <input type="checkbox"/> | <input type="checkbox"/> | 6. Does this project propose encroachments, obstructions, or dams that will affect wetlands?<br>If yes, describe impact _____  |
| <input type="checkbox"/> | <input type="checkbox"/> | 7. Will any known historical or archeological resources be impacted by this project?<br>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?<br>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?<br>If no, describe inconsistencies _____   |

**SECTION C. AGENCY REVIEW** (continued)

Yes	No	
<input type="checkbox"/>	<input type="checkbox"/>	11. Have all applicable zoning approvals been obtained?
<input type="checkbox"/>	<input type="checkbox"/>	12. Is there a county or areawide subdivision and land development ordinance?
<input type="checkbox"/>	<input type="checkbox"/>	13. Does this proposal meet the requirements of the ordinance? If no, describe which requirements are not met _____
<input type="checkbox"/>	<input type="checkbox"/>	14. Is this proposal consistent with the municipal Official Sewage Facilities Plan? If no, describe inconsistency _____
<input type="checkbox"/>	<input type="checkbox"/>	15. Are there any wastewater disposal needs in the area adjacent to this proposal that should be considered by the municipality? If yes, describe _____
<input type="checkbox"/>	<input type="checkbox"/>	16. Has a waiver of the sewage facilities planning requirements been requested for the residual tract of this subdivision?
<input type="checkbox"/>	<input type="checkbox"/>	If yes, is the proposed waiver consistent with applicable ordinances. If no, describe the inconsistencies _____
<input type="checkbox"/>	<input type="checkbox"/>	17. Does the county have a stormwater management plan as required by the Stormwater Management Act?
<input type="checkbox"/>	<input type="checkbox"/>	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.



DEP Code #:
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**SEWAGE FACILITIES PLANNING MODULE  
COMPONENT 4C - COUNTY OR JOINT HEALTH DEPARTMENT REVIEW**

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

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

Project Name  
Decommissioning of Deerfield Knoll Wastewater Treatment Plant

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

1. Date plan received by county or joint county health department \_\_\_\_\_  
Agency name \_\_\_\_\_
2. Date review completed by agency \_\_\_\_\_

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

Yes	No	
<input type="checkbox"/>	<input type="checkbox"/>	1. Is the proposed plan consistent with the municipality's Official Sewage Facilities Plan? If no, what are the inconsistencies? _____
<input type="checkbox"/>	<input type="checkbox"/>	2. Are there any wastewater disposal needs in the area adjacent to this proposal that should be considered by the municipality? If yes, describe _____
<input type="checkbox"/>	<input type="checkbox"/>	3. Is there any known groundwater degradation in the area of this proposal? If yes, describe _____
<input type="checkbox"/>	<input type="checkbox"/>	4. The county or joint county health department recommendation concerning this proposed plan is as follows: _____
		5. Name, title and signature of person completing this section: Name: _____ Title: _____ Signature: _____ Date: _____ Name of County Health Department: _____ 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.

SECTION R.  
RESOLUTION OF ADOPTION

WILLISTOWN TOWNSHIP

CHESTER COUNTY

Resolution No.

RESOLUTION FOR PLAN REVISION

DECOMMISSIONING OF DEERFIELD KNOLL WASTEWATER TREATMENT PLANT

**WHEREAS**, Section 5 of the act of January 24 1966, 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 (PaDEP) adopted thereunder, 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 waste, and to revise said plan whenever it is necessary to met the sewage disposal needs of Willistown Township, and

**WHEREAS**, Willistown Township has prepared a report entitled *Special Study - Decommissioning of Deerfield Knoll Wastewater Treatment Plant* which provides for the alternatives to address the treatment of sewage conveyed to Aqua Pennsylvania Wastewater, Inc.'s Deerfield Knoll Wastewater Treatment Plant, and

The Willistown Township Supervisors have chosen the alternative to decommission the Deerfield Knoll Wastewater Treatment Plant and convey the associated sewage to the Willistown Woods Wastewater Treatment Plant pending planning approval, permit approval, and related construction activities; consistent with the project implementation schedule outlined in the study.

**WHEREAS**, Willistown Township finds that the plan described conforms to applicable zoning, subdivision, other municipal ordinances and plans, and to a comprehensive program of pollution control and water quality management.

**NOW, THEREFORE, BE IT RESOLVED**, the Board of Supervisors of Willistown Township hereby adopts and submits to PaDEP for its approval as a revision to the Official Plan of the municipality, the above referenced Plan. The Township hereby assure the PaDEP of the complete and timely implementation of the said plan as required by law (Section 5, Pennsylvania Sewage Facilities Act, as amended).

I, \_\_\_\_\_, Secretary, Willistown Township Board of Supervisors, hereby certify that foregoing is a true copy of the Township's Resolution No. 2025 - \_\_, adopted this \_\_\_\_ day of \_\_\_\_\_, 2025.

**WILLISTOWN TOWNSHIP  
BOARD OF SUPERVISORS**

\_\_\_\_\_  
Secretary

\_\_\_\_\_  
Chairman

\_\_\_\_\_  
Vice Chairman

\_\_\_\_\_  
Supervisor

**SEAL**

3.0 SEWAGE TREATMENT FACILITY  
CLOSURE PLAN

**SEWAGE TREATMENT FACILITY CLOSURE PLAN**

**FOR THE  
DEERFIELD KNOLL WASTEWATER TREATMENT PLANT  
WATER QUALITY PERMIT NO. 1586408  
WILLISTOWN TOWNSHIP, CHESTER COUNTY**

**FOR SUBMISSION TO  
PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION**

**ON BEHALF OF  
AQUA PENNSYLVANIA WASTEWATER, INC.  
762 LANCASTER AVE  
BRYN MAWR, PA 19010**

**JULY 2025**

**Pennoni**

1900 Market Street, Suite 300  
Philadelphia, PA 19104  
www.pennoni.com

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Robert Campbell, PE  
License No. PE-055701

DEERFIELD KNOLL WASTEWATER TREATMENT PLANT  
SEWAGE TREATMENT FACILITY CLOSURE PLAN

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## **1.0 INTRODUCTION**

### **1.1 Project Description**

The proposed project will divert the existing domestic sewage from Aqua's Deerfield Knoll Wastewater Treatment Plan (WWTP) to the existing Willistown Woods WWTP. The facilities associated with the wastewater treatment process will be abandoned, and Water Quality Management (WQM) permit will be canceled. A new pumping station and a new force main will be constructed to redirect wastewater to the existing Willistown Woods WWTP.

The Deerfield Knoll WWTP was constructed in 1986 for the Deerfield Knoll development. The facility operates under WQM Permit No. 1586408 under Aqua Pennsylvania Wastewater.

The Deerfield Knoll WWTP consists of an influent surge tank, a treatment tank, and a chlorination basin. The treatment tank consists of sequential anoxic, aerobic, anoxic, aerobic, and clarification zones. Following disinfection, effluent is pumped into seepage beds.

The current permit has an expiration date of December 31, 2029. The facility discharges treated wastewater to a three (3) effluent disposal seepage beds. The WWTP is permitted for an average daily flow of 25,000 gpd.

The project will comply with all requirements set out in the Department's Sewage Treatment Facility Closure documentation, including but not limited to de-energizing and securing the site.

## **2.0 DEERFIELD KNOLL WWTP DESIGN COMPONENTS**

### **2.1 Cohasset Lift Station**

The existing lift station is located within the Deerfield Knoll development and receives wastewater flow from the existing 119 residential units. The lift station will remain in service to convey flow to the Deerfield Knoll WWTP site.

### **2.2 Influent Surge Tank**

Wastewater is transferred from the influent pump station to an equalization tank. During project design, this tank will be evaluated for conversion to a pump station. The pump station will then convey the Deerfield Knoll WWTP influent to the Willistown Woods WWTP. If the influent tank is not suitable for conversion, a new pump station structure will be built on the grounds of the existing WWTP.

### **2.3 Treatment Tank**

Wastewater enters the existing treatment train. Consisting of anoxic and aerobic zones which facilitate treatment. Flow continues to a clarifier and seepage beds. Upon commissioning of the pump station and force main, this structure will be disinfected, decommissioned, and demolished.

### **2.4 Chlorination Basin**

From the clarifier the discharge drains by gravity to the chlorine dosing tank. Chlorine is added at the head of the tank for chlorine contact time before being discharged to the seepage beds. The control room, and chlorine feed system will be abandoned, and removed from the site. Chlorine storage tanks will be removed from the site and legally disposed of. Upon commissioning of the pump station and force main, this structure will be disinfected, decommissioned, and demolished.

### **2.5 Subsurface Discharge Beds**

The subsurface discharge beds will be abandoned in place. Existing pressure dose cleanout piping which is present at the surface will be cut off below grade. Existing siphon chambers will be disinfected and demolished at the surface and filled in.