

To:	Tiffani Doerr Evergreen Resources Management Operations 2 Righter Parkway, Suite 120, Wilmington, DE 19083	From:	Jenny Kachel 1060 Andrew Drive, Suite 140 West Chester, PA
Project/File:	213403364	Date:	December 28, 2021

Reference: Updated Pennsylvania Natural Diversity Inventory Search, Area of Interest 4, Former Philadelphia Refinery

As part of the sitewide ecological assessment activities, Stantec Consulting Services Inc (Stantec) completed Pennsylvania Natural Diversity Inventory Searches (PNDI) for Area of Interest (AOI) 4 (and other AOIs) in 2018 and again in 2021. AOI 4 was grouped with the AOIs located on the eastern side of the Schuylkill River (AOIs 1 through 8). This memo provides a brief summary of each PNDI search and includes the search results as attachments. The final 2021 survey results and associated agency letters along with results of any individual species site surveys will be included in the Sitewide Ecological Risk Assessment (ERA) to be submitted in June 2022 pursuant to the 2020 First Amendment to Consent Order and Agreement.

The 2021 draft PNDI (**Attachment A**) is very similar to the previous PNDI from 2018 (**Attachment B**) that Stantec used as a basis for the ecological assessment work performed 2018 through 2019. Fewer total species have been identified in the PNDI in 2021.

Pennsylvania Game Commission

- Species are identical on both versions:
 - Marsh Wren
 - Peregrine Falcon
 - Least Bittern
- Species were included in the previous ERA work.

Pennsylvania Department of Conservation and Natural Resources (PA DCNR)

- These species are the same on both PNDI versions:
 - Waterhemp Ragweed
 - Walter's Barnyard-grass
 - Multiflowered Mud-plantain
 - Bugleweed
 - River Bulrush
- The 2018 version identified two species that were not identified in 2021 (Eastern Baccaris and Shrubby Camphor-weed)
- Species were included in the previous ERA work that included a field botanical survey.

Reference: Updated Pennsylvania Natural Diversity Inventory Search, Area of Interest 4, Former Philadelphia Refinery

US Fish and Wildlife

- Did not identify any species of concern in 2018 or 2021

Pennsylvania Fish and Boat Commission (PFBC)

- In recent years, PFBC has not been identifying by name many species of concern on PNDIs. 2021 was no exception; however, there were some differences between the 2018 and 2021 lists:

2018	2021
3 unnamed endangered species	4 unnamed endangered species
1 named endangered species - Hickory Shad	1 unnamed threatened species
1 unnamed special concern species	
1 unnamed threatened species	
6 Total	5 Total


- Through additional correspondence with PFBC in 2018 (**Attachment B**), three of the unnamed species were identified for further ecological risk assessment, but the PFBC was unwilling to disclose the rest of the species:
 - Atlantic Sturgeon (endangered)
 - Shortnose Sturgeon (endangered)
 - Eastern Redbelly Turtle (threatened)
- Stantec expects the 2021 list of species to be similar to those identified in 2018. According to PA Code Title 58 Chapter 75, the statuses of the four species identified by PFBC in 2018 (Atlantic Sturgeon, Shortnose Sturgeon, Hickory Shad, and Eastern Redbelly Turtle) have not changed.
- Atlantic Sturgeon, Shortnose Sturgeon, Hickory Shad, and Eastern Redbelly Turtle were included in previous risk assessment work. In addition to desktop work, activities included a monitoring program for acoustically-tagged sturgeon in the Schuylkill River and field surveys for the Eastern Redbelly Turtle (habitat survey & presence/absence basking survey).

The final 2021 survey results and associated agency letters along with results of any individual species site surveys will be included in the Sitewide ERA to be submitted in June 2022. The ERA will also present an evaluation of potential impacts from site constituents of concern to identified species.

Stantec will be submitting follow up correspondence to the Pennsylvania Game Commission, PA DCNR, and PFBC shortly.

Thank you,

Stantec Consulting Services Inc.



Jenny Kachel

Geologist

Phone: (610) 840-2561

Mobile: (484) 757-7890

jenny.kachel@stantec.com

Reference: Updated Pennsylvania Natural Diversity Inventory Search, Area of Interest 4, Former Philadelphia Refinery

Attachment: Attachment A: Draft 2021 PNDI Search, AOIs 1-8
Attachment B: 2018 PNDI Search, AOIs 1-8

ATTACHMENT A

Draft 2021 PNDI Search, AOIs 1-8

1. PROJECT INFORMATION

Project Name: **Former Philadelphia Refinery AOIs 1-8**

Date of Review: **12/6/2021 04:37:52 PM**

Project Category: **Hazardous Waste Clean-up, Site Remediation, and Reclamation, Spill (e.g., oil, chemical)**

Project Area: **1,004.67 acres**

County(s): **Philadelphia**

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

ZIP Code:

Quadrangle Name(s): **PHILADELPHIA**

Watersheds HUC 8: **Schuylkill**

Watersheds HUC 12: **City of Philadelphia-Schuylkill River**

Decimal Degrees: **39.912261, -75.202889**

Degrees Minutes Seconds: **39° 54' 44.1401" N, 75° 12' 10.4010" W**

This is a draft receipt for information only. It has not been submitted to jurisdictional agencies for review.

2. SEARCH RESULTS

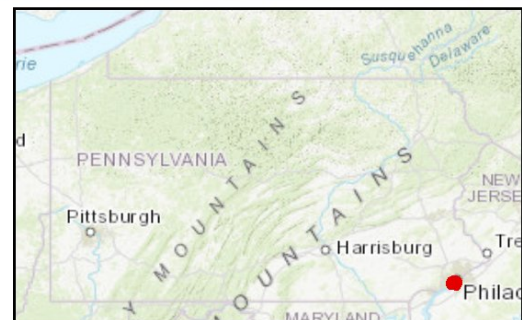
Agency	Results	Response
PA Game Commission	Potential Impact	FURTHER REVIEW IS REQUIRED, See Agency Response
PA Department of Conservation and Natural Resources	Potential Impact	FURTHER REVIEW IS REQUIRED, See Agency Response
PA Fish and Boat Commission	Potential Impact	FURTHER REVIEW IS REQUIRED, See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

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.

Former Philadelphia Refinery AOIs 1-8

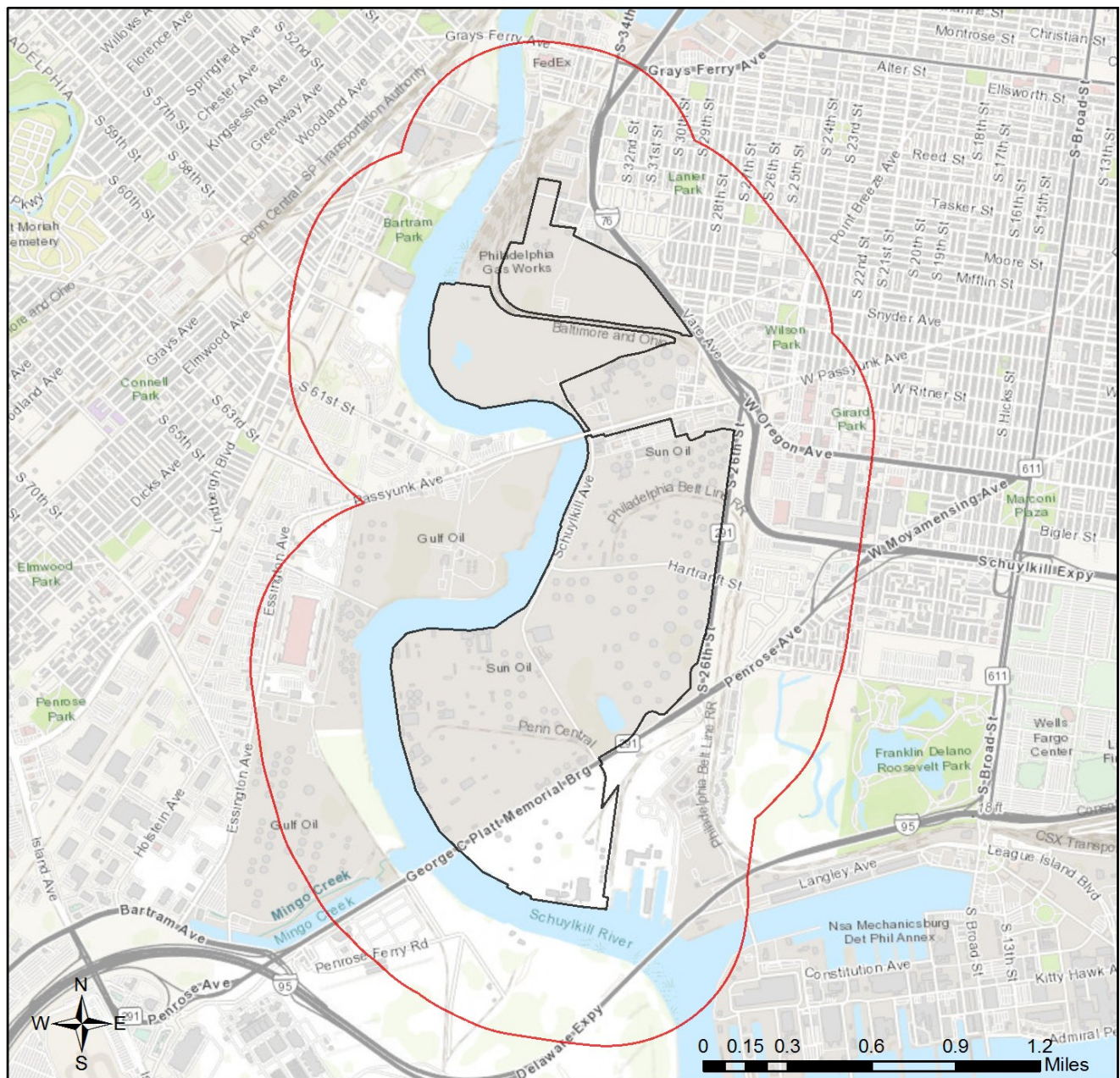


- Project Boundary
- Buffered Project Boundary



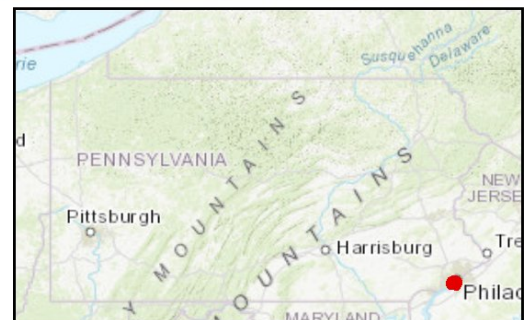
Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China

Former Philadelphia Refinery AOIs 1-8



- ☐ Project Boundary
- ☒ Buffered Project Boundary

Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community



RESPONSE TO QUESTION(S) ASKED

Q1: Accurately describe what is known about wetland presence in the project area or on the land parcel by selecting ONE of the following. "Project" includes all features of the project (including buildings, roads, utility lines, outfall and intake structures, wells, stormwater retention/detention basins, parking lots, driveways, lawns, etc.), as well as all associated impacts (e.g., temporary staging areas, work areas, temporary road crossings, areas subject to grading or clearing, etc.). Include all areas that will be permanently or temporarily affected -- either directly or indirectly -- by any type of disturbance (e.g., land clearing, grading, tree removal, flooding, etc.). Land parcel = the lot(s) on which some type of project(s) or activity(s) are proposed to occur.

Your answer is: Someone qualified to identify and delineate wetlands has investigated the site, and determined that wetlands ARE located in or within 300 feet of the project area. (A written report from a wetland specialist, and detailed project maps should document this.)

Q2: Aquatic habitat (stream, river, lake, pond, etc.) is located on or adjacent to the subject property and project activities (including discharge) may occur within 300 feet of these habitats?

Your answer is: Yes

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:

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).

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

Scientific Name	Common Name	Current Status
Cistothorus palustris	Marsh Wren	Special Concern Species*
Falco peregrinus	Peregrine Falcon	Special Concern Species*
Ixobrychus exilis	Least Bittern	Endangered

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
Amaranthus cannabinus	Waterhemp Ragweed	Special Concern Species*	Special Concern Species*	Flowers July - September
Echinochloa walteri	Walter's Barnyard-grass	Endangered	Endangered	Flowers August - September
Heteranthera multiflora	Multiflowered Mud-plantain	Endangered	Endangered	Flowers July - early October
Lycopus rubellus	Bugleweed	Endangered	Endangered	Flowers June - early September
Schoenoplectus fluviatilis	River Bulrush	Special Concern Species*	Special Concern Species*	Fruits June - August

PA Fish and Boat Commission

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).

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

Scientific Name	Common Name	Current Status
Sensitive Species**		Endangered
Sensitive Species**		Endangered
Sensitive Species**		Endangered
Sensitive Species**		Endangered
Sensitive Species**		Threatened

U.S. Fish and Wildlife Service

RESPONSE:

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

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

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

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 email, or mail, project information to IR1_ESPenn@fws.gov to initiate a review. USFWS will not accept uploaded project materials.

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). Also note that the PNDI Environmental Review Tool only contains information about species occurrences that have actually been reported to the PNHP.



ATTACHMENT B

2018 PNDI Search, AOIs 1-8

1. PROJECT INFORMATION

Project Name: **Philadelphia Refining Complex AOIs 1-8**

Date of Review: **6/19/2018 05:21:24 PM**

Project Category: **Hazardous Waste Clean-up, Site Remediation, and Reclamation, Spill (e.g., oil, chemical)**

Project Area: **1,026.73 acres**

County(s): **Philadelphia**

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

ZIP Code: **19145; 19146**

Quadrangle Name(s): **PHILADELPHIA**

Watersheds HUC 8: **Schuylkill**

Watersheds HUC 12: **City of Philadelphia-Schuylkill River**

Decimal Degrees: **39.912490, -75.202759**

Degrees Minutes Seconds: **39° 54' 44.9644" N, 75° 12' 9.9336" W**

2. SEARCH RESULTS

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

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.

Philadelphia Refining Complex AOIs 1-8

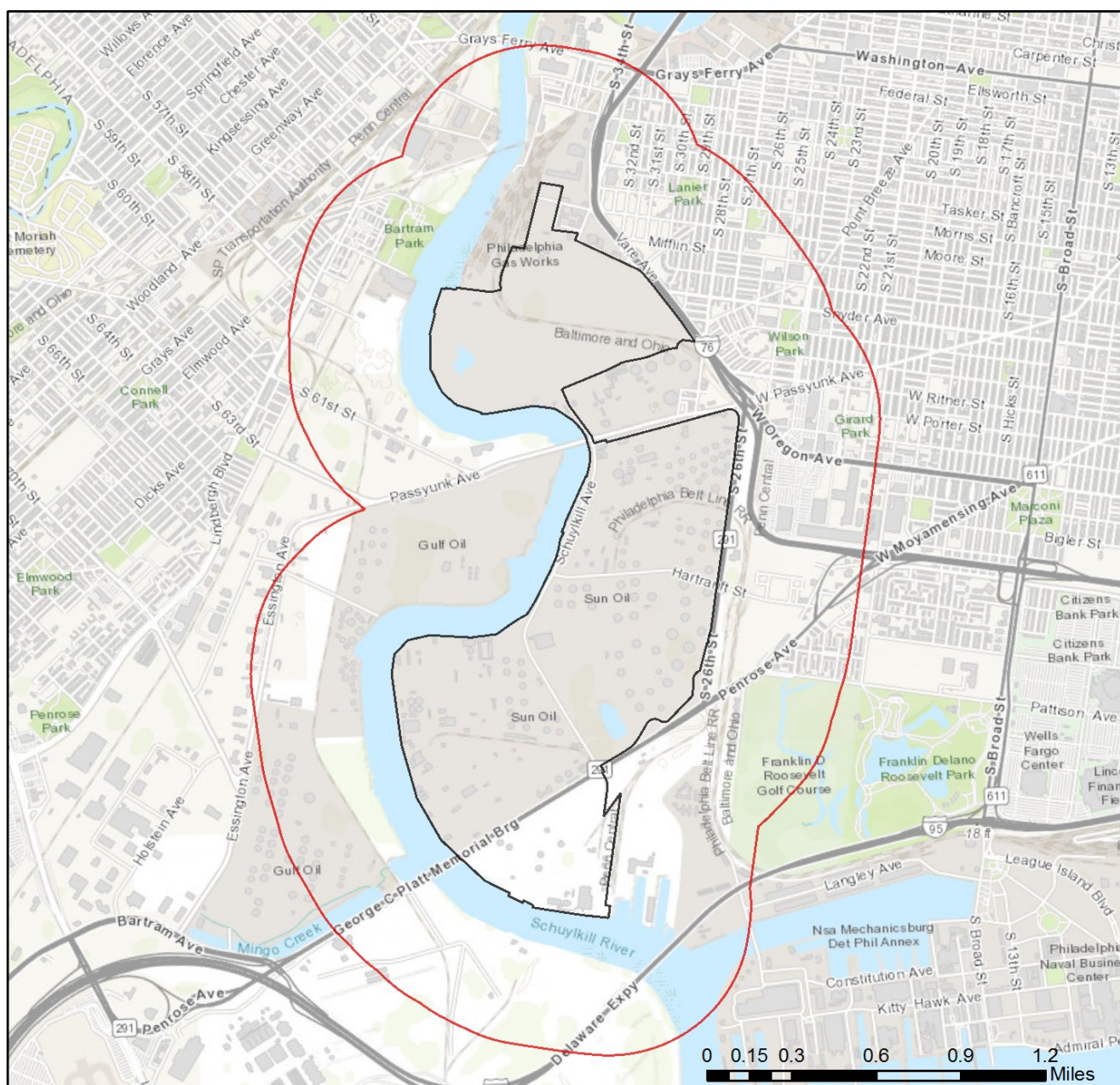


- ☐ Project Boundary
- ☐ Buffered Project Boundary



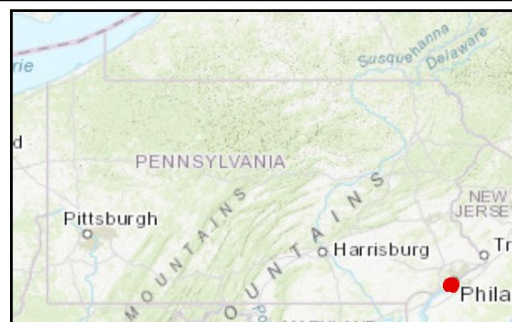
Service Layer Credits: Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community
Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community

Philadelphia Refining Complex AOIs 1-8



- Project Boundary
- Buffered Project Boundary

Service Layer Credits: Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS,



RESPONSE TO QUESTION(S) ASKED

Q1: Accurately describe what is known about wetland presence in the project area or on the land parcel by selecting ONE of the following. "Project" includes all features of the project (including buildings, roads, utility lines, outfall and intake structures, wells, stormwater retention/detention basins, parking lots, driveways, lawns, etc.), as well as all associated impacts (e.g., temporary staging areas, work areas, temporary road crossings, areas subject to grading or clearing, etc.). Include all areas that will be permanently or temporarily affected -- either directly or indirectly -- by any type of disturbance (e.g., land clearing, grading, tree removal, flooding, etc.). Land parcel = the lot(s) on which some type of project(s) or activity(s) are proposed to occur.

Your answer is: The project area (or land parcel) has not been investigated by someone qualified to identify and delineate wetlands, or it is currently unknown if the project or project activities will affect wetlands.

Q2: Aquatic habitat (stream, river, lake, pond, etc.) is located on or adjacent to the subject property and project activities (including discharge) may occur within 300 feet of these habitats?

Your answer is: Yes

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:

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).

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

Scientific Name	Common Name	Current Status
Cistothorus palustris	Marsh Wren	Special Concern Species*
Falco peregrinus	Peregrine Falcon	Endangered
Ixobrychus exilis	Least Bittern	Endangered

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
Amaranthus cannabinus	Waterhemp Ragweed	Special Concern Species*	Special Concern Species*	Flowers July - September
Baccharis halimifolia	Eastern Baccharis	Special Concern Species*	Special Concern Species*	Flowers August - October
Echinochloa walteri	Walter's Barnyard-grass	Endangered	Endangered	Flowers August - September
Heteranthera multiflora	Multiflowered Mud-plantain	Endangered	Endangered	Flowers July - early October
Lycopus rubellus	Bugleweed	Endangered	Endangered	Flowers June - early September
Pluchea odorata	Shrubby Camphor-weed	Special Concern Species*	Endangered	Flowers August - October
Schoenoplectus fluviatilis	River Bulrush	Special Concern Species*	Special Concern Species*	Fruits June - August

PA Fish and Boat Commission

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).

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

Scientific Name	Common Name	Current Status
Sensitive Species**		Endangered
Sensitive Species**		Endangered
Alosa mediocris	Hickory Shad	Endangered
Sensitive Species**		Special Concern Species*
Sensitive Species**		Endangered
Sensitive Species**		Threatened

U.S. Fish and Wildlife Service

RESPONSE:

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

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

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***Note:** U.S.Fish and Wildlife Service requires applicants to mail project materials to the USFWS PA field office (see AGENCY CONTACT INFORMATION). USFWS will not accept project materials submitted electronically (by upload or email).

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

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5. ADDITIONAL INFORMATION

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

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

6. AGENCY CONTACT INFORMATION

PA Department of Conservation and Natural Resources

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

U.S. Fish and Wildlife Service

Pennsylvania Field Office
Endangered Species Section
110 Radnor Rd; Suite 101
State College, PA 16801
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

PA Game Commission

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

7. PROJECT CONTACT INFORMATION

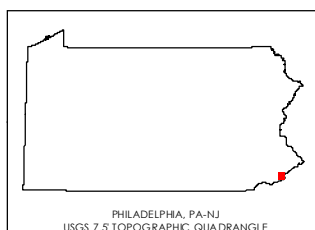
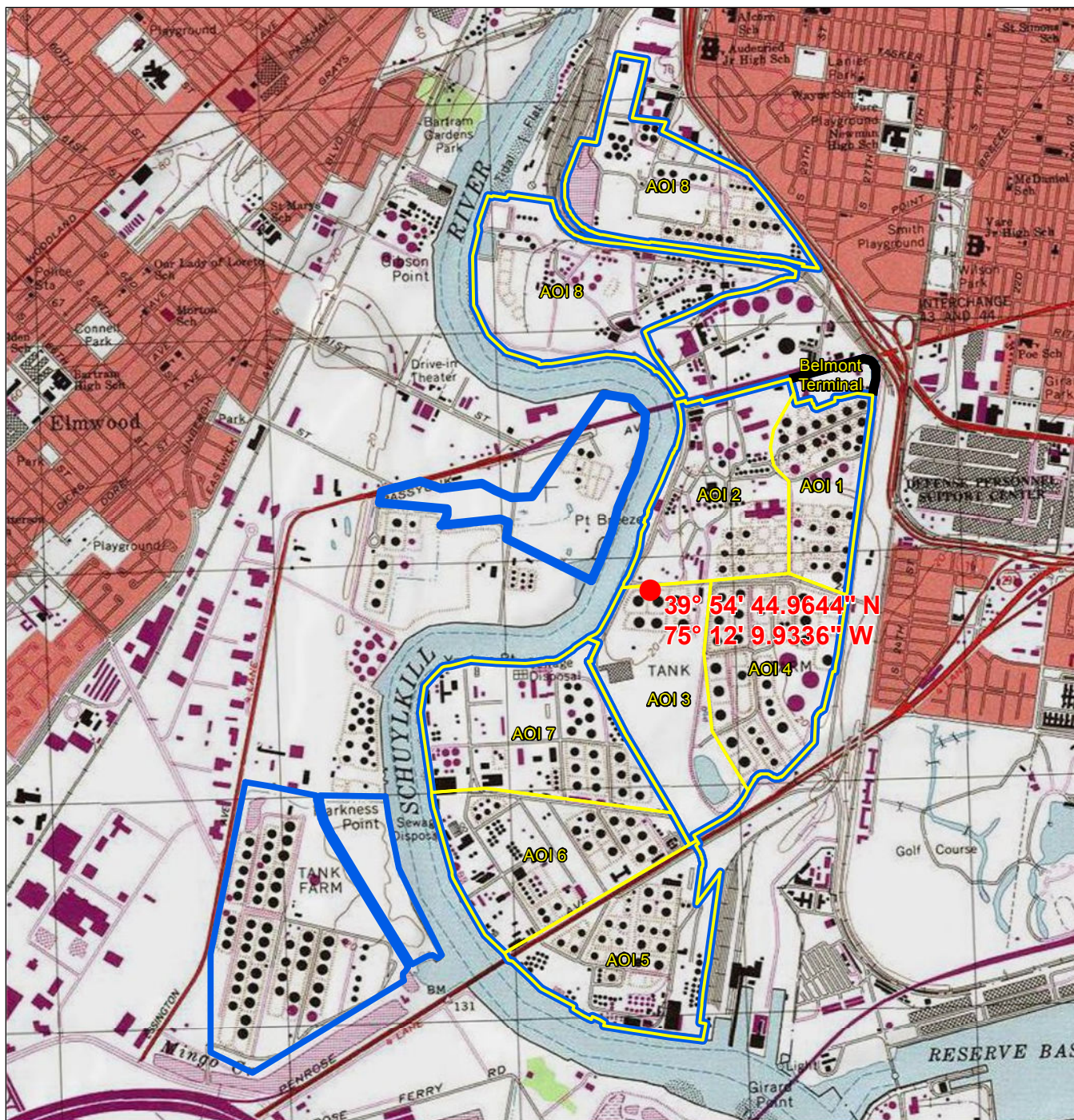
Name: JENNIFER MENGES
Company/Business Name: STANTEC CONSULTING SERVICES INC.
Address: 1060 ANDREW DRIVE, SUITE 140
City, State, Zip: WEST CHESTER, PA 19380
Phone: (610) 840-2540 Fax: (610) 840-2501
Email: jennifer.menges@stantec.com

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.

Jennifer Menges
applicant/project proponent signature

6/19/2018
date



Notes

1. Coordinate System: NAD 1983 StatePlane Pennsylvania South FIPS 3702 Feet
2. Sources: Stantec, USGS, PNDI
3. Coordinates generated on Pennsylvania Natural Diversity Inventory search PNDI: 659359 are 39° 54' 44.9644\"/>

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.

LEGEND

- AREA OF INTEREST (AOI) 1 THROUGH 8
- PHILADELPHIA REFINING COMPLEX AOIs 1 THROUGH 8 CENTROID COORDINATES
- PHILADELPHIA REFINING COMPLEX

0 1,100 2,200 Feet
1:26,400 (at original document size of 8.5x11)



Project Location
City of Philadelphia,
Pennsylvania

Prepared by GWC on 6/18/2018
Technical Review by JLM on 6/18/2018
Independent Review by MAS on 6/18/2018

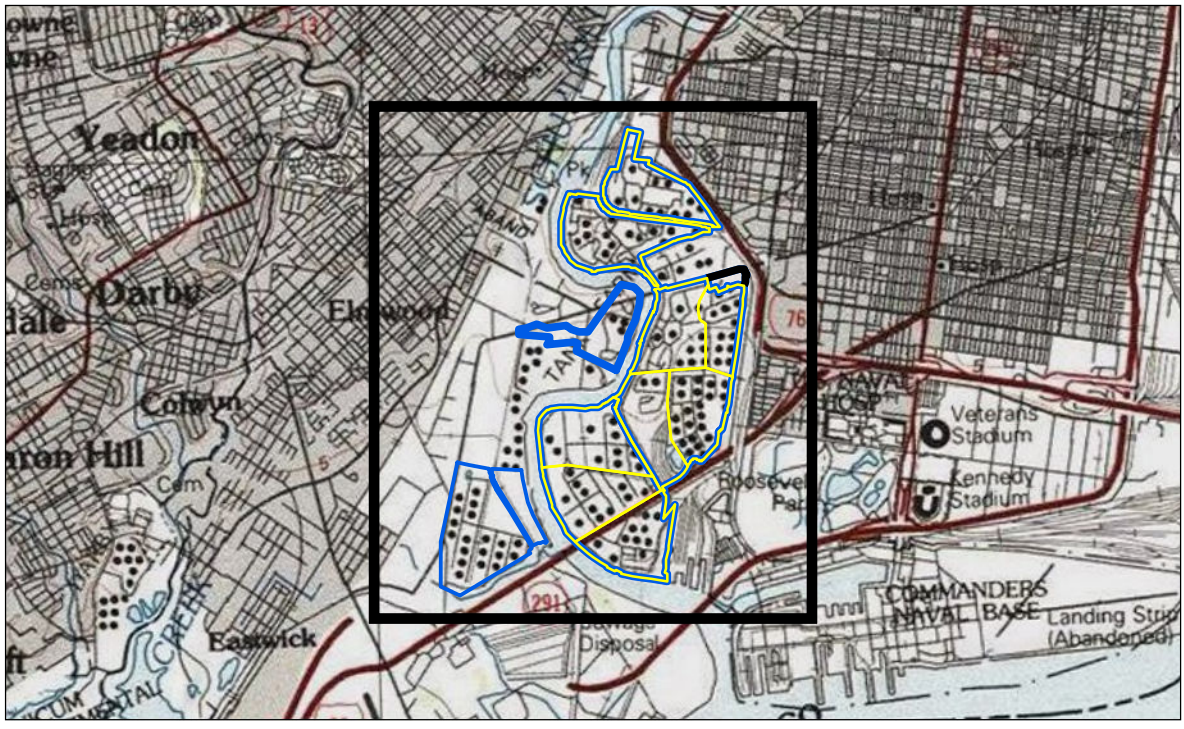
Client/Project
PHILADELPHIA REFINERY OPERATIONS, A SERIES OF
EVERGREEN RESOURCES GROUP, LLC
PHILADELPHIA REFINING COMPLEX
3144 PASSYUNK AVENUE, PHILADELPHIA, PA 19145

Figure No.

1

Title

**SITE LOCATION MAP
AOIs 1 THROUGH 8**



Notes
1. Coordinate System: NAD 1983 StatePlane Pennsylvania South FIPS 3702 Feet
2. Sources: Stantec, PNDI
3. Coordinates generated on Pennsylvania Natural Diversity Inventory search PNDI - 60959 are 39° 54' 44.9644\"/>

- LEGEND
AREA OF INTEREST (AOI) 1 THROUGH 8
PHILADELPHIA REFINING COMPLEX AOI 1 THROUGH 8 CENTROID COORDINATES
PHILADELPHIA REFINING COMPLEX

0 400 800 Feet
1:4,800 (At original document size of 36x48)

Figure No.
2
Title
SITE PLAN
AOIs 1 THROUGH 8

Client/Project
PHILADELPHIA REFINERY OPERATIONS, A SERIES OF
EVERGREEN RESOURCES GROUP, LLC
PHILADELPHIA REFINING COMPLEX
3144 PASSYUNK AVENUE, PHILADELPHIA, PA 19145

Project Location
City of Philadelphia,
Philadelphia County,
Pennsylvania
Prepared by GWC on 6/18/2018
Technical Review by JLM on 6/18/2018
Independent Review by MAS on 6/18/2018





Stantec Consulting Services Inc.
1060 Andrew Drive, Suite 140
West Chester, Pennsylvania 19380

June 19, 2018

PA Department of Conservation and Natural Resources
Bureau of Forestry, Ecological Services Section
400 Market Street
P.O. Box 8552
Harrisburg, PA, 17105-8552

Reference: Potential PNDI Conflict
Philadelphia Refining Complex AOIs 1-8
PNDI Search ID: PNDI-659359
Philadelphia, Philadelphia County, Pennsylvania

Dear Sir/Madam,

Stantec Consulting Services, Inc. (Stantec) is continuing with Site Characterization Reports (SCRs) on behalf of Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC (Evergreen) for select aboveground storage tanks located in the Philadelphia Energy Solutions Refining and Marketing LLC (PES) Philadelphia Refining Complex (Complex) located at 3144 Passyunk Avenue, Philadelphia (**Figure 1**) in response to tank related incidents. Additionally, the PES Complex is part of the One Cleanup Program which provides a mechanism for properties participating in the Pennsylvania Land Recycling Program to also satisfy the requirements of the Environmental Protection Agency (EPA) Corrective Measures program. As a part of this program, Stantec is currently preparing an Ecological Risk Assessment to examine potential impacts to threatened species, endangered species, and species of special concern.

The storage tank Corrective Action Process (CAP) regulations in 25 PA Code Chapter 245, Subchapter D, specifically §245.310(a)(28) and §245.310(b)(4), as well as the Land Recycling Program regulations in 25 PA Code Chapter 250, specifically §250.311 and §250.402, require an evaluation of ecological receptors at the site. According to the Pennsylvania Natural Diversity Inventory (PNDI) Environmental Review Tool search (PNDI Search ID: PNDI-659359), potential impacts may exist within the project area under the jurisdiction of the Pennsylvania Department of Conservation and Natural Resources (PADCNR).

The PNDI search identified the following as endangered or species of special concern within the project area:

- Waterhemp ragweed (*Amaranthus cannabinus*)
- Eastern baccharis (*Baccharis halimifolia*)



June 19, 2018
Page 2 of 3

Reference: Potential PNDI Conflict
Philadelphia Refining Complex AOIs 1-8
PNDI Search ID: PNDI-659359
Philadelphia, Philadelphia County, Pennsylvania

- Walter's Barnyard-grass (*Echinochloa walteri*)
- Multi-flowered mud-plantain (*Heteranthera multiflora*)
- Bugleweed (*Lycopus rubellus*)
- Shrumpy camphor-weed (*Pluchea odorata*)
- River Bulrush (*Schoenoplectus fluviatilis*)

A copy of the PNDI Project Environmental Review Receipt is attached.

Area of Interest (AOI) 1 through 8 at the PES Complex comprise the Girard Point Refinery and the majority of the Point Breeze Refinery. The PES Complex is located on industrial property with access restricted by fencing and security measures. The current and intended future uses of the PES Complex are non-residential. The PES Complex distills crude oil and produces various petroleum products including gasoline, aviation fuel, kerosene, home heating oil, low-sulfur diesel fuel, propane, butane, and petrochemicals (benzene and cumene).

The PES Complex is located in Philadelphia, Pennsylvania and sits along the banks of the Schuylkill River. The active portion of the Point Breeze Refinery is bordered on the west by the Schuylkill River and on the east by 26th Street. Passyunk Avenue splits the Point Breeze Refinery into two general areas, referred to as the North Yard and South Yard. All Point Breeze Refinery processing facilities are located in the South Yard. The Girard Point Refinery is located southwest of the Point Breeze Refinery South Yard and is bounded to the north, west, and south by the Schuylkill River. The Girard Point Refinery covers approximately 350 acres and the Point Breeze Refinery covers approximately 650 acres as depicted on **Figure 2**.

We request a determination from the PADCNr as to whether or not projects at the PES Complex AOIs 1 through 8 could affect sensitive species as identified by the PNDI Environmental Project Review PADCNr jurisdiction. If you have questions on the enclosed material or require any additional information to make your determination, please feel free to contact me at (610) 840-2540.



June 19, 2018
Page 3 of 3

Reference: Potential PNDI Conflict
Philadelphia Refining Complex AOIs 1-8
PNDI Search ID: PNDI-659359
Philadelphia, Philadelphia County, Pennsylvania

Regards,

STANTEC CONSULTING SERVICES INC.

Jennifer Menges
Principal, LRS
1060 Andrew Drive, Suite 140
West Chester, PA 19380
Phone: (610) 840-2540
jennifer.menges@stantec.com

Attachments: PNDI Project Environmental Review Receipt
Figure 1 – Site Location Map
Figure 2 – Site Plan

c. Stantec Project File
Evergreen Project File

BUREAU OF FORESTRY

June 20, 2018

PNDI Number: 659359
Version: Final_1; 6/19/18

Jennifer Menges

Stantec

1060 Andrew Drive

West Chester, PA 19380

Email: jennifer.menges@stantec.com (hard copy will not follow)

Re: Philadelphia Refining Complex AOIs 1-8
City of Philadelphia, Philadelphia County, PA

Dear Jennifer Menges,

Thank you for the submission of the Pennsylvania Natural Diversity Inventory (PNDI) Environmental Review Receipt Number **659359** 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

PNDI records indicate species or resources under DCNR's jurisdiction are located in the vicinity of the project. However, based on the information you submitted concerning the scope of work, the immediate location, and our detailed resource information, DCNR has determined that no impact is likely. No further coordination with our agency is needed for this project.

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 Megan Pulver, Ecological Information Specialist, by phone (717-705-2819) or via email (c-mpulver@pa.gov).

Sincerely



Greg Podniesinski, Section Chief
Natural Heritage Section

BUREAU OF FORESTRY

November 8, 2018

PNDI Numbers: 659359 and 659365

Versions: Final_1; 6/19/18 and Final_1; 6/20/18

Jennifer Menges

Stantec

1060 Andrew Drive

West Chester, PA 19380

Email: Jennifer.menges@stantec.com (hard copy will not follow)

**Re: Philadelphia Refining Complex AOIs 1-8 and Philadelphia Refining Complex AOI 9
City of Philadelphia, Philadelphia County, PA**

Dear Jennifer Menges,

Thank you for the submission of the botanical survey report for Pennsylvania Natural Diversity Inventory (PNDI) Environmental Review Receipt Numbers **659359 and 659365**. 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.

Coordination History

The PNDI search results of species potentially within the project or its vicinity included seven species for PNDI 659359 (AOIs 1-8) and one species for PNDI 359365 (AOI 9). Given the disturbed and fragmented condition of AOIs 1-8, the avoidance of impacts to the forested area along the riverbank within AOI 9, and the nature of the project as hazardous waste clean-up/site remediation, DCNR did not request a botanical survey. However, at the request of the Pennsylvania Department of Environmental Protection, Stantec conducted a botanical survey in Areas of Interest 1-8 and 9 for seven plant species of concern.

No Impact per Survey

Stantec ecologists conducted a survey for *Amaranthus cannabinus* (waterhemp ragweed), *Baccharis halimifolia* (eastern baccharis), *Echinochloa walteri* (Walter's barnyard grass), *Heteranthera multiflora* (multiflowered mud plantain), *Lycopus rubellus* (bugleweed), *Pluchea odorata* (shrubby camphor weed), and *Schoenoplectus fluviatilis* (river bulrush) on August 15, 16, and 29, 2018. One of the target species, *Baccharis halimifolia*, was observed within AOIs 3 and 8. Except for one plant along the Schuylkill River, all individuals were observed in anthropogenically disturbed areas within an active industrial site. Based on the disturbed nature of on-site habitat and the lack of natural habitat (coastal wetlands) identified by the survey, these populations are not a conservation priority. DCNR concurs with Stantec's conclusion that the proposed remedial actions would not impact the continued viability of the existing *Baccharis halimifolia* populations. No further coordination is needed with our agency.

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 Megan Pulver, Ecological Information Specialist, by phone (717-705-2819) or via email (c-mpulver@pa.gov).

Sincerely

A handwritten signature in black ink that reads "Greg Podniesinski". The signature is written in a cursive, flowing style.

Greg Podniesinski, Section Chief
Natural Heritage Section



Stantec Consulting Services Inc.
1060 Andrew Drive, Suite 140
West Chester, Pennsylvania 19380

June 19, 2018

PA Fish and Boat Commission
Division of Environmental Services
595 East Rolling Ridge Drive
Bellefonte, PA 16823

Reference: Potential PNDI Conflict
Philadelphia Refining Complex AOIs 1-8
PNDI Search ID: PNDI-659359
Philadelphia, Philadelphia County, Pennsylvania

Dear Sir/Madam,

Stantec Consulting Services, Inc. (Stantec) is continuing with Site Characterization Reports (SCRs) on behalf of Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC (Evergreen) for select aboveground storage tanks located in the Philadelphia Energy Solutions Refining and Marketing LLC (PES) Philadelphia Refining Complex (Complex) located at 3144 Passyunk Avenue, Philadelphia (**Figure 1**) in response to tank related incidents. The current and intended future uses of the PES Complex are non-residential. Additionally, the PES Complex is part of the One Cleanup Program which provides a mechanism for properties participating in the Pennsylvania Land Recycling Program to also satisfy the requirements of the Environmental Protection Agency (EPA) Corrective Measures program. As a part of this program, Stantec is currently preparing an Ecological Risk Assessment to examine potential impacts to threatened species, endangered species, and species of special concern.

The storage tank Corrective Action Process (CAP) regulations in 25 PA Code Chapter 245, Subchapter D, specifically §245.310(a)(28) and §245.310(b)(4), as well as the Land Recycling Program regulations in 25 PA Code Chapter 250, specifically §250.311 and §250.402, require an evaluation of ecological receptors at the site. According to the Pennsylvania Natural Diversity Inventory (PNDI) Environmental Review Tool search (PNDI Search ID: PNDI-659359), potential impacts may exist within the project area under the jurisdiction of the Pennsylvania Fish and Boat Commission (PAFBC). The search identified five undisclosed sensitive species as endangered and/or threatened within the general project area. Additionally, named is the *Alosa mediocris* (hickory shad) as an endangered species.

A Species Impact Review (SIR) request form is included with this submission, which provides necessary information to conduct a database search for species of special concern listed under the Endangered Species Act of 1973, the Wild Resource Conservation Act, the Pennsylvania Fish and Boat Code, or the Wildlife Code.



June 19, 2018
Page 2 of 3

Reference: Potential PNDI Conflict
Philadelphia Refining Complex AOIs 1-8
PNDI Search ID: PNDI-659359
Philadelphia, Philadelphia County, Pennsylvania

Area of Interest (AOI) 1 through 8 at the PES Complex comprise the Girard Point Refinery and the majority of the Point Breeze Refinery. The PES Complex is located on industrial property with access restricted by fencing and security measures. The PES Complex distills crude oil and produces various petroleum products including gasoline, aviation fuel, kerosene, home heating oil, low-sulfur diesel fuel, propane, butane, and petrochemicals (benzene and cumene).

The PES Complex is located in Philadelphia, Pennsylvania and sits along the banks of the Schuylkill River. The active portion of the Point Breeze Refinery is bordered on the west by the Schuylkill River and on the east by 26th Street. Passyunk Avenue splits the Point Breeze Refinery into two general areas, referred to as the North Yard and South Yard. All Point Breeze Refinery processing facilities are located in the South Yard. The Girard Point Refinery is located southwest of the Point Breeze Refinery South Yard and is bounded to the north, west, and south by the Schuylkill River. The Girard Point Refinery covers approximately 350 acres and the Point Breeze Refinery covers approximately 650 acres as depicted on **Figure 2**.

We request that PAFBC provide the names of the threatened species and endangered species listed in the PNDI receipt so that Stantec can perform an Ecological Risk Assessment for those species in accordance with the Land Recycling Program. Stantec intends to examine whether there is a potential for an unacceptable risk to exist to these species as a result of historic releases to soil and groundwater at the PES Complex. If you have questions on the enclosed material or require any additional information to make your determination, please feel free to contact me at (610) 840-2540.

Regards,

STANTEC CONSULTING SERVICES INC.

Jennifer Menges
Principal, LRS
1060 Andrew Drive, Suite 140
West Chester, PA 19380
Phone: (610) 840-2540
jennifer.menges@stantec.com



June 19, 2018
Page 3 of 3

Reference: Potential PNDI Conflict
Philadelphia Refining Complex AOIs 1-8
PNDI Search ID: PNDI-659359
Philadelphia, Philadelphia County, Pennsylvania

Attachments: PNDI Project Environmental Review Receipt
PAFBC SIR Request Form
Figure 1 – Site Location Map
Figure 2 – Site Plan

c. Stantec Project File
Evergreen Project File

COMMONWEALTH OF PENNSYLVANIA
FISH AND BOAT COMMISSION
 NATURAL DIVERSITY SECTION
SPECIES IMPACT REVIEW (SIR) REQUEST FORM

- A. This form provides the site information necessary to perform a computer database search for species of special concern listed under the Endangered Species Act of 1973, the Wild Resource Conservation Act, the Pennsylvania Fish and Boat Code or the Wildlife Code.
- B. Use only **one form** for each proposed project or location. Complete the information below and **mail** form to:

Natural Diversity Section
 Division of Environmental Services
 PA Fish and Boat Commission
 450 Robinson Lane
 Bellefonte, PA 16823
 Fax: (814) 359-5175

- C. This form, a cover letter including a project narrative, and accompanying maps should be sent to the above address for environmental reviews that **only** concern **reptiles, amphibians, fishes and aquatic invertebrates**. Reviews for other natural resources must be submitted to other appropriate agencies.
- D. The absence of recorded information from our databases and files does not necessarily imply actual conditions on site. Future field investigations could alter this determination. The information contained in our files is routinely updated. A review is valid for one year.
- E. **Please send us only one (1) copy of your request** – either by fax or by mail – not both. Mail is preferred to improve legibility of maps. Facsimile submission will not improve our response turn-around time.
- F. **Allow 30 days for completion of the review from the date of PFBC receipt.** Large projects and workload may extend this review timeframe.
- G. **In any future correspondence with us following your receipt of the SIR response, please refer to the assigned SIR number at the top left of our cover letter.**
- H. **FORMS THAT ARE NOT COMPLETED IN FULL WILL NOT BE REVIEWED.**

PLEASE PRINT OR TYPE: If available, provide the potential conflict **PNDI Search Number:** _____

PFBC response should be sent to:

Company/Agency: _____ Form Preparer: _____

Address: _____

Phone (8:00 AM to 4:00 PM): _____

Project Description: _____

Indicate if the project is: Transportation ☐ or Non-transportation ☒ (check one)

Will the proposed project encroach directly or indirectly (e.g., runoff) upon wetlands or waterways? Circle one for each:

Wetlands: Yes No Unknown Waterways: Yes No Unknown

County: _____ Township/Municipality: _____

Name of the United States Geological Survey (U.S.G.S.) 7.5 Minute Quadrangle Map where project is located: _____

Project size (in acres): _____

Attach an 8.5" by 11" photocopy (**DO NOT REDUCE**) of the section of the U.S.G.S. Quadrangle Map which identifies the project location. On this map, indicate the location of the project center (if linear, depict both ends) and outline the approximate boundaries of the project area.

Specify latitude/longitude of the project center.

Latitude: _____ ° / _____ ' / _____ " N

Indicate latitude/longitude in degrees-minutes-seconds format only.

Longitude: _____ ° / _____ ' / _____ " W

Three steps are needed to convert from decimal degrees to degrees-minutes-seconds: (1) Degrees will be the whole number. (2)

To get minutes, multiply the decimal degree portion by 60. (3) Multiply the decimal minute portion by 60 to get seconds.

Example: (Latitude) 40.93748 = 40°; 0.93748 x 60 = 56.2488' = 56'; 0.2488 x 60 = 14.928 = 15" = 40°56'15" N

(Longitude) 75.94740 = 75°; 0.94740 x 60 = 56.844' = 56'; 0.844 x 60 = 50.64 = 51" = 75°56'51" W

FOR PFBC USE ONLY

SIR#	Quad Name	Data Source	Search Result-Potential Species Conflict	Action



Pennsylvania Fish & Boat Commission

Division of Environmental Services

Natural Diversity Section
595 E Rolling Ridge Dr.
Bellefonte, PA 16823
814-359-5237

June 29, 2018

IN REPLY REFER TO

SIR# 49719

Stantec
Jennifer Menges
1060 Andrew Drive
West Chester, Pennsylvania 19380

**RE: Species Impact Review (SIR) – Rare, Candidate, Threatened and Endangered Species
PNDI Search No. 659359_1
Philadelphia Refining Complex AOIs 1-8
PHILADELPHIA County: Philadelphia City**

Dear Jennifer Menges:

This responds to your inquiry about a Pennsylvania Natural Diversity Inventory (PNDI) Internet Database search “potential conflict” or a threatened and endangered species impact review. These projects are screened for potential conflicts with rare, candidate, threatened or endangered species under Pennsylvania Fish & Boat Commission jurisdiction (fish, reptiles, amphibians, aquatic invertebrates only) using the Pennsylvania Natural Diversity Inventory (PNDI) database and our own files. These species of special concern are listed under the Endangered Species Act of 1973, the Wild Resource Conservation Act, and the Pennsylvania Fish & Boat Code (Chapter 75), or the Wildlife Code.

Eastern Redbelly Turtle (*Pseudemys rubriventris*, Threatened)

Based on the review of this information and the proximity of the project to known element occurrences of the species of concern listed above, potential habitat could be present within the proposed disturbance area. Therefore, additional evaluations are necessary to confirm whether or not the project site contains habitat and to determine the potential for adverse impacts to this species. We request completion of a **habitat assessment** to characterize and determine if potential habitat exists within the vicinity of the proposed project area.

A qualified biologist, who possesses the necessary Scientific Collector’s Permit issued by the Pennsylvania Fish and Boat Commission, must conduct this habitat assessment. A list of biologists recognized as qualified by the Pennsylvania Fish and Boat Commission to perform this assessment is enclosed. If our staff are available, we may be able to conduct the habitat assessment. However, please be aware that because of the time demands on our staff, it is likely that we will not be able to visit your site for several months. If this is unsatisfactory, we suggest that you contact one of the surveyors on the enclosed list.

Our Mission:

www.fish.state.pa.us

To protect, conserve and enhance the Commonwealth’s aquatic resources and provide fishing and boating opportunities.

This response represents the most up-to-date summary of the PNDI data and our files and is valid for two (2) years from the date of this letter. An absence of recorded species information does not necessarily imply species absence. Our data files and the PNDI system are continuously being updated with species occurrence information. Should project plans change or additional information on listed or proposed species become available, this determination may be reconsidered, and consultation shall be re-initiated.

If you have any questions regarding this review, please contact Robert Morgan at 814-359-5129 and refer to the SIR # 49719. Thank you for your cooperation and attention to this important matter of species conservation and habitat protection.

Sincerely,

A handwritten signature in black ink that reads "Christopher A. Urban". The signature is fluid and cursive, with the first name "Christopher" and last name "Urban" being clearly legible, and the middle initial "A." written in a smaller, more compact script.

Christopher A. Urban, Chief
Natural Diversity Section

CAU/RTM/dn

PENNSYLVANIA FISH & BOAT COMMISSION
Division of Environmental Services
Natural Diversity Section
595 E. Rolling Ridge Drive
Bellefonte, PA 16823-9620

QUALIFIED SURVEYORS FOR EASTERN REDBELLY TURTLE

58 Pa. Code §75.5 provides that in order to conduct surveys for endangered or threatened fish (fish, amphibians, reptiles and aquatic invertebrates) species or their habitat in connection with an application for a proposed or planned development activity, a surveyor must be deemed qualified by the Pennsylvania Fish and Boat Commission (PFBC). An individual who wishes to be qualified by the PFBC to conduct surveys for endangered or threatened species must demonstrate to the PFBC's satisfaction that he or she meets the qualified surveyor requirements as approved by the Executive Director and published in the *Pennsylvania Bulletin*. The following list includes persons deemed qualified by the PFBC to possess skills and to have experience in properly searching for and finding Eastern Redbelly Turtles (*Pseudemys rubriventris*) and in identifying their critical habitat. Persons not on this list but who have documented experience in conducting scientific studies of, or successful searches for, Eastern Redbelly Turtles and their critical habitat may submit their qualifications to the Natural Diversity Section for review and possible inclusion as a qualified surveyor. When applicable, a qualified surveyor must meet the requirements pertaining to scientific collector's permits and special permits for endangered and threatened species. All permitted collector's encounters with Eastern Redbelly Turtles must be reported in writing to the PFBC's Natural Diversity Section.

Scott Bush
GHD Services, Inc.
410 Eagleview Blvd.
Suite 110
Exton, PA 19341
(610)321-1800
scott.bush@ghd.com

Marlin Corn
Ecological Associates
315 Swamp Road
Newton, PA 18940
(215)208-3655
cornsnake@verizon.net

Bryon Dubois
DuBois Environmental Consultants
190 N. Main Street
Manahawkin, NJ 08050
(609)488-2857
bdubois@denviro.com

Deborah Poppel
URS Corporation
625 West Ridge Pike Suite E-100
Conshohocken, PA 19428
(610)832-3500
deborah.poppel@urs.com

Michael Torocco
Herpetological Associates, Inc.
1745 Westwood Road
Wyomissing, PA 19610
(610)670-1017
(609)618-3998 Cell
mtorocco@herpetologicalassociates.com

Herpetological Associates, Inc.
575 Toms River Road
Jackson, NJ 08527
(732)833-8600
(609)618-0314 Cell
rzappalort@aol.com

Harold W. Avery, Ph.D.
Adjunct Professor, The College of New Jersey
1309 Heartwood Drive
Cherry Hill, NJ 08003
(856)630-1708
haltort@aol.com
averyh@tcnj.edu

Robert Zappalorti, Sr.

Stantec Consulting Services Inc.

Communications Log

Date/Time of Call: Thursday, July 19, 2018

PNDI Search No. 659359 and 659365

Caller's Name: Robert Morgan

Site: Philadelphia Refining Complex

Pennsylvania Fish & Boat Commission

Site Address: 3144 Passyunk Avenue, Philadelphia, PA

Caller's Address: Div. of Env. Services National Diversity Section
595 E. Rolling Ridge Drive, Bellefonte, PA 16823

From: Jennifer Menges, voice mail at (610) 840-2540

Species Impact Review No: 49719 & 49720

Hey Jennifer, its Bob Morgan at Fish & Boat Commission getting back to you. Sorry your message got kind of buried in my emails. I was out on Tuesday. To answer your question, the only thing we are worried about is Redbelly Turtle. If there had been more, just for future reference, we would have put it in there, so Redbelly Turtle is it. That is all you have to worry about. So, that's what we need some surveys on or habitat assessments on. If you have any other questions, please get back to me (814) 359-5129. Again, Bob Morgan, Fish & Boat Commission. Have a good one, see you, bye.

Notes:



Pennsylvania Fish & Boat Commission

Division of Environmental Services
Natural Diversity Section
595 E Rolling Ridge Dr.
Bellefonte, PA 16823
814-359-5237

October 31, 2018

IN REPLY REFER TO
SIR# 49719

Stantec
Jennifer Menges
1060 Andrew Drive
West Chester, Pennsylvania 19380

RE: Species Impact Review (SIR) – Rare, Candidate, Threatened and Endangered Species
PNDI Search No. 659359_1
Philadelphia Refining Complex AOIs 1-8
PHILADELPHIA County: Philadelphia City

Dear Jennifer Menges:

This responds to your inquiry about a Pennsylvania Natural Diversity Inventory (PNDI) Internet Database search “potential conflict” or a threatened and endangered species impact review. These projects are screened for potential conflicts with rare, candidate, threatened or endangered species under Pennsylvania Fish & Boat Commission jurisdiction (fish, reptiles, amphibians, aquatic invertebrates only) using the Pennsylvania Natural Diversity Inventory (PNDI) database and our own files. These species of special concern are listed under the Endangered Species Act of 1973, the Wild Resource Conservation Act, and the Pennsylvania Fish & Boat Code (Chapter 75), or the Wildlife Code.

Eastern Redbelly Turtle (*Pseudemys rubriventris*, Threatened)

You provided an evaluation of habitats on site by Bryon DuBois to determine their potential to support the species of concern. Mr. DuBois identified several existing water bodies (A and G) on the site, as well as the Schuylkill River, and the vegetated areas in proximity to these water bodies as potential habitat for the Eastern Redbelly Turtle. I concur with the results of this evaluation; therefore, impacts to these features should be avoided.

If the identified suitable habitats or the area within 300ft of these water features are to be disturbed from project activity, we will need to conduct a more thorough evaluation of the potential adverse impacts to the species of concern. Items **such as**: basic project plans, project narrative, general habitat descriptions, and color photographs keyed to a site map or diagram of the project area, wetlands identification and delineation, stream characterization (flow velocity, width, depth, substrate type, pools and riffles, identification of basking areas, logs, woody debris, presence of aquatic vegetation) would expedite our review process. Pending the review of information, a habitat assessment or survey targeting the presence of the species of concern may be warranted.

Our Mission:

www.fish.state.pa.us

To protect, conserve and enhance the Commonwealth's aquatic resources and provide fishing and boating opportunities.

However, if the identified suitable habitats or the area within 300ft of these water features are not to be disturbed from project activity, and provided that best management practices are employed and strict erosion and sedimentation measures are maintained, I do not foresee any adverse impacts to the Eastern Redbelly Turtle (*Pseudemys rubriventris*) from the proposed project.

Additionally, for the purposes of your Ecological Risk Assessment, based on records maintained in the Pennsylvania Natural Diversity Inventory (PNDI) database and our own files, the following rare or protected species are known from the River in the vicinity of the project site:

Common Name (Scientific Name, PA Status)

Atlantic Sturgeon (*Acipenser oxyrinchus*, Endangered)

Hickory Shad (*Alosa mediocris*, Endangered)

Shortnose Sturgeon (*Acipenser brevirostrum*, Endangered)

Measures to prevent the release of sediment and harmful chemicals into waterways should be implemented. We recommend construction techniques that avoid instream work, sediment release, and changes to water quality and that fuel storage tanks for equipment re-fueling be located at least 100 feet away from waterways. Storm sewers and retention basins should be designed so as to minimize/remove all silt from the water before it is released into the stream. Strict erosion and sedimentation control measures, as well as best management practices should be employed.

This response represents the most up-to-date summary of the PNDI data and our files and is valid for two (2) years from the date of this letter. An absence of recorded species information does not necessarily imply species absence. Our data files and the PNDI system are continuously being updated with species occurrence information. Should project plans change or additional information on listed or proposed species become available, this determination may be reconsidered, and consultation shall be re-initiated.

If you have any questions regarding this review, please contact Kathy Gipe at 814-359-5186 and refer to the SIR # 49719. Thank you for your cooperation and attention to this important matter of species conservation and habitat protection.

Sincerely,



Christopher A. Urban, Chief
Natural Diversity Section

CAU/KDG/dn



Pennsylvania Fish & Boat Commission

Division of Environmental Services

Natural Diversity Section
595 E Rolling Ridge Dr.
Bellefonte, PA 16823
814-359-5237

October 22, 2019

IN REPLY REFER TO

SIR# 49719

Stantec
Jennifer Menges
1060 Andrew Drive
West Chester, Pennsylvania 19380

**RE: Species Impact Review (SIR) – Rare, Candidate, Threatened and Endangered Species
PNDI Search No. 659359_1
Philadelphia Refining Complex AOIs 1-8
PHILADELPHIA County: Philadelphia City**

Dear Jennifer Menges:

This responds to your inquiry about a Pennsylvania Natural Diversity Inventory (PNDI) Internet Database search “potential conflict” or a threatened and endangered species impact review. These projects are screened for potential conflicts with rare, candidate, threatened or endangered species under Pennsylvania Fish & Boat Commission jurisdiction (fish, reptiles, amphibians, aquatic invertebrates only) using the Pennsylvania Natural Diversity Inventory (PNDI) database and our own files. These species of special concern are listed under the Endangered Species Act of 1973, the Wild Resource Conservation Act, and the Pennsylvania Fish & Boat Code (Chapter 75), or the Wildlife Code.

Based on records maintained in the Pennsylvania Natural Diversity Inventory (PNDI) database and our own files, the following rare or protected species are known from the Schuylkill River in the vicinity of the project site:

Common Name (Scientific Name, PA Status)

Eastern Redbelly Turtle (*Pseudemys rubriventris*, Threatened)

Atlantic Sturgeon (*Acipenser oxyrinchus*, Endangered)

Hickory Shad (*Alosa mediocris*, Endangered)

Shortnose Sturgeon (*Acipenser brevirostrum*, Endangered)

In 2019, Bryon DuBois of DuBois Environmental Consultants conducted a Redbelly Turtle presence/absence survey (Phase 2) at the above site at habitat identified in a 2018 assessment. According to the resulting report, Waterbody A has been recolonized by *P. rubriventris* after the 2013 removal, but Waterbody G is not occupied by this species. Although Waterbody G does not provide optimal habitat for the Redbelly Turtle and is not currently occupied, the presence of other aquatic turtle species indicates

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To protect, conserve and enhance the Commonwealth's aquatic resources and provide fishing and boating opportunities.

that transient turtles could colonize here in the future, and as such, impacts to all three habitats (Waterbodies A, G, and the Schuylkill River shoreline) identified in the 2018 assessment should be avoided in future planning.

We recommend that the identified occupied waterbodies and existing vegetated areas within 300ft of these water features not be disturbed from project activity, and that best management practices are employed and strict erosion and sedimentation measures are maintained. Measures to prevent the release of sediment and harmful chemicals into waterways should be implemented. We recommend construction techniques that avoid instream work, sediment release, and changes to water quality and that fuel storage tanks for equipment re-fueling be located at least 100 feet away from waterways. Storm sewers and retention basins should be designed so as to minimize/remove all silt from the water before it is released into the stream.

This response represents the most up-to-date summary of the PNDI data and our files and is valid for two (2) years from the date of this letter. An absence of recorded species information does not necessarily imply species absence. Our data files and the PNDI system are continuously being updated with species occurrence information. Should project plans change or additional information on listed or proposed species become available, this determination may be reconsidered, and consultation shall be re-initiated.

If you have any questions regarding this review, please contact Kathy Gipe at 814-359-5186 and refer to the SIR # 49719. Thank you for your cooperation and attention to this important matter of species conservation and habitat protection.

Sincerely,

A handwritten signature in black ink that reads "Christopher A. Urban". The signature is fluid and cursive, with the first name being the most prominent.

Christopher A. Urban, Chief
Natural Diversity Section

CAU/KDG/dn



Stantec Consulting Services Inc.
1060 Andrew Drive, Suite 140
West Chester, Pennsylvania 19380

June 19, 2018

PA Game Commission
Bureau of Wildlife Habitat Management
Division of Environmental Planning and Habitat Protection
2001 Elmerton Avenue
Harrisburg, PA 17110-9797

Reference: Potential PNDI Conflict
Philadelphia Refining Complex AOIs 1-8
PNDI Search ID: PNDI-659359
Philadelphia, Philadelphia County, Pennsylvania

Dear Sir/Madam,

Stantec Consulting Services, Inc. (Stantec) is continuing with Site Characterization Reports (SCRs) on behalf of Philadelphia Refinery Operations, a series of Evergreen Resources Group, LLC (Evergreen) for select aboveground storage tanks located in the Philadelphia Energy Solutions Refining and Marketing LLC (PES) Philadelphia Refining Complex (Complex) located at 3144 Passyunk Avenue, Philadelphia (**Figure 1**) in response to tank related incidents. Additionally, the PES Complex is part of the One Cleanup Program which provides a mechanism for properties participating in the Pennsylvania Land Recycling Program to also satisfy the requirements of the Environmental Protection Agency (EPA) Corrective Measures program. As a part of this program, Stantec is currently preparing an Ecological Risk Assessment to examine potential impacts to threatened species, endangered species, and species of special concern.

The storage tank Corrective Action Process (CAP) regulations in 25 PA Code Chapter 245, Subchapter D, specifically §245.310(a)(28) and §245.310(b)(4), as well as the Land Recycling Program regulations in 25 PA Code Chapter 250, specifically §250.311 and §250.402, require an evaluation of ecological receptors at the site. According to the Pennsylvania Natural Diversity Inventory (PNDI) Environmental Review Tool search (PNDI Search ID: PNDI-659359), potential impacts may exist within the project area under the jurisdiction of the Pennsylvania Game Commission (PAGC). The PNDI search identified one special concern species, the marsh wren (*Cistothorus palustris*) within the general project area. Additionally, named are the peregrine falcon (*Falco peregrinus*) and least bittern (*Ixobrychus exilis*) as endangered species. A copy of the PNDI Project Environmental Review Receipt is attached.

Area of Interest (AOI) 1 through 8 at the PES Complex comprise the Girard Point Refinery and the majority of the Point Breeze Refinery. The PES Complex is located on industrial property with access restricted by fencing and security measures. The current and intended future uses of the PES Complex are non-residential. The PES Complex distills crude oil and produces various petroleum products including gasoline, aviation fuel, kerosene, home heating oil, low-sulfur diesel fuel, propane, butane, and petrochemicals (benzene and cumene).



June 19, 2018
Page 2 of 2

Reference: Potential PNDI Conflict
Philadelphia Refining Complex AOIs 1-8
PNDI Search ID: PNDI-659359
Philadelphia, Philadelphia County, Pennsylvania

The PES Complex is located in Philadelphia, Pennsylvania and sits along the banks of the Schuylkill River. The active portion of the Point Breeze Refinery is bordered on the west by the Schuylkill River and on the east by 26th Street. Passyunk Avenue splits the Point Breeze Refinery into two general areas, referred to as the North Yard and South Yard. All Point Breeze Refinery processing facilities are located in the South Yard. The Girard Point Refinery is located southwest of the Point Breeze Refinery South Yard and is bounded to the north, west, and south by the Schuylkill River. The Girard Point Refinery covers approximately 350 acres and the Point Breeze Refinery covers approximately 650 acres as depicted on **Figure 2**.

We request a determination from the PAGC as to whether or not projects at the PES Complex AOIs 1 through 8 could affect sensitive species as identified by the PNDI Environmental Project Review PAGC jurisdiction. If you have questions on the enclosed material or require any additional information to make your determination, please feel free to contact me at (610) 840-2540.

Regards,

STANTEC CONSULTING SERVICES INC.

Jennifer Menges
Principal, LRS
1060 Andrew Drive, Suite 140
West Chester, PA 19380
Phone: (610) 840-2540
jennifer.menges@stantec.com

Attachments: PNDI Project Environmental Review Receipt
Figure 1 – Site Location Map
Figure 2 – Site Plan

c. Stantec Project File
Evergreen Project File



COMMONWEALTH OF PENNSYLVANIA

PENNSYLVANIA GAME COMMISSION

2001 Elmerton Avenue
Harrisburg, PA 17110-9797

Wildlife Habitat Management
(717) 787-6818

July 27, 2018

Ms. Jennifer Menges
Stantec
1060 Andrew Drive
West Chester, Pennsylvania 19380
jennifer.menges@stantec.com

PNDI Receipt File: *project_receipt_philadelphia_refining_com_659359_FINAL_1.pdf*
Re: Philadelphia Refining Complex AOIs 1-8
City of Philadelphia Township, Philadelphia County, Pennsylvania

Dear Ms. Menges,

Thank you for submitting Pennsylvania Natural Diversity Inventory (PNDI) Environmental Review Receipt *project_receipt_philadelphia_refining_com_659359_FINAL_1.pdf* for review. The Pennsylvania Game Commission (PGC) screened this project for potential impacts to species and resources of concern under PGC responsibility, which includes birds and mammals only.

No Impact Anticipated

PNDI records indicate species or resources of concern are located within the vicinity of the project. However, based on the information you submitted concerning the nature of the project, the immediate location, and our detailed resource information, the PGC has determined that no impact is likely. Therefore, no further coordination with the PGC will be necessary for this project at this time.

This response represents the most up-to-date summary of the PNDI data files and is valid for two (2) years from the date of this letter. An absence of recorded information does not necessarily imply actual conditions on site. Should project plans change or additional information on listed or proposed species become available, this determination may be reconsidered.

Should the proposed work continue beyond the period covered by this letter, please resubmit the project to this agency as an "Update" (including an updated PNDI receipt, project narrative and accurate map). If the proposed work has not changed and no additional information concerning listed species is found, the project will be cleared for PNDI requirements under this agency for two additional years.

This finding applies to impacts to birds and mammals only. To complete your review of state and federally-listed threatened and endangered species and species of special concern, please be sure

that the U.S. Fish and Wildlife Service, the PA Department of Conservation and Natural Resources, and/or the PA Fish and Boat Commission have been contacted regarding this project as directed by the online PNDI ER Tool found at www.naturalheritage.state.pa.us.

Sincerely,



Olivia A. Braun
Environmental Planner
Division of Environmental Planning & Habitat Protection
Bureau of Wildlife Habitat Management
Phone: 717-787-4250, Extension 3128
Fax: 717-787-6957
E-mail: Olbraun@pa.gov

A PNHP Partner



OAB/oab

cc: File