

Appendix A – Correspondence



U.S. Fish and Wildlife Service
3817 Luker Road
Cortland, NY 13045-9349
Attn: Robyn Niver

Subject:
Advanced Power NA - Cricket Valley Site

Dear Ms. Niver:

The purpose of this letter is to request a determination from the U.S. Fish and Wildlife Service (USFWS) regarding the potential for the presence of threatened/endangered wildlife species or significant habitat on the 131.6-acre area shown on the attached Figure 1 in Dover, Dutchess County, New York. As can be seen on Figure 1, the site is bounded on the east by Route 22, and the Swamp River flows through the site's westernmost extent. An active railroad line also extends through the site in a north-south direction. The area east of the railroad tracks includes dilapidated structures that would be removed as part of project development at this previously developed industrial site. The proposed development area will focus on the portion of the site east of the railroad tracks, although some related activities could occur to the west.

Consistent with the current USFWS protocol for evaluating the potential presence of protected species on a site, we have reviewed the information presented on your website for Dutchess County and found the bog turtle and Indiana bat listed as present in the County. As we discussed, a meeting last week with the New York State Department of Environmental Conservation (NYSDEC) identified that proximate bog turtle records indicated the need for a Phase 1 survey. We understand that Indiana bat records exist to the south of the site. The project goal is to avoid substantial tree clearing to the greatest extent possible, which should minimize the potential for this species impact.

We would appreciate your input regarding the need for species review and look forward to working with you at this site. If you have any questions or require additional information, please do not hesitate to contact me. Thank you in advance for your assistance.

Sincerely,

ARCADIS

Lynn Gresock
Environmental Consultant

Copies: C. Hogan, NYSDEC; J.Ahrens, Advanced Power

ARCADIS
Two Executive Drive
Suite 303
Chelmsford
Massachusetts 01824
Tel 978.937.9999
Fax 978.937.7555
www.arcadis-us.com

Date:
June 2, 2009

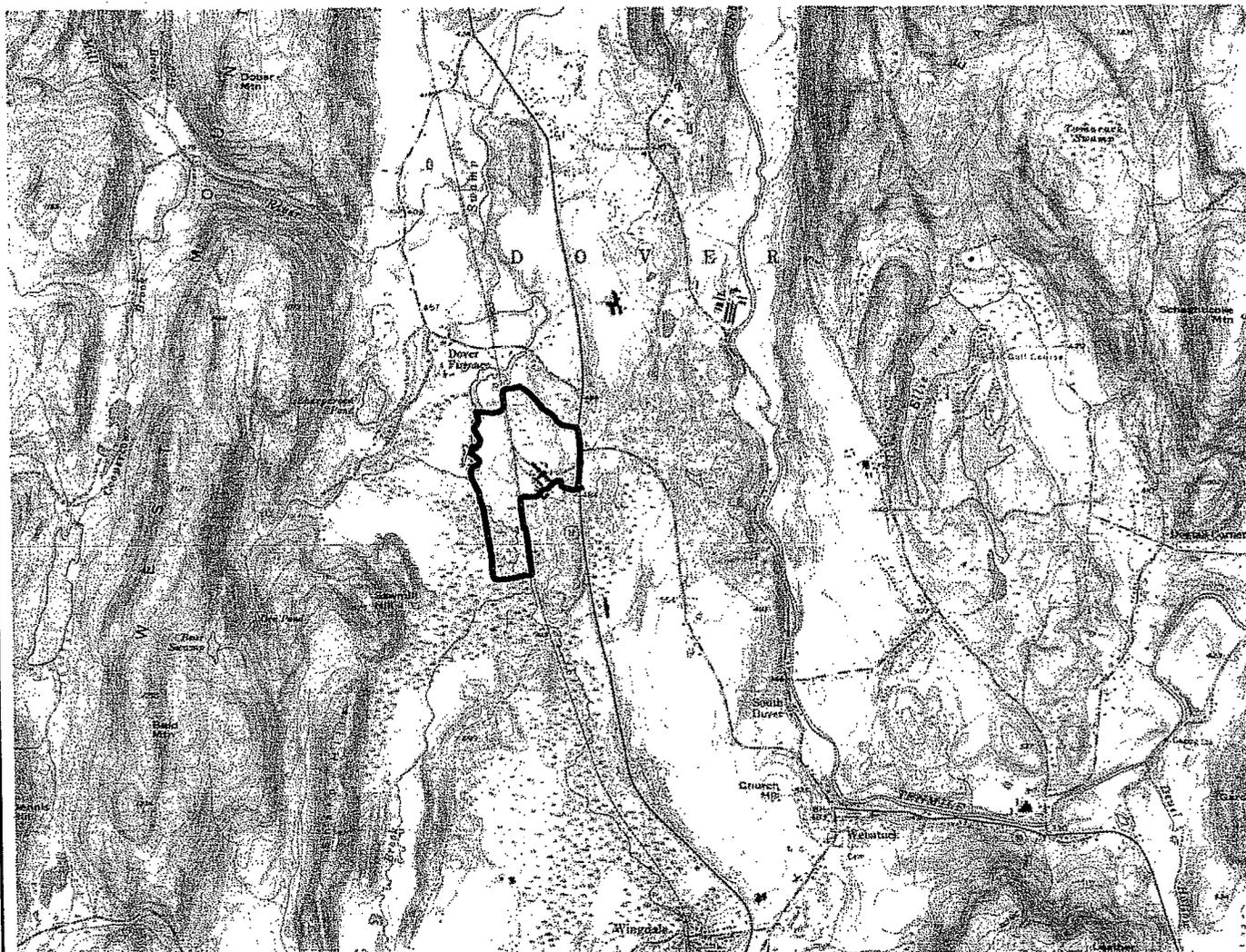
Contact:
Lynn Gresock

Phone:
978.937.9999, ext. 320

Email:
lynn.gresock@arcadis-us.com

Our ref:
CO001447

Imagine the result



Source: USGS Dover Plains Quadrangle; 7.5 Minute Series (Topographic); Revised 1958.

<p>CRICKET VALLEY SITE - DOVER, NY</p> <p>ADVANCED POWER NA</p>	
<p>SITE LOCATION MAP</p>	
 <p>ARCADIS</p> <p><i>Infrastructure, environment, buildings</i></p>	<p>FIGURE</p> <p>1</p>



United States Department of the Interior



FISH AND WILDLIFE SERVICE

3817 Luker Road
Cortland, NY 13045

July 20, 2009

Mr. Lynn Gresock
Associate Vice President
ARCADIS
Two Executive Drive, Suite 303
Chelmsford, MA 01824

Dear Mr. Gresock:

This is in response to your June 2, 2009, letter regarding the proposed 131.6-acre Cricket Valley Site in the Town of Dover, Dutchess County, New York. The following comments are provided pursuant to the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*). This response does not preclude additional U.S. Fish and Wildlife Service (Service) comments under other legislation.

Given our understanding of the project site, it appears that the Federally-listed threatened and State-listed endangered bog turtle (*Glyptemys [=Clemmys] muhlenbergii*) occurs within and around the vicinity of the project area. Therefore, efforts must be made to avoid direct and indirect effects to the wetlands within and offsite of the proposed project area.

At this time, the Service has no information regarding the plans for the site. However, adverse impacts associated with residential and commercial development could include, but are not limited to, fragmentation of habitat and alterations to bog turtle dispersal routes; introduction of contaminated surface water runoff into the wetland from pesticides, herbicides, fertilizers, road deicers, etc.; alteration of wetland hydrology; introduction of nutrients from septic systems; introduction of yard and other waste materials into wetlands; introduction of people, pets, and recreational vehicles into wetlands; and death/injury of bog turtles that wander onto lawns and roads. Generally, the larger the upland buffer, the lower the risk of many of these potential adverse affects. However, some of the effects may not be adequately addressed by buffers. The Bog Turtle (*Clemmys muhlenbergii*) Northern Population Recovery Plan (U.S. Fish and Wildlife Service 2001) (Appendix A - Bog Turtle Conservation Zones) includes recommendations for minimum buffers for various activities. You can find this document at <http://nyfo.fws.gov/es/btconszone.pdf>. Please note that the Service generally recommends a minimum of a 300-foot buffer around wetlands with known or likely bog turtle populations. The Recovery Plan recommends avoiding many activities within this area including development, delineation of lot lines, herbicide application, and pesticide or fertilizer application.

In addition to the bog turtle, there is potential for the Federally- and State-listed endangered Indiana bat (*Myotis sodalis*) to occur within the proposed project area. Two males were captured approximately 2 miles from the project area and there is likely a maternity colony approximately

5 miles from the site. The Service recommends that the applicant conduct mist netting between May 15 and August 15. The Service's current mist-netting guidelines are available on our website.* Should any Indiana bats be captured during mist-netting activities, a radio-transmitter should be attached to the bat and the bat should be tracked to determine whether there is roosting, foraging, and/or maternity habitat present within the proposed project area. We encourage the applicant to coordinate with the Service to develop the proposed survey and tracking scope of work. This type of information can greatly assist the Service and any involved Federal agencies with a full analysis of the effects of the proposed activity. We recommend that the applicant provide the requested information to the Service to determine whether additional conservation measures may be needed to avoid or minimize adverse effects to Indiana bats.

In addition, the New England cottontail (*Sylvilagus transitionalis*) is known to occur within 4 miles of the proposed project. The New England cottontail is a candidate species which is being considered by the Service for addition to the Federal List of Endangered and Threatened Wildlife and Plants. Candidate species are species for which the Service has on file sufficient information on the biological vulnerability and threat(s) to support issuance of a proposal to list, but issuance of a proposed rule is currently precluded by higher priority listing actions. Candidate species do not receive substantive or procedural protection under the ESA; however, the Service does encourage Federal agencies and other appropriate parties to consider these species in the project planning process.

Should the New England cottontail be proposed for listing as endangered or threatened prior to completion of this project, conference procedures pursuant to Section 7(a)(4) of the ESA may be necessary if your project involves Federal authorizations. Should this species be listed prior to completion of the project, further coordination or consultation pursuant to the ESA will be required to evaluate potential adverse effects of project implementation on the New England cottontail or its habitat, and to determine if formal consultation is necessary. Please visit our website for more information on New England cottontail.

The most recent compilation of Federally-listed and proposed endangered and threatened species in New York is available for your information. Until the proposed project is complete, we recommend that you check our website every 90 days from the date of this letter to ensure that listed species presence/absence information for the proposed project is current.

As stated above, the Indiana bat and bog turtle are listed as endangered by the State of New York. The New England cottontail is a New York State Species of Special Concern. Any additional information regarding the project and its potential to impact listed species should be coordinated with both this office and with the New York State Department of Environmental Conservation (NYSDEC). The NYSDEC contact for the Endangered Species Program is Mr. Peter Nye, Endangered Species Unit, 625 Broadway, Albany, NY 12233 (telephone: [518] 402-8859).

In summary, we have concerns about potential impacts to Federally-listed species from the proposed project. We recommend additional coordination among the appropriate consulting firms, the NYSDEC, any involved Federal agencies, the applicant, and the Service regarding these potential impacts.

Thank you for your time. If you require additional information please contact Robyn Niver at (607) 753-9334. Future correspondence with us on this project should reference project file 90453.

Sincerely,



David A. Stilwell
Field Supervisor

*Additional information referred to above may be found on our website at:
<http://www.fws.gov/northeast/nyfo/es/section7.htm>

References:

U.S. Fish and Wildlife Service. 2001. Bog Turtle (*Clemmys muhlenbergii*), Northern Population, Recovery Plan. Hadley, Massachusetts. 103 pp.

cc: NYSDEC, New Paltz, NY (Attn: L. Masi/A. Ciesluk)
NYSDEC, Albany, NY (Endangered Species; Attn: P. Nye)
COE, New York, NY (Attn: B. Orzel)



Infrastructure, environment, buildings

Jean Pietrusiak
NYSDEC-DFWMMR
NYS Natural Heritage Program - Information Services
625 Broadway, 5th Floor
Albany, NY 12233-4757

ARCADIS
Two Executive Drive
Suite 303
Chelmsford
Massachusetts 01824
Tel 978.937.9999
Fax 978.937.7555
www.arcadis-us.com

Subject:
Advanced Power NA - Cricket Valley Site

Dear Ms. Pietrusiak:

The purpose of this letter is to formally request current information from the New York State Natural Heritage Program (NYSNHP) - Information Services regarding the presence of threatened/endangered plant and animal species or significant habitat within the 131.6-acre area shown on the attached Figure 1 in Dover, Dutchess County, New York. As can be seen on Figure 1, the site is bounded on the east by Route 22, and the Swamp River flows through the site's westernmost extent. An active railroad line also extends through the site in a north-south direction. The area east of the railroad tracks and includes dilapidated structures that would be removed as part of project development at this previously developed industrial site. The proposed development area will focus on the portion of the site east of the railroad tracks, although some related activities could occur to the west.

During a meeting with the New York State Department of Conservation (NYSDEC) on 5/27/09 in the New Paltz office, we were informed that two species of interest at the site (bog turtle and timber rattlesnake) would require additional review. We would appreciate your input regarding the need for additional species review. If you have any questions or require additional information, please do not hesitate to contact me. Thank you in advance for your assistance.

Sincerely,

ARCADIS

Lynn Gresock
Environmental Consultant

Copies: C. Hogan, NYSDEC; J.Ahrens, Advanced Power

Date:
June 2, 2009

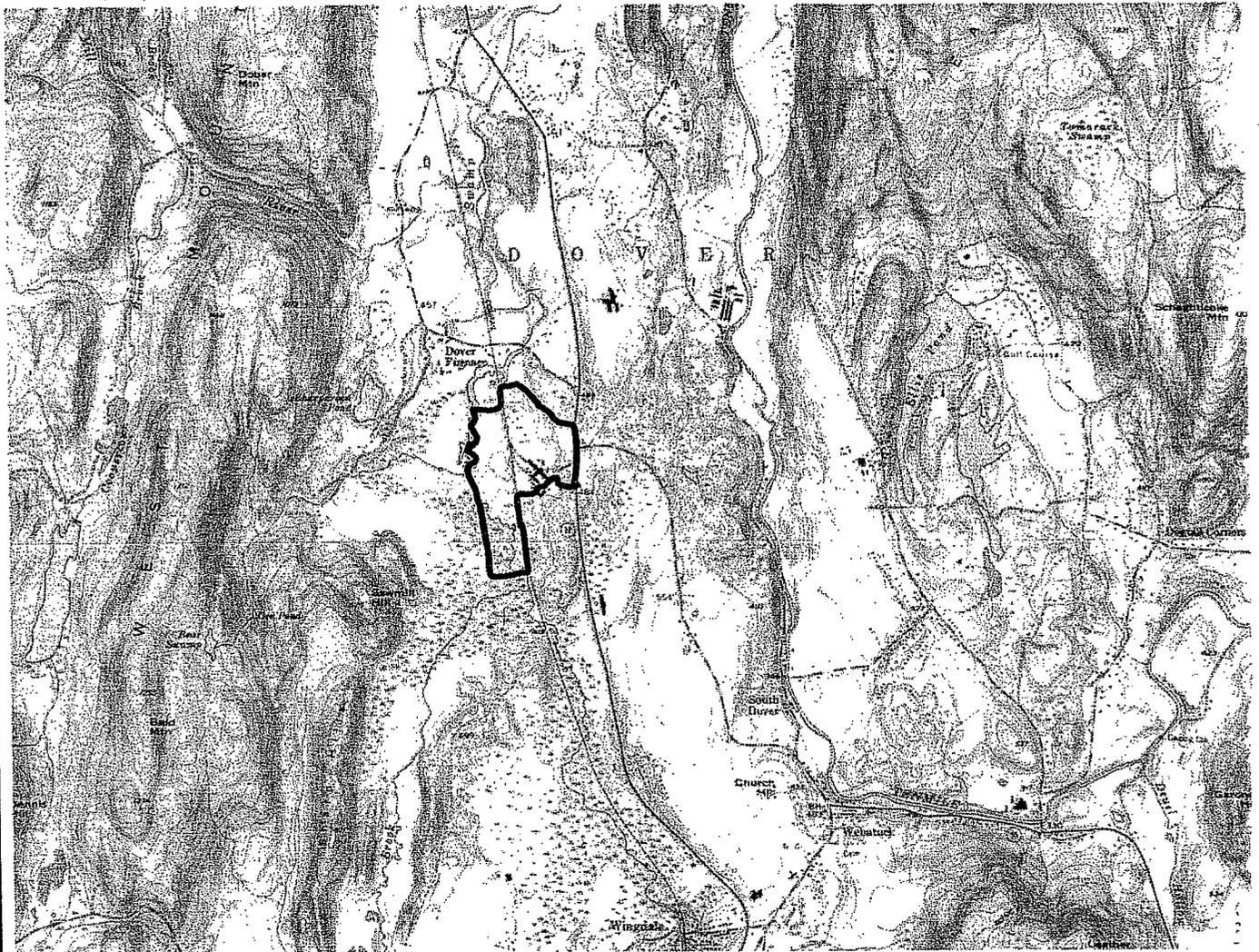
Contact:
Lynn Gresock

Phone:
978.937.9999, ext. 320

Email:
lynn.gresock@arcadis-us.com

Our ref:
CO001447

Imagine the result



Source: USGS Dover Plains Quadrangle; 7.5 Minute Series (Topographic); Revised 1958.

<p>CRICKET VALLEY SITE - DOVER, NY ADVANCED POWER NA</p>	
<p>SITE LOCATION MAP</p>	
 <p>ARCADIS Infrastructure, environment, buildings</p>	<p>FIGURE 1</p>

New York State Department of Environmental Conservation

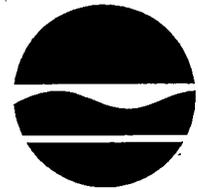
Division of Fish, Wildlife & Marine Resources

New York Natural Heritage Program

625 Broadway, Albany, New York 12233-4757

Phone: (518) 402-8935 • FAX: (518) 402-8925

www.dec.state.ny.us



Alexander B. Grannis
Commissioner

June 19, 2009

Lynn Gresock
ARCADIS
2 Executive Drive, Suite 303
Chelmsford, MA 01824

Dear Ms. Gresock:

In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to an Environmental Assessment for the proposed Advanced Power NA - Cricket Valley Site - 131 acres, area as indicated on the map you provided, located in the Town of Dover, Dutchess County.

Enclosed is a report of rare or state-listed animals and plants, significant natural communities, and other significant habitats, which our databases indicate occur, or may occur, on your site or in the immediate vicinity of your site. The information contained in this report is considered sensitive and should not be released to the public without permission from the New York Natural Heritage Program.

The presence of the plants and animals identified in the enclosed report may result in this project requiring additional review or permit conditions. For further guidance, and for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the appropriate NYS DEC Regional Office, Division of Environmental Permits, at the enclosed address.

For most sites, comprehensive field surveys have not been conducted; the enclosed report only includes records from our databases. We cannot provide a definitive statement on the presence or absence of all rare or state-listed species or significant natural communities. This information should not be substituted for on-site surveys that may be required for environment impact assessment.

Our databases are continually growing as records are added and updated. If this proposed project is still under development one year from now, we recommend that you contact us again so that we may update this response with the most current information.

Sincerely,

A handwritten signature in black ink that reads "Tara Salerno". The signature is fluid and cursive.

Tara Salerno, Information Services
New York Natural Heritage Program

Enc.

cc: Reg. 3, Fisheries Mgr.

Natural Heritage Report on Rare Species



NY Natural Heritage Program, NYS DEC, 625 Broadway, 5th Floor,
Albany, NY 12233-4757
(518) 402-8935

~This report contains **SENSITIVE** information that should not be released to the public without permission from the NY Natural Heritage Program.
~Refer to the User's Guide for explanations of codes, ranks and fields.
~We do not provide maps for species most vulnerable to disturbance.

Natural Heritage Report on Rare Species and Ecological Communities



REPTILES

Glyptemys muhlenbergii (formerly *Clemmys muhlenbergii*)

Bog Turtle

NY Legal Status: Endangered

NYS Rank: S2 - Imperiled

Office Use

11465

Federal Listing: Threatened

Global Rank: G3 - Vulnerable

County: Dutchess

USFWS

Town: Dover

Location:

The documented location is on or in very close proximity to the project site.

ESU

Please note that animals can move 1 mile or more from documented locations. For information on the population at this location and management considerations, please contact the NYS DEC Regional Wildlife Manager for the Region where the project is located.

1 Records Processed

More detailed information about many of the rare and listed animals in New York, including biology, identification, habitat, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.acris.nynhp.org, from NatureServe Explorer at <http://www.natureserve.org/explorer>, and from NYSDEC at <http://www.dec.ny.gov/animals/7494.html>.

Natural Heritage Report on Rare Species

NY Natural Heritage Program, NYS DEC, 625 Broadway, 5th Floor, Albany, NY
12233-4757
(518) 402-8935



- This report contains **SENSITIVE** information that should not be released to the public without permission from the NY Natural Heritage Program.
- Refer to the User's Guide for explanations of codes, ranks and fields.
- We do not provide maps for species most vulnerable to disturbance.

Natural Heritage Report on Rare Species and Ecological Communities



REPTILES

Crotalus horridus
Timber
Rattlesnake

NY Legal Status: Threatened

NYS Rank: S3 - Vulnerable

Office Use
1079

Federal Listing:

Global Rank: G4 - Apparently secure

ESU

County: Dutchess

Town: Dover

Location: **There are two documented locations within 1.5 miles of the project site.** Animals can move 1.5 miles or more from documented locations. For information on the population at this location and management considerations, please contact the NYS DEC Regional Wildlife Manager for the Region where the project is located.

1 Records Processed

More detailed information about many of the rare and listed animals in New York, including biology, identification, habitat, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.acris.nynhp.org, from NatureServe Explorer at <http://www.natureserve.org/explorer>, and from NYSDEC at <http://www.dec.ny.gov/animals/7494.html>.

Natural Heritage Report on Rare Species and Ecological Communities



NY Natural Heritage Program, NYS DEC, 625 Broadway, 5th Floor, Albany, NY
12233-4757
(518) 402-8935

- This report contains **SENSITIVE** information that should not be released to the public without permission from the NY Natural Heritage Program.
- Refer to the User's Guide for explanations of codes, ranks and fields.
- Location maps for certain species and communities may not be provided 1) if the species is vulnerable to disturbance, 2) if the location and/or extent is not precisely known, 3) if the location and/or extent is too large to display, and/or 4) if the animal is listed as Endangered or Threatened by New York State.

Natural Heritage Report on Rare Species and Ecological Communities



COMMUNITIES

Rich graminoid fen

This occurrence of Rich Graminoid Fen is considered significant from a statewide perspective by the NY Natural Heritage Program. It is either an occurrence of a community type that is rare in the state or a high quality example of a more common community type. By meeting specific, documented significance criteria, the NY Natural Heritage Program considers this occurrence to have high ecological and conservation value.

Office Use

NY Legal Status: Unlisted	NYS Rank: S1S2	8926
Federal Listing:	Global Rank: G3	
Last Report: 1997-07-10	EO Rank:	
County: Dutchess		S
Town: Dover		
Location:		
Directions:		

General Quality and Habitat: Small size, some exotics. A small patch sedge and shrub dominated wetland. Area was used as pasture land several years ago. Route 22 is east border. Young floodplain forest occurs to the west. Landscape within 500 acres is somewhat fragmented and includes floodplain forest, red maple hardwood swamp, deep and shallow emergent marsh, commercial development, residential development, successional red cedar woodland and cropland.

Rich shrub fen

This occurrence of Rich Shrub Fen is considered significant from a statewide perspective by the NY Natural Heritage Program. It is either an occurrence of a community type that is rare in the state or a high quality example of a more common community type. By meeting specific, documented significance criteria, the NY Natural Heritage Program considers this occurrence to have high ecological and conservation value.

Office Use

NY Legal Status: Unlisted	NYS Rank: S1S2	1471
Federal Listing:	Global Rank: G3G4	
Last Report: 1997-06-10	EO Rank:	
County: Dutchess		S
Town: Dover		
Location:		
Directions:		

General Quality and Habitat: Small good to fair quality fen with no exotics. Suspect area was pasture, formerly drained. Bordered by successional and natural communities. A small rich shrub fen, in the north flow of the Great Swamp watershed, in the wetland complex near the base of sawmill hill on the west side of the Swamp River. The fen has a tall shrub margin and is bordered by mowed field and sedge meadow on the west and early successional floodplain forest on the east. Hemlock northern hardwood forest occurs on sawmill hill.



Red maple-hardwood swamp

This occurrence of Red Maple-Hardwood Swamp is considered significant from a statewide perspective by the NY Natural Heritage Program. It is either an occurrence of a community type that is rare in the state or a high quality example of a more common community type. By meeting specific, documented significance criteria, the NY Natural Heritage Program considers this occurrence to have high ecological and conservation value.

Office Use

NY Legal Status: Unlisted	NYS Rank: S4S5	9064
Federal Listing:	Global Rank: G5	
Last Report: 1997-10-01	EO Rank:	
County: Dutchess		S
Town: Dover, Pawling		
Location: Great Swamp North Flow		
Directions: The Great Swamp begins flowing north in the village of Pawling and continues north through the town of Pawling to the town of Dover. The swamp is bounded by Route 22 and the Harlem Valley Line Railroad on the east. Access points are: 1) From Hurd Corners, go north on Route 22 about 0.2 mi to a parking circle. Walk south to the Appalachian Trail. Follow the Appalachian Trail west to the swamp. 2) From Wingdale, go west on Route 21 about 2 mi to a cemetery. Park and walk north about 1 mi to the swamp.		

General Quality and Habitat: This is a large swamp with good diversity. The swamp includes mature areas and some early successional areas. Invasive exotics are found at the edges. There are 15% invasive exotics within. The immediate landscape is somewhat fragmented. There is minimal buffering between the swamp and a major road to the east. The community consists of large patches of red maple-hardwood swamp which occur in a valley along the Swamp River which flows north into the Tenmile River. The red maple-hardwood swamp grades into floodplain forest which occurs adjacent to the Swamp River. Small scattered patches of shallow/deep emergent marsh and purple loosestrife marsh occur at the edge of and in the river. The red maple-hardwood swamp is less frequently flooded than the floodplain forest. The hills on either side of the swamp are predominantly forested with recovering hardwood forest. The swamp is located in a somewhat fragmented landscape that includes forest, successional communities, agricultural land, residential and commercial development centered on Route 22.

Floodplain forest

This occurrence of Floodplain Forest is considered significant from a statewide perspective by the NY Natural Heritage Program. It is either an occurrence of a community type that is rare in the state or a high quality example of a more common community type. By meeting specific, documented significance criteria, the NY Natural Heritage Program considers this occurrence to have high ecological and conservation value.

Office Use

NY Legal Status: Unlisted	NYS Rank: S2S3	4563
Federal Listing:	Global Rank: G3G4	
Last Report: 1997-10-02	EO Rank:	
County: Dutchess		S
Town: Dover, Pawling		
Location: Great Swamp North Flow		
Directions: Great Swamp begins flowing north in the village of Pawling and continues north through the town of Pawling to the town of Dover. The swamp is bounded by Route 22 and the Harlem Valley Line railroad on the east. Access points are: 1) From Hurd Corners, go north on Route 22 about 0.2 mi to a parking circle. Walk south to the Appalachian Trail. Follow the Appalachian Trail west to the swamp. 2) From Wingdale go north on Route 22 1.9 mi to Chipewalla Road.		

General Quality and Habitat: This is a large floodplain forest with good diversity, but relatively young. Includes some highly disturbed areas. Invasive exotics at edges. 20% somewhat invasive exotics within. Immediately landscape is somewhat fragmented. There is minimal buffering between the swamp and the major road to the east. Recoverable to a "B" rank if maturity increases and exotics do not greatly expand. The community is a large patch of floodplain forest which follows the Swamp River which flows north into the Tenmile River. Patches of shallow/deep emergent marsh and purple loosestrife marsh occur at the edge of and in the river. The floodplain forest grades into red maple-hardwood swamp moving away from the river. The surrounding red maple hardwood swamp in the valley is 458 acres. The hills on either side of the swamp are predominantly forested with recovering hardwood forest. The swamp is located in a somewhat fragmented landscape that includes forest, successional communities, agricultural land, residential and commercial development centered on Route 22.



Rich sloping fen

This occurrence of Rich Sloping Fen is considered significant from a statewide perspective by the NY Natural Heritage Program. It is either an occurrence of a community type that is rare in the state or a high quality example of a more common community type. By meeting specific, documented significance criteria, the NY Natural Heritage Program considers this occurrence to have high ecological and conservation value. Office Use

NY Legal Status: Unlisted	NYS Rank: S1S2	5752
Federal Listing:	Global Rank: G3	
Last Report: 2003-08-29	EO Rank:	
County: Dutchess		
Town: Dover		
Location:		
Directions:		

General Quality and Habitat: The occurrence is very small with invasive species encroaching at some spots and succession to forest at other spots, and located right on the side of a busy road. A series of very small patches of seeps along a slope adjacent to a paved road with strongly calciphilic plant species. The road is a busy two-lane county road; the edges of the road are regularly mowed by county road crews. Upslope of some of the patches is an open powerline cut, upslope of the remainder is a small patch of rich forest. The open slopes between patches are heavily invaded by Phragmites and purple loosestrife. Deer trails are evident and deer appear to be active users of the woodland and this community.

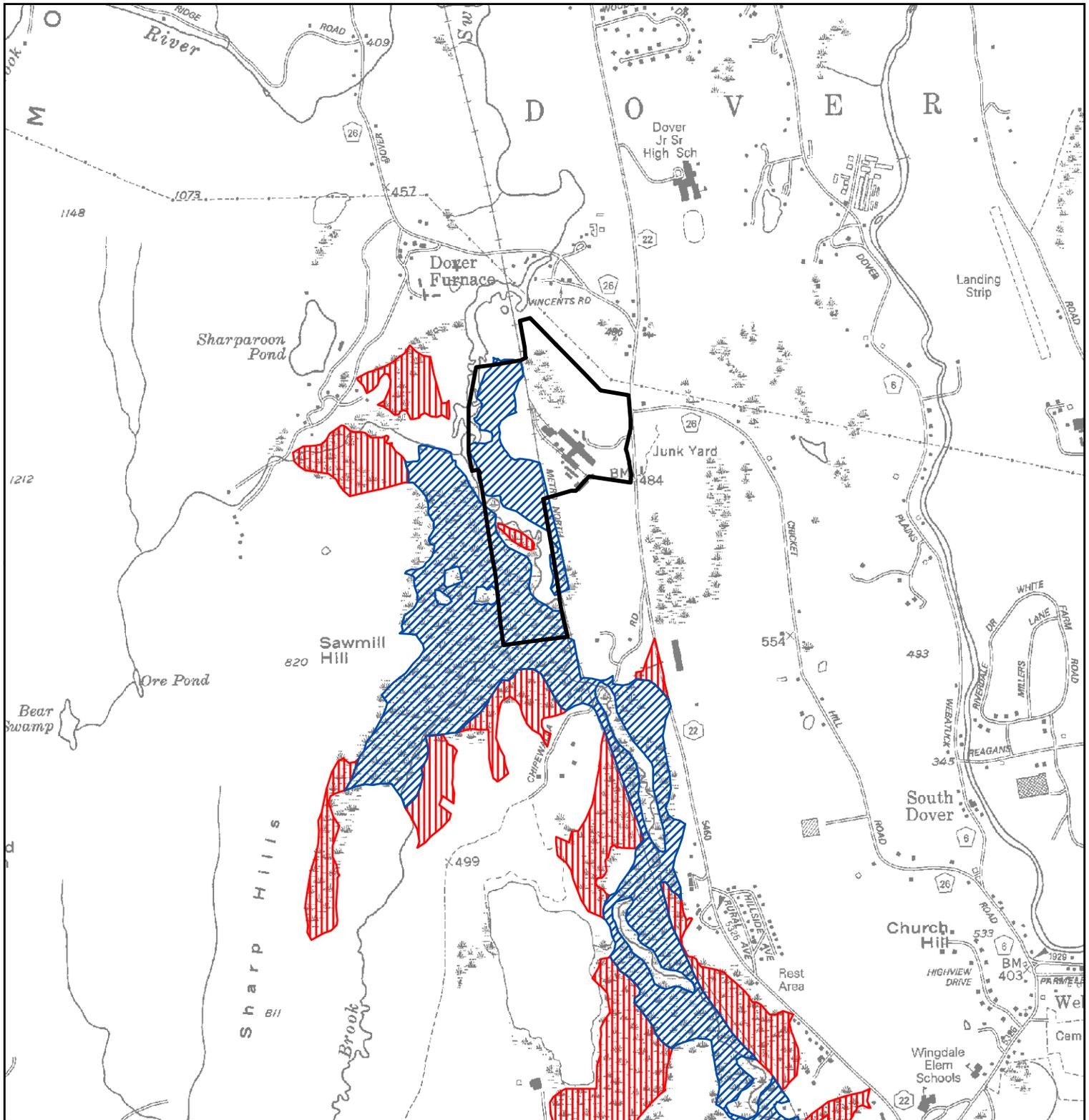
5 Records Processed

More detailed information about many of the rare and listed animals and plants in New York, including biology, identification, habitat, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.acris.nynhp.org, from NatureServe Explorer at <http://www.natureserve.org/explorer>, from NYSDEC at <http://www.dec.ny.gov/animals/7494.html> (for animals), and from USDA's Plants Database at <http://plants.usda.gov/index.html> (for plants).

More detailed information about many of the natural community types in New York, including identification, dominant and characteristic vegetation, distribution, conservation, and management, is available online in Natural Heritage's Conservation Guides at www.acris.nynhp.org. For descriptions of all community types, go to <http://www.dec.ny.gov/animals/29384.html> and click on Draft Ecological Communities of New York State.

Natural Heritage Map of Rare Species and Ecological Communities

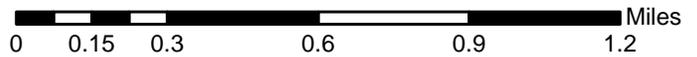
Prepared July 8, 2009 by the NY Natural Heritage Program, NYS DEC Albany, NY



Legend

-  Project Site
- NY Natural Heritage Program Database Records*
 -  Floodplain Forest
 -  Red Maple-Hardwood Swamp

1:24,000



*The locations that are displayed are considered sensitive and should not be released to the public without permission. We do not provide map locations for all records. Please see report for details.



Natural Heritage Report on Rare Species and Ecological Communities



NY Natural Heritage Program, NYS DEC, 625 Broadway, 5th Floor,
Albany, NY 12233-4757
(518) 402-8935

HISTORICAL RECORDS

The following plants and animals were documented in the vicinity of the project site at one time, but have not been documented there since 1979 or earlier.

There is no recent information on these plants and animals in the vicinity of the project site and their current status there is unknown. In most cases the precise location of the plant or animal in this vicinity at the time it was last documented is also unknown and therefore location maps are generally not provided.

If appropriate habitat for these plants or animals is present in the vicinity of the project site, it is possible that they may still occur there.

Natural Heritage Report on Rare Species and Ecological Communities



VASCULAR PLANTS

Bouteloua curtipendula var. *curtipendula*

Side-oats Grama NY Legal Status: Endangered
Federal Listing:
Last Report: 1948-08-07

NYS Rank: S1 - Critically imperiled
Global Rank: G5T5 - Secure
EO Rank: Historical, no recent
information

Office Use
7228

County: Dutchess
Town: Dover
Location: Dover Furnace
Directions: Specimen label: Cinder bed along the Harlem Valley Railroad, Dover Furnace, along Route 22.
General Quality and Habitat: Specimen label: Cinder bed along a railroad.

1 Records Processed

More detailed information about many of the rare and listed animals and plants in New York, including biology, identification, habitat, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.acris.nynhp.org, from NatureServe Explorer at <http://www.natureserve.org/explorer>, from NYSDEC at <http://www.dec.ny.gov/animals/7494.html> (for animals), and from USDA's Plants Database at <http://plants.usda.gov/index.html> (for plants).

USERS GUIDE TO NY NATURAL HERITAGE DATA

New York Natural Heritage Program, 625 Broadway, 5th Floor, Albany, NY 12233-4757 phone: (518) 402-8935



NATURAL HERITAGE PROGRAM: The NY Natural Heritage Program is a partnership between the NYS Department of Environmental Conservation (NYS DEC) and The Nature Conservancy. Our Mission is to facilitate the conservation of New York's biodiversity by providing comprehensive information and scientific expertise on rare species and natural ecosystems to resource managers and other conservation partners. We accomplish this mission by combining thorough field inventories, scientific analyses, expert interpretation, and the most comprehensive database on New York's distinctive biodiversity to deliver the highest quality information for natural resource planning, protection, and management.

DATA SENSITIVITY: The data provided in the report are ecologically sensitive and should be treated in a sensitive manner. The report is for your in-house use and should **not** be released, distributed or incorporated in a public document without prior permission from the Natural Heritage Program.

EO RANK: A letter code for the quality of the occurrence of the rare species or significant natural community, based on population size or area, condition, and landscape context.

- A-E = Extant: A=Excellent, B=Good, C=Fair, D=Poor, E=Extant but with insufficient data to assign a rank of A-D.
- F = Failed to find. Did not locate species during a limited search, but habitat is still there and further field work is justified.
- H = Historical. Historical occurrence without any recent field information.
- X = Extirpated. Field/other data indicates element/habitat is destroyed and the element no longer exists at this location.
- U = Extant/Historical status uncertain.
- Blank = Not assigned.

LAST REPORT: The date that the rare species or significant natural community was last observed at this location, as documented in the Natural Heritage databases. The format is most often YYYY-MM-DD.

NY LEGAL STATUS – Animals:

Categories of Endangered and Threatened species are defined in New York State Environmental Conservation Law section 11-0535. Animals listed as Endangered, Threatened, or Special Concern are protected against taking, importation, transportation, possession, or sale without a permit. Endangered, Threatened, and Special Concern species are listed in regulation 6NYCRR 182.5.

E - Endangered Species: any species which meet one of the following criteria:

- Any native species in imminent danger of extirpation or extinction in New York.
- Any species listed as endangered by the United States Department of the Interior, as enumerated in the Code of Federal Regulations 50 CFR 17.11.

T - Threatened Species: any species which meet one of the following criteria:

- Any native species likely to become an endangered species within the foreseeable future in NY.
- Any species listed as threatened by the U.S. Department of the Interior, as enumerated in the Code of the Federal Regulations 50 CFR 17.11.

SC - Special Concern Species: those species which are not yet recognized as endangered or threatened, but for which documented concern exists for their continued welfare in New York.

P - Protected Wildlife (defined in Environmental Conservation Law section 11-0103): wild game, protected wild birds, and endangered species of wildlife.

U - Unprotected (defined in Environmental Conservation Law section 11-0103): the species may be taken at any time without limit; however a license to take may be required.

G - Game (defined in Environmental Conservation Law section 11-0103): any of a variety of big game or small game species as stated in the Environmental Conservation Law; many normally have an open season for at least part of the year, and are protected at other times.

NY LEGAL STATUS – Plants:

The following categories are defined in regulation 6NYCRR part 193.3 and apply to NYS Environmental Conservation Law section 9-1503.

E - Endangered Species: listed species are those with:

- 5 or fewer extant sites, or
- fewer than 1,000 individuals, or
- restricted to fewer than 4 U.S.G.S. 7 ½ minute topographical maps, or
- species listed as endangered by U.S. Dept. of Interior, as enumerated in Code of Federal Regulations 50 CFR 17.11.

T - Threatened: listed species are those with:

- 6 to fewer than 20 extant sites, or
- 1,000 to fewer than 3,000 individuals, or
- restricted to not less than 4 or more than 7 U.S.G.S. 7 and ½ minute topographical maps, or
- listed as threatened by U.S. Department of Interior, as enumerated in Code of Federal Regulations 50 CFR 17.11.

R - Rare: listed species have:

- 20 to 35 extant sites, or
- 3,000 to 5,000 individuals statewide.

V - **Exploitably vulnerable**: listed species are likely to become threatened in the near future throughout all or a significant portion of their range within the state if causal factors continue unchecked.

U - **Unprotected**; no state status.

FEDERAL STATUS (PLANTS and ANIMALS): The categories of federal status are defined by the United States Department of the Interior as part of the 1974 Endangered Species Act (see Code of Federal Regulations 50 CFR 17). The species listed under this law are enumerated in the Federal Register vol. 50, no. 188, pp. 39526 - 39527. The codes below without parentheses are those used in the Federal Register. The codes below in parentheses are created by Heritage to deal with species which have different listings in different parts of their range, and/or different listings for different subspecies or varieties.

(blank) = No Federal Endangered Species Act status.

LE = Formally listed as endangered.

LT = Formally listed as threatened.

C = Candidate for listing.

LE,LT = Formally listed as endangered in part of its range, and as threatened in the other part; or, one or more subspecies or varieties is listed as endangered, and the others are listed as threatened.

LT,PDL = Populations of the species in New York are formally listed as threatened, and proposed for delisting.

GLOBAL AND STATE RANKS (animals, plants, ecological communities and others): Each element has a global and state rank as determined by the NY Natural Heritage Program. These ranks carry no legal weight. The global rank reflects the rarity of the element throughout the world and the state rank reflects the rarity within New York State. Intraspecific taxa are also assigned a taxon rank to reflect the infraspecific taxon's rank throughout the world. ? = Indicates that the state or global rank is uncertain and more information is needed. Range ranks, e.g. S1S2, indicate not enough information is available to distinguish between two ranks.

GLOBAL RANK:

G1 - Critically imperiled globally because of extreme rarity (5 or fewer occurrences), or very few remaining acres, or miles of stream) or especially vulnerable to extinction because of some factor of its biology.

G2 - Imperiled globally because of rarity (6 - 20 occurrences, or few remaining acres, or miles of stream) or very vulnerable to extinction throughout its range because of other factors.

G3 - Vulnerable: Either rare and local throughout its range (21 to 100 occurrences), or found locally (even abundantly at some of its locations) in a restricted range (e.g. a physiographic region), or vulnerable to extinction throughout its range because of other factors.

G4 - Apparently secure globally, though it may be quite rare in parts of its range, especially at the periphery.

G5 - Demonstrably secure globally, though it may be quite rare in parts of its range, especially at the periphery.

GH - Historically known, with the expectation that it might be rediscovered.

GX - Species believed to be extinct.

GU - Lack of information or substantial conflicting information about status or trends makes ranking infeasible at this time.

NYS RANK:

S1 - Critically imperiled: Typically 5 or fewer occurrences, very few remaining individuals, acres, or miles of stream, or some factor of its biology making it especially vulnerable in New York State.

S2 - Imperiled: Typically 6 to 20 occurrences, few remaining individuals, acres, or miles of stream, or factors demonstrably making it very vulnerable in New York State.

S3 - Vulnerable: Typically 21 to 100 occurrences, limited acreage, or miles of stream in New York State.

S4 - Apparently secure in New York State.

S5 - Demonstrably secure in New York State.

SH - Historically known from New York State, but not seen in the past 20 years.

SX - Apparently extirpated from New York State.

SU - Lack of information or substantial conflicting information about status or trends makes ranking infeasible at this time.

SxB and SxN, where Sx is one of the codes above, are used for migratory animals, and refer to the rarity within New York State of the breeding (B)populations and the non-breeding populations (N), respectively, of the species.

TAXON (T) RANK: The T-ranks (T1 - T5) are defined the same way as the Global ranks (G1 - G5), but the T-rank refers only to the rarity of the subspecific taxon.

T1 through T5 - See Global Rank definitions above.

Q - Indicates a question exists whether or not the taxon is a good taxonomic entity.



New York State Department of Environmental Conservation

Regional Permit Administrators

Region	Counties	Regional Permit Administrator
1	Nassau & Suffolk FAX: 631-444-0360	Roger Evans NYSDEC 50 Circle Rd SUNY @ Stony Brook Stony Brook, NY 11790-3409 631-444-0365 631-444-0355 (Duty Analyst-M,W&F only)
2	New York City, (Boroughs of Manhattan, Brooklyn, Bronx, Queens & Staten Island) FAX: 718-482-4975	John Cryan NYSDEC One Hunters Point Plaza 47-40 21st St. Long Island City, NY 11101-5407 718-482-4997
3	Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster & Westchester FAX: 845-255-3042	Margaret Duke NYSDEC 21 South Putt Corners Rd. New Paltz, NY 12561-1620 845-256-3054
4	Albany, Columbia, Greene, Montgomery, Rensselaer & Schenectady FAX: 518-357-2460	William Clarke NYSDEC 1130 North Westcott Rd. Schenectady, NY 12306-2014 518-357-2069
4(sub-office)	Delaware, Otsego & Schoharie FAX: 607-652-2342	Kent Sanders* NYSDEC 65561 State Highway - Route 10 HCR #1, Box 3A Stamford, NY 12167-9503 607-652-7741
5	Clinton, Essex, Franklin & Hamilton FAX: 518-897-1394	Thomas Hall NYSDEC Route 86, P.O. Box 296 Ray Brook, NY 12977-0296 518-897-1234
5(sub-office)	Fulton, Saratoga, Warren & Washington FAX: 518-623-3603	Thomas Hall NYSDEC P.O. Box 220 232 Golf Course Rd. Warrensburg, NY 12885-0220 518-623-1281

6	Jefferson, Lewis & St. Lawrence FAX: 315-785-2242	Larry Ambeau NYSDEC State Office Bldg. 317 Washington St. Watertown, NY 13601-3787 315-785-2245 or 2246
6(sub-office)	Herkimer & Oneida FAX: 315-793-2748	Patrick Clearey* NYSDEC State Office Building 207 Genesee St. Utica, NY 13501-3787 315-793-2555
7	Cayuga, Madison, Onondaga & Oswego FAX: 315-426-7425	John Feltman NYSDEC 615 Erie Blvd. West (Env. Permits Room 206) Syracuse, NY 13204-2400 315-426-7438
7(sub-office)	Broome, Chenango, Cortland, Tioga & Tompkins FAX: 607-753-8532	Michael Barylski* NYSDEC 1285 Fisher Ave. Cortland, NY 13045-1090 607-753-3095
8	Chemung, Genesee, Livingston, Monroe, Ontario, Orleans, Schuyler, Seneca, Steuben, Wayne & Yates FAX: 585-226-2830	Peter Lent NYSDEC 6274 East Avon Lima Rd. Avon, NY 14414-9519 585-226-2466
9	Erie, Niagara & Wyoming FAX: 716-851-7168	Steve Doleski NYSDEC 270 Michigan Ave. Buffalo, NY 14203-2999 716-851-7165
9(sub-office)	Allegany, Cattaraugus, & Chautauqua FAX: 716-372-2113	Charles Cranston* NYSDEC Suite 3, 182 East Union Allegany, NY 14706-1328 716-372-0645

*Deputy Regional Permit Administrator