

DANBURY BRANCH IMPROVEMENT PROGRAM TASK 5

ENVIRONMENTAL TECHNICAL MEMORANDUM

STATE PROJECT 302-008



SECTION 6: THREATENED AND ENDANGERED SPECIES

MARCH 2009

SECTION 6. THREATENED AND ENDANGERED SPECIES

INTRODUCTION

This section discusses the presence or potential presence of threatened and endangered species in the study corridor. Threatened and endangered species include plants and animals. Threatened and endangered species are identified at the national level by the federal government, resulting in a group of federally-listed species. Threatened and endangered species are also identified at the state level, in Connecticut by the Connecticut Department of Environmental Protection (DEP). The state list of threatened and endangered species includes federally-listed species which previously occurred in Connecticut or could still exist in Connecticut, plus additional species of rare or declining occurrence in the state. These species and their essential (or critical) habitats are protected at both the federal and state levels.

Regulatory Context

The federal and state laws that govern threatened and endangered species are described below.

At the federal level, the following legislation is relevant to the project:

- The Fish and Wildlife Coordination Act (16 USC 661-667) requires federal agencies (and other agencies) to consult with the U.S. Fish and Wildlife Service (USFWS) and the state agency with jurisdiction over fish and wildlife resources when undertaking a federal action (or action requiring any federal permit or license) that could affect these resources. The purpose of consultation is to avoid, minimize, and/or mitigate potential adverse impacts. The act enables the USFWS and state agency to undertake project impact studies and states that the recommendations of these agencies must be given full consideration by the sponsoring federal agency in decision-making.
- The Endangered Species Act (ESA) of 1973 (16 USC 1531 et seq.) requires federal agencies (and others) to avoid actions that would jeopardize threatened or endangered species or their critical habitats. The species and their critical habitats are designated by the USFWS for terrestrial and freshwater species and by the National Marine Fisheries Service (NMFS) for marine species and anadromous fish species. Section 7 of the ESA describes the steps for informal and formal consultation with the USFWS or NMFS if adverse impacts to federally designated (listed) species may occur due to a federal action. Consultation may require a biological assessment of potential project impacts on a listed species, after which the USFWS or NMFS issues a biological opinion regarding the conditions or prohibitions necessary for the project to proceed.

At the state level, the following legislation is relevant:

• The Connecticut Endangered Species Act, passed in 1989 (CGS 26-303), declared a policy of the state to *conserve*, *protect*, *restore*, *and enhance any endangered or threatened species and essential habitat*. The act authorized the Connecticut Department of Environmental Protection (DEP) to establish procedures to identify whether any native

species is endangered, threatened or of special concern and to review and update these designations every five years. The act requires that any action authorized, funded or performed by a state agency does not threaten the continued existence of any endangered or threa tened species or result in the destruction or adverse modification of habitat designated as essential to such species, using the best scientific data available. The act established the following definitions:

"Endangered Species" means any native species documen ted by biological research and inventory to be in danger of extirpation throughout all or a significant portion of its range within the state and to have no more than five occurrences in the state, and any species determined to be an "endange" red species" pursuant to the federal Endangered Species Act.

"Threatened Species" m eans any native spec ies documented by bi ological research and inventory to be likely to become an endangered species with in the foreseeable future throughout all or a significant portion of its range within the state and to have no more than nine occurrences in the stat e, and any species determined to be a "threatened species" pursuant to the federal Endangered Species Act, except for such species determined to be endangered (by the DEP).

"Species of Special Concern" means any native plant species or any native nonharvested wildlife species documented by sc ientific research and inventory to have a naturally restricted range or habitat in the state, to be at a low population level, to be in such high demand by man that its unregulated taking wo uld be detrimental to the conservation of its population or has been extirpated from the state.

Methods, Coordination, and Data Sources

Due to the risk of specimen collection or intentional destruction of threatened and endangered (T&E) species and their habitats, specific information on their whereabouts is not published for public use. The DEP and USFWS have established protocols that allow project sponsors to screen their project sites for potential T&E species. If this first-level screening indicates potential T&E species or habitats, direct consultation with DEP and/or the USFWS is required to find out more about potentially affected species.

For projects in Connecticut, the DEP Natural Diversity Data Base (NDDB) is the primary resource for identifying T&E species. The NDDB contains data from over 100 years of biological inventories and observations. The NDDB has prepared maps with the general locations of threatened and endangered species, species of special concern, and unique ecological communities.

The NDDB maps were reviewed for the Danbury Branch study corridor [GIS data consulted March 2008]. The maps showed numerous records (portrayed as broad circular areas) of threatened and endangered species, their habitats, ecologically unique areas, and/or species of special concern located in or adjacent to the corridor. Based on this screening – which further noted that the corridor is located in Fairfield and Litchfield Counties and passes through habitats

such as forest, wetlands, and waterways – direct consultation with DEP and USFWS was warranted and initiated. The responses from these agencies identified the T&E species and additional species of concern that have been recorded in or near the corridor, and the approximate locations of their occurrence (see correspondence letters in Appendix A). This is the most complete and most current information available for these resources and was used to characterize the potential for T&E species in the study corridor.

Correspondence from DEP provided the scientific names, some common names, and some information about the habitat needs of the subject species. Where common names and habitat information was not provided, these were derived from published literature and on-line sources as noted in the References section.

The NDDB records are subject to change, as research findings and new data are identified and added to the database. Further coordination with DEP will be necessary periodically during the course of the EIS to ensure that the T&E species information is current.

EXISTING CONDITIONS

Federally Listed Species

Coordination from the USFWS (April 29, 2008) indicated that no federally-listed or proposed threatened or endangered species or critical habitats are located in the study corridor, based on current information. The USFWS noted that there were two historic records of the federally-threatened bog turtle (*Glyptemys muhlenbergii*) within the study corridor, but recent surveys indicated that bog turtles are no longer present at those locations.

The USFWS also pointed out that the New England cottontail (*Sylvilagus trans itionalis*) is known to occur in Brookfield and New Milford and that this species is a candidate for listing under the ESA. The USFWS encourages attempts to avoid adverse project effects on the habitat of this species, which consists primarily of heavily-shrubbed early-successional habitats. Such habitats include wetlands with beaver flowage, idle agricultural lands (old fields), power line corridors, railroad rights-of-way, and regenerating forests.

The USFWS noted that no more coordination under the ESA is required for a period of one year from the correspondence date, after which further coordination will be necessary relative to potential project impacts.

State Listed Species

Coordination from DEP provided records of several state-listed plant and animal species located in the study corridor (correspondence from DEP Franklin Wildlife Management Area dated May 23, 2008 and from DEP Natural History Survey dated June 23, 2008). According to the DEP, their data is considered current for approximately six months, after which additional consultation is needed to ensure the most updated information. Based on the potential for state-listed species in the study corridor, there may be a need for field surveys in areas of potential project impacts in order to determine whether suitable habitat and/or state-listed species are present.

The general location of the records in relation to the corridor is shown in Appendix B, Sheets 1 to 14. [Note: the map sheet numbers referred to by DEP in their correspondence are <u>not</u> the same as the sheet numbers for this document.]

Based on the DEP correspondence, the NDDB records in the study corridor include eight state-listed plants and fifteen state-listed animals, none of which are fish species. One of the plant records is historic, indicating that the species has not been observed recently, so the likelihood of its occurrence is low. The other records are more recent, indicating a greater likelihood of occurrence in the study corridor. State-listed species have been recorded from Ridgefield and Redding and northward in the study corridor; none were from Norwalk and Wilton. The species, their status, and the types of habitats they are associated with are listed in Table X1.

Reflecting the information in Table 1, the potential locations of the state-listed species in the study corridor communities are described below.

Norwalk: No records of state-listed species are located in the Norwalk portion of the study corridor.

<u>Wilton</u>: No records of state-listed species are located in the Wilton portion of the study corridor.

<u>Redding</u>: There is a historic record of a threatened plant in Redding and the possibility of habitat for seven state-listed animal species: two threatened butterfly species; one butterfly species of special concern; one moth species of special concern; two ground beetle species of special concern; and one aquatic snail species of special concern.

<u>Ridgefield</u>: The Ridgefield portion of the study corridor has the possibility of habitat for the same seven state-listed animal species as Redding: two threatened butterfly species; one butterfly species of special concern; one moth species of special concern; two ground beetle species of special concern; and one aquatic snail species of special concern.

<u>Danbury</u>: The Danbury portion of the study corridor has the possibility of habitat for one statelisted plant of special concern and one endangered butterfly species.

<u>Bethel</u>: The Bethel portion of the study corridor has possible habitat for one endangered butterfly species.

<u>Brookfield</u>: The Brookfield portion of the study corridor has a historic record of a special concern plant species and the possibility of habitat for two plant species (sedges) of special concern. The five state-listed animal species with possible habitat in the Brookfield portion of the study corridor include the state and federally endangered bog turtle, a threatened salamander species, two turtle species of special concern, and a snake species of special concern.

<u>New Milford</u>: New Milford has the greatest potential for T&E species, based on the number of NDDB records from that community. The New Milford portion of the study corridor has the possibility of habitat for four plant species of special concern and seven animal species: the state and federally endangered bog turtle; an endangered hawk species; a threatened salamander species; two turtle species of special concern; one snake species of special concern; and a bird species of special concern.

Table 1: State-Listed Plant and Animal Species Recorded in the Study Corridor and Their Status: Threatened (T), Endangered (E) and Special Concern (SC)

PLANTS								
Common Name	Scientific Name	State Listing Status	Description	Habitat Affinity	Potential Locations			
Water marigold	Megalodonta beckii	Т	aquatic plant	ponds and quiet streams	Historic record - Redding			
Rigid sedge (hairy-fruit sedge)	Carex trichocarpa	SC	perennial sedge	moist to wet habitats, rich soils	Danbury, New Milford			
Tuckerman's sedge	Carex tuckermani	SC	perennial sedge	Deciduous swamps, shores of streams and ponds, wet meadows	Brookfield			
Bush's sedge	Carex bushii	SC	perennial sedge	Upland grasslands, forest margins	Brookfield			
Cursed crowfoot	Ranunculus scleratus	SC	herbaceous plant of wet places	wet habitats	Historic record - Brookfield			
Dillen's tick trefoil	Desmodium glabellum	SC		dry woods and borders	New Milford			
Violet wood sorrel	Oxalis violaceae	SC		open woods	New Milford			
Draba (or Carolina draba)	Draba repens	SC		rocky open ground, pastures, roadsides, rail lines	New Milford			
ANIMALS								
Common Name	Scientific Name	Status	Description	Habitat Affinity	Potential Locations			
Northern Metalmark butterfly	Calephelis borealis	Е		habitats with <i>Senecio obovatus</i> (round-leaved ragwort)	Bethel, Danbury			
Bog turtle	Gleptemys muhlenbergii	E		bogs, swamps and marshy meadows with clear, slow-moving, soft-bottom streams	Brookfield, New Milford			
Sharp-shinned hawk	Accipiter striatus	Е	seasonal resident (March-Sept)	nest on large evergreens	New Milford			

Appalachian blue	Celastrina neglectamajor	T	butterfly	riparian hardwood forest or mixed forest with black cohosh (plants)	Ridgefield, Redding
Sedge skipper	Euphyes dion	T	butterfly of wet areas	wetlands	Ridgefield, Redding
Slimy salamander	Plethodon glutinosis	T	amphibian	rotting logs and leaf litter on steep, moist, rocky slopes in dense-canopy hardwood forests	Brookfield, New Milford
Bronze Copper butterfly	Lycaena hyllus	SC		wetlands	Ridgefield, Redding
Newman's brocade moth	Meropleon ambifuscum	SC		wetlands	Ridgefield, Redding
(unnamed) ground beetle	Badister transversus	SC		wetlands	Ridgefield, Redding
(unnamed) ground beetle	Bembidion pseudocautum	SC		wetlands	Ridgefield, Redding
(unnamed) lymnaeid snail	Fossaria rustica	SC	Gill-breathing snail	shallow water < 3 feet deep	Ridgefield, Redding
Eastern box turtle	Terrapene carolina	SC	terrestrial adults and semiaquatic young	old field and deciduous forests; powerlines; logged areas; near streams and small ponds	Brookfield, New Milford
Wood turtle	Glyptemys insculpta	SC		streams and rivers next to floodplains, woodlands, or meadows (may include powerlines and rail lines)	Brookfield, New Milford
Eastern hognose snake	Heterodon platirhinos	SC	upland snake	dry sandy areas with well-drained gravelly soils	Brookfield, New Milford
Common raven	Corvus corax	SC		coniferous and deciduous forests; agricultural fields; prefer cliffs for nesting	New Milford

Sources: Locations based on correspondence from DEP (2008); nomenclature and habitat affinities based on DEP, USDA, efloras.org, Newcomb (1977) Note: Species status based on the 2004 list published by DEP.

E = Endangered; T = Threatened; SC = Special Concern; Historic = very old record (e.g. from museum or literature); present-day occurrence of species unlikely

REFERENCES

Connecticut Department of Environmental Protection. 2004. *Connecticut's List of Endangered, Threatened, and Special Concern Species*, 2004. Web access: http://www.ct.gov/dep/lib/dep/wildlife/pdf_files/nongame/ETS04.pdf

efloras.org. Flora of North America. Web access: www.efloras.org

Newcomb, Lawrence. 1977. Wildlife guide. Little, Brown and Company, Boston.

U.S. Department of Agricultural (USDA), Natural Resources Conservation Service. *PLANTS Profile*. Web access: http://plants.usda.gov

APPENDIX A

AGENCY CORRESPONDENCE RELATIVE TO THREATENED AND ENDANGERED SPECIES



STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION



Wildlife Division-Natural History Survey Natural Diversity Data Base 79 Elm Street, 6th Floor Hartford, CT 06106-5127

June 23, 2008

Linda Perelli Wright Fitzgerald and Halliday, Inc. 72 Cedar Street Hartford, CT 061106

> Subject: State Endangered, Threatened and Special Concern Plant Species Review-Danbury Branch Electrification (New Haven Commuter Rail; CT State Project #302-008

Dear Ms. Perelli Wright,

I have reviewed Natural Diversity Data Base maps and files regarding State listed plant species in the areas delineated on the maps you provided for the project listed above. Comments for State listed animal species will be sent separately. According to our information, there are nine state listed plant areas along the proposed project area. I have provided copies of the maps you submitted showing these locations along with the state listed plant species that we have documented from these areas. A summary of each map is listed below. Since the scope of actual work has not been determined at this time, this information should be useful in the planning process. As a more detailed plan evolves, I will be glad to provide detailed comments. Please be aware that depending on the scope of the final project, the applicant may need to have a botanist conduct site visits. This possibility should be built into the project timeframe. Do not hesitate to contact me during the planning process. If the proposed project has not been initiated within 6 months of this review, contact the NDDB for an updated review.

Summary of Areas

<u>Sheet 6</u>- Historic record of Water marigold (*Megalodonta beckii*) State Threatened from Umpawaug Pond.

<u>Sheet 9</u>- Recent records (last observed:1998); 2 locations of *Carex trichocarpa*, State Special Concern.

<u>Sheet 10</u>- north area -*Ranunculus scleratus* (last observed-historic); south area-*Carex tuckermani*-last observed 2005)

<u>Sheet 11-</u> north area- *Carex trichocarpa,* State Special Concern (last observed: 1998); south area- Carex bushii, State Special Concern (last observed: 1990, not relocated in 2005)

Sheet 12- north area- Carex trichocarpa, State Special Concern (last observed: 1998) Desmodium glabellum State Special Concern (last observed: 1992) and south area-Draba reptans State Special Concern (last observed: 1999).

Sheet 13- Oxalis violaceae, State Special Concern (last observed: 1992).

Natural Diversity Data Base information includes all information regarding critical biologic resources available to us at the time of the request. This information is a compilation of data collected over the years by the Environmental & Geographic Information Center's Geological and Natural History Survey and cooperating units of DEP, private conservation groups and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations. Consultations with the Data Base should not be substituted for on-site surveys required for environmental assessments. Current research projects and new contributors continue to identify additional populations of species and locations of habitats of concern, as well as, enhance existing data. Such new information is incorporated into the Data Base as it becomes available.

Please contact me if you have further questions (nancy.murray@po.state.ct.us; 860-424-3589). Thank you for consulting the Natural Diversity Data Base and continuing to work with us to protect State listed species.

Sincerely

Nancy M. Murray

Biologist, Geological and Natural History Survey

NDDB Program Coordinator

Megalodenta

Instruct Record - Umpaway Pond

February 2008 - Fitzgerald & Halliday, Inc. - Project # 788 - original in color

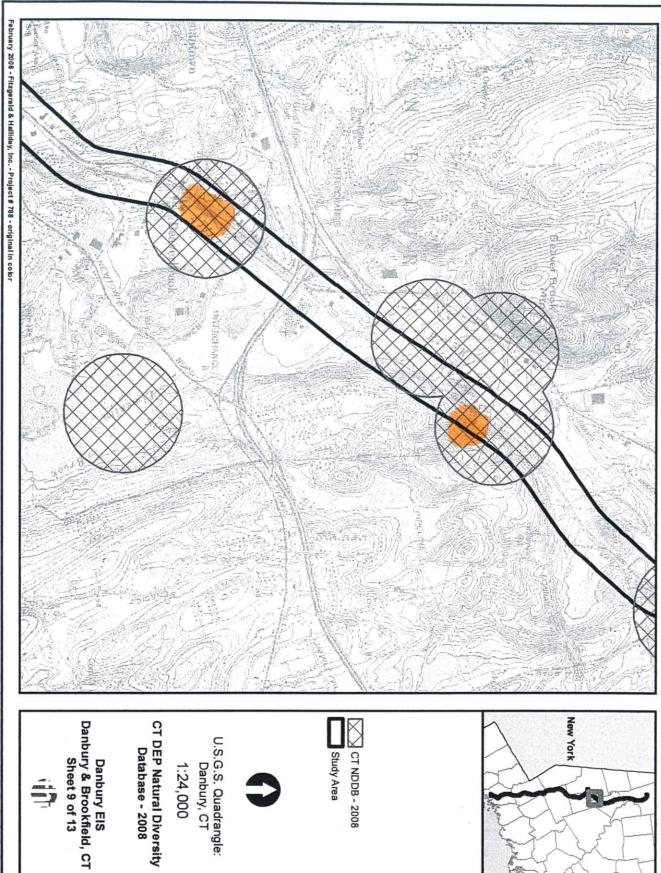


CT DEP Natural Diversity U.S.G.S. Quadrangle: Bethel, CT Database - 2008 1:24,000

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Danbury EIS Ridgefield, & Redding CT Sheet 6 of 13

Caraex tricho carpa a Locations





CT NDDB - 2008 Study Area

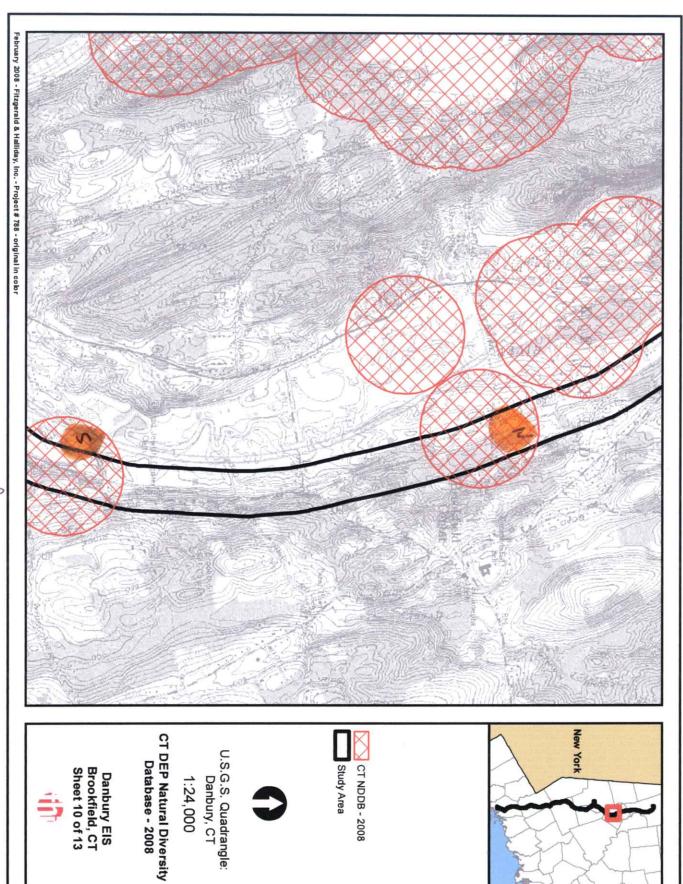
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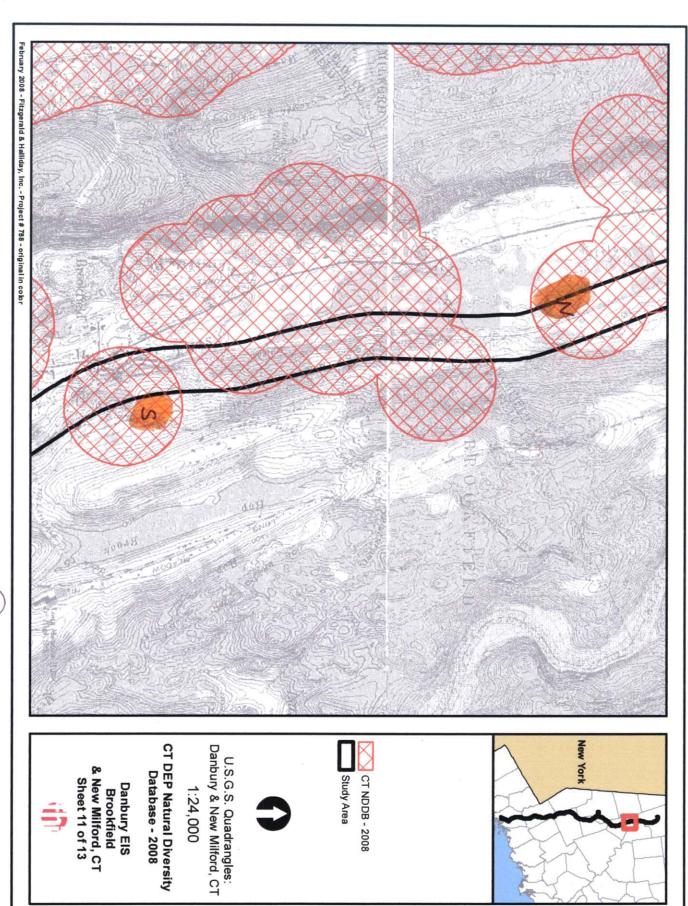
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Database - 2008

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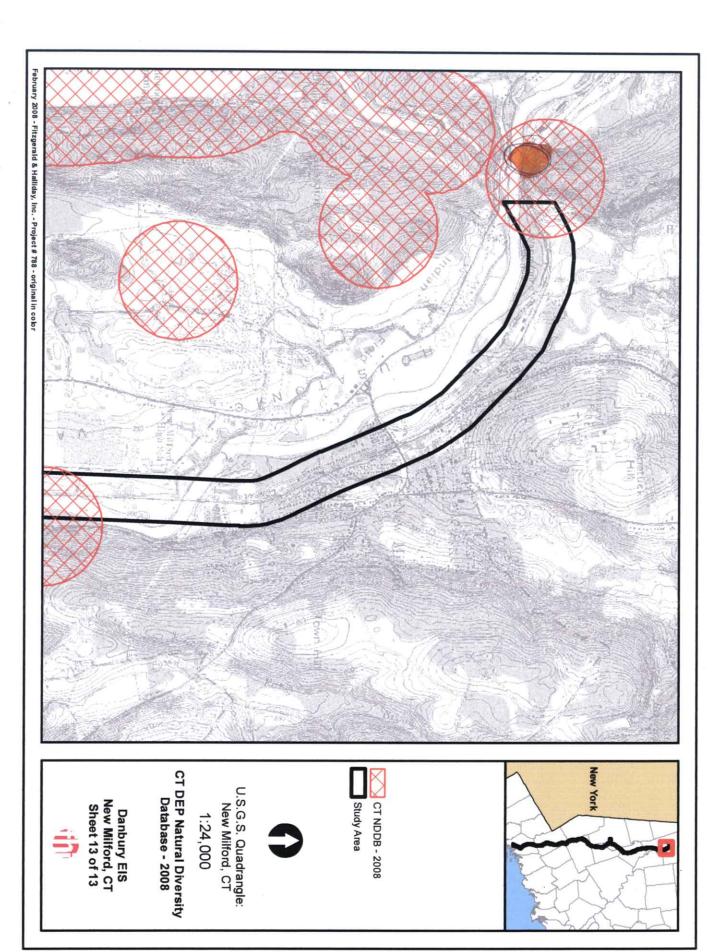


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February 2008 - Fitzgerald & Halliday, Inc. - Project # 788 - original in color New York CT DEP Natural Diversity
Database - 2008 U.S.G.S. Quadrangle: New Milford, CT Danbury EIS New Milford, CT Sheet 12 of 13 Study Area 1:24,000

Diraba Reptans

(N) Caret trichocarpe + Desmalium glebrellum





STATE OF CONNECTICUT

DEPARTMENT OF ENVIRONMENTAL PROTECTION

FRANKLIN WILDLIFE MANAGEMENT AREA

391 ROUTE 32 NORTH FRANKLIN, CT 06254 TELEPHONE: (860) 642-7239

May 23, 2008

Ms. Linda Perelli-Wright Fitzgerald & Halliday, Inc. 72 Cedar Street Hartford, CT 06106

re: CT State Project #302-008 Danbury Branch Electrification (New Haven Commuter Rail Line)

Dear Ms. Perelli-Wright:

Your request was forwarded to me on 5/13/08 from Dawn McKay of the Department of Environmental Protection's (DEP) Natural Diversity Data Base (NDDB). The Wildlife Division has not made a field inspection of the project nor have we seen detailed plans or timetables for work to be done. Impacts to this species are difficult to predict without detailed project plans. Consultation with the Wildlife Division should not be substituted for site-specific surveys that may be required for environmental assessments.

They have records of the following listed species:

Mapsheet 6 of 12: two threatened species, Appalachain Blue (*Celastrina neglectamajor*) and Sedge Skipper (*Euphyes dion*) and five state species of special concern, the Bronze Copper butterfly (*Lycaena hyllus*), Newman's brocade moth (*Meropleon ambifuscum*), a ground beetle (*Badister transversus*), a lymnaeid snail (*Fossaria rustica*) and a ground beetle (*Bembidion pseudocautum*)

The preferred habitat of the Appalachain blue is riparian in hardwood forest or mixed forest with the food plant Black cohosh (*Cimicifuga racemosa*). Impacts to the food plant will affect this species.

The Sedge Skipper (*Euphyes dion*), Bronze Copper butterfly (*Lycaena hyllus*), Newman's brocade moth (*Meropleon ambifuscum*), ground beetle (*Badister transversus*), and ground beetle (*Bembidion pseudocautum*) are associated with wetland habitats. If any wetland habitats are to be altered, it may affect these species.

Fossaria rustica is a gill breathing snail which is very susceptible to siltation from dredging and other soil disrupting activities. Also, these individuals occur in shallow water less than three meters deep. Activities that degrade the water quality, particularly the dissolved oxygen and dissolved salts, will affect this species. Activities that cause a rapid fluctuation in water depth may affect this species. Runoff in the form of siltation or pollution or fluctuations in water depth will be detrimental.

Mapsheet 7 of 13: one state endangered species; Northern Metalmark butterfly (*Calephelis borealis*) The state endangered Northern Metalmark butterfly (*Calephelis borealis*) is associated with the plant *Senecio obovatus* and any activities which affect this plant will affect the butterfly. The Wildlife Division recommends that a botanist identify and stake out or cordon off any *Senecio obovatus* so it can be avoided by heavy machinery or contractors.

Mapsheet 10 of 13: one state species of special concern; Eastern Box Turtle (*Terrapene carolina*). Eastern box turtles require old field and deciduous forest habitats, which can include power lines and logged woodlands. They are often found near small streams and ponds, the adults are completely terrestrial but the young may be semiaquatic, and hibernate on land by digging down in the soil from October to April. They have an extremely small home range and can usually be found in the same area year after year. Hognose snakes favor dry sandy areas with well drained gravelly soils. They have also been negatively impacted by the loss of suitable habitat.



Mapsheet 11 of 13: historically the federally threatened and state endangered, bog turtle, *Glyptemys muhlenbergii*, and currently one state threatened species; Slimy salamander (*Plethodon glutinosis*) and three state species of special concern; Wood Turtle (*Glyptemys insculpta*), Eastern Hognose snake (*Heterodon platirhinos*), and Eastern Box Turtle (*Terrapene carolina*).

The preferred habitat of the bog turtle is bogs, swamps, and marshy meadows having clear slow-moving streams with soft bottoms. Draining and flooding of the habitat is a major ecological problem for the species. Eastern box turtles require old field and deciduous forest habitats, which can include power lines and logged woodlands. They are often found near small streams and ponds, the adults are completely terrestrial but the young may be semiaquatic, and hibernate on land by digging down in the soil from October to April. They have an extremely small home range and can usually be found in the same area year after year. Both of these species have been negatively impacted by the loss of suitable habitat.

Slimy salamanders are found under rotting logs and forest leaf litter in moist, mature mixed hardwood forests with a dense canopy. On Connecticut sites, they are found on steep, moist, rocky slopes. If slimy salamander habitat exists on the proposed site, the Wildlife Division recommend that surveys be conducted between April and September to see if the are present. If they are found - we recommend that timber not be cut in areas containing slimy salamanders and that contiguous areas of young second growth forest also not be cut to serve as a buffer zone. As the buffer zone matures, they may provide additional habitat.

Eastern box turtles require old field and deciduous forest habitats, which can include power lines and logged woodlands. They are often found near small streams and ponds, the adults are completely terrestrial but the young may be semiaquatic, and hibernate on land by digging down in the soil from October to April. They have an extremely small home range and can usually be found in the same area year after year. Hognose snakes favor dry sandy areas with well drained gravelly soils. They have also been negatively impacted by the loss of suitable habitat.

Wood turtles require riparian habitats bordered by floodplain, woodland or meadows. Their summer habitat includes pastures, old fields, woodlands, powerline cuts and railroad beds bordering or adjacent to streams and rivers.

Since the bog turtle is a federally threatened species, you should forward a detailed project proposal to the U. S. Fish and Wildlife Service (USFWS) for their information and notification (Anthony Tur, U. S. Fish and Wildlife Service, 70 Commercial Street, Suite 300, Concord, NH 03301-5087, (603) 223-2541). If suitable habitat exists on this site and will be impacted by the project, a consultation may be required per the Endangered Species Act. The Wildlife Division will be happy to assist the USFWS and you in the consultation process. The USFWS has a list of herpetologists that are qualified to do a Phase 1 Bog Turtle Survey since particular protocols need to be addressed.

If any work will be conducted in any Bog Turtle habitat, the Wildlife Division recommends that a USFWS qualified herpetologist familiar with the habitat requirements of these turtles conduct surveys (contact USFWS for list). A report summarizing the results of such surveys should include habitat descriptions, reptile species list and a statement/resume giving the herpetologist' qualifications. The DEP does not maintain a list of herpetologists in the state. A DEP Wildlife Division permit may be required by the herpetologist to conduct survey work, you should ask if your herpetologist has one. The results of this investigation can be forwarded to the Wildlife Division and, after evaluation, recommendations for additional surveys, if any, will be made. This herpetologist can also survey for the wood turtle, box turtle and hognose snake.

5/23/08 page 3

Eastern Box Turtles require old field and deciduous forest habitats, which can include power lines and logged woodlands. They are often found near small streams and ponds, the adults are completely terrestrial but the young may be semiaquatic, and hibernate on land by digging down in the soil from October to April. They have an extremely small home range and can usually be found in the same area year after year. This species is dormant from November 1 to April 1. It has been negatively impacted by the loss of suitable habitat.

Mapsheet 12 of 13: one state endangered species; Sharp-shinned hawk (Accipiter striatus), and one state species of special concern; Common Raven (Corvus corax).

Data on Sharp-shinned hawk distribution and abundance in Connecticut is poorly documented. Sharp-shinned hawks build a large platform nest almost 2 feet across on the low side-limbs of an evergreen, only 12-14 feet from the ground. This species raises 6-8 young, the most of any raptor. No radius figures are available, but sharp-shinned hawks are vicious in defense of their nests. Only their small size prevents them from being dangerous to humans, for they make hard contact when they strike. They usually build a new nest in the same area year after year. They arrive in Connecticut at the end of March and leave in September.

The Common raven is found in coniferous and deciduous forests and agricultural fields. They prefer areas with cliffs for nesting. Surveys for the avian species should be conducted by an ornithologist.

Standard protocols for protection of wetlands should be followed and maintained during the course of the project. Additionally, all silt fencing should be removed after soils are stable so that reptile and amphibian movement between uplands and wetlands is not restricted.

Please be advised that the Wildlife Division has not made a field inspection of the project nor have we seen detailed timetables for work to be done. Consultation with the Wildlife Division should not be substituted for site-specific surveys that may be required for environmental assessments. The time of year when this work will take place will affect this species if they are present on the site when the work is scheduled. Please be advised that should state permits be required or should state involvement occur in some other fashion, specific restrictions or conditions relating to the species discussed above may apply. In this situation, additional evaluation of the proposal by the DEP Wildlife Division should be requested. If the proposed project has not been initiated within 6 months of this review, contact the NDDB for an updated review. If you have any additional questions, please feel free to contact me at Julie.Victoria@ct.gov, please reference the NDDB # at the bottom of this letter when you e-mail. Thank you for the opportunity to comment.

Sincerely.

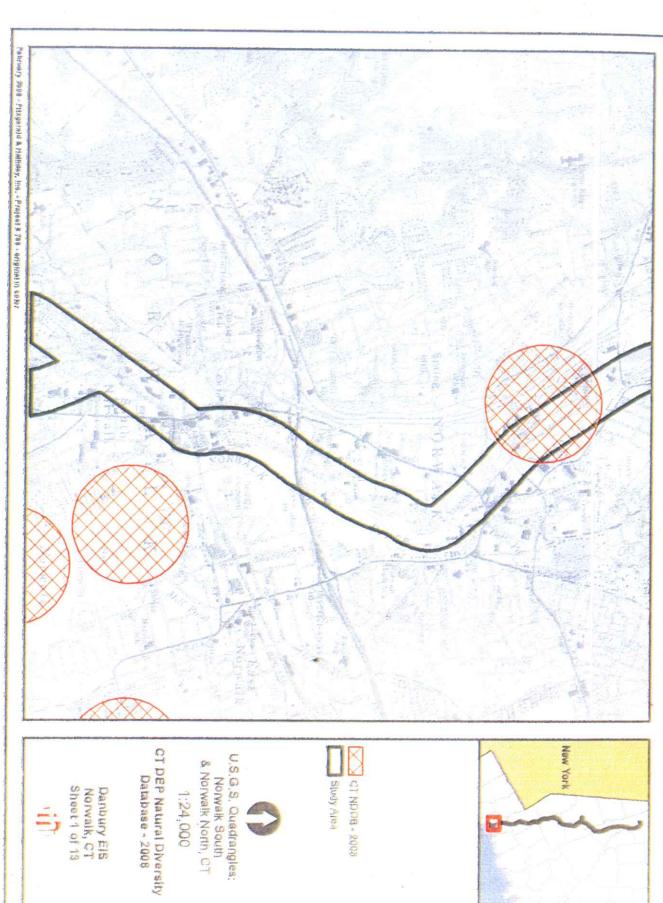
Julie Victoria Wildlife Biologist

Franklin Wildlife Management Area

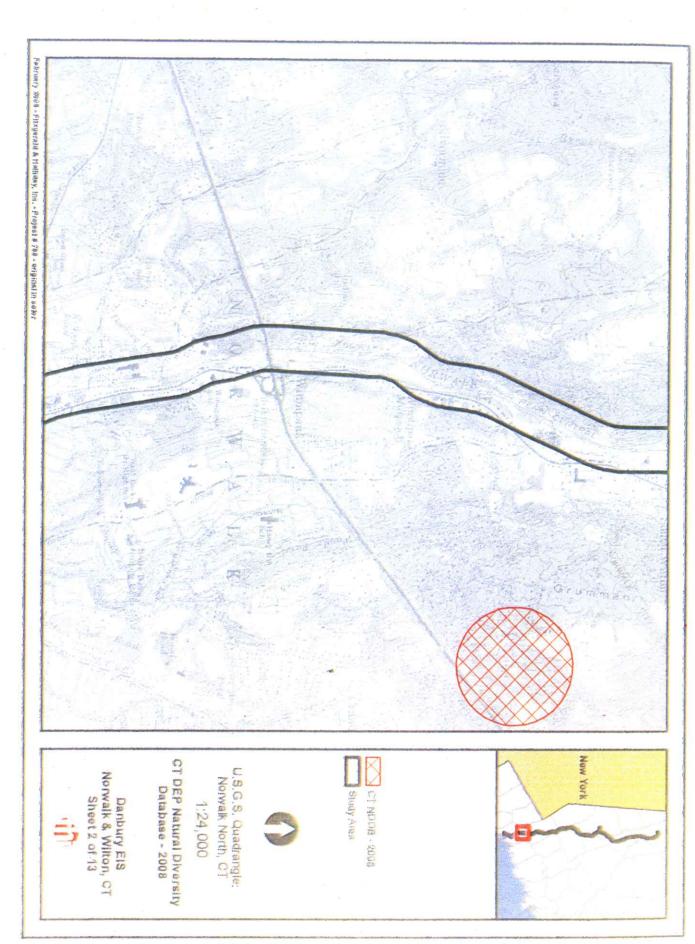
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N. Franklin, CT 06254

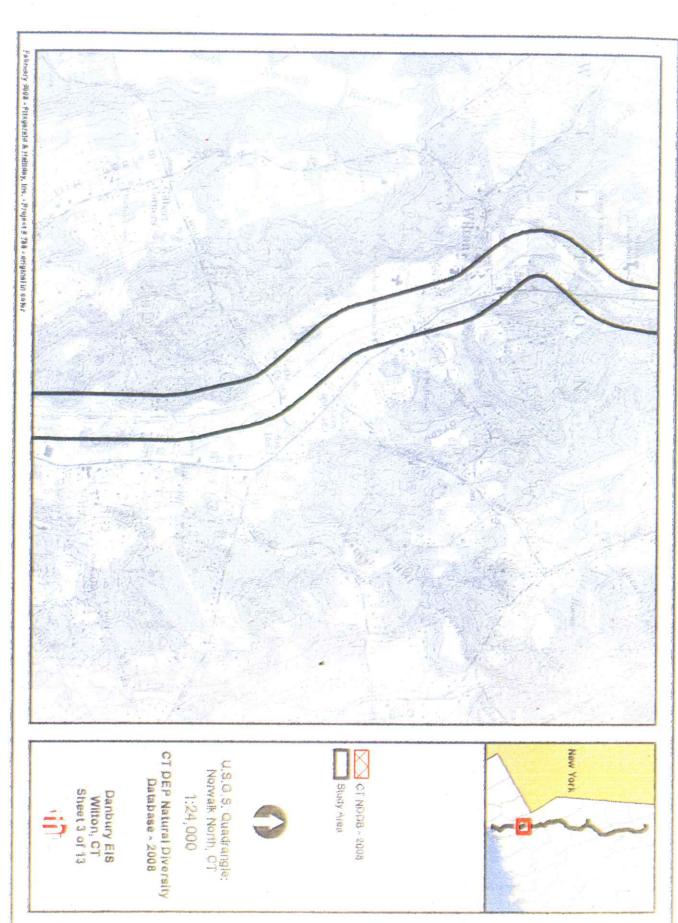
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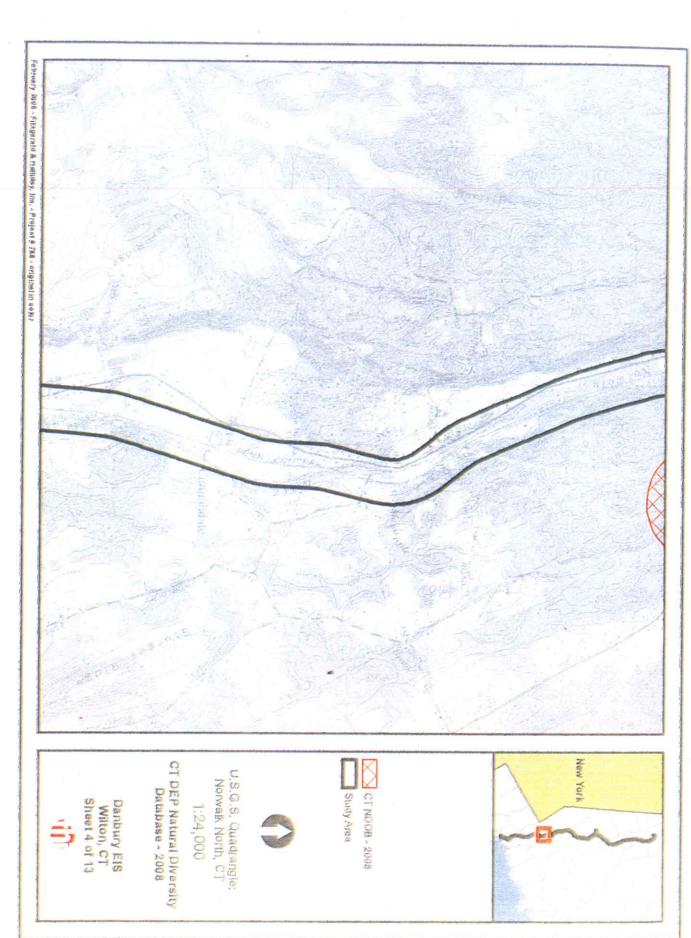
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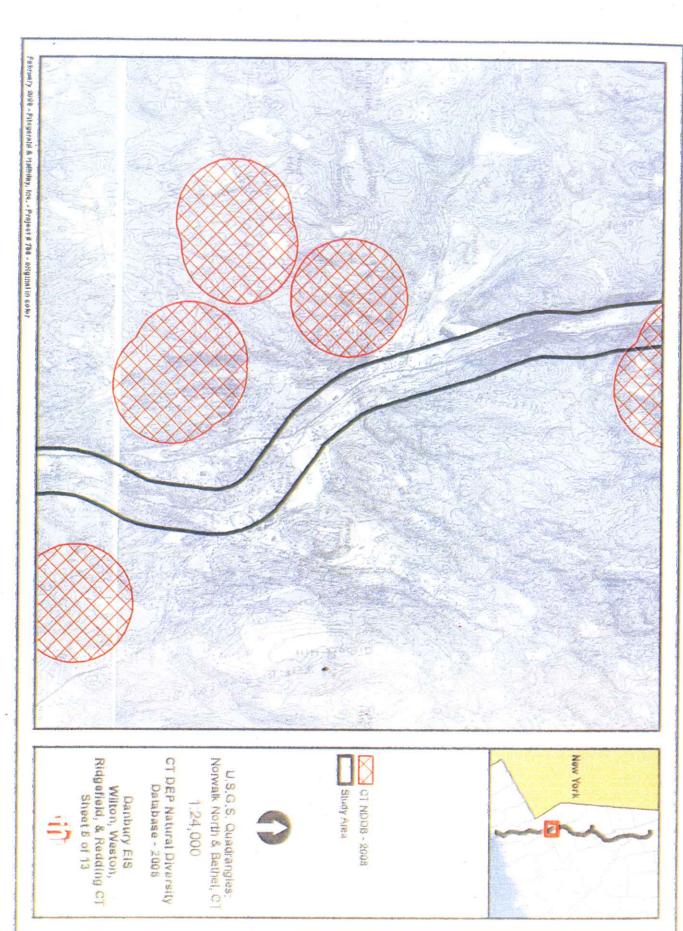




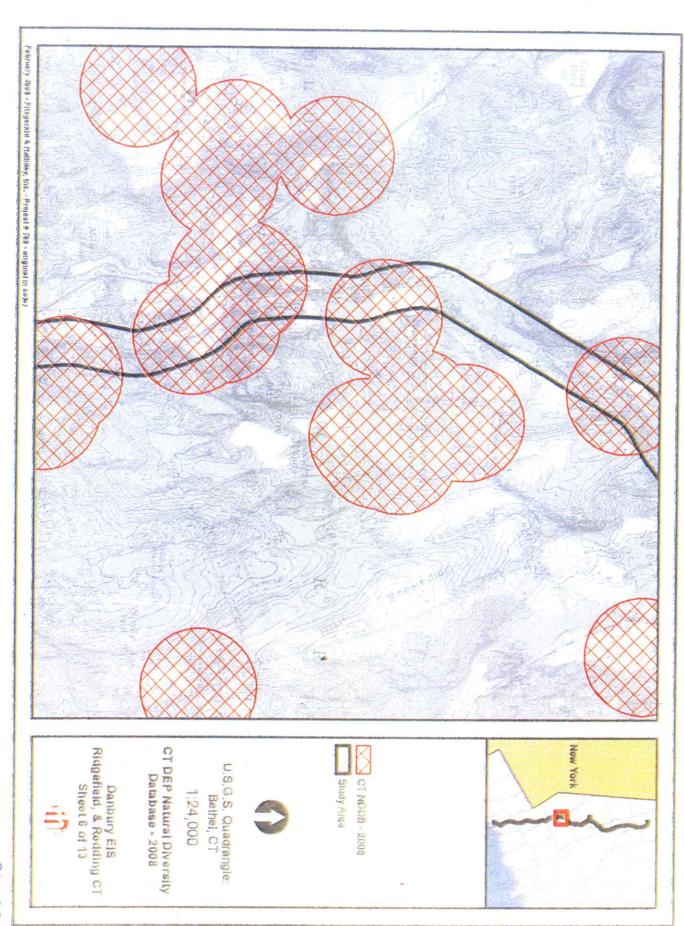
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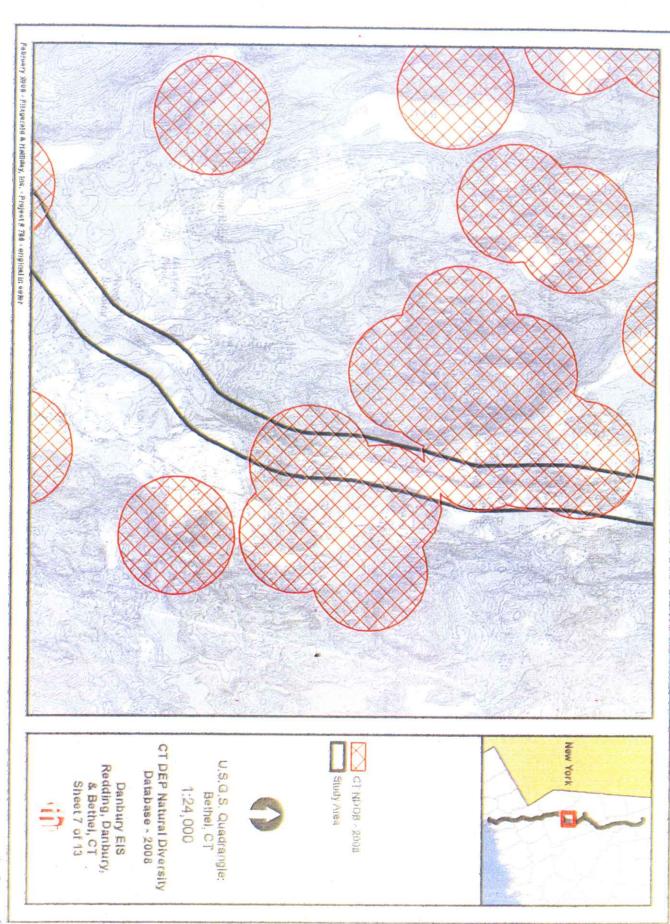




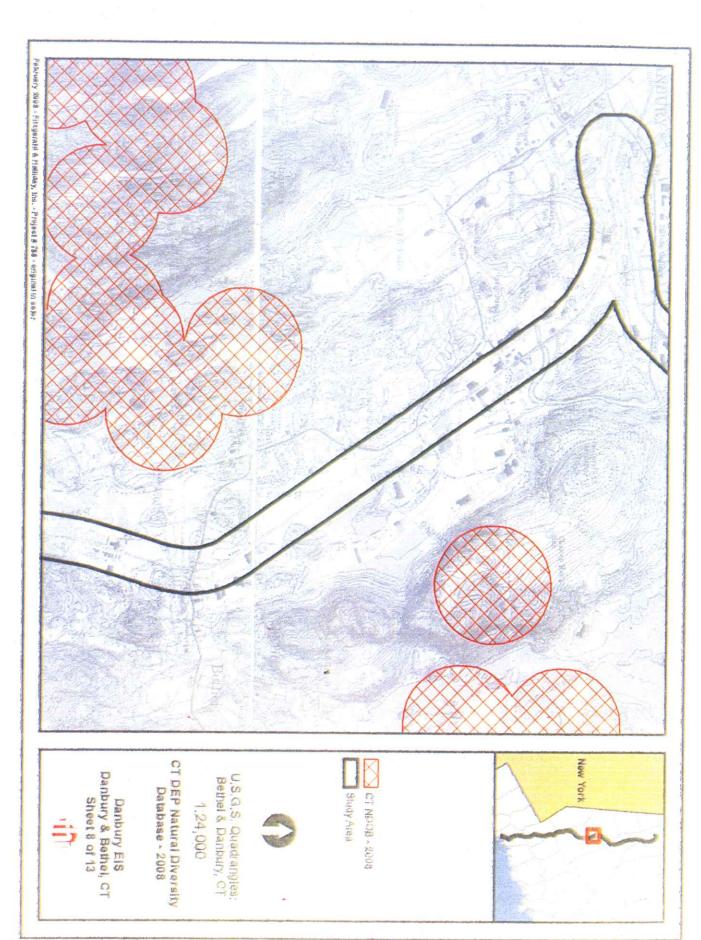
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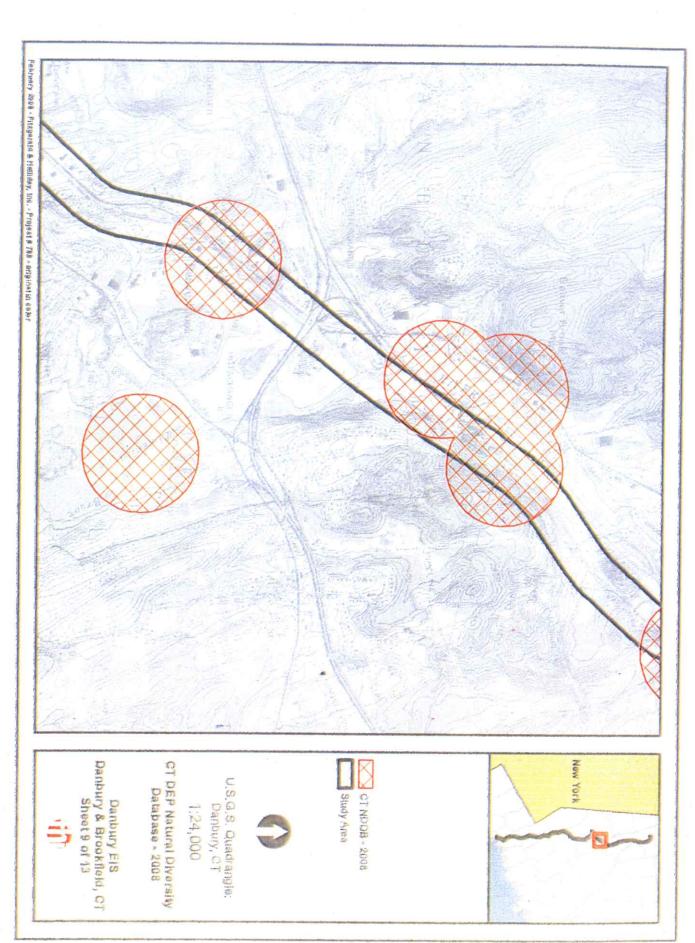
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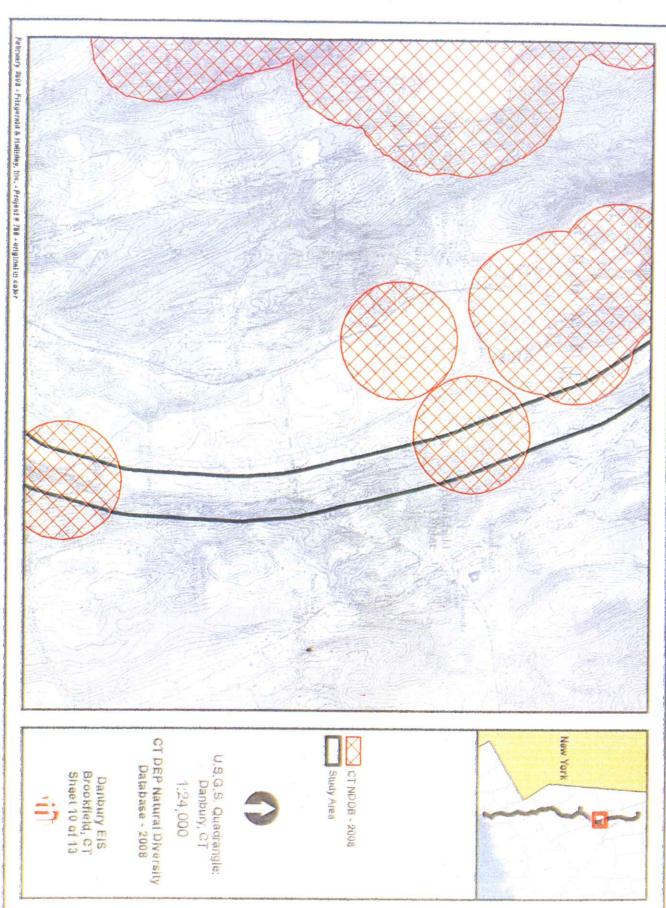
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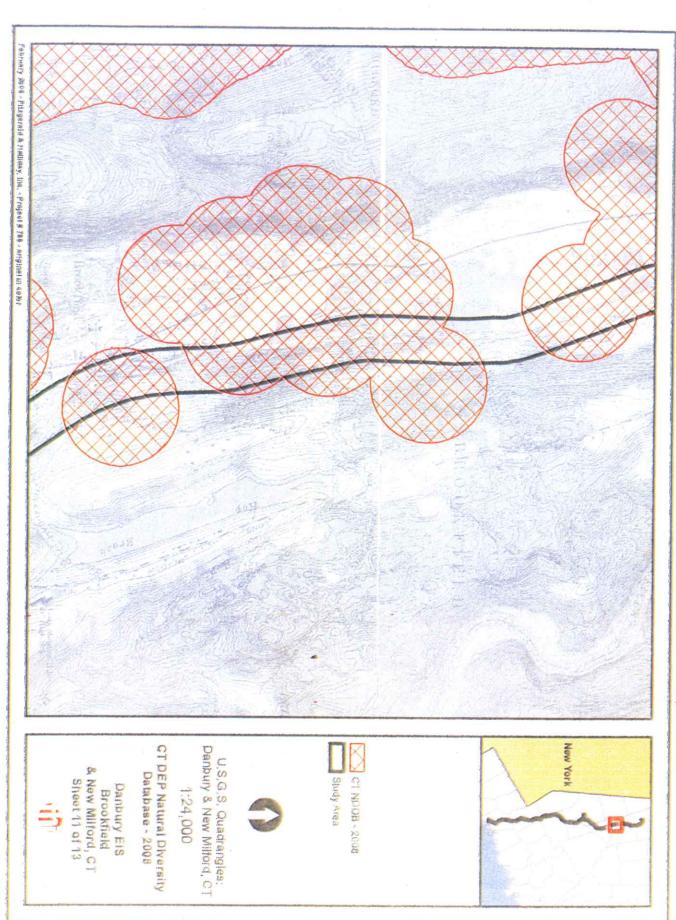
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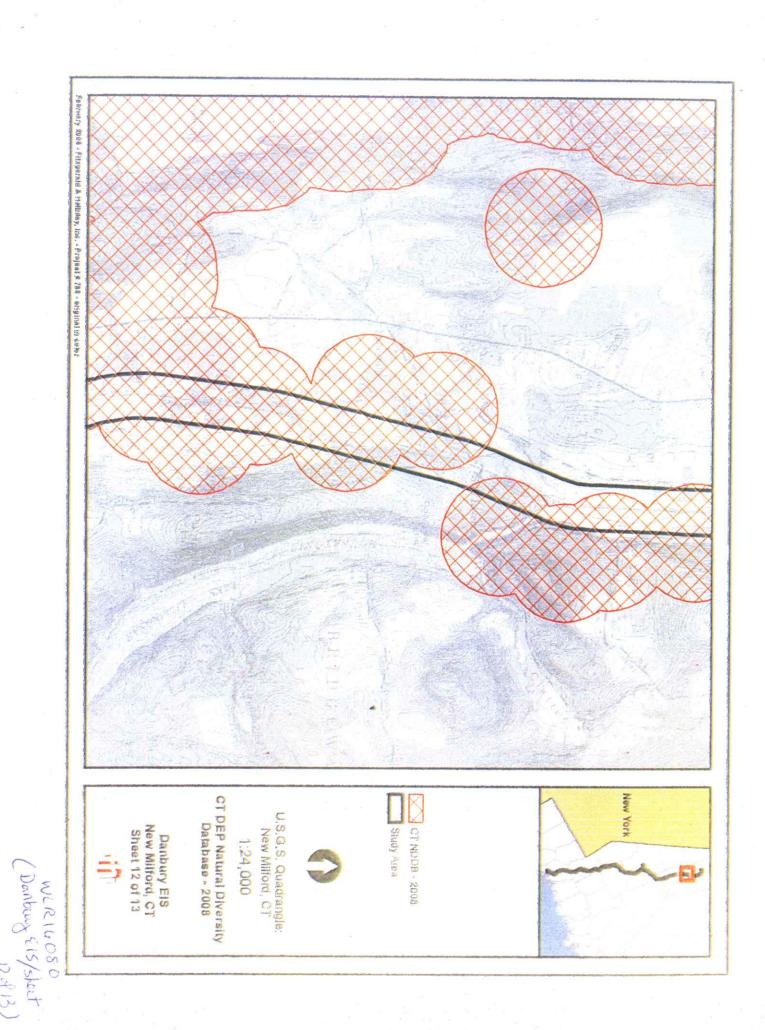


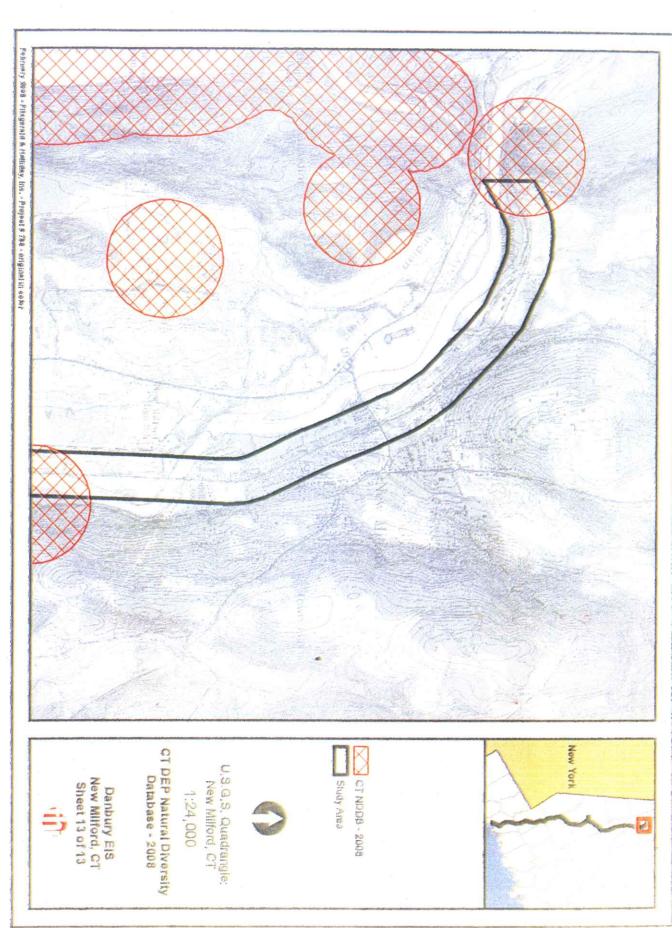


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STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION



Bureau of Natural Resources
Division of Wildlife
79 Elm Street, 6th Floor
Hartford, CT 06106
Natural Diversity Data Base

May 7, 2008

Ms. Linda Perelli-Wright Fitzgerald & Halliday, Inc. 72 Cedar Street Hartford, CT 06106

> re: Connecticut State Project # 302-008, Danbury Branch Electrification (New Haven Commuter Rail Line) in Norwalk, Wilton, Redding, Ridgefield, Bethel, Danbury, Brookfield and New Milford, Connecticut

Dear Ms. Perelli-Wright:

I have reviewed Natural Diversity Data Base maps and files regarding the area delineated on the map you provided for the proposed Connecticut State Project # 302-008, Danbury Branch Electrification. New Haven Commuter Rail Line in Norwalk, Wilton, Redding, Ridgefield, Bethel, Danbury, Brookfield and New Milford Connecticut. According to our information, there are state-listed species that occur in the vicinity of this project site. You will receive a letter with recommendations from Ms. Nancy Murray (DEP-Wildlife; 860-424-3589) regarding state-listed plant species and a letter from Ms. Julie Victoria (DEP-Wildlife; 860-642-7239) regarding state-listed animal species. We did not have any state-listed fish species located within your project boundaries.

Natural Diversity Data Base information includes all information regarding critical biological resources available to us at the time of the request. This information is a compilation of data collected over the years by the Department's Geological and Natural History Survey and cooperating units of DEP, private conservation groups and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations. Consultations with the Data Base should not be substitutes for on-site surveys required for environmental assessments. Current research projects and new contributors continue to identify additional populations of species and locations of habitats of concern, as well as, enhance existing data. Such new information is incorporated into the Data Base as it becomes available.

Please contact me if you have further questions at 424-3592. Thank you for consulting the Natural Diversity Data Base. Also be advised that this is a preliminary review and not a final determination. A more detailed review may be conducted as part of any subsequent environmental permit applications submitted to DEP for the proposed site.

Sincerely,

Dawn M. McKay

Biologist/Environmental Analyst 3

Cc: Julie Victoria, NDDB # 16080 Nancy Murray



72 Cedar Street, Hartford, Connecticut 06106 Tel. (860) 247-7200 Fax (860) 232-7536

TELECON

Call From: Laurel Project: P788.06/Danbury Branch Rail

Corridor – Biological Diversity

Call To: Bob Orciari, CT DEP Voice/Fax: 860-485-0226

Date: December 9, 2008 **Time:** 11:00-11:30 a.m.

Subject: Danbury Branch Rail Corridor – Fisheries Resources

Laurel called Bob Orciari, CT DEP, fisheries biologist, for the purpose of inquiring about fisheries resources for the Danbury Branch Rail Corridor DEIS. She asked 1) if fish are stocked (and, if so, the species of stocked fish), 2) for a list of native species (if any), 3) about sensitive habitat areas (if any), 4) about hot spots for fishing (if any) for the following locations:

- Norwalk River from downtown Norwalk (north of Norwalk Harbor) and north all the way to Redding (the river is parallel to and often within the corridor in Norwalk, Wilton, a teeny corner of Ridgefield, and a short stretch in Redding)
- Umpawaug Pond Brook in Redding (parallel to and in corridor for a short stretch)
- Saugatuck River in Redding one location (bridge crossing) as the river cuts cross the corridor
- Bogus Mountain Brook in Redding one location (culvert or bridge) as it cuts across the rail corridor
- Sympaug Pond and Brook in Bethel this brook is parallel to corridor and inside it a couple of times in Bethel
- Still River in downtown Danbury near Union Station, a bridge crossing at Route 784 in Danbury, then parallel to and within the rail corridor again in northern Brookfield and New Milford.
- Housatonic River in New Milford (north of Still River junction) parallel to and within the rail corridor

What follows is a summary of the call/discussion:

Still River

According to Mr. Orciari, the Still River is stocked with a mix of 400 trout (brook, brown, and rainbow) in downtown Danbury at Eagle Street. This Eagle Street location, a hot spot for fishing, is near the bridge crossing at Routes 7 and 84. Native fish found in the vicinity of Eagle Street include small mouth bass and white sucker. Carp are also common at this location, but they are a non-native species.

The Still River in northern Brookfield and New Milford is a warm water resource. It does not support trout and is not stocked with fish. However, non-native carp are found in this part of the Still River.

Housatonic River

According to Mr. Orciari, the Housatonic in New Milford (north of Still River junction) is a warm water resource. It does not support trout and is not stocked with fish. However, non-native carp and native species such as small mouth bass and white suckers are found in this part of the Housatonic River.

Saugatuck River

According to Mr. Orciari, the Saugatuck River in Redding at the bridge crossing where the river cuts across the rail corridor is a very popular fishing spot. The Saugatuck River is stocked with trout (a mix of brook, brown, and rainbow) in the vicinity of the bridge crossing. This area is sensitive habitat for a variety of native species: long nose bass, black nose bass, white sucker, creek chubbs, and tessellated darter.

Norwalk River

There are several areas along the Norwalk River in the railroad corridor where trout are stocked. There is a Wild Trout Management Area along the Norwalk River starting from the vicinity of Wolfpit Road in Wilton, through Wilton to Ridgefield. This Wild Trout Management Area is a hot spot for fishing. Other key fishing and habitat areas along the Norwalk River are:

- South of Route 107 to Old Mill Road in Wilton (the Georgetown area)
- One mile north of Route 106 in Wilton
- The vicinity of the Cannon Road/Pimpewaug Road intersection in Wilton near the railroad bridge

Adult trout (brook, brown, and rainbow) are stocked, intermittently, along the Norwalk River. Approximately 8,000 trout are stocked each year. In 2007, approximately 1,800 brook trout, 3,200 brown trout, and 1,800 rainbow trout were stocked. Additionally, 500 trophy brown trout, 550 trophy rainbow trout, and 31 surplus brood trout stock (very large) were stocked. In the Wild Trout Management Area (Wilton to Ridgefield), brown trout fry are also stocked. Any fish less than nine inches in length must be released in the Wild Trout Management Area.

Native fish species found in the Norwalk River in the railroad corridor study area include: long nose bass, black nose bass, white sucker, creek chubbs, and tessellated darter.

Brooks, and Ponds

Mr. Orciari refered me to Mr. Michael Humphreys (860-567-3445), another CT DEP fisheries biologist for more information to discuss the Umpawaug Pond Brook in Redding, Bogus Mountain Brook in Redding, and Sympaug Pond and Brook in Bethel.



United States Department of the Interior



FISH AND WILDLIFE SERVICE

New England Field Office 70 Commercial Street, Suite 300 Concord, NH 03301-5087 http://www.fws.gov/northeast/newenglandfieldoffice

April 29, 2008

Linda Perelli Wright Fitzgerald & Halliday, Inc. 72 Cedar Street Hartford, Connecticut 06106

Dear Ms. Wright:

This responds to your March 26, 2008 request for information on the presence of federally-listed or proposed, endangered or threatened species in relation to the preparation of an EIS for Connecticut State Project #302-008, New Haven Commuter Rail Line. The study corridor includes a 38-milelong by 1,000-foot-wide project located in Fairfield and Litchfield Counties in Connecticut.

Based on information currently available to us, no federally-listed or proposed, threatened or endangered species or critical habitat under the jurisdiction of the U.S. Fish and Wildlife Service are known to occur in the project area(s). However, there are two historic records for the federally-threatened bog turtle (*Glyptemys muhlenbergii*) within close proximity to the study corridor. Recent surveys at these locations lead us to conclude that bog turtles are no longer present at these locations. Therefore, preparation of a Biological Assessment or further consultation with us under Section 7 of the Endangered Species Act is not required for bog turtles.

While no federally-listed species are known to occur at the above referenced location, the New England cottontail (*Sylvilagus transitionalis*) is known to occur in the towns of New Milford and Brookfield. The Service recently announced the New England cottontail as a Candidate Species for listing on September 12, 2006 in the Federal Register (50 CFR part 17). While the New England cottontail remains an official candidate species, industry is under no federal obligation to avoid affecting the habitat of the species. However, we encourage you to consider potential project impacts to the New England cottontail for your activities. We will be glad to assist you in that effort. Coordination at this time may help to avoid any potential project delays that may arise should the Service propose that the species be federally-listed.

New England cottontails are considered habitat specialists, insofar as they are dependent upon early-successional habitats typically described as thickets. In addition to New England cottontails demonstrating a strong affinity for heavy cover, they are also reluctant to stray from it (>5 m).

Habitats of this type are typically associated with beaver flowage wetlands, idle agricultural lands, power line corridors, railroad right-of-ways, and patches of regenerating forests. In contrast, eastern cottontails (which can often be found living with New England cottontails) appear to have relatively generalized habitat requirements and can often be found in residential-type habitats, such as private lawns, golf courses, and active agriculture areas.

This concludes our review of listed species and critical habitat in the project location and environs referenced above. No further Endangered Species Act coordination of this type is necessary for a period of one year from the date of this letter, unless additional information on listed, proposed, or potential candidate species like the New England cottontail becomes available.

Thank you for the opportunity to provide these comments. Please contact me at 603-223-2541 if we can be of further assistance.

Sincerely yours,

Anthony P. Tur

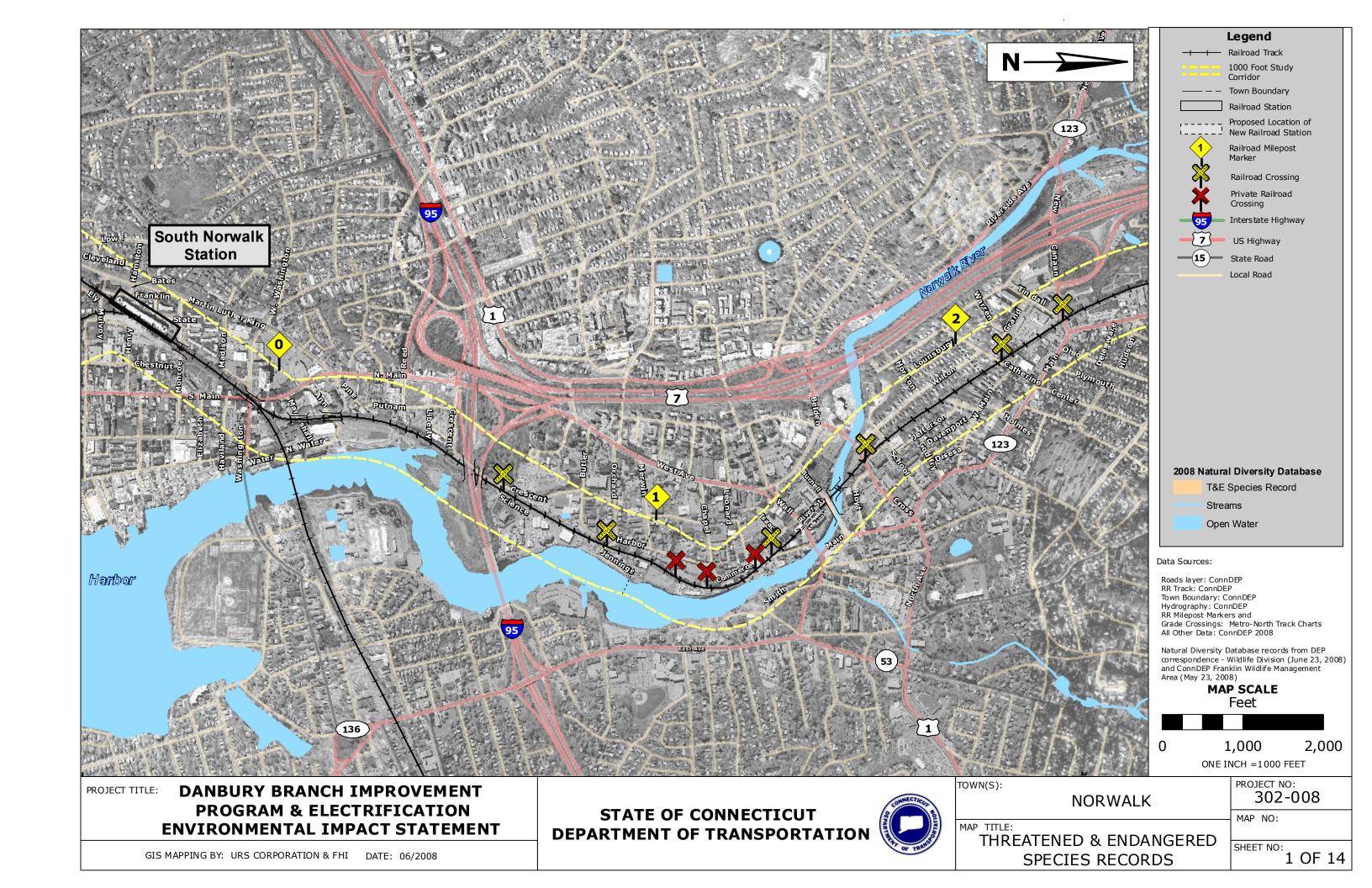
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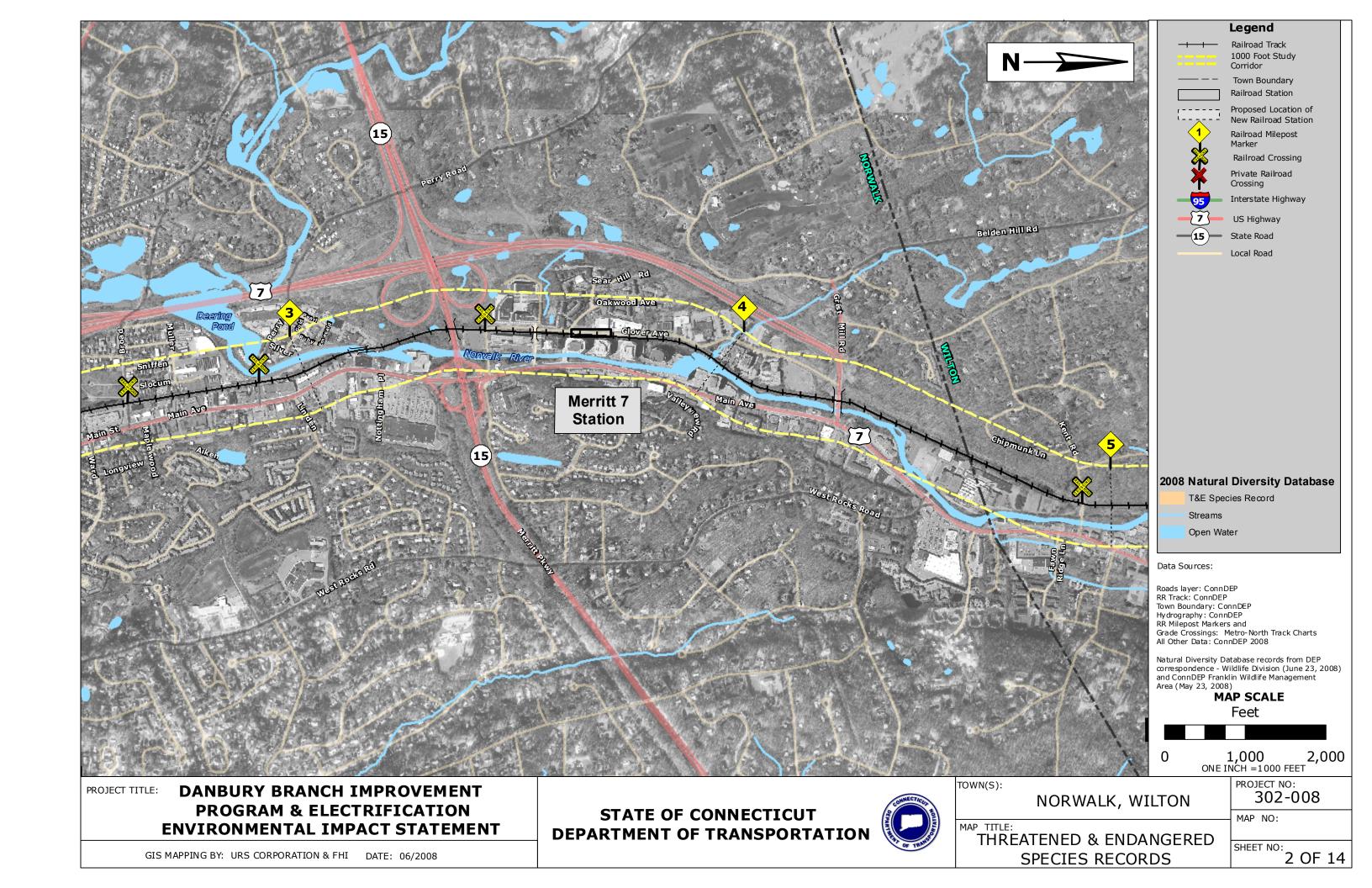
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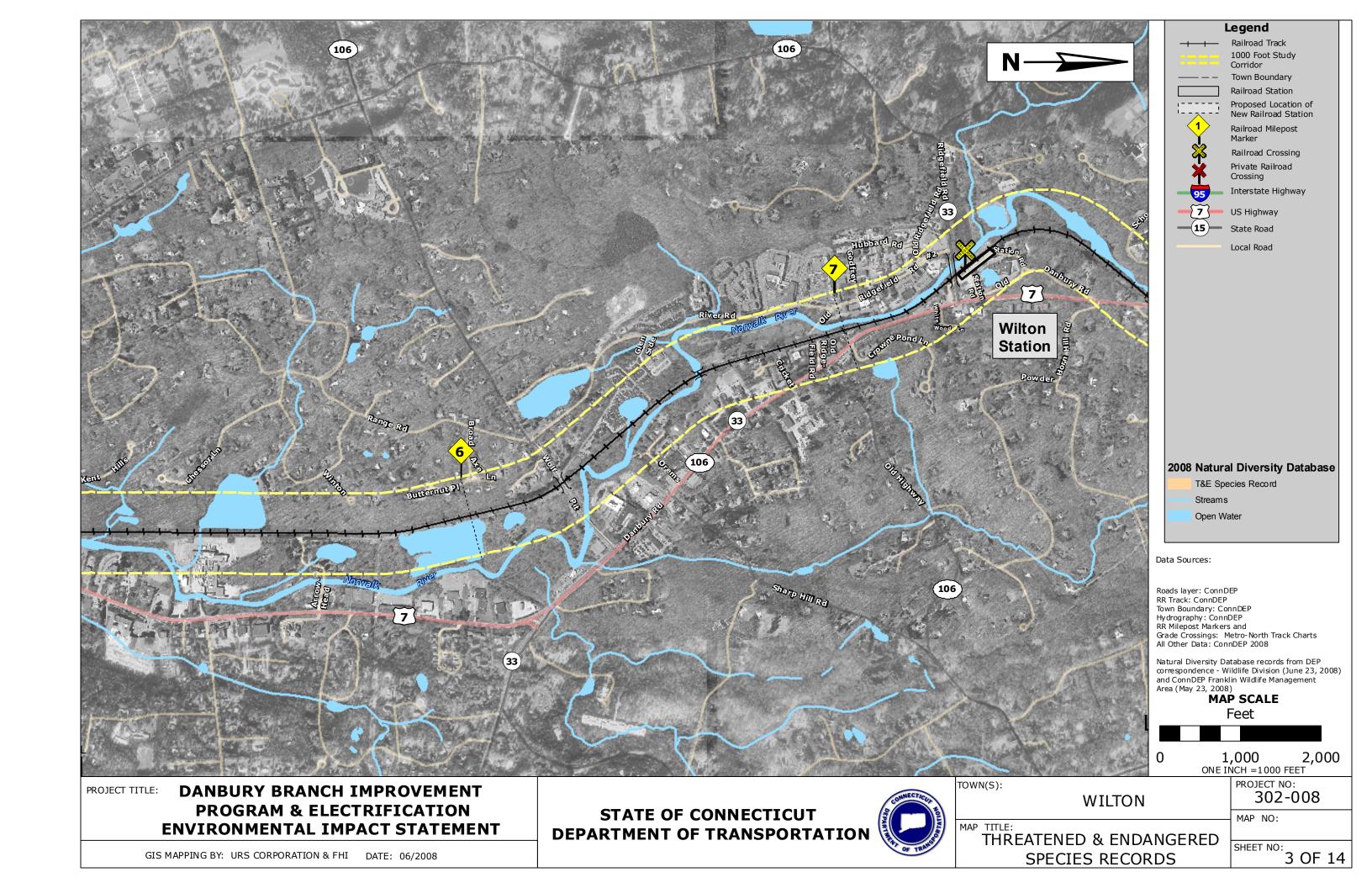
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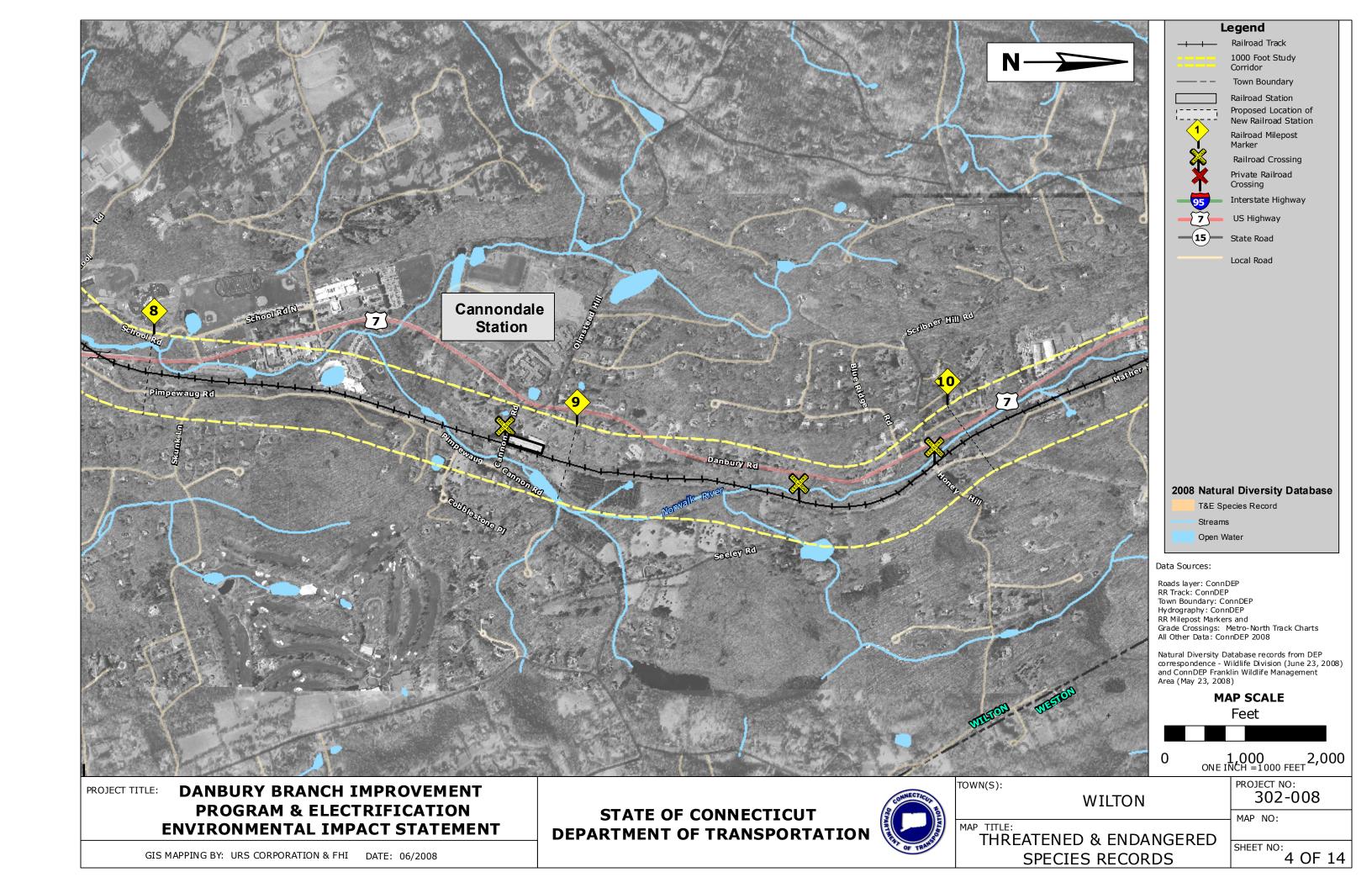
APPENDIX B

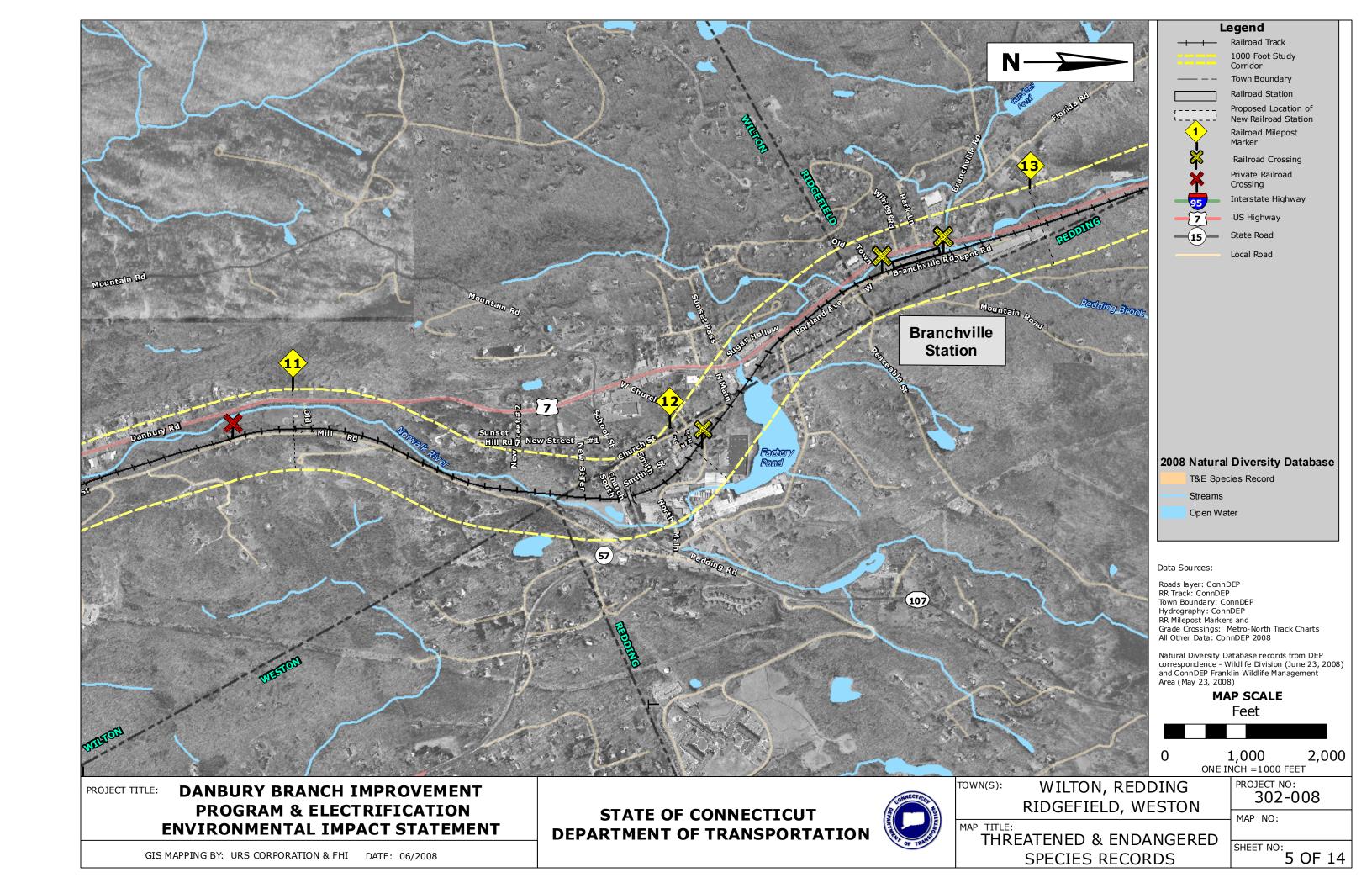
THREATENED AND ENDANGERED SPECIES RECORDS SHEETS 1-14

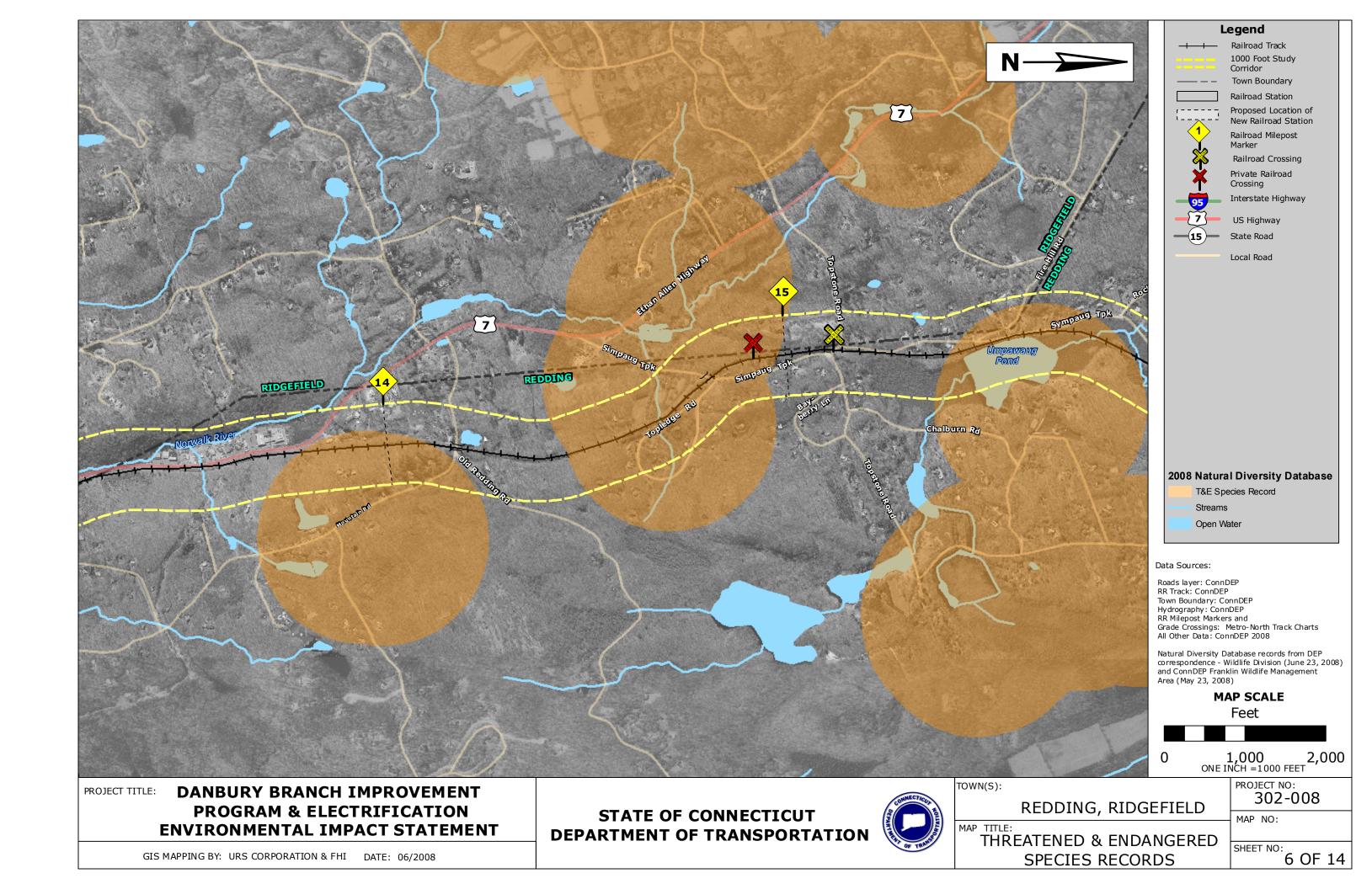


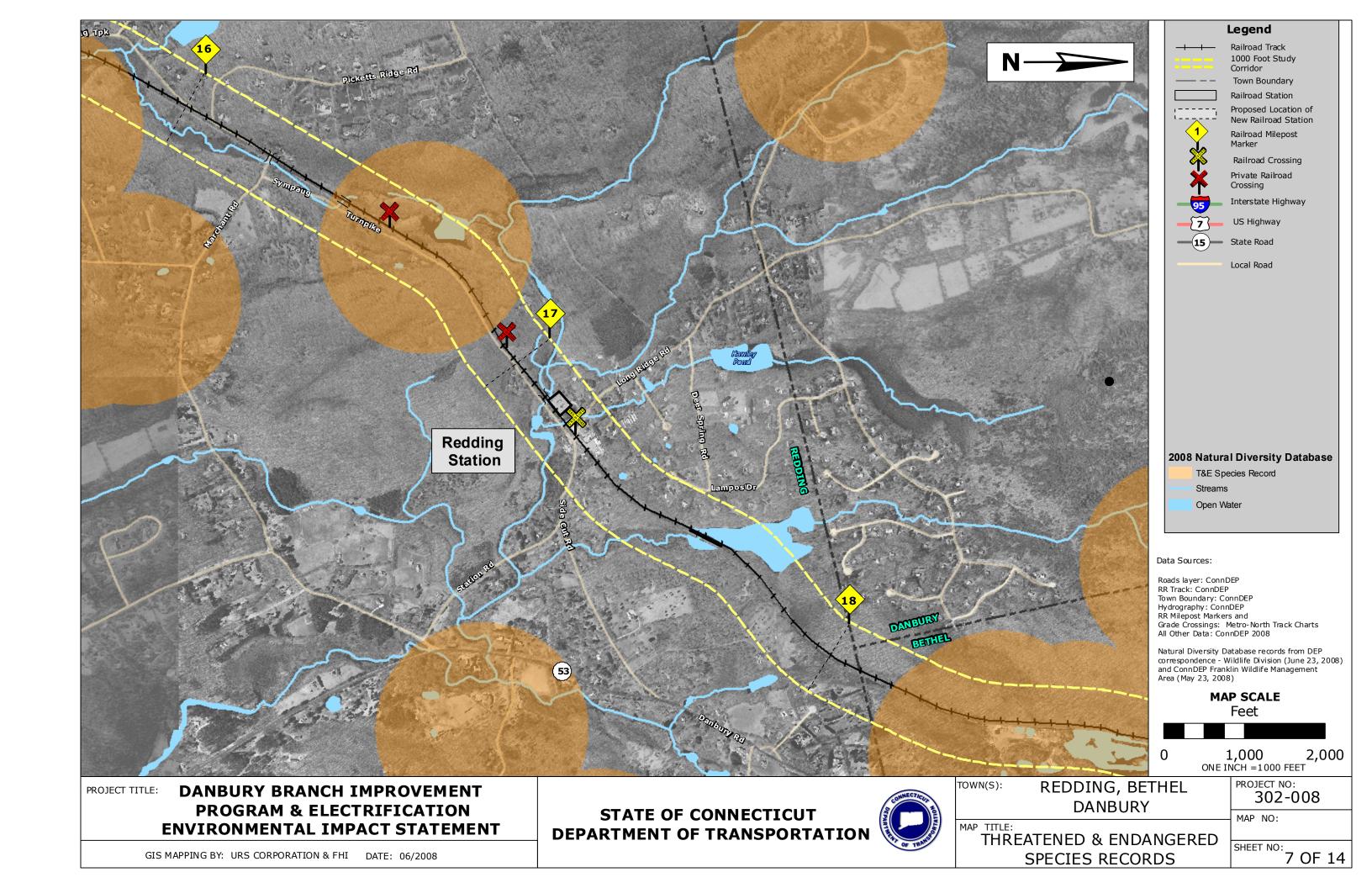


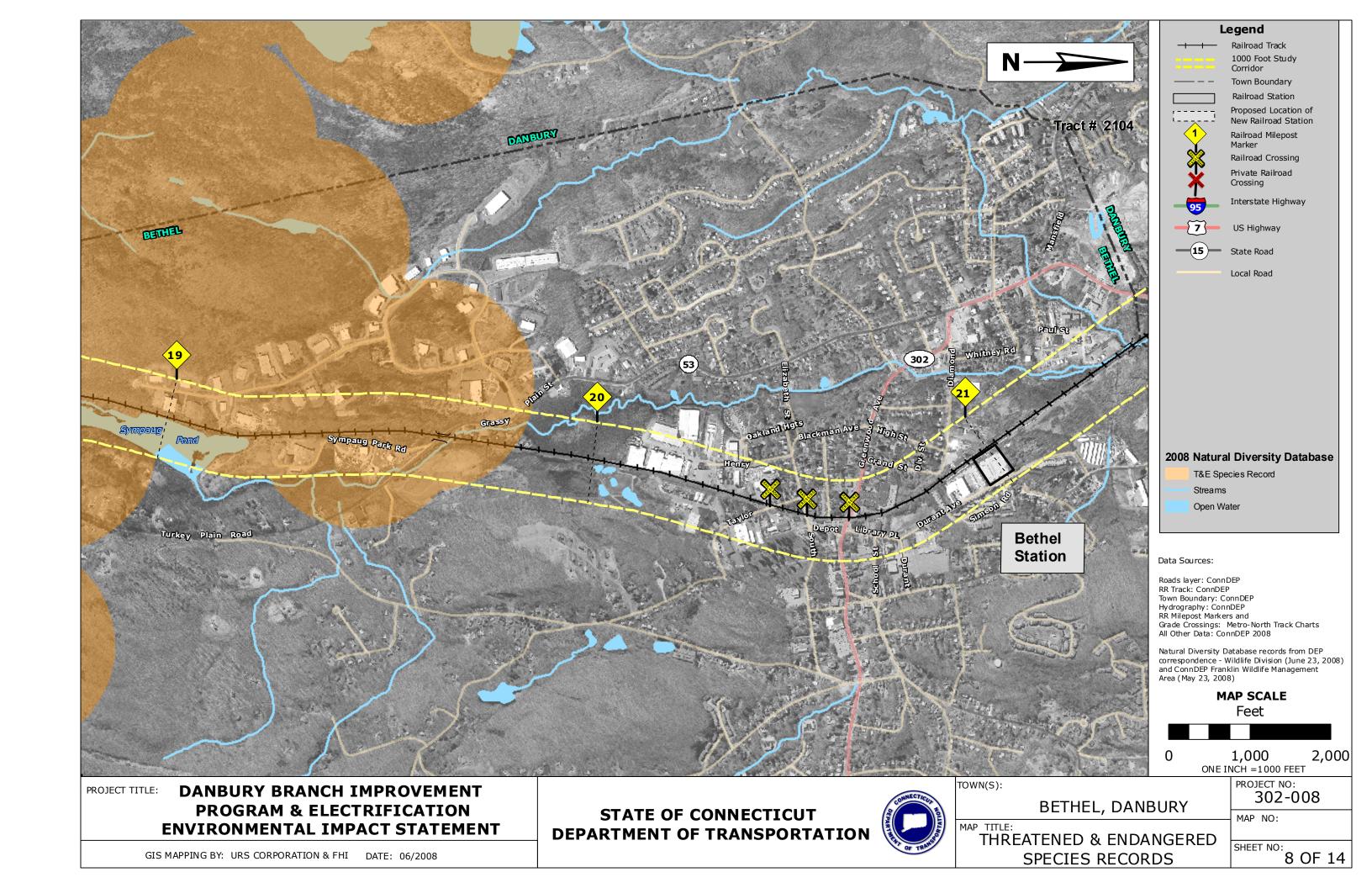


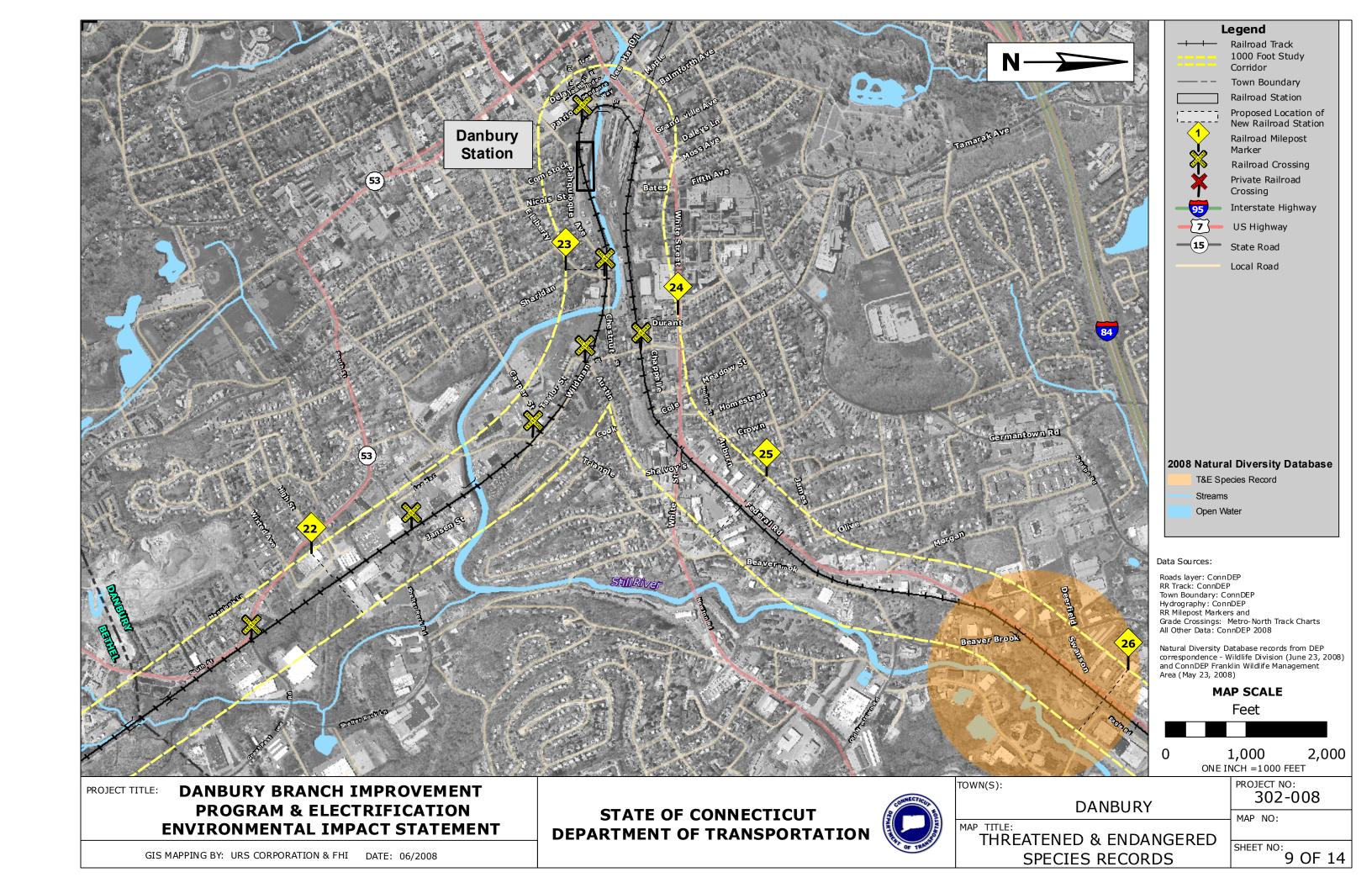


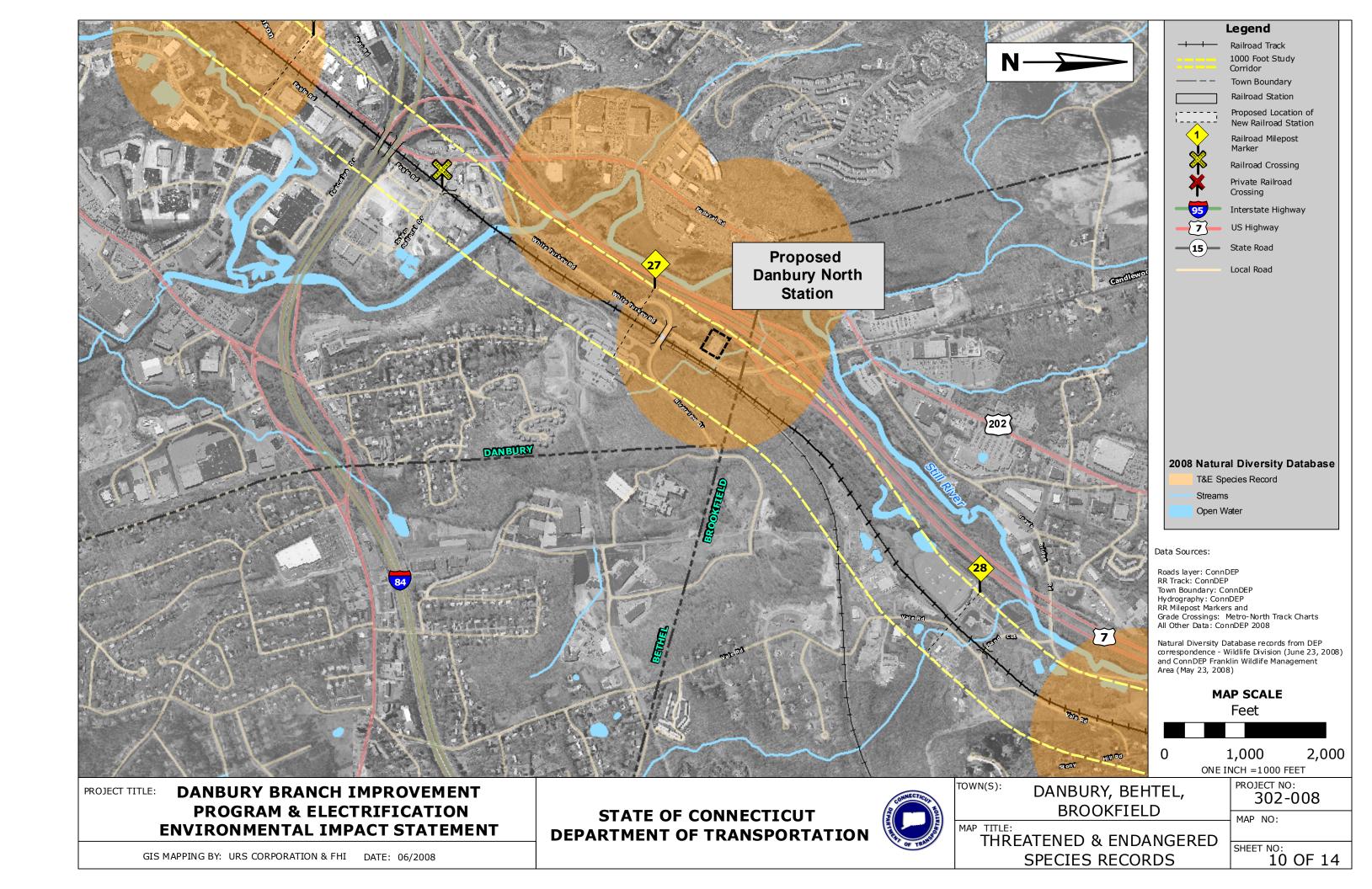


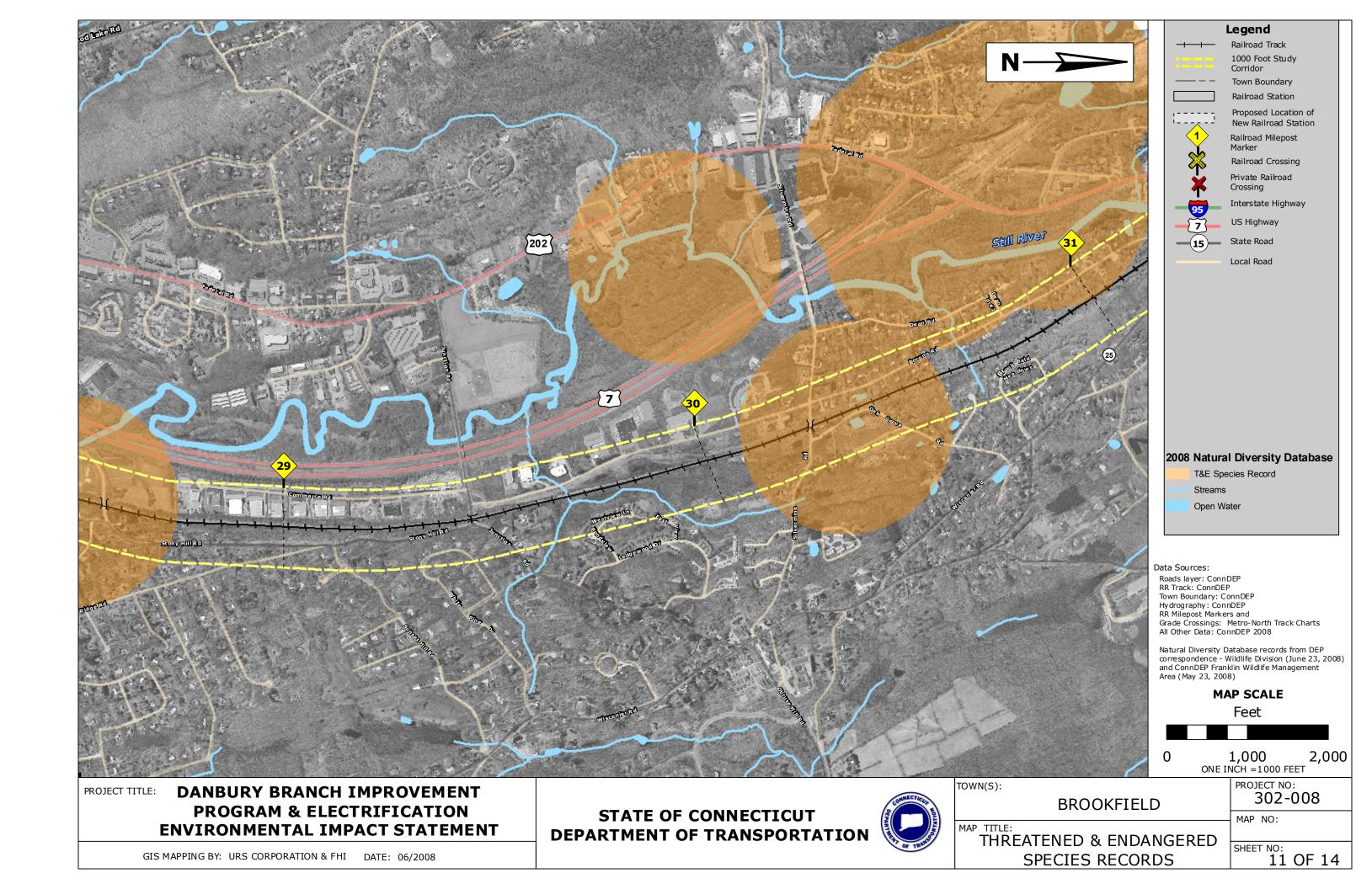


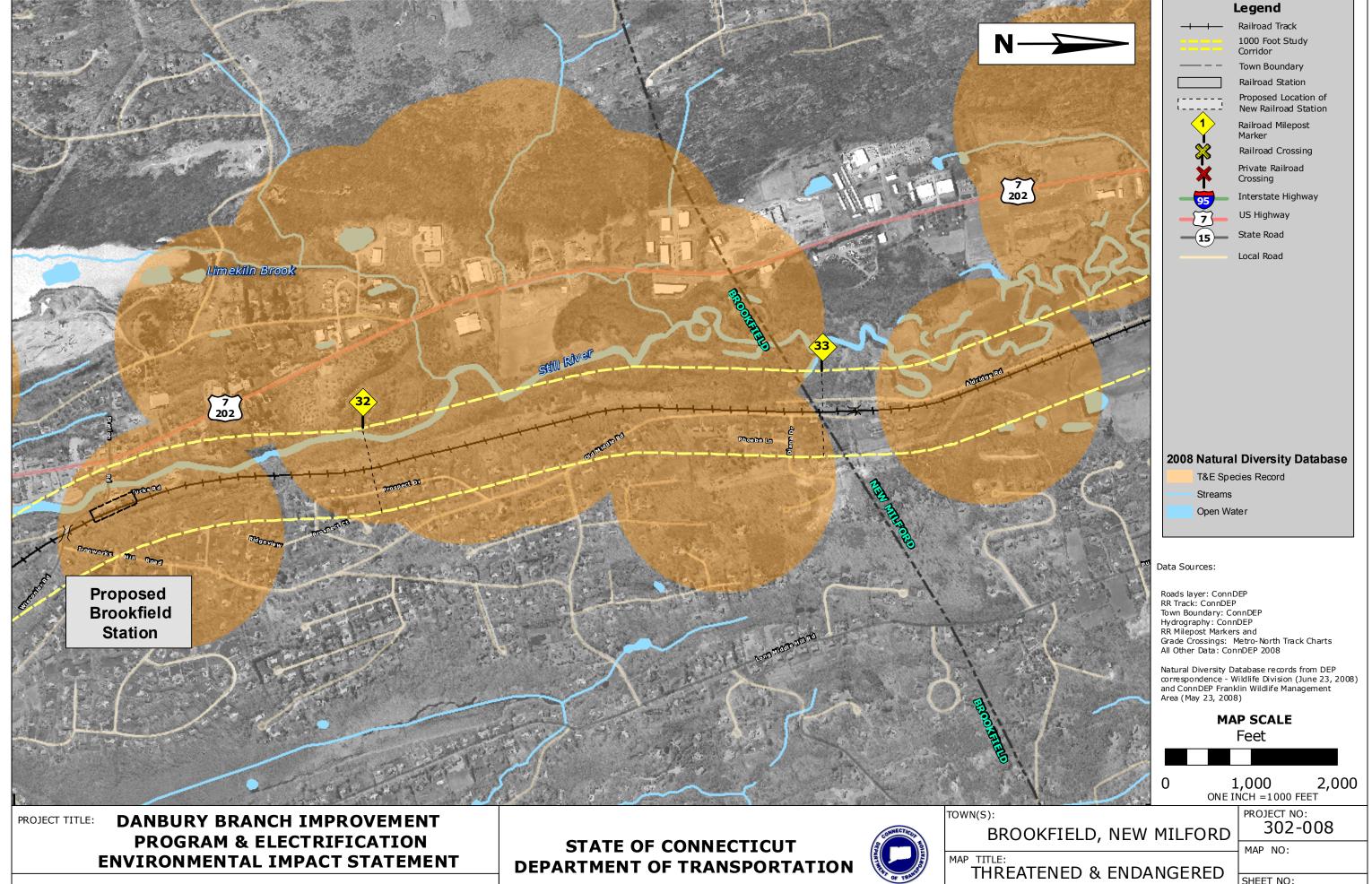








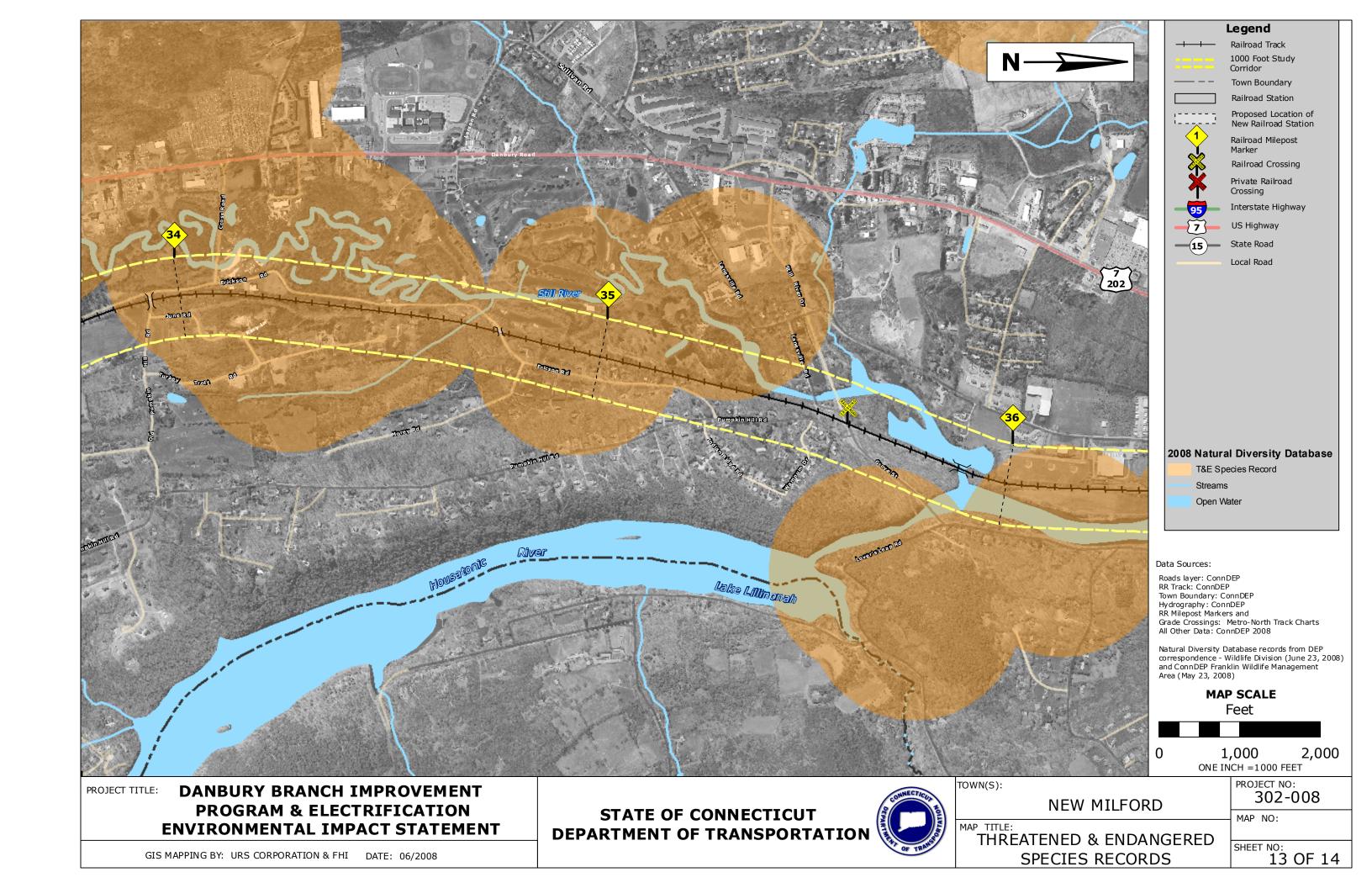


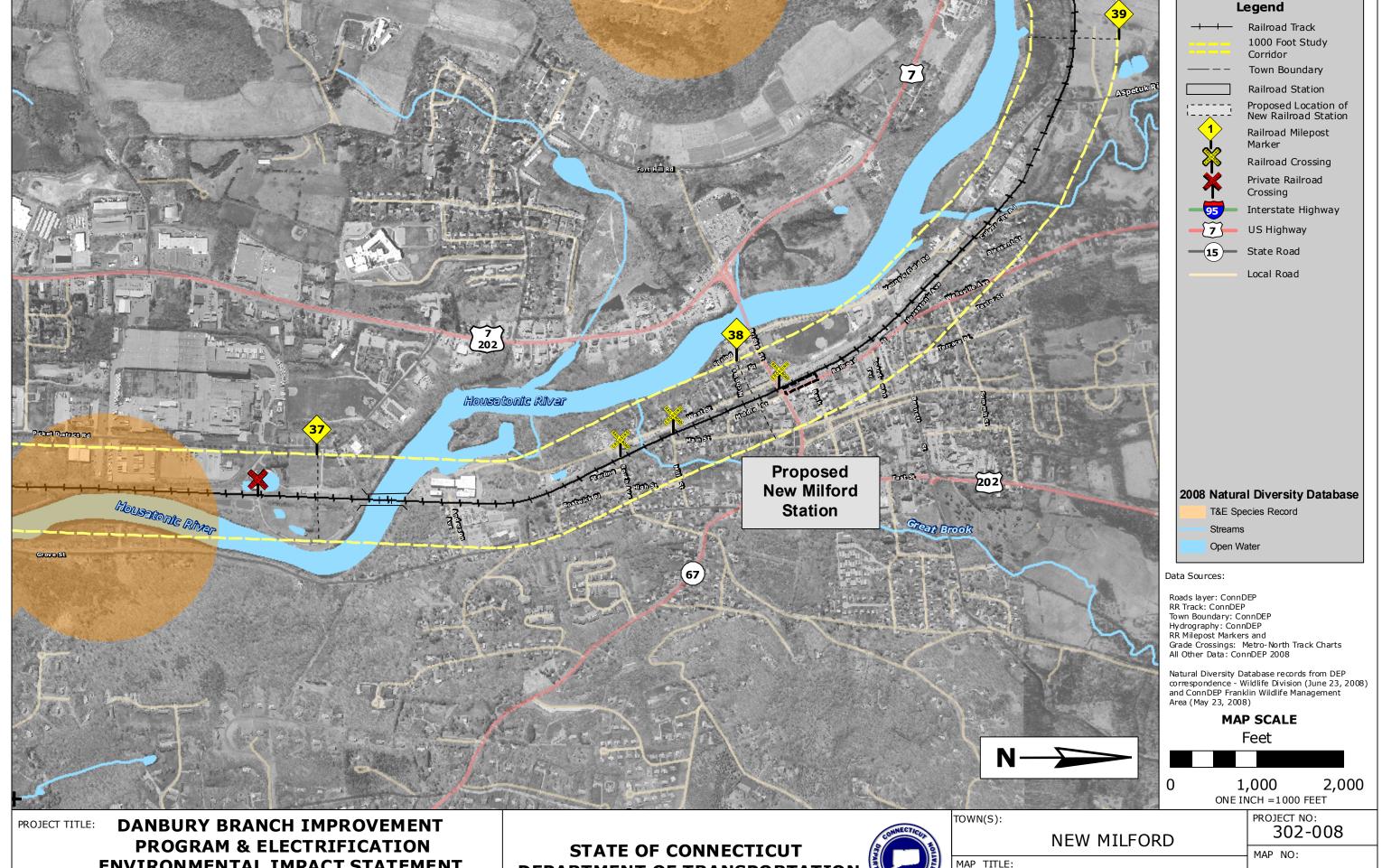


GIS MAPPING BY: URS CORPORATION & FHI DATE: 06/2008

SPECIES RECORDS

SHEET NO: 12 OF 14





ENVIRONMENTAL IMPACT STATEMENT

GIS MAPPING BY: URS CORPORATION & FHI DATE: 06/2008

DEPARTMENT OF TRANSPORTATION

THREATENED & ENDANGERED SPECIES RECORDS

SHEET NO: 14 OF 14