



**US Army Corps
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New England District

PUBLIC NOTICE

696 Virginia Road
Concord, MA 01742-2751

Date: May 3, 2011
Comment Period Ends: June 1, 2011
File Number: NAE-2010-2214
In Reply Refer To: Ruth M. Ladd
Or by e-mail: ruth.m.ladd@usace.army.mil

The District Engineer (“DE”) of the New England District, Corps of Engineers (“Corps”) has received the attached prospectus dated April 26, 2011 for an **Umbrella Mitigation Bank** in the State of Connecticut, using Camp Hoyt in Redding, CT (N41° 19.222’ W73° 26.349’) as the initial bank site.

**SPONSOR: Connecticut Yankee Council of the Boy Scouts of America (CYC-BSA),
60 Wellington Road, P.O. Box 32, Milford, CT 06460-0032**

The Corps of Engineers is soliciting comments on this prospectus from the public; federal, state, local agencies and officials; Indian Tribes; and other interested parties to help determine whether the proposed mitigation bank has the potential for providing appropriate compensatory mitigation for Department of the Army permits. If so, the sponsor can then proceed to develop a draft umbrella banking instrument to be signed by the sponsor, the Corps, and other interested stakeholder agencies. The process will follow 33 CFR 332, Compensatory Mitigation for Losses of Aquatic Resources (“Mitigation Rule”). The Mitigation Rule was published in the Federal Register on April 10, 2008. Comments will also be used to determine the need for a public hearing on this matter.

The umbrella bank would provide an alternative to permittee-responsible mitigation for proposed unavoidable impacts authorized under Section 404 of the Clean Water Act (“Section 404”) and Section 10 of the Rivers and Harbors Act of 1899 (“Section 10”). It would also provide an alternative for Civil Works projects needing compensation for impacts to aquatic resources.

The DE has determined that this prospectus is complete in that it includes a discussion of the following as required by 33 CFR 332.8(d)(2):

- The objectives of and need for the proposed umbrella bank and the Camp Hoyt bank site;
- How the umbrella bank and the Camp Hoyt bank site will be established and operated;
- The proposed service area for the Camp Hoyt site;
- The technical feasibility of the Camp Hoyt site;
- The proposed ownership arrangements and long-term management strategies in general and for the Camp Hoyt site in particular;
- The qualifications of the sponsor and its ability to successfully complete the types of mitigation projects that will be proposed;

- The ecological suitability of the Camp Hoyt site to achieve the objectives of the proposed bank, including the physical, chemical, and biological characteristics of the bank site and how that site will support the planned types of aquatic resources and functions; and
- Sufficient water to support the long-term sustainability of the bank site.

Based on his initial review, the District Engineer has determined that little likelihood exists for the proposed work at Camp Hoyt to impinge upon properties with cultural or Native American significance, or listed in, or eligible for listing in, the National Register of Historic Places. Therefore, no further consideration of the requirements of Section 106 of the National Historic Preservation Act of 1966, as amended, is necessary. This determination is based upon one or more of the following:

- a. The work area has been extensively modified by previous work.
- b. The work area has been recently created.
- c. The proposed activity is of limited nature and scope.
- d. Review of the latest published version of the National Register shows that no presence of registered properties listed as being eligible for inclusion therein are in the permit area or general vicinity.
- e. Coordination with the State Historic Preservation Officer and/or Tribal Historic Preservation Officer(s).

In order to properly evaluate the proposal, we are seeking public comment. Anyone wishing to comment is encouraged to do so. **Comments should be submitted in writing by June 1, 2011.** If you have any questions, please contact Ruth M. Ladd at (978) 318-8818, (800) 343-4789 or (800) 362-4367, if calling from within Massachusetts.

The initial determinations made herein will be reviewed in light of facts submitted in response to this notice. All comments will be considered a matter of public record. Copies of comment letters will be forwarded to the sponsor and the Interagency Review Team consisting of representatives of the Corps, Environmental Protection Agency, US Fish and Wildlife Service, Natural Resources Conservation Service, and Connecticut Department of Environmental Protection.

For more information on the New England District Corps of Engineers programs, visit our website at <http://www.nae.usace.army.mil>.

THIS NOTICE IS NOT AN AUTHORIZATION TO DO ANY WORK, NOR DOES THE POTENTIAL APPROVAL OF AN UMBRELLA MITIGATION BANK PRE-DETERMINE THE OUTCOME OF ANY FUTURE PERMIT DECISIONS FOR DEVELOPMENT PROJECTS WITHIN THE SERVICE AREA.


JENNIFER L. MCCARTHY
Chief, Regulatory Division

CENAE-R
FILE NO. NAE-2010-2214

If you would prefer not to continue receiving Public Notices, please contact Ms. Tina Chaisson at (978) 318-8058 or e-mail her at bettina.m.chaisson@usace.army.mil. You may also check here () and return this portion of the Public Notice to: Bettina Chaisson, Regulatory Division, U.S. Army Corps of Engineers, 696 Virginia Road, Concord, MA 01742-2751.

NAME: _____
ADDRESS: _____

FINAL PROSPECTUS:

Connecticut Yankee Umbrella Stream and Wetland Mitigation Bank

Date: 04-26-11



Prepared by:

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1. INTRODUCTION

The Connecticut Yankee Council of the Boy Scouts of America (CYC-BSA), proposes to sponsor and establish an umbrella stream and wetland mitigation bank (hereafter referred to as “Umbrella Bank”) in Connecticut, consisting of one mitigation site initially, (referred to as Bank Site hereafter) and the potential for additional bank sites in the future. A Bank is a site or suite of sites, where resources are restored, established, enhanced and/or preserved for the primary purpose of providing compensatory mitigation for impacts authorized by Department of Army permits.

Both state and federal agencies administering resource protection regulations may require compensatory mitigation as a condition of their permit approvals and authorizations. To date in Connecticut, mitigation has been accomplished by requiring the applicant to provide compensation (permittee-responsible mitigation) on-site or off-site of the project area. However, under the Mitigation Rule, The New England District Corps of Engineers (NAE) may also allow a permittee to buy credits from a bank sponsor, whose obligation is then to provide the compensatory mitigation. Since there are currently no banks in Connecticut, the above sponsor proposes an Umbrella Bank as an alternative to permittee-responsible mitigation.

2. UMBRELLA BANK

2.1. BANK OBJECTIVES

The proposed Umbrella Bank will provide the following goals:

- Create an alternative to permittee-responsible mitigation of adverse impacts to aquatic resources and their functions arising from activities authorized under the federal Clean Water Act (“CWA”) and Rivers and Harbors Act (“RHA”) or such other activities as may be permitted by the NAE.
- Create an alternative means for compensatory mitigation of adverse impacts to aquatic resources and their functions arising from activities associated with NAE Civil Works projects.
- Increase the extent and quality of restoration, enhancement, creation and protection of significant natural resources in Connecticut.

- Reduce and/or eliminate temporal losses of aquatic functions from permitted impacts to waters of the U.S. within the service area (SA) of the proposed Bank.
- Ensure compliance with the standards and criteria for compensatory mitigation as specified in 33 CFR Part 332 (Mitigation Rule).
- Reduce the net loss of wetland functions in the State of Connecticut.

2.2. ESTABLISHMENT OF THE UMBRELLA BANK

The Umbrella Bank will be established and managed in accordance with the “Compensation Mitigation for Losses of Aquatic Resources”, Federal Register, 40 CFR, Part 230 (Mitigation Rule), dated April 10, 2008, as well as any state guidance that may apply.

The CYC-BSA is the current land owner of the proposed Bank Site. The CYC-BSA intends to continue to own and operate the Umbrella Bank and any bank sites within the Umbrella Bank in the short and long term.

The Bank will contain one Umbrella Mitigation Banking Instrument (UMBI) that governs the requirements and conditions for all Bank Sites that are approved by the IRT and included within the Umbrella Bank. The UMBI is a legally binding document that will contain specific information including the establishment of the Umbrella Bank, operation of the Umbrella Bank, maintenance and monitoring requirements of the Umbrella Bank, responsibilities of the IRT, and responsibilities of the Umbrella Bank sponsor. The Umbrella Bank will initially contain one Bank Site, Camp Hoyt, described below. The UMBI may provide for future authorization of additional mitigation bank sites, per IRT approval. As additional bank sites are selected, they must be included in the UMBI as modifications to the instrument.

Woltz and Associates will serve as the consultant to the CYC-BSA. Woltz and Associates will also be responsible for annual management and operations of the proposed Bank Site. The CYC-BSA proposes preservation, reestablishment, and enhancement of stream corridors and adjacent wetland systems, as well as preservation of riparian and upland buffers, specifically for the purpose of generating compensation credits. The CYC-BSA will provide for the long term maintenance and management of the proposed Bank Site, as will be detailed in the UMBI.

Woltz and Associates, on behalf of the CYC-BSA, will prepare an UMBI that will represent the legal framework for the proposed Umbrella Bank. The proposed Umbrella Bank will be developed through an iterative modification process with the IRT and will be formalized in final form in the UMBI and Bank Development Plan (BDP). This documentation will be submitted and presented to the IRT for review and approval.

2.2.1 Qualifications of the Sponsor

The CYC-BSA has owned the proposed Bank Site since 1966 and, as a result, is very familiar with the property and is dedicated to its welfare. Correspondingly, there is no entity better equipped and willing to bear the responsibility of ensuring that the proposed work is accomplished and maintained in perpetuity. The CYC-BSA has extensive experience in project management, conservation activities, natural resource management, and property management. The CYC-BSA is also well versed in land management issues and conservation easements.

Woltz and Associates, Inc. will act on behalf of the CYC-BSA regarding the establishment, maintenance, monitoring, and management of the proposed Umbrella Bank. Woltz and Associates has extensive experience in stream and wetland mitigation, real estate easements, and mitigation bank development. Woltz and Associates is currently involved in the development of stream and/or wetland mitigation banks in two locations in Virginia. One mitigation bank site is located in Callaway, Virginia and has been approved by all Interagency Review Team members. Approximately 5,700 credits will be generated using this site, which will entail roughly 20 acres of invasive tree removal (*Ailanthus altissima*), 20 acres of native plantings, and preservation of approximately two miles of headwater tributaries and 150 acres of land found along the Blue Ridge Escarpment. The second mitigation bank site is located near Shawsville, Virginia on roughly 500 acres of land that varies from steep to level. Approximately 6 miles of stream will be preserved, enhanced, and/or restored as part of the proposed mitigation design. The final plan is in the final stages of approval from the IRT. Submittal of the final Band Development Plan (BDP) will occur in May 2011. Regulatory agency contacts (references) for these projects include:

Ms. Bettina Sullivan

Virginia Department of Environmental Quality

4949-A Cox Road

Glen Allen, VA 23060

(804) 527-5020

Mr. Steve Martin

U.S. Army Corps of Engineers--Norfolk District

803 Front Street

Norfolk, VA 23510

(757) 201-7500

Ms. Scharlene Floyd

U.S. Army Corps of Engineers--Norfolk District

803 Front Street

Norfolk, VA 23510

(757) 201-7500

Environmental scientists employed by Woltz and Associates have extensive training in stream restoration (Rosgen I-IV), wetland mitigation design, stream and wetland delineation and mapping (Virginia Certified Professional Wetland Delineator, Society of Wetland Scientists Professional Wetland Scientist), conservation easements, water permitting, mitigation monitoring, technical report development, and stream and wetland functional assessment.

The contact information for the bank sponsor is as follows:

Mr. Lou Salute
Connecticut Yankee Council of the Boy Scouts of America
60 Wellington Road
P.O. Box 32
Milford, CT 06460-0032
(203) 876-6868
www.ctyankee.org

Woltz and Associates contact information is as follows:

Mr. Deal Tompkins
Woltz and Associates, Inc.
23 Franklin Road
Roanoke, VA 24011
(540) 342-3741
deal@woltz.com

2.2.2 Permits

The CYC-BSA, with assistance from Woltz and Associates, will be responsible for obtaining all documentation, permits and other authorizations required to establish and maintain the Umbrella Bank and all associated Bank sites.

2.2.3 Anticipated Schedule

The anticipated schedule for the implementation of the proposed Umbrella Bank starts with submittal of a complete prospectus in April 2011. Upon approval of the prospectus by the IRT, a site delineation of wetlands and streams, and subsequent jurisdictional confirmation by the U.S. Army Corps of Engineers will be completed in the Spring or Summer of 2011. Completion and submittal of the draft Umbrella Mitigation Banking Instrument (UMBI) will take place in the Fall of 2011. Completion and submittal of the final UMBI will take place in the Winter of 2011. The date of final approval of the UMBI is impossible to determine at this time. The schedule will likely be adjusted over time as the process develops from start to finish. It is hoped that the UMBI will be completed and the Umbrella Bank approved by December 2011. Again, this timeframe is impossible to pinpoint but is more useful as a guideline.

2.2.4 Financial Assurances Requirements

The CYC-BSA may or may not choose to utilize the early 15% credit release typically available for mitigation banks at the outset of operation. Should the CYC-BSA choose to accept the early 15% credit release option, the CYC-BSA will provide financial assurances by way of escrow account, performance bond, or the like.

2.2.5 Real Estate Provisions

The CYC-BSA will provide the perpetual protection and preservation of any proposed bank sites through conservation easements. This easement, as well as any and all future easements will be transferred to an acceptable third party or conservation organization, to be identified at a later date, upon fulfillment of project objectives. Bank ownership and easement responsibility remain with the titled owner.

2.2.6 Maintenance, Monitoring, & Success Criteria

The CYC-BSA will ensure all monitoring and maintenance will be undertaken during the success criteria time period for each bank site. The CYC-BSA will provide maintenance and monitoring in accordance with the terms and conditions outlined in the individual Bank Development Plans (BDP) for each bank site. Monitoring will include data collection for the indicators of success specified for each bank site. Annual monitoring reports for each site will be submitted to the IRT according to the schedule set forth in the UMBI and BDP and will be used to evaluate site performance relative to the criteria established in the UMBI and BDP for each site. Remedial actions to an individual bank site may be necessary during the operational life of the Bank. If the CYC-BSA has followed the MBI and BDP criteria for each bank site, yet performance criteria are not being met; the sponsor will propose remedial actions which IRT will review, comment upon, and approve if they are deemed appropriate, to meet performance criteria while holding additional cost to a minimum.

2.2.7 Accounting Procedure

Woltz and Associates, on behalf of the CYC-BSA, will establish and maintain a banking ledger which documents credits and debits to each proposed bank site account. The bank ledger will record the specific number of available credits for each bank site (e.g., Camp Hoyt) in a spreadsheet format. The annual beginning and ending credit balance for each credit type will be recorded for each site included within the Umbrella Bank. As credits are

sold from each site, a revised credit total will be calculated. The details of each credit transaction will be recorded in the bank ledger and include project name, number of credits and type purchased/sold, a revised credit total, project location, contact information, name of watershed, and the specific bank site (e.g., Camp Hoyt) used to service the project. Each time an approved debit/credit transaction occurs, Woltz and Associates will submit a statement to the permitting agencies.

Woltz and Associates will also generate an annual report to be submitted to all members of the IRT. It will consist of a ledger report and a financial assurance and long-term management funding report. The annual ledger report will show the beginning and ending balance of available credits and permitted impacts for each resource type, all additions and subtractions of credits, and any other changes in credit availability (e.g., additional credits released, credit sales suspended). The financial assurance and long-term management funding report will show the beginning and ending balances, including deposits into and any withdrawals from, the accounts providing funds for financial assurances and long-term management activities. The report will also include information on the amount of required financial assurances and the status of those assurances, including their potential expiration, if applicable.

The sponsor, or its designee, will be responsible for entering appropriate data into the Regulatory In-lieu Fee and Banking Information Tracking System (RIBITS). The Corps will provide access to make such entries.

2.2.8 Long Term Protection

Consistent with the conditions of the UMBI, a conservation easement will be recorded for each bank site included in the Umbrella Bank prior to the sale of any credits to assure preservation of these lands in perpetuity. Copies of documents of long term protection measures for each bank site will be provided to the IRT. Decisions concerning the operational life of the proposed Umbrella Bank, long-term monitoring/management, remedial actions, and financial assurances will be made in accordance with the Mitigation Rule.

2.2.9 Responsibilities of the IRT

The IRT will review and comment on the prospectus, UMBI, and BDP in accordance with the regulations stipulated in the Mitigation Rule.

2.2.10 Responsibilities of the Site Ownership

The Bank Site sponsor agrees to:

- A. Establish and/or maintain the site until:
 - 1. Credits have been exhausted and the debited bank site has satisfied all the conditions stated in the approved MBI and SDP, or
 - 2. Banking activity is voluntarily terminated through written notice by the Bank sponsor with written approval of the IRT.
- B. Develop a long-term stewardship for the property to sustain it in perpetuity.
- C. Submit to the IRT an annual monitoring report describing the condition of the each bank site in relation to the success criteria outlined in the UMBI or the approved amendment to the UMBI for each site and BDP until each bank site has been deemed by the IRT to be successful.
- D. Submit an annual report which includes all debiting and crediting information for each site in the Umbrella Bank as outlined in 3.7 above.
- E. Develop necessary adaptive management plans and/or implement appropriate remedial actions for the bank site in coordination with the IRT in the event the proposed mitigation site fails to achieve success as specified in the final MBI and BDP.

2.3. PROPOSED SERVICE AREA

The bank Service Area (SA) refers to the geographic area within which impacts can be mitigated at a specific bank site, as designated in the UMBI or through modifications to the UMBI as additional bank sites are added. The CYC-BSA has currently identified one site (referred to as “Camp Hoyt” hereafter) that will be included within the proposed Umbrella Bank.

2.4 USE OF CREDITS

All projects or activities regulated under Section 10 of the Rivers and Harbors Act, Section 404 of the Clean Water Act (CWA) and/or Connecticut Department of Environmental Protection (DEP) regulations, and which are located within the primary or

secondary SA of a Bank Site, may be eligible to use the proposed Bank Site as compensatory mitigation for unavoidable impacts.

Credits may be used to compensate for environmental impacts under other programs (Civil Works, Superfund removal and remedial activity, and supplemental environmental projects for State enforcement actions, etc.).

Once the NAE and/or DEP have determined that mitigation for impacts from a permitted project could be addressed by the proposed Bank Site, credits, which have been assigned to this Bank Site, may be bought to address mitigation requirements.

3.0 INITIAL BANK SITE: CAMP HOYT

3.1 SERVICE AREA

Camp Hoyt is located within the Western Uplands physiographic province, which covers the majority of Western Connecticut. Camp Hoyt consists of approximately 170 acres of land that varies from level to rolling topography that is primarily wooded with streams and diverse wetland systems. The topography at Camp Hoyt is generally level near the center of camp, with elevation dropping on all sides of the Training Cabin. The lowest elevation found on-site lies at approximately 475 feet above sea level and is located adjacent to Simpaug Turnpike. The site then rises to a maximum elevation of roughly 550 feet above sea level on the hill behind the Training Cabin. There are several hills and valleys within the site that serve to channel surface and groundwater from upland positions to the nearby streams and wetlands found at the valley floors. There are currently no water rights restrictions imposed on the proposed bank site.

The primary SA of Camp Hoyt is the Saugatuck Watershed (Appendix 3), hydrologic unit code (HUC) 01100006. The Saugatuck Watershed drains portions of Fairfield County in Connecticut. The Saugatuck Watershed services populated areas such as Trumbull, Bridgeport, Norwalk, and Stamford, as well as many smaller towns in the region. Credits generated at Camp Hoyt could be sold to projects that incur wetland and/or stream impacts within the Saugatuck Watershed.

The Housatonic Watershed (Appendix 3) will serve as a secondary bank service area for the proposed stream and wetland mitigation Bank. The Housatonic Watershed (HUC 01100005) drains portions of the counties of Fairfield, Hartford, Litchfield, and New Haven in Connecticut. The Housatonic Watershed services populated areas such as Waterbury, Shelton, and Danbury, as well as many smaller towns in the region. Credits generated at Camp Hoyt could be sold to projects that incur wetland and/or stream impacts within the Housatonic Watershed. The IRT has the final determination of the location and extent of the Bank service area (primary and/or secondary) for each site included in the umbrella mitigation.

Camp Hoyt can offer compensation in the form of preservation, native plant reestablishment, and enhancement (live staking) to compensate for impacts to forested, scrub-shrub, emergent, and headwater stream impacts within the primary SA, the Saugatuck River Watershed (HUC 01100006), for both General Permits and Individual Permits. Additionally, the Camp Hoyt site will provide compensation for General Permit impacts in the Housatonic River Watershed (HUC 01100005) at an increased ratio to be determined in coordination with the IRT.

Portions of Camp Hoyt will require the eradication of invasive plant species, most likely through spraying. Care will be taken to confine spray to the invasive plant species. Additionally, it will be important to reestablish native plant species (trees, shrubs) through plantings of native plant species specifically adapted to conditions found at the proposed bank site. Finally, due to the current erosion of some stream banks found on-site there may be opportunity for stream bank enhancement via the planting of live stakes.

The final mitigation plan for each site will depend on feedback from the Interagency Review Team (IRT).

3.2. EXISTING SITE CONDITIONS

The Camp Hoyt property contains five perennial streams and one intermittent stream that flow through the property. A more detailed stream and wetland map will be developed for the site upon completion of a stream and wetland delineation and subsequent jurisdictional confirmation by the U.S. Army Corps of Engineers. The detailed jurisdictional waters map of the site will be included in the MBI.

Stream 1 is intermittent and begins near the outfall from a forested wetland; however, as it flows down-gradient the stream picks up more drainage, resulting in perennial streams conditions. Stream 1 flows for approximately 1,000 linear feet on the Camp Hoyt property.

An intermittent stream (Stream 2) enters the Camp Hoyt property from the New Pond Farm Carmen Mathews Preserve. This stream has very little flow as it enters the property and remains intermittent until leaving the property along the northern property boundary at Simpaug Turnpike. Stream 2 flows for approximately 1,600 linear feet on the Camp Hoyt property.

Stream 3 is the longest perennial stream found on the Camp Hoyt property. Stream 3 enters the property at the southern property boundary near residential lots and housing. Stream 3 flows through the primitive portion of camp where fields and some primitive scouting structures are located. There are areas along Stream 3 in which the riparian buffer is currently maintained in grass along the left descending bank. Stream 3 flows for approximately 3,250 linear feet on the Camp Hoyt property before leaving the property at the northern boundary where residential housing begins. Streams 4-6 are short, perennial sections of stream that begin near the southwest corner of the property as spring seeps and eventually join Stream 3. Streams 4-6 combine for a total of approximately 1,200 linear feet before joining Stream 3. The condition of all streams on the Camp Hoyt property vary from pristine in most areas to slightly eroded in some areas. There may be opportunities for some enhancements to stream banks and the adjacent riparian buffers. In total, it is estimated there are roughly 7,000 linear feet of stream contained within the Camp Hoyt property.

Camp Hoyt contains a diversity of wetlands including emergent, scrub-shrub, and forested wetlands. Wetland areas were found throughout the Camp Hoyt property. A large forested wetland area was found to the east of the Training Cabin. This forested wetland area channels water into an intermittent/perennial stream that flows off of the property near the eastern property boundary. Additionally, the western portion of the property contains several large wetland systems containing all wetland types (forested, scrub-shrub, emergent). Based on wetland maps obtained from the U.S. Fish and Wildlife Service National Wetland Inventory it is estimated that approximately 11 acres of scrub-shrub and forested wetland are found on the Camp Sequassen site. It is believed that this estimate is low.

Camp Hoyt has a rather large population of invasive species (Japanese barberry, multiflora rose, garlic mustard, honeysuckle, bittersweet) that occur in both upland and wetland positions. The invasive species found on-site are well established, thereby requiring significant effort to eradicate them and re-establish a native tree and shrub population. This will provide an opportunity to enhance the site.

3.4. TECHNICAL FEASIBILITY AND NEED

The technical difficulty associated with the preliminary mitigation plan is relatively low. Reestablishing native vegetation in areas currently colonized by invasive species will likely prove to be the most difficult task. Through annual spraying applications to invasive species found on-site it is expected that the removal of invasive species at Camp Hoyt will be accomplished during the required annual maintenance and monitoring period (5 year minimum). Success in this endeavor appears to be more associated with persistence in eradicating the problem, rather than technical difficulty.

The planting of live stakes along specific sections of stream bank is not considered to be a technically difficult activity. Annual monitoring of the planted live stakes, coupled with additional live stake plantings in areas that may experience difficulty establishing appears to be the primary difficulty associated with this mitigation activity. Success in this endeavor is more related to persistence in monitoring (required), as well as recognizing and addressing the need for supplemental plantings to offset any losses due to mortality, if necessary.

The technical difficulty associated with the preservation of streams, wetlands, riparian buffers, and upland buffers is low. Long term protection of the site through an executed conservation easement at Camp Hoyt is the primary task. It should be noted that this task must occur prior to the release of any credits, therefore any difficulty or risk associated with this task is eliminated prior to the release of credits (stream, wetland).

3.5. PRESERVATION

The Federal Mitigation Rule stipulates that preservation may be used as a means of generating credits when all the following criteria are met: (i) The resources to be preserved provide important physical, chemical, or biological functions for the watershed; (ii) The resources to be preserved contribute significantly to the ecological sustainability of the

watershed. In determining the contribution of those resources to the ecological sustainability of the watershed, the district engineer must use appropriate quantitative assessment tools, where available; (iii) Preservation is determined by the district engineer to be appropriate and practicable; (iv) The resources are under threat of destruction or adverse modifications.

3.5.1. Physical, Chemical, and Biological Functions for the Watershed

The predominantly forested condition of the Camp Hoyt site provides important physical benefits and functions to the watershed including: providing critical habitat and habitat corridors for many species, providing thermal protection (shade) for streams and wetlands, reducing erosion, and reducing sediment load in local waterways.

The resources at the Camp Hoyt site provide important chemical benefits and functions to the watershed including plant uptake of nutrients and pollutants that may enter the site from nearby residential dwellings, a reduction in nutrient and pollutant loading within the local waterways, and reduction in the formation of harmful algal blooms that are detrimental to watershed health.

The resources at the Camp Hoyt site provide important biological benefits and functions to the watershed including filtering of sediment to prevent sedimentation of waterways, protection of in-stream habitat, protection of important habitat for upland, wetland, and transitional species, and providing a carbon source for many important micro and macro species.

By establishing Camp Hoyt as a mitigation bank site, the threat to these important physical, chemical, and biological functions are greatly reduced, if not completely eliminated, thereby benefitting the overall watershed.

3.5.2. Ecological Sustainability of the Watershed

The ecological sustainability of a watershed is closely tied to the level of development occurring within that watershed, the degree of fragmentation of the natural landscape, and the condition of the many natural communities that make up the watershed. Fairfield County, Connecticut is the second fastest growing county in the state. Despite this fast growth, the Saugatuck watershed is the healthiest watershed in southwestern Connecticut, according to the *Saugatuck River Watershed Partnership (2005)*. It will be a challenge to

protect the health and ecological sustainability of the Saugatuck watershed in the future as growth continues.

The protection of streams, wetlands, riparian buffers, and upland buffers at Camp Hoyt will have a beneficial effect on the Saugatuck watershed. By protecting these natural features found at Camp Hoyt in perpetuity it will be possible to permanently eliminate the possibility of development and subsequent fragmentation of the site. This will, in turn, provide an ecological sanctuary for the many species that utilize the watershed. It will also promote stream and wetland stability, which ultimately benefits water quality within the watershed.

3.5.3. Threats to the Resource

The Camp Hoyt site is located amid a thriving residential community. The area surrounding Camp Hoyt contains numerous multi-million dollar homes with large lots. There has been enormous pressure to sell the Camp Hoyt property for the purpose of residential development. This is clearly a threat to the site and natural resources that occupy it.

3.5.4. Permanent Protection of the Site

The areas of Camp Hoyt that are utilized for the purpose of mitigation banking will be protected in perpetuity through a conservation easement that will be held by an acceptable third party (e.g., The Nature Conservancy, land trust, town). The portions of the site that are not included in the mitigation bank may or may not be included in a conservation easement. Such a decision will be made in the future.

3.6. PRESENCE OF THREATENED AND ENDANGERED SPECIES

The Connecticut Department of Environmental Protection (DEP) endangered species maps were searched for the presence of rare, threatened, and endangered species found in and around the proposed bank site. There were endangered species shown for the Camp Hoyt site, as shown in the map in Appendix 2. The DEP endangered species maps database does not specify what species are found to be endangered at given locations, therefore it was necessary to request a report from the DEP-Wildlife Division.

The request was submitted and a report was provided by the DEP-Wildlife Division in which a one page detailed account of existing rare, threatened, endangered, or species of concern are identified on or near the Camp Hoyt site. The report (Appendix 2) identifies several species of concern found in the vicinity of Camp Hoyt. According to the report there are two herptile species of concern found on or near the project site and include the Jefferson salamander (*Ambystoma jeffersonium*) and wood turtle (*Glyptemys insculpta*). Additionally, two invertebrate species have been found in the vicinity of Camp Hoyt and include the state threatened Appalachian Blue butterfly (*Celastrina neglectamajor*) and a species of special concern, lymnaeid snail (*Fossaria rustica*). Finally, the Broad-winged Hawk (*Buteo platypterus*), a species of special concern, has been documented in the vicinity of this project site. Specific habitat requirements of each species can be found in the DEP report (Appendix 2).

3.7. LAND CONSERVATION IN VICINITY OF SITE

The presence of nearby land conservation is beneficial when considering a site as a potential mitigation bank site because larger, more contiguous conservation lands are considered to be more effective ecologically when compared to many smaller non-contiguous conservation lands.

Land conservation can be achieved through various entities including local land trusts, towns, The Nature Conservancy, Department of Environmental Protection, etc. For the purpose of this prospectus it was important to review the proposed mitigation site with respect to nearby or adjacent conservation lands.

Camp Hoyt, located in West Redding, CT is situated near or adjacent to numerous conservation lands (Appendix 4). The Redding Land Trust is the second oldest land trust in the state and boasts approximately 1,600 acres of land in conservation. Additionally, Devil's Den Preserve is located nearby and contains approximately 1,750 acres of conservation land, the largest tract of protected land in densely developed Fairfield County. Topstone Park (274 acres), Saugatuck Falls Natural Area (312 acres), and Gallows Hill Natural Area (73 acres) are all state or locally owned lands that are set aside for conservation and located within approximately one mile of Camp Hoyt. The Seth Low Pierrepont State Park Reserve contains 313 acres and is located approximately 3 miles from Camp Hoyt. The Wooster

Mountain State Park has 800 acres of preserved land and is located within roughly 3-4 miles of Camp Hoyt. Finally, the New Pond Farm, a year round environmental education facility, boasts 102 acres of land located adjacent to the proposed mitigation site at Camp Hoyt.

The Camp Hoyt site is situated within close proximity or located adjacent to significant acreage of conservation lands. By including Camp Hoyt into the umbrella Bank it would be possible to further protect important natural resources within the Saugatuck watershed.

APPENDIX 1: CAMP HOYT

Approximate Site
Boundary

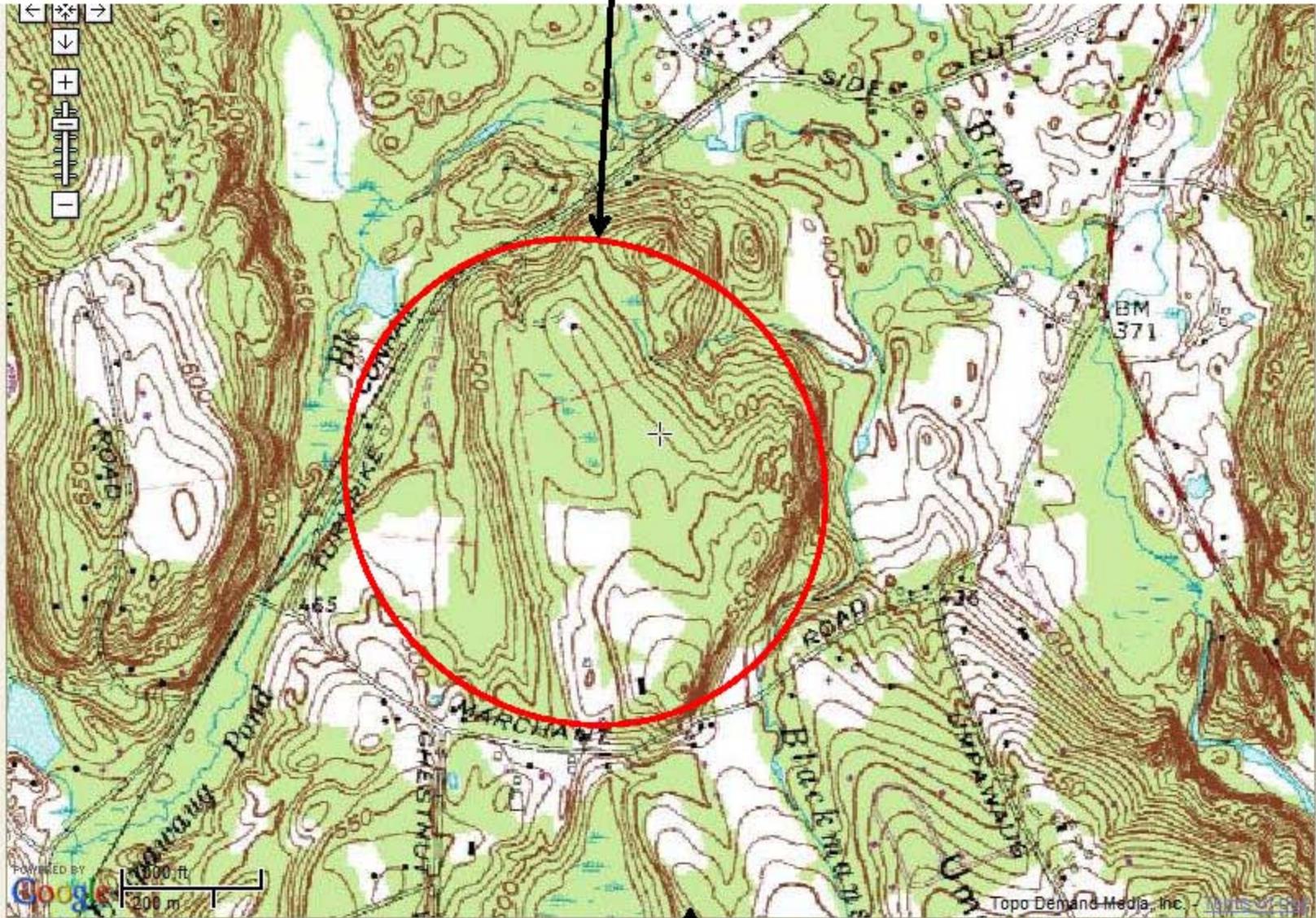


Center: 41.3182°N 73.4357°W
Elevation at center: 558 feet (170 meters)



Display format:
Decimal Degrees

Approximate Site
Boundary



Center: 41.3182°N 73.4357°W
Elevation at center: 558 feet (170 meters)



Display format:

Decimal Degrees

**APPENDIX 2: THREATENED AND ENDANGERED SPECIES MAP AND
REPORT**

Natural Diversity Data Base Areas

REDDING, CT

August 2010

 State and Federal Listed Species & Significant Natural Communities

 Town Boundary

NOTE: This map shows general locations of State and Federal Listed Species and Significant Natural Communities. Information on listed species is collected and compiled by the Natural Diversity Data Base (NDDB) from a number of data sources. Exact locations of species have been buffered to produce the general locations. Exact locations of species and communities occur somewhere in the shaded areas, not necessarily in the center.

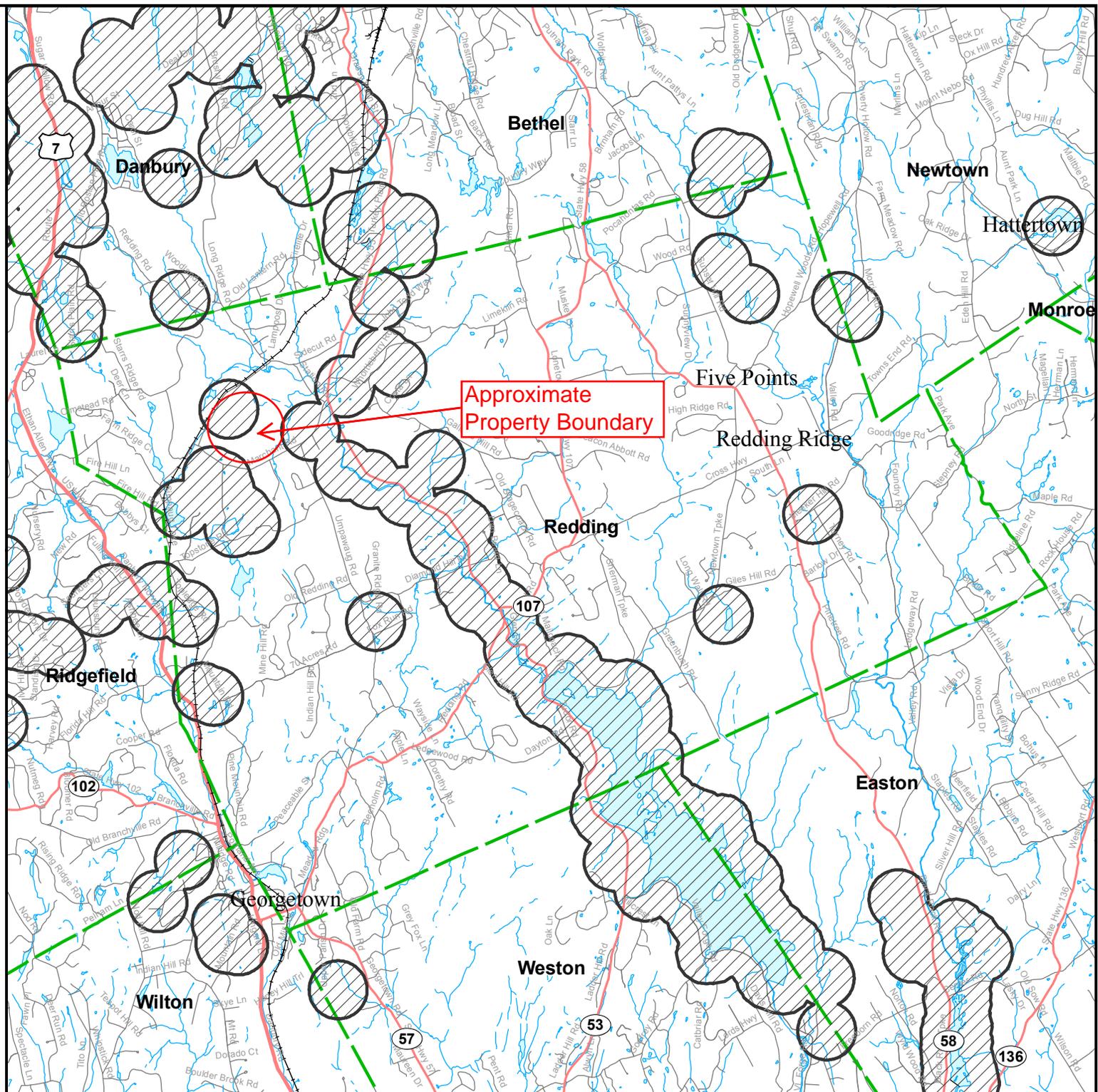
This map is intended for use as a preliminary screening tool for conducting a Natural Diversity Data Base Review Request. To use the map, locate the project boundaries and any additional affected areas. If the project is within a shaded area; or overlapping a lake, pond or wetland that has shading; or upstream or downstream (by less than 1/2 mile) from a shaded area, the project may have a potential conflict with a listed species. For more information, complete a Request for Natural Diversity Data Base State Listed Species Review form (DEP-APP-007), and submit it to the NDDB along with the required maps and information. More detailed instructions are provided with the request form on the DEP website.

To view street labels, use the PDF Layers tab on the left. Expand the Layers and use the "eye" icons to change visibility.

QUESTIONS: DEP, Bureau of Natural Resources, Wildlife Division
Phone (860) 424-3011
www.ct.gov/dep/nddbrequest



STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
79 Elm Street
Hartford, CT 06106-5127





STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION
FRANKLIN WILDLIFE
391 ROUTE 32
N FRANKLIN CT 06254
860-642-7239



December 10, 2010

Mr. David Tribble
Watershed Strategies
10468 Fortune Ridge Road
Bent Mountain, VA 24059

re: Camp Hoyt, 288 Simpaug Turnpike, West Redding, CT

Dear Mr. Tribble:

Your request for information was forwarded to me by the DEP Natural Diversity Database. There are two Species of Special Concern herptile species: Jefferson salamander (*Ambystoma jeffersonium*) and wood turtle (*Glyptemys insculpta*), 2 invertebrate species: the state threatened Appalachian Blue butterfly (*Celastrina neglectamajor*) and a species of special concern, lymnaeid snail (*Fossaria rustica*) and a species of special concern Broad-winged Hawk (*Buteo platypterus*) that have been documented in the vicinity of this project.

Broad-winged hawks are inconspicuous forest nesting hawks in deciduous forests. Their large bowl nests are often old crow or squirrel nests.

Jefferson salamanders prefer steep, rocky areas with rotten logs and a heavy duff layer. They are found in or near deciduous forests and their breeding pools may be in hemlock groves or grassy pasture ponds. Surveys should be done if the area has any woods with rotten logs and duff layers, breeding pools or ponds. They actively breed from February – April and should be surveyed for from February - April by rock and log turning, night lighting or looking along any roads at night.

Wood turtles require riparian habitats bordered by flood plains, woodlands or meadows. Their summer habitat includes pastures, old fields, woodlands, power line cuts and railroad beds bordering or adjacent to streams ,and rivers. They hibernate submerged in tangled tree roots along the river banks or in deep pools from November 1 to April 1. These species have recently been negatively impacted by the loss of suitable habitat.

The preferred habitat of the Appalachian blue butterfly is riparian in hardwood forest or mixed forest with the food plant Black cohosh (*Cimicifuga racemosa*). Pesticide spraying while the food plant is in flower (May – July) would impact this species. It is recommended that work be done during the food plants non-flowering period May 1 through July 31 to avoid impacts.

The lymnaeid snail (*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.

The Wildlife Division cannot provide detailed comments as your work description did not provide details as to what activities the stream and wetland mitigation bank would entail nor what invasive species are being targeted and how they would be removed. 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. 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. Consultation with the Wildlife Division should not be substituted for site-specific surveys that may be required for environmental assessments. If the proposed project has not been initiated within 12 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 or write. Thank you for the opportunity to comment.

Sincerely,

Julie Victoria
Wildlife Biologist

cc: NDDB – 201006326

APPENDIX 3: BANK GEOGRAPHIC SERVICE AREA MAP

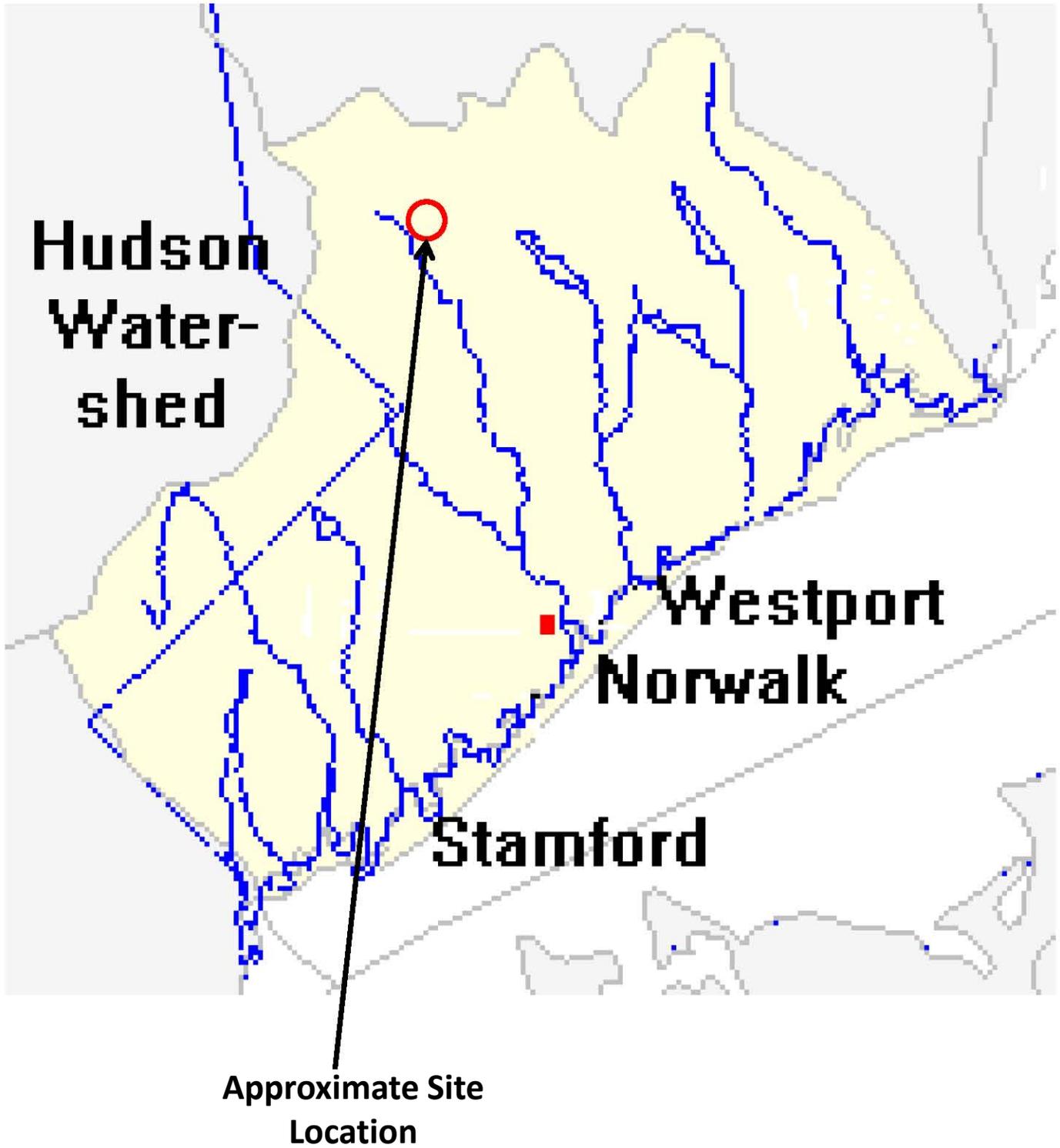


Housatonic Watershed
(in green shading)

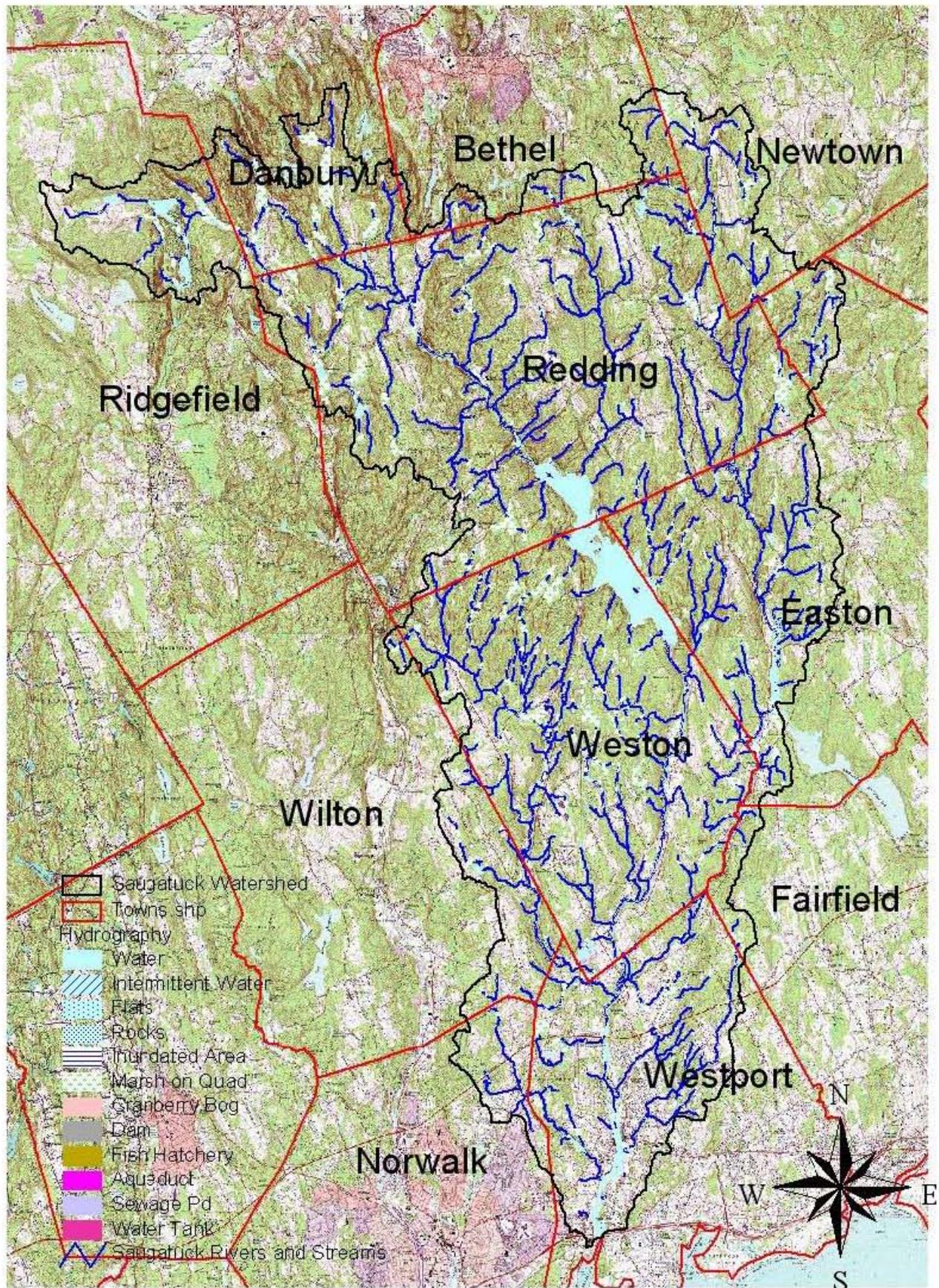
Approximate site
location

Saugatuck Watershed

Saugatuck River Watershed (HUC 01100006)

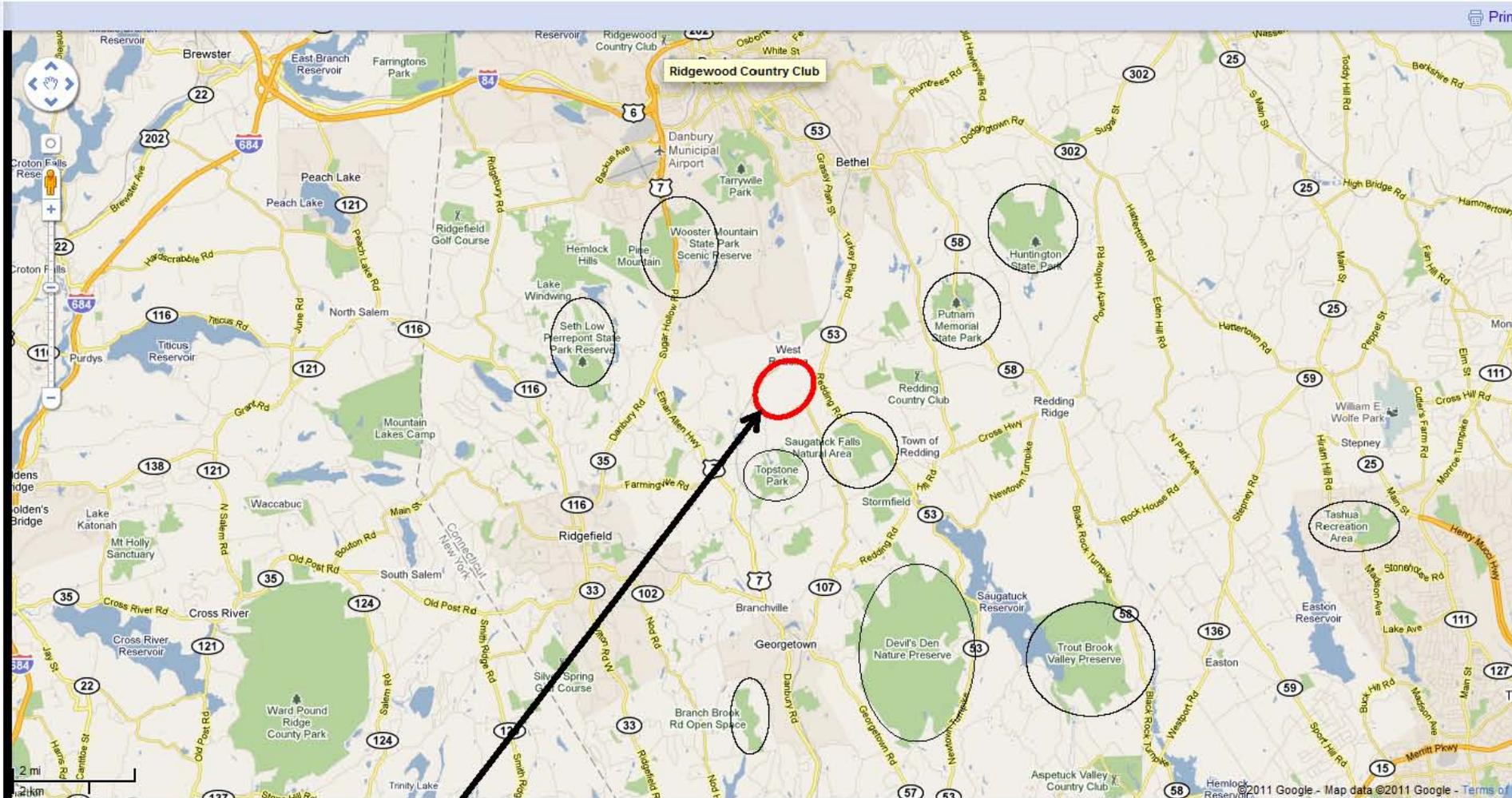


Towns in The Saugatuck River Watershed



APPENDIX 4: CONSERVATION LANDS NEAR CAMP HOYT

Nearby Conservation Lands



Approximate Site Boundary