

# Town of Merrimack, NH



## Horse Hill Nature Preserve Definitive Plan

Endorsed by the Consensus Building Group on  
June 19, 2006

---

## ACKNOWLEDGEMENTS

### Horse Hill Nature Preserve Consensus Building Group

**Shannon Barnes**, HHNP Master Plan Committee, HHNP Ad-Hoc  
**Terry Bernhardt**, President - MYA  
**Roger Blais**, HHNP Master Plan Committee, Right Riders (ATV)  
**Amanda Boerner**, HHNP Master Plan Committee, Horseback Rider, Abutter  
**Chris Christensen**, HHNP Master Plan Committee, HHNP Ad-Hoc, Parks & Recreation Committee  
**Janet Cormier**, HHNP Master Plan Committee, HHNP Ad-Hoc, Chair - Parks & Recreation Committee  
**Newton Coryell**, HHNP Master Plan Committee, HHNP Ad-Hoc, Merrimack Sno-Buds  
**Rick DiOrio**, President - Merrimack Sno-Buds  
**Nelson Disco**, HHNP Master Plan Committee, HHNP Ad-Hoc, Chair - Planning Board  
**Robyn Goinsalvos**, Horseback Rider, Abutter  
**John Hall**, Watanic Bowmen's Club  
**Debra Huffman**, Chair- HHNP Master Plan Committee, HHNP Ad-Hoc  
**Connie Kreider**, HHNP Master Plan Committee, HHNP Ad-Hoc, Heritage Commission, Abutter  
**Bob L'Heureux**, Hunter Liaison  
**Karen Mattor**, HHNP Master Plan Committee, HHNP Ad-Hoc, Conservation Commission  
**Denise O'Dwyer**, HHNP Master Plan Committee, HHNP Ad-Hoc  
**Bette Philo**, Abutter  
**Andy Powell**, HHNP Master Plan Committee, HHNP Ad-Hoc, Chair - Conservation Commission  
**Linda Reid**, Abutter  
**Ruth Roulx**, HHNP Master Plan Committee, HHNP Ad- Hoc, Chair- Heritage Commission,  
Parks & Recreation Committee  
**Mike Ruggiero**, HHNP Master Plan Committee, HHNP Ad-Hoc, MYA  
**Tim Tenhave**, HHNP Master Plan Committee, Chair- HHNP Ad-Hoc  
**Tom Vaillancourt**, Mountain Biking  
**Harry Watt**, Mountain Biking  
**Harold Watson**, HHNP Master Plan Committee, HHNP Ad-Hoc, Abutter  
**Helynne Wenz**, HHNP Master Plan Committee, HHNP Ad-Hoc

### Presenters/Field Experts

Todd Szewczyk, NH Fish and Game Department - Game Warden  
Tom Kokx, Thomas Kokx Associates  
Darrel Covell, UNH Cooperative Extension Service  
Steve Keach, Keach-Nordstrom Associates, Inc.

### Nashua Regional Planning Commission

Kerrie Diers, NRPC Assistant Director  
Steve Schaffer, NRPC GIS Manager  
Karen Baker, NRPC Administrative Assistant

**TABLE OF CONTENTS**

- I. EXECUTIVE SUMMARY .....1
  - A. OVERVIEW OF PLAN .....1
- II. INTRODUCTION .....3
  - A. BACKGROUND .....3
  - B. CONSENSUS BUILDING .....3
  - C. DEFINITIVE PLAN PROCESS .....4
    - i. Convene Consensus Building Group .....4
    - ii. Determine Objective Criteria .....5
- III. CBG DEFINITIVE PLAN AGREEMENT.....9
  - A. ACCESS & PARKING.....11
  - B. ARCHERY TARGET SHOOTING EVENTS.....14
  - C. OUTDOOR EDUCATION .....16
  - D. CONSERVATION .....18
  - E. SNOWMOBILE TRAILS .....20
  - F. PROPOSED ATV TRAILS .....22
  - G. HUNTING.....24
  - H. TRAILS.....26
  - I. ATHLETIC COMPLEX.....28
- IV. MANAGEMENT RECOMMENDATION .....32
  - A. WASSERMAN STYLE.....32
  - B. NEW COMMITTEE .....32
  - C. CURRENT OPTION .....32
  - D. IMPLEMENTATION .....33
- V. MAPPING EXERCISES SUMMARY .....35
  - A. MAPPING EXERCISE #1 – PREFERRED USE LOCATIONS.....35
  - B. MAPPING EXERCISE #2 – ACCOMMODATING ALL OF THE USES.....36
  - C. MAPPING EXERCISE #3 – DRAFTING THE FINAL SITE PLAN .....37
  - D. MAPPING EXERCISE #4 – THE CONSENSUS AGREEMENT.....38

**APPENDICES**

- Appendix A List of documents on file with Merrimack Community Development Department
- Appendix B Reference Maps

**MINORITY REPORTS CONCERNING THE ATHLETIC COMPLEX**

- A. In Opposition to the Athletic Complex A Minority Positioning Report
- B. Horse Hill Nature Preserve Minority Opinion – Habitat Impact Study

## LIST OF ACRONYMS

ATV	All-Terrain Vehicle
BOS	Board of Selectmen
CBG	Consensus Building Group
CIP	Capital Improvements Program
DEM	Digital Evaluation Models
DPW	Department of Public Works
EPA	Environmental Protection Agency
GIS	Geographic Information System
HSI	Hayner/Swanson, Inc.
HHNP	Horse Hill Nature Preserve
MCC	Merrimack Conservation Commission
MYA	Merrimack Youth Association
NRPC	Nashua Regional Planning Commission
NH DES	New Hampshire Department of Environmental Services
OHRV	Off-Highway Recreational Vehicle
P&R	Parks and Recreation
PSNH	Public Service Company of New Hampshire
ROS	Recreational Opportunity Spectrum
USGS	United States Geological Survey

## I. EXECUTIVE SUMMARY

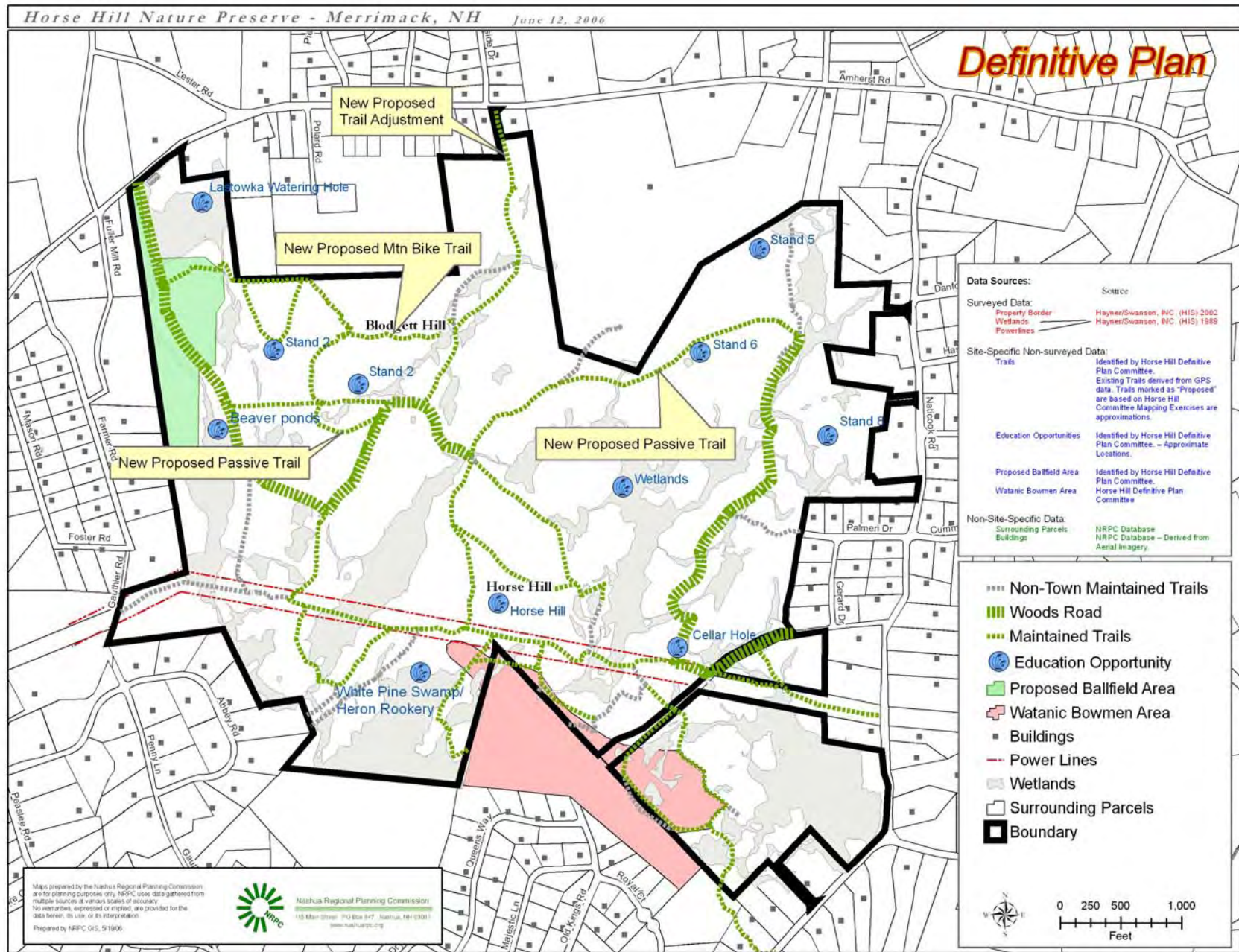
### A. OVERVIEW OF PLAN

The *Horse Hill Nature Preserve Definitive Plan (Definitive Plan)* is a document that accomplishes several goals: it shows the proposed locations of the uses that were approved by the Board of Selectmen in the *Horse Hill Nature Preserve Master Plan (Master Plan)*; it identifies issues and considerations for the development of each of the uses; and it documents the consensus building process that a group of Merrimack Citizens engaged in to develop the recommendations for the use and management of the property.

The *Master Plan* was the result of considerable evaluation and discussion regarding the appropriateness of the possible uses that could be developed on the site. Therefore, the Consensus Building Group (CBG) was not charged with reviewing the policy decisions already approved by the Board of Selectmen, but rather with identifying the best possible locations for all of the uses approved in the *Master Plan*. The CBG met over a period of seven months to review the natural resource data, topography and other environmental characteristics of the site. The CBG heard presentations from experts ranging from wildlife specialists to the regional Fish and Game Officer, and participated in four mapping exercises to create the final *Definitive Plan*. The map on the next page shows the site plan that the CBG developed through the process.

- **Archery Target Shooting** - The area for archery target shooting (occasional organized events) is located adjacent to the Watanic Bowmen's Club.
- **Athletic Complex** - The area for the athletic complex is located in the northwest corner of the parcel near Amherst Road.
- **Conservation of Open Space** - All of the area (other than that for the athletic complex) is to be reserved as conservation/open space
- **Cross country skiing and snowshoeing** - The general trail network should be multi-purpose and accommodate these seasonal uses
- **Hiking** - As part of the general trail system, hiking trails are to be integrated throughout the property using the existing trail network as a foundation
- **Horseback Riding** - Horseback riding trails should be integrated with the general trail network
- **Hunting** - Hunting is to continue on the site as it has in the past. Educational efforts will target hunter and abutter awareness of the 300' buffer required by State Law.
- **Mountain biking** - Mountain biking trails should be integrated into the general trail network
- **Outdoor Education Programs** - Points of educational interest should be developed into an educational program
- **Snowmobiling** - This seasonal use is an overlay trail system limited to the powerline corridor and a central loop trail
- **All-Terrain Vehicles** - Are not permitted at this time, but a limited trail system was proposed should this policy change in the future

The CBG recommends that the Merrimack Conservation Commission (MCC) and the Parks & Recreation Department (P&R) jointly manage the property. The MCC should be responsible for managing the conservation/open space area of the property, while the Parks & Recreation should oversee the area reserved for the athletic complex. Until the athletic fields are constructed, the Parks and Recreation Department should, in consultation with MCC, manage the area reserved for the athletic complex in accordance with the recommendations listed in the *HHNP Master Plan* and the *Forest Management and Ecological Assessment*.



## II. INTRODUCTION

### A. BACKGROUND

This document presents the *Horse Hill Nature Preserve Definitive Plan (Definitive Plan)*, a blueprint for the long-term development, conservation, use and management of the Horse Hill Nature Preserve (HHNP). The *Definitive Plan* is grounded in the use and policy recommendations adopted by the Town of Merrimack Board of Selectmen in the *Horse Hill Nature Preserve Master Plan (2003)* and is guided by the environmental principles and best management practices set forth in the *Horse Hill Nature Preserve Forest Management Plan and Ecological Assessment (2004)*.

The *Definitive Plan*, at its most basic concept, is a site map that shows the proposed locations for the uses approved in the *HHNP Master Plan*. It also, however, describes the process that a group of Merrimack citizens used to discuss and evaluate recommendations that will guide the future use and management of an important Town resource. The group of citizens was charged with evaluating the site characteristics and developing recommendations for where the uses should be located on the site. The group looked at areas for parking and access, athletic fields and associated improvements, significant historic features, significant wildlife habitat areas and identified existing and proposed trails by type and function. In addition to creating an overall action plan for each proposed use, the group also was charged with recommending a management structure for overseeing the property and the long-term implementation of the *HHNP Master Plan*.

It is important to recognize that the *Definitive Plan* is not a plan in the traditional sense of a master plan, but is rather the result of many discussions by a diverse group of citizens regarding the ways in which the Horse Hill Nature Preserve should be used and preserved. It represents the best efforts of the group to achieve consensus.

### B. CONSENSUS BUILDING

Consensus building is a method of problem solving in which a group utilizes a facilitator to help it work through difficult or complex issues to reach a conclusion or agreement. It is a way of making decisions that allows full exploration and discussion of the problems and is an alternative to the traditional *Robert's Rules of Order* or other familiar hierarchical decision making methods (majority vote or top-down decisions).<sup>1</sup>

The consensus building process allows various stakeholders (parties with an interest in the issue) to work together to develop a mutually acceptable solution. In a consensus building process, all stakeholders are given the opportunity to express their own interests and needs, and to then participate in a cooperative search for information and solutions that provide an acceptable solution to other members of the group. Often, a major outcome of a consensus building process is that new, mutually advantageous approaches are developed, which enable the participants to agree on a final outcome. Consensus building is based on the following principles:

- Active Participation by All Stakeholders
- Acknowledgment of Objective Facts
- Recognition of the Validity of Each Participant's interest
- Collaborative Identification of Alternatives

---

<sup>1</sup> *The Consensus Building Handbook*, Lawrence Susskind, Sarah McKearnan, Jennifer Thomas-Larmer, editors, Sage Publications, Inc. 1999.

- Consensus Decision Making
- Approval of the Agreement by Stakeholders
- Patience with the Consensus Building Process
- Neutral Facilitation

The Town of Merrimack determined that a consensus building process was needed to ensure that the many diverse interests represented in the *HHNP Master Plan* were afforded the opportunity to provide input into the *Definitive Plan*. The Town contracted with the Nashua Regional Planning Commission (NRPC) to facilitate the development of the *Definitive Plan*. The NRPC team included Kerrie Diers, NRPC's Assistant Director, as facilitator, Tom Kokx of Thomas Kokx Associates, an outdoor recreation planner, Steve Schaffer, NRPC's GIS Manager, a Geographic Information System (GIS) specialist, and Karen Baker, NRPC's Administrative Assistant, to create a record of the proceedings.

### C. DEFINITIVE PLAN PROCESS

The consensus building process that NRPC used to facilitate the creation of the *Horse Hill Nature Preserve Definitive Plan* consisted of:

- Convening a Consensus Building Group (CBG);
- Developing the "objective criteria" by which each use was evaluated;
- Conducting four mapping exercises; and
- Drafting a management recommendation for the property.

In this process, NRPC staff served as a neutral facilitator and not as a participant in the group. It is important to note that the CBG directed the creation of *Definitive Plan*.

#### i. Convene Consensus Building Group

The first step in a consensus building process was the organization of the CBG. The CBG was organized so that all potential stakeholders were invited to participate and provide input. In this process, the Horse Hill Nature Preserve Ad hoc Committee served as the foundation of the CBG for the development of the *Definitive Plan*, and additional members were invited to represent the particular interests that were identified in the *HHNP Master Plan*.

An initial meeting with Horse Hill Nature Preserve Ad Hoc Committee was held on November 7, 2005 to review the proposed process and to develop a list of participants who should be invited to form the CBG. In addition to the members from the Ad Hoc Committee, the suggested list of potential participants included representatives from:

- Watanic Bowmen's Club
- Parks Committee
- Merrimack Youth Association
- Department of Public Works (DPW)
- Conservation Commission
- Horseback riders
- Hunters
- Representative from the NH Fish and Game Department
- Mountain bikers
- Outdoor Education Professionals
- SnoBuds Snowmobiling Club
- Right Riders All-Terrain Vehicle (ATV) Club



- Abutters
- Heritage Commission

Invitations to the organizational meeting of the CBG were sent out to the list of 40 potential members, and a general invitation to the public was advertised on the Community Access cable channel as well as in the local paper.

The second step in a consensus building process was the organizational meeting of the group. On December 5, 2005, members of the CBG group convened for an organizational meeting to begin the *Definitive Plan* process. During the session, the group received some basic training on the purpose and methods of consensus building and the consensus building principles that are described above.

At the organizational meeting, NRPC explained that the consensus building process should lead to the development of a consensus agreement, and ultimately to the preparation of the *Definitive Plan*. The members of the CBG were asked to provide their input on the process and meeting schedule and to agree to participate in it as discussed.

The CBG members received copies of the *HHNP Master Plan* and the *Horse Hill Nature Preserve Forest Management Plan and Ecological Assessment* to become familiar with the goals, objectives and recommendations set forth in the documents.

## ii. Determine Objective Criteria

The *HHNP Master Plan* includes a list of ten uses that were recommended by the Master Plan Committee and adopted by the Selectmen as appropriate for the site. One additional use, all-terrain vehicles, was not recommended as an appropriate use at this time, but might be permitted in the future if certain criteria are met. Since the recommendations for various possible uses for the HHNP had been the subject of intense and considerable discussion within the community over the last several years, it was not within the charge of the CBG to reconsider the appropriateness of recommended uses. Rather, the CBG was charged with locating sites for the recommended uses based on a set of objective criteria and analysis.

Prior to analyzing the site, the CBG needed to identify the unique requirements of each use and quantify them to the extent possible. Mr. Kokx provided technical background information about a process used by the US Forest Service and other outdoor recreational planners called the Recreational Opportunity Spectrum (ROS) which looks at the biological, social, managerial, physical and technical attributes of each potential use.

Using the ROS parameters and the Goals, Objectives and Recommendations from the *HHNP Master Plan*, the CBG divided into two smaller groups to review and discuss the attributes of each use. Each group addressed the following questions:

- What are the requirements of this particular use?
- What other factors need to be considered for this use?
- Which uses is this use compatible with?
- Which uses is this use not compatible with?

The summary of the discussions from each group are on file with the Community Development Department. During the session, the groups not only identified the needs and requirements of each particular use, but they also identified potential conflicts between uses.

The Objective Criteria was developed from the working meeting, and was reworded and refined over the next two meetings. On January 30, 2006, the CBG voted unanimously to approve the following Objective Criteria, which was used to analyze the site characteristics and the use locations in the *Definitive Plan*.

**Objective Criteria for Suitability Analysis**  
**Approved January 30, 2006**

**General Considerations**

- Meet Town vision for recreation opportunities as outlined in Town Master Plan
- Meet project goals & objectives as outlined in HHNP Master Plan
- Complement/Supplement existing uses on site and in Town
- Maintain integrity of 500 acres minimum of unfragmented land (especially w/ respect to known wildlife corridors)
  - Minimize roads, large fields, or other facilities that would break up parcel.
- Minimize impact to biological attributes (Important / critical wildlife habitat as identified on the Ecologically Sensitive Areas map and on the NH Fish and Game Wildlife Maps [See the Conservation Map on page 19]).<sup>2</sup>
- Enforce wetland violations
- Minimize impact to known historic / cultural sites
- Meet all applicable State Rules and Regulations (and Town Ordinances)
- Location minimizes construction cost & lowers long term maintenance needs

**Considerations for Access**

- Parking lots (Primary)
  - Minimize impacts to jurisdictional wetlands
  - Minimize impact to significant wildlife habitat impacts
  - Locate on slopes <10% (<5 / 6% best)
  - Accessible from Town road (good sight distance)
  - Locate w/ reasonable proximity to Town road
  - Create minimum impact on neighborhoods (traffic/safety/noise/etc)
  - Provide adequate access to uses on parcel
  - Adequate area available for construction
- Access points without or that have minimum parking
  - Minimal slope on access trail (<8%)
  - Minimize impact to jurisdictional wetlands
  - Serve adequate level of use (neighborhood or dwelling clusters)
  - Can be controlled / minimum law enforcement concerns

**Archery (organized events)**

- Adjacent / abuts Watanic Bowmen's Club
- Provides control opportunity / safe buffer (For placement of targets, signing and controlling access, monitoring, and isolating area as appropriate)

<sup>2</sup> The Ecologically Sensitive Areas map can be found on page 46 of the Forest Management Plan and the Ecological Assessment. For information on the NH Fish and Game Departments Wildlife Maps, refer to [www.wildlife.state.nh.us](http://www.wildlife.state.nh.us)

**Athletic Complex (50 Acre Max.)**

- Area will support athletic fields with parking
  - Meets field size requirements
  - Provides parking lot size requirements
  - Additional area for support facilities (buildings)
- Area accessible by road (22' wide / max 8% slope)
- Within reasonable proximity to Town road
- Relatively flat area for construction (<10%)
- Incompatible with power lines
- Minimizes impact to jurisdictional wetlands
- Minimize impact to important / critical wildlife habitat
- Room for proper field orientation (north - south)
- Opportunity for:
  - Adequate buffer / abutters
  - Water source
  - Electricity source
  - Sanitary facilities

**Conservation**

- A minimum of 500 unfragmented acres (no road open to the public)
- Maintain biodiversity
- Maintain wildlife habitat

**Trails (General Considerations for all trails)**

- Build trails to Town guidelines (see DPW trail guidelines)
- Minimize impact to jurisdictional wetlands (provide bridges/ implement proper construction, techniques, etc.)
- Minimize impact to important / critical wildlife habitat as identified on the Ecologically Sensitive Areas Map and on the NH Fish and Game Wildlife Maps
- Minimize erosion of steeper slopes (>10%)
- Loop trail network desired
- Base designation of trails for a specific use on known (probable) access points for that use
- Provide for adequate distribution of access points around parcel

**Hiking / Ski Touring / Snowshoe)**

- Range of (opportunity for) access points
- Connection to other trail system(s) desired
- Location / layout promotes accessible trail
- Provide for (some) separate cross-country & snowshoe trails
- Provide mixed terrain / vegetation

Note: Snowshoe activities can be in general forest zone (fewer designated trails)

**Trail (Horseback)**

- Use on designated trails only
- Avoid deer yarding areas

Note: Absence of trailer parking not a constraint

**Trail (Mountain Bike)**

- Use on designated trails only
- Some one-way loop trails desired
- Provide variety of terrain / elevation / rocky trails

Note: Mountain bike trails could be designed as an entirely new trail system

**Trail (Snowmobile)**

- Use on designated trails only
- Avoid deer yarding areas
- Provide buffer (noise) for abutters

Note: Could potentially use same trail system as mountain bike (and perhaps horseback)

**Hunting**

- State law requires a 300 feet buffer from any permanently occupied structure
- Investigate future additional buffering for proposed uses such as athletic fields and designated education areas as needed
- Investigate option of additional restrictions such as time of day or season

**Outdoor Education**

- Identify best locations for education opportunities (wildlife habitat / observation, forest & natural resource mgt. / etc.)
- Provide easy access opportunities
- Provide for bus parking

Note: Coordinate opportunities with Wasserman Park Facilities

**ATV Trails**

- Use on designated trails
- Provide buffer (noise) for abutters
- Consider seasonal restrictions as appropriate

Note: This use is currently not recommended as an allowed use in the HHNP Master Plan until certain conditions are met (see section 8.3.1)

### III. CBG DEFINITIVE PLAN AGREEMENT

At the organizational meeting of the CBG, the group received training about the consensus building process and the definition of consensus. The CBG agreed that when it came time for decision making, the group would use a “modified consensus” approach. This approach strives for unanimity, but recognizes that where a unanimous vote is not possible, the CBG would endorse a proposal that the entire group could support, or “live with,” and allow minority reports to be included in the final document.

In order to facilitate the consensus agreement discussion, NRPC introduced a *Gradients of Agreement Scale* (Agreement Scale) for the CBG to use as a tool to make decisions. The Agreement Scale presents a spectrum of agreement from a rating of 1 (endorsement) to 8 (veto)<sup>3</sup>. Using the Agreement Scale allowed members of the CBG to express their individual level of support for a particular proposal. In this way, members could, for example, endorse an idea within a range of affirmative votes from total agreement to less than enthusiastic support. Collectively, the tally of each vote indicates the level of support or consensus among the group. The CBG agreed that consensus would constitute the majority of votes on either side of the “4 - 5” level.

#### Gradients of Agreement Scale

1	2	3	4	5	6	7	8
Endorsement <i>“I like it”</i>	Endorsement with a minor point of contention  <i>“Basically I like it”</i>	Agreement with Reservations  <i>“I can live with it”</i>	Abstain  <i>“I have no opinion”</i>	Stand Aside  <i>“I don’t like this, but I don’t want to hold up the group”</i>	Formal Disagreement  <i>“I want my disagreement noted in writing, but I’ll support the decision”</i>	Formal Disagreement, with request to be absolved of responsibility for implementation  <i>“I don’t want to stop anyone else, but I don’t want to be involved in implementing it”</i>	Block  <i>“I veto this proposal”</i>

The CBG participated in four mapping exercises between January and April, 2006, during which the group reviewed data maps, heard presentations from group members, experts and the public, and discussed the Objective Criteria for each use. The CBG also recommended a management entity, identified additional issues that should be addressed in the future, and discussed potential resources available to the management entity in implementing the plan (see Section V of this document for a summary of the mapping exercises).

The mapping exercises focused on the preparation of the final comprehensive map and drafting of the consensus agreement. Using the mapping and discussion from the mapping exercises, NRPC created a final map for each individual use as well as a composite map that shows how all the use locations overlap on the site.

<sup>3</sup> *The Facilitator’s Guide to Participatory Decision Making*, Sam Kraner et al, New Society Publishers, 1996.

The following section represents the *Definitive Plan* recommendation by the CBG. Each use is presented individually with accompanying maps and text, with the Definitive Site Plan presented as the final map in the series.

1. Access and Parking
2. Archery Target Shooting Events
3. Outdoor Education
4. Conservation
5. Trails
6. Snowmobile Trails
7. Preferred ATV Trails
8. Hunting
9. Athletic Complex
10. Definitive Plan

## A. ACCESS & PARKING

### **Objective Criteria: Considerations for Access**

- Parking lots (Primary)
  - Minimize impacts to jurisdictional wetlands
  - Minimize impact to significant wildlife habitat impacts
  - Locate on slopes <10% (<5 / 6% best)
  - Accessible from Town road (good sight distance)
  - Locate w/ reasonable proximity to Town road
  - Create minimum impact on neighborhoods (traffic/safety/noise/etc)
  - Provide adequate access to uses on parcel
  - Adequate area available for construction
- Access points without or that have minimum parking
  - Minimal slope on access trail (<8%)
  - Minimize impact to jurisdictional wetlands
  - Serve adequate level of use (neighborhood or dwelling clusters)
  - Can be controlled / minimum law enforcement concerns

The CBG recommends two main access points with associated parking areas on the HHNP site. The first access point and parking area is identified as **Location 1** on the Access and Parking Map. This is the site of the recently constructed parking area on Amherst Road and is one of the main access points identified in both the *Forest Management Plan and Ecological Assessment and Ecological Assessment* (see discussion on pages 12, 15, 16) and the *HHNP Master Plan* (see 5.3.1 Access Points and 9.2 Recommendations to Improve Access).

**Location 1** should be the primary access to the HHNP, as well as the location of the main woods road into the property. The CBG agreed that the existing logging road should be upgraded to provide proper access for forest management equipment, safety vehicles, forest fire control, and for other such maintenance and emergency vehicles. Although the *Forest Management Plan and Ecological Assessment* recommends that the road be built into a graveled woods road, the CBG did not make a recommendation about the specific construction details for the proposed roadway. The CBG discussed using gravel materials located on the property to upgrade a portion of the corridor, but did not discuss which portions. The CBG did not spend a lot of time on the construction issue because this entrance corridor is also the proposed location of the roadway to the athletic complex, which most likely will have different specifications than a woods road. The CBG clarified that regardless of the possible road specifications, the Town will need to obtain the proper wetlands permits from the New Hampshire Department of Environmental Services (NH DES) prior to any work impacting jurisdictional wetlands in the access corridor.

The CBG also recommended that the **Location 1** access corridor should not connect through to a like access corridor on the eastern side of the property, due to the environmentally sensitive areas that would be disturbed through such a connection. The construction of this corridor should accommodate current snowmobile use, and other motorized uses should they be allowed to utilize the parcel in the future.

**Location 2** is a secondary access to the parcel from Old King's Highway off of Naticook Road with little or no parking available. The woods road corridor that would be developed to the north of this area would be strictly for non-motorized trail and forest management purposes, and would be minimally

maintained in order to accommodate forest fire control and safety vehicles. It is anticipated that no motorized vehicles would use this corridor due to the presence of sensitive wildlife habitat.

The Heritage Commission has recently undertaken an effort to reclassify Old King’s Highway in this area to a non-motorized Class A trail. A reclassification to a Class A trail would still allow for forest management and other emergency access,<sup>4</sup> but due to the historic nature of the roadway, another main access point with parking (see Location 3) should be secured.

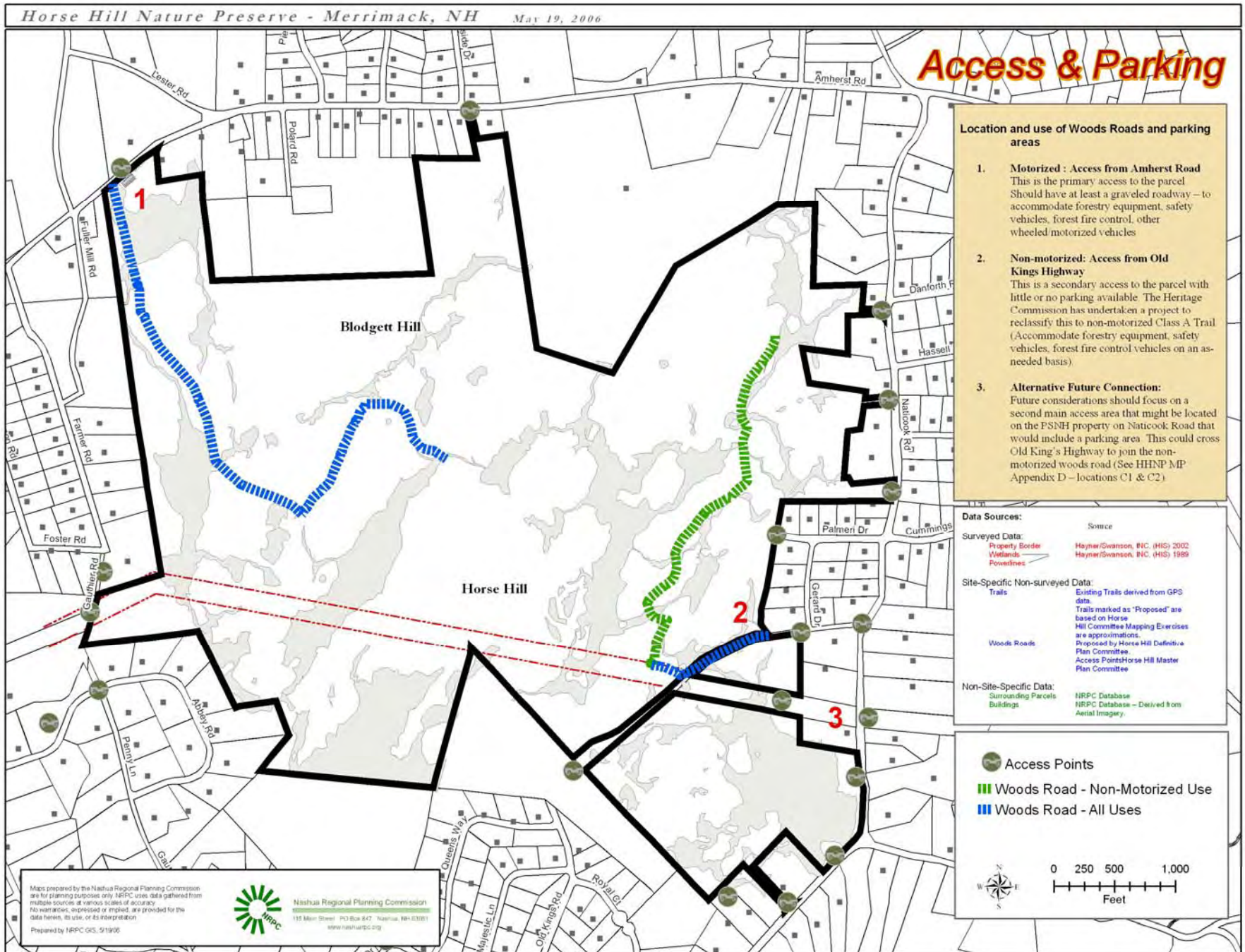
Although the main access to the eastern woods road would initially be from the Old King’s Highway, it should eventually be moved to **Location 3** when an area for parking can be negotiated with Public Service Company of New Hampshire (PSNH). Development of a parking area at **Location 3** is one of the primary access recommendations in the *HHNP Master Plan* (see page 9-1).

*CBG Gradients of Agreement Scale Vote:*

<i>Agreement Scale</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>
	<i>Agree</i>					<i>Disagree</i>		
<i>CBG Votes</i>	<i>7</i>	<i>8</i>	<i>1</i>		<i>1</i>			

<sup>4</sup> *A Hard Road to Travel*, 2004, NH Local Government Center, Inc.





**B. ARCHERY TARGET SHOOTING EVENTS**

**Objective Criteria: Archery Target Shooting (organized events)**

- Adjacent/abuts Watanic Bowmen’s Club
- Provides control opportunity / safe buffer (For placement of targets, signing and controlling access, monitoring, and isolating area as appropriate)

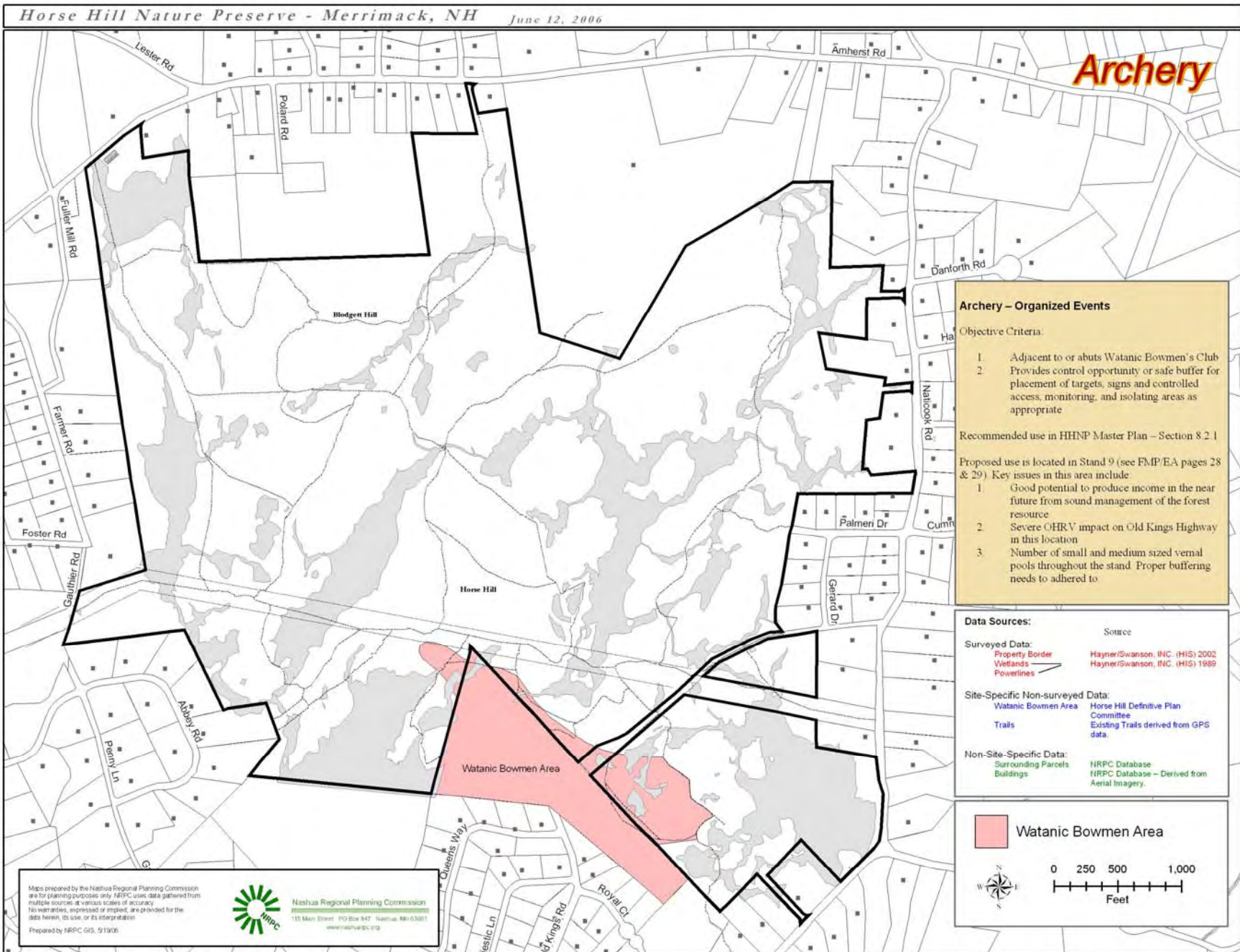
The CBG recommends that the areas specified on the Archery Map be utilized by the Watanic Bowmen’s Club subject to the specifications outlined in the *HHNP Master Plan* (see 8.2.1 Archery Target Shooting)

Issues that should be investigated by the Management Entity:

- Requirement of a permit for Target Shooting events
- Require that the Club continue to post notices at the entrance of the property and trails for safety purposes

*CBG Gradients of Agreement Scale Vote:*

<i>Agreement Scale</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>
	<i>Agree</i>					<i>Disagree</i>		
<i>CBG Votes</i>	19							



**C. OUTDOOR EDUCATION**

**Objective Criteria: Outdoor Education**

- Identify best locations for education opportunities (wildlife habitat / observation, forest & natural resource mgt. / etc.)
- Provide easy access opportunities
- Provide for bus parking

Note: Coordinate opportunities with Wasserman Park Facilities

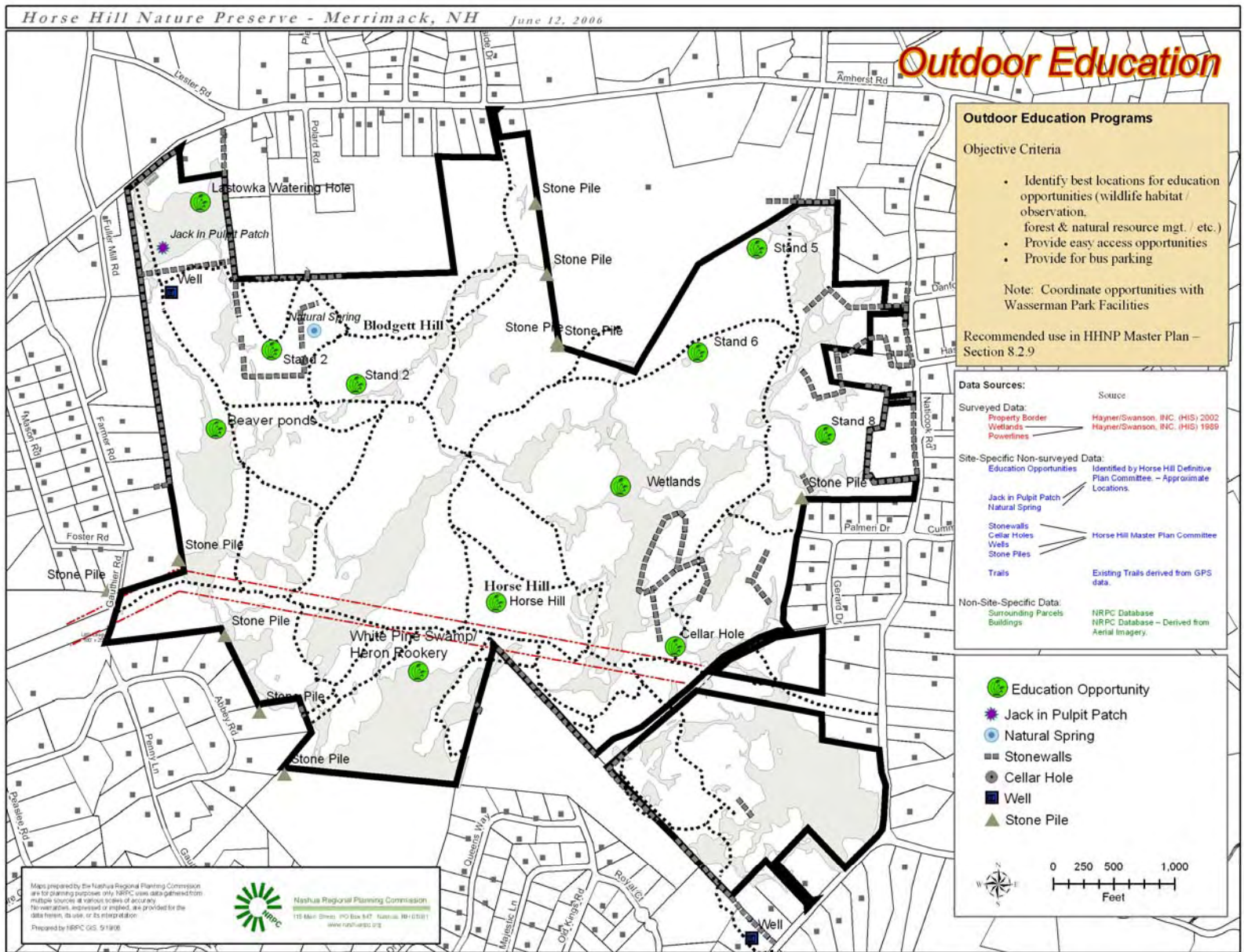
The CBG identified a number of potential educational points of interest on the Outdoor Education Map. These include historic resources such as the Spaulding cellar-hole, sheep pen enclosure, Old King’s Highway, wells, and stone piles. Natural resources such as the beaver dams, heron rookery, White Pine Swamp, natural spring, and other critical habitat were also identified. The group felt that the educational value of the entire site is so high that an educational program could take place virtually anywhere on the HHNP.

Issues that should be investigated by the Management Entity:

- Specifics of an outdoor educational program. (During the discussions, the CBG felt that the entity managing the property should look to Wasserman Park as an example of integrating educational opportunities into the natural environment.)

*CBG Gradients of Agreement Scale Vote:*

<i>Agreement Scale</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>
	<i>Agree</i>					<i>Disagree</i>		
<i>CBG Votes</i>	18							



**D. CONSERVATION**

<p><b><u>Objective Criteria: Conservation</u></b></p> <ul style="list-style-type: none"> <li>• A minimum of 500 unfragmented acres (no road open to the public)</li> <li>• Maintain biodiversity</li> <li>• Maintain wildlife habitat</li> </ul>
--

The Conservation Map shows the natural resource features from several different sources, including the “coarse-filter” data from NH Fish and Game Habitat Maps and the “site-specific” data from the *Forest Management Plan and Ecological Assessment*. The NH Fish and Game maps were generated by models that correlate habitats required by specific wildlife species with certain landscape features, as well as several other resources, to produce a map of areas where significant wildlife habitat may exist given the natural resources present on the site.<sup>5</sup> The site-specific data is more detailed mapping that was developed by E. Ann Poole, a professional ecologist and environmental planner, through an ecological assessment as part of the *Forest Management Plan and Ecological Assessment* (see the Ecologically Sensitive Areas Map in the report).

The CBG discussed the importance of several areas in particular due to the significant natural resources and wildlife present: The areas south west of the power lines, and the parcel south of Old King’s Highway that was purchased through the US Environmental Protection Agency (EPA) grant funds. The *Forest Management Plan and Ecological Assessment* recommended that the area south of the power lines should be designated as an area strictly for wildlife habitat and observation (see page 15).

The main recommendation regarding conservation of HHNP is the importance of maintaining a minimum of 500 unfragmented acres.

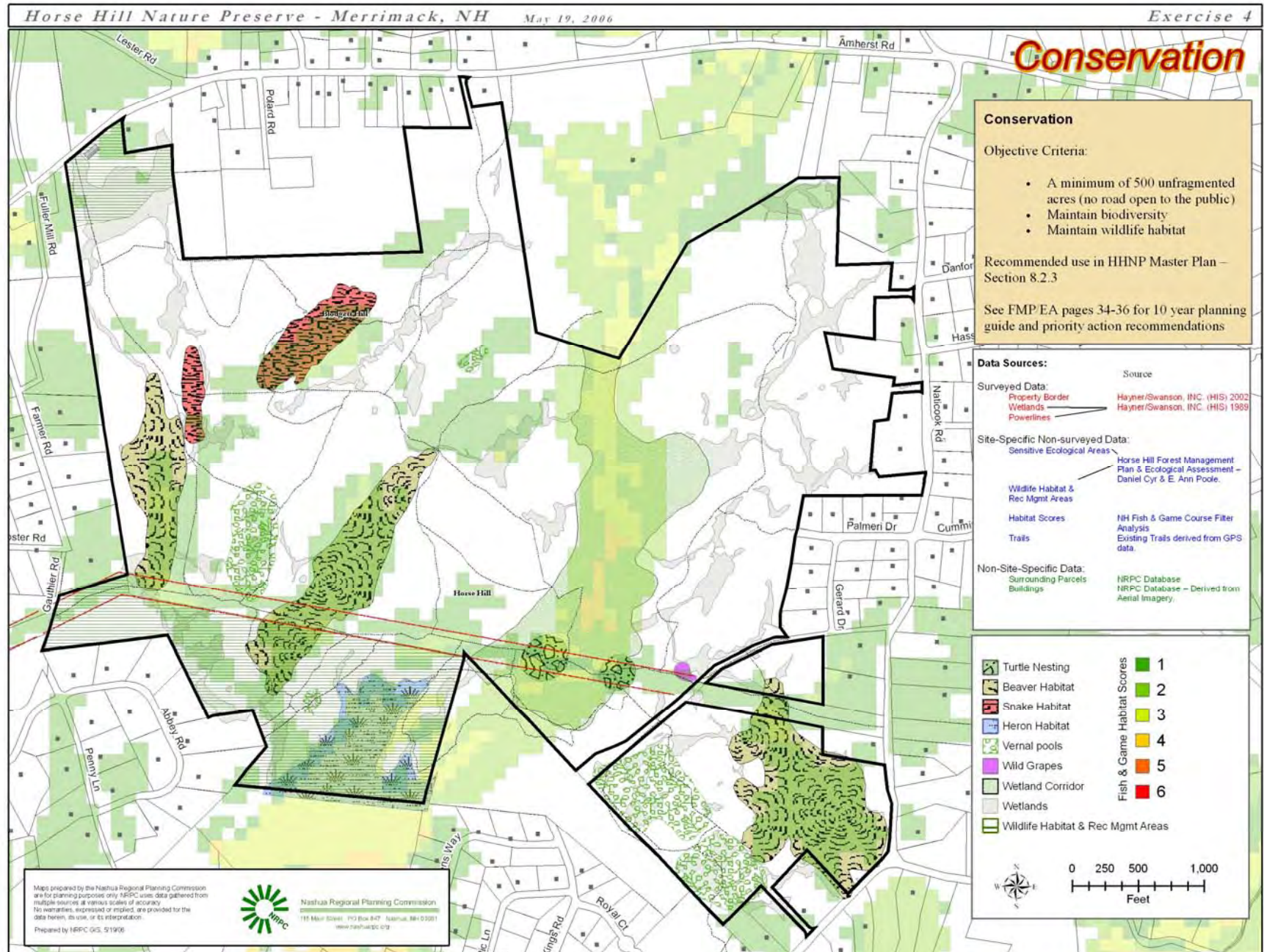
Issues that should be investigated by the Management Entity:

- Permanent protection measures for the majority of the parcel. This could be in the form of a conservation easement held by a third party such as a land trust, or some other form of permanent protection.

**CBG Gradients of Agreement Scale Vote:**

<b>Agreement Scale</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>
	Agree					Disagree		
CBG Votes	2	12	7					

<sup>5</sup> NH Wildlife Action Plan, NH Fish & Game Department, 2005.



**E. SNOWMOBILE TRAILS**

**Objective Criteria: Trail (Snowmobile)**

- Use on designated trails only
- Avoid deer yarding areas
- Provide buffer (noise) for abutters

Note: Could potentially use same trail system as mountain bike (and perhaps horseback).

It was generally agreed that most of the snowmobile use is drawn from abutting property owners or from the immediate vicinity. Due to the limited trail network and lack of connection to a large trail system, there probably will be a very limited number of users arriving with snowmobile trailers and extensive parking is not needed. The only motorized use currently permitted on HHNP is snowmobile, so the CBG decided to show the Snowmobile Trail Map as an overlay map separate from the general Trail Map.

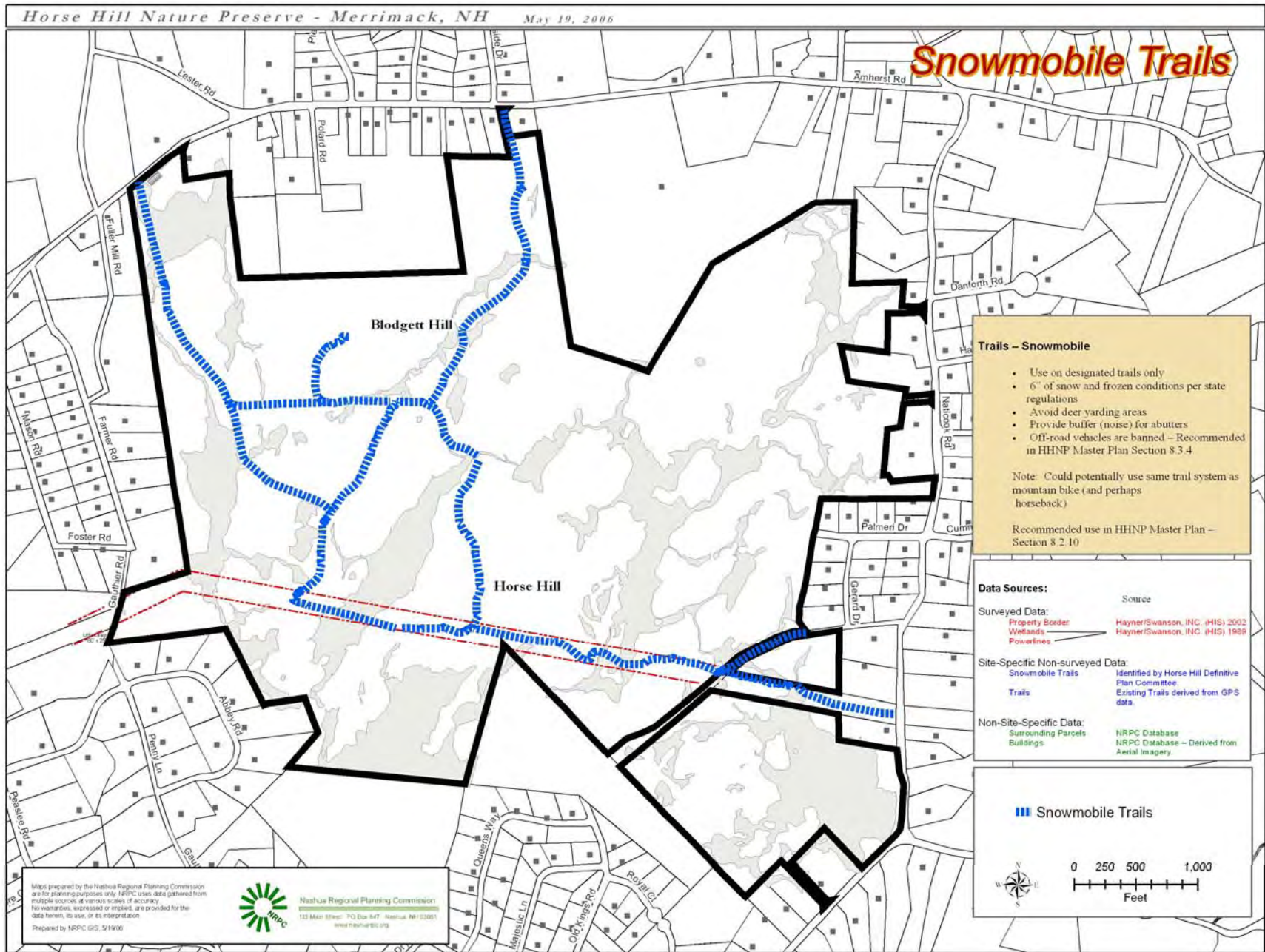
Issues for the Management Entity to investigate:

- Designate specific snowmobile trails through signage
- Educate users about State regulations (a minimum of 6" snow cover)

*CBG Gradients of Agreement Scale Vote:*

<i>Agreement Scale</i>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>
	<i>Agree</i>					<i>Disagree</i>		
<i>CBG Votes</i>	10	6	2					





## F. PROPOSED ATV TRAILS

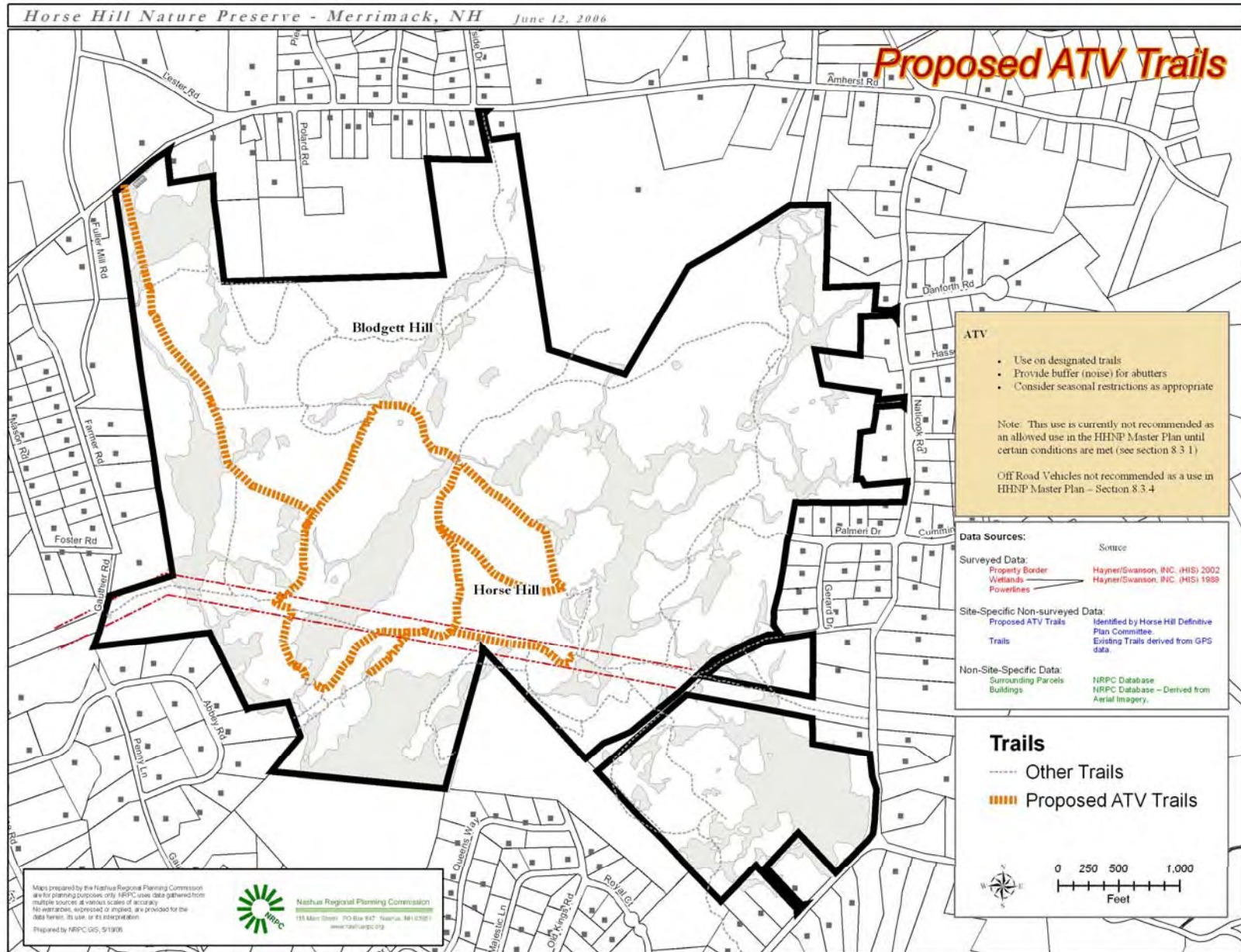
Although ATV's are currently not a permitted use on HHNP, the NH Right Riders' representative participated in the consensus building process in order to contribute to the discussion and analyze potential locations for ATV trails, should the Town leadership determine that the use be allowed in the future.

The CBG was careful to point out that the *HHNP Master Plan* defines ATV use differently than off-road vehicles. Off-road vehicles include larger four-wheeled vehicles such as jeeps, but not dirt bikes and 3 - 4 wheeled all terrain vehicles (see 8.3.4 Off-Road Vehicles). Off-road vehicles as defined in the *Master Plan* are not a recommended use on HHNP under any circumstances.

The CBG did not vote on the appropriateness of the proposal, but did make some points for the Management Entity to consider in the future:

- See conditions set forth in the *Master Plan*
- ATV use should be seasonal
- Appropriate enforcement be arranged
- Trail signage should be clear
- Potential impacts to wetland are a real concern

The *HHNP Master Plan* recommends that ATV use might be considered upon the occurrence of certain conditions including the creation of an active club, provisions for the use, design, and enforcement of proper use of the trails (see *Master Plan* Section 8.3.1 All Terrain Vehicles).



**G. HUNTING**

<p><b>Objective Criteria: Hunting</b></p> <ul style="list-style-type: none"> <li>• State law requires a 300 feet buffer from any permanently occupied structure</li> <li>• Investigate future additional buffering for proposed uses such as athletic fields and designated education areas as needed</li> <li>• Investigate option of additional restrictions such as time of day or season</li> </ul>
---

The CBG invited the area Game Warden from the New Hampshire Fish and Game Department to provide some specific information about the State hunting laws, and his experience with hunting in the Town of Merrimack and in the region. After considerable discussion about the logistics of hunting at HHNP, the CBG came to the conclusion that the use should continue to operate under the current conditions. The group felt that hunting serves as a wildlife management tool, is a controlled sport, and has an excellent safety record.

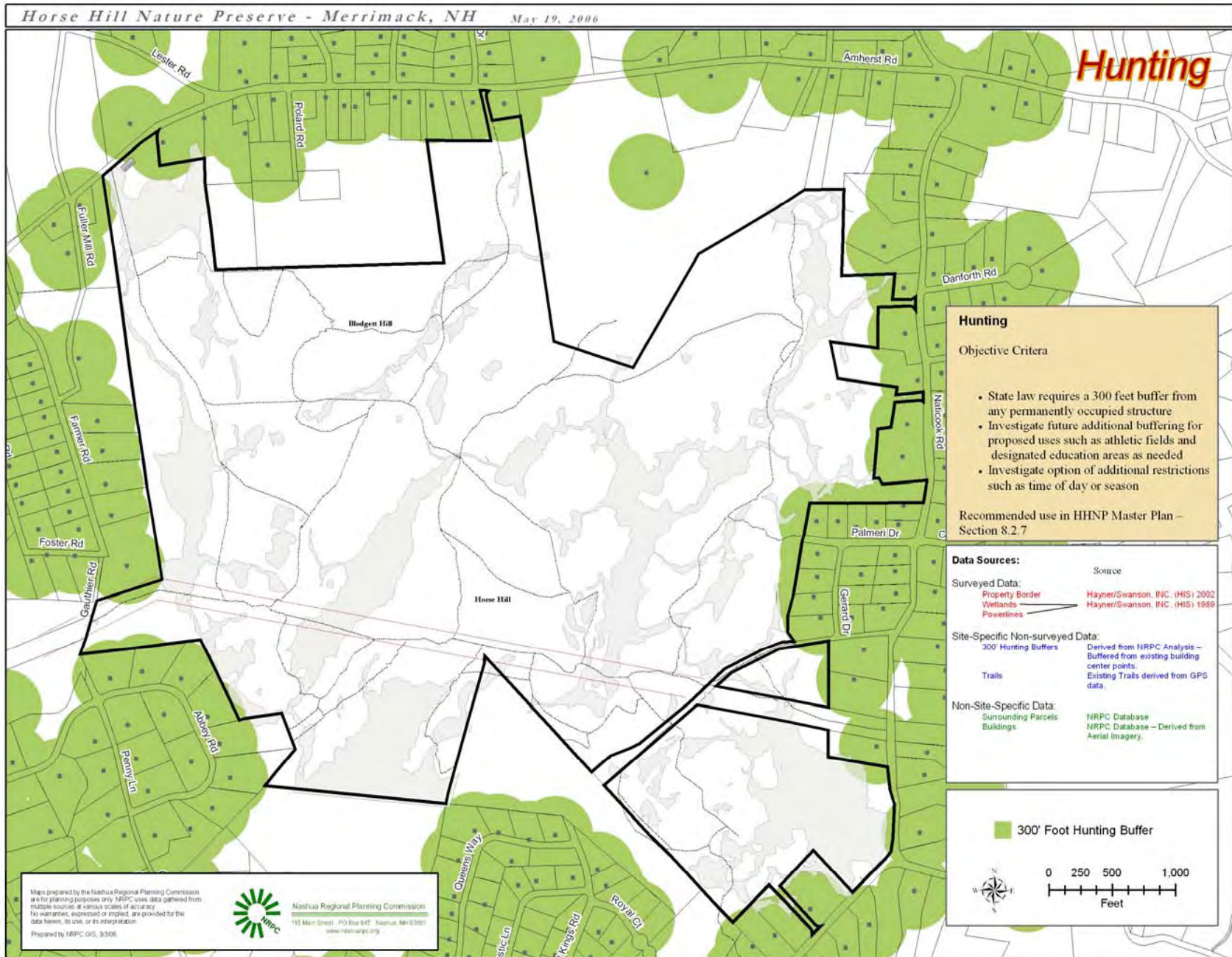
The Hunting Map shows the required 300' buffer from each occupied residential structure.

Action recommendations for the Management Entity discussed included:

- Alert abutters of their right to post their property against hunting if they so desire
- When the athletic fields are constructed, a 300' buffer should be demarcated
- Safety zones can be established in certain areas where the Town determines it is in the best interest to provide additional buffer for the abutters

*CBG Gradients of Agreement Scale Vote:*

<i>Agreement Scale</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>
	<i>Agree</i>					<i>Disagree</i>		
<i>CBG Votes</i>	8	6	7					



**H. TRAILS**

<p><b><u>Objective Criteria: Trails (General Considerations for all trails)</u></b></p> <ul style="list-style-type: none"> <li>• Build trails to Town guidelines (see DPW trail guidelines)</li> <li>• Minimize impact to jurisdictional wetlands (provide bridges/ implement proper construction, techniques, etc.)</li> <li>• Minimize impact to important / critical wildlife habitat as identified on the Ecologically Sensitive Areas Map and on the NH Fish and Game Wildlife Maps</li> <li>• Minimize erosion of steeper slopes (&gt;10%)</li> <li>• Loop trail network desired</li> <li>• Base designation of trails for a specific use on known (probable) access points for that use</li> <li>• Provide for adequate distribution of access points around parcel</li> </ul>	<p><b><u>Hiking / Ski Touring / Snowshoe</u></b></p> <ul style="list-style-type: none"> <li>• Range of (opportunity for) access points</li> <li>• Connection to other trail system(s) desired</li> <li>• Location / layout promotes accessible trail</li> <li>• Provide for (some) separate cross-country &amp; snowshoe trails</li> <li>• Provide mixed terrain / vegetation</li> </ul> <p>Note: Snowshoe activities can be in general forest zone (fewer designated trails)</p> <p><b><u>Horseback</u></b></p> <ul style="list-style-type: none"> <li>• Use on designated trails only</li> <li>• Avoid deer yarding areas</li> </ul> <p>Note: Absence of trailer parking not a constraint</p> <p><b><u>Mountain Bike</u></b></p> <ul style="list-style-type: none"> <li>• Use on designated trails only</li> <li>• Some one-way loop trails desired</li> <li>• Provide variety of terrain / elevation / rocky trails</li> </ul> <p>Note: Mountain bike trails could be designed as an entirely new trail system</p>
---	---

The CBG discussed the proposed trail configuration shown on the Trails Map, which shows a potential trail network for HHNP. It should be noted that the lines representing the trail locations are for informational purposes only and are not proportionate to the actual size of the trails on the ground. The CBG recognized that this proposed network layout is based on the best estimate of current conditions and that additional work would need to be completed for a comprehensive trail plan. The CBG also recognized that many of the trails would be multi-use trails, with a limited number reserved for specific uses.

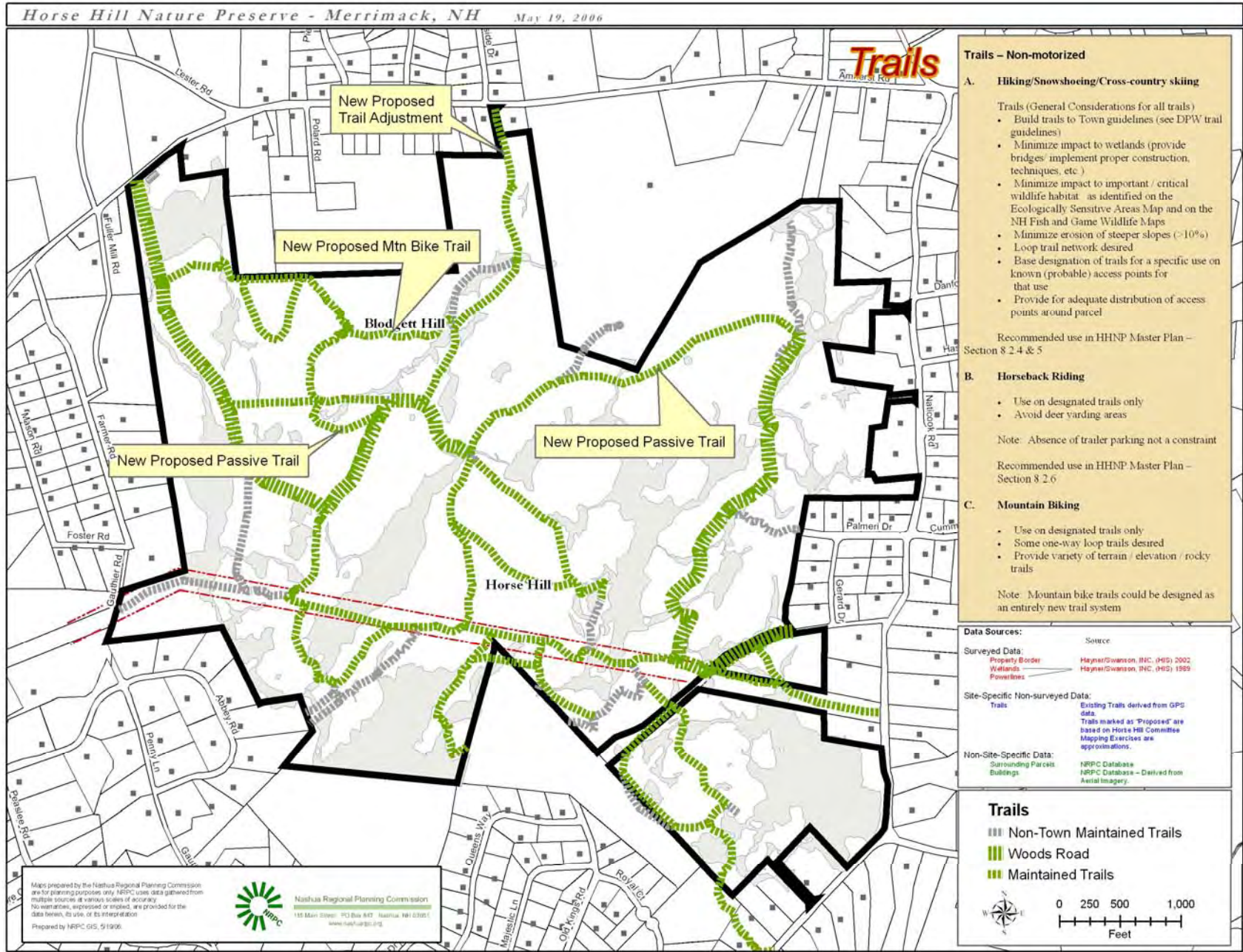
At one time, the HHNP Ad Hoc Committee had appointed a trails committee that began to assess the existing conditions of all of the trails and make recommendations for upgrading the trail network. The Trails Committee developed a proposed template of for a Trail Master Plan, and are awaiting for approval to continue to work on the project.

Issues for the Management Entity included:

- Appoint a trails subcommittee to continue the work that was begun by the HHNP Ad Hoc Committee. Trail construction should be conducted with the following considerations:
  - Trails should be constructed to Town DPW guidelines
  - Signs should be posted to direct proper trail usage
  - New trails should connect parts of system to provide a “looped” network

*CBG Gradients of Agreement Scale Vote:*

<b><i>Agreement Scale</i></b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>
	<i>Agree</i>					<i>Disagree</i>		
<i>CBG Votes</i>	7	10	1					



*This page intentionally left blank*



## I. ATHLETIC COMPLEX

### **Objective Criteria: Athletic Complex (50 Acre Max.)**

- Area will support athletic fields with parking
  - Meets field size requirements
  - Provides parking lot size requirements
  - Additional area for support facilities (buildings)
- Area accessible by road (22' wide / max 8% slope)
- Within reasonable proximity to Town road
- Relatively flat area for construction (<10%)
- Incompatible with power lines
- Minimizes impact to jurisdictional wetlands
- Minimize impact to important / critical wildlife habitat
- Room for proper field orientation (north - south)
- Opportunity for:
  - Adequate buffer / abutters
  - Water source
  - Electricity source
  - Sanitary facilities

In order to assist the CBG in reviewing the potential areas on the HHNP that might support the athletic complex, the NRPC developed the "Recreation Area Suitability Analysis" map (see Appendix B). The Recreation Suitability Analysis map shows the relatively flat upland areas where it might be appropriate to consider locating an athletic complex. Mr. Kokx used this map to develop a report to the CBG with his recommendation for the location of the athletic complex, which is on file with the Community Development Department (see Appendix A).

Aerial photographs were reviewed and discussed at length, especially with regard to the beaver ponds located near the southern portion of the proposed athletic complex. In 2005, the Town of Merrimack took a series of aerial photographs of the entire Town in order to develop a Geographic Information System, but the aerial photograph of the HHNP was not available during the CBG mapping exercises. The aerial photo has since become available, and is presented in Appendix B for informational purposes.

The location of the athletic complex prompted the most divisive discussion for the CBG. Some members of the group wanted to discuss the policy issue concerning the overall appropriateness of the use on the site. Others felt that the proposed location under consideration did not meet the Objective Criteria. However, since the CBG was specifically tasked with identifying locations for all of the uses, the final discussion was focused on determining the issues that should be taken into consideration by a management entity in siting the athletic complex on HHNP.

Although the discussion brought up many issues regarding the potential impacts to wildlife, wetlands, noise, congestion, security, and Town resources, the CBG crafted a motion specifically tailored to the group's charge:

*As per the charge of the Board of Selectmen to locate an area for an Athletic Complex on HHNP, the Consensus Building Group recommends that the best location for an athletic complex is the 24 acres depicted on the plans submitted by Keach-Nordstrom Associates.*

**CBG Gradients of Agreement Scale Vote:**

<i>Agreement Scale</i>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>
	<i>Agree</i>					<i>Disagree</i>		
<i>CBG Votes</i>	5	3	6		4	1		4

Looking at the vote on the Agreement Scale, the group was clearly unable to come to a unanimous vote. A majority of the CBG members voted to recommend the area shown on the Athletic Complex Map as the site most appropriate for the use, given the charge from the Board of Selectmen.

**Those who voted in disagreement to the location of the athletic complex have prepared a Minority Report which can be found at the end of this report.**

In discussing the recommended action items for the Management Entity about this use, the CBG created another specific motion:

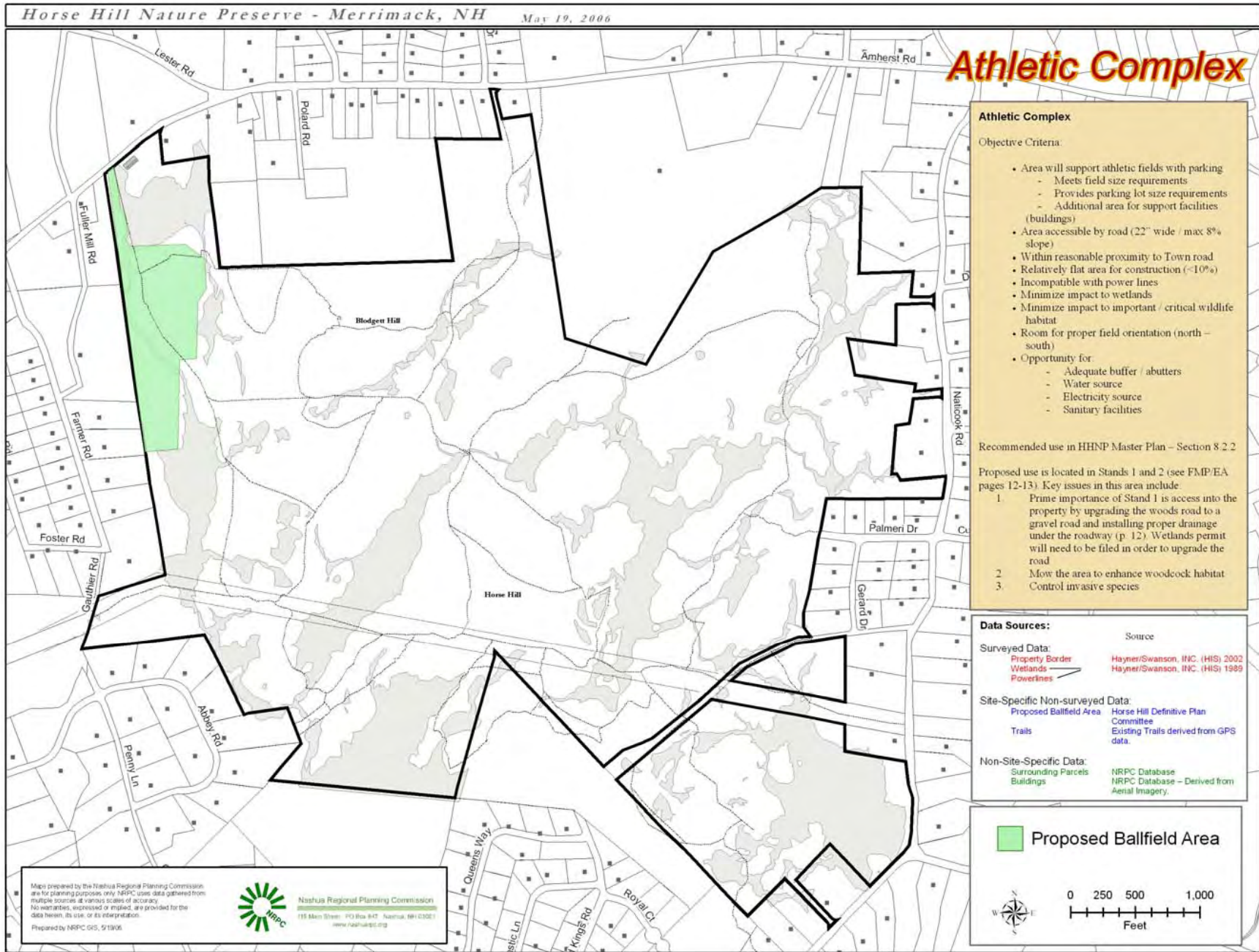
*The CBG recommends that before an Athletic Complex is constructed on the HHNP site, a wildlife habitat impact study be conducted on the 24 acres based upon the plan submitted by Keach-Nordstrom Associates.*

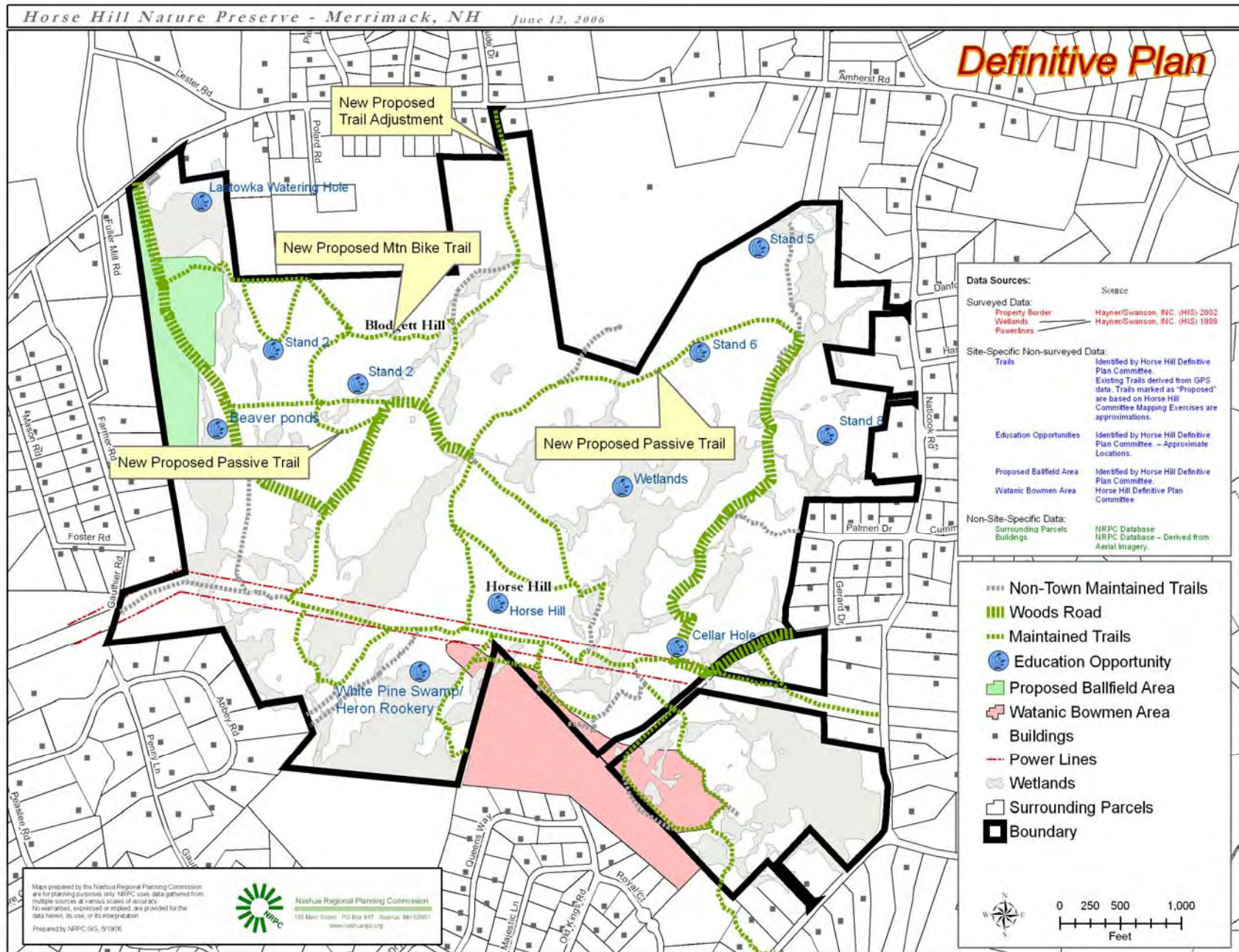
**CBG Gradients of Agreement Scale Vote:**

<i>Agreement Scale</i>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>
	<i>Agree</i>					<i>Disagree</i>		
<i>CBG Votes</i>	17	2						1

**Those who voted in disagreement to the wildlife impact study requirement have prepared a Minority Report which can be found at the end of this report.**

The CBG felt that further engineering, surveying and wetlands studies of the area would be completed in the course of planning and preparation for the athletic complex, and as such were not items that needed to be specifically voted as recommendations for the Management Entity.





#### IV. MANAGEMENT RECOMMENDATION

In brainstorming possible management structures, the CBG discussed three different possible options:

##### A. WASSERMAN STYLE

Under this option, the management duties would be split between the Parks and Recreation Department and the Merrimack Conservation Commission. The athletic complex area would be managed by the Parks and Recreation Department and the remainder would be managed by the Merrimack Conservation Commission. This type of management structure was the basis for the recommendation in the *HHNP Master Plan* (see Section 9-1. A Managing Body).

The advantages of this type of management scheme are:

- There is a model at Wasserman that already works well
- The parties are used to working with each other
- It keeps the people closest to their programs in charge of the management (there is no extra management layer).
- Each entity has funding mechanisms in place in order for them to use to accomplish their goals

##### B. NEW COMMITTEE

The Selectmen could appoint members to a new committee with the sole purpose of managing the HHNP. If this is the option, there should be representation from all groups with an interest in using the property. The Committee would report directly to the Selectmen, probably through the Town Manager.

##### C. CURRENT OPTION

The last option the CBG discussed was to maintain the current management by the Community Development Director with the assistance of the Ad Hoc Committee. Although this might be the easiest to implement, it was noted that Town staff has many priorities and may not have the time to provide the level of management function that is needed for the parcel.

After discussing the options, the CBG felt that the proposal outlined in the *HHNP Master Plan* continues to be the best recommendation for the management of the property, with a little clarification. The points below are the points that the CBG approved to refine the recommendations from the *HHNP Master Plan*.

#### Management Recommendations for the Horse Hill Nature Preserve:

1. The HHNP Consensus Building Group recommends that the Board of Selectmen authorize the MCC to manage the area of Horse Hill Nature Preserve not otherwise reserved on the *Definitive Plan* for athletic fields.
2. The MCC should appoint a subcommittee to carry out the management tasks of the HHNP as set forth in the *Definitive* and *Master Plans*.

3. The MCC should investigate permanently protecting the portion of HHNP under its jurisdiction through a conservation easement or other legal mechanism that will ensure permanent protection of the site from future development.
4. The HHNP subcommittee should consist of a minimum of five and a maximum of seven members. The MCC is encouraged to select representatives from MCC, Parks Committee, and volunteer citizens to serve on the subcommittee. A chairperson should be elected annually from the members.
5. The HHNP Subcommittee should propose an annual implementation schedule of the Definitive and Master Plans. This implementation schedule should identify the activities that will be undertaken on an annual basis and, where necessary, associated funding sources (CIP, Conservation Fund, Recreation Fund, etc) that will be needed in accomplishing the activities.
6. The HHNP Subcommittee should solicit the assistance of volunteers to accomplish tasks set forth in the implementation schedule, such as trail construction and maintenance, or educational programming.
7. The HHNP Subcommittee should meet quarterly, at a minimum, in a public session and report to the MCC at their next regularly scheduled meeting.
8. The HHNP Consensus Building Group recommends that the Board of Selectmen authorize the Parks and Recreation Department to manage the area of HHNP shown on the *Definitive Plan* as reserved for future athletic fields.
9. The HHNP CBG recommends that before an athletic complex is constructed, a wildlife habitat impact study needs to be conducted on the 24 acres based upon the plans submitted by Keach Nordstrom Associates.
10. Until athletic fields are constructed, the Parks and Recreation Department should, in consultation with MCC, manage the area in accordance with the recommendations listed in the HHNP Master Plan, Forest Management Plan and Ecological Assessment.

In addition to these specific recommendations, the Management Entity should review the Implementation section of this *Definitive Plan* for additional specific action items and resources.

#### **D. IMPLEMENTATION**

As with any plan, an implementation strategy and action schedule is the key to achieving the goals of the plan. The CBG recommends that the Management Entity review the *Master Plan* for detailed action recommendations when creating the action plan for the HHNP. The list below highlights some of the action items that were discussed during the current process that refine or clarify some of the *Master Plan* recommendations.

##### **Parking & Access:**

- Negotiate with PSNH for permission to construct a parking area and alternate access area to HHNP off of Naticook Road
- Support Heritage Commission efforts to reclassify Old King's Highway to a Class A trail
- Work with DPW and volunteers to construct a parking area on PSNH land and alternate access to eastern woods road trail

- Identify short term solutions for making the Amherst Road access corridor accessible in order for users to be able to easily gain access to the parcel prior to the construction of any permanent access way
- Proper wetlands permit will need to be obtained for the Amherst Road access corridor before any impacts to jurisdictional wetlands

**Archery Target Shooting Events:**

- Develop formal policies and a permit process to grant permission for the Watanic Bowmen to hold Target Shooting events

**Outdoor Education:**

- Develop outdoor educational program
- Continue to identify locations of historical interest and work to document or preserve the resources

**Conservation:**

- Investigate permanent protection of the area not reserved for an athletic complex
- Complete wildlife surveys with abutters and/or with professional assistance

**Trails**

- (Re)appoint the Trails Committee
- Continue the work on the Trails Master Plan
- Evaluate trail construction standards using the Town Standards as well as those recommended by Tom Kokx
- Snowmobile Trails – work with SnoBuds to create loops and design user educational materials
- ATV Trails – Develop educational materials directing the proper use of other areas in Town for ATV use until it is allowed at HHNP;
- ATV Trails – continue to work with NH Right Riders to evaluate the appropriateness and extent of ATV use on the site
- Enforcement needed to eliminate improper Off-Highway Recreational Vehicle (OHRV) use

**Hunting**

- Develop educational materials for abutters to be aware of their rights to post their property
- Develop safety zones in certain areas where it is determined that additional buffers are needed
- Develop educational material for hunters regarding boundaries and sensitive areas on the site as well as about where other uses might be present on HHNP

**Athletic Complex**

- Conduct a wildlife impact study on the 24 acres demarcated for the athletic complex
- Conduct the appropriate surveying and engineering analysis, including wetland delineation, that will need to be completed prior to constructing the athletic complex

*This page intentionally left blank*



## V. MAPPING EXERCISES SUMMARY

This section summarizes the CBG mapping exercises that were conducted between January and April, 2006. It documents the data and other information the group reviewed, and provides an indication of level of detail the group used in evaluating and discussing the issues that lead to the creation of the *Definitive Plan*.

Using the data sets prepared for the *Horse Hill Nature Preserve Master Plan* and the *Horse Hill Nature Preserve Forest Management Plan and Ecological Assessment*, NRPC developed a series of maps to evaluate the terrain and environmental characteristics of the Horse Hill Nature Preserve (See Appendix B).

The Base Map shows the property lines, road network, access points, approximate house locations, stonewalls, trails, power lines, wetlands and other basic features of the Horse Hill Nature Preserve and the immediate abutting property. Sources of this information include: survey data from Hayner/Swanson, INC. (HSI) in 1989 and 2002, the Town of Merrimack, United States Geological Survey (USGS) and other state and national datasets. The wetlands were delineated in 1989 by HSI, as part of a survey of the entire property

The Soils Map data was obtained from the Hillsborough County Soil Surveys and shows standard soil classifications on the property.

The Topography Map shows the elevations present on the site in 2' contours. The contour data was created by HSI from surveyed elevations. A Digital Elevation Models (DEM) and a hill-shaded relief map were derived from the contour data to better illustrate the topography on the property. A classification of percent slope was then created from the DEM.

The Ecologically Sensitive Lands and Wildlife Habitat Map compares the map developed specifically for the HHNP by the field work conducted by E. Ann Poole in the *Forest Management Plan and Ecological Assessment* with the Wildlife Habitat Coarse Filter Maps that were produced by the UNH Cooperative Extension and NH Fish and Game through their work on the NH Wildlife Action Plan. (This map is similar to the Conservation Map located in section III D of this document)

With the data maps as a foundation, and the Objective Criteria as a guide, the CBG then engaged in a series of four mapping exercises to assess the parcel and to identify the areas on the site which are most and least suitable for the various uses. The mapping exercises were facilitated by NRPC with technical assistance provided by Mr. Kokx.

### A. MAPPING EXERCISE #1 – PREFERRED USE LOCATIONS



The purpose of the first mapping exercise was to provide each group of stakeholders with the opportunity to identify and advocate for their preferred locations on the site.

The first mapping exercise took place on January 30, 2006. After approving the Objective Criteria, the group divided into smaller groups based on specialized interests.

Each stakeholder group was given a large scale base map of the property that showed wetlands, slopes and other important physical features and a set of markers. Each was asked to

consider their needs for access, parking, and preferred activity locations. Since many uses involve the trail network, no general “trail” group was formed. Rather, for trail uses, each group was asked to show the trail system they currently use and identify additional trail or connections that they would like to explore in the future.

The groups were also tasked with reviewing their preferred locations against the Objective Criteria and to begin discussing the management options for the property. The interest groups that met included:

- Mountain Biking
- Horseback Riding
- Snowmobiling
- ATV
- Athletic Complex
- Outdoor Education and Historic Resources
- Archery (organized events)

The exercise concluded with each interest group presenting their map and reasoning for the selection of their highest priority location to the entire Consensus Building Group.



The initial themes that arose during the presentations included the concept that a majority of the trail system would most likely need to be multi-use, with only a few trails that would be limited to a single use due to space constraints, funding, construction, and maintenance issues. Almost all trail users identified the need for additional “loops” within the trail network to make the experiences more interesting and provide some variety. Also, it was suggested that some trail uses are likely limited to users drawn from the immediate vicinity, such as horseback riding and snowmobiling, because of the smaller trail system and lack of connection to other larger trail networks.

The proposal for the location of the athletic complex area was presented by Steve Keach, of Keach-Nordstrom Associates on behalf of the Merrimack Youth Association (MYA) and Parks & Recreation Committee. This presentation was accompanied by a detailed concept plan showing the locations of the proposed fields, parking areas and access road (see Appendix B).

A main concern that all uses identified was the potential impact to jurisdictional wetlands. Due to the extensive wetland system present on the site, almost all uses brought up the issue of needing to minimize or avoid wetlands impacts.

## **B. MAPPING EXERCISE #2 – ACCOMMODATING ALL OF THE USES**

The purpose of the second mapping exercise was to divide the individual stakeholders into four small groups to work together to find ways to accommodate all of the recommended uses on the property. The stakeholder representatives were randomly assigned to one of four small groups. Each group was provided with the base map and associated map series, including wetlands, soils, conservation, wildlife, topography, and ecologically sensitive map to use to evaluate the site.

Each group was asked to develop a site plan using the Objective Criteria and the recommendations set forth in the *HHNP Master Plan* and the *Forest Management Plan and Ecological Assessment*.

During the break-out session, the groups were asked to consider the areas that clearly presented some points of agreement, and to identify the challenges and conflicts in locating various uses. This mapping exercise provided the opportunity for people representing diverse interests to speak on an individual basis about the activities and uses recommended for the site. At the end of the exercise, the groups were asked to report on their maps and the reasoning that led to the solutions they proposed.



Two of the groups developed site plans during the session, and the other two focused their efforts on examining the maps and discussing the pro's and con's of siting uses at different locations on the parcel given the Objective Criteria, topography, wildlife, wetlands and other land characteristics present.

The two site plans that were presented were similar in presenting a proposed trail system for multi-uses as well as a few trails that were limited to single uses.

The groups identified the following challenges that should be addressed in the *Definitive Plan*:

#### Challenges:

- Bridge over wetlands needed work but completes beautiful loop
- Size of bridge, if built, due to rocky areas to accommodate multi-use loops
- ATV's are tough issue – suggested circle around Horse Hill, but access tough due to the wetlands
- Crossing Wetlands
- Heron Rookery
- Nesting Turtles
- Trails running through private property
- Conflicts when trails have multiple uses
- Parking for vehicles and trailers near proposed ballfields
- Multiple use trails used at same time could be a big problem.
- Potential for Black Razor Snakes on top of Blodgett Hill (ideal environment but no confirmed sightings)

All of the groups agreed that the site plan that was developed by Group 2 should be the basis for Mapping Exercise #3.

#### C. MAPPING EXERCISE #3 – DRAFTING THE FINAL SITE PLAN

Because there was general consensus about many of the trail uses, the CBG agreed that for the third mapping exercise, they would break out into four small groups and begin to draft their conception of the final site plan. The purpose of this exercise was to require the members to work together to create examples of alternative scenarios for consideration by the entire group.

At the end of the exercise, the four groups reported the results of their discussions to the entire CBG.

**Group 1 Report:**

- **Old Kings Highway** - Agreed on the use of but wanted Heritage Commissions input and to incorporate both plans.
- **ATV**- No issues on seasonal motorized use along powerlines.
- **Athletic Complex** - Issues on general impact on wildlife - parking lot close to wetlands and beaver dams. Noise, congestion, security, forest fires. No consensus among the group regarding configuration, size, or location.
- **Hunting** - Did not discuss.

**Group 2 Report:**

- **Athletic Complex** - Same problems with ballfields as reported by Group 1. Parks and Recreation rejected areas near powerlines and neighborhoods. Only logical place based on criteria. Could not say it was physically impossible. Traveled deer route near area is a corridor and Woodcock area. Issues with location of the southern field on the proposed area.
- **Hunting** - Issues with policing area, need more posting. Due to the need to harvest deer, consensus was to continue to allow hunting.
- **ATV** - Parking impact on wetlands. Possible use for harvesting deer. Too many sensitive areas. Frozen areas okay, but what about days with drastic temperature changes.

**Group 3 Report:**

- **Athletic Complex** - Potential area near Palmeri would impact neighborhood (could not put field there). In the Northwest corner of the site, there is a potential problem with Woodcock, but felt it they could be impacted by any other activity proposed for the property and did not know if Woodcock would be impacted. Lower gray trails not possible (not owned by the town).
- **Hunting** - No issues. Posting could be put up when and if ballfields built.
- **Snowmobiles** - Okay with snowmobile routes.
- **Trails** - No issues.
- **Horseback** - No issues.

**Group 4 Report:**

- **Hunting** - No issue but felt area should be revisited if and when a ballfield is built.
- **ATV** - Felt they should get a shot (they voted for this). ATV use for bringing out a deer as long as they stay on trail. State has guidelines set for ATV use and should give opportunity for ATVs to use property on a gradual basis.

**D. MAPPING EXERCISE #4 - THE CONSENSUS AGREEMENT**

Mapping Exercise #4 was held over a period of two meetings in March and April, 2006. The results of this Exercise are recorded in Section III, the CBG Definitive Plan Agreement.

#235D-34

## APPENDIX A

### LIST OF DEFINITIVE PLAN PROCESS DOCUMENTS ON FILE AT THE TOWN OF MERRIMACK COMMUNITY DEVELOPMENT DEPARTMENT:

#### a. Consensus Building Group Meeting Minutes and Mapping Exercise Results

1. November 7, 2005 – Project initiation and development of invitation list
2. December 5, 2005 – Project overview and convening of the CBG
3. December 19, 2005 – Brainstorming the Objective Criteria
4. January 16, 2006 – Review and Refinement of Objective Criteria
5. January 30, 2006 – Adoption of Objective Criteria; Mapping Exercise #1
  - i. Exercise 1 Map
6. February 6, 2006 – Management Options; Mapping Exercise #2
  - i. Exercise 2 Map
7. March 6, 2006 – Mapping Exercise #3
8. March 20, 2006 – Mapping Exercise #4 – (Part 1)
9. April 2, 2006 – Site Walk
10. April 3, 2006 – Mapping Exercise #4 (Part 2)
11. April 17, 2006 – Final Management Discussion and Next Steps
12. June 5, 2006 – Review Draft HHNP Definitive Plan
13. June 19, 2006 – Final review after changes from June 5, 2006 meeting

#### b. Memos, Letters & Presentations to the Group

1. Harold Watson Letter
2. John Carlisle Letter
3. Laura Deming, Senior Wildlife Biologist of NH Audubon Society, Letter
4. Written Testimony from Ann Poole, Wildlife Biologist
5. Written Testimony from Dave Danielson
6. Written Testimony from Brian Gillis
7. Robyn Goinsalvos “Overall 24 Acre” Power Point presentation
8. Robyn Goinsalvos “Beaver Pond” Power Point presentation

#### c. Town of Merrimack Department of Public Works: Trail Construction and Maintenance Guidelines

#### d. Handouts

1. ROS Assessment - Tom Kokx Associates
2. Athletic Complex Site Suitability Report and Analysis - Thomas Kokx Associates
3. Implementation Considerations – Tom Kokx Associates
4. Helynn Wenz Site Walk handout
5. Keach Nordstrom Preliminary Recreation Field Design handout
6. Roger Blais Right Riders handout
7. Stand Data Summary handout
8. 12/19/05 Small Group Discussion and Design Considerations Summary handout

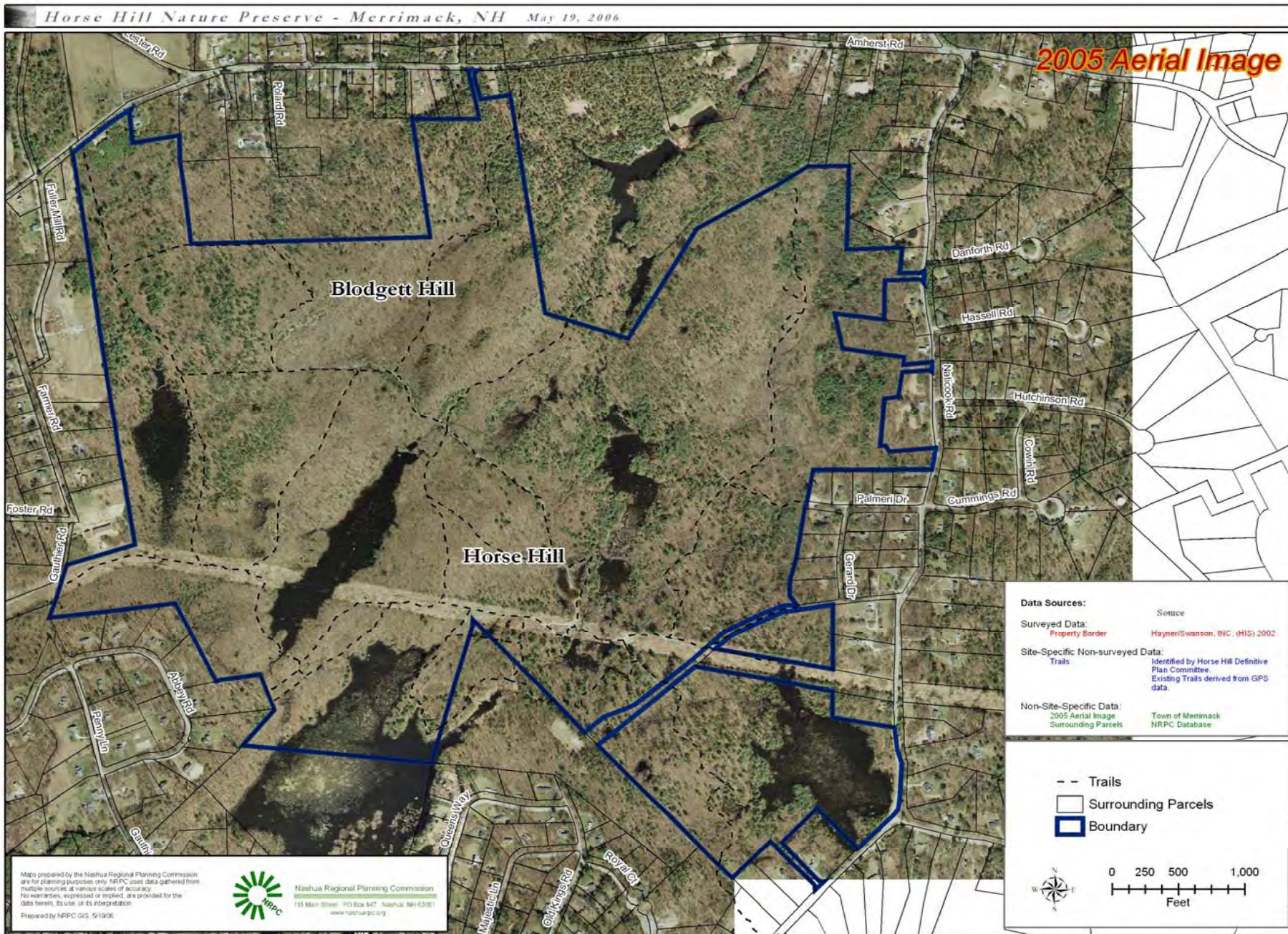


## **APPENDIX B - REFERENCE MAPS**

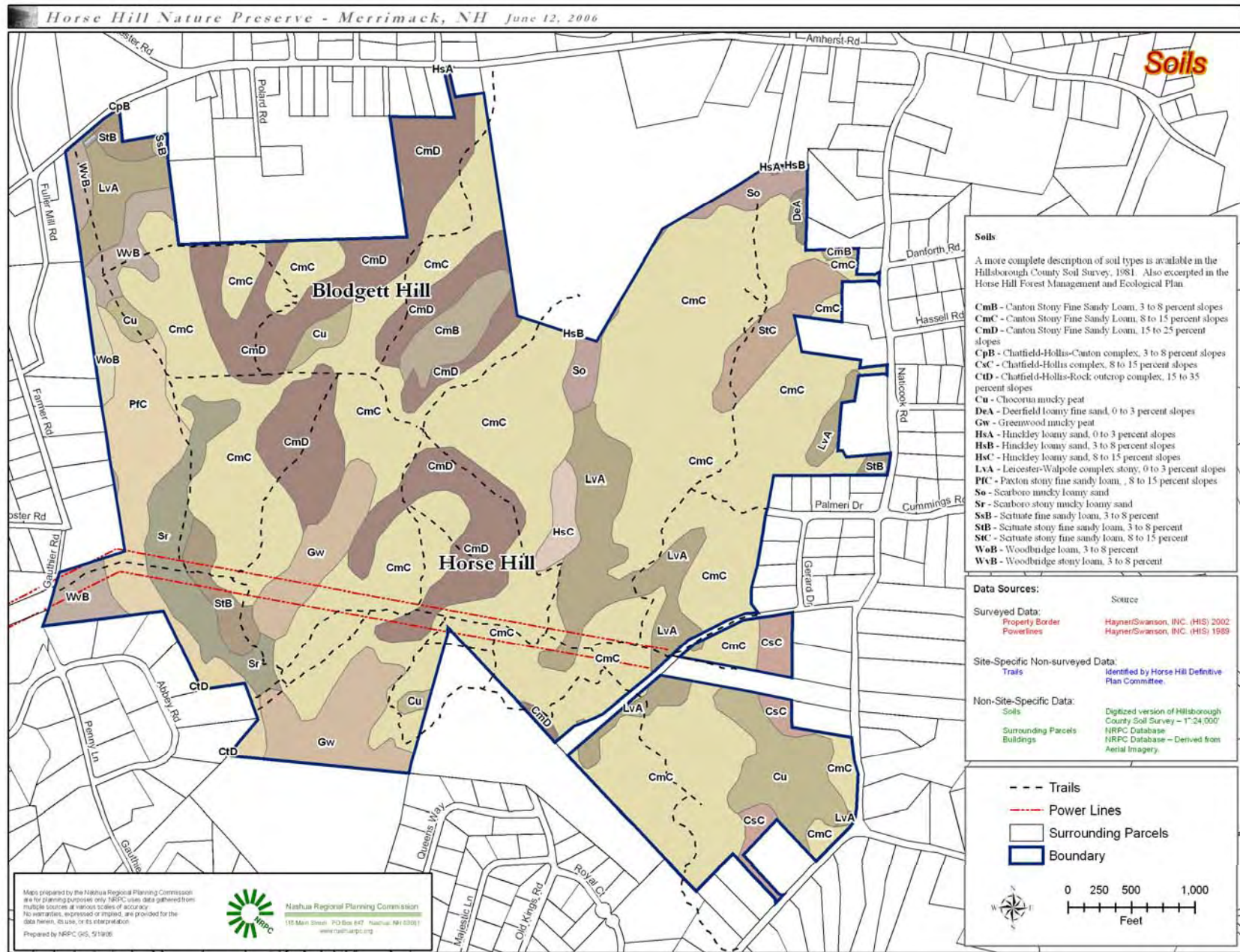
- a) 2005 Arial Photograph
  - b) Base Map
  - c) Soils Map
  - d) Topography Map
  - e) Recreation Area Suitability Analysis Map
  - f) Keach-Nordstrom Preliminary Recreational Field Layout Map
-



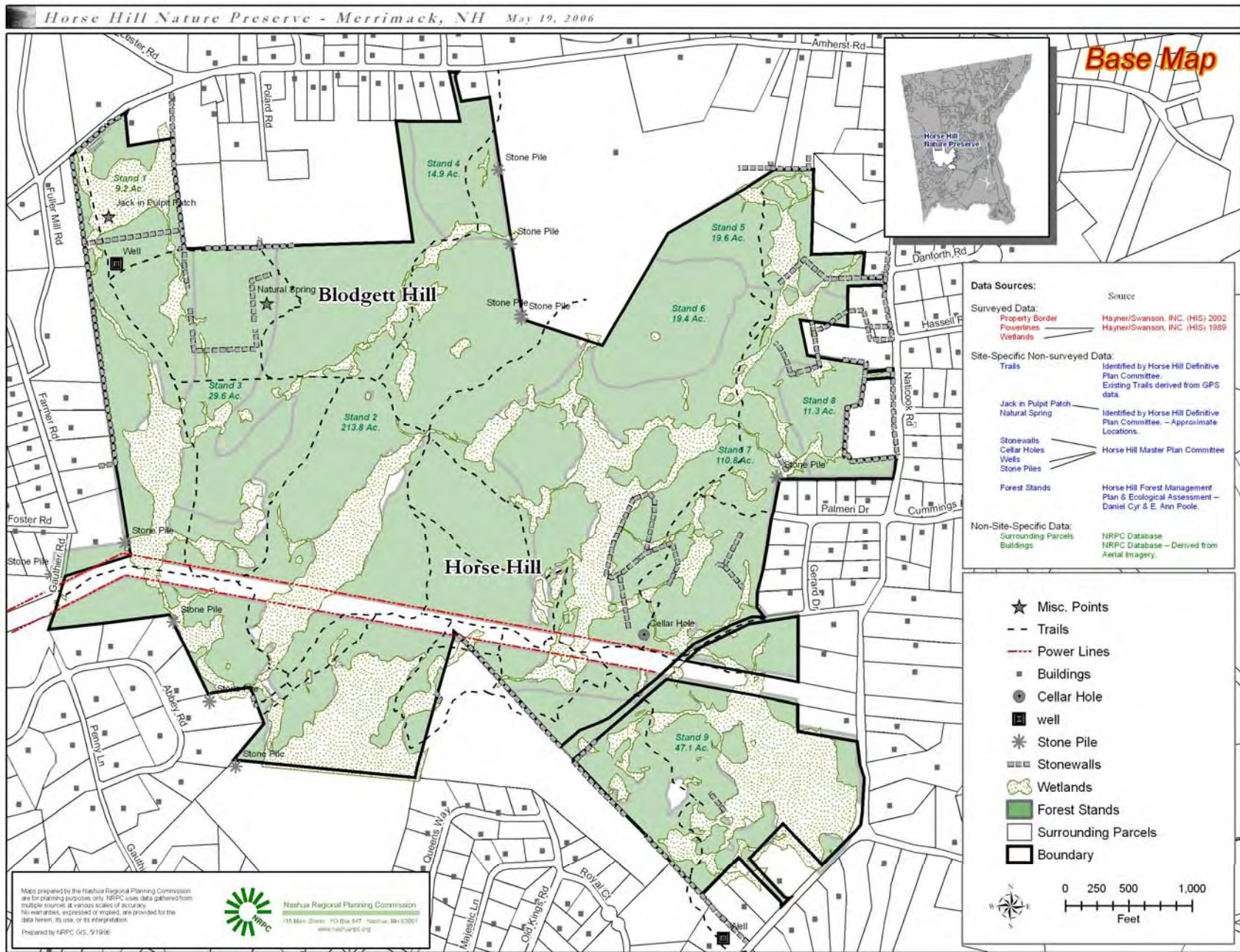






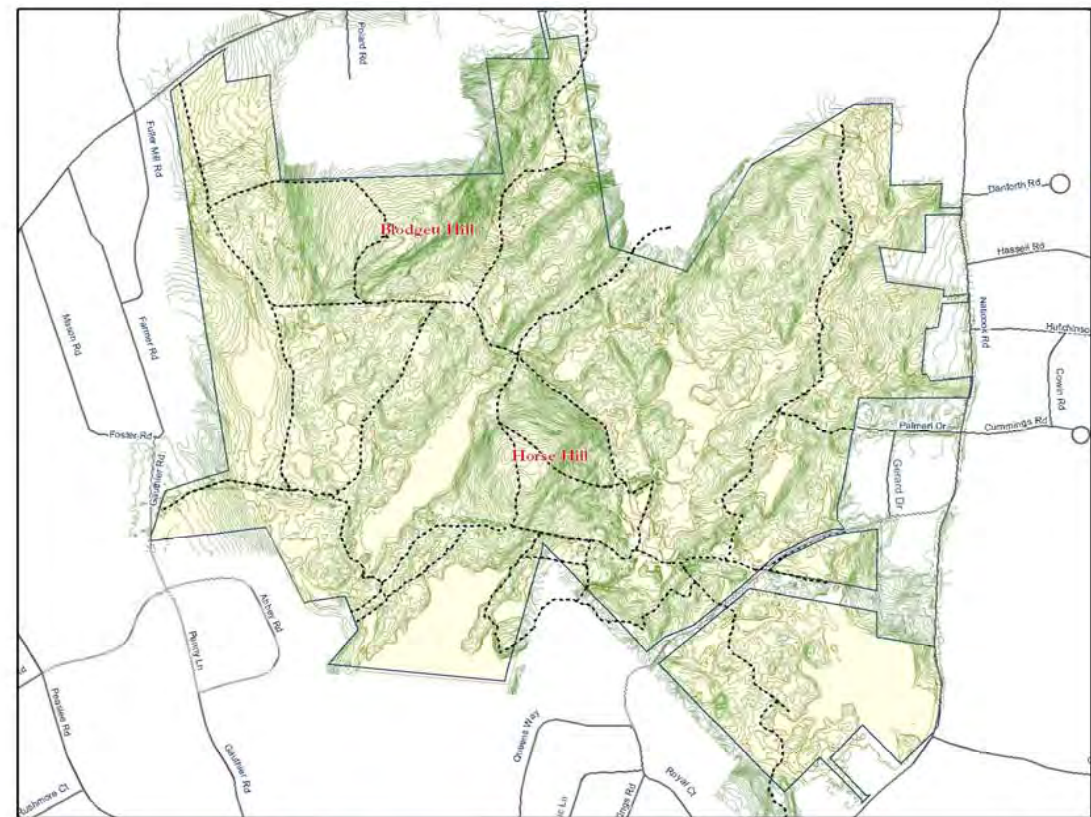




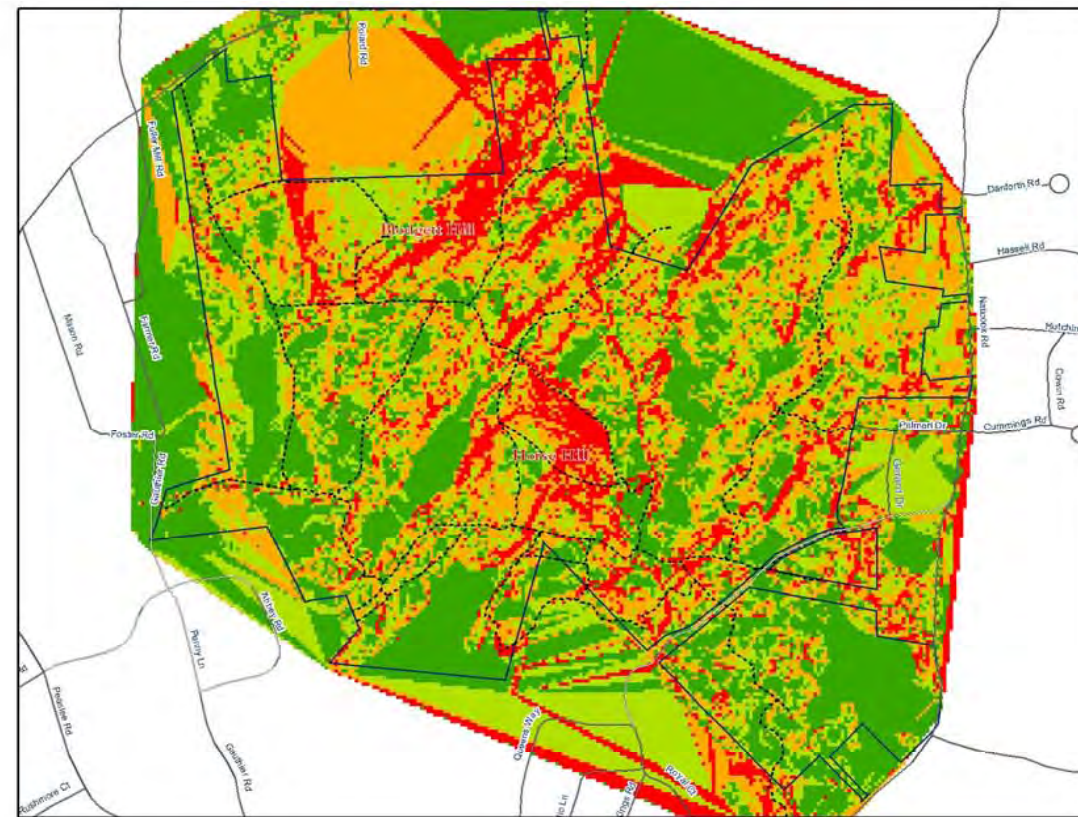


Horse Hill Nature Preserve - Merrimack, NH May 19, 2006

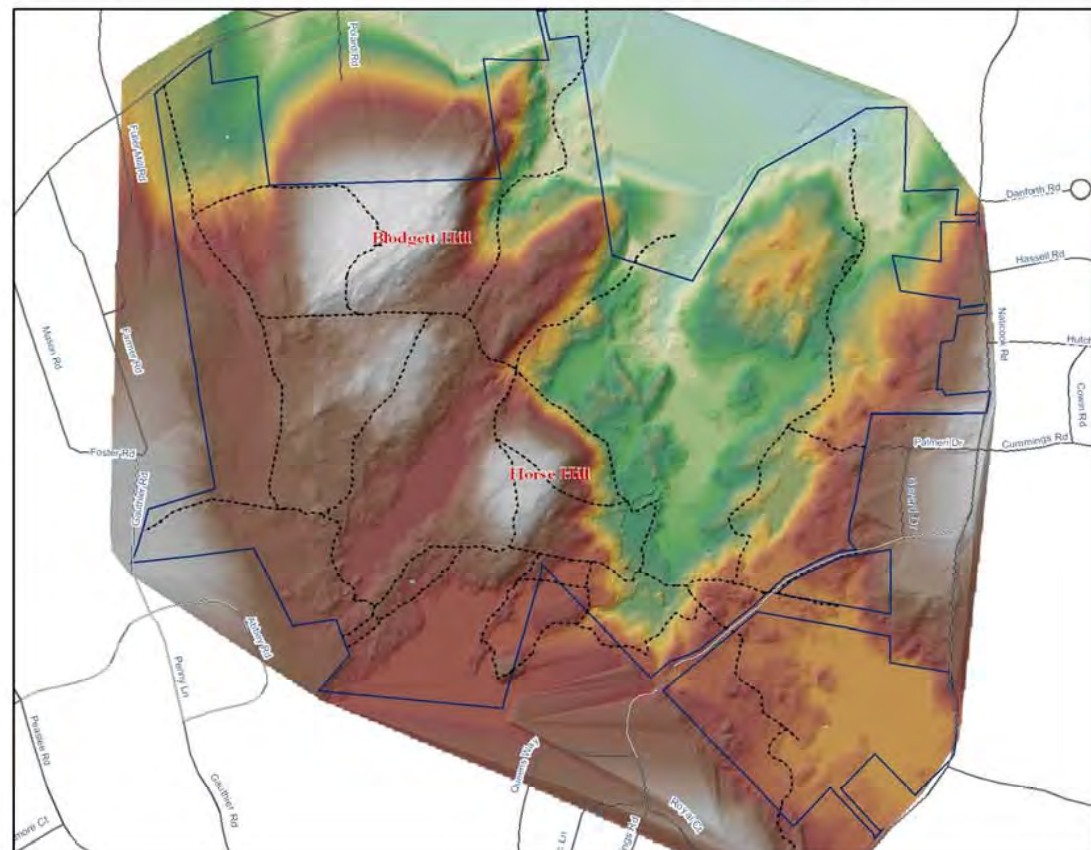
Topography



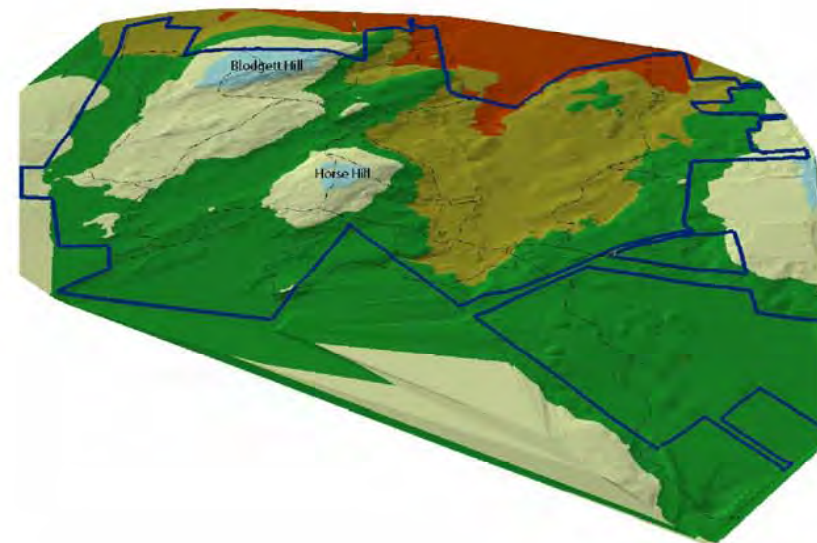
- 2 Foot Contours
- Local Road
- Class VI, Private Road
- - - Trails
- Wetlands
- Boundary



- Slope**
- 0 - 5%
  - 6 - 10%
  - 10 - 20%
  - 20+%
  - Local Road
  - Class VI, Private Road
  - Trails
  - Boundary



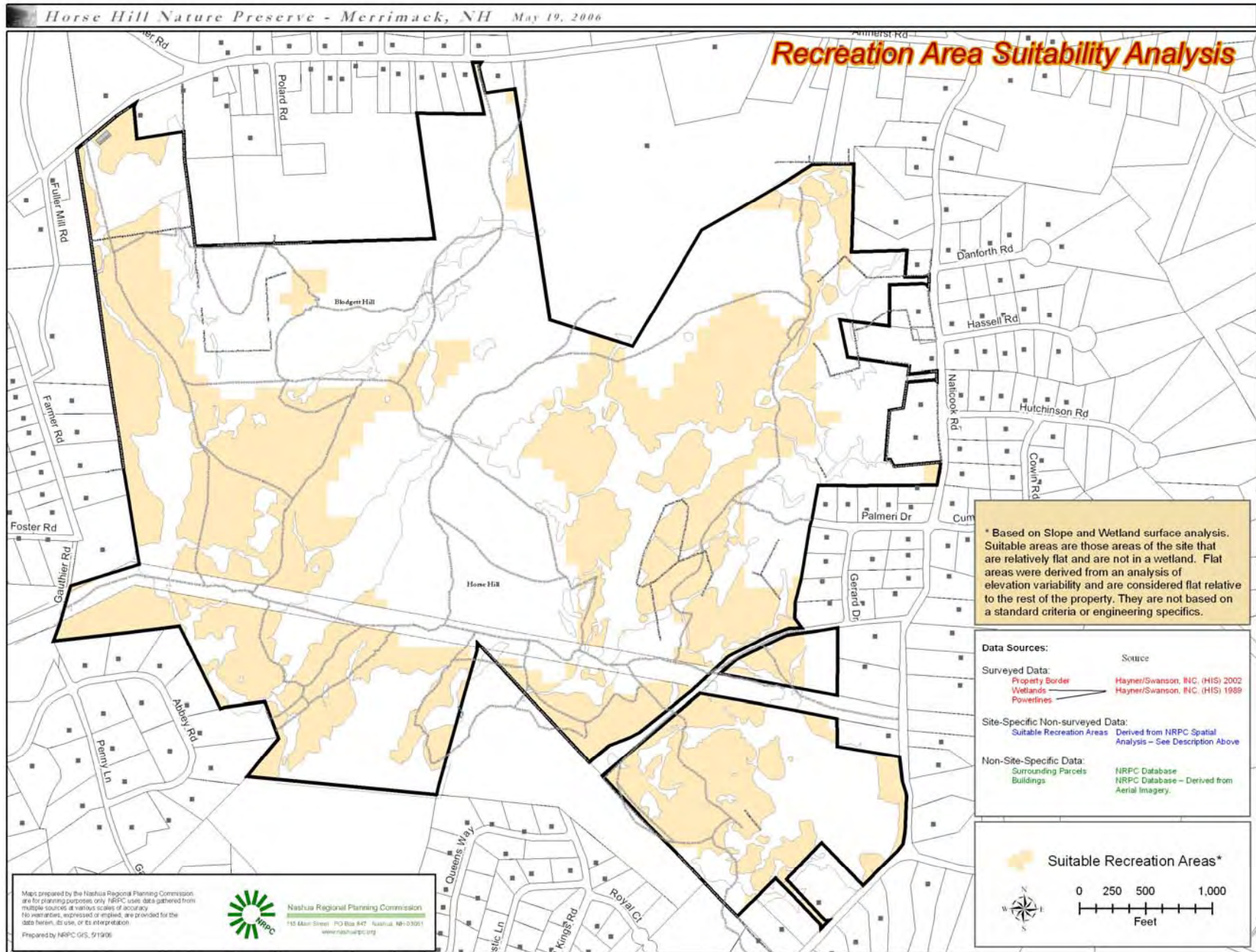
- Elevation Value**
- High: 421
  - Low: 177
  - Local Road
  - Class VI, Private Road
  - Trails
  - Boundary



Map(s) provided by the Nashua Regional Planning Commission are for planning purposes only. NRPC uses data gathered from multiple sources at various scales of accuracy. No warranties, expressed or implied, are provided to the data herein, its use, or its interpretation.  
 Prepared by NRPC GIS, 5/19/06

Nashua Regional Planning Commission  
 115 Main Street, PG Box 847, Nashua, NH 03001  
 www.nashuarpc.org

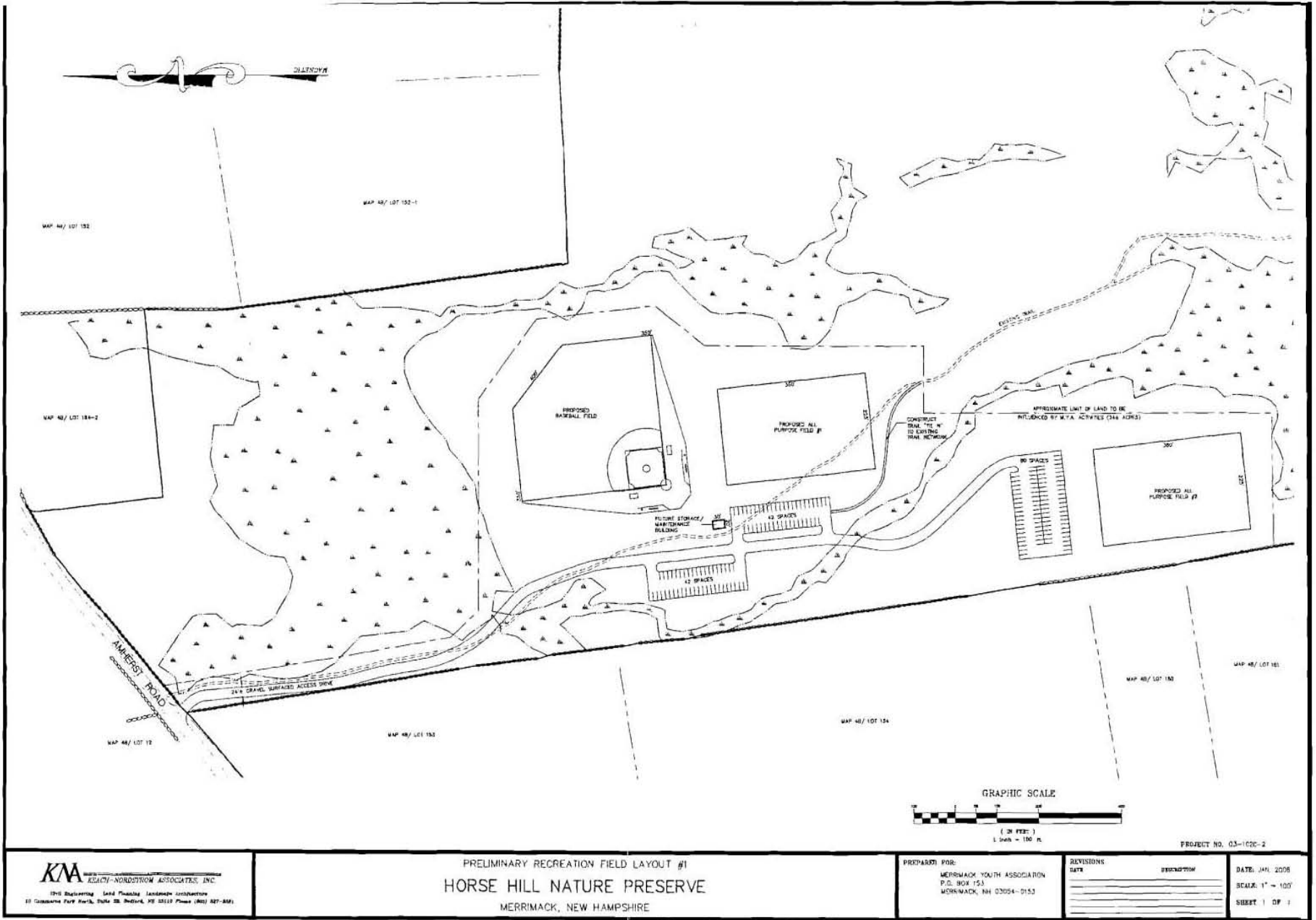
Data Sources:		Source
<b>Surveyed Data:</b>		
Property Border	Powerlines	Hayner/Swanson, INC. (HIS) 2002 Hayner/Swanson, INC. (HIS) 1989
Wetlands	Contours	
<b>Site-Specific Non-surveyed Data:</b>		
Digital Elevation Model	Slopes	Derived from 2' contours by NRPC Derived from Digital Elevation Model by NRPC
Trails		Identified by Horse Hill Definitive Plan Committee. Existing Trails derived from GPS data.
<b>Non-Site-Specific Data:</b>		
Streets NRPC - Edited from USGS Data.		







R:\\_project\0310202\0310202.dwg\CONCEPT.dwg, Layout1, 11/16/2006 1:57:36 PM, .rvt



**KMA**  
 KIMMEL & MERRIMACK ASSOCIATES, INC.  
 1210 Seaboard Lane, Portsmouth, New Hampshire  
 20 Commerce Park North, Suite 20, Bedford, NH 03110 Phone (603) 827-8811

PRELIMINARY RECREATION FIELD LAYOUT #1  
**HORSE HILL NATURE PRESERVE**  
 MERRIMACK, NEW HAMPSHIRE

PREPARED FOR:  
 MERRIMACK YOUTH ASSOCIATION  
 P.O. BOX 153  
 MERRIMACK, NH 03054-0153

REVISIONS	DESCRIPTION
DATE	

PROJECT NO. 03-1020-2  
 DATE: JAN. 2006  
 SCALE: 1" = 100'  
 SHEET 1 OF 2



**MINORITY REPORTS CONCERNING THE ATHLETIC COMPLEX**

- A. In Opposition to the Athletic Complex - A Minority Positioning Report**
- B. Horse Hill Nature Preserve Minority Opinion - Habitat Impact Study**



## **IN OPPOSITION TO THE ATHLETIC COMPLEX :** **A MINORITY POSITION REPORT**

We the undersigned strongly disagree, and do not support, the decision to potentially construct an athletic complex on Horse Hill Nature Preserve as proposed in the Definitive Plan. We believe the athletic complex should not be built and, further, it should be removed from the list of activities that should take place on Horse Hill Nature Preserve.

We base our position on several key points that will be presented in detail later in this report.

- The Definitive Plan Group was charged to obtain consensus on all issues, but when consensus was not possible on this issue we believe that the “majority” vote is inappropriate.
- Since consensus could not be reached, the appropriate course of action should have been an in-depth evaluation of the general and athletic complex Objective Criteria. This was not done. As the facts will demonstrate, if the evaluation process had taken place it would have been apparent that the proposal did not meet the criteria and should have been rejected. Since construction would result in permanent damage to the site we need to hold the proposal up to the highest standards and follow the established evaluation standards.
- An abundance of professional testimony and correspondence is available from natural resource experts that the proposal will destroy instead of protect the biodiversity of the natural resources – goals of the Horse Hill Nature Preserve Master Plan, the Merrimack Master Plan and the NH Wildlife Action Plan.
- Finally, it is our firm belief that the athletic complex is not an activity that should be a part of HHNP as proposed, or in any alternative location or format. We believe that the athletic complex should be removed from the list of approved activities. We agree that there is an apparent need for an “athletic complex” facility somewhere in Merrimack, but the Horse Hill Nature Preserve is NOT a logical or supportable location.

### **The Objective Criteria for Suitability Analysis**

The Definitive Plan Consensus Building Group developed a set of *Objective Criteria for Suitability* prior to discussing the proposed activities. General criteria were established for evaluating all of the uses. Criteria specific to each activity were also established. The resulting General and Specific objective criteria were to be used in evaluating the suitability of each proposed activity. The proposed athletic complex does not meet the majority of the General criteria and, in fact, fails to meet many of the Specific criteria. For purposes of clarity we have formatted the objective criteria statements as questions and combined related criteria. The questions are followed with a concise statement of our position and supporting information. Additional information may be obtained by reading the referenced materials, viewing the meeting tapes or by contacting us.

### **Evaluation Using the General Objective Criteria**

- *Does the athletic complex meet the vision for recreational opportunities as outlined in the Merrimack Master Plan?*
- *Does the proposed use complement/supplement existing uses on this site and within the town?*

These criteria were not fully examined as our attempts to discuss the status of current and/or future locations for athletic facilities in town were declared “out of order”. We were not allowed to consider the number of athletic facilities sites added since the publication of the Town Master Plan in 2002. We were not allowed to discuss the Park & Recreation Department proposal for a full sized ball field at another

location. We believe that had we been able to consider the criteria as established, the analysis would have been that the proposal did not meet these criteria.

- ***Does the proposed use meet project Goals & Objectives as outlined in the 2003 Horse Hill Nature Preserve Master Plan?***
- ***Does the proposed use minimize impact to biological attributes (important/critical wildlife habitat as identified in the Ecological Sensitive Area map and the NH Fish & Game Wildlife maps)?***

The proposed athletic complex is in direct opposition to the Horse Hill Nature Preserve Master Plan Goals and Objectives. Specifically, it would violate the goal to “*Preserve and encourage the biological diversity of the property through the protection and careful management of existing, potential and emergent plant and animal habitats and species.*”

A further reference to be considered is the Town of Merrimack Master Plan of 2002, Chapter IV, Natural Resources, Conclusions and Recommendations. The Town Master Plan establishes the number one priority action item must be to provide for open space preservation, for retention of rural character, for access to and protection of surface water, protection of wildlife habitats, and for the protection of groundwater resources.

The NH Fish & Game “*Endangered and Threatened Wildlife of New Hampshire*” study, the resulting acclaimed “*Wild Life Action Plan*” and the accompanying “*Critical Habitats and Associated Species*” list is an in-depth professional study of critical habitat in NH and the actions necessary to protect and enhance them.<sup>1</sup> The athletic complex is contrary to the goals of these recognized wildlife experts. One obvious example is that the American woodcock and ruffed grouse inhabit the early successional habitat proposed for destruction. These two species would not survive the destruction. Further studies and understanding of the area slated for ball fields will surely determine the presence of additional critical habitats and species within this rich ecological wetland/upland area. The signs are there that additional information is needed.

The proposed athletic complex is located close to an ever-expanding beaver habitat and it would cross the outlet stream several times. Beaver are considered to be a “key species” as they create new habitat, an activity unique to this species alone. The proposed location would eliminate one of their major food sources and introduce an abundance of human activity in their pond habitat complex. The loss of food and the greatly increased amount of human activity would impact their ability to survive. In addition to impacting the beaver, human activity would scare away wood ducks and other birds, capture turtles, and generally destroy the ecological balance of the pond area. We are all aware that beaver continually work to expand their ponds and this in turn creates wetlands and new habitat. When their natural expansion conflicts with human activities the beaver generally are trapped or killed (*See the aerial photo montage that demonstrates the growth of their habit over the past 30 years. It is found at the end of this report*).

- ***Does the use complement and/or supplement existing uses on site and in other town locations?***

The athletic complex would provide parking areas and this could supplement other HHNP activities. However, it would cause major environmental impacts. We do not believe that the permanent destruction justifies the end result! Certainly the amount of traffic, upwards of 1,100 people, and the resultant noise, lights and trash does not complement the other activities proposed for this site. The existing parking area on Amherst Road was developed with minimal impact and could be expanded. Other locations for parking are available and could be developed without severe impact on biodiversity. We are aware of no activity on HHNP that an athletic complex would complement.

---

<sup>1</sup> For more information on the NH Wildlife Action Plan go to the NH Fish & Game website: [www.wildlife.state.nh.us](http://www.wildlife.state.nh.us)

Once again, we were not permitted to discuss “other town locations”, so this element of the agreed-upon criteria item was not able to be discussed or evaluated. Common sense tells us that other locations within the town, realized and potential, appear to be better places for an athletic complex as there are existing School, Parks & Recreation or town facilities with parking and/or transportation routes already in place.

➤ *Does the use maintain the integrity of unfragmented land (especially with respect to known wildlife corridors)?*

There is a recognized major wildlife travel corridor running from HHNP, westerly of the parking area and crossing Amherst Road. It connects HHNP and the open fields and woodlands that are all important elements in the Souhegan River Watershed Master Plan.<sup>2</sup> Construction of the entrance road would destroy the corridor and severely impact the travel patterns of the wildlife species. Additionally, any road and field construction along the brook and around the beaver ponds would fragment existing travel patterns.

➤ *Does the use minimize impact to known historic/cultural sites?*

The only potential historical impact would be to the dug well that served the farm across Amherst Road. We are aware of no other historical issues.

➤ *Does the use meet all applicable NH State Regulations and Town Ordinances?*

The only area for an access road is very limited in width due to the presence of NH jurisdictional wetlands. It appears that the Merrimack Town Ordinance requiring a 25-foot, no-disturb, wetland protective buffer would be violated in order to construct the road as proposed. Buffer zones of at least 25 feet are recognized as a means to prevent/lessen wetland habitat impacts from alteration and tree cutting. The conceptual plan is based upon an outdated wetland study. It is apparent that the wetlands have and are continuing to expand as seen in the attached photographs. There is certainly less space available than shown on the plans and this means a probable increase of the amount of negative impact.

The NH DES regulations and rules permit the destruction of wetlands through a highly regulated permitting process. However, since there is no current mapping of the wetlands, no in-depth engineering plans, and no other specific construction details, it cannot be determined if this project would be able to meet the applicable state regulations. On-the-ground observations point to severe limitations. The NH DES might require the town to place associated uplands under protective covenants.

➤ *Does the athletic complex location minimize construction cost and lower long-term maintenance needs?*

The athletic complex supporters state that this location meets these criteria, but no supporting information was presented. Since the group was not permitted to discuss potential construction costs and site-specific engineering studies were not part of the proposal, we are forced to use common sense observations and reasoning to answer the question.

We know that the entrance road area contains very wet soils with limited space available, that ledge is visible in several locations, that two field areas are covered with stones and boulder outcroppings and that several wetland crossings will be required. The 1,200 foot entrance road will require maintenance of an area with unstable wetland soils and an abundance of natural drainage across the location. A well will be required to be drilled and maintained in order to water the fields. The new roadway would bring vehicle access well into the HHNP parcel and police coverage will be needed to patrol the parking lots

---

<sup>2</sup> For further information refer to the Souhegan River Watershed Management Plan prepared by the Nashua Regional Planning Commission. Since this is a lengthy document, a copy is being made available at the Merrimack Community Development Department for reference. Website: [www.nashuarpc.org](http://www.nashuarpc.org)

and fields due to their remote location. Common sense tells us that these potential costs are not going to be insignificant.

Again, we were not permitted to discuss the costs of the proposal to costs associated with other potential non-HHNP locations. Common sense says the costs will be extensive due to the difficulty of accessing the site; the amount of leveling needed to prepare the fields and certainly length of the roadway will increase maintenance costs.

### **Evaluation Using the Specific Athletic Complex Objective Criteria**

In addition to the General Objective Criteria for Suitability the group agreed upon another set of criteria specific to each of the activities. The majority of the criteria are site-selection requirements as used by the MYA in evaluating any location, not just HHNP. Therefore, we expect that they would support the proposal.

➤ ***Does the area location support athletic fields with parking, fields and support facilities?***

The proposed location could support an athletic complex - only after extensive preparatory reworking of the area. There would be a substantial amount of vegetation removed, a moving and leveling of earth and boulders, potential blasting of ledge, well drilling, electrical access construction and more. All of this just to make the location suitable for parking, fields and support facilities. We question the high costs in terms of the ecological damage/destruction, destroyed wildlife species and the spending of taxpayer dollars just to locate a complex on this site. We do not feel that the end result justifies the cost necessary to meet it. There must be other locations within town without the high associated costs – however, we were not permitted to raise this issue for discussion.

➤ ***Is the area accessible by a road 22 feet wide and with a maximum 8% slope?***

No engineering studies were developed that support the contention that a road can be built that meets these criteria. As noted previously, the wetland mapping is several years old and the wetlands throughout the area have increased over the past years. A road surface may be 22 feet wide, but it will require shoulders for safety and storm water management structures and this will increase the width of the area needed. The available area is limited close to the wetlands so the ability to build a 22 foot roadway is questionable. No data is available to support the claim that an 8% grade exists or could be constructed as proposed. As noted previously, virtually anything can be built but what will be the associated costs in terms of lost habitat and dollars.

➤ ***Is the complex within reasonable proximity to a town road?***

There was no discussion of what is “reasonable proximity”. The proposed road length appears to be over 1,200 feet. Parking lots are located adjacent and beyond it and fields extend further beyond them. We do not consider that these distances are reasonable proximity. We believe that other sites can be located where accessibility is more reasonable and significantly less costly to construct. Again, there was no discussion of other locations permitted.

➤ ***Is the area under consideration relatively flat (less than 10% slope)?***

The area along the wetlands is relatively flat. There is a moderate slope up into the upland area once the stream is crossed. Portions of the area proposed for parking and fields appear to contain steeper slopes. The presentation confirmed that in order to create level areas for fields and parking there would be substantial moving of rocks and fill around the site. Detailed engineering studies have not been conducted so slope information is not available. We note that with unlimited funds, virtually any project can be built with the equipment available.



➤ *Is the area incompatible with power lines?*

The MYA does not want to place fields under power lines due to safety issues. Therefore the location mentioned in the *Forestry & Ecological Study* was immediately eliminated. Overhead power lines exist only in a very limited portion of HHNP meaning this criteria could be met by virtually any proposed site.

➤ *Does the proposal minimize the impact to jurisdictional wetlands?*

The NH DES regulations require that all construction proposals must minimize the impact to wetlands. We know that there will be wetland impacts along the roadway as proposed, at the brook crossings and probably in several other isolated spots. Are these impacts less than on any other site considered? We don't know as no wetland impact data was apparently calculated for any of the sites, including this one. Therefore we are unable to determine if this location has less impact than any other one. Due to the lack of data available, there is no reason to accept that the proposal actually meets the criteria.

➤ *Does the proposed plan minimize impact to important/critical wildlife habitat?*

We know that the proposal will have far ranging and destructive impact to the critical wildlife habitat on this site based upon experts who reviewed the proposal.<sup>3</sup> There is no comparative data supporting the contention that the impact is less than on any other HHNP location – it is hard to imagine that it could be! Without proof the proposal fails to meet the criteria.

➤ *Does the proposed plan provide for proper field orientation? What about water, electricity and sanitary facilities?*

These are all inherent ball field design elements and would be met by any proposed location.

➤ *Does the proposal provide an opportunity for adequate buffers for abutters?*

The Horse Hill Nature Preserve Master Plan states that any activity should “Minimize impacts to the ...surrounding properties with regard to...noise...” The proposal did not include any information as to what constitutes an adequate buffer in order to control the noise created by the over 1,000 people expected to use the fields throughout a weekend. We do know that construction of the proposed entrance road would remove the majority of the tree and shrub buffer along this boundary line. Obviously, there would be no buffer to the traffic noise or the resultant trash. This criteria was not addressed in the proposal and we cannot assume what is not in evidence.

### **Objective Criteria Evaluation Summary**

In conclusion, when the proposed athletic complex is evaluated using the agreed-upon objective criteria, both General and Specific, it does not pass the majority of the measures:

- The athletic complex proposal fails to meet 80% of the General Objective Criteria for Suitability.
- Of the nine Specific athletic complex criteria: the proposal clearly fails to meet three criteria; does not provide information to support a conclusion that it could meet another three of the criteria even if more detailed information was available; partially meets one criteria; and, only meets two of the criteria. Close examination shows that the proposal only meets simple design issues – proper field size, orientation, availability of utilities. The criteria measuring impact on the ecology and wildlife habitat with permanent destructive consequences are not met. In most instances supporting data is not even provided. Due to the serious impacts this type of facility

---

<sup>3</sup> Refer to the minutes of the Group meetings and copies of the presented materials on file at Community Development. Particular reference is made to letters from Laura Deming, Senior Wildlife Biologist of NH Audubon Society, and an email from Ann Poole, Wildlife Biologist.

would have if it were built we should not approve criteria unless the proof is presented and is in fact positive. It is not proven at this point by any means.

### **Town Master Plans vs. the Athletic Complex**

Although the *Objective Criteria for Suitability Analysis* is an important tool in the evaluation of the conceptual athletic complex, they are not the only information on this subject. We should also consider two long range plans that have been adopted by the town since they both address the Horse Hill Nature Preserve issues.

#### **Merrimack Master Plan of 2002**

Within the *Merrimack Master Plan of 2002, Chapter IV, Natural Resources, Conclusions and Recommendations* the parcels known as the Horse Hill Nature Preserve are listed as the number one priority action item. The parcels were considered by the planners as being very important for open space preservation, retention of rural character, access to and protection of surface water, protection of wildlife habitats, and for the protection of groundwater resources. Note that the Master Plan does not include any mention of an athletic complex on this parcel.

#### **Horse Hill Nature Preserve Master Plan of 2003**

Excerpts pertinent to the athletic complex issue include:

- “Goals and Objectives: Preserve and encourage the biological diversity of the property through the protection and careful management of existing, potential and emergent plant and animal habitats and species.”
- The Executive Summary specifically addresses ten (10) recommended uses. Eight (8) of the recommendations were listed as activities/actions that “should” be included on HHNP. The athletic complex “could” be established. (Emphasis is ours.)
- The Master Plan also states that accepted uses should take into consideration “the extent to which [a] use will detract from the enjoyment of the area by others” and “Every attempt possible should be made so those said [athletic] complex(es) maintain the character of the Horse Hill Nature Preserve and its sensitive areas.”

The concept of an athletic complex is in direct opposition to the goals and objectives of both Master Plans.

### **Conclusions and Recommendations**

We strongly believe that with a careful analysis of the material available, an in-depth evaluation of the Objective Criteria and a review of the available Master Plans that the facts do not support the construction of an athletic complex on the Horse Hill Nature Preserve.

- The athletic complex proposal fails to meet eighty percent (80%) of the agreed upon General Objective Criteria for Suitability.
- The athletic complex proposal also fails to meet the majority of the Specific Objective Criteria. Supporting information is not available to support most of the other criteria.
- The athletic complex proposal is in direct opposition to the Horse Hill Nature Preserve Goals and Objectives. It is in direct opposition to the short and long range planning statements contained in the Horse Hill Nature Preserve and Town Master Plan documents.
- Although approved by a simple majority vote, it must be noted that thirty-nine percent of the Group were opposed the athletic complex motion. Many of the non-voting participants also

voiced strong opposition to the design and location and provided valuable documentation to support their positions.

**We firmly believe that NO athletic complex should be included in the future plans for Horse Hill Nature Preserve.** Several supporters of the athletic complex have stated that since the athletic complex is mentioned in the HHNP Master Plan it must be included in the Definitive Plan and their plan must be accepted. When you take the time to review all of the materials available, this position is not supported.

Specifically, the writers of the Horse Hill Nature Preserve Master Plan addressed the issue of change in their recommendations that have governed all of our discussions. The Master Plan specifically recommends that *“as circumstances change over time, these and other uses might be reconsidered by the managing body”*. Now is the time for that reconsideration in light of the extensive amount of new information that has become available since the Master Plan was written.

A **Forest and Ecological Study** has been conducted by a licensed NH Forester in cooperation with a Wildlife Biologist. The **NH Fish & Game Significant Wildlife Habitat** study of important habitat was released and has been followed with detailed **Critical Habitat and Associated Species** reports and finally the **NH Wild Life Action Plan**. Two wildlife biologists have reviewed the materials and advised against building an athletic complex. Additionally, the number of walks, tours and hours spent on the parcel by numerous interested citizens has increased the volume of knowledge available on the natural habitat and wildlife inhabitants and leaves many questions unanswered as to the potential impacts.

We must keep in mind that we can build an athletic complex somewhere else where the impact will be significantly lessened. Once we destroy the ecological balance and the critical habitat of this unique parcel, it will be gone forever.


*“In the end the way we treat the land affects not only the fish and game  
but all life, including our own”<sup>4</sup>*

---

<sup>4</sup> Habitats, Volume XXI, No. 1, Spring 2006, published by the UNH Cooperative Extension Service, Forestry and Wildlife program, Seagrant, Water & Marine Resources Program and Community Conservation Assistance Program. For more information: <http://deinfo.unh.edu>

**Respectively submitted by:**

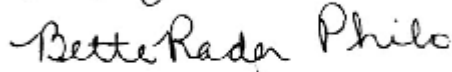
Harold Watson



Robyn Goinsalvos



Bette Rader Philo



Helynne Wenz



Andy Powell



Karen Mattor



# **Horse Hill Nature Preserve Minority Opinion - Habitat Impact Study**

**June 2006  
Michael Ruggiero  
Vice President - MYA**

**Author is representative of the Merrimack Youth Association assigned to the Horse Hill Nature Preserve Ad Hoc Committee and former Vice Chair of the Horse Hill Nature Preserve Master Plan Committee.**

## **Horse Hill Nature Preserve Minority Opinion - Habitat Impact Study**

This document will attach to the Definitive Plan of the Horse Hill Nature Preserve Ad Hoc Committee and Nashua Regional Planning Commission as an Addendum and be entered for the record according to the rules set forth by the Nashua Regional Planning Commission in October 2005.

The reason for this minority opinion is to inform the public that the Horse Hill Nature Preserve Consensus Building Group was unable to reach 100% agreement on the issue of supplying a Habitat Impact Study for the areas chosen on the site as Athletic Field complex.

It is the opinion of the minority that this requirement is a duplication of effort, not needed, and was only enacted because the neighbors and abutters required a compromise from the Consensus Building Group. This report will detail each objection with data and facts so that the BOS may consider the minority opinion and reject the requirement as part of the Definitive Plan.

First, there is absolutely no such thing as a standard Habitat Impact Study. Such a study does not exist, there is no template, and there is no place to obtain the subject matter that should be addressed in such a study. According to NH Fish and Game, DES, and US EPA, these types of studies are subjective opinions and could take years to complete to include irrefutable evidence that wildlife is negatively impacted by enacting the Athletic Field Plan as proposed.

Thus, any expert opinion obtained would be subject to dismissal by an equally qualified expert. In the case of HHNP, it is assumed that those opposed to the presence of athletic fields would hire, or attempt to hire, a consultant that would show some adverse affect on the habitat due to the construction of athletic fields. In turn, those that favor the athletic fields would be required to hire (thus countering the claims) of the "no athletic field" contingency and present their findings to the BOS or the Town Council.

In both cases, tax dollars will be spent and countless months (maybe years) will have been wasted for what will certainly be a wash. One expert versus another will not resolve the issue and the BOS or Council will ultimately make the decision anyway. It is the opinion of the minority that this exercise be skipped, the taxpayer dollars saved or spent on more worthwhile projects, and the detailed reports contained in the HHNP Master Plan, Forest Ecological Report, and the recommendation of the Nashua Regional Planning Commission be taken as the factual data regarding habitat impact with the presence of athletic fields on HHNP.

In the Horse Hill Nature Preserve Master Plan, this issue was addressed by citizens of the community. The Master Plan carefully states that a diverse range of citizens made up the group and that research was conducted, researched, and debated. It is worth mentioning that this group was founded by the BOS and had the following charge:

*The charge of this committee shall be to research and develop plans and policies for this 563 acre site which will promote conservation, **open space, recreational** and other allowable municipal purposes as approved by the voters of this town at the Town Meeting held on April 9, 2002 (Warrant Article #10).*

*The plans shall include past history, current uses and proposals for the future that will encourage controlled development to its fullest potential as a benefit to the community now and in the future.*

The original Master Plan very clearly allowed the group to assess the use, research, and develop plans that promote recreational purposes of the property. Exhaustive research and debate found that the athletic field complex is a desirable and approved use with little or no impact on the sensitive areas, habitat, wildlife, or wetlands. The committee found that the fields should be built using best known practices and that all town ordinances be followed.

Of utmost importance to the Master Plan Committee was that 500 acres be left un-fragmented. Their research indicated that 500 acres left un-fragmented supported habitat and offered suitable resource protection for wildlife. Various sources are cited in their work including The Forest's Society Report, the Town's Master Plan of 2002, and Ellen Snyder of UNH Cooperative Extension Service.

A summary statement from the Plan:

*...forest blocks larger than 500 acres have a greater capacity of supporting a wider range of resource protection values such as economic forest management, wildlife habitat, outdoor recreation, and water supply protection than smaller forest tracts. It is for this reason that 500 acres is used as a threshold indicator of forest health and forest fragmentation.*

By not fragmenting the area, further impact studies will only reveal what the experts above have already stated. By leaving the area un-fragmented, the impact on wildlife is minimal for forest health and wildlife habitat.



The athletic field complex proposed is in the NW corner of the property. This leaves the remaining 539 acres unfragmented, exactly as recommended.

To further site “expert” testimony and evaluation, the Master Plan proudly announced the diversity and expertise of the Master Plan Group.

*The volunteers who stepped forward to accept this charge represented a broad spectrum of individuals with extensive experience in government, conservation, land management, and education. Among the thirty members of the master plan committee were the Chairman of the Conservation Commission, the Chairman of the Parks and Recreation Committee, the Chairman of the Planning Board, a state representative, a member of the Zoning Board of Adjustment, a Vice President of the Merrimack Youth Association, a Library Trustee, a Selectman's representative, a member of the Heritage Commission, an engineer with the Department of Environmental Services, an engineer with the Environmental Protection Agency, a civil engineer, two teachers with masters degrees in environmental education, abutters, and long-term residents.*

If the Master Plan Committee felt that their group had experts including an engineer with DES and engineer with EPA, the minority report authors wonder why their testimony and research was good enough to get approval, but is not good enough for a Definitive Plan. The answer is obvious to the minority. This is just another excuse to delay the project by the neighbors.

Further, the Town has already spent considerable dollars for Forest Management Plan and Ecological Assessment authored by Daniel J. Cyr LPF, Brian Johnsen LPF, and E. Ann Poole, Ecologist. In this report, (paid for by Conservation Commission dollars), no evidence came forward that further research was required or an impact study be performed. Nowhere in their recommendations did these experts note any objections to the plan put forth by the Athletic Fields Subcommittee. To the point, these experts did not recommend any further study.

The Forest Plan refers to the athletic field area as Stand 1. The following are excerpts from their report about Stand 1 (athletic field area).

*The prime importance of this stand is certainly that of access into the property and the present use of the road. Have the road built into a graveled woods road with a ditch and cross drainage culverts to make the trail into an access corridor for safety vehicles, forest fire control, and future harvesting equipment while maintaining the integrity of surrounding wetlands.*

This recommendation is exactly the plan for the Athletic Field access roadway.

This report has two other recommendations relevant to this discussion. First, there is considerable time spent explaining that this “stand” needs to be cut and trimmed back. There are invasive species present that are choking out native species on which local wildlife populations depend. Clearly, the wildlife not only thrives in this area, but clearing is recommended. Further, mowing has even been recommended to enhance the woodcock habitat. Athletic Fields are mowed and will provide additional space for this species when the children are not there.

*Mowing these invasives with a follow-up selective herbicide application is highly recommended.*

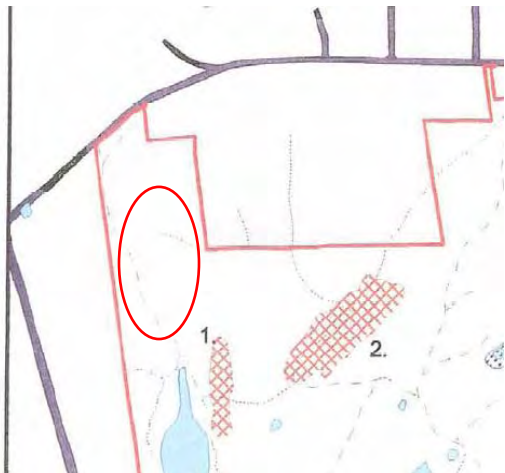


*Consider mowing some of this area where the growth is mostly alders in order to enhance Woodcock habitat.*

The Foresters report recommends in part, *Look into placing a conservation easement on most of the property that should remain as open space forever, and determine which areas of this property could be set aside of other Town uses (such as a ball field). This may require a much more thorough evaluation of soils and costs of road and site construction before this can be determined, but the process should begin as soon as possible.*

This expert maintains that ball fields are viable yet has concerns about soils and costs only. There is no mention of Wildlife Impact studies.

The next section of the report is from E. Anne Poole, an Ecologist. Again, no specific recommendation to perform extensive impact studies was given. Ecologically sensitive areas were identified on the property. The Athletic Field complex is **not** located in any area identified as sensitive.



Athletic Field area is shown in red. This report did not identify this area as sensitive.

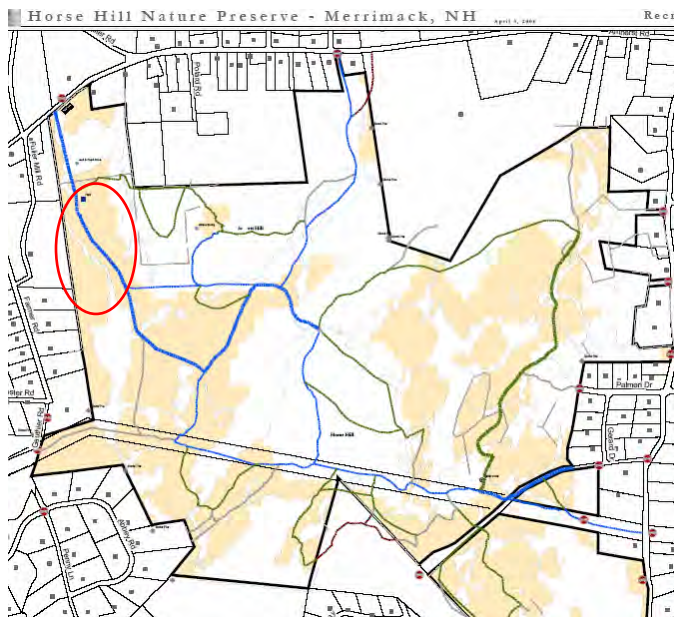
Both Mr. Cyr and Ms. Poole went out of their way to describe the true menace to the property as OHRV vehicles. Nowhere in their discussions do they proclaim that additional studies need to be done prior to building any athletic fields.

Ms. Poole has submitted an e-mail to the neighbors that are opposing any athletic fields. In it she states that fields should not be allowed because of the impact on wildlife. However, when she was employed by the Town as a consultant, (again with Conservation Commission dollars) she did not state that impact studies are required nor did she recommend an outright ban on athletic fields, as she has done in her alleged e-mail. It should also be noted that she did NOT supply this information to the Town,

only to the neighbors and abutters. Finally, Ms. Poole did recommend in her report that hunting be banned from HHNP. This recommendation was not followed.

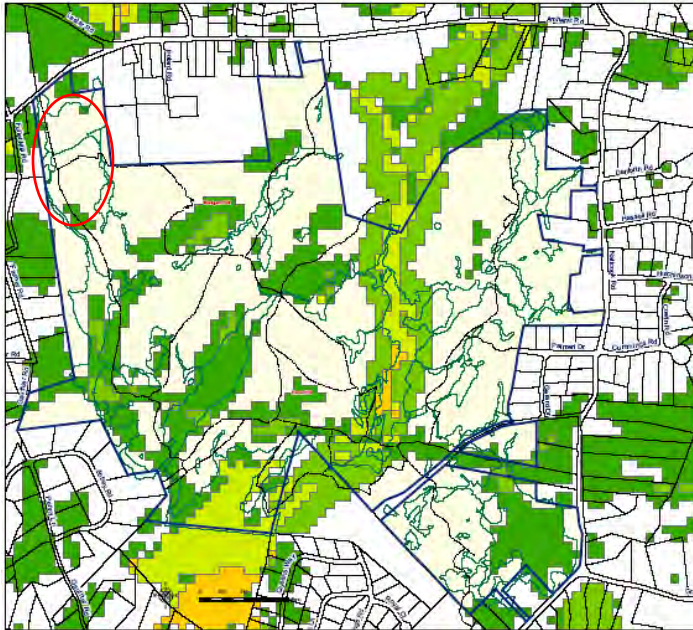
The Consensus Building Group also found the following information and based their recommendations on all of the objective criteria for the different uses. Included in their recommendations was the impact on wildlife. First, the committee found that the spot chosen for the athletic fields was suitable based on slope and wetland surface analysis.

*Suitable areas are those areas of the site that are relatively flat and are not in a wetland. Flat areas were derived from an analysis of the elevation variability and are considered flat relative to the rest of the property. They are not based on a standard criteria or engineering specifics.*



Tan areas are considered suitable for recreational areas. Athletic complex and the area for a Wildlife Impact Study is shown inside red area.

The NRPC group also identified the corridors where wildlife is most likely to travel. This is a proven method of predicting the corridors where the animals will travel to and from based on the proximity to water and other factors. NH Fish and Game produces these maps to enable groups such as the HHNP Ad Hoc Committee to plan and locate human interest sections of a forest so that a minimal impact on wildlife results. Many members of the Consensus Building Group chose to ignore this work in an attempt to bolster their “no athletic fields” posture. Clearly, the next graphic shows that the field complex is as far away from predicted and verified corridors as it possibly can be. Asking for additional studies when it is clearly shown that the areas chosen has no basis of fact and that minimal wildlife impact has already been proven as a given objective criteria.



The darker the color, the higher incidence of concurrence, the greater significance to wildlife. Note the area inside the red line is the lightest color on the property.

This map shows that the area chosen will have the least impact on wildlife as any area on the property. No additional studies are required.

In addition to the diverse nature and educational attributes of the citizens that have already looked at this issue, the NRPC chose to hire a consultant to work with NRPC and the Consensus Building Group. Tom Kokx and Associates is a consulting agency based in Gilford, NH. Mr. Kokx is a recreational planner with experience in design, planning, and management with the White Mountain National Forest. Mr. Kokx's comments can be read many times over in the minutes of the HHNP meetings as well as his recommendations to include athletic fields in the NRPC Definitive Plan. Mr. Kokx assured this group, time and again, that the fields had minimal impact on wildlife, in his expert opinion, and that every attempt to minimize any impact is included in the Definitive Plan. The citizens of Merrimack have already paid for this advice.

Federal laws, guidelines, and policies already exist to protect wildlife. Specifically, when a Wildlife Impact Study is called for, it almost always is in reference to an Endangered Species. There are specific steps to follow in an Environmental Impact Statement (EIS). In these statements, alternative solutions are mandated for study and the alternatives clearly spelled out and weighed. Rarely, if ever, can one find a EIS that specifically says "no" to a proposal unless an endangered species is impacted. There are no endangered species on HHNP.

Further data is easily attainable and simple to find. Factual data can be presented to show that athletic fields have little or no impact in wildlife. There are dozens of references and many abstracts easy to find and research. Some examples follow:

Movement of forest birds across river and clearcut edges of varying riparian buffer strip widths

Susan M. Shirley Corresponding Author  
Department of Zoology, University of British Columbia, 6270

University Boulevard, Vancouver, BC, Canada V6T 1Z4  
Received 24 June 2005; revised 29 October 2005; accepted 31  
October 2005. Available online 27 December 2005.

## Abstract

The ability to move across and perhaps exploit resources in adjacent habitats may also allow a species to persist in marginal habitats until a better territory is found. Understanding how animals next term respond to the distribution of forest remnants may be useful in combining conservation efforts with landscape harvest designs. Studies have examined movements of birds within permanently fragmented habitats, but movement patterns may differ in temporarily fragmented landscapes.

I examined the frequency of movements across river and forest-clearcut edges for several habitat and nesting guilds and individual species. Movements were almost four times higher at clearcut edges than river edges and were dominated by forest generalists, open-edge and ubiquitous species across both edges particularly those nesting in deciduous trees. Forest interior species were rarely observed crossing either boundary.

Movements were positively related to abundances in buffers and negatively related to buffer width for deciduous tree nesters and those species associated with open-edge habitats. High movements in the narrow buffers suggests that these species incorporate this edge habitat as part of their territories. For forest specialists that are unwilling to cross-habitat boundaries, retaining wide buffers may provide valuable connections between unlogged patches in addition to breeding habitat. Narrow buffers that do not provide suitable habitat to support most forest-dwelling species may function as foraging sites or travel previous term corridors next term that offer more protection from predators than flying across open spaces.

Hundreds of studies already done produce a common theme with respect to athletic fields and their interaction with wildlife and the environment. The following is the final paragraph of a study conducted in Pasadena California in 2002.

*The research presented in this report indicates that the key to maintaining fields with minimal effect on the environment is diligent management **with** proper cultural practices. Maintaining a healthy turfgrass system on heavily used areas such as youth sports fields is not easily accomplished. Proper cultural practices will reduce the need for treatments that would be harmful to the environment. It is recognized that many of the studies cited in this report were conducted on golf-course quality turf under constant supervision and maintenance.*

Many communities have already spent considerable dollars studying the impact on wildlife with respect to recreational facilities. Here are just a few examples of findings of "No Significant Impact":

Amelia Orton-Palmer, 303-236-8179

**Service Determines “Finding of No Significant Impact” on a Proposal for Oil Development on the Triangle Ranch Wildlife Management Area**

The U.S. Fish and Wildlife Service (Service) has determined a “Finding of No Significant Impact” (FONSI) for the final environmental assessment of Cleary Petroleum’s proposal to extract oil under the Triangle Ranch Wildlife Management Area near Nephi, Utah. The Utah Division of Wildlife Resources (Division) purchased the property, in part with monies from the Wildlife Restoration Act, a federal grant administered by the Service. The purpose of the acquisition, under the grant, was for preserving critical winter range for mule deer and elk. Cleary Petroleum has submitted a right-of-way application to the Division for use of the surface property to access its subsurface mineral rights. Because the proposed project constitutes a change in the original purpose of the grant to purchase the wildlife management area, the Division must seek approval from the Service in the form of an amendment to the grant before permitting the right-of-way. An approval of the amendment by the Service would be a federal action requiring compliance with the National Environmental Policy Act (NEPA).

The final environmental assessment, prepared by the Division and Service, analyzed Cleary Petroleum's proposal to improve an existing two-track road, construct a new road, install one well pad, and extract oil through directional drilling on the Triangle Ranch Wildlife Management Area. The Service determined that the project would not result in significant impacts to critical wintering range for elk and mule deer or to other wildlife resources on the Triangle Ranch Wildlife Management Area. This conclusion is based on several measures that Cleary Petroleum would implement to minimize, avoid, and mitigate for any environmental impacts; information indicating that ample suitable habitat for big game, small mammals, birds, and reptiles exist in the surrounding area as an alternative for the eight acres of habitat that would be temporarily degraded or lost; and information indicating that project noise and activities would not result in significant disturbance to wildlife.

DEPARTMENT OF ENERGY

Bonneville Power Administration

Finding of No Significant Impact for Burlington Bottoms Wildlife

Mitigation Project

AGENCY: Bonneville Power Administration (BPA), Department of Energy (DOE).

ACTION: Finding of No Significant Impact (FONSI).

SUMMARY: This notice announces BPA's proposal to fund wildlife management and enhancement activities for the Burlington Bottoms wetlands mitigation site. Acquired by BPA in 1991, wildlife habitat at Burlington Bottoms would contribute toward the goal of mitigation for wildlife losses and inundation of wildlife habitat due to the construction of Federal dams in the lower Columbia and Willamette River Basins. BPA has prepared an environmental assessment (DOE/EA-0928) evaluating the potential environmental effects of the proposed project.

Alternative 1 (Proposed Action) evaluated maintenance and enhancement of the property with limited public access; Alternative 2 evaluated maintenance and enhancement of the property with no public access; and Alternative 3 evaluated the No-Action Alternative. Maintenance and enhancement under Alternative 1 would not cause significant environmental impact because: (1)

There would be no adverse impacts on soils, air quality, water quality, wildlife (including no effect on endangered species), vegetation, fish, and land use; and (2) there would be no effect on cultural resources. Based on the analysis in the environmental assessment (EA), BPA has determined that the proposed action is not a major Federal action significantly affecting the quality of the human environment, within the meaning of the National Environmental Policy Act (NEPA) of 1969. Therefore, the preparation of an environmental impact statement (EIS) is not required and BPA is issuing this FONSI.

*National Park Service*

**U.S. Department of the Interior**

**Glacier National Park**

**Montana**

**Finding of No Significant Impact**

**Construction of New Hay Storage and Feeding Facility**

**September, 2004**

**FINDING OF NO SIGNIFICANT IMPACT  
CONSTRUCTION OF NEW HAY STORAGE AND FEEDING FACILITY  
GLACIER NATIONAL PARK  
WEST GLACIER, MONTANA**

In Glacier National Park, stock is used to support much of the work conducted in the backcountry. Some programs that regularly receive supplies or assistance from stock operations include: trail crews, backcountry rangers, lookouts, revegetation crews, and maintenance of backcountry structures. The park maintains 55-60 head of stock in a given year. Currently, the hayloft of the West Glacier barn is the primary storage and dispersal point for hay storage. Hay arrives at the barn in five-ton stacks of 70 lb. bales and is lifted by conveyor up from the delivery truck and hand stacked. It must then be hand loaded from the barn down to feeding areas or onto a flatbed truck for delivery to other parts of the park.

This project is a proactive measure that targets both health and safety issues and park efficiency.

The proposed hay storage structure will reduce the number of times bales are handled, thereby reducing recurrent back injuries. Glacier National Park has one of the highest rates of injury in the National Park Service and back injuries are among the most

frequent. In addition, the proposed structure will be large enough to store an entire year's supply of hay and will eliminate a frequent problem of wet weather damaging recently delivered hay before it can be stored or transported elsewhere in the park.

## **CONCLUSION**

The proposal does not constitute an action that normally requires preparation of an environmental impact statement (EIS). The proposal will not have a significant effect on the human environment. Negative environmental impacts that could occur are minor. There are no unmitigated adverse impacts on public health, public safety, threatened or endangered species. No highly uncertain or controversial impacts, unique or unknown risks, cumulative effects, or elements of precedence were identified. Consultation with the US Fish and Wildlife Service under Section 7 of the Endangered Species Act is not necessary. The park will document a "no historic properties affected" finding in its annual report to the State Historic Preservation Office in accordance with the Programmatic Agreement among the National Park Service (Glacier National Park), the Advisory Council on Historic Preservation, and the Montana State Historic Preservation Officer for Management of Historic Properties in Glacier National Park. Concurrence from the State Historic Preservation Office is not required and no further Section 106 analysis is required. Implementation of the action will not violate any federal, state, or local environmental protection laws.

The action will not result in major, adverse impacts to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation and proclamation of Glacier National Park; (2) key to the natural or cultural integrity of the park; or (3) identified as a goal in the park's general management plan or other relevant National Park Service planning documents, there will be no impairment of the park's resources or values.

Based on the foregoing, it has been determined that an EIS is not required for this project and thus will not be prepared.

### **GEOLOGIC DRILLING & AGGREGATE SAMPLING PROGRAM, UPPER SAN JOAQUIN RIVER BASIN STORAGE INVESTIGATION, FRESNO AND MADERA COUNTIES, CALIFORNIA**

In accordance with section 102(2)(c) of the National Environmental Policy Act (NEPA) of 1969, as amended, the South-Central California Area Office of the U.S. Bureau of Reclamation (Reclamation), has determined that the proposed geologic drilling and aggregate sampling program at two potential dam sites on the Upper San Joaquin River is not a major Federal action significantly affecting the quality of the human environment; therefore an environmental impact statement is not required. This Finding of No Significant Impact is supported by Reclamation's Draft Environmental Assessment (EA) Number EA-06-54, *Geologic Drilling & Aggregate Sampling Program, Upper San Joaquin River Basin Storage Investigation, Fresno and Madera Counties, California* and is hereby incorporated by reference.

**DECISION NOTICE  
AND  
FINDING OF NO SIGNIFICANT IMPACT  
Lowell Observatory's Discovery Channel Telescope  
Environmental Assessment  
Mogollon Rim Ranger Districts  
Coconino County, Arizona**

An environmental assessment (EA) has been completed for the construction of an observatory that would house a 4-meter-class telescope. This decision also includes a water storage tank, road reconstruction and new construction, underground trenching for a power line, security fence, removal of existing outbuildings at the Happy Jack Ranger Station, and replacement of those facilities with new buildings.

**Cumulative Effects:**

Cumulative effects are addressed in the EA. The analysis team evaluated the projects listed on the current Schedule of Proposed Actions (SOPA) for the Coconino National Forest for potential impacts of reasonably foreseeable action. There are no significant cumulative effects to the environment, or to the economy of the project, region or Nation, from implementing Alternative 2.

**Significant Scientific, Cultural or Historical Resources:**

Implementing Alternative 2 will not cause the loss or destruction of significant scientific, cultural or historical resources. An Archaeological Survey and Cultural Resources Clearance report is complete and available for review in the Project Record. A 'no effect' on cultural resources was determined for this project.

**Threatened and Endangered Species or Critical Habitat:**

Implementing Alternative 2 will have no significant effects on threatened, endangered, candidate or proposed species or Forest Service listed sensitive species, and is not likely to destroy or adversely modify proposed critical habitat of any species. A Biological Assessment and Evaluation has been complete for threatened, endangered, candidate species occurring within or adjacent to the project area and a Biological Assessment and Evaluation was completed on sensitive, management indicator species and migratory birds [#PR 50, 51 and 63].

**FINDING OF NO SIGNIFICANT IMPACT  
FOR  
TOWN OF PLAINS, MONTANA  
WATER SYSTEM IMPROVEMENTS**

**TO: ALL INTERESTED PERSONS**

Date: January 20, 2006

Action: Funding Drinking Water System Improvements

Location of Project: Town of Plains, Montana



DEQ Funding: \$281,000.  
Total Project Cost: \$281,000.

An environmental review has been conducted by the Montana Department of Environmental Quality (DEQ) for proposed funding for improvements to the Town of Plains' water system. The project involves the installation of a new Well No. 1 50 hp vertical turbine pump and motor, well house expansion and piping, approximately 100 feet of 8-inch water transmission main and all associated controls, telemetry, and appurtenances. The project also includes the purchase of an emergency backup generator. The purpose of the project is to make improvements to the Town's water system needed to protect public health.

The affected environment will primarily be the Town of Plains, and the immediate vicinity. The human environment affected will include residents and visitors of the aforementioned areas. Based on the environmental assessment (EA), the project is not expected to have any significant adverse impacts upon terrestrial and aquatic life or habitat, including endangered species, water quality or quantity, air quality, geological features, cultural or historical features, or social quality.

**FINDING OF NO SIGNIFICANT IMPACT**  
**Management Plan/Environmental Assessment**  
**For**  
**The Fort Circle Parks**  
**Washington, D.C.**

- Existing services such as restrooms and parking lots would be improved to raise the quality of the visitor experience. The three superintendents would make a coordinated effort to develop a park logo and to purchase similar signs, site furniture, and interpretive materials as a way to make the FCP more visible, provide a unified image, and let visitors know when they are in the FCP.
- Existing recreational opportunities and facilities would be improved where needed. Such improvements would include rehabilitating selected ball fields; basketball and tennis courts; picnic areas; and other existing facilities as needed as well as careful evaluation of additional facilities as they are proposed.

Negative environmental impacts that could occur are minor or negligible with the following exceptions: moderately adverse impacts on vegetation, soils, water resources, and aquatic life would continue over the long term due to trail use through the loss of vegetation and possible compaction of soils; and moderate, short-term localized adverse noise impacts due to trail construction.

There are no significant impacts on public health, public safety, threatened or endangered species, historic properties either listed in or eligible for listing in the

National Register of Historic Places, or other unique characteristics of the region. No highly uncertain or controversial impacts, unique or unknown risks, significant cumulative effects, or elements of precedence were identified. Implementation of the action will not violate any federal, state, or local environmental protection law.

COMMITTEES ON BUDGET AND APPROPRIATIONS & PARKS AND RECREATION:  
Tibbetts Brook Park - Environmental: RES 200-2004: LOCAL LAW Resolution finding no significant impact on the environment with respect to an agreement with New York State whereby the County will lease property next to Tibbetts Brook Park in Yonkers in order to construct athletic fields.

COMMITTEES ON BUDGET AND APPROPRIATIONS AND PARKS: Environmental -  
Bronx River Reservation: RES 201-2004: Resolution finding no significant impact on the environment from the construction of an athletic field complex at the Bronx River Reservation.

---

Below is the area proposed for the wildlife impact study.



It is the opinion of this minority that the Wildlife Impact Study recommended by the NRPC is nothing more than an ill-advised attempt to spend tax-payer dollars on consulting services that will yield no answer. Even if a biologist can be found that will write such generic information, an equally qualified consultant would then easily counter any argument.

The tax-payers of Merrimack do not need, nor will they support, this additional expense. Athletic Fields are not 50 story high-rise apartments. These facilities will be used a few hours a day during the week and during daylight hours on week-ends. These facilities will be used approximately seven months of the year. These facilities are essentially dormant from mid-November through mid-April. The wildlife impact will be minimized based on construction and management using best-known-practices and common sense.

Evidence abounds that wildlife will adapt, and in some cases prosper, with the presence of an open area in a 500+ acre forest. The athletic fields at HHNP will provide not only a natural break in the forest, but a wonderful place for the youth of the Town to enjoy outdoor activities.

Two groups have formed, researched and studied this issue. Their work is factual and complete and no further consulting is required to determine if athletic fields have an adverse affect on wildlife.

Finally, the school of public opinion has weighed in heavily on this issue. Numerous Letters to the Editor and public condemnation of any project at HHNP has revealed a few individuals that have been making attempts to influence public opinion with distorted facts (or no facts). Rather than respond in the newspapers, those that represent this minority report have decided to respond using this forum so that the record always shows the displeasure in the behavior of this very small group.

At some point in time, some neighbors and abutters of Horse Hill Nature Preserve are going to have to realize that the rest of the Town is not going to fund a private 563 acre playground for their exclusive use. At 4.2 million dollars, this property belongs to the entire Town. That includes the 2500 children that live here and participate in organized outdoor activities.

Members of the Conservation Commission have also stated publicly that new information has come forward that has "caused them to change their minds" about the athletic field complex. Although some members state this, they have yet to produce any evidence to support their recent claims. The Merrimack Conservation Commission already controls or manages nearly 1000 acres of forested areas in Merrimack. They would like to add 563 more where the youth of Town are not allowed to kick around a soccer ball or play lacrosse with their friends.

Some neighbors of the property would like you to believe that 24 acres dedicated to open soccer and baseball fields will negatively impact wildlife. Not one iota of evidence has been brought forth in regards to any long-lasting or permanent affect on the wildlife. For three years, neighbors, abutters and conservationists have had the opportunity to bring evidence forward and have not been able to find any that shows athletic fields are any worse than building a trail or clearing an educational area. In fact, evidence has come forth that wildlife needs some open space to break up the thick forested areas.

Many of the most ardent anti-field, “pro lets study it some more” people are abutting and neighboring horse owners. Yet, we do have testimony from experts (NH Fish and Game) that horses are often called “four legged roto-tillers” when discussing the impact on a trail system. Yet, do small special interest groups attempt to block this (horseback riding) already approved use? No, of course not. This issue was debated and already decided. The Definitive Plan Group was not supposed to revisit uses. Yet, the NRPC and Consensus Building Group spent hour upon hour revisiting the use of athletic fields on HHNP. Even with the odds clearly stacked against the pro-field people by inviting additional abutters and conservationists, the committee again agreed to allow the use.

Once this Definitive Plan is released, all Merrimack residents will be able to clearly see that this issue has been investigated and researched, studied and debated endlessly and the remaining claims of the abutters and neighbors are simply unfounded.

The pro-active recreation people have repeatedly stated publicly and privately, that each and every law, ordinance, policy and code will be followed to the letter of the law when the athletic fields are constructed. This same group has pledged, for three years, that the athletic fields will flow into the property and minimize any affect on the sensitive nature of the property. They have written this in the Master Plan, have stated it on television, and have repeated it to the BOS, the HHNP Committees, and the Nashua Regional Planning Commission.

The athletic fields committee had a plan, approved by a Master Plan Committee and the BOS, for 50 acres. This committee contracted an engineering firm that crafted a plan for a 24 acre complex. This plan meets or exceeds every one of the objective criteria set forth by the Consensus Building Group. This same group produced engineered drawings to scale to show the Consensus Building Group the location, how it overlays with the trails, the entry roads and parking areas. They even showed the location of a proposed storage shed for soccer goals. No other group, (trails group, archery group, hunting, horse group, education group, mountain bike group, snowmobiling group) produced drawings created by engineering firms to show how the intended use will interact with the rest of the property.

As a FACT, the state produced maps showing the location of wildlife corridors and areas where wildlife had the highest potential for habitat. These are State created maps. The field location could NOT be further away from wildlife corridors. The field location could NOT be further away from potential habitat. The field location could NOT be further away from wet and sensitive areas. Maps show this factually. The neighbor’s response is pretty simplistic. “The State is wrong” is their reply. “Your maps are wrong”.

The neighbors want the tax payers of Merrimack to fund ANOTHER study. They use statements such as “...destroying a critical wildlife corridor and habitat that many of the animals need to survive”. There are absolutely no facts to back up this statement or intent to show facts. The anti-field people simply state it and expect the reader to believe it.

The statement “It has been said by some supporters of the destruction that it is only five percent of the 563-plus acres, as if that is OK. What they don’t understand (or perhaps they do but just don’t care) is the impact that destroying “only five percent” of the parcel has on the other 95 percent of the land”

Interesting comments stated out of pure desperation. Since when does widening an existing foresters' trail and clearing a few acres of trees and planting grass called "destruction"? Why would they try to lead the reader to believe that just because some enjoy active recreation, they don't enjoy the forest or the rest of the property? The neighbors would like you to believe that the MYA and pro-field people are a bunch of greedy high-rise apartment developer's intent on pouring cement over every inch of space on the property. We are simply trying to build a couple of ball fields for the youth of Merrimack!

Additional miss-statements can be attributed to those that oppose athletic fields on the property.. *"...athletic complex could clearly be built somewhere else in town for a lot less money (that will ultimately cost the taxpayers)".* .

The neighbors and abutters want the taxpayers to BUY more land and build the fields elsewhere. So, the people of Merrimack spent 4.2 million dollars for Horse Hill with the intention of providing recreational space, and a few neighbors want us to spend millions more so they can ride their horses without children interrupting their rides with the crack of a baseball on a bat (this was stated as a reason for not building fields there)?

Upon release of this Definitive Plan, the residents of Town can clearly see that the plan for athletic fields is sound, based on facts and data, clearly flows into the rest of the property, and will be something we will be very proud of for many years.

There is a strong likelihood that the general public will also continue to hear from those misinformed who will intentionally try to mislead the public. Just look up their names and addresses and it is simple to see the reasons for their opposition.

The neighbors and abutters and Conservation Commission have had their say and input. Each and every one of their concerns has been addressed except one. Each and every one of their concerns will continue to be addressed except one. "Not-in-my-back-yard" is not a consideration that can be addressed with facts, data, statistics, and engineering. Another study which make take considerable time and expense is simply not needed.

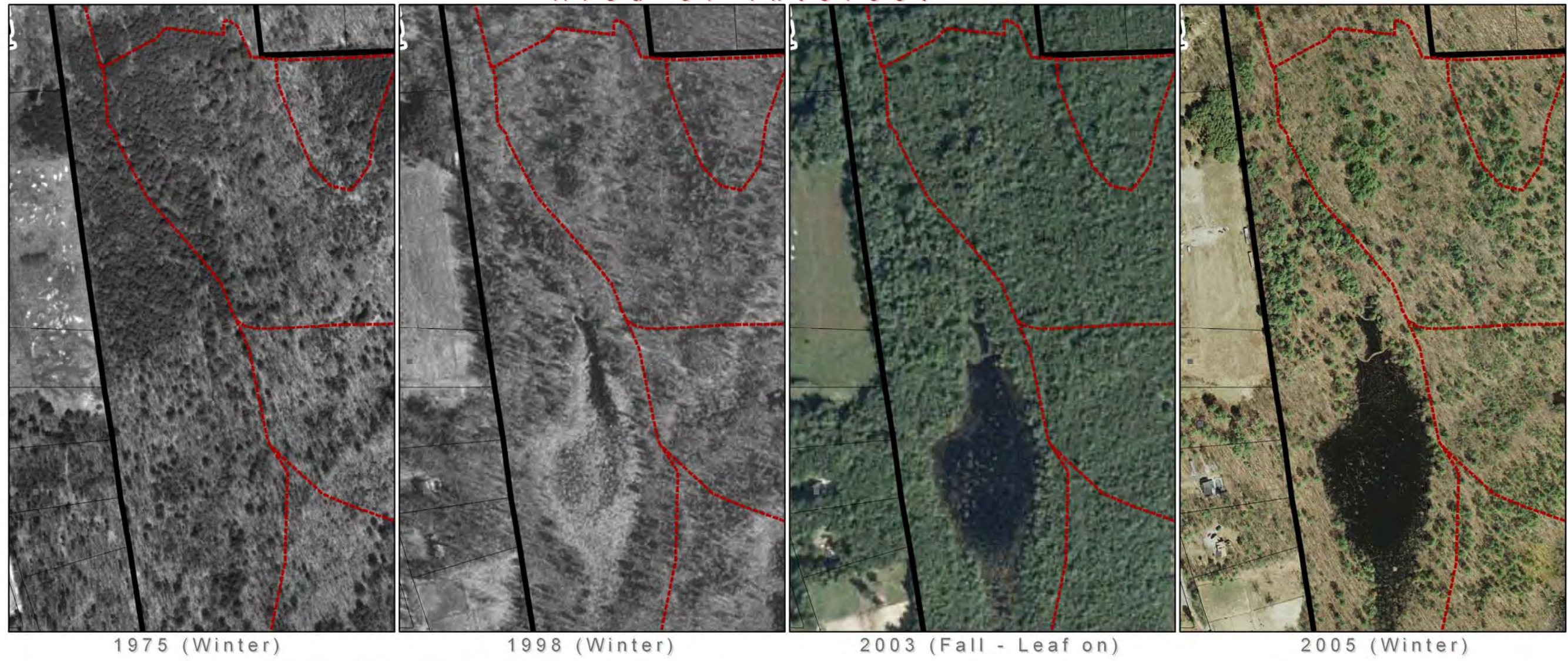
After three years of research by scientists, professional foresters, professional parks and open space planners, and professional construction engineers and architects, it is time to move on, build the trails and kiosks, build the open space athletic field areas, get some parking areas constructed, and erect signage so everyone in Town can enjoy the property. That includes the children, the horse back riders, the hikers, the mountain bikers, the archers and hunters, and anyone else in Town that wants to go out there and enjoy the space.

We urge the BOS or Town Council to reject this "more studies" recommendation and move the process forward for the Horse Hill Nature Preserve, including the planning and construction of athletic fields. Enough studies have been performed, at least three times, and the additional requests are nothing more than an attempt to further delay any recreational offerings for HHNP by a very few neighbors, abutters , and Conservation Commission members.

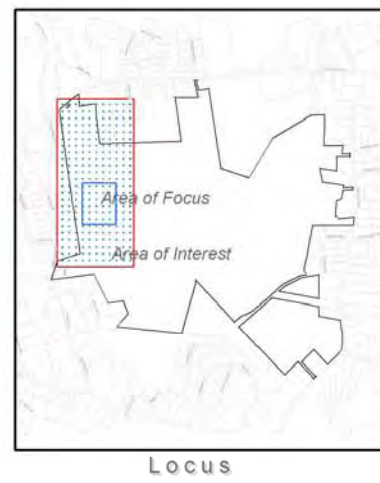
Additional studies are frivolous, repetitive and very expensive for the Town of Merrimack.

Horse Hill Nature Preserve - Merrimack, NH May 15, 2005 **Beaver Pond Time Series**

Area of Interest



Area of Focus



Data Sources:	Source
<b>Surveyed Data:</b>	
Property Border	Hayner/Swanson, INC. (HIS) 2002
Wetlands	Hayner/Swanson, INC. (HIS) 1989
<b>Site-Specific Non-surveyed Data:</b>	
Trails	Identified by Horse Hill Definitive Plan Committee. Existing Trails derived from GPS data.
<b>Non-Site-Specific Data:</b>	
1975 Aerial Photo	GRANIT - University of New Hampshire
1998 Aerial Photo	USDA. Obtained through GRANIT - University of New Hampshire
2003 Aerial Image	USDA. Obtained through GRANIT - University of New Hampshire
2005 Aerial Image	Town of Merrimack

**Legend:**

- Trails
- Wetlands
- Surrounding Parcels

**Scales:**

*Area of Interest Scale*

0      250      500

Feet

---

*Area of Focus Scale*

0      100      200

Feet

Map provided by the National Wetland Planning Commission. All planning information, including GIS data, was obtained from public records. All other data is proprietary. No warranty, expressed or implied, is provided for the information. As used in this report.

Project by NRPC 05-1998