Cheshire County Farm and Infrastructure Feasibility Study

Final Report – February 21, 2012

Submitted jointly by Cheshire County Conservation District, Land For Good, and the Monadnock Conservancy
# Table of Contents

- Introduction ...................................................................................................................... 4
- Summary of Next Steps .................................................................................................... 5
- Current Context ................................................................................................................ 6
- Client and Goals ............................................................................................................... 7
- Project Leaders ............................................................................................................... 8
- Project Partners .............................................................................................................. 9
- Feasibility Study Work Plan ............................................................................................ 11
- Community Awareness and Involvement ....................................................................... 12
  - Farm and Jail Re-use Subcommittee Criteria .............................................................. 14
  - Community Forums ....................................................................................................... 15
  - Request for Interest in the Former Jail .......................................................................... 16
- Conservation ................................................................................................................... 17
- Agricultural Potential ..................................................................................................... 23
- Farm and Infrastructure Program Planning .................................................................... 26
  - Farm Incubator .............................................................................................................. 26
    - Summary .................................................................................................................... 26
    - Potential Interest ...................................................................................................... 27
    - Land Base Needs ....................................................................................................... 27
    - Exploration into land opportunities ........................................................................ 28
    - Infrastructure and Equipment Needs ...................................................................... 31
    - Market Needs ............................................................................................................ 31
    - Staffing and Administrative Needs ......................................................................... 31
    - Operational and Capitalization Costs ..................................................................... 31
    - Lease Terms .............................................................................................................. 32
    - Technical Support ..................................................................................................... 32
    - Incubator Next Steps ............................................................................................... 32
Farm to Institution ......................................................................................................................... 33
Business Incubation ....................................................................................................................... 34
County Office Space ....................................................................................................................... 35
Farm Design .................................................................................................................................. 35
Farm Buildings Inventory ............................................................................................................... 38
Former Jail Building Adaptive Re-Use .......................................................................................... 40
Preliminary Cost Estimate ............................................................................................................... 45
Farm Adaptive Re-use – Proposed River Walk ............................................................................... 47
Housing ........................................................................................................................................ 48
Legal Considerations ..................................................................................................................... 49
Financial Planning .......................................................................................................................... 50
Energy ........................................................................................................................................... 53
Biomass for Heat .............................................................................................................................. 53
Solar PV ......................................................................................................................................... 56
Solar Thermal ................................................................................................................................. 56
Appendix A. – Forum Results ........................................................................................................... 57
Appendix B. – Request for Interest ................................................................................................ 75
Appendix C. – Strafford County Farm Conservation Easement ...................................................... 77
Appendix D. – Conservation Easement Appraisal ......................................................................... 99
Appendix E. – Natural Resource Inventory Data ............................................................................ 118
Appendix F. – Intervale Consultation .............................................................................................. 140
Appendix G. – Jail Adaptive Re-Use Cost Estimate Details ............................................................ 142
Introduction

For more than 150 years, the Cheshire County Farm in Westmoreland, New Hampshire has provided shelter, food, work, rest, education, recreation, and rehabilitation to county residents. Those who benefited most included the elderly, the destitute, and the incarcerated, many of whom provided labor in return for their bed and board. The farm, in turn, provided a wide array of products to local markets and surrounding communities. For many years the county’s Maplewood Nursing Home sourced produce, dairy, and meats from the farm in its shadow, and though vegetable production ceased, the farm’s dairy herd remained one of the most productive in the region thanks to high-quality forage grown on site. The farm’s bounteous soils are the legacy of thousands of years of flooding and soil deposition by the adjacent Connecticut River, which borders the farm for more than a mile.

Complementing the fertile soil, and likewise the river’s legacy, are a host of unique ecological features on the greater farm property. Buffering the open fields along the riverbanks and in other areas too wet to cultivate are cathedral-like patches of floodplain forest, among the most imperiled natural communities in New England and host to dozens of rare plant and animal species. Looming above it all are nearly 500 acres of well-managed forest on Cass Hill, from which timber is harvested on a profitable and sustainable basis. From hilltop to river, the entire property and its mix of forest and field provides a diverse array of wildlife habitats for the myriad species that reside in the river valley or pass through in migration. Public hiking trails link agricultural and natural areas, and regular events and programs by UNH Cooperative Extension and other partners tell a rich story of environmental conservation and productive use in harmony.

Though the river has moved little in 150 years, other forces at work on the farm have been in constant change, threatening the harmony that has been the farm’s legacy. As public needs have changed, so too have the farm’s public buildings, and none of the original historic structures remain. The commoditization of milk and dwindling resident labor signaled the end of vegetable production, pigs, and chickens. Most significantly, the recent relocation of the county House of Corrections has made obsolete the rehabilitative nature of the farm and cut off the last source of affordable on-site labor. This change, coupled with historically low milk prices and the high costs of farm personnel, led to the recent closure of the county-run dairy operation. The open land and buildings are now under short-term lease to a private farmer.

The question now on many minds is, “What next?” Will the land be sold for development? What will come of the now-vacant jail? We do not yet know what will come next, but we do believe that the Cheshire County Farm can be reborn as something entirely new, a farm that continues the legacy of land stewardship and public benefit while remaining financially viable. Accordingly, we have conducted a comprehensive one-year feasibility study to evaluate the farm’s agricultural and natural resources and physical improvements, assessing how those assets could support alternative scenarios for a thriving new enterprise.

Although the landscapes vary, successful solutions to challenges like ours abound in New England and throughout the country. Prime land, woods, and fields are unique resources that, once lost, are gone forever. Possible scenarios range for simple to complex, immediate or phased, modest or ambitious. A privately owned farm with protections in place provides tremendous cultural, economic, and environmental benefit. With effort and investment, a publicly held farm and forest complex could provide those benefits and much more. Our collaboration is working to identify and present the hard facts.
Summary of Next Steps

The Commissioners may choose to pursue a number of next steps depending on reception to this feasibility study and responses to the request for proposals. These might include:

1. Evaluating responses to the Request For Interests issued January 2012
2. Conducting an open tour of the former jail and site for interested parties.
3. Proceeding with further exploration of the farmer incubator usage, including market research, as outlined in this study
4. Proceeding, in conjunction with others, to explore the Farm To Institution facility
5. Meeting with the Town of Westmoreland to discuss the permissibility and regulatory ramifications of different potential uses
6. Completing a comprehensive business plan based on selected elements of this feasibility study
7. Considering long- and short-term conservation mechanisms appropriate to the greater county property and desired future uses and conditions
9. Other steps as may be recommended by the Commissioners
Current Context

The elected officials of Cheshire County have struggled with the best way to manage the resources at the County Farm for decades. Each year during budget hearings the County’s ownership of the farmland and support of the dairy business has been under fire. 2010 brought the move of the jail from Westmoreland to the new facility in Keene. This essentially eliminated the rehabilitation benefit that was offered to inmates through their work on the farm and thus deflated the argument for keeping the farm. With foresight, in the fall of 2009 the Farm Subcommittee of the Delegation made a recommendation that the commissioners research the possibility of leasing the county farm for agricultural use and investigate expanding the scope of the farm to include an educational function.

The Cheshire County Conservation District met a number of times with the Farm Sub-Committee of the Delegation to discuss possible educational opportunities on the farm, and the Delegation was supportive of further exploration. Hearing the Delegation’s desire for more information, the Conservation District embarked on the Cheshire Farm Labor and Infrastructure Needs Assessment, funded in part through the United States Department of Agriculture’s Sustainable Agriculture Research and Education Program (USDA SARE). In collaboration with project partners, including Land For Good, Antioch University, and UNH Cooperative Extension, the CCCD conducted a needs assessment and feasibility study that was comprised of several steps: two focus groups and 39 interviews with farmers, a fair wage assessment, and a matrix evaluation of properties suitable for meeting labor and infrastructure needs including the Westmoreland jail building. The results of this work have been instrumental in ascertaining feasibility scenarios consistent with the needs of our local farming community.

Our past, current, and proposed efforts make up three, progressively more detailed feasibility studies:

1. **2008-2010**: Monadnock Region Farm Legacy, Opportunity and Stewardship Project and the needs assessment described above were completed. These were funded by USDA Sustainable Agriculture Research and Education program, the Putnam Family Foundation, and in-kind contributions from collaborating organizations.

2. **2011 March-June**: Cheshire County Farm and Infrastructure process, Phase 1 began the feasibility analysis and prepared for a larger Rural Business Opportunity Grant application. This was submitted in June 2011 and scored high, but it was unsuccessful due to limited funds.

3. **2011 July-February 2012**: Study completed and presented to the farm subcommittee. The study was made possible by funding through the Putnam Family Foundation, Gone Giving Fund, private donations, and in-kind contributions from the collaborating organizations.
Client and Goals

Our client for this project is the Cheshire County Delegation and Commissioners. Partners took direction from the Farm and Jail Re-use Subcommittee of the Delegation, an ad-hoc advisory committee established to give feedback and direction for the future use of the farm and former jail. On March 21, 2011 the full Delegation unanimously backed the Farm Committee's recommendation to endorse the feasibility study. The Putnam Foundation was also recognized by the Delegation for their generous contribution towards this effort. The motion brought by Rep. Tara Sad is as follows:

"To accept the recommendation of the Farm Committee and fully endorse the Cheshire County Farm and Infrastructure Project feasibility study and approve that county staff may participate, as necessary, provided that there be no requirement of any direct financial contribution by the county; that the study be completed on or before January 10, 2012; and finally, that periodic reports regarding the feasibility study will be provided to the Farm Committee"

Cheshire County Delegation, Farm and Jail Re-use sub-committee membership:

<table>
<thead>
<tr>
<th>Dist</th>
<th>Party</th>
<th>First</th>
<th>Last</th>
<th>Address</th>
<th>City</th>
<th>State</th>
<th>Zip</th>
<th>E-mail</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Democrat</td>
<td>Bill</td>
<td>Butynski</td>
<td>60 River Road</td>
<td>Hinsdale</td>
<td>NH</td>
<td>03451</td>
<td><a href="mailto:williambutynski@aol.com">williambutynski@aol.com</a></td>
<td>336-7498</td>
</tr>
<tr>
<td>4</td>
<td>Democrat</td>
<td>Daniel</td>
<td>Carr</td>
<td>P O Box 111</td>
<td>Ashuelot</td>
<td>NH</td>
<td>03441</td>
<td><a href="mailto:dcarr7@earthlink.net">dcarr7@earthlink.net</a></td>
<td>239-6830</td>
</tr>
<tr>
<td>2</td>
<td>Republican</td>
<td>Anne</td>
<td>Cartwright</td>
<td>1253 Alstead Center Rd</td>
<td>Alstead</td>
<td>NH</td>
<td>03602</td>
<td><a href="mailto:anne.cartwright@leg.state.nh.us">anne.cartwright@leg.state.nh.us</a></td>
<td>756-3781</td>
</tr>
<tr>
<td>3</td>
<td>Democrat</td>
<td>Cynthia</td>
<td>Chase</td>
<td>110 Arch Street #38</td>
<td>Keene</td>
<td>NH</td>
<td>03431</td>
<td><a href="mailto:cyndychase@ne.rr.com">cyndychase@ne.rr.com</a></td>
<td>357-2381</td>
</tr>
<tr>
<td>7</td>
<td>Republican</td>
<td>Susan</td>
<td>Emerson</td>
<td>1121 NH Rt. 119</td>
<td>Rindge</td>
<td>NH</td>
<td>0361</td>
<td><a href="mailto:semerson435@aol.com">semerson435@aol.com</a></td>
<td>899-6529</td>
</tr>
<tr>
<td>3</td>
<td>Democrat</td>
<td>Sam</td>
<td>Hawkes</td>
<td>210 Pearl Street</td>
<td>Keene</td>
<td>NH</td>
<td>03431</td>
<td><a href="mailto:samhawkes@ne.rr.com">samhawkes@ne.rr.com</a></td>
<td>357-4971</td>
</tr>
<tr>
<td>6</td>
<td>Republican</td>
<td>Jane</td>
<td>Johnson</td>
<td>329 Sawyers Crossing</td>
<td>Swanzey</td>
<td>NH</td>
<td>03448</td>
<td><a href="mailto:janejohnson7@yahoo.com">janejohnson7@yahoo.com</a></td>
<td>352-4057</td>
</tr>
<tr>
<td>1</td>
<td>Republican</td>
<td>Robert</td>
<td>Moore, Jr.</td>
<td>49 River Road</td>
<td>Westmoreland</td>
<td>NH</td>
<td>03467</td>
<td><a href="mailto:mklmfarms@aol.com">mklmfarms@aol.com</a></td>
<td>399-4310</td>
</tr>
<tr>
<td>2</td>
<td>Democrat</td>
<td>Tara</td>
<td>Sad</td>
<td>82 North Road</td>
<td>Walpole</td>
<td>NH</td>
<td>03608</td>
<td><a href="mailto:tara.eric@gmail.com">tara.eric@gmail.com</a></td>
<td>759-4861</td>
</tr>
<tr>
<td>6</td>
<td>Democrat</td>
<td>Bruce</td>
<td>Tatro</td>
<td>208 Old Richmond Road</td>
<td>Swanzey</td>
<td>NH</td>
<td>03446</td>
<td><a href="mailto:btatro1@yahoo.com">btatro1@yahoo.com</a></td>
<td>352-3904</td>
</tr>
<tr>
<td>3</td>
<td>Democrat</td>
<td>Charles</td>
<td>Weed</td>
<td>28 Damon Court</td>
<td>Keene</td>
<td>NH</td>
<td>03431</td>
<td><a href="mailto:cweed@keene.edu">cweed@keene.edu</a></td>
<td>352-8309</td>
</tr>
</tbody>
</table>

The CCFI project explored questions including:

- How might a 200-year-old county farm become viable for the future?
- How might a former jail building be redeveloped for agricultural infrastructure?
- How might the county farm and jail – individually or both together – best support the county that supported them both for so long?

CCFI lead partners met with interested individuals and organizations to determine what the community values most about this property and what the most worthwhile uses might be for the farm and infrastructure. This understanding of how new uses can benefit existing farms and farmers will be of great value for the future of the region. We assiduously sought the interests and concerns of local citizens and elected officials, which led to the establishment of criteria to guide our work. Scenarios promising to meet those criteria received priority attention.
Ideas for uses proposed by the community include dairy, vegetables, a new farmer incubator, a "food bank" farm, food processing, food storage and distribution, and education. Also under consideration is permanent conservation of the land, specifically mechanisms like a conservation easement that balance the adaptability of future uses with the protection of the farm's critical agricultural, natural, and scenic values.

Project Leaders

**Land For Good** (LFG) is a nonprofit tax-exempt organization offering education and assistance to owners and managers of working lands, entering farmers, and other land-use decision-makers in the six New England states. LFG is based in Keene, New Hampshire, with a satellite office in western Massachusetts.

We started our nonprofit organization because we believe farming and land stewardship are vital to New England's future. Our vision is of a regional landscape of vibrant working farms and forests that provide opportunities for people who derive their livelihoods from the land. We envision working lands sustained by sound stewardship planning by owners and managers, and cared for by enterprising farmers for the benefit of the entire community.

Land for Good offers unique programs and services to keep New England's working lands working.

- We provide direct services to individual, families, organizations, and units of government to help them acquire or plan for working lands
- We conduct public education and professional training activities
- We act as catalysts, collaborating with other service providers to strengthen service networks, build awareness, and foster supportive public policies

Our goals are to:

- Help owners and managers of working lands develop sound transfer or land use plans
- Enable affordable and secure access to farmland and farmer homes
- Educate the general public about working lands issues, innovative land use and land tenure models, sustainability practices, and local food systems
- Work with partners to develop, improve, and promote methods that achieve successful farm transfers
- Promote farm business viability and economic opportunities for low income residents and their communities
- Help community residents contribute to long-term stability and wellbeing of local working lands

The mission of the **Monadnock Conservancy** is “To identify, promote, and actively seek protection of significant natural, aesthetic, and historic resources in the Monadnock Region; and to monitor and enforce the protection of lands in the trust.” Since its founding as a non-profit land trust in 1989, the Conservancy has believed that the well-being of the human community is dependent upon the ecological, economic, and health benefits provided by open spaces and the natural landscape. Accordingly, it has to-date worked with landowners, municipalities, and partners to protect nearly 17,000 acres in 22 Monadnock Region towns. Protected properties include managed forests, farms, recreation areas, wetlands and shorefront, wilderness reserves, and scenic views. The primary, though not exclusive conservation tool used has been the conservation easement, which permanently restricts land from certain types of development while keeping it in private ownership and available for use, enjoyment, and provision of community benefits, from clean water and recreation to lumber and food.

The tremendous public benefits afforded by the Cheshire County Farm, and especially its soil resources, have long made the farm a Monadnock Conservancy priority for protection from future development, be that protection in the form of a permanent conservation easement or simply a sustainable and economically viable agricultural
business plan. By helping chart a thriving agricultural future for the Farm, contributing to this study enables the Conservancy to advance its goal of sustaining and enhancing the overall public benefits of open land.

The Cheshire County Conservation District was created in 1945 as a governmental sub-division of the state to provide local leadership and decision-making for the protection of land and water resources in the county. A collaborative approach to conservation is what has stimulated our success in the years since our establishment as an organization. The CCCD represents the conservation interests and priorities of the county, for the county. As such, the conservation district is fully vested in the preservation and enhancement of agriculture and its place and role within the community at large. The CCCD has worked on land management and conservation plans for over six decades, establishing strong relationships with the people who work the land and those community members that care about its stewardship.

The Monadnock Farm and Community Connection program, started by the CCCD in 2008, is fostering community action to support a sustainable local food system by sharing resources and building collaborations by:

- Increasing local marketing and sales opportunities for farmers, and local food availability for consumers, through the Monadnock Matchmaker Event, and by incubating and launching a food cooperative, the Monadnock Community Market.
- Increasing the community’s awareness of the importance of buying local food and how to access it through educational community events and projects.
- Enhancing knowledge of the local agricultural landscape through the inventory and mapping of current farms and land that is well-suited for agriculture.
- Increasing civic engagement and advocacy by providing assistance for towns interested in creating Agricultural Commissions.

Conducting a feasibility assessment for the future use of the County Farm and previous County Jail will be a continuation of the efforts to strengthen our local food system. Better understanding the potentials for re-use and how they can benefit existing farms and future farmers will be of great value for the future of our region. We value our role in providing public outreach and education to the community that focuses on environmental concerns in a manner that encourages appreciation and stewardship of natural assets for the benefit of future generations.

Project Partners

There has been much groundwork laid to identify and familiarize stakeholders with the current state of affairs on the County-owned property in Westmoreland. Beyond the feasibility study leadership that will include Cheshire County Conservation District, Land For Good, Monadnock Conservancy, and we are pleased to be able to call many of these organizations and individuals partners on the feasibility study. They include Cheshire County, Antioch University New England, University of New Hampshire Cooperative Extension, Hannah Grimes Center, Great Falls Food Hub, and Stonewall Farm.

The expressed commitment from Cheshire County Delegates, Commissioners, and staff to identify a long-term plan for best utilizing the county resources and infrastructure has encouraged our dedication to this project. Cheshire County Staff brings grant writing and project management skills to the feasibility study and a unique insight in how to best collaborate with elected officials to find solutions. The County Delegates and Commissioners represent the concerns and priorities of their constituents. Having their involvement in setting criteria for the feasibility study ensured that we have a sounding board with the citizens of Cheshire County.
Antioch University New England brings expertise to the project in the arenas of environmental studies and business administration. Libby McCann, director of the Environmental Education program, advised this project and encouraged the involvement of students to assist in data collection and the public process of community acceptance.

Carl Majewski, Agricultural Resources Educator, and Steve Roberge, Forest Resources Educator, for Cheshire County, of UNH Cooperative Extension bring great knowledge of farm and forestry practices and management that informed the feasibility study. Carl and Steve along with their predecessors Bruce Clement and Marshall Patmos have been involved with the decision making process around this property and the educational outreach hosted on the property for decades.

The Hannah Grimes Center has a thriving Center for Entrepreneurship in downtown Keene, where a business incubator is the cornerstone of their work. The shared advice from their experience with small business development and incubator programs has been essential in determining the feasibility of an incubator farm on the County property. Mary Ann Kristiansen, Executive Director of Hannah Grimes, advised the project.

The Great Falls Food Hub has a mission of making locally produced food affordable and accessible while providing a fair return to farmers. They dedicated staff time to support the preservation of the prime agricultural land and the renovation of the existing structures on the farm.

Stonewall Farm is a local authority on agricultural education in the Monadnock region. They are invested in the outcome of this feasibility study as they see the value in the property and the prospects it offers to strengthen their operation as well as many other farms in the region. Stonewall Farm offered guidance on program development and input on possible feasibility scenarios.

Froling Energy has pioneered in combining engineering, procurement, and construction service with renewable energy expertise since 2002. Froling Energy specializes in renewable energy projects for institutional, commercial, and industrial clients. It proposed biomass and solar energy design solutions for the proposed adaptive reuse of the former jail building.

Moosewood Ecological offers comprehensive ecological consulting services designed for effective conservation planning efforts. They provide sound, scientific research and education to facilitate the understanding and conservation of biological diversity and ecological integrity. For this effort, Moosewood Ecological performed an ecological inventory focused on the floodplain and riparian areas of the property, especially on species of conservation concern.

A recognized criterion for the next evolution of the County Farm is that it does not compete with existing agricultural entities, but instead supports and strengthens their ability to succeed. The local farming community and the citizens of Cheshire County are implicit stakeholders; however we find it important to mention that their input was highly valued throughout the feasibility assessment process. Through interviews, focus groups, and public forums we endeavored to capture the public sentiment on the future use of these significant publicly-owned resources.
The project committee included interested individuals and representatives of local organizations and met bi-weekly. That committee reviewed and revised work on an ongoing basis. The committee focused on those criteria most important to the broader community and those scenarios that offered best to meet them.

Our focus areas were:

1. **Community Awareness and Involvement** – a participatory process in which county residents, farmers, and farm service professionals share input and feedback on the activities that could occur on the County farm and in the former jail. Given the long history and strong feelings about the project, we felt that it was vital to maintain a transparent process whereby the community had multiple opportunities to participate.

2. **Conservation** – explorations regarding the conservation options for the wooded and open lands and full site

3. **Agricultural Potential** – identify opportunities and constraints for the open lands

4. **Farm & Infrastructure Program Planning** – advance ideas for adaptive reuse of buildings and grounds, including agriculture-related educational and office space, food processing, agriculture business incubator, and food bank farm. Assess potential uses for existing agricultural buildings.

5. **Former Jail Building Adaptive Reuse** – conduct Phase 2 construction and usages feasibility analysis

6. **Housing** – explore desirability, locations, and permitting requirements for the development of three to nine “green and affordable” units of on-site farm workforce housing

7. **Legal Planning** – identify and address legal issues pertaining to ownership, funding, and management per the various scenarios

8. **Financial Planning** – draft operating and development proformas; identify potential sources of local, state, and federal funding.

9. **Energy** – explore and report on alternative energy systems relating to the adaptive reuse of the site, potential savings in operating costs, and creation of a demonstration site

10. **Administration** – project management and communication
Community Awareness and Involvement

Our Goal: a participatory process in which county residents, farmers, and farm service professionals share input and feedback on the activities that could occur on the County farm and former jail. Given the long history and strong feelings about the project, we felt that it was vital to maintain a transparent process whereby the community had multiple opportunities to participate.

The first step of the Community Awareness and Involvement focus area was to complete an ongoing study, Cheshire County, NH Farm Needs Assessment: Farm Labor and Infrastructure. This study was written by the Cheshire County Conservation District in collaboration with Antioch University New England, Land For Good, and UNH Cooperative Extension and was funded by the US Department of Agriculture, Sustainable Agriculture Research and Education (USDA SARE) program. Please contact the Cheshire County Conservation District for a copy of this study. In brief, the intention of this research was to provide farmers, agricultural service providers, and community members with the necessary information to promote the economic viability of farms in Cheshire County. The research was conducted through two focus groups followed by 39 in-depth one-on-one interviews, lasting about an hour each. This information will be critical to the work at the Cheshire County Complex in determining appropriate farm and infrastructure program possibilities and the potential of the former jail building to satisfy the infrastructure needs of the local farming community.

Tara Sad, State Representative from Walpole and Chair of the Farm & Jail Re-use Sub-committee of the Cheshire County Delegation, has worked with project leadership to determine the communication strategy and timeline for collaboration with the County Delegation. This included three meetings with the sub-committee. The first meeting, which took place during the week of May 23, 2011, determined the threshold criteria for the project, the second meeting will occur in August and be an opportunity for a midway report on progress and opportunity for feedback, the third meeting that is projected to occur in December will be a feedback session for the Draft Report that will be due in its entirety by January 15, 2012.

A plan was set to ensure strong community awareness and involvement with this project. The plan that we adhered to was the following six step process. The plan that we adhered to was the following six step process.

1. Share the results of the SARE Report with stakeholders to ensure there is understanding of need and opportunity in our agricultural sector,
2. Define threshold criteria with County Delegation to determine project direction,
3. Host six community meetings in various geographic points in Cheshire County (Alstead, Jaffrey, Keene, Nelson, Westmoreland, and Winchester) to solicit input from the public on how to move forward based on the delegations threshold criteria. Libby McCann, PhD core faculty and director of Environmental Education at Antioch University New England, was active in consulting with project leadership on engaging stakeholders and planning meeting agendas to ensure we reach our goals.
4. One on one interviews with elected and appointed officials of Cheshire County and the Town of Westmoreland to review finding to date on what the community is saying,
5. August 27, 2011 Open Barn Day display on process and results to date to be held at the County Complex in Westmoreland,
6. A Request of Interest will be drafted and distributed to potentially interested tenants of the former jail facility.

On May 23rd project leadership attended a meeting of the Cheshire County Delegation Farm and Jail Re-use subcommittee. The goal of the meeting was to garner input and advice from sub-committee members, to engage them as clients in the project, and to establish expectations of their role. Our requests of sub-committee members for this project were to:
• Attend three meetings: the May 23rd kickoff, an August progress review meeting, and a January meeting to discuss the final report and offer feedback;
• Share this initiative with others in our community on an informal basis;
• Serve as a resource to the project as time, interest, and specific expertise allow.

Prior to this meeting the committee members were asked to complete a questionnaire to offer input that would stimulate ideas and guide discussion for the first meeting. The committee was led through a two-hour process aimed at identifying criteria, or standards for which decisions will be based for the CCFI feasibility project. The results of this brainstorm are summarized below. From the ideas and concerns put forth from the sub-committee, members were able to establish the following criteria that guided this project’s research. All potential activities that could take place at the farm or former jail were weighed against these criteria.
Farm and Jail Re-use Subcommittee Criteria

THRESHOLD CRITERIA FOR FUTURE USES OF THE CHESHIRE COUNTY FARM AND FORMER JAIL

Financial

Uses of the farm and former jail building shall strive to be:

- Cost-neutral to Cheshire County taxpayers
  - critical now - future may be different as resources allow
- Fair – the property shall be a resource for the agricultural community, rather than a competitor against it. Tenants OR leaseholders shall have no unfair financial advantage over non-tenants.
- A promoter of local-food affordability, helping all Cheshire County farmers become competitive with non-local produce
- Complementary to other agricultural service providers rather than duplicative
- Incrementally funded, with new ventures developed in phases, as uses and resources allow

Legal

Uses of the farm and former jail building shall strive to be:

- Remain\Always under Cheshire County control, yet with lessees responsible for day-to-day management and operational responsibility and accountable to the county government

Environmental

Uses of the farm and former jail building shall strive to be:

- Primarily an agricultural and forestry resource
- Environmentally sustainable – uses of the property should ensure that its natural resources are not degraded such that they may no longer function to meet other criteria

Social

Uses of the farm and former jail building shall strive to be:

- Educational – the property shall provide opportunities for entering/young farmers to gain knowledge and experience and for the general public to learn about farming and local food
- Honoring and promoting of the Cheshire County Farm’s and Cheshire County’s agrarian culture and heritage
- Welcoming to all members of the community
Community Forums

Six community meetings were held to gain public input on the future use of the Cheshire County Farm and Infrastructure. This was a successful series of meetings with attendance of approximately 100 attendees overall. We engaged a diverse number of organizations and municipalities to partner on this endeavor in an effort to expand the reach of the message and increase the level of feedback we would receive. The event sponsors included: Cheshire County, Land for Good, Monadnock Conservancy, Cheshire County Conservation District, University of New Hampshire Cooperative Extension, Antioch University New England, Stonewall Farm, Town of Nelson Conservation Commission, City of Keene, Town of Jaffrey, Town of Alstead Conservation Commission, Small and Beginner Farmers in New Hampshire, Great Falls Food Hub, Hannah Grimes Center, The Rotary Club of Keene, Mt. Pistareen Grange #145, Arlington Grange #139, and Walpole Grange #125. Press releases were submitted to local press outlets announcing the meetings. All sponsors also shared the announcement with their contact lists. There was good media coverage of these events by the Keene Sentinel and Monadnock Ledger-Transcript. There were also follow up letters to the editor in the Keene Sentinel.

The results from the evaluation of these meetings are included as Appendix A, Forum Results. A snapshot of the results is offered below.

Forum Highlights:

• Results from an evaluation of 89 participants:
  o Building Reuse Ideas
    ▪ 94% of respondents were “in favor” or “very in favor” of farmer education &/or Community Education
    ▪ 91% of respondents were “in favor” or “very in favor” of Farm to Table work to connect farm products to consumers
    ▪ 89% of respondents were “in favor” or “very in favor” of a farm business Incubator program
    ▪ 85% of respondents were “in favor” or “very in favor” of food processing
  o Land
    ▪ 89% of respondents were “in favor” or “very in favor” of recreation
    ▪ 87% of respondents were “in favor” or “very in favor” of conserving the county farm and forest land so that it may never be developed.
    ▪ 81% of respondents were “in favor” or “very in favor” of a Food Bank Farm

• Results from Forum Ranking Activity:
  o Building Reuse
    ▪ Priority 1 – Food Processing and Food Storage and Distribution. 40% of votes ranked this as a priority
    ▪ Priority 2 – Centralize Cooperative Extension and other Agricultural & Natural Resources Government Agencies. 15% of votes ranked this as a priority
    ▪ Priority 3 – Farm Business Incubator. 9% of votes ranked this as a priority
  o Land – Environment/Natural Resources
    ▪ Priority 1 – Education. 24% of votes ranked this as a priority.
    ▪ Priority 2 – Public Use. 17% of votes ranked this as a priority.
    ▪ Priority 3 – Conservation Easement. 16% of votes ranked this as a priority.


**Request for Interest in the Former Jail**

The Cheshire County Conservation District worked with the Cheshire County Administrator, Jack Wozmak, on crafting a Request for Proposals for potential tenants of the former jail facility. Mary Ann Kristiansen of the Hannah Grimes Center was consulted on the best way to create and market the request. The proposals that the County receives will be evaluated based on the strength of their business plan and their connection to the criteria the Farm and Jail Reuse Subcommittee of the Delegation set forth.

Please see Appendix B, Request for Interest, which has been submitted to the County and will be circulated in January of 2012.
Conservation

For more than ten years, numerous Cheshire County residents, elected officials, and conservation organizations have claimed that the Cheshire County Farm’s natural, scenic, and cultural resources are of such high value and benefit to the public that they merit permanent conservation of the property, thereby ensuring that the farm may continue to provide those benefits for generations to come. Consequently, the Monadnock Conservancy has led this portion of the feasibility study to investigate possible conservation strategies.

Considerations have included:

1. Assessment of the Farm and Jail Subcommittee’s long-term objectives for the property – is permanent conservation as open space consistent with threshold criteria?
2. Assessment of broader community opinions as to the same.
3. Possible conservation mechanisms – conservation easement, deed restrictions, different conservation organizations, etc.
4. Scope and scale – the property is large and diverse; how much of it could or should be conserved?
5. Would the county conserve the property or portions of it (thereby reducing its market value) without financial compensation, as a means to an end; or should a conservation easement or other interest be sold as a source of revenue for on-site operations? If the latter, is public or private funding feasible?
6. What are the specific unique natural values of the site, which may inform conservation options? Conduct a site assessment of conservation values other than agricultural values (ecological, scenic, cultural, and recreational); complete a new natural resource inventory, with emphasis on CT River floodplain and adjacent zones.
7. How can permanent conservation remain compatible with, and adaptable to, evolving agricultural uses and technologies appropriate for the site?

This final analysis of conservation options for the Cheshire County Farm addresses each of the original considerations in turn.

1. **Assessment of the Farm and Jail Subcommittee’s long-term objectives for the property – is permanent conservation as open space consistent with threshold criteria?**

The preliminary threshold criteria discussed at the May 23rd meeting of the Farm and Jail Re-use subcommittee provided insight into this question. Specifically, there was general consensus that the farm’s use should remain agricultural for the foreseeable future, that agricultural uses should be sustainable and compatible with the property’s other natural values, and that the county should retain ultimate control of the property, albeit perhaps without regular management and operational responsibilities.

A permanent conservation mechanism such as a conservation easement offers both advantages and disadvantages with regard to continued county control over short- and long-term uses of the property. On one hand, a well-designed easement would not in any way deprive the County of its ability to continue owning the property and using it in a manner consistent with all criteria on which the subcommittee agreed earlier in 2011. Moreover, should the county ever change its mind and decide that county ownership of all or portions of the farm is not in the best interests of county residents, a permanent easement would enable continued control—via the easement holder, typically a non-profit land trust—over successor owners to ensure uses remain consistent with the public benefits of open space, but without continuing county responsibility. One could argue that a conservation easement could be placed on the property at such a time that the county decided to divest of the land, but that is typically too late.
On the other hand, a conservation easement could deprive the county of its desired ultimate control over the property if future county officials decided to use the property for uses inconsistent with the current stated criteria—large-scale residential or industrial development, for example. At least one committee member stated specifically that a permanent conservation mechanism was not desired for precisely this reason, though the question was not posed to the larger group. If the subcommittee’s wish truly is to not bind the hands of future decision makers in any way, then a conservation easement may not be the right tool for the situation. That said, a conservation easement can be tremendously flexible in geographic scale and scope of limitations, so it may be possible to structure an easement that affords opportunities for a variety of alternative future land uses. It should also be noted that a decision to develop the County Farm or otherwise degrade its soils and other natural resources may be just as irreversible as a permanent conservation easement.

2. **Assessment of broader community opinions as to the same — is permanent conservation as open space consistent with threshold criteria?**

Community discussion forums held through the summer indicated a strong preference by attendees for protection of the property’s diverse natural resources, including a majority in favor of permanent conservation by legal means such as a conservation easement. In the evaluation that 89 participants completed after the series of six community forums, 87% of respondents stated they were “in favor” or “very in favor” of conserving the county farm and forest land so that it may never be developed; 71% were “very in favor.” It should be noted, however, that forum attendees were not necessarily representative of the general public, though the general public was invited to attend.

Of particular interest from the forums was the strong public interest expressed in developing waterfront recreational amenities on the property. A specific opportunity that could be quite compatible with agricultural operations is some form of “car-top” boat access to the river—access to the water for canoes, kayaks, and other portable craft, but not sufficient for trailered motorboats. Complementing such access could be a small number of picnic tables or pavilions. Vehicular access could be limited to a riverside boat drop-off point, with actual parking kept closer to River Road. Access to this site could be controlled daily or seasonally by a gate that might be managed in partnership with the resident farmer. Recreational access of this nature would help diversify the types of tangible public benefit the property could offer.

3. **Possible conservation mechanisms – conservation easement, deed restrictions, different conservation organizations, etc.**

A variety of tools exist for conserving the Cheshire County Farm property, each with its individual strengths and weaknesses.

A conservation easement is a voluntary deeded conveyance of real estate through which a landowner (Grantor) permanently extinguishes certain land use rights by conveying those rights—and the affirmative obligation to prohibit their exercise—to a qualified organization or entity (Grantee), typically a non-profit land trust or a division of government. The easement and its restrictions are said to “run with the land” and are binding upon the Grantor and all successor landowners in perpetuity. Though each conservation easement is tailored to the unique circumstances of a property and landowner, the most common restrictions are on further subdivision, residential and commercial development, soil or gravel extraction, and alterations of terrain or wetlands, except when such uses relate to most forms of non-commercial public recreation, or commercial agriculture and forestry, which are encouraged. The landowner retains all other usage rights, including the right to practice agriculture and manage forestland; the right to sell, mortgage, encumber, bequeath, or lease the property; and the right to manage some forms of public access, provided in all cases that the easement restrictions continue to be upheld. While a conservation easement may be subsequently amended under very limited circumstances, it is generally irreversible by design. The commissioners of Strafford County, NH granted a conservation easement on their
County Farm to the Society for the Protection of NH Forests in 2002 (a copy of the easement deed is appended to this report as Appendix C).

A deed restriction is a limitation or limitations on the use of a certain parcel of land that is described in a deed conveying that parcel. The restriction may address a variety of uses and may remain in effect for a specified period of time or indefinitely. Though a deed restriction is legally enforceable, there is no obligation on any party to enforce it, and such enforcement power is typically limited to past owners of the parcel in question or, in rare cases, owners of certain named adjacent properties. For these reasons, a deed restriction is substantially weaker and lacks staying power in comparison to a conservation easement. In the case of an easement, the easement holder (Grantee) is legally obliged to enforce the easement, the state’s Attorney General also has the authority to enforce the easement, and the law requires the appointment of a suitable successor holder should the original holder fail to perform its obligations. Deed restrictions are sometimes used to conserve properties that are given or sold to public entities, but they are rarely used when the property is already under public ownership.

A third option that need not be binding in perpetuity is simply for Cheshire County to pledge or resolve to manage and maintain the property in a manner consistent with its presently stated criteria until such time that doing otherwise is deemed to be in the greater public interest. In this case, the County would be well served to seek the ongoing counsel of the many agencies and organizations that exist to advise landowners on matters of forest and agricultural management, especially University of New Hampshire Cooperative Extension, the Cheshire County Conservation District, and the Natural Resources Conservation Service. While this approach avoids forcing the perpetual prohibition on non-agricultural development of the property, it also perpetuates the risk of sacrificing the unique natural and agricultural resources of the property in the name of short-term thinking and opportunities for one-time cash flow.

Should the county choose to take further steps on any of the above options, the Monadnock Conservancy is willing and qualified to facilitate the process, serve as conservation easement holder, or otherwise assist. Other potential land trust partners include the Society for the Protection of New Hampshire Forests and The Nature Conservancy.

4. Scope and scale – the property is large and diverse; how much of it could or should be conserved?

A common myth about conservation easements and other tools is that they must restrict all areas of a property in the same way. This is not the case, and it is certainly feasible for Cheshire County to apply any of the above conservation tools to any portion or portions of the property, rather than the entire ownership. For example, the County may decide that the most valuable natural resources of the property are the riverfront and agricultural portions, which comprise less than half of the greater ownership, and therefore place a conservation easement on some or all of those areas alone, leaving the upland areas open to alternative uses, including subdivision, sale, or development. It is also possible to structure an easement that excludes other portions of the property, such as acreage along road frontage, for possible future sale or development, while keeping the more irreplaceable acreage of prime farmland soils and riverfront under the easement. Finally, it is possible, and indeed common, for a conservation easement to allow additional construction and development of structures and improvements ancillary to encouraged uses, such as barns and other facilities for agriculture.

If the county were to choose to conserve or restrict only portions of the property, it is the recommendation of this report that highest priority be placed on the prime farmland soils, floodplain, and riverfront areas along the Connecticut River and Partridge Brook, and on the limited upland areas that include populations of state threatened and endangered plants, with lesser priority on the remaining upland forest areas.
The following images illustrate a range of options that exist for conserving all or limited portions of the property:

Sample Conservation Easement Options, Cheshire County Farm
Westmoreland
April 2008
5. **Would the county conserve the property or portions of it (thereby reducing its market value) without financial compensation, as a means to an end; or should a conservation easement or other interest be sold as a source of revenue for on-site operations? If the latter, is public or private funding feasible?**

Any interest in real estate, including a conservation easement, has a monetary value, and in theory the county could sell a conservation easement on the property. The market value of a conservation easement must be determined by a qualified real estate appraiser, who assesses the full development potential the property, the current market value and income potential of such development, the “liquidation” value of timber on the property, and the net result on the property’s market value if such development and liquidation opportunities were prohibited by a conservation easement. Recognizing that, in a conservation easement, the landowner retains some rights and income potential from the property, the value of a conservation easement is necessarily a portion of the total market value of the property. A March 2010 conservation easement appraisal of the full property (exclusive of buildings and improved areas), appended hereto as Appendix D, indicated a maximum conservation easement value of approximately $925,000.

It is quite common for private landowners to derive income from their land by selling conservation easements to land trusts or government entities, yet the authors of this portion of the study know of no cases of a division of government selling a conservation easement. The primary obstacle is in securing funds—public conservation funding sources, such of the federal Farm and Ranchland Protection Program through the Natural Resources Conservation Service, are typically off-limits for conservation projects on publicly owned land. Furthermore, it is unlikely in the current political and economic climate that a private fundraising effort from the public at large could secure the needed funds.

Should the county choose to grant a conservation easement on the property, it is the recommendation of this report that the easement be donated, recognizing that an easement will ensure the continued public benefits of the property’s natural resources while still affording the county a multitude of usage alternatives and income potential.

6. **What are the specific unique natural values of the site, which may inform conservation options? Conduct site assessment of conservation values other than agricultural values (ecological, scenic, cultural, recreational); complete a new natural resource inventory, with emphasis on CT River floodplain and adjacent zones.**

On-site research by Moosewood Ecological assessed and documented the many non-agricultural natural values of the greater property. The study included an ecological inventory focusing on the Connecticut River floodplain and riparian areas of the property, and especially on species of conservation concern. Surveys were conducted to better understand the presence of spring ephemeral plants, summer vegetation, breeding birds, natural communities, and critical wildlife habitats. Incidental observations of wildlife and their sign were noted as well. Existing data was gathered, to the extent possible, to inform survey design and to supplement species lists. Outcomes included tables, species lists, and recommended management practices, all of which can be found at Appendix E.

Early inventory data were available to inform exhibits and discussions at the discussion forums held around the region. Research indicated that existing undeveloped riparian areas of the property offer high-quality examples of some of the most uncommon forested floodplain communities in the state, which are, in general, limited only to small patches of remaining unimproved frontage along the Connecticut and Merrimack Rivers. Also discovered was a significant population of a rare and commercially valuable plant, the specific location of which should not be divulged publicly due to risk of poaching.
Among the great diversity of species observed using the property, a total of 20 species are recognized by the NH Natural Heritage Bureau as “species of conservation concern”: ten birds, one mammal, and nine plants. Of these, six species are listed as either threatened or endangered in the state of NH. An additional three species of reptiles were not observed during field studies but have a very high likelihood of being present. Four natural communities were observed, two occurrences of which—Rich red oak rocky woods and Silver maple-wood nettle-ostrich fern floodplain forest—are documented as statewide “exemplary” occurrences of these exceedingly rare natural communities.

Nearly all rare communities and species found on the property are present due to the unique geological formations of the Connecticut River Valley and the ancient processes of flooding and deposition caused by the river itself. For this reason, it is the recommendation of this report that, should the county choose to conserve portions of the property, highest priority should be placed on the riverfront areas not presently used for agriculture, especially the floodplain forest patch along the outlet of Partridge Brook, recognizing, however, that upland portions of the property are also critical to ecological integrity as a whole.

7. **How can permanent conservation remain compatible with, and adaptable to, evolving agricultural uses and technologies appropriate for the site?**

As described above, conservation easements and other tools, when properly used by experienced partners, can afford the landowner a wide range of evolving uses. In the case of the Cheshire County Farm, the property’s already distinct boundaries between agricultural fields, upland forest, and wetland areas would allow uses and restrictions to be zoned, as opposed to applied to the entire property in the same way. Because the continuance of agricultural use would be an expressed purpose of conserving the property in the first place, every effort would be made to ensure that measures taken to protect soil and water not prevent farming enterprises from evolving and thriving.
Agricultural Potential

Carl Majewski, Agricultural Resources Educator for University of New Hampshire Cooperative Extension of Cheshire County, was consulted to plan steps toward determining the soil and production potential of the farmland on the Cheshire County Complex.

A particularly valuable feature of the Cheshire County Farm property is the abundance of Prime Farmland. According to the USDA’s definition, these soils have the best combination of physical and chemical characteristics, and are located in areas where the combination of soil properties, growing season, and available moisture make high yields of food, forage, and feed crops possible. Most of the Prime Farmland in Cheshire County is located in the Connecticut River valley, with soils formed from glacial outwash (material deposited by receding glaciers some 10,000 years ago) and alluvial deposits (material deposited by the river with annual flooding). Approximately 50% of the cropland at the County Farm property is classified as Prime Farmland with Hadley silt loam, Winooski silt loam, Agawam very fine sandy loam, and Haven very fine sandy loam being the dominant soil types. These soils are well-drained yet have the capacity to retain moisture for crops, and they are nearly level and free of stones. An additional 15-20% of the acreage is classified as Farmland of Statewide Importance, with Unadilla very fine sandy loam as the dominant soil type. While these soils have some minor limitations (in this case, slopes that pose a slightly greater risk of soil erosion), they still have many of the characteristics that make them ideal for growing crops.
These soils are suited for growing a wide range of forage, vegetable, or fruit crops. The USDA estimates that the prime agricultural soils at the County Farm property and similar adjacent areas along the Connecticut River are capable of yielding corn silage at 24-28 tons per acre, alfalfa hay at 4-5 tons per acre, sweet corn at 4-6 tons per acre, and potatoes at 350-400 cwt. per acre. By comparison, soils in the area that are in agricultural production but are not classified as Prime Farmland or Farmland of Statewide Importance are capable of yielding 16-22 tons of corn silage per acre, or 300 cwt. of potatoes.

Most of the County Farm fields are suited to growing a wide range of crops, but certain areas are more appropriate for given crops than others. For example, the dominant soil type along the Connecticut River and Partridge Brook are Hadley silt loam and Winooski silt loam. While these areas are excellent for perennial forage crops and annual row crops, they are not suited for fruit or berry production because seasonal flooding on these soils would result in extensive injury to fruit trees or berry bushes. Vegetable crops planted on very well-drained soils may yield better with irrigation than if one relied solely on the soil’s water holding capacity.

Steve Roberge, Forest Resources Educator for Cheshire County for University of New Hampshire Cooperative Extension, has prepared the following map on forest soils on the county property:
The following explanation on soil types was taken from “Good Forestry in the Granite State: Recommended Voluntary Forest Management Practices for New Hampshire”.

**IMPORTANT FOREST SOIL GROUPS**

New Hampshire soils are complex and highly variable due primarily to their glacial origins. The Natural Resource Conservation Service (NRCS) soil mapping recognizes and inventories these complex patterns and organizes them into a useful and understandable planning tool: Important Forest Soil Groups. The objective is a simplified yet accurate tool that will be helpful to natural resource professionals and landowners.

These groupings allow managers to evaluate the relative productivity of soils and to better understand patterns of plant succession and how soil and site interactions influence management decisions. All soils have been grouped into one of six categories, as described below. For a complete list, contact your local NRCS field office or http://extension.unh.edu/resources/files/Resource001580_Rep2136.xls

**Group IA** consists of the deeper, loamy, moderately well-drained and well-drained soils. Generally, these soils are more fertile and have the most favorable soil-moisture conditions. Successional trends are toward climax stands of shade-tolerant hardwoods such as sugar maple and beech. Early successional stands frequently contain a variety of hardwoods such as sugar maple, beech, red maple, yellow, gray, and white birch, aspen, white ash, and northern red oak in varying combinations with red and white spruce, balsam fir, hemlock, and white pine. The soils in this group are well-suited for growing high-quality hardwood veneer and saw timber, especially sugar maple, white ash, yellow birch, and northern red oak. Softwoods are usually less abundant and are best managed as a minor component of predominantly hardwood stands. Hardwood competition is severe on these soils. Successful natural regeneration of softwoods and the establishment of softwood plantations require intensive management.

**Group IB** generally consists of soils that are moderately well-drained and well-drained, sandy or loamy-over-sandy, and slightly less fertile than those in group 1A. Soil moisture is adequate for good tree growth but may not be quite as abundant as in group 1A. Successional trends and the trees common in early successional stands are similar to those in group 1A. However, beech is usually more abundant on group IB and is the dominant species in climax stands. Group IB soils are well-suited for growing less-nutrient-and-moisture-demanding hardwoods such as white birch and northern red oak. Softwoods generally are scarce to moderately abundant and managed in groups or as part of a mixed stand. Hardwood competition is moderate to severe on these soils. Successful regeneration of softwoods and the establishment of softwood plantations are dependent upon intensive management. The deeper, coarser-textured, and better-drained soils in this group are generally suitable for conversion to intensive softwood production.
Group IIA consists of diverse soils and includes many of the soils that are in groups IA and IB. The soils in IIA, however, have limitations such as steep slopes, bedrock outcrops, erodibility, surface boulders, and extreme stoniness. Productivity of these soils isn’t greatly affected by those limitations, but management activities such as tree planting, thinning, and harvesting are more difficult and more costly.

Group IIB soils are poorly drained. The seasonal high water table is generally at a depth of 12 inches or less. Productivity is lower than in IA, IB, or IC. Fertility is adequate for softwoods but is a limitation for hardwoods. Successional trends are toward climax stands of shade-tolerant softwoods, such as red spruce and hemlock. Balsam fir is a persistent component in nearly all stands. Early successional stands frequently contain a variety of hardwoods such as red maple, yellow, gray, and paper birch, aspen, and white and black ash in varying mixtures with red spruce, hemlock, balsam fir, and white pine. These soils are well-suited for spruce and balsam fir pulpwood and saw timber. Advanced regeneration is usually adequate to fully stock a stand. Hardwood competition isn’t usually a major limitation, but intensive management by chemical control of competing woody and herbaceous vegetation may be desirable.

Farm and Infrastructure Program Planning

The Cheshire County Farm is currently being leased to Dana and Tiffany Briggs, owners of Bo-Riggs Cattle Company. This lease arrangement is set for five years with the opportunity for renewal at that time. The Briggs have plans to continue the dairy operation on the property. Program elements suggested in this report are meant to complement the current lease agreement that the Briggs hold with the County. The bulk of planning efforts summarized in this report focus initially on the uses for the former jail building and the farm buildings on the site. Proposed program elements for the 30,000-square foot shell include: farm incubator, farm to institution food processing and storage, agriculture-related offices and storage, agricultural business incubation, and multi-function space. Please see Appendix A, Forum Results, for additional interests that have surfaced from county residents.

Farm Incubator

The preliminary evaluation of the prospect of a farm incubator at the Cheshire County Farm was prepared by Mike Ghia of Land For Good. Refer to Appendix F, Intervale Consultation, for additional information. There are multiple reasons why a Farm Incubator is a good fit for the Cheshire County Property. This programming does not have to be an "either/or" between having an incubator and supporting the current tenant—in fact the current tenant could be a useful mentor in soil and equipment management and equipment maintenance; dairy and horticultural tenants can both be supported on this property at the same time. The farm incubator will serve a number of farmers at one time, and it has the potential to serve the entire county by helping to support and supply the next generation of farmers at a time when many of our region’s farmers are retiring without designated successors.

Summary

The purpose of a farm incubator is to help new farmers get started in a way that allows them to build expertise, markets, and some equity while receiving technical support, therefore increasing the potential for new farmers
and new farms to grow and succeed. This makes an incubator different from a traditional lease situation. Another way that a farm incubator differs from a traditional lease situation is that there is an expectation that at least a portion of the farm tenants will eventually leave the site and move on to other longer term lease situations elsewhere, or buy their own farms. However, some of these farm businesses will have long-term leases at the incubator site so that there is a pool of experienced farmers who can mentor the new incubator farmers as well as provide continuity to equipment maintenance and land stewardship.

Like the rest of the country, the median age of Cheshire County farmers is increasing, and many farms have no successors. Thus, an incubator has the potential of having a multiplier effect that can benefit agriculture in the entire county and the surrounding region by helping to train and support new farmers who can eventually become the successors to retiring farmers.

Most farm incubators in the country have a horticultural focus, such as the Intervale Center in Burlington, VT. However, some incubators also work with livestock and dairy farms, such as the incubator program at VT Technical College. The Cheshire County Farm has the potential to incubate horticultural operations, livestock operations, at least one dairy, or a combination of these operations with careful planning. This preliminary report outlines some of the factors which need to be considered if the county wishes to examine this further. In preparing this report, Land For Good consulted with the Intervale Center to learn from their experience. A report from the Intervale is also attached here, and their “Farms Program” manual is available for inspection upon request to Land For Good.

Potential Interest
The Intervale Center receives about 20 inquiries per year from start-up farmers seeking farming spaces at the Intervale. While most farm seekers have a range of prior experience, many lack the background required to start a viable farm business. In addition to serving as an incubator to the more experienced farmers, the Cheshire County farm could also be used as a training center to provide much-needed training and expertise to start-up farmers. It could be run in cooperation with UNH Cooperative Extension, the Hannah Grimes Center, Cheshire Conservation District, Keene State College, and other partners. The training center would help prepare the total greenhorns to be ready to access the incubator or to start farms elsewhere in the county.

Additionally, the Intervale Center receives about 50 requests per year from organizations in the US and Canada that would like to begin incubator projects or that have incubator projects but would like to improve their model. This demonstrates that there is a national interest in successful farm incubators. An incubator in Cheshire County could learn from the existing models and be part of a significant network of incubators.

Land Base Needs
It is important to acknowledge that the current Bo-Riggs’s Cattle Co. lease arrangement includes all the tillable land at the county farm. In order to accommodate both that operation and a farmer incubator, one or more of the following options would have to be explored:

1. Collaboration on some land between the incubator and lessee, possibly a mentoring relationship. Farm mentors can be compensated for training entering farmers on activities from fieldwork to equipment maintenance.
2. Incubator and/or lessee acquiring additional nearby land with a secure multi-year, written lease.
3. Incubator and/or lessee acquiring additional moderately distant land with a secure multi-year, written lease. Farmers who are “hatching” out from the incubator may benefit from some distance, e.g. working different soils and accessing different markets, thereby becoming independent in phases. Note that, as a tool for supporting the long term health of agriculture in the county, incubators may get special consideration from landowners who are supportive of that need.
The existing least notwithstanding, the Cheshire County Farm has excellent soils, most of which could support a diversity of crops. Farm operations in the Intervale and other incubators generally run from two acres to 15 acres of fruits, vegetables and flowers, but one tenant farm in the Intervale is 18 acres and the largest is 50 acres. The larger operations are generally the “mentor farms” and have large CSAs or significant wholesale accounts. Livestock and dairy operations generally require more than 50 acres, though they may require less, particularly if they are “purchased feed” operations. Small-scale poultry operations and some small ruminant operations may also only require smaller parcels to get started.

The acreage needs for an incubator for Cheshire County will depend on the mix of farms desired, the interest of potential tenants, and the land available. One could start by assuming that an incubator will need a critical mass of farms to make sense functionally, perhaps half a dozen, in addition to the current tenant. Two to three of the horticultural farms as well as the existing livestock operation could be the mentor farms, and the remainder would be the incubator farms. If it was assumed that the horticulture farms would consist of 5-10 acres on average, then 30-60 acres would be needed for the horticulture aspect of the incubator, but more or less land might be used. If the existing livestock operation can accommodate the loss of this acreage, than there is a potential for the current tenant to continue while providing enough land for horticultural aspects of an incubator.

All of this land does not necessarily have to be contiguous. However, if the land is not contiguous, some aspects of the incubator could be diminished. Some of the benefits of an incubator include regular interactions between the farmers, particularly between mentors and incubators; the sharing of equipment, water resources, greenhouse space, and storage and cooling space; and the coming together for various meetings and educational activities. Thus, initially, it would be ideal to have a contiguous home base, and then add on satellite locations once the incubator is established.

**Exploration into land opportunities**
There are a few nearby properties whose owners may have some interest in supporting agriculture by supplying housing and making their land available. The following two interviews shed some light on these potential opportunities.

**Meeting with David Putnam, November 3, 2011**
On October 17, 2011, Land For Good met with David Putnam, former farm manager of the Cheshire County Farm, to discuss the potential Westmoreland land base for an incubator operation at the former county jail. David suggested that most of the large parcels of prime farmland were owned or leased by the Chickerings of Westmoreland and the Goodells of Westminster Farms. David highlighted 135 acres, on a series of nine contiguous parcels, on the southwest side of Westmoreland, owned by Westview Management Corporation (WMC) and Bernard Palitz. Presently the land is leased by Westminster Farms and the Goodell Family. The Westview land is mostly prime agricultural soil and soil of statewide significance. David knows that this is some of the best soil in the valley, stewarded well by Richard Lawson and Walter Derjue prior to the current lease.

**Meeting with Bart Hunter, November 9, 2011**
Bart Hunter owns 15 acres of land adjacent to the southern border of the County Complex land. Bart was contacted as a potential supporter of the farm incubator project. In conversation, Bart expressed interest in seeing the idea move forward and exploring a potential relationship with lessees in the future. He would be interested in arranging a tour of his property.
The map below shows parcels of land in the town of Westmoreland. The land comprising the Cheshire County Complex is outlined in green. Through the Community Awareness and Involvement process, several sites were identified as having potential for serving as additional land base for a Farm Incubator project. These are identified on the map with an orange outline.
Potential Incubator Site #1
Westview Management Corporation and Bernard Palitz.

Nine (9) assessed parcels owned by both Westview Management Corporation and Bernard Palitz. Total acreage of 135 acres. Soil details listed to the right.

<table>
<thead>
<tr>
<th>acres</th>
<th>Imprint</th>
<th>Percent Slope</th>
<th>2nd Crop Use</th>
<th>Hydric</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>PILOTTEX FINE SANDY LOAM</td>
<td>All areas are prime</td>
<td>2e</td>
<td>Yes</td>
</tr>
<tr>
<td>10</td>
<td>SAND, A VERY FINE SANDY CLAY, 0 TO 3 PERCENT SLOPES</td>
<td>All areas are prime</td>
<td>1</td>
<td>No</td>
</tr>
<tr>
<td>75</td>
<td>SAND, A VERY FINE SANDY CLAY, 3 TO 8 PERCENT SLOPES</td>
<td>Farmland of statewide importance</td>
<td>7a</td>
<td>No</td>
</tr>
<tr>
<td>11</td>
<td>SAND, A VERY FINE SANDY CLAY, 9 TO 15 PERCENT SLOPES</td>
<td>Farmland of statewide importance</td>
<td>7a</td>
<td>No</td>
</tr>
<tr>
<td>18</td>
<td>REDSILT CLAY</td>
<td>All areas are prime</td>
<td>1</td>
<td>No</td>
</tr>
<tr>
<td>30</td>
<td>POOCHAM VERY FINE SANDY CLAY, 36 TO 70 PERCENT SLOPES</td>
<td>Not prime land</td>
<td>7e</td>
<td>No</td>
</tr>
</tbody>
</table>
**Infrastructure and Equipment Needs**
The main infrastructure for an incubator consists of a greenhouse, walk-in cooler, and some sort of storage shed. Additional space for meetings and educational activities are useful, but can be accommodated in various ways. Office and classroom requirements vary based on the details of the program. An office for staff is more or less useful, depending on the structure of the staff arrangements. Certain meetings can often take place outside or in a barn. The farmers may also choose to construct additional high tunnels and temporary sheds on their lease holdings at their own expense.

An equipment shed and shop are highly useful for an incubator. There is already a shop on the Cheshire Farm used by the current tenant. It may be possible for shared use of this facility, particularly if the current tenant was also a mentor and compensated for assisting in machinery and equipment maintenance and repairs for the incubator.

There is a short list of equipment that will be necessary to assist the farmers of the incubator (see list on page 3 of the Intervale Report). The Intervale Center initially bought the equipment, but then transferred the equipment to a farmer-owned equipment co-operative (actually an LLC). The Intervale Center provided owner-financing to the Co-op until it became possible for the debt to be transferred to a private bank. Fees from the cooperative now cover the costs for repairing, maintaining, and purchasing equipment (see Intervale Manual for details on the cooperative structure and fees). Additionally, the farmers will often purchase their own equipment over time in order to build up equity for when they leave the incubator.

**Market Needs**
One of the most important things that will need further research is the market potential for the products coming from the farmers in an incubator. Intuitively, there should be strong markets in Keene and Cheshire County, plus opportunities for farmers to also tap into markets in VT and MA. However, more specific market analysis should be conducted to determine the potential markets for new CSAs, farmers’ market vendors, and other retail outlets as well as opportunities and limitations in the wholesale markets. The Intervale Center report provides additional suggestions on market development and resources in their attached report.

**Staffing and Administrative Needs**
At a minimum, an incubator would need a person to provide technical support to the farmers, though this is likely only a 25%-time position. Other part-time tasks include administration/bookkeeping, land stewardship/management and equipment maintenance positions. For a small incubator, and the right staffing, the total staffing needs are likely to be only 1.5 full-time equivalents, but two or more persons could be justified depending on the incubator design and its broader charge. For instance, if the organization was also charged with being a training center, doing county-wide market development, managing food aggregation and distribution for county farmers, establishing a “food bank farm” or managing on-site value-added product development support, or managing the community gardens, then more staff would be required. If the incubator was directly associated with other institutions such as UNH Cooperative Extension, the Hannah Grimes Center, the Cheshire County Conservation District, or Keene State College, then there may be some shared overhead reducing the staffing needs.

**Operational and Capitalization Costs**
Incubators are funded through a varied combination of short and long-term resources. See a description of the funding stream for the Intervale Center on page 2 of the attached report. Grants and foundation funding will likely be important in the establishment phase. Farmer lease fees also are an important source of funding. See an example rental table from the Intervale Center attached. For a projection of capitalization costs for an equipment cooperative, see page 3 of the Intervale report.
Lease Terms
For the incubator farms, the lease term is generally five years. At the end of the lease period, the expectation is that the farmers will move on to another property. Both the Intervale Center and VT Technical College provide assistance to the farmers to find another location post-incubation. If there are hardships, the incubator manager may provide for an extended incubation. For instance, VTC has arranged to extend their most recent dairy incubations because the low milk prices of the previous few years prevented the incubator farmers from being able to acquire the equity target which the incubator managers had established as necessary for the farmer to succeed once they left.

Mentor Farmers at the Intervale have lease terms varying from 10-30 years. A requirement of the lease is that these farmers provide 20 hours of training per year to incubator farmers, so it is important that these are both skilled farmers and also capable and enthusiastic educators. It was suggested by the Intervale staff that, at the three-year point of the initial incubation period, the incubator staff determine which might be the best farms to stay on as mentors. Then, discuss with these farmers an extension of their lease, and then let the remaining farmers know at that point that they will be expected to leave after the subsequent two years.

Technical Support
The staff of an incubator will help the incubator farmers with production, marketing, financial management and business planning issues. In some cases, the staff provides direct support and, in other cases, they will assist the incubator farmer to access support from other providers such as UNH Cooperative Extension. There is generally a requirement that each incubator farmer sit down with staff to do an annual review of their finances and records. The purpose of this meeting is to ensure that the farmer is developing the necessary financial and record-keeping skills to run a successful farm business, and to help guide them towards becoming a profitable enterprise capable of succeeding beyond the incubation period.

Incubator Next Steps
In order to further explore the potential for a farm incubator at the Cheshire County Farm, the following steps should be taken:

- a discussion should occur with the county delegation based on this report and a direct presentation, if they desire;
- a discussion should occur with the current tenant about the potential of the incubator sharing the farm with them in the short term or at the end of their current lease;
- a more thorough market analysis should be completed;
- a farm design process should occur that will take the needs of the potential incubator and the current tenant in mind in order to determine more specifically what the land and infrastructure configuration may look like once an incubator is established; and
- a more thorough start-up and operations budget should be developed and funding sources should be identified.
Farm to Institution

A second and compatible aspect of programming for the former jail building would be serving as a site for farm fresh food aggregation, light processing, and distribution. Farm to Institution (F2I) work will create the local infrastructure for schools, nursing homes, correctional facilities, and other institutions to acquire locally-produced foods at reasonable cost. The project is expected to increase the supply and demand of local foods within the region.

The feasibility study has identified the following:
1. The former jail building is sound and preliminarily suitable for Farm to Institution and alternative energy applications.
2. Such uses of the building are strongly supported by Cheshire County residents who participated in the six community forums.
3. The location appears preliminarily to be a reasonable prospect for F2I aggregation and distribution.
4. The biomass and solar applications would significantly decrease F2I operating costs and enhance viability.

A Farm to School Pilot Program in Cheshire County has been funded by the NH Department of Agriculture, Markets and Food through a USDA Specialty Crop Block Grant. This will be administered by the Cheshire County Conservation District and is being established in partnership with the University of New Hampshire Cooperative Extension and Monadnock Region schools and farmers. This Pilot Program will be modeled after the successful University of Vermont Cooperative Extension program—Windham Farm and Food Network. It will begin in February 2012 and run through June 2013, after which it will transition, if successful, to a permanent entity separate from the Cheshire County Conservation District.

The Windham Farm and Food Network (WFFN) is a not-for-profit, farmer-owned produce delivery service for institutional food buyers in the Windham County, VT Region. Piloted by Westminster Organic Farms in the fall of 2009, several farmers collaborate to produce a reliable and affordable inventory with convenient ordering and billing. Farms post their products on the WFFN website and sell directly to local institutional kitchens. WFFN delivers from over 15 farms to the doors of more than 35 public and non-profit institutions in the Windham area, such as the Brattleboro and Bellows Falls Public Schools. They also deliver to other wholesale buyers such as stores and restaurants but transparently charge a higher delivery fee to for-profit buyers. These higher delivery fees help to subsidize lower delivery fees for schools, thereby promoting farm-to-school programs in Windham County. Currently, about 75 percent of WFFN funding comes from delivery fees, with coordination paid for and provided by UVM Extension.

Keep Farmland in Farming is a New England Farm & Food Security Initiative (NEFFSI) convened to strengthen New England’s food system and improve the region’s economy, environment, and public health. In July 2010, the Blue Ribbon Commission on Land Conservation, a standing commission of the New England Governors’ Conference, published the 2010 Report to the Governors that stated:

New England agriculture is today at a most promising crossroad. Surging demand for local food is providing exciting new market opportunities. Growing obesity rates and the lack of access to healthy and affordable food for many of the region’s residents foster new partnerships between the agricultural and public health communities to combat food deserts and increase the availability of local fruit and vegetables in schools and other institutions.

As Farm to School programs gain momentum on a national scale, New Hampshire’s farmers have an opportunity to help make more fruits and vegetables available to children at school every day. The Monadnock Region Farm to School Pilot Program’s purpose is to connect farmers with schools and institutions as a way of promoting and
marketing NH Specialty Crops to a new market and building lasting connections between school children and NH farmers.

Estimation of potential annual institutional purchasing

<table>
<thead>
<tr>
<th>Cheshire County, NH</th>
<th>Students or beds</th>
<th># Meals</th>
<th>Price of food / year, $</th>
<th>Fruits and vegetables, $</th>
<th>Fresh (56% of total fruits and vegetables), $</th>
<th>Non-milk protein, $</th>
<th>Cheese/yogurt (24% of Non-milk protein), $</th>
<th>Carbohydrate-based foods, $</th>
<th>Date</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>public schools</td>
<td>5,943</td>
<td>1,069,740</td>
<td>1,069,740</td>
<td>160,461</td>
<td>80,231</td>
<td>256,738</td>
<td>385,106</td>
<td>92,426</td>
<td>267,435</td>
<td>FY 2009-10</td>
</tr>
<tr>
<td>college and resid</td>
<td>6,717</td>
<td>3,530,350</td>
<td>3,530,350</td>
<td>529,956</td>
<td>264,719</td>
<td>647,282</td>
<td>1,270,939</td>
<td>305,020</td>
<td>652,980</td>
<td>2011</td>
</tr>
<tr>
<td>college and instit</td>
<td>1,200</td>
<td>29,950</td>
<td>29,950</td>
<td>19,440</td>
<td>9,720</td>
<td>31,114</td>
<td>46,656</td>
<td>11,197</td>
<td>32,400</td>
<td>2011</td>
</tr>
<tr>
<td>nursing homes</td>
<td>750</td>
<td>850,000</td>
<td>850,000</td>
<td>124,522</td>
<td>62,251</td>
<td>189,232</td>
<td>298,804</td>
<td>71,711</td>
<td>207,503</td>
<td>2011</td>
</tr>
<tr>
<td>Cheshire County Jail</td>
<td>57</td>
<td>624,15</td>
<td>624,15</td>
<td>9362</td>
<td>4,681</td>
<td>14,990</td>
<td>22,469</td>
<td>5,993</td>
<td>15,604</td>
<td>2011</td>
</tr>
<tr>
<td>subtotal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7/10/2011</td>
</tr>
</tbody>
</table>

NEFFSI has identified farm to institution as one of the six focus areas for agricultural service providers and communities to work on in upcoming years, and they have identified “Continued capacity building for Farm to School programming, networking, information services, and technical assistance in the region” as an identified project. The Monadnock Region Farm to School Pilot Program will build the capacity for NH farm to school and farm to institution programming.

As the WFFN grows they are finding a need for infrastructure – space for climate-controlled food storage and light processing (e.g. turning whole carrots into washed, sliced, and bagged carrot coins that are easy for institutions to process). Leadership of WFFN has visited the facility and feels that there is an opportunity at the former jail to supply this space. WFFN along with the developing Cheshire County network have discussed the opportunity for collaboration after the pilot year is complete and the benefit of shared space for climate controlled food storage and light processing. This type of infrastructure will be essential in bolstering the burgeoning local food system.

Business Incubation

A third and compatible aspect of programming for this building would be to offer office space for for-profit businesses, specifically emerging businesses that support the agricultural economy. This office space would be offered through a non-profit umbrella, such as the Hannah Grimes Center for Entrepreneurship located in Keene, which would offer business programming and incubation to ensure the strength and stability of these businesses in a publicly-owned facility. The Hannah Grimes Center has a proven track record of success in business programming and incubation at their Center in Keene.

Hannah Grimes is also well-positioned to take this on because of their “farm focus cluster.” This is a targeted program focusing on the productivity and innovation of regional farm and food processing business owners.

“Business incubation creates more jobs for less money than any other economic development initiative.”

- US Department of Commerce Economic Development Administration, “Construction Grants Program Impact”
November 2008, Hannah Grimes launched the Industry Cluster Project, assessing what resources are currently available to farms and food processing businesses, reaching out to partners, documenting resources available in our region and worldwide through the Internet, and aggregating events and useful business resources for local farms. From this work, Hannah Grimes will design new and adapt current programs to fill in gaps that current service providers can't provide and to overcome the negative effects that challenges such as underemployment, seasonal employment, low wages, and economic low productivity have on this industry. To identify strengths and needs, the Hannah Grimes Center compiled e-newsletters, identified partners/service providers, created a focus group, and produced an Agricultural Business Resources brochure. The Hannah Grimes Center has proven its ability to support small producers and enhance their business success.

**County Office Space**

The County of Cheshire currently leases office space to house the University of New Hampshire Cooperative Extension offices for the county. However, budget pressures of recent years have challenged the ability of the county to fund Cooperative Extension at historical levels, causing the county to seek savings and cuts where possible. With rehabilitation, the former jail facility could provide the office space for UNH Cooperative Extension, and other departments as needed, in a county-owned facility, removing the need to pay for leased space. The former jail is 10.5 miles from the current Extension Office at 800 Park Avenue in Keene.

Throughout the history of the County Farm, UNH Cooperative Extension Educators have used the Farm property as an outdoor classroom for community education on agriculture, gardening, forestry resources, wildlife, and more. This relocation could prove fruitful with enhanced access to teaching sites.

**Farm Design**

The scenarios below were developed to explore ways to meet the committee’s desire to know more about ways that the county farm could maximize public benefit county-wide. To varying degrees, they allow for on-farm and off-farm public participation, education, and county-wide consumption of county farm food products. While the farm is currently leased through 2016, the scenarios illustrate some of the alternatives that might be considered after the current lease ends, if the county then desires to make changes and/or if additional lands were to become available. Three scenarios of farm design have been mapped to illustrate varying degrees of public use. Other scenarios are, of course, possible.

**Scenario #1:** In this scenario there is little change from the present use of the farm. Land would be protected from development with a conservation easement and leased to a farmer who may reside in the farmhouse. This is the scenario presenting the least complexity and minimal public use.

**Scenario #2:** In this scenario there are significant changes proposed from the present use of the farm. Land would be protected from development with a conservation easement and leased to a farmer who may reside in the farmhouse. In addition to the working dairy, production would include mixed vegetables, tree fruits and berries, small livestock, and honey bees. The former jail would be utilized for food processing, education, and offices. This scenario proposes three to five units of farmer workforce housing and a high level of public use.

**Scenario #3:** Similar to sample scenario #2, this scenario proposes significant changes from the present use of the farm. Land would be protected from development with a conservation easement and leased to a farmer who may reside in the farmhouse. In addition to the working dairy, production would include mixed vegetables, tree fruits and berries, small livestock, and honey bees. This scenario includes a focus on ecologically-driven production design and management, a farm business incubator, food bank production, and alternative energy education. The former jail would be utilized for food processing, education, and offices. This scenario proposes five to nine units of farmer workforce housing and a very high level of public use.
Sample Scenario #1
Cheshire County Dairy

- **Existing Farmhouses**
- **Former Jail**

**Land protection:** Conservation Easement
**Owner:** County OR Non-Profit OR Individual
**Stewardship:** The Monadnock Conservancy
**Farm house(s):** One unit
**Public use:** Low

**Features:** Managed woodlot, Working dairy

**Project Complexity:** Low

**Funded by:** To be determined
Sample Scenario #3
Cheshire County Diversified Foods, Energy & Education Center

Features:
- Managed woodland
- Diversified farm operation with mixed vegetables, fruits, berries, apiary, cattle & small livestock
- On-site food processing & education center
- Incubator Farm for beginning farmers
- Food Bank Farm for community pantries
- Alternative energy demonstration center

Project Complexity: High

Funded by: To be determined

Legend:
- Planned Grazing
- Vegetable Production
- Permaculture
- Orchard / Berries
Farm Buildings Inventory

The jail structure is surrounded by a number of support buildings. The farm, as a working dairy farm, is comprised of a number of buildings along with the two homes used by the farm. All of these auxiliary building were reviewed to access the probability of any major problems that could impact projects and to evaluate potential reuse, or adaptive reuse.

Closely grouped to the north and west of the jail structure is a complex of buildings that once housed equipment that served the jail:

"Repair shop": An auxiliary 1950-era building. Dual fuel boiler (wood and oil); above ground oil tank at exterior is leaking with no secondary retainer tank. Building envelope appears intact. Minor/typical repairs are desirable, maintenance of exterior paint. Roof appears intact.

"Old Work Shop" – An auxiliary building used as the original workshop space. This is a 1930-era building in fair shape. Building envelope appears intact. Minor/typical repairs are desirable, maintenance of exterior paint. Roof appears intact.

"Garage Bays" – An auxiliary building at the jail site, 1950-era five-bay garage in fair shape. Building envelope appears intact. Minor/typical repairs are desirable, maintenance of exterior paint. Roof appears intact. Several garage doors were damaged recently and need repair in-kind.

All of the additional buildings are "utility grade" structures lacking plumbing, DWV, insulation. The type, locations, and configurations do not lend them to adaptive reuse as housing. Likely reuse is along the lines of the historic use - storage and utility areas. Neither the jail building nor any of the auxiliary buildings lend themselves to any residential use. Use of the jail as a potential hostel was considered, but given the building’s fundamental construction and condition, this is the least reasonable reuse. Aside from housing, the buildings are all worth reusing. Light industrial is the most practical reuse for the buildings in the jail complex.

There is also an area south of the jail that once was the location of an older jail building. This site’s soil is compromised for agricultural purposes, but the site is suitable for a new structure. This area is across from the pump house, which is the only building in the compound still in operation.

The farm area is a separate complex of several typical farm buildings housing a dairy herd and operation:

The “Hay Barn” is an older, original building. Building deficiencies include rotted sills, concrete foundation frost damage, and some minor items. The roof is intact and minor repairs to doors/ windows are needed for good operation/maintenance. Paint should be maintained.
“Farmhouse 1,” circa 1920-30, is in fair shape. It needs typical maintenance items and minor repairs. Paint is cracked and failing in several locations. Paint should be properly maintained and not allowed to deteriorate, in order to not create a lead based paint hazard.

"Farmhouse 2," circa 1920-30, is in fair shape. It needs typical maintenance items and minor repairs. Paint is cracked and failing in several locations. Paint should be properly maintained and not allowed to deteriorate, in order to not create a lead based paint hazard. The septic field is leaking and tank should be checked, along with septic field.

There are several buildings housing the dairy herd and equipment. These appear fairly modern and have recently been leased for this purpose. These operational buildings were not inspected.
Former Jail Building Adaptive Re-Use

Adaptive reuse refers to the process of reusing an old site or building for a purpose other than which it was built or designed for. Along with brownfield reclamation, adaptive reuse is seen by many as a key factor in land conservation and the reduction of urban sprawl. It can be regarded as a compromise between historic preservation and demolition. The building which was the former county jail has the potential to be adapted to fit agriculturally related programs.

A creative and experienced team of consultants came together to evaluate the adaptive use potential of the former jail building relative to the agricultural infrastructure uses currently under consideration. The resulting floor plans and specifications will enabled project cost estimators to provide preliminary estimates for the types of remodeling that might be desired for the building.

Currently the former jail building is an expense to the county at an estimated $30-40 thousand annually. This cost is to maintain the building as is as a vacant building to heat, dehumidify, and otherwise keep at a minimum level of maintenance so that the building doesn’t fall into disrepair, rendering it unusable.

The first step in the evaluation of adaptive reuse potential was to take inventory of the jail building contents. A team of four, led by Craig Oshkello, employed an inventory format used by green oriented adaptive reuse projects in other parts of the country. The information derived here was used to create a baseline to schedule estimates for removal, recycling and/or reuse of materials in the proposed plans for the building’s future.

The first round of cost estimating was completed by Steve Horton. Composite costs for several potential uses are now available. A special focus was placed on energy saving and alternative energy applications. Methods and costs for saving the building, should re-use appear feasible and likely, were also addressed during this process. Please see Appendix G for the complete Preliminary Cost Estimate.
Adaptive Re-use of the Former Jail and Compatibility with Current Lessee Bo-Riggs Cattle Co.

Since the county funded farm was closed and jail relocated, the relationship between the leased farm and vacant or repurposed former jail building has been a challenging one. The current 5 year lease and uncertain future for the jail building is starting to be addressed by this report in that it suggests possible uses for the former jail. Even with the feasibility of those uses better understood, questions remain as to what might happen when and how that might or might not relate to the farm. In other words, it all depends.

Dana and Tiffany Briggs are into the first year of their five year lease of the county farm land and facilities. The lease has been extended to include the two houses at the farm. Dana attended two of the community forums. They were updated at the farm and asked their views on the former jail proposals. They expressed support for adapting a portion of the former jail for office space but have no use for any further space and expressed, at this time, no interest in a role with the farm to school or farmer incubator activity.

This is an early rendering of the former jail building.
Conceptual Site Plan for Farm Incubator
This floor plan shows one potential arrangement of spaces and uses on the first and second floor of the former jail. Related cost estimates can be found in this section.
Jonn Kutyla of PiXate Creative constructed a photo-realistic 3D rendering of the former Cheshire County Jail building and landscape. This rendering illustrates some examples of the property's potential re-uses.
Several preliminary estimates were completed for the potential reuse of the Cheshire County Jail Building. The latest estimate takes into account that the building interior had been significantly impacted by the removal of most of the heating system by a demolition/salvage contractor hired by the County to remove salvageable metals. Every section of the estimate was designed to “stand alone” in case the funding availability made the project multi phased and the work was completed as funding became available. Every section has its own overhead costs included for that reason.

The following outline briefly describes the contents of the estimate:

- **Section #1- Gut Existing Building**
  1. Outlines the cost to remove remaining building components to prepare for future use.
  2. It is believed that there is little or no asbestos or similar hazardous material to be removed from the building.
  3. Effort to consider reuse of metal doors, bars, and grates and other reusable materials were considered. However, most of these items were removed by the demolition contractor hired by the County and this is no longer an option. The estimate has been adjusted accordingly.

- **Section #2- Exterior Windows and Doors**
  1. The existing windows and doors were designed for confinement purposes and reuse of the building would likely require that these windows be removed and larger openings created.
  2. New windows estimated would be approximately 4’0” by 6’-0” in size.
  3. New windows were estimated as insulated aluminum storefront type.

- **Section #3- Exterior Walls and Air Sealing**
  1. When the building was built (in two phases) the emphasis on insulating the exterior envelope to save energy cost was not there.
  2. Estimated costs were included to add insulation at the exterior walls at the inside of the building by adding rigid board insulation and drywall to the interior surface to achieve an R-19 minimum.
  3. The roof insulation was also estimated to be upgraded to an R-29.

- **Section #4 Core MEP**
  1. It is assumed that water and sewer lines to the building can be reused.
  2. New domestic hot and cold water systems were estimated throughout.
  3. New sprinkler systems were estimated throughout.
  4. A new distribution and heating and cooling system has been considered in the estimate. Type of system is not yet fully determined. Costs have been included for a relatively simple distribution and equipment scenario.
  5. New ventilation costs were considered in the estimate.
  6. New electrical distribution and minimal fixtures were estimated. No specialty or communications systems were included.
• Section #5 Fit Up

1. Three possible levels of fit up costs are presented as a means of providing a sliding scale of costs (or menu) for various and possible scenarios for using the building. Only one can be chosen.
2. Level 1 at $50 per square foot would allow for a majority of large open space interior renovations such as vegetable processing and storage- or similar.
3. Level 2 at $75 per square foot would allow for a mix of 50% large open space and 50% smaller office space configurations.
4. Level 3 at $100 per square foot would allow for 75% smaller space and office area configuration with 25% large open space use.

• Section #6 Contingency

1. Contingency for the unknown factors has been included already in each section.

• Section #7 Soft Costs

1. An industry average fee for an Architect and related engineers at 8% has been indicated.
2. A 7% factor has indicated for possible moveable furnishings and equipment items that might be necessary to complete the building such as kitchen equipment, desks, chairs, etc.
3. Owner paid consultants including Civil Engineers, Geo Technical and Owners Representative have been included.

The summary of the estimate choosing the $75 per square foot fit up cost would be as follows;

| Demo Existing Building Interior | $ 151,932 |
| Exterior Windows and Doors      | $ 117,082 |
| Exterior Walls and Air Sealing   | $ 210,359 |
| Core Mechanical and Electrical  | $ 1,011,280 |
| $75 per square foot mixed use fit up | $ 1,650,000 |
| Soft costs including design     | $ 521,098 |
| **Project Total**               | $ 3,661,752 |

The estimates indicated above are based on historical data and experience derived from similar projects and recent local project costs. Only narrative descriptions of possible uses for the building were used to develop this estimate. The estimate is based on possible scenarios for building use, but there are no specific or intended final plans that a more accurate estimate may be completed with at this time. Therefore, caution should be used when applying portions of this estimate without certain context considerations or contingencies.

Sincerely,
Steve Horton

Steve Horton Construction Consulting Services, Inc. PO Box 399 Walpole, NH 03608 603-313-9333
Farm Adaptive Re-use – Proposed River Walk

This preliminary cost estimate is for the basic elements of a trail system to be used by the public at the site of the former county jail. The system would include paths leading to the river and connecting to other trails nearby, interpretive signs, basic picnic facilities, and a river dock where canoes/kayaks could be launched. Because of the ecological sensitivity of the river banks and their plant communities, extensive trail planning is required that is beyond the scope of this project.

The following outline briefly outlines items included in the estimate;

Section #1 – Design and Permitting: Design development and submission for federal, state and local review.
Section #2 – Connector Paths; Connector paths would be ADA accessible; connecting the picnic and canoe dock to other trails in the locale. [Trails would be of natural materials.]
Sections #3 & #4 – Picnic Benches
Section #5 – Canoe Launch: Access road, parking area, picnic area, and portage to dock.
Section #6 – Dock: Purchase and install (3) 4’x12’ aluminum docks in a “T” pattern.

Preliminary estimates

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design and permitting</td>
<td>$3,500</td>
</tr>
<tr>
<td>Connector paths</td>
<td>$5,000</td>
</tr>
<tr>
<td>Sitting benches</td>
<td>$750</td>
</tr>
<tr>
<td>Picnic tables and benches</td>
<td>$2,750</td>
</tr>
<tr>
<td>Canoe launch/ramp</td>
<td>$10,000</td>
</tr>
<tr>
<td>Dock</td>
<td>$7,500</td>
</tr>
<tr>
<td>Contingency</td>
<td>$2,750</td>
</tr>
<tr>
<td><strong>Total Estimated Cost</strong></td>
<td><strong>$32,250</strong></td>
</tr>
</tbody>
</table>

Londello Consulting, Landscape Architecture, Design and Planning
Housing

Current on-site housing, which consists of two residences, was evaluated. Options for seasonal and perhaps caretaker housing were also considered. The possibility of hostel-like seasonal housing within the former jail building was considered feasible before partial demolition and is now less so do to the practicality, at this point, of retaining as an “awake and alert” facility.

Until December 2011, the feasibility was being considered for adaptive re-use of portions of the electrical, water supply and heating systems, plumbing fixtures, interior doors, and furnishings. For some prospective tenants, it was believed that this would have allowed for phased or interim facility usage. This planning was aborted after much of those systems and or materials were removed or compromised during unanticipated decommissioning of the building. After a short hiatus, subsequent proposals were formulated. These require greater upfront investment and lack the potential for creative recycling of building elements. Lost also was the architectural opportunity to adapt and highlight the transformation of the structure in a way that comparable projects have used to generate destination appeal.

The current proposal begins to consider ways that a more modern and landscape-based focus might feature the river location instead of, rather than in addition to, the former jail adaptation. Current cost estimates reflect the need to replace the lost elements and redefine the potential re-use.
Legal Considerations

Consistent with the county’s decision to close the county-run dairy operation on the farm, this study presented a unique opportunity to evaluate different scenarios of continued county control of the property and day-to-day operations, ranging from regular oversight and property/programmatic management responsibilities to an ownership-only, hands-off model in which non-county property operators hold nearly all responsibilities, or even outright non-county ownership.

It should be noted that the potential future uses of the former jail building discussed in this report differ in many respects from prior uses by county government. Some of the potential uses discussed at the community forums would provide significant public benefit, while others might be of a more private nature. It remains to be seen what the nature of proposals elicited by the RFP will be relative to public and private benefit, but under any circumstance it is likely that changes in use will alter the applicability of local land use regulations on the property. It is envisioned that once actual proposals come before the Commissioners, discussions with the appropriate Town of Westmoreland boards will be initiated to ascertain applicability of NH RSA 674:54, local ordinances, and any related reviews by the Westmoreland planning or zoning boards.

The threshold criteria established by the farm and jail reuse subcommittee of the county delegation indicate a preference for continued county ownership and ultimate control of the property, but without regular oversight or management responsibilities. Accordingly, the following review of legal and ownership issues pertaining to different scenarios assumes county ownership of all land and existing buildings and improvements. Should the county wish to divest of some or all of the property in the future, a conservation easement or other binding legal mechanism could ensure continued agricultural and open-space use of the property by future owners. Furthermore, while selling a conservation easement on the publicly-owned property is currently unfeasible due to funders’ reluctance to conserve publicly-owned land, it would be quite feasible to sell a conservation easement in conjunction with the sale of the property to a private entity. Such a joint conveyance would enable the county to receive full value for the property while still keeping it affordable to a greater range of potential buyers.

The farm incubator, farm-to-institution, and business incubator models discussed in this study all involve a complex array of landlord-tenant relationships, many of which are for limited duration. It is unlikely that the county would be in the position to manage such a multitude of leases, as the personnel burden would be significant. Accordingly, each of these models could feature a single management and coordination entity to be the principal lessee, the responsibilities of which would include the oversight of subleases to incubator tenants. The examples discussed above, such as the Intervale Center and the Windham Farm and Food Network, are non-profit entities that play such a role. The Hannah Grimes Center, based in Keene, has expressed preliminary interest in mentoring and overseeing business incubation tenants.
The equity in improvements or investments in facilities, if financed by the lessees, would belong to the lessees, while all existing facilities would remain county property. Non-fixed equipment, such as tractors, and temporary structures, such as greenhouses, would be the property of the tenants.

It should be noted that a short-term lease arrangement exists already on the farm property, and any new programming or leases should be developed so as not to conflict with this first lease. That said, the property is large, and as discussed under the farmer incubator above, there are likely opportunities for a variety of small-scale horticulture operations to coexist alongside a larger dairy operation.

**Financial Planning**

The feasibility of the facility redevelopment such as this typically depends on identifying an appropriate funding mix. Sources of both affordable development funds and sustainable revenue to cover operating costs are essential. The study explored a mix of public and private sources and uses that might leverage county ownership and public private benefit. Discussions with Jack Dugan, Executive Director of Monadnock Economic Development Corporation (MEDC) focused on the following prospects for funding this project.

**NH Community Development Finance Authority (CDFA)** administers nearly $40 million in funding resources, which includes a combination of state tax credits and federal Community Development Block Grant, Neighborhood Stabilization, and Energy Reduction Funds. It supports the development of vibrant and resilient communities by providing financial resources to nonprofits, community development organizations, counties, municipalities, and for-profit businesses. These organizations, in partnership with CDFA, create affordable housing, support the formation of new jobs, and help retain existing employment for low and moderate income New Hampshire residents.

CDFA offers New Hampshire businesses the opportunity to invest and target their tax dollars to community development projects throughout the state in exchange for a 75% State Tax Credit through the Tax Credit Program. This program enables businesses to invest cash, securities, or property to fund economic or community development projects in exchange for this 75% tax credit which can be applied against any or all three of the business profits, business enterprise, or insurance premium taxes. This is a great way for a business to impact a community by leveraging their tax dollars.

CDFA also administers the federal Community Development Block Grant program, one aspect of which supports job creation with grants up to $500,000 at an investment of up to $20,000 per job created or retained.

Funding from both these programs could be sought for this jail re-use.

**Rural Business Enterprise Grants (RBEG)** program provides grants for rural projects that finance and facilitate development of small and emerging rural businesses help fund business incubators, and help fund employment related adult education programs. To assist with business development, RBEGs may fund a broad array of activities. Grants have no required maximum level of funding. However, smaller projects are given higher priority. Generally grants range $10,000 up to $500,000.

Rural public entities (towns, communities, State agencies, and authorities), Indian tribes, and rural private non-profit corporations are eligible to apply for funding. At least 51 percent of the outstanding interest in any project must have membership or be owned by U.S. citizens or resident aliens. Rural is defined as any area other than a city or town that has a population of greater than 50,000 and the urbanized area contiguous and adjacent to such a city or town according to the latest decennial census.
The RBEG program is a broad-based program that reaches to the core of rural development in a number of ways. Examples of eligible fund use include: Acquisition or development of land, easements, or rights of way; construction, conversion, renovation of buildings, plants, machinery, equipment, access streets and roads, parking areas, utilities; pollution control and abatement; capitalization of revolving loan funds including funds that will make loans for start-ups and working capital; training and technical assistance; distance adult learning for job training and advancement; rural transportation improvement; and project planning. Any project funded under the RBEG program should benefit small and emerging private businesses in rural areas. Small and emerging private businesses are those that will employ 50 or fewer new employees and have less than $1 million in projected gross revenues. Availability of Funds

Each year, Congress provides program funding as called for in the Federal Budget. Fiscal Year funding levels will be made available as soon as possible after the beginning of each Fiscal Year. RBEG could provide approximately $80,000 toward project costs.

USDA Rural Development's Community Facilities Programs provide loans, grants, and loan guarantees for water and environmental projects, as well as community facilities projects. Water and environmental projects include water systems, waste systems, solid waste, and storm drainage facilities. Community facilities projects develop essential community facilities for public use in rural areas and may include hospitals, fire protection, safety, and many other community-based initiatives.

Community Facilities Direct and Guaranteed Loan Program can make and guarantee loans to develop essential community facilities in rural areas and towns of up to 20,000 in population. Loans and guarantees are available to public entities such as municipalities, counties, parishes, boroughs, and special-purpose districts, as well as to non-profit corporations and tribal governments.

Community Facilities Grants assist in the development of essential community facilities in rural areas and towns of up to 20,000 in population. Grants are authorized on a graduated scale. Applicants located in small communities with low populations and low incomes will receive a higher percentage of grants. Grants are available to public entities such as municipalities, counties, parishes, boroughs, and special-purpose districts, as well as non-profit corporations and tribal governments.

Rural Community Development Initiative develops the capacity and ability of private, nonprofit, community-based housing and community development organizations and low-income rural communities to improve housing, community facilities, and community and economic development projects in rural areas. A low interest, long-term loan of some $1-2 million might be obtainable through the Community Facilities special loan program. For profit usage of up to 25% of a community facility funded through this program is allowable.

US Department of Commerce Economic Development Administration (EDA) encourages programs that promote job growth and business expansion in today's technologies and in discovering tomorrow's. The EDA supports key initiatives among regional areas across the United States, thereby developing economic stability through intergovernmental and public/private sector collaboration. At a meeting between project partners and Alan Brigham, ED of regional EDA office, we were invited to submit a proposal for a grant of up to $50,000 to develop a business plan fleshing out the county approved recommendations on the feasibility work completed to date.

Additional institutional gap funders might include local banks, the NH Community Loan Fund, and the Cooperative Fund of New England.

Individual lenders and donors might also be asked to play a key role as the funding mixed became finalized. Jack Dugan and MEDC could play a lead role in finding arranging the project development funding be it for a nonprofit or for profit end user. Mary Ann Kristiansen, Executive Director of The Hannah Grimes Center,
expressed willingness to explore the possibility of expanding its current Keene-based business incubator functions to include managing occupancy and program aspects in a redeveloped jail building. The county or other entity might be retained to provide building maintenance. These partners have collaborated successfully several times before.

**Rural Business Opportunity Grant (RBOG) – USDA Rural Development**

On July 27, 2011 Cheshire County submitted a $150,000 Rural Business Opportunity Grant application to the USDA. This proposal was not funded. The purpose of the grant was to fund work by regional partners such as non-profit organizations, universities, cooperative extension offices, and agricultural service agencies to bring greater economic development—primarily in the agricultural sector—to the four-county region of Cheshire and Sullivan Counties in NH and Windsor and Windham Counties in VT. Though the proposal does not focus solely or explicitly on the Cheshire County Farm or former jail, the guidelines of this particular grant program at this time are such that a two-state application of a larger scope was deemed much more competitive than a Cheshire County-only proposal, and the two-state application was eligible for a much larger maximum grant award. As stated in the application, “Local economic regions, by definition, are fluid entities with borders that are not always easily defined. These four rural counties are tied together by similar agricultural economies, by their placement in the Connecticut River Valley, and their access to Interstate 91…” Furthermore, the proposed planning and program-development outcomes of the work have the potential to boost significantly the emergence and viability of the type of tenant(s) sought for reuse of the former jail and adjacent farmland.

Although the RBOG application was not funded in the 2011 round, stronger affiliations in Cheshire County and neighboring Windham County VT are yielding great promise for future programming that could benefit the counties’ agricultural community of our region.

**Operating Costs and Property Management**

Calculation of projected operating costs has been deferred until actual proposals for particular usages are before the Commissioners. The intent of the feasibility study was to emphasize approaches that would:

1. Maximize efficiencies of collocation of various uses;
2. Allow for phased redevelopment as lessees came forward; and
3. Make best use of alternative energies, particularly those that would benefit the local economy.

The study envisioned an arrangement under which the county would continue to own the former jail building. That said, the county might choose to enter into a contract for maintenance of the facility; an organization such as the Hannah Grimes Center might take on marketing, lease-up, and ongoing management responsibilities, possibly using a business incubator model.
Energy

Mark Froling, of Froling Energy Inc., was contracted to provide biomass and solar energy design solutions for the proposed adaptive reuse of the former jail building. Froling Consulting submitted a report outlining the potential for biomass using wood chips and photovoltaic installation on the roof on the building. Some of the benefits of both installations could include: use of local low grade wood chips, cheap energy for uses within the former jail building and a large on-site heated greenhouse. Please see the detailed description below.

Biomass for Heat

New Hampshire has a long history of burning wood for heat. For many centuries wood has been our primary fuel for providing heat for our homes and businesses. Over the last 100 years however, fuel oil has replaced our once strong tradition. Now, over 82% of all heating oil in the country is consumed in the North East Region of the United States (DOE 2006).

In this proposal we emphasize the economic importance of keeping this tradition and integrating improved technology to increase efficiency and decrease costs and emissions. Using wood fuel from our forests will result in a dramatic cost reduction and give the owner a great economic advantage over competitors, using the more expensive fuel oil. When the wood fuel is harvested sustainably and locally it also provides us with greater security for our future. The core principle of this cycle is sustainable and provides steady economic growth through repetition. The biomass to heat conversion adapted at multiple sites will provide increased employment and economic gain.

Why Biomass is a good fit for this building and its community

The CCF is adjacent to hundreds of acres of woodland owned and managed by the county. It is highly likely that this woodlot and or others in the region could sustainably supply the fuel to heat this building and its new potential tenants. In recent years an average of 28 thousand gallons of fuel oil per year has been imported to the site for the use of space and domestic water heating. With improvements to the building envelope and heating distribution system, a significant portion of the energy can be conserved. An additional fuel switch from oil to wood will have these distinctive positive impacts:

1. Woody Biomass (in this case, wood chips) is a locally available fuel. The use of wood chips will increase forest management and logging services and diminish the import of fuel oil.
2. Biomass is generally regarded as a carbon neutral fuel, not the case with #2 fuel oil.
3. Burning Wood Chips with low moisture content (below 30%) can save the owner 50% in heating fuel costs annually.
4. Profits from the wood chip fuel stay in the region as opposed to75% of fuel oil profits which leave the state and 50% leaving the country. (DOE 2007)
5. Operating and showcasing a wood chip system to the public will restore our wood burning tradition
6. Using the best available technology will set the tone for being a leader in this technology and will provide a path to a new industry and many potential jobs in engineering, installation operation and fuel harvesting.
7. Showcasing and integrating this technology into an agricultural program would enhance the viability of participating farm operations and provide foresters with information for duplication at their other operations.
8. Duplication of this type of technology is possible and adaptable to municipal, commercial, and industrial facilities.
The Project will provide a thorough study addressing the pros and cons for the inclusion of a biomass system for the CCF and elsewhere. The proposal shall include:

- Plant schematic and working description
- Development cost and feasibility study
- Exploration of replication at 10 other sites in three counties (see additional site evaluation fee)
- Economic and environmental benefits for using biomass over fuel oil

**Heating Cost Comparison of Oil VS Wood at CCF**

- Wood Chip Cost/Year, $41,040.00
- Fuel Oil Cost/Year, $98,000.00

- Using the existing land resource for fuel (establishing a wood fuel economy within the region)
- Consideration of Learning Center integration for Forest and Agricultural industries
- Creating a new industry and Jobs (see Graph below)

**Job Creation & Economic Benefit**

- Logging
- Forrest Management
- Plant Operator
- Chipping Operator
- Trucking
- Engineering
- Installation Work
- Educational Training

- Conduct survey of three perspective sites for introducing similar systems

Examples: Farms, Schools, Commercial Warehousing, Production Facilities, Municipalities, Hospitals...etc
Biomass to Heat Visual Model

Sustainable forest management provides the woody biomass.

The energy crop is made up from small diameter branches and low grade wood found in the top of the tree.

After achieving less than 30% Moisture Content the fuel is prepared and sized by chipping.

The Fuel is inspected for its quality of size and MC.

The Fuel is loaded into a automated storage bin that feeds the biomass boiler.

The wood chip boiler converts the fuel to heat. Farm grade ash is left as waste.

Heat can be used for space heating, process heating and cooling.

Solar PV

Solar PV is a good match for CCF and other buildings of this scale, and its newly proposed function as a community-based agricultural center. Although currently the cost of power generation with PV is still a bit higher in NH than buying from the grid, this technology clearly provides long-term cost stability for the owner. As a converted agricultural center it provides a clear message of environmental awareness and simultaneously contributes to New Hampshire’s goals of achieving 20% use of renewables by year 2020.

This grant proposal will study the feasibility of various installed systems at the CCF. It will include:

- Rooftop installation schematic at CCF
- Environmental benefits
- Economic impacts and cost analysis
- PPA Possibilities (Power Purchase Agreement) for future installation

Solar Thermal

A solar thermal system is ideally suited to function on its own, or in conjunction with a modern biomass boiler. The installation of a solar thermal heating system ensures an unequivocally positive CO₂ balance—and virtually instant payback period (one year)—when compared to conventional water heating systems.

In addition to the lowering of environmentally harmful CO₂ emissions, the period of energetic amortization (the time until the solar heating system has produced as much energy as was needed to manufacture the system) on a solar thermal heating system is between one-half year and two and one-half years.

This project will study the feasibility of various installed systems at the CCF and similar buildings. It will include:

- Rooftop Installation diagrams at the former CCF and nursing home
- Development costs
- Application at the dairy, greenhouse, heating, hot water
- Operating costs and economies
- Integration with cooling system (Solar Cooling)
- Possibilities of interconnection with Biomass district
## County Conversation:
What does the future hold for the 150 year-old Cheshire County Farm and former County jail?

Come join fellow Cheshire County residents to find out more about what’s happening at the publicly-owned farm in Westmoreland.
Share your ideas for the future uses of the Farm’s property and buildings.
We want to hear YOUR voice!

Join us for ice cream and conversation at any of the following locations and dates:

**Keene**—Heberton Hall, 60 Winter St. Tuesday, July 19th, 6:30-8:30 PM

**Nelson**—Town Hall, 7 Nelson Common Rd. Wednesday, July 20th, 6:30-8:30 PM

**Alstead**—Town Hall/Firestation, 9 Main St. Thursday, July 21st, 6:30-8:30 PM

**Winchester**—Town Hall, 1 Richmond Rd. Tuesday, July 26th, 6:30-8:30 PM

**Westmoreland**—Town Hall, 780 Rte. 63 Thursday, July 28th, 6:30-8:30 PM

**Jaffrey**—Jaffrey Civic Center, 40 Main St. Wednesday, August 3rd, 6:30-8:30 PM

---

For more information visit [www.cheshireconservation.org](http://www.cheshireconservation.org), call Cheshire County Conservation District at (603)755-2988 ext. 116, or email Libby Weland at eweland@antioch.edu.
<table>
<thead>
<tr>
<th>Agriculture</th>
<th># of votes ranking activity as priority</th>
<th>% of votes ranking activity as priority</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Food Production</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diversify crops—food production over forage, high-value</td>
<td>138</td>
<td>44%</td>
</tr>
<tr>
<td>Make land avail. for local farmers—multiple tenants, compatible use with jail</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>building for education and processing, lessee open to public use and education, long-term tenure for lessee, remain in farming</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>Food security for lower income individuals—unique CSA model, food bank</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Farm-to-institution—hospitals, schools, nursing homes, Maplewood Nursing Home, food bank, geriatric mental health facilities, food co-ops</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>End products bought and consumed locally—Farmer’s Markets, keep money in the County</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Lease to farmers for CSA</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Grain production</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Pasture-raised cattle/lamb, poultry</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Community gardens</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Vineyards</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Best management practices—crop rotation, permaculture principles incorporated, Salatin-style rotation</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Agriforestry (ex. growing mushrooms)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Pick-Your-Own</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Chickens in Jail</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Orchard</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Dairy—raw milk, cheese</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Aquaculture</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Microbrewery—grow hops, barley</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Silvopasture—growing nut trees</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Youth Education—future generation of farmers, informed consumers, “food business”, school groups, agriculture education, field trips, local County high schools (outdoor classroom), pre-school thru high school, 4-H programs, vo-tech high school partnerships (agriculture, building trades, mechanics, forestry), FFA, high school horticulture programs</td>
<td>88</td>
<td>28%</td>
</tr>
<tr>
<td>Farmer Education—business of farming, young farmers, mechanical classes, farm safety classes, existing farms—networking and cooperation</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>UNH Coop. Ext. Crop Trails, extended growing season</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Master Gardener Program/Demonstration Garden—orchard</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Garden Club’s involvement</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>General Public Education—natural resources, energy production, agriculture, Maplewood Nursing Home residents, local food cultivation and forest management, indoor education space next to farm (ex. classroom), opportunity for citizen scientists, summer farm camp, cooking classes, green building, food safety</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>Charter School—use of property, buildings, farm operation and river</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Higher Ed.—agricultural students from universities, veterinary school partnership</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Self-guided tour of farm</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>--------------------------</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>Apprenticeships</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Farm Incubator</strong>--processing, distribution, affordable</td>
<td>19</td>
<td>6%</td>
</tr>
<tr>
<td><strong>Food Hub</strong>--Storage, Distribution, Processing (slaughter house), value added products (ex. cheese, canned, fast freeze)</td>
<td>18</td>
<td>6%</td>
</tr>
<tr>
<td><strong>Agricultural Fairs and Events/Agritourism</strong>--get public involved, Rib Night with local pigs, Open Barn Day, Field Days</td>
<td>12</td>
<td>4%</td>
</tr>
<tr>
<td><strong>Public Use</strong>--picnic area, &quot;petting farm,&quot; recreation, public boat landing, snow machines</td>
<td>12</td>
<td>4%</td>
</tr>
<tr>
<td><strong>Preservation</strong>--open space, Wildlife Habitat--deer and turkey</td>
<td>7</td>
<td>2%</td>
</tr>
<tr>
<td><strong>Alternative Energy Production</strong>--wind farm on Cass Hill</td>
<td>7</td>
<td>2%</td>
</tr>
<tr>
<td><strong>Housing</strong>--farm workforce housed in for-profit jail, educational center on site with dormitories, seasonal housing/hostel, farm and jail stay for school groups</td>
<td>5</td>
<td>2%</td>
</tr>
<tr>
<td><strong>Prisoner rehabilitation</strong></td>
<td>4</td>
<td>1%</td>
</tr>
<tr>
<td><strong>Comprehensive Master Plan</strong></td>
<td>3</td>
<td>1%</td>
</tr>
<tr>
<td><strong>External Business Uses</strong>--experimental testing site for farm equip. companies</td>
<td>1</td>
<td>&lt;1%</td>
</tr>
<tr>
<td><strong>Sustainable Forest Management</strong>--have a model for public</td>
<td>1</td>
<td>&lt;1%</td>
</tr>
<tr>
<td><strong>Centralize Coop. Extension and other Agricultural and Natural Resource Governor</strong></td>
<td>1</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Building Reuse</td>
<td># of votes</td>
<td>% of votes</td>
</tr>
<tr>
<td>------------------------------------------------------------------------------</td>
<td>------------</td>
<td>------------</td>
</tr>
<tr>
<td><strong>Food Processing</strong></td>
<td>65</td>
<td>25%</td>
</tr>
<tr>
<td>General food processing</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>Commercial Kitchen/Community Food Processing Center (using handicapped or at</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>risk population as workers)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flash freeze unit</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Slaughter House</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Microbrewery</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>School Food Prep</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td><strong>Food Storage and Distribution Facility--for Winter CSA, Farm-to-Institution, use</strong></td>
<td>39</td>
<td>15%</td>
</tr>
<tr>
<td>cells for root vegetable storage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General food storage and distribution</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>&quot;Foodmobile&quot;</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>Centralize Coop. Extension and other Agricultural and Natural Resource</strong></td>
<td>22</td>
<td>9%</td>
</tr>
<tr>
<td>Government Agencies in Old Jail Building</td>
<td>21</td>
<td>8%</td>
</tr>
<tr>
<td><strong>Alternative Energy--education, research and production</strong></td>
<td>20</td>
<td>8%</td>
</tr>
<tr>
<td>General alternative energy</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Biomass Projects--education and experimental activities</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Alternative heat and energy education and demonstration</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Thermal and Methane</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Wood</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>Food Production--with educational component</strong></td>
<td>17</td>
<td>7%</td>
</tr>
<tr>
<td>General food production</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Aquaculture</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Season extension</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>indoor grow rooms</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Community garden/farm</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Permaculture principles</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Hydroponics</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>Housing</strong></td>
<td>17</td>
<td>7%</td>
</tr>
<tr>
<td>farmer housing--seasonal or year round</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>farm interns and apprentices--housing and education</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Adult Care facility</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Alternative Housing/Shelter</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td>14</td>
<td>5%</td>
</tr>
<tr>
<td>Higher Education as tenant--Antioch</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Technical School/Ag. equip. repair</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Youth Education--4-H programs, Camp</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>College or High School Alternative</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Culinary training</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Young Farmer Training</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Lodging for visitors--agritourism, hotel, &quot;rent-a-cell&quot;, working on farm, hostel</strong></td>
<td>11</td>
<td>4%</td>
</tr>
<tr>
<td>Category</td>
<td>Count</td>
<td>Percentage</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>-------</td>
<td>------------</td>
</tr>
<tr>
<td>Water Use—ferry, river wharf</td>
<td>7</td>
<td>3%</td>
</tr>
<tr>
<td>Senior Mental Health/Elder Care-extension of Maplewood Nursing Home</td>
<td>5</td>
<td>2%</td>
</tr>
<tr>
<td>Business Use—&quot;green&quot; restaurant, for-profit jail, restaurants</td>
<td>4</td>
<td>2%</td>
</tr>
<tr>
<td>Waste water treatment</td>
<td>3</td>
<td>1%</td>
</tr>
<tr>
<td>Museum</td>
<td>3</td>
<td>1%</td>
</tr>
<tr>
<td>Horse Riding Campground</td>
<td>2</td>
<td>1%</td>
</tr>
<tr>
<td>Structural Building Change-copy HVAC at Maplewood Nursing Home</td>
<td>2</td>
<td>1%</td>
</tr>
<tr>
<td>Veteran's Home (ex. In Fitchburg, MA)</td>
<td>1</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>County Office Building</td>
<td>1</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Misc. Building Use—recreation (sports, community)</td>
<td>1</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Community Use</td>
<td># of votes ranking activity as priority</td>
<td>% of votes ranking activity as priority</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------</td>
<td>----------------------------------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td><strong>Public Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Youth Education—4-H, Girl and Boy Scouts, County schools, property use by high school</td>
<td>69</td>
<td>23%</td>
</tr>
<tr>
<td>Horticulture programs, summer programs</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Research Station—access to river, climate change, other scientific data</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Community Education—focusing on natural resources and habitats, land management workshops, kayaking, natural communities, agriculture, working farm, food preservation workshops, backyard poultry classes, basic and advanced gardening classes, art and photography workshops</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td><strong>Farmer Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hands-on workshops, food safety, equipment safety</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Outside agency or organization come and lead educational programming—Stonewall Farm, Audubon Society, FFA, Boy Scouts, Coop. Ext.</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Community Service Projects—trail clearing, involvement of middle and high schools, use of AmeriCorps volunteers and interns to run programs</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Energy efficiency and alternative energy education—training, tours</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Farm School</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>Public Open Space</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hiking and Biking Trails, Hunting, Horseback riding, Some handicap accessible trails, River trail, Marked Trails with maps, Snowmobile Trails, Fishing, Guided Nature Walks (e.g. wildflower and habitat i.d.), ATV trails, X-country ski and Snowshoe trails, Interpretive Nature Trails, Dog sledding, Habitat enhancement, Sledding</td>
<td>56</td>
<td>19%</td>
</tr>
<tr>
<td>Motorized use trails</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>Public Use Facilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Camp Ground—people, equine</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Petting Zoo</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Pavilion/Picnic Area</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Pick Your Own</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Misc.—indoor Farmer’s Market, roller skating gym space, cemetary, day care facility, climbing wall, outdoor ice skating rink, incubator space for art, cooking and restaurants, horse stable rentals, restaurant, emergency preparedness (home-base during disaster)</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td><strong>River Access—non-invasive boat launch, innertubes</strong></td>
<td>32</td>
<td>11%</td>
</tr>
<tr>
<td><strong>Centralize Coop. Extension and other Agricultural and Natural Resource Government Agencies in Old Jail Building</strong></td>
<td>32</td>
<td>11%</td>
</tr>
<tr>
<td><strong>Events</strong></td>
<td>18</td>
<td>6%</td>
</tr>
<tr>
<td>County Harvest Fest/Farm Day, Farm Fun Weekend with shuttle bus, agricultural fairs, corn and pig roasts, anitque tractor shows, craft fairs, festivals, business farm equipment demos</td>
<td>17</td>
<td>6%</td>
</tr>
<tr>
<td><strong>Tourist Destination</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retreat center, holiday attraction, corn maze, biking hostel, dairy and ice cream connection, agritourism (community involved in farm chores)</td>
<td>13</td>
<td>4%</td>
</tr>
<tr>
<td><strong>Connection with Higher Education</strong>—Antioch, KSC, UNH, community colleges, agricultural school</td>
<td>13</td>
<td>4%</td>
</tr>
<tr>
<td>Project Type</td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>--------</td>
<td>------------</td>
</tr>
<tr>
<td>Food Production and Ag. Products</td>
<td>12</td>
<td>4%</td>
</tr>
<tr>
<td>Farming Museum</td>
<td>7</td>
<td>2%</td>
</tr>
<tr>
<td>Master Gardener Demo Garden</td>
<td>6</td>
<td>2%</td>
</tr>
<tr>
<td>Community Gardens</td>
<td>5</td>
<td>2%</td>
</tr>
<tr>
<td>Farm Incubator Program</td>
<td>5</td>
<td>2%</td>
</tr>
<tr>
<td>Comprehensive Master Plan</td>
<td>5</td>
<td>2%</td>
</tr>
<tr>
<td>Poor Farm</td>
<td>4</td>
<td>1%</td>
</tr>
<tr>
<td>Environment/Natural Resources</td>
<td># of votes ranking activity as priority</td>
<td>% of votes ranking activity as priority</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----------------------------------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>River ecology research and education station</td>
<td>82</td>
<td>24%</td>
</tr>
<tr>
<td>Higher Education--agricultural research, campus, create a beginning farmer program, technical community college</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Public Education--wildlife habitat, maple sugaring demo, natural resources, land conservation, working landscape, river, soils, wildlife demonstration areas, woodland trails with interpretive kiosks, river education center (e.g. Harris Center on the water), collaborate with Harris Center, programs using farm, forestry education, agricultural camp, led hikes, bird watching, mammal tracking, place-based education, biodiversity education, look-out tower to learn about migratory birds and hawks, Conservation Education Center for Boy Scouts and other groups, water-based education (storm water, waste water treatment, &quot;living system&quot;)</td>
<td>49</td>
<td></td>
</tr>
<tr>
<td>Youth Education--Boy Scouts, School ed. opportunities (tree i.d., &quot;No Child Left Inside,&quot; maple sugaring), school involvement in forest and habitat management</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Climate Change research</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Science study labs--educational opportunities to learn about natural resources</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Feasibility study for the need for Science Education Center</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Website use for programs information</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Public Use</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>river access, boat launch, canoe and kayak rental, improve access and parking, trail system (hiking, x-country skiing, snowmobile), have maps available for trail system, picnic area, hunting, campsites (for Boy Scouts, Girl Scouts, educational groups), bird watching, keep accessible to public, fitness stations, pavilion, consider using existing gravel pit, floating housing, bike and walking path, dock, wheel chair accessible trails</td>
<td>56</td>
<td>17%</td>
</tr>
<tr>
<td><strong>Conservation Easement</strong></td>
<td>53</td>
<td>16%</td>
</tr>
<tr>
<td><strong>Stewardship of Resources</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>soils, river frontage, forests, research and management of invasive species, wildlife management (ex. osprey platforms), preserve wildlife and wetland habitat and wildlife corridor, keep upper fields on back of hill, selective development of less ecologically valuable areas, wetlands as ecoservice</td>
<td>28</td>
<td>8%</td>
</tr>
<tr>
<td><strong>Renewable Energy Generation</strong></td>
<td>windpower, hydropower, biofuel from timber, solar, biomass (look at AmeriCorps for leadership), lab</td>
<td>24</td>
</tr>
<tr>
<td><strong>Food Production</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintain Working Farm</td>
<td>14</td>
<td>6%</td>
</tr>
<tr>
<td>Nut tree management--chestnut, black walnut</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Maple Sugar production</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Wild Edibles--fiddleheads</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Maintain Forest Management</strong></td>
<td>14</td>
<td>4%</td>
</tr>
<tr>
<td>Topic</td>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>--------</td>
<td>------------</td>
</tr>
<tr>
<td>Comprehensive Master Plan—do a comparison btwn. County Farm and Pisgah State</td>
<td>9</td>
<td>3%</td>
</tr>
<tr>
<td>Park in terms of natural resources and management decisions</td>
<td>5</td>
<td>1%</td>
</tr>
<tr>
<td>Property Inventories—Natural Resources, Recreational Use</td>
<td></td>
<td></td>
</tr>
<tr>
<td>County-ownership is enough protection for the conservation of land</td>
<td>3</td>
<td>1%</td>
</tr>
<tr>
<td>Use Jail as office space for non-profits</td>
<td>2</td>
<td>1%</td>
</tr>
<tr>
<td>Family Events, Farm publicity</td>
<td>1</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Homeless Shelter and work on farm</td>
<td>1</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Knock down Jail and build restaurant</td>
<td>1</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Agricultural Easement</td>
<td>1</td>
<td>&lt;1%</td>
</tr>
</tbody>
</table>
County Conversation: Evaluation/Survey

At 6 “County Conversations” held at 6 different locations around the county, a total of 89 participants filled-out the following evaluation/survey, providing us information on their interests, concerns, and ideas relating to the Cheshire County Farm and Buildings.

The following numbers represent attendees at the following locations, not necessarily residents of those locations.
Keene = 26  Nelson = 11  Alstead = 15  Winchester = 10  Westmoreland = 21  Jaffrey = 6

Note: Additional comments are included in the body of the survey highlighted in yellow.

1. What describes you best? (please circle all that apply)
(# of respondents / % of respondents out of total participants)
Farmer = 15 / 17%
- State rep.
- Small and Beginner Farmer rep.
- Farm service provider volunteer
Interested Community Member = 66 / 74%
- Selectman
- Farm service provider volunteer
- State rep.
- Small and Beginner Farmer rep.
- Land trust employee
Other = 8 / 8%
- Staff
- Great Falls Food Hub
- Conservation Commission Member
- Farmer-educator, retired
- Public official
- Wildlife Manager for S.W. N.H.
- Retired soil scientist
- Retired

2. What brought you here tonight?
- To find out more info on the plans for the jail.
- Wanted to learn more about current plans and history of the farm.
- Interested in the presentation.
- Information
- Wanted to hear what other people had to say.
- Increase awareness of community perspective and what people are excited about.
- To learn the latest about what’s going on…and to be a part of this huge decision.
- Wanted to learn more about property and help vision about best use for facilities.
- Chance to exchange ideas/learn about the property.
- Interested in the process and very appreciative of the meeting in our town/close to home.
- Interest in supporting this type of thinking/effort.
- Interest in supporting the town.
- Interest in the future of the farm.
- We live in Westmoreland and are interested in the future of the County Farm.
• Interest in future of farm (ing).
• Land use interest.
• Lived near County Farm for 12 years—great resource!
• Community farm part of family history.
• Future of County Farm property.
• Interest in future of the farm.
• Concern for farm future.
• Concerned citizen.
• Project for local area/costs benefits for NH as well.
• Concern for community.
• Interest in the subject and to see that the County Farm is used for community in future and the ice cream.
• Interest in public lands.
• Interest in continued public use and control of the “farm” lands and resources.
• To be sure it stays open and public—not “privatized.”
• Walpole Creamery ice cream! I’d like to see creative, adaptive use of the land without condos, commercial properties (Walmart, etc.) and more local food security.
• Very interested in preserving the County Farm land for food security especially when peak oil makes trucking produce across the country prohibitively expensive.
• Concern over land/food.
• Newspaper—Concern for land.
• Walpole Creamery ice cream which is excellent. Great interest in the County Farm land.
• Interest in future, conservation.
• Wanting to see the County Farm (a very special place) protected for its agricultural, scenic, ecological, and natural resource values.
• Interest in preserving the County Farm land for wildlife, agriculture and recreation.
• F & G Dept. wildlife management opportunities on this land.
• Interest in natural resources.
• Interest in preservation of this incredible resource.
• Interest in preserving this resource.
• Amanda Costello had sent the schedule and I am dedicated to the preservation of this resource.
• Opportunity to urge that conservation easement be put on whole property.
• Idea of a charter high school in location.
• To present idea re: potential park/recreation.
• Plan to convert jail to housing for severely disabled mental health consumers over 74—relieve Medicaid dependence.
• Part of sponsoring organization; interest in topic.
• Asked to host also interested in outcome for County Farm.
• Rotary member (sponsor)
• Member of ACC. (sponsor)
• ACC was the host of the session—member.
• Member of ACC.
• Member of ACC.
• I’m a sponsor!
• I heard about this at Antioch NE’s open house for the Green MBA program which I plan to take; then my mother needed some flyers displayed from a sponsoring organization so I agreed to deliver them.
• I want to hear as much local input and dialogue as I can—be exposed to various perspectives.
• Needed input to make decisions on use of farm.
• I’m on County Delegation.
• Volunteered.
• I was asked to facilitate.
• Being a facilitator.
• Facilitator and CC resident
• Selectman.
• Email.
• Amanda request.
• Amanda's emails and calls.
• Keep my wife company.
• Calls/emails/curiosity.
• Curiosity
• To get a feeling as to where agriculture is headed.
• Curious to see what is going to happen to County Farm.
• General interest.
• General interest.
• Emails and paper.
• Interest. Newspaper notice.
• Interest, came with a friend.
• Interest.
• Interest. Also property tax liability, if any.
• Interest in future integrated plan.
• Interested in many community term projects.
• Have been following progress of discussion.

3. Prior to attending this event, how familiar were you with the Cheshire County Farm property and buildings? (check all that apply)  
   (Number of respondents / % of respondents out of total participants)
   □ I could give a talk to the public on the County Farm. = 12 / 13%
   □ I have visited and/or attended events at the County Farm. = 38 / 43%
      ➢ Worked there
      ➢ Former Master Gardener at Farm
      ➢ I have experienced the woodlands and taught N.E. Flora there.
   □ I have stayed up-to-date on the recent developments at the County Farm. = 55 / 62%
   □ I knew it existed and a few details about it. = 38 / 43%
   □ Never heard of it. = 0

4. Following this event, how well do you understand the current state of the County Farm & Buildings?  1=Not at all likely ... 2=Unlikely ... 3=Somewhat likely ... 4= Likely ... 5=Very likely

   (Number of respondents / % of respondents out of total participants)
   Not at All 1 = 3 / 3%  2 = 0  3 = 12 / 13%  4 = 46 / 52%  5 = 25 / 28% Very

5. Indicate your opinion of the following potential activities at the County Farm/Buildings. (The following activities are common ideas raised, but are not intended to limit possible future uses of the County Farm and Buildings.) (Number of respondents / % of respondents out of total participants)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Very Opposed</th>
<th>Opposed</th>
<th>Neutral</th>
<th>In Favor</th>
<th>Very In Favor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recreation (walking trails, boat launch,)</td>
<td>0</td>
<td>1 / 1%</td>
<td>7 / 8%</td>
<td>22 / 25%</td>
<td>57 / 64%</td>
</tr>
</tbody>
</table>
6. An idea you heard tonight about future use of the County Farm & Buildings that excited you:

**Uses of Land and Building**
- Microbrewery/Hops Cultivation
  - Microbrewery—yum.
  - Microbrewery with own hops.
  - Local hops.
  - Hops and local brewing.
- Miscellaneous
  - Used as incubator for new ideas.
  - Cheshire County Fair food.
  - Festivals.
  - Biking hostel!
  - Petting “zoo” of farm animals.

**Education/Training**
- Agricultural education—important for next generation.
- Use for training young farmers.
- Educational opportunities for both new and existing farmers to share information, plan together, and work together.
- Long term tenure opportunities for agricultural producers.
- Farm business incubator.
- Seed farm.
- Farm incubator that has all of the diversity of NH farms... grain, meat, fruit, dairy, honey, veggies, maple, forestry, etc... so that potentially someone could learn all and so that farm provides all to community.
- Making it a center for promoting small scale/family dairy farms.
- Agricultural or forestry college.
- Vet school connection—interesting idea.
- Utilizing opportunity to create some educational and sustainable community possible model to educate.
- Use as education tool with people able to stay for long periods.
- Educational resource for everyone—forest, river, gardens, etc.
• Educational aspects.
• Restaurant/culinary training.
• The charter school is especially interesting.
• Charter school for county students.
• Charter school.
• Use of forested area for education.
• Demo site for agriforestry.

Focus on underserved populations
• Providing food for Maplewood.
• Poor farm.
• Self-sustaining housing for homeless/low income to farm the land.
• Housing in old jail for senior mental health consumers over 74. 10 year residence and education and research center for geriatric consumers.

Building and Infrastructure
Keeping it “green”
• Green economy center.
• Wind farm.
• Solar panels jail roof.

Jail Use
• Hydroponics and using the current cells for root cellars.
• Possible uses for jail building.
• CC Extension moving to jail building.
• Explore use of jail to house NH Coop. Extension—they would be adjacent to areas for programs.
• Centralize UNH Cooperative Extension, USDA, Fish & Game, NRCS, CCCD, etc.

Food Hub/Processing
• Energy efficient jail renovations to accommodate various food preparation and distribution to local food bank and schools. (from onsite garden)
• Food for schools.
• Food hub.
• Food hub.
• Local food storage and distribution headquarters.
• Food storage and processing
• Slaughterhouse
“Foodmobile”
• Bookmobile of foods to the community to sell rather than having to go to the farm.
• Food “bookmobile” or “ice cream truck” that could sell local food in more places than one can find farmers’ markets. It could also sell food for small farmers who don’t have the resources for a farmers’ market presence.

Land
Conservation/Preservation
• Conserve the land!
• Preserving/Conserving a wonderful property, opening up the possibilities to involve the farm and the community possibilities.
• Wildlife preservation—conservation.

Recreation for Public Use
• Public use—boat launch, pavilion.
• Boat launch/picnic area/hiking trails
• River use—aquaculture, fish culture, educational, recreational, transportation.
• Using the Connecticut River as a recreation facility.
• Use the river to bring people to the facility (kayak rental, etc.)
• Using the river for recreation/education.
• Recreational/Educational Park
• Hunting (on a restricted level)
  Agriforestry
• Plant chestnut trees in area.
• Introducing American chestnut and black walnut to the land.
• That both the farm and forest are being maintained.
• Use of trees and perennials.
  Maintain Agricultural Production
• Keep agricultural land in production.
• That another farmer will lease land for cattle, and maintain hayfields and cornfields used by wildlife.
  Comprehensive Master Plan
• Comprehensive master plan for farm.
• Conducting an N.R.I. and then writing a comprehensive management plan for all uses.
• Create a master plan.

7. The likelihood that you will...
  1=Not at all likely ... 2=Unlikely ... 3=Somewhat likely ... 4=Likely ... 5=Very likely
  (# of respondents / % of respondents out of total participants)
  Participate in future events at County Farm: 1 = 0 2 = 1 / 1% 3 = 17 / 19%
                                                4 = 36 / 40%  5 = 32 / 36%
  Use the facilities for one or more of the activities in question #5: 1 = 2 / 2% 2 = 6 / 7%
                                                                      3 = 18 / 20% 4 = 24 / 27%  5 = 34 / 38%

8. What is your opinion on conserving the county farm and forest land so that it may never be developed?
  ➢ Depending on details
  ➢ With caveat that perhaps less valuable portions be sold to fund the rest
  ➢ Part of the property may be suitable and needed for additional facilities in the future
  (# of respondents / % of respondents out of total participants)

  Very Opposed  Opposed  Neutral  In Favor  Very In Favor
  = 0          = 3 / 3%  = 7 / 8%  = 14 /16%  = 63 / 71%

9. In your opinion, how important is it for the future uses of the County Farm property and buildings to accomplish the following? (# of respondents / % of respondents out of total participants)

<table>
<thead>
<tr>
<th>Cost-neutral to Cheshire County taxpayers</th>
<th>Unimportant</th>
<th>Of Little Importance</th>
<th>Moderately Important</th>
<th>Important</th>
<th>Absolutely Essential</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>7 / 8%</td>
<td>28 / 31%</td>
<td>25 / 26%</td>
<td>27 / 30%</td>
</tr>
</tbody>
</table>

➢ Revenue producing
➢ Balance with triple bottom line and externalities value
<table>
<thead>
<tr>
<th>Property serve as a resource for the agricultural community</th>
<th>0</th>
<th>1 / 1%</th>
<th>4 / 4%</th>
<th>44 / 49%</th>
<th>36 / 40%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promote local-food affordability</td>
<td>0</td>
<td>2 / 2%</td>
<td>13 / 15%</td>
<td>35 / 39%</td>
<td>35 / 39%</td>
</tr>
<tr>
<td>Stay under Cheshire County control, with lessee day-to-day management</td>
<td>2 / 2%</td>
<td>12 / 13%</td>
<td>17 / 19%</td>
<td>28 / 31%</td>
<td>28 / 31%</td>
</tr>
<tr>
<td>Primarily an agricultural and forestry resource</td>
<td>2 / 2%</td>
<td>2 / 2%</td>
<td>9 / 10%</td>
<td>37 / 42%</td>
<td>39 / 44%</td>
</tr>
<tr>
<td>Property use is environmentally sustainable</td>
<td>0</td>
<td>0</td>
<td>2 / 2%</td>
<td>26 / 29%</td>
<td>56 / 63%</td>
</tr>
<tr>
<td>Educational for beginner farmers and general public</td>
<td>0</td>
<td>4 / 4%</td>
<td>14 / 16%</td>
<td>36 / 40%</td>
<td>31 / 35%</td>
</tr>
<tr>
<td>Honors and promotes agrarian culture and heritage</td>
<td>0</td>
<td>2 / 2%</td>
<td>18 / 20%</td>
<td>38 / 43%</td>
<td>29 / 33%</td>
</tr>
<tr>
<td>Welcoming to all members of the community</td>
<td>0</td>
<td>0</td>
<td>12 / 13%</td>
<td>27 / 30%</td>
<td>47 / 53%</td>
</tr>
</tbody>
</table>

10. Is there anything else you would like to add?

**Evaluation of Forum**
- Nice presentation. Thank you.
- Nice job!
- Thank you.
- This was well planned—Thank you.
- Loved the ice cream.
- Lots of good ideas—great format.
- Thank you for all your work!
- Useful and well run forum!
- Great job Libby!
- Thank you for a smooth running forum and the ice cream!
- Disappointed that no state reps. came tonight and no county commissioners came—they missed the spirit and enthusiasm of the session.
- Good job tonight.
- Great forum! Good way of collecting input.
- Thank you for all your work.
- Ice cream treat is awesome!
- Great forum!
- Thanks! Great event!
- Very good workshop, thank you for the opportunity to participate.
Hopes and Concerns

- Great time to be exploring—much effort around area to tie into—Also around NATION as demonstrated in opening slide show.
- Continue public involvement in the process.
- Hope ideas from these group meetings are beneficial.
- This program is necessary; however it will take time to develop.
- Allow for future change.
- Don't move too quickly—a lot is changing.
- Stay open to new uses.
- Although I live on the other side of the County, I believe this is a critical resource to protect.
- Land is an asset.
- Don't spoil this prize piece of property. The jail building is so ugly, can you really fix it up or is it better to start over and tear it down?
- One of the reasons the jail moved was distance from Keene for people traveling to the jail. Do the local residents want the increased traffic? Would there be a way to facilitate public transportation? Is the bike trail still functional all the way from Keene?
- What will it all cost to taxpayers and to get started costs?
- Cost-neutral.
- Cost-neutral very important.
- Operating to make income for the County.
- The Nursing Home to remain publically owned and controlled.
- Maintain Maplewood Nursing Home.
- Keep open to all ages and abilities: handicap trails, access to mental health services and assisted living, renewable energy! Cost-effective!
- Save space for the human resource 1st. Senior mentally ill (over 74).
- Conservation easement is first step.
- Integration will be key—link 4 areas together, not separate.
- More focus on jail is needed—that is the facility with the expenses and causing a net loss to taxpayers. It is also available at the moment.
- Connecticut River Joint Commission of New Hampshire and Vermont (CRJC) as resource.
- Consider the impact of motorized recreation on natural resource.
- Recreation uses should not be noise-generating—no snowmobiles/ATVs
- Partner with Stonewall Farm and Keene so programs are not in conflict
- Are there less ecologically valuable areas along edges that could be developed to fund the rest of the property?
- Farm lessee—always willing to engage with education programs, be friendly and open with public and have expectations articulated in lease.
- Living wage for agricultural workers.
- Rehab. In phases—tenant by tenant.
- Comprehensive Master Plan for Farm.
- What to do about access and vehicle traffic? Zoned right?
- What is a viable board feet/harvest?

Ideas

- A park would also benefit residents of Maplewood Nursing Home.
- Did I mention the charter high school idea?
- Maintain management of tree farm.
- That it serve as an incubator for new ideas that increase sustainability—food, natural resources, and building.
• Let's make it a destination for Cheshire County citizens and beyond—A place to learn and have fun!
• I think a farm incubator in NH would be very beneficial for food sustainability...6% is terrible. This could bring farmers to our state and Land for Good could then help them stay!
• Farmer incubator is a good idea!
• Should be a boat launch theme to Connecticut River—for fishermen, canoes, kayaks. There is very little from Mass. Border to Claremont.
• Put all ag/natural resource agencies at jail for cross-fertilization of staff and public education.
• Fiddleheads, ramps and other gourmet forest crops.
• Handicap accessible trails.
• I am anxious to see this particularly fertile area in the Conn valley used as an experimental and educational facility in looking towards restoring some of the valley's former agricultural productivity and developing new grassland, grazing and produce farming practices. Because ecosystems vary in climate, soil, infestations, etc., these must be local and it takes some time to develop the local knowledge and expertise required for their development.
• Experimental work and developments are also needed to reduce dependence upon oil in agriculture, reducing and using methane, developing new crops for a generation which may not be able to enjoy the cheap post-war agriculture that is currently expected, etc. We may all need to become farmers!
• My wife and I are in accord that the the County Farm and Former Jail should be sold to the highest bidder as quickly as possible and the proceeds go to reduce County Taxes
Appendix B. – Request for Interest

Does your business support the food and farm economy?
Looking to grow your business?
Your Vision Can be a Reality

The Cheshire County Commons - Farm and Food Hub will offer your business the opportunity to thrive in an environment that supports entrepreneurs and collectively bolsters the agricultural sector of the region.

Businesses could include but are not limited to:

- Food processing
- Food aggregation, storage, and distribution
- Food production
- Farm services—ex. bulk purchasing and resale
- Farmer and/or community education or Higher Education
- Forest products industry

Where: Westmoreland NH, located on 6,700 ft of frontage on the Connecticut River, surrounded by 52 acres of prime agricultural soils, a working dairy farm, over 500 acres of managed forest and recreational opportunities. 10 minutes from Interstate 91 in VT, 13 miles from the cultural center of downtown Keene NH, 12 miles from the cultural center of downtown Brattleboro VT.

What: A modern one of a kind 35,000 square foot facility that will offer office space, conference room, classroom, food processing and storage area, loading dock, and more to businesses and organizations. This hub will be made up of businesses and organizations that mutually support each other in ways that leverage profitability and long-term sustainability through innovation. Opportunity for businesses to actively farm some prime farmland acreage adjacent to facility. Currently the building is under demolition/construction and being prepared for it’s next life as a Farm and Food Hub. Your interest and commitment to locating your business on site will allow us to build to suit your needs.

How: A hub that will catalyze growth in the agricultural economy. This will be done through bringing together the business community, non-profit sector, and government. Business incubation and business development education and networking will be built into the lease fees and provided by the Hannah Grimes Center.

Why: Elected county leadership would like to see a public and private partnership to foster success for current and future agricultural and food related businesses in the region.
The County of Cheshire is seeking letters of interest for leasing the county owned property on River Road in Westmoreland, NH. This request is the initial stage to gauge interest in the property. Such letters of interest could include the lease, development or other use of the property consistent with the range of potential uses established by the Cheshire County Delegation by and through the Farm Committee and are listed below. Proposals may include interest in particular sections of the facility. A proposed floor plan of the reuse is available (see appendix A), this is subject to change based on tenant’s needs. Interested parties should submit letters of interest with sufficient details to the County Commissioners.

Letters of Interest are to be addressed to the ‘Project Manager’ and mailed or delivered to the County of Cheshire, Cheshire County Administration Building, 33 West Street, Keene, NH 03431. They should be identified on the exterior of the sealed envelope with “Cheshire County Commons—Farm and Food Hub.” Letters of Interest are due on or before 4pm January 31, 2012.

Answers to your questions, and further information, including making arrangements for a walkthrough, may be obtained from the County Commissioners Office, 33 West Street, Keene, NH 03431 or by phone at 603-352-8215. The Commissioners reserve the right to waive any irregularities or reject any or all proposals. This project is subject to the appropriation of funds and/or ratification by the County Delegation pursuant to RSA 28:8c & d.

Summary of Guidelines set by the Cheshire County Delegation:

Development and Uses of the farm and buildings shall strive to be:

**Financial**
- Cost-neutral to Cheshire County taxpayers
- The property shall be a resource for the agricultural community. Tenants or leaseholders shall have no county tax subsidized financial advantage over non-tenants.
- A promoter of local-food affordability, helping all Cheshire County farmers become competitive with non-local produce
- Developed in phases as funding allows

**Legal**
- Remain Always under Cheshire County control, yet with lessees responsible for day-to-day management and operational responsibility and accountable to the county government

**Environmental**
- Primarily an agricultural and forestry resource
- Environmentally sustainable – uses of the property should ensure that its natural resources are not degraded

**Social**
- Educational – the property shall provide opportunities for entering/young farmers and local food system/agricultural businesses to gain knowledge and experience and for the general public to learn about farming and local food
- Honoring and promoting of the Cheshire County Farm’s and Cheshire County’s agrarian culture and heritage
- Welcoming to all members of the community

“Agriculture has shaped New England’s economy, identity and self-reliance for centuries. After decades of steady loss of the region’s farmland and farm infrastructure, New England agriculture is today at a most promising crossroad. Surging demand for local food is providing exciting new market opportunities.”

- Blue Ribbon Commission on Land Conservation, 2010 Report to the Governors
Appendix C. – Strafford County Farm Conservation Easement

CONSERVATION EASEMENT DEED

THE STRAFFORD COUNTY BOARD OF COUNTY COMMISSIONERS, on behalf of THE COUNTY OF STRAFFORD, with a principal place of business at P.O. Box 799, County Farm Road, City of Dover, County of Strafford, State of New Hampshire, (hereinafter referred to as the "Grantor", which word where the context requires includes the plural and shall, unless the context clearly indicates otherwise, include the Grantor's executors, administrators, legal representatives, devisees, heirs, successors and assigns),

for consideration paid, with QUITCLAIM covenants, grants in perpetuity to

the SOCIETY FOR THE PROTECTION OF NEW HAMPSHIRE FORESTS, a corporation duly organized and existing under the laws of the State of New Hampshire, with a principal place of business at 54 Portsmouth Street, City of Concord, County of Merrimack, State of New Hampshire, 03301-5400, having been determined by the Internal Revenue Service to be an income tax exempt, publicly supported corporation, contributions to which are deductible for federal income tax purposes pursuant to the United States Internal Revenue Code, (hereinafter referred to as the "Grantee" which shall, unless the context clearly indicates otherwise, include the Grantee's successors and assigns),

the Conservation Easement (herein referred to as the "Easement") hereinafter described with respect to that certain area of land (herein referred to as the "Property") with any and all buildings, structures, and improvements thereon, consisting of 212.53 acres, situated on County Farm Road and County Farm Cross Road, so-called, in the City of Dover, County of Strafford, State of New Hampshire, shown as “Conservation Easement #1, #2, #3, & #4” and "Special Provision Conservation Easement #1, #2, #3, #4, #5, & #6” on a plan consisting of Sheets 1-7 entitled "Conservation Easement Plan of Strafford County Lands Prepared for the Society for the Protection of New Hampshire Forests, Tax Map B, Lot No. 20 & Tax Map C, Lot No. 4, County Farm Road and County Farm Cross Road, Dover, Strafford County, New Hampshire," by McEreaney Survey Associates, inc., dated November 25, 2002, as revised, recorded at the Strafford County Registry of Deeds as Plan # _______________ (hereinafter referred to as the "Plan"), more particularly bounded and described in Appendix "A" attached hereto and made a part hereof.
1. PURPOSES.

The Easement hereby granted is pursuant to NH RSA 477:45-47, exclusively for the following conservation purposes:

A. The protection of the land, and the water body of the Cocheco River to which it provides access and on which it fronts for a distance of approximately 1.9 miles, subject to the Easement granted hereby for outdoor recreation and scenic enjoyment by, and/or the education of, the general public, including residents of the City of Dover, County of Strafford, and State of New Hampshire. The Property includes approximately 4,600 feet of scenic, undeveloped frontage along County Farm Road and County Farm Cross Road, and is also a high priority for protection in the “Cocheco River Public Access Corridor,” a high priority greenway identified in the City of Dover’s Master Plan.

B. The protection of the unusual natural habitat of plant and animal species native to New Hampshire, including habitat for the Golden-Winged Warbler, which is a state "species of special concern," the Northern Harrier and Upland Sandpiper, which are state “endangered” species, and the Osprey, which is a state “threatened” species, and including the enhancement and enlargement of 65 acres of protected land which is adjacent to the Property, said other land including the 36-acre County Farm Crossing development set-aside, the three-acre Husseys Dam Privilege tract owned by the City of Dover on the east side of the Cocheco River, the three-acre County Farm Road tract owned by the City of Dover along the west side of the Cocheco River, and the 23-acre Tolland and Glen Hills Road tract also owned by the City of Dover along the west side of the Cocheco River; and the protection of the Property’s significant diversity of habitat, including but not limited to wetlands, vernal pools, extensive riparian and floodplain area along the Cocheco River, early successional shrub areas, grasslands, and woodlands.

C. The conservation and protection of open spaces, particularly the conservation of the productive farm and forest land of which the Property consists and of the wildlife habitat thereon as described above, and the long-term protection of the Property’s capacity to produce economically valuable agricultural and forestry products; the Property includes a 26-acre Certified Tree Farm used as a demonstration forest and teaching site by the University of New Hampshire Cooperative Extension, and has approximately 153 acres of Class I soils with high productivity for forestry; the Property also has approximately 204 acres of soils rated as prime or of statewide importance for agriculture about 165 acres of which is currently under production; the Property is one of the largest contiguous blocks of highly productive agricultural land under current production remaining in the fast-developing Strafford County; and

D. The perpetual protection of the quality and sustainable yield of groundwater and surface water resources under and on the Property to safeguard present and future drinking water supplies, including the stratified-drift aquifer which underlies about 197 acres of the Property and the City of Dover’s Hopper’s Well, whose Source Water Protection Area includes a portion of the Property, and to safeguard those conservation features of
the Property which are dependent on water quality and quantity, such as but not limited to the existing wetlands, vernal pools, and riparian and floodplain habitat along the Cocheco River; and

E. The preservation of historic and cultural features on the Property, including but not limited to the site of the former Strafford County Asylum and the existing monument honoring those who died there when the Asylum burned in 1893, and also the archeological features of the Property, including one site previously identified by the state.

The above purposes are consistent with New Hampshire RSA Chapter 79-A which states: "It is hereby declared to be in the public interest to encourage the preservation of open space, thus providing a healthful and attractive outdoor environment for work and recreation of the state's citizens, maintaining the character of the state's landscape, and conserving the land, water, forest, agricultural and wildlife resources."

All of these purposes are consistent and in accordance with the U.S. Internal Revenue Code, Section 170(h).

The Easement hereby granted with respect to the Property is as follows:

2. USE LIMITATIONS (Subject to the reserved rights specified in Section 3 below)

A. The Property shall be maintained in perpetuity as open space without there being conducted thereon any industrial or commercial activities, except agriculture and forestry, including timber harvesting, as described below, and provided that the productive capacity of the Property to produce forest and/or agricultural crops shall not be degraded by on-site activities.

i. For the purposes hereof, "agriculture" and "forestry" shall include animal husbandry, floriculture, and horticulture activities; the production of plant and animal products for domestic or commercial purposes; the growing, stocking, cutting, and sale of Christmas trees or forest trees of any size capable of producing timber or other forest products; the construction of roads or other accessways for the purpose of removing forest products from the Property; and the processing and sale of products produced on the Property (such as pick-your-own fruits and vegetables and maple syrup), all as not detrimental to the purposes of this Easement.

ii. Agriculture shall be permitted, to the extent reasonably practicable, only if performed in accordance with a coordinated management plan for the sites and soils of the Property. Agricultural management activities shall not be detrimental to the purposes of this Easement, as described in Section 1 above, with particular reference to the protection of habitat of state and federally listed species, nor materially impair the scenic quality of the Property as viewed from public roads or public trails. Said management activities shall be in accordance with the then-current scientifically based practices recommended by the UNH Cooperative Extension, U.S. Natural
Resources Conservation Service, or other government natural resource conservation and management agencies then active, and shall be in accordance with “best management practices” as set forth in the following publications or as these publications may be specifically updated or superseded:


b. “Pesticide Management Guidelines for Groundwater Protection,” University of New Hampshire Cooperative Extension, November 1992; and


d. “Best Management Practices: Biosolids,” University of New Hampshire Cooperative Extension, 1995; and


iii. Forestry for industrial or commercial purposes shall be permitted, to the extent reasonably practicable, only if performed as hereinafter specified in accordance with the following goals, and in a manner not detrimental to the purposes of this Easement as described in Section 1 above.

a. The goals are:
   • maintenance of soil productivity;
   • protection of water quality, wetlands, and riparian zones;
   • maintenance or improvement of the overall quality of forest products;
   • conservation of scenic quality;
   • protection of unique or fragile natural areas;
   • protection of unique historic, cultural, and archeological features; and
   • conservation of native plant and animal species.

b. Such forestry shall be performed in accordance with a written forest management plan consistent with this Easement, prepared by a licensed professional forester, or by other qualified person approved in advance and in writing by the Grantee, which approval shall not be unreasonably withheld. Said plan shall have been prepared not more than ten years prior to the date any harvesting is expected to commence, or shall have been reviewed and updated as required by such a forester or other qualified person at least thirty (30) days prior to said date.
c. At least thirty (30) days prior to harvesting, Grantor shall submit to Grantee a written certification, signed by a licensed professional forester, or by other qualified person approved in advance and in writing by the Grantee, that such plan has been prepared in compliance with the terms of this Easement. Grantee may request the Grantor to submit the plan itself to Grantee within ten (10) days of such request, but acknowledges that the plan’s purpose is to guide forest management activities in compliance with this Easement, and that the actual activities will determine compliance therewith.

d. The plan shall include a statement of landowner objectives, and shall specifically address:

- the long-term protection of those purposes for which this easement is granted, as described in Section 1 above; and
- the goals in Section 2.A.iii.a above.

e. Timber harvesting with respect to such forestry shall be conducted in accordance with said plan and be supervised by a licensed professional forester, or by other qualified person approved in advance and in writing by the Grantee.

f. Such forestry shall be carried out in accordance with all applicable local, state, federal, and other governmental laws and regulations, and, to the extent reasonably practicable, in accordance with then-current, generally accepted best management practices for the sites, soils, and terrain of the Property. For references, see “Best Management Practices for Erosion Control on Timber Harvesting Operations in New Hampshire” (J.B. Cullen, 1996), and “Good Forestry in the Granite State: Recommended Voluntary Forest Management Practices for New Hampshire” (New Hampshire Forest Sustainability Standards Work Team, 1997), or similar successor publications.

g. In areas used by, or visible to, the general public, such forestry shall be carried out, to the extent reasonably practicable, in accordance with the recommendations contained in “A Guide to Logging Aesthetics: Practical Tips for Loggers, Foresters, and Landowners” (Geoffrey Jones, 1993) or similar successor publications.

B. The Property shall not be subdivided, and none of the individual tracts which together comprise the Property shall be conveyed separately from one another.

C. No structure or improvement, including, but not limited to, a dwelling, any portion of a septic system, tennis court, swimming pool, dock, aircraft landing strip, tower or mobile home, shall be constructed, placed, or introduced onto the Property. However, ancillary structures and improvements including, but not limited to, a road, dam, fence, bridge, culvert, barn, maple sugar house, or shed may be constructed, placed, or introduced onto the Property only as necessary in the accomplishment of the agricultural, forestry, conservation, habitat management, outdoor educational, or non-commercial outdoor

Page 5 of 22
recreational uses of the Property and provided that they are not detrimental to the purposes of this Easement. Notwithstanding the provisions of this paragraph, there shall be no fields developed or improved for organized outdoor sports, such as but not limited to football, horseracing, or golf.

D. No removal, filling, or other disturbances of soil surface, nor any changes in topography, surface or subsurface water systems, wetlands, or natural habitat shall be allowed unless such activities:

i. are commonly necessary in the accomplishment of the agricultural, forestry, conservation, habitat management, outdoor educational, or non-commercial outdoor recreational uses of the Property; and

ii. do not harm state or federally recognized rare, threatened, or endangered species, such determination of harm to be based upon information from the New Hampshire Natural Heritage Inventory or the agency then recognized by the State of New Hampshire as having responsibility for identification and/or conservation of such species; and

iii. are not detrimental to the purposes of this Easement.

Prior to commencement of any such activities, if applicable to the Grantor, all necessary federal, state, local, and other governmental permits and approvals shall be secured.

E. No outdoor advertising structures such as signs and billboards shall be displayed on the Property except as desirable or necessary in the accomplishment of the agricultural, forestry, conservation, outdoor educational, or non-commercial outdoor recreational uses of the Property, and provided such signs are not detrimental to the purposes of this Easement. No sign shall exceed 16 square feet in size and no sign shall be artificially illuminated.

F. There shall be no mining, quarrying, excavation, or removal of rocks, minerals, gravel, sand, topsoil, or other similar materials on the Property, except in connection with any improvements made pursuant to the provisions of sections 2.A., C., D., or E., above. No such rocks, minerals, gravel, sand, topsoil, or other similar materials shall be removed from the Property.

G. There shall be no dumping, injection, burning, or burial of man-made materials or materials then known to be environmentally hazardous.

H. There shall be no posting to prohibit the public, including residents of the City of Dover, County of Strafford, and State of New Hampshire from accessing and using the Property for low-impact, non-motorized, non-commercial, outdoor recreational, or outdoor educational purposes, including but not limited to fishing, hiking, and other transitive passive recreational purposes, but not camping. Notwithstanding the provisions of the preceding sentence, the Grantee may post the Property against or limit such public access
if such activities become inconsistent with the purposes for protecting the Property or when public safety would be at risk. Further, Granter may post against or limit such public access on agricultural cropland during the planting or growing season, and on forest land during harvesting. In any case, the Grantee shall be under no duty to supervise said access, use, or purpose.

3. RESERVED RIGHTS

A. The Granter, including Granter’s designee, reserves the right to withdraw groundwater on a sustainable yield basis and to remove said groundwater from the Property only for the purpose of providing a public water system, as defined by NH R.S.A. 485:1-a, XV, as may be amended from time to time, whose ownership is maintained by a governmental entity. For the purposes hereof, permitted activities in conjunction with said withdrawal and/or removal shall consist of: the installation, maintenance, monitoring, and replacement of temporary wells for exploratory and/or testing purposes, long-term water production wells, monitoring wells, a water distribution system, pumping stations, and ancillary improvements such as but not limited to roads, signs, utilities, and security facilities; and the extraction and removal of groundwater from the Property. This provision is an exception to Sections 2.C., D., E., and F. above.

i. In order to conduct exploratory and/or testing activities, including the installation of temporary wells, to determine the feasibility of groundwater extraction, the Granter shall provide written notice to the Grantee of the proposed exercise at least 120 days prior to the commencement of any exploration or testing activities. Said notice shall include the specific details of said exercise, including but not limited to location, scope, size, timing, duration, method of construction, and pumping rates. Said notice shall also demonstrate that said exploratory and/or testing activities shall minimize detrimental impacts on the purposes of this Easement, including the protection of: scenic values as viewed from County Farm Road and County Farm Cross Road; productive agricultural and forestlands; conservation features of the Property which are dependent on water quality and quantity, such as but not limited to the existing wetlands, vernal pools, and riparian and floodplain habitats along the Cocheco River. Said exploratory and/or testing activities may commence only after written approval by the Grantee, following Grantee’s determination that the proposed activities shall minimize detrimental impacts on the purposes of this Easement and the aforesaid values. Within 120 days after Grantee’s receipt of such notice, the Grantee shall approve or disapprove in writing the proposed exercise, such approval not to be unreasonably withheld, and the Grantee shall so inform the Granter. Any disapproval shall specify in detail the reasons therefor. Grantee’s failure to so approve or disapprove within said period shall constitute an approval of the proposed exercise.

ii. In order to conduct any withdrawal or removal of groundwater from the Property, other than exploratory and/or testing activities, the Granter shall provide a written
notice and “Water Extraction Plan” to the Grantee at least 150 days prior to the commencement of any withdrawal or removal activity other than exploratory and/or testing activities. Said Plan shall include the specific details of said withdrawal and/or removal, including but not limited to: aquifer location and description; wellhead locations; proposed sustainable yield pumping and recharge rates; monitoring and reporting practices; design, location, and method and timing of construction for facilities; well capping procedures; anticipated changes to groundwater tables, to surface water levels and associated wetlands, and to in-stream flows on and off the Property as a result of water withdrawals; and potential impacts on the associated biological communities. Said notice shall also demonstrate that said withdrawal and/or removal activities shall minimize detrimental impacts on the purposes of this Easement, including the protection of scenic values as viewed from County Farm Road and County Farm Cross Road: productive agricultural and forestlands; conservation features of the Property which are dependent on water quality and quantity, such as but not limited to the existing wetlands, vernal pools, and riparian and floodplain habitats along the Cocheco River.

Construction or other improvements related to said withdrawal and/or removal activities may commence only after written approval of the “Water Extraction Plan” by the Grantee, following Grantee’s determination that the proposed activities shall minimize detrimental impacts on the purposes of this Easement and the aforesaid values. Within 150 days after Grantee’s receipt of such notice and the “Water Extraction Plan,” the Grantee shall approve or disapprove in writing the proposed exercise, such approval not to be unreasonably withheld, and the Grantee shall so inform the Grantor. Any disapproval shall specify in detail the reasons therefor. Grantee’s failure to so approve or disapprove within said period shall constitute an approval of the proposed exercise.

iii. Any withdrawal or removal activities, other than exploratory and/or testing activities, shall conform to the approved “Water Extraction Plan,” or said plan as may be amended from time to time. The Grantor may amend said plan, with Grantee approval, under the procedures, standards, and criteria specified in the immediately preceding Section 3.A.ii.

B. The Grantor reserves the right to maintain, improve, replace, and relocate existing utilities on the Property, including but not limited to a sewer pump station shown in “Special Provision Conservation Easement #4” on the Plan.

C. Grantor reserves the right to repair, maintain, alter, enlarge, and reconstruct the existing detention pond area shown in “Special Provision Conservation Easement #6” on the Plan for the purposes of: managing stormwater runoff of existing and/or future buildings and their associated roadways, slopes, and other facility existing or permitted within the Property or within the adjacent property currently owned by the Grantor; habitat management; and other conservation uses, all in accordance with regulations of the State of New Hampshire’s Department of Environmental Services or other agency then responsible for such activities.
Furthermore, the Grantor reserves the right to remove from the Property any dirt, rocks, mud, or other associated materials resulting from the repair, maintenance, or reconstruction (such as dredging) of said pond. Grantor shall notify the Grantee in writing at least thirty (30) days before undertaking reconstruction or dredging activities, said notice to include a description of the timing, location, scope, and method of the proposed activity. These provisions are exceptions to Sections 2.C., D., and F. above.

D. Grantor reserves the right to permit archaeological investigations on the Property after receiving written approval from the Grantee, where such approval shall not be unreasonably withheld. Prior to permitting any such investigations, Grantor shall send written notice to the New Hampshire State Archaeologist (or other person or agency then recognized by the State as having responsibility for archaeological resources) for review and comment, and to the Grantee, such notice describing the nature, scope, location, timetable, qualifications of investigators, site restoration, research proposal, and any other material aspect of the proposed activity. The Grantor and Grantee shall request the State Archaeologist (or other person or agency, as above) to consider the proposal, to apply the standards as specified in rules implementing RSA 227-C:7 (Permits Issued for State Lands and Waters), and to provide written comments to the Grantor and Grantee. The Grantee may, in its sole discretion, approve the proposed investigations only if it finds that all of the following conditions are met:

i. The archaeological investigations shall be conducted by qualified individuals and according to a specific research proposal;

ii. The proposed activities will not harm state or federally recognized rare, endangered, or threatened species, such determination of harm to be based upon information from the New Hampshire Natural Heritage Inventory or the agency then recognized by the State of New Hampshire as having responsibility for identification and/or conservation of such species; and

iii. The proposed activities will not be materially detrimental to the purposes of this Easement.

4. NOTIFICATION OF TRANSFER, TAXES, MAINTENANCE

A. The Grantor agrees to notify the Grantee in writing at least 10 days before the transfer of title to the Property.

B. The Grantee shall be under no obligation to maintain the Property or pay any taxes or assessments thereon.

5. BENEFITS, BURDENS, AND ACCESS

A. The burden of the Easement conveyed hereby shall run with the Property and shall be enforceable against all future owners and tenants in perpetuity; the benefits of this Easement shall not be appurtenant to any particular parcel of land but shall be in gross
and assignable or transferable only to the State of New Hampshire, the U.S. Government, or any subdivision of either of them, consistent with Section 170(c)(1) of the U.S. Internal Revenue Code of 1986, as amended, or to any qualified organization within the meaning of Section 170(h)(3) of said Code, which organization has among its purposes the conservation and preservation of land and water areas and agrees to and is capable of enforcing the conservation purposes of this Easement. Any such assignee or transferee shall have like power of assignment or transfer.

6. BREACH OF EASEMENT

A. When a breach of this Easement, or conduct by anyone inconsistent with this Easement, comes to the attention of the Grantee, it shall notify the Grantor in writing of such breach or conduct, delivered in hand or by certified mail, return receipt requested. However, whenever the Grantor is the County of Strafford a breach of this Easement for which the County is responsible shall only occur as a result of intentional acts or gross negligence of the County.

B. The Grantor shall, within thirty (30) days after receipt of such notice or after otherwise learning of such breach or conduct, undertake those actions, including restoration, which are reasonably calculated to cure swiftly said breach, or to terminate said conduct, and to repair any damage. The Grantor shall promptly notify the Grantee of its actions taken under this section.

C. If the Grantor fails to take such proper action under the preceding section, the Grantee shall, as appropriate to the purposes of this deed, undertake any actions that are reasonably necessary to cure such breach or to repair any damage in the Grantor’s name or to terminate such conduct. The cost thereof, including the Grantee’s expenses, court costs, and legal fees, shall be paid by the Grantor, provided that the Grantor is directly or primarily responsible for the breach.

D. Nothing contained in this Easement shall be construed to entitle the Grantee to bring any action against the Grantor for any injury to or change in the Property resulting from causes beyond the Grantor’s control, including, but not limited to, unauthorized actions by third parties, natural disasters such as fire, flood, storm, disease, infestation and earth movement, or from any prudent action taken by the Grantor under emergency conditions to prevent, abate, or mitigate significant injury to the Property resulting from such causes.

E. The Grantee and the Grantor reserve the right, separately or collectively, to pursue all legal remedies against any third party responsible for any actions detrimental to the conservation purposes of this Easement.
7. NOTICES

All notices, requests and other communications, required to be given under this Easement shall be in writing, except as otherwise provided herein, and shall be delivered in hand or sent by certified mail, postage prepaid, return receipt requested to the appropriate address set forth above or at such other address as the Grantor or the Grantee may hereafter designate by notice given in accordance herewith. Notice shall be deemed to have been given when so delivered or so mailed.

8. SEVERABILITY

If any provision of this Easement, or the application thereof to any person or circumstance, is found to be invalid by a court of competent jurisdiction, by confirmation of an arbitration award or otherwise, the remainder of the provisions of this Easement or the application of such provision to persons or circumstances other than those to which it is found to be invalid, as the case may be, shall not be affected thereby.

9. CONDEMNATION/EXTINCTION

A. Except as provided herein, whenever any part of the Property is taken in exercise of eminent domain by public, corporate, or other authority so as to abrogate in whole or in part the Easement conveyed hereby, the Grantor and the Grantee shall thereupon act jointly to recover the full damages resulting from such taking with all incidental or direct damages and expenses incurred by them thereby to be paid out of the damages recovered. Notwithstanding the immediately preceding sentence, in the event of any taking of any portion of this Conservation Easement by the County of Strafford within any of the areas shown as “Special Provision Conservation Easement #1, #2, #3, #4, #5, or #6” on the Plan, the Grantee waives its right to any damages.

B. The balance of the land damages recovered (including, for purposes of this subsection, proceeds from any lawful sale, in lieu of condemnation, of the Property unencumbered by the restrictions hereunder) shall be divided between the Grantor and the Grantee in proportion to the fair market value, at the time of condemnation, of their respective interests in that part of the Property condemned. The values of the Grantor’s and Grantee’s interests shall be determined by an appraisal prepared by a qualified appraiser at the time of condemnation. Notwithstanding the above provisions of this paragraph, in the event of any taking of any portion of this Conservation Easement by the County of Strafford within any of the areas shown as “Special Provision Conservation Easement #1, #2, #3, #4, #5, or #6” on the Plan, the Grantee waives its right to any damages.

C. The Grantee shall use its share of the proceeds in a manner consistent with and in furtherance of one or more of the conservation purposes set forth herein.

D. Nothing contained herein with respect to this Easement shall prohibit the Grantor from exercising its rights, to the extent all conditions are met for the exercise of such rights, with respect to those rights provided to the Grantor pursuant to RSA 26, et. seq., and any
other power of condemnation vested with the Grantor pursuant to the laws of the State of New Hampshire.

10. ADDITIONAL EASEMENT

Should the Grantor determine that the expressed purposes of this Easement could better be effectuated by the conveyance of an additional easement, the Grantor may execute an additional instrument to that effect, provided that the conservation purposes of this Easement are not diminished thereby and that a public agency or qualified organization described in Section 5.A., above, accepts and records the additional easement.

11. ARBITRATION OF DISPUTES

A. Any dispute arising under this Easement shall be submitted to arbitration in accordance with New Hampshire RSA 542.

B. The Grantor and the Grantee shall each choose an arbitrator within 30 days of written notice from either party. The arbitrators so chosen shall in turn choose a third arbitrator within 30 days of the selection of the second arbitrator.

C. The arbitrators so chosen shall forthwith set as early a hearing date as is practicable which they may postpone only for good cause shown.

D. A decision by two of the three arbitrators, made as soon as practicable after submission of the dispute, shall be binding upon the parties and shall be enforceable as part of this Easement.

12. SEPARATE PARCEL

The Grantor agrees that for the purpose of determining compliance with any present or future regulation (other than those governing N.H. Current Use Assessment under RSA 79-A), bylaw, order, or ordinance (within this section referred to as "legal requirements") of the City of Dover, the State of New Hampshire or any other governmental unit, the Property shall be deemed a separate parcel of land and shall not be taken into account in determining whether any land of the Grantor, other than the Property, complies with any said legal requirements. The Property shall not be taken into account to satisfy in whole or in part any of said legal requirements or any area, density, setback or other dimensional standard applicable to such land.

13. CONTROLLING LAW

The interpretation and performance of this Easement shall be governed by the laws of the State of New Hampshire.
14. **ENTIRE AGREEMENT**

This instrument sets forth the entire agreement of the parties with respect to the conservation easement, and supersedes all prior discussions, negotiations, understandings, or agreements related to the Easement, all of which are merged herein.

THIS IS A NON-CONTRACTUAL CONVEYANCE PURSUANT TO NEW HAMPSHIRE RSA 78-B:2 AND IS EXEMPT FROM THE NEW HAMPSHIRE REAL ESTATE TRANSFER TAX.
The Grantee, by accepting and recording this Easement, agrees to be bound by and to observe and enforce the provisions hereof and assumes the rights and responsibilities herein granted to and incumbent upon the Grantee, all in the furtherance of the conservation purposes for which this Easement is delivered.

IN WITNESS WHEREOF, We have hereunto set our hands this 3rd day of December, 2002.

BOARD OF COUNTY COMMISSIONERS
COUNTY OF STRAFFORD

George Maglaras, Chairman

Ronald R. Chagnon, Clerk

The State of New Hampshire
County of Strafford

Personally appeared George Maglaras, Chairman of the Board of County Commissioners of the County of Strafford, this 3rd day of December, 2002, and acknowledged the foregoing on behalf of the Board of County Commissioners of the County of Strafford.

Before me, ____________________________

My commission expires: ______________________

NOTARY PUBLIC - STATE OF NH
COMMISSION EXPIRES JANUARY 24, 2006

Page 14 of 22
The State of New Hampshire
County of Strafford

Personally appeared Ronald R. Chagnon, Clerk of the Board of County Commissioners of the County of Strafford, this 1, 2002, and acknowledged the foregoing on behalf of the Board of County Commissioners of the County of Strafford.

Before me,

My commission expires:

BETTIE R. TRUNDY
NOTARY PUBLIC - STATE OF NH
COMMISSION EXPIRES JANUARY 24, 2006
ACCEPTED: SOCIETY FOR THE PROTECTION OF NEW HAMPSHIRE FORESTS

By: ___________________________
Title: President / Forester
Date: December 3, 2002

The State of New Hampshire
County of Strafford

Personally appeared ___________________________
Title: ___________________________

of the Society for the Protection of New Hampshire Forests, this 3rd day of
December, 2002, and acknowledged the foregoing on behalf of the Society for the Protection of
New Hampshire Forests.

Before me, ___________________________

My commission expires: ___________________________

BETTIE K. TRUNDY
NOTARY PUBLIC - STATE OF NH
COMMISSION EXPIRES JANUARY 24, 2006
APPENDIX A

The "Property" subject to this Easement consists of ten (10) certain tracts of land with any and all structures and improvements thereon situated on or off of County Farm Road and County Farm Cross Road, so-called, in the City of Dover, County of Strafford, State of New Hampshire, consisting of 212.53 acres, and shown as “Conservation Easement #1, #2, #3, & #4” and "Special Provision Conservation Easement #1, #2, #3, #4, #5, & #6" on a plan consisting of Sheets 1-7 entitled “Conservation Easement Plan of Strafford County Lands Prepared for the Society for the Protection of New Hampshire Forests, Tax Map B, Lot No. 20 & Tax Map C, Lot No. 4, County Farm Road and County Farm Cross Road, Dover, Strafford County, New Hampshire,” by McEneaney Survey Associates, Inc., dated November 25, 2002, as revised, recorded at said Registry as Plan #G8-3 through #G8-5, more particularly bounded and described as follows:

Beginning at an iron rod at the junction of two stonewalls on the southwest side of County Farm Cross Road, at the north corner of the Property, and at the north corner of “Conservation Easement #4,” at land now or formerly of John and Jill Murphy, proceeding South 51° 02’ 41” East a distance of 162.87 feet along the southwest side of said Road to a point;

Thence proceeding southeasterly 80.44 feet along the southwest side of said Road along the arc of a curve to the right to an iron rod at the north corner of “Special Provision Conservation Easement #2,” said curve having a radius of 200.00 feet;

Thence proceeding northeasterly across County Farm Cross Road to a point at the end of a stonewall on the northeast side of said Road at land now or formerly of David Paolini;

Thence proceeding the following courses and distances along said Paolini land:

South 50° 11’ 51” East 137.89 feet along said stonewall to a drill hole;
South 52° 34’ 28” East 420.83 feet to a drill hole at the end of said stonewall;
South 45° 47’ 06” East 77.18 feet to a drill hole at the end of a stonewall;
South 54° 21’ 03” East 99.15 feet along said stonewall to a drill hole;
South 54° 19’ 18” East 125.22 feet along said stonewall to a drill hole;
South 60° 21’ 52” East 59.76 feet along said stonewall to a drill hole;
South 50° 06’ 45” East 35.02 feet along said stonewall to a drill hole;
South 52° 57’ 11” East 110.47 feet along said stonewall to a drill hole at the junction of two stonewalls and at “Special Provision Conservation Easement #3;”
North 34° 37’ 13” East 49.98 feet along said stonewall to a drill hole at the end of said stonewall;
North 37° 02’ 30” East 181.65 feet along a fenceline to an iron rod;
North 36° 19’ 21” East 113.23 feet along said fenceline to a fencepost;
North 38° 10’ 35” East 52.18 feet along said fenceline to an iron rod at “Conservation Easement #2;”
North 38° 10’ 35” East 50.05 feet along said fenceline to a fencepost;
North 34° 23’ 27” East 206.16 feet along said fenceline to a fencepost;
North 35° 55’ 21” East 101.08 feet along said fenceline to a fencepost;
North 35° 38’ 22” East 213.92 feet along said fenceline to a fencepost; and
North 30° 22’ 50” East 51.77 feet to an iron rod at land now or formerly of Mary
Merkley;

Therefore proceeding southeasterly the following courses and distances along said Merkley land:

811.92 feet along the arc of a curve to the left to an iron rod, said curve having a radius of
6,653.98 feet;
631.81 feet along the arc of a curve to the left to an iron rod at the north corner of
“Special Provision Conservation Easement #5,” said curve having a radius of 10,201.12
feet;
352.50 feet along the arc of a curve to the left to an iron rod, said curve having a radius
of 10,201.12 feet;
South 48° 52’ 38” East 373.06 feet to an iron rod; and
South 48° 32’ 30” East 147.18 feet to an iron rod at land now or formerly of Karen and
Douglas Nobbs;

Therefore proceeding South 35° 40’ 48” West a distance of 200.21 feet along said Nobbs land to an
iron pin at land now or formerly of Nicholas and Lorraine Skaltis;

Therefore proceeding South 35° 20’ 41” West a distance of 182.74 feet along said Skaltis land to
an iron pin at land now or formerly of Christina and Kosmas Veziris;

Therefore proceeding South 35° 05’ 22” West a distance of 251.69 feet along said Veziris land to
an iron pin at land now or formerly of Carol Marion Living Trust;

Therefore proceeding along said Trust land South 35° 05’ 22” West a distance of 79.00 feet to a
point, and
South 35° 28’ 32” West a distance of 142.53 feet to an iron rod on the north side of County Farm
Road;

Therefore proceeding along the north side of County Farm Road the following courses and
distances:

North 78° 19’ 39” West 169.43 feet to an iron rod;
North 76° 50’ 21” West 492.24 feet to a point at the southeast corner of “Conservation
Easement #2;”
North 76° 50’ 21” West 231.00 feet to a point at the southeast corner of “Special
Provision Conservation Easement #4;”
North 76° 50’ 21” West 264.00 feet to an iron rod at the southeast corner of “Non-
Easement #2;” and
North 76° 50’ 21” West 117.15 feet to a point;

Therefore proceeding southerly across County Farm Road to an iron pin on the south side of said
Road, at land now or formerly of Diane Morrow Myles Revocable Trust and at the northeast
corner of “Special Provision Conservation Easement #6;”
Thence proceeding the following courses and distances along said Metes and Bounds:

South 35° 17' 39" West 351.43 feet to an iron rod at the northeast corner of
"Conservation Easement #3;"
South 35° 17' 39" West 727.20 feet to an iron rod;
South 57° 04' 46" East 528.00 feet to a point in Jackson Brook, so-called; and
South 33° 33' 21" East 480.30 feet to a point at the junction of Jackson Brook and the
Cochecho River, so-called;

Thence along the Cochecho River proceeding generally westerly and then northerly a distance of approximately 1.9 miles to a point on the southeasterly side of said River at land now or formerly of the City of Dover;

Thence the following courses and distances along said City of Dover land:

South 06° 02' 10" East 4.34 feet to a monument;
North 83° 57' 50" East 161.20 feet to a monument;
North 49° 16' 50" East 179.60 feet to a monument on the southwest side of County Farm Road;
Northerly crossing County Farm Road approximately 55 feet to a monument on the
northeast side of said Road at the southwest corner of "Conservation Easement #4;"
North 19° 36' 50" East 150.35 feet to a monument;
North 03° 58' 10" West 73.30 feet to a monument;
North 14° 40' 10" West 121.20 feet to a granite bound;
North 46° 31' 10" West 81.00 feet to a monument;
North 69° 15' 10" West 82.00 feet to a monument;
North 59° 53' 10" West 297.00 feet to a monument; and
North 34° 51' 10" West 119.00 feet to a granite bound at land now or formerly of
Winning Ways Stable, Inc.;

Thence proceeding North 62° 47' 54" East a distance of 293.09 feet along said Stable land to a
point at the end of a stonewall;

Thence proceeding North 63° 39' 45" East a distance of 501.40 feet along said stonewall and
said Stable land to a point at said Murphy land;

Thence proceeding North 63° 20' 45" East a distance of 30.29 feet along said Murphy land to a
point at a break in said stonewall;

Thence proceeding North 61° 31' 12" East a distance of 559.76 feet along said stonewall to the
Point of Beginning.

EXCEPTING AND RESERVING from the above-described Easement premises are those
premises shown as "Non-Easement #1, #2, and #3" on the Plan, more particularly bounded and
described as follows:

Beginning at a point on the east side of County Farm Cross Road and on the north side of County Farm Road, at the northeast corner of the junction of said Roads, at the southwest corner of “Non-Easement #2,” proceeding southerly across County Farm Road to an iron rod on the south side of said Road at the northwest corner of “Special Provision Conservation Easement #6” and at the northeast corner of “Non-Easement #3;”

Thence proceeding the following courses and distances along “Special Provision Conservation Easement #6;”

- South 19° 45’ 04” West 59.92 feet to an iron rod;
- South 13° 49’ 22” West 79.40 feet to an iron rod;
- Southeasterly 47.08 feet along the arc of a curve to the left to an iron rod, said curve having a radius of 30.00 feet;
- South 76° 05’ 03” East 57.09 feet to an iron rod;
- Southeasterly 91.38 feet along the arc of a curve to the right to an iron rod, said curve having a radius of 117.00 feet;
- South 31° 20’ 12” East 210.31 feet to an iron rod;
- North 77° 32’ 10” East 197.14 feet to an iron rod; and
- South 76° 00’ 00” East 69.73 feet to an iron rod at the northwest corner of “Conservation Easement #3;”

Thence proceeding South 06° 00’ 00” West a distance of 891.00 feet along “Conservation Easement #3” to an iron rod at the northeast corner of “Special Provision Conservation Easement #1;”

Thence proceeding North 84° 00’ 00” West a distance of 1,081.46 feet to an iron rod at “Conservation Easement #3;”

Thence proceeding the following courses and distances along “Conservation Easement #3;”

- North 06° 00’ 00” East 796.53 feet to an iron rod;
- North 06° 09’ 33” West 224.19 feet to an iron rod;
- North 08° 16’ 18” West 383.52 feet to an iron rod; and
- North 49° 09’ 23” East 179.80 feet to an iron rod on the southwest side of County Farm Road;

Thence proceeding northeasterly across County Farm Road approximately 48.5 feet to a point on the northeast side of said Road at “Conservation Easement #4;”

Thence proceeding the following courses and distances along “Conservation Easement #4;”

- Southeasterly 176.06 feet along the arc of a curve to the left to an iron rod at the southwest corner of “Non-Easement #1,” said curve having a radius of 1,557.50 feet; and
- North 06° 00’ 00” East 708.10 feet to an iron rod at the southwest corner of “Special Provision Conservation Easement #2;”
Thence proceeding South 82° 45' 00" East a distance of 546.80 feet to an iron rod on the west side of County Farm Cross Road;

Thence proceeding easterly across County Farm Cross Road to an iron rod on the east side of said Road at the northwest corner of "Non-Easement #2" and southwest corner of "Special Provision Conservation Easement #3;"

Thence proceeding South 82° 45' 00" East a distance of 1,576.28 feet along "Special Provision Conservation Easement #3" to an iron rod at "Conservation Easement #2;"

Thence proceeding South 31° 16' 25" East a distance of 108.87 feet along "Conservation Easement #2" to an iron rod at the North corner of "Special Provision Conservation Easement #4;"

Thence proceeding South 10° 00' 00" West a distance of 780.77 feet along "Special Provision Conservation Easement #4" to an iron rod on the north side of County Farm Road;

Thence proceeding northwesterly the following courses and distances along the north side of County Farm Road:

North 76° 50' 21" West 117.15 feet to a point;
North 75° 57' 24" West 438.56 feet to a point;
550.12 feet along the arc of a curve to the left to a point, said curve having a radius of 23,654.93 feet; and
512.22 feet along the arc of a curve to the left to the Point of Beginning, said curve having a radius of 2,868.85 feet.

**ALSO EXCEPTING AND RESERVING** from the above-described Easement premises are said County Farm Road and County Farm Cross Road, and whatever right, title, and interest the public and others may have in County Farm Road and County Farm Cross Road, so-called;

**FURTHER EXCEPTING AND RESERVING** from the above-described Easement premises are two burial places with the right of passing to and from the same as described in deed dated June 15, 1867, recorded at said Registry at Book 241, Page 521.

**SUBJECT TO** a certain dam privilege of the City of Dover, known as the "Hussey's Dam Privilege," as described in deed from the State of New Hampshire dated July 26, 1972, recorded at said Registry at Book 911, Page 112.

**SUBJECT TO** possible dam privilege and flowage rights of Watson Hydroelectric Associates at the Watson-Waldron Dam as described in Agreement dated December 5, 1984, recorded at said Registry at Book 1153, Page 440.
SUBJECT TO a passway in common with others as described in deed dated May 11, 1866, recorded at said Registry at Book 239, Page 337. For reference, see Note 5C on Plan and in "Conservation Easement #1."

SUBJECT TO a right and easement for overhead and underground lines of the Public Service Company of New Hampshire and New England Telephone and Telegraph Company as described in deed recorded at said Registry at Book 854, Page 70.

SUBJECT TO an easement for underground cables of the New England Telephone and Telegraph Company and Public Service Company of New Hampshire as described in Easement dated August 8, 1977, recorded at said Registry at Book 1001, Page 514.

SUBJECT TO certain conditions imposed by the New Hampshire Department of Environmental Services in Wetlands Permit #2001-2435 for the expansion of the Strafford County House of Corrections, including but not limited to the obligation of the Grantor to create and maintain a wetland/detention pond area.

SUBJECT TO any and all matters as are shown on said Plan.

SUBJECT TO any and all encumbrances on record at said Registry as of the date of the filing of this Conservation Easement Deed.

MEANING AND INTENDING to describe a portion of the premises conveyed to Grantor by the following deeds: deed dated May 11, 1866, recorded at said Registry at Book 239, Page 337; deed dated June 15, 1867, recorded at said Registry at Book 241, Page 521; and deed dated December 28, 1867, recorded at said Registry at Book 252, Page 274.
March 4, 2010

Jack Wozmak, County Administrator
Finance Office
33 West Street
Keene, NH 03431

Re: Cheshire County Farm Properties
625 acres (net of exclusion areas)
River Road, Partridge Brook Road, Ferry Road & Connecticut River
Westmoreland, New Hampshire

Dear Jack:

As requested, I have inspected the above referenced properties for the purpose of estimating their present market values, both Before and After a Conservation Easement. The function of the appraisal is to provide “rough” preliminary values for planning purposes only. The intended users of this report are Cheshire County officials and the Monadnock Conservancy. This appraisal includes land only. I have excluded a total of 22.35 acres, including 15.35 acres around the nursing home complex, 2 acres around the barns, 2 acres around a farmhouse, and 3 acres around the jail, including the parking area across the road.

This is a "Restricted Use Appraisal Report", which is intended to comply with the reporting requirements set forth under Standard Rule 2-2(c) of the Uniform Standards of Professional Appraisal Practice. As such, it does not contain full discussions of the data, reasoning, and analyses that were used in the appraisal process to develop my opinion of value. Supporting documentation is retained in the work file. The information in this report is specific to your needs and for your exclusive use.
PERTINENT DATA

Owner
Cheshire County Farm

Legal References
Deeds not provided

Land Area
625 acres (net of exclusion areas)

Frontages
River Road, Partridge Brook Road, Ferry Road & CT River

Improvements
None included

2009 Land Assessment
$1,321,800 Ad Valorem (547.35 acres)
$301,402 Current Use

2009 Taxes
$17,295 (Current Use Land)

Zoning
Medium Density Residential: 2 Acres/300 Feet
Rural Residential: 5 Acres/500 Feet
Forestry Residential: 10 acres/500 Feet

Highest and Best Use
Before the CE - Residential, Agriculture, Forestland
After the CE - Forestland, Agriculture and Conservation

SALES HISTORY

The subject properties have been owned by Cheshire County for many years. I have not reviewed any deeds and assume there are no adverse easements, encroachments or encumbrances. To my knowledge there have been no recent transfers and none of the parcels are currently under agreement or listed for sale.

Monadnock Appraisal Company
GENERAL DESCRIPTION OF THE PROPERTY

The subject property consists of five abutting parcels located on River Road, Partridge Brook Road and Ferry Road in Westmoreland, New Hampshire. River Road and Partridge Brook Road are town maintained asphalt surfaces. Ferry Road is a town maintained gravel surface. There is also extensive frontage on the Connecticut River. All frontages referenced in this report have been scaled from the tax maps.

Based on the assessment cards, the five parcels have a total land area of 647.35 acres. I have excluded 22.35 acres, which leaves 625 acres included in this appraisal. The exclusion areas are shown on the attached project map, which was provided by the Monadnock Conservancy.

Utilities available to the properties include electric and telephone services from the roads. Private wells and septic systems are utilized in this area.

The neighborhood surrounding the property is primarily residential in nature, consisting of older and newer, average to good quality single family dwellings, widely varied in value. The location is 1.7 miles northwest of Westmoreland Village and 10 miles west of major employment and shopping, in Keene.

Each parcel is described briefly, as follows:

**R11-11**

This lot contain 3.5 acres, with 1,700 feet of frontage on the west side of River Road and 1,000 feet on the east side of Ferry Road. The land along Ferry Road has limited utility due to steep slopes. There is a level area along River Road in the north part of the property. The range in elevation is from 78 meters above mean sea level on Ferry Road, to 90 meters on River Road. There are winter views toward the west of the Connecticut River and Vermont. A topography map is included for reference, which was provided by the Monadnock Conservancy.

Soil types are 24A and 230E. According to “Soil Potential Ratings for Development”, published by the Cheshire County Conservation District. 230E has a very low rating for development potential and 24A is classified as “Important Farmland Soil”. A soil map is included for reference. Ground cover consists of an open field to the north on River Road and mixed woods for the remainder. The property is zoned Rural Residential and is assessed under the NH Current Use Program in the farm land category.

---

Monadnock Appraisal Company
R11.4

This lot contains 6.37 acres, with 800 feet of frontage on the west side of River Road and Ferry Road. It abuts the jail complex on the north. There is a historic cemetery located on Ferry Road and a small level filled area in the southeast corner, where hay bales are currently being stored. The elevation is 72 meters along River Road. The land drops off steeply from the roads to Partridge Brook, which runs through the property. Soil types are 9 and 230E. 9 is classified as a “Flood Plain and Important Farmland Soil”. This property is zoned Rural Residential and assessed under the wetlands Current Use category. It is located within the 100 year Flood Zone AE. A flood map is included for reference.

R11.3

This parcel contains 36 acres, after excluding a 1 acre parking area across from the jail. There is 2,900 feet of frontage on the east side of River Road and 1,800 feet on the north side of Partridge Brook Road (including the exclusion area). The topography is level to the northwest along River Road and in the southwest along Partridge Brook Road. The remainder has moderate to steep slopes. The range in elevation is from 72 meters in the southwest corner, to 120 meters along the southeast boundary.

Soil types include 9, 24A, 108, 230E and 362E. 230E and 362E have very low ratings for development potential. 9, 24A and 108 are classified as “Flood Plain and Important Farmland Soils”. This property is zoned Rural Residential along River Road to a depth of 500 feet, then Medium Density Residential to the east. The Current Use assessment categories are 10 acres farm land, 15.5 acres managed hardwoods, and 10.5 acres managed other. Partridge Brook runs through the property and about 15 areas in the southwest corner are located in Flood Zone AE.

R9-32

This parcel contains 115 acres, less three 2 acre exclusion areas, which equals 109 acres included in this appraisal. There is approximately 6,000 feet of frontage on the Connecticut River and River Road, including the exclusion areas. The topography is mostly level to gently sloping, with a range in elevation from 72 to 108 meters above mean sea level. There are some areas with steep slopes.

Soil types include: 4; 9; 24C; 30B; 30C; 108; 230E and 410A. 24C and 30C have very high ratings for development potential. 230E has a very low rating. 30B and 410A are classified as “Important farmland Soils”. 4, 9 and 108 are “Flood Plain and Important Farmland Soils”. This property is zoned Rural Residential. The Current Use assessment categories are 65 acres farm land, 38.37 acres managed other, and 5.63 acres wetlands. Approximately 35 acres are located in the 100 year flood AE.
This parcel contains 485.48 acres, less 15.35 acres around the nursing home complex, which leaves 470.13 acres included in this appraisal. There is 2,000 feet of frontage on Partridge Brook Road and 5,500 feet on River Road, including the exclusion area. The land slopes up from the roads to the peak of Cass Hill, which is at 312 meters above mean sea level. Most of the land has moderate to steep slopes, however, there are areas along River Road with favorable topography for development. Cass Hill Road, which is a non-maintained “rough” gravel surface, runs through the east part of the property from the rear of the nursing home, up over the hill and down to Paine Road. It provides access to a water storage tank and two upper fields near the peak.

The property has been a Certified Tree Farm since 1994. There is a Forest Management Plan that was updated by Wayne L. Young in 2001. There are 420 acres of forestland, with white pine and hemlock being the predominant species. Wayne has reviewed his file, applied a growth rate of 2.5% and used current pricing to arrive at a present estimated net timber liquidation value in a range from $346,500 to $393,750, which equals $825 to $938 per forested acre. These figures includes a discount of 10% for the NH timber tax, but no deduction for forester fees, as liquidation could easily be arranged without a forester. Although not recommended, timber liquidation would be possible Before a Conservation Easement. After a Conservation Easement, only a portion of the timber value would be available, say 25% to 30%.

The soils are widely varied. The predominant types are 360D, 361D and 367E, which have low to very low ratings for development potential. Most of the soils along River Road are suitable for development. This property is zoned Rural Residential to a depth of 500 feet from River Road. Beyond that is Forestry Residential. The Current Use assessment categories are 51.5 acres farm land and 418.35 acres forest land. The Maplewood Nature and River Tail is maintained on this property.

**HIGHEST AND BEST USE**

Highest and Best Use is defined as "The reasonably probable and legal use of vacant land or an improved property, which is physically possible, appropriately supported, financially feasible, and that results in the highest value. The four criteria the highest and best use must meet are legal permissibility, physical possibility, financial feasibility, and maximum profitability."

I have estimated the highest and best use of each parcel, both Before and After a Conservation Easement. If a full "Self-Contained" appraisal report is required in the future, consultation with a professional planner is recommended.
R11-11

In my opinion, the highest and best use of this 3.5 acre lot is residential. Before a Conservation Easement. Although non conforming to current zoning (5 acres required), this is a legal pre existing lot and I assume a state approved septic system could be designed and a building permit obtained for one dwelling located in the field on River Road. After a Conservation Easement, the highest and best use would be open space, agriculture, forestland and conservation.

R11-4

This 6.37 acre lct is non developable wetlands located entirely within Flood Zone AE. The highest and best use is open space and conservation, both Before and After a Conservation Easement.

R11-3

Before a Conservation Easement, it appears this 36 acre parcel could support one dwelling site in the field along River Road and one site in the southeast corner, off Partridge Brook Road. The remainder has a highest and best use of open space, agriculture and forestland. After a Conservation Easement, the highest and best use would be open space, agriculture, forestland and conservation.

R9-32

Before a Conservation Easement, it is my opinion the highest and best use of this 109 acre parcel is residential subdivision along River Road. The remainder has a highest and best use as agriculture. Given the topography, soils, flood zone and zoning, development would be limited to four or five lots south of the barn complex. Most likely, these would be larger lots extending to the river in order to maximize value. The remaining land has a highest and best use as open space and agriculture. After a Conservation Easement, the highest and best use would be open space, agriculture and conservation.

R9-1

In my opinion, the highest and best use of this 470.13 acre parcel, Before the Conservation Easement, is residential subdivision along River Road. The remainder has a highest and best use as agriculture and forestland. Given the topography, soils and zoning, development would be limited to five or six lots. Larger lots of at least 10 to 12 acres are typical for this neighborhood. Development along Partridge Brook Road is unlikely due to the soils and flood zone. After a Conservation Easement, the highest and best use would be open space, agriculture, forestland and conservation.
COMPARABLE LAND SALES

Unencumbered Land Sales

Sale 1 - Watts to Putnam, 9/8/08, Volume 2531 Page 844, 5.12 acres with 315 feet of frontage on Mount Gilboa Road in Westmoreland sold for $85,000. There are nice pastoral views and an old barn on the property that contributes minimal value.

Sale 2 - Ballou to Dauphin, 12/8/09, Volume 2615 Page 120, 11.74 acres with 400 feet on Route 63 in Chesterfield sold for $110,000. The location is a short distance south of the Westmoreland line. This is an average wooded building lot and the price included an approved septic system design and some site clearing.

Sale 3 - Cande to Page, 11/2/07, Volume 2475 Page 610, 13.42 acres off Butterfield Hill Road in Westmoreland sold for $67,100, or $5,000 per acre. The land is mostly open field, with nice views of hills toward the east and frontage on Partridge Brook. The land was acquired from an abutter through a boundary line adjustment, with no new lots created.

Sale 4 - Gerrish to Shad, 3/23/04, Volume 2120 Page 814, 30.81 acres with 513 feet on River Road in Westmoreland sold for $242,500, or $8,083 per acre. The land is mostly open field, with nice views of Vermont toward the west. There is 1,573 feet of frontage on the Connecticut River.

Sale 5 - Simino Trust to Rudolf, 10/27/06, Volume 2391 Page 830, 54.71 acres with 385 feet on Spofford Road in Westmoreland sold for $225,000, or $4,113 per acre. The property consists of two abutting parcels. There are 15 acres in front, with a nice field and views of surrounding hills. The remaining 39.71 abutting acres are wooded with minimal timber value. There is a brook and 1,460 feet of frontage on an old woods road. The buyer is an abutter.

Sale 6 - Broadridge Investments, LLC to Merkt, 8/19/09, Volume 2592 Page 878, 104.72 acres with 501 feet of class 5 frontage on Hurricane Road and 529.63 feet of mostly class 6 frontage on Patton Road in Westmoreland sold for $135,000, or $1,298 per acre. There is minimal timber value. The highest and best use is one residential building lot site near the road and forestland & recreation for the rear.
Sale 7 - Nietschlem to Saul, 1/30/04, Volume 2107 Page 97, 123.6 acres with 650 feet on River Road in Westmoreland sold for $542,300, or $4,388 per acre. The land is mostly level, with views of Vermont toward the west. 100 acres are high dry farmland and there is 3,100 feet of frontage on the Connecticut River.

Sale 8 - H&H Investments, LLC, to Kohl, 8/31/07, Volume 2461 Page 109, 127 acres with 2,958 feet of non maintained frontage on Chapin Road in Westmoreland sold for $120,000, or $945 per acre. There is minimal timber value due to a harvest in 2005.

Sale 9 - Kibbee to Aldrich, 4/29/08, Volume 2506 Pages 959 & 961, 152.71 acres (42.85 + 109.86) with 1,857 feet of frontage on Butterfield Hill Road and 453 feet on Paine Road in Westmoreland sold for $452,500, or $2,963 per acre. The property has potential for three to four lots, however, the planned use is one “estate” lot. There are 20 acres of field and nice westerly views of hills. There is some timber value.

Sale 10 - High Forest Partners to O'Brien, 1/31/07, Volume 2412 Page 827, 295.7 acres with 700 feet of class 6 frontage on Houghton Ledge Road in Sullivan sold for $400,000, or $1,353 per acre. The frontage begins about 1,500 feet from the town maintained portion of the road. 85 acres are in Keene, with access from Route 9, however, the best area for building is in Sullivan.

Conservation & Non Developable Land Sales

Sale 11 - SPNHF to Kenney & Buckbee, 4/18/08, Volume 2504 Page 117, 5.5 acres with 527 feet of frontage on Roxbury Road in Marlborough sold for $8,600, or $1,600 per acre. The buyers are abutters. The property is open field with views of Monadnock and surrounding hills. The property is encumbered by a Conservation Easement, with no reserved rights for development. Forestry and agriculture are allowed.

Sale 12 - Marlborough Roxbury Land Association to Puleo, 6/28/07, Volume 2446 Page 143, 15 acres with 879 feet of broken frontage on Roxbury Road and 499 feet on Clapp Pond Road in Marlborough sold for $15,000, or $1,000 per acre. There is some open field and views of Monadnock. 9.5 acres wrap around the buyers 5 acre dwelling site. The other 5.5 acres form a long strip of land that was formerly a railroad right of way and is now a public recreation trail. The property is encumbered by a Conservation Easement, with no reserved rights for development. Forestry and agriculture are allowed.
Sale 13 - The Cretaz Family Trust to Tomey, 11/13/07, Volume 2475 Page 892, 14
acres with 500 feet of frontage on Hurricane Road in Keene sold for $30,000, or $2,143
per acre. The property includes 7 acres of open field and nice views of surrounding
hills. The property is encumbered by a Conservation Easement, with no reserved rights
for any development. Forestry and agriculture are allowed. The buyer is an abutter.

Sale 14 - Hatt to Paul, 9/29/09, Volume 2600 Page 648, 15 acres of non buildable rear
land off Old Spotford Road in Westmoreland sold to an abutter through a boundary line
adjustment for $14,500, or $967 per acre.

Sale 15 - Pond Trust to Trombly, 11/4/09, Volume 2612 Page 485, 25.078 acres with
301 feet of frontage on Squantum Road in Jaffrey sold for $72,500. 2.5 acres are
open field, 2 acres are wetlands and the remainder is forestland with minimal timber
value. A Conservation Easement was conveyed to the Town of Jaffrey 9/24/08. There
is a reserved right for one single family dwelling within a 2 acre envelope. Deducing
$60,000 for the estimated value of the exclusion area, results in an extracted price for
the conservation land of $22,500, or $975 per acre.

Sale 16 - Fitzwilliam Green, LLC to Smith, 6/24/08, Volume 2518 Page 24, 33.26 acres
with 280 feet of frontage on the north side of Fitzwilliam Road, 878 feet on the south
side of Fitzwilliam Road and 24 feet on the north side of Route 119 in Fitzwilliam sold
for $130,000. 25.6 acres are subject to a Conservation Easement, of which 9 acres are
level field with outstanding soils. This is the new site of Tracie Smith’s Community
Supported Agriculture operation (CSA). There is a 2 acre exclusion area for one
dwelling, plus a 5.7 acre wooded area in the rear that is not encumbered, but intended
for future protection. Deducing $79,000 for the estimated value of the 7.7 acres not
encumbered by the Easement, results in an extracted price of $51,000 for the
conservation land, or $1,992 per acre.

Sale 17 - Finn to Burt, 1/8/10, Volume 2617 Page 604, 40 acres with right of way
access from Glebe Road in Westmoreland sold for $24,000, or $600 per acre. The
distance from Glebe Road is about 3,600 feet. There is minimal timber value due to a
harvest about 10 years ago. This is a non buildable recreational wood lot. In my
opinion, the price was low.

Sale 18 - Trask Estate to Forecastle Timber NH, LLC, 3/19/09, Volume 2561 Page 260,
51 acres located on Old Bartlett Road, about 2,600 feet from Atherton Hill Road in
Chesterfield, sold for $35,000, or $678 per acre. About 8 acres are wetlands.
The property is protected by a Conservation Easement that prevents any development.
Forestry and agriculture are allowed. The buyer is an abutter. The available timber
value is about $250 per acre.
Sale 19 - The Cabot 1967 Trust to Green, 3/25/08, Volume 2499 Page 403, 52.89 acres with frontage on Route 12 and 2,000 feet on the Connecticut River in Walpole sold for $245,000. This is the Ballam Farm which is encumbered by a Conservation Easement, with a 1 acre farm homestead exclusion area. Deducting $125,000 for the appraised value of this site, results in an extracted price of $120,000 for the 51.89 acres of conservation land, or $2,313 per acre. Most of the land has prime agricultural soils. There are some negative factors, including traffic noise, abutting commercial activity and rights for public access.

Sale 20 - King & Faulkner to Trails Unlimited, LLC, 1/11/07, Volume 2409 Page 26, 640.8 acres off Emerson Brook Drive in Gilsun and Marlow sold for $410,000, or $640 per acre. There is minimal timber value due to a partial clear cut in 1999. The property was protected by a Conservation Easement on December 22, 2006, with 230 acres “forever” wild. There is a reserved right to build one dwelling within a 10 acre envelope. Deducting $75,000 for the estimated value of this site, results in an adjusted selling price of $335,000 for the 630.8 acres of conservation land, or $531 per acre.

VALUATION

Each sale has been compared to the relevant subject parcel, with consideration given to date of transfer, location, size, frontage, access, topography, soils, timber value, views, zoning and development potential. The “Before” values reflect discounts for subdivision and selling costs. I have also considered Current Use change of use taxes. For example, if the subject 3.5 acre lot were sold, a 10% penalty would be assessed by the town at closing. Lots along River Road would most likely exceed 10 acres in size, therefore, no change of use tax would not be due at the time of transfer, however, most typical buyers would take this factor into account, which impacts price.

In my opinion, based on the market data, the Cheshire County Farm properties, located on River Road, Partridge Brook Road, Ferry Road and the Connecticut River, in Westmoreland, New Hampshire, had the following values on March 1, 2010:

<table>
<thead>
<tr>
<th>Parcel</th>
<th>Size</th>
<th>Before the CE</th>
<th>After the CE</th>
<th>Of the CE</th>
</tr>
</thead>
<tbody>
<tr>
<td>R11-11</td>
<td>3.50</td>
<td>$62,000</td>
<td>$5,500</td>
<td>$56,500</td>
</tr>
<tr>
<td>R11-4</td>
<td>6.37</td>
<td>6,400</td>
<td>6,400</td>
<td>0</td>
</tr>
<tr>
<td>R11-3</td>
<td>36.00</td>
<td>145,000</td>
<td>47,000</td>
<td>98,000</td>
</tr>
<tr>
<td>R9-32</td>
<td>109.00</td>
<td>590,000</td>
<td>174,000</td>
<td>416,000</td>
</tr>
<tr>
<td>R9-1</td>
<td>470.13</td>
<td>726,000</td>
<td>370,000</td>
<td>356,000</td>
</tr>
<tr>
<td>Total</td>
<td>625.00</td>
<td>$1,529,400</td>
<td>$602,900</td>
<td>$926,500</td>
</tr>
</tbody>
</table>

Monadnock Appraisal Company
If you have any questions, please advise.

Sincerely,

John T. Newcombe
NHCG 43
CERTIFICATION

I certify that to the best of my knowledge and belief:

- The statements of fact contained in this report are true and correct.
- The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions and are my personal, impartial, and unbiased professional analyses, opinions, and conclusions.
- I have no present or prospective interest in the property that is the subject of this report and no personal interest with respect to the parties involved.
- I have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.
- My engagement in this assignment was not contingent upon developing or reporting predetermined results.
- My compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
- The reported analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the requirements of the Code of Professional Ethics & Standards of Professional Appraisal Practice of the Appraisal Institute, which include the Uniform Standards of Professional Appraisal Practice.
- The use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives.
- I have made a personal inspection of the property that is the subject of this report. No one provided significant real property professional assistance to the person signing this certification.

John T. Newcombe
NHCG 43

Monadnock Appraisal Company
ASSUMPTIONS AND LIMITING CONDITIONS

1) This is a Restricted Use Appraisal Report, which is intended to comply with the reporting requirements set forth under Standard Rule 2-2(c) of the Uniform Standards of Professional Appraisal Practice. As such, it might not include full discussions of the data, reasoning, and analyses that were used to develop the appraiser's opinion of value. Supporting documentation concerning the data, reasoning, and analyses is retained in the appraiser's file. The information in this report is specific to the needs of the client and for the stated intended use. The appraiser is not responsible for unauthorized use of this report.

2) No responsibility is assumed for legal or title considerations. Title to the property is assumed to be good and marketable. The property is appraised free and clear of any or all liens and encumbrances, unless otherwise stated in this report.

3) Responsible ownership and competent property management are assumed unless otherwise stated in this report.

4) The information furnished by others is believed to be reliable, however, no warranty is given for its accuracy.

5) All engineering is assumed to be correct. Any plot plans and illustrative material in this report are included only to assist the reader in visualizing the property.

6) It is assumed that there are no hidden or unapparent conditions of the property, subsoil, or structures that render it more or less valuable. No responsibility is assumed for such conditions or for arranging for engineering studies that may be required to discover them.

7) It is assumed that there is full compliance with all applicable federal, state, and local environmental regulations and laws unless otherwise stated in this report.

8) It is assumed that all applicable zoning and use regulations and restrictions have been complied with, unless a nonconformity has been stated, defined, and considered in this report.

9) It is assumed that all required licenses, certificates of occupancy or other legislative or administrative authority from any local, state, or national governmental or private entity or organization have been or can be obtained or renewed for any use on which the value estimates contained in this report are based.

10) Any proposed improvements are assumed to be completed in a good workmanlike manner in accordance with the submitted plans and specifications.

11) Any sketch in this report may show approximate dimensions and is included to assist the reader in visualizing the property. Maps and exhibits are provided for reference purposes only. No guarantee as to accuracy is expressed or implied unless otherwise stated.

Monadnock Appraisal Company
ASSUMPTIONS AND LIMITING CONDITIONS

12) It is assumed that the utilization of the land and improvements is within the boundaries or property lines described and that there is no encroachment or trespass unless otherwise stated in this report.

13) The appraiser is not qualified to detect hazardous waste and/or toxic materials. Any comment by the appraiser that might suggest the possibility of the presence of such substances should not be taken as confirmation of the presence of hazardous waste and/or toxic materials. Such determination would require investigation by a qualified expert in the field of environmental assessment. The presence of substances such as asbestos, lead based paint, or other potentially hazardous materials may affect the value of the property. The appraiser’s value estimate is predicated on the assumption that there is no such material on or in the property that would cause a loss in value unless otherwise stated in this report. No responsibility is assumed for any environmental conditions, or for any expertise or engineering knowledge required to discover them. The appraiser’s descriptions and resulting comments are the result of the routine observations made during the appraisal process.

14) Unless otherwise stated, the subject property is appraised without a specific compliance survey having been conducted to determine if the property is or is not in conformance with the requirements of the Americans with Disabilities Act. The presence of architectural and communications barriers that are structural in nature that would restrict access by disabled individuals may adversely affect the property’s value, marketability, or utility.

15) The distribution, if any, of the total valuation in this report between land and improvements applies only under the stated program of utilization. The separate allocations for land and buildings must not be used in conjunction with any other appraisal and are invalid if so used.

16) Possession of this report, or a copy thereof, does not carry with it the right of publication. It may not be used for any purpose by any person other than the party to whom it is addressed without the written consent of the appraiser, and in any event, only with the proper written qualification and only in its entirety.

17) Neither all nor any part of the contents of this report (especially any conclusions as to value, the identity of the appraiser, or the firm with which the appraiser is connected) shall be disseminated to the public through advertising, public relations, new sales, or other media without prior written consent and approval of the appraiser.
QUALIFICATIONS AND EXPERIENCE

John T. Newcombe
NHCG #43

Education

Employment
E.F. Greene & Assoc. - Fee Appraiser/Supervisor 3/76 - 7/82
Presently Fee Appraiser/Owner - Monadnock Appraisal Company

Experience
Type of appraisals: residential, commercial, industrial, mortgage loan, acquisition, tax revaluations, tax abatement, conservation easements, employee relocation.

Completed Appraisals For
Lending Institutions - Citizens Mortgage; Ocean National Bank; Savings Bank of Walpole; TD Bank, NA; Merrimack Mortgage; Connecticut River Bank; Service Credit Union; People's United Bank.

Attorneys - Lane & Bentley; Bradley & Faulkner; McLane Law Firm; Choate, Hall & Stewart; Ropes & Gray; Hale & Dorr.

Miscellaneous - J.M. Forbes & Co.; Prudential Relocation; Harris Center for Conservation Education; Society for the Protection of NH Forests; Fiduciary Trust; Monadnock Conservancy; Audubon Society of New Hampshire; past assessor for the towns of Nelson and Waterville Valley; assessing experience in ten NH towns.
October 25, 2011

Ryan Owens, Executive Director  
Monadnock Conservancy  
15 Eagle Court 2nd Fl  
PO Box 337  
Keene, NH 03431-0337

Ryan,

Please see the attached brief summary of my findings regarding the Cheshire County Farm ecological inventory. This information is a supplemental guide along with the various graphs and tables provided in this email.

If you have any questions or need additional data please do not hesitate to contact my office.

Best regards-

Jeffry N Littleton  
Ecologist
Birds
- Breeding bird surveys provided relative abundance data on 56 species recorded within and adjacent to floodplains and riparian areas (see relative abundance graphs)
  - 3 species (veery, wood thrush, and willow flycatcher) are considered as species of conservation concern
  - Breeding bird surveys consisted of 5-minute point counts at 11 stations and were conducted on 5/24/11 and 6/26/11
- A total of 96 species have been recorded through systematic surveys and incidental observations (see species list)
  - 10 species are considered species of conservation concern
  - Of these 10 species, the American black duck, northern harrier, peregrine falcon, and purple finch were observed only during migration

Mammals
- A total of 19 species were identified through incidental observations of tracks, scat, visual, and browse (see species list)
- One species of conservation concern was observed (bobcat)
  - Derek Broman (graduate research assistant at UNH) has been working with Dr. Livaitis on a bobcat study within the Monadnock region, tracking radio-collared individuals from January-September 2010
  - While they have no data on a radio-collared bobcat that has visited the Cheshire County Farm they have tracked a male bobcat (3.5 years old at the time of the study) nearby and may have visited the property previously or if still alive may visit it in the future (see the Westmoreland bobcat map: green dots are location data and green polygon represents the composite home range of this individual)

Amphibians
- A total of nine species were identified through incidental observations (see species list)

Reptiles
- A total of two species were identified through incidental observations (see species list)
- Three species of conservation concern have a high probability of being present on the property, including eastern smooth green snake, wood turtle, and northern leopard frog

Plants
- A total of 9 species of conservation concern were recorded on the property
- A total of 68 ginseng plants were recorded (22 mature and 46 immature plants)
- Two patches of Virginia waterleaf were confirmed to still be present within the old floodplain forest
- Two patches of mayapple were present; one in the old floodplain forest and one in the open field down from the nursing home near Partridge Brook (the latter being the largest patch observed)
- Stickseed was confirmed in its original location but further investigations found that the population was much larger than previously recorded along the bank of Partridge Brook near the River Road bridge
• Hackberry was confirmed to be present along the bank of the exemplary Silver maple floodplain forest in the northwestern part of the property
• Sycamore was located along Partridge Brook
• Squirrel corn was located in the rich mesic forest community
• 12 species of invasive plants have been observed

Wildlife Habitats
• Five WAP habitats have been observed (see list)

Natural Communities
• Four natural communities have been observed throughout the property (see list)
• Two natural communities have been previously identified as exemplary by the NH natural Heritage Bureau

Basic Recommendations
• Reroute the nature trail away from ginseng
• Develop an invasive species management plan
Relative Abundance of Birds

![Graph showing relative abundance of bird species](image-url)
<table>
<thead>
<tr>
<th>Family</th>
<th>Scientific</th>
<th>Common</th>
<th>Conservation Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ardeidae</td>
<td><em>Ardea herodias</em></td>
<td>Great blue heron</td>
<td></td>
</tr>
<tr>
<td>Anatidae</td>
<td><em>Branta canadensis</em></td>
<td>Canada goose</td>
<td></td>
</tr>
<tr>
<td>Anatidae</td>
<td><em>Aix sponsa</em></td>
<td>Wood duck</td>
<td></td>
</tr>
<tr>
<td>Anatidae</td>
<td><em>Anas rubripes</em></td>
<td>American black duck</td>
<td>SC</td>
</tr>
<tr>
<td>Anatidae</td>
<td><em>Anas platyrhynchos</em></td>
<td>Mallard</td>
<td></td>
</tr>
<tr>
<td>Anatidae</td>
<td><em>Lophodytes cucullatus</em></td>
<td>Hooded merganser</td>
<td></td>
</tr>
<tr>
<td>Anatidae</td>
<td><em>Mergus merganser</em></td>
<td>Common merganser</td>
<td></td>
</tr>
<tr>
<td>Laridae</td>
<td><em>Larus argentatus</em></td>
<td>Herring gull</td>
<td></td>
</tr>
<tr>
<td>Cathartidae</td>
<td><em>Cathartes aura</em></td>
<td>Turkey vulture</td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Haliaeetus</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accipitridae</td>
<td><em>Leucocephalus</em></td>
<td>Bald eagle</td>
<td>T</td>
</tr>
<tr>
<td>Accipitridae</td>
<td><em>Circus cyaneus</em></td>
<td>Northern harrier</td>
<td>E</td>
</tr>
<tr>
<td>Accipitridae</td>
<td><em>Buteo jamaicensis</em></td>
<td>Red-tailed hawk</td>
<td></td>
</tr>
<tr>
<td>Accipitridae</td>
<td><em>Accipiter cooperi</em></td>
<td>Cooper's hawk</td>
<td></td>
</tr>
<tr>
<td>Accipitridae</td>
<td><em>Accipiter striatus</em></td>
<td>Sharp-shinned hawk</td>
<td></td>
</tr>
<tr>
<td>Accipitridae</td>
<td><em>Pandion haliaetus</em></td>
<td>Osprey</td>
<td>SC</td>
</tr>
<tr>
<td>Falconidae</td>
<td><em>Falco peregrinus</em></td>
<td>Peregrine falcon</td>
<td>T</td>
</tr>
<tr>
<td>Charadriidae</td>
<td><em>Charadrius vociferus</em></td>
<td>Killdeer</td>
<td></td>
</tr>
<tr>
<td>Scolopacidae</td>
<td><em>Actitis macularia</em></td>
<td>Spotted sandpiper</td>
<td></td>
</tr>
<tr>
<td>Phasianidae</td>
<td><em>Bonasa umbellus</em></td>
<td>Ruffed grouse</td>
<td>*</td>
</tr>
<tr>
<td>Phasianidae</td>
<td><em>Meleagris gallopavo</em></td>
<td>Wild turkey</td>
<td></td>
</tr>
<tr>
<td>Columbidae</td>
<td><em>Columbia livia</em></td>
<td>Rock pigeon</td>
<td></td>
</tr>
<tr>
<td>Family</td>
<td>Scientific</td>
<td>Common</td>
<td>Conservation Status</td>
</tr>
<tr>
<td>------------</td>
<td>-----------------------------</td>
<td>-------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Columbidae</td>
<td><em>Zenaida macroura</em></td>
<td>Mourning dove</td>
<td></td>
</tr>
<tr>
<td>Trochillidae</td>
<td><em>Archilochus colubris</em></td>
<td>Ruby-throated hummingbird</td>
<td></td>
</tr>
<tr>
<td>Alcedinidae</td>
<td><em>Ceryle alcyon</em></td>
<td>Belted kingfisher</td>
<td></td>
</tr>
<tr>
<td>Caprimulgidae</td>
<td><em>Chordeiles minor</em></td>
<td>Common nighthawk</td>
<td></td>
</tr>
<tr>
<td>Picidae</td>
<td><em>Sphyrapicus varius</em></td>
<td>Yellow-bellied sapsucker</td>
<td></td>
</tr>
<tr>
<td>Picidae</td>
<td><em>Melanerpes carolinus</em></td>
<td>Red-bellied woodpecker</td>
<td></td>
</tr>
<tr>
<td>Picidae</td>
<td><em>Picoides pubescens</em></td>
<td>Downy woodpecker</td>
<td></td>
</tr>
<tr>
<td>Picidae</td>
<td><em>Picoides villosus</em></td>
<td>Hairy woodpecker</td>
<td></td>
</tr>
<tr>
<td>Picidae</td>
<td><em>Colaptes auratus</em></td>
<td>Northern flicker</td>
<td></td>
</tr>
<tr>
<td>Picidae</td>
<td><em>Dryocopus pileatus</em></td>
<td>Pileated woodpecker</td>
<td></td>
</tr>
<tr>
<td>Tyrannidae</td>
<td><em>Sayornis phoebe</em></td>
<td>Eastern phoebe</td>
<td></td>
</tr>
<tr>
<td>Tyrannidae</td>
<td><em>Contopus virens</em></td>
<td>Eastern wood-pewee</td>
<td></td>
</tr>
<tr>
<td>Tyrannidae</td>
<td><em>Myiarchus crinitus</em></td>
<td>Great-crested flycatcher</td>
<td></td>
</tr>
<tr>
<td>Tyrannidae</td>
<td><em>Tyrannus tyrannus</em></td>
<td>Eastern kingbird</td>
<td></td>
</tr>
<tr>
<td>Tyrannidae</td>
<td><em>Empidonax tralliidae</em></td>
<td>Willow flycatcher</td>
<td></td>
</tr>
<tr>
<td>Tyrannidae</td>
<td><em>Empidonax minimus</em></td>
<td>Least flycatcher</td>
<td></td>
</tr>
<tr>
<td>Corvidae</td>
<td><em>Cyanocitta cristata</em></td>
<td>Blue jay</td>
<td></td>
</tr>
<tr>
<td>Corvidae</td>
<td><em>Corvus corax</em></td>
<td>Common raven</td>
<td></td>
</tr>
<tr>
<td>Corvidae</td>
<td><em>Corvus brachyrhynchos</em></td>
<td>American crow</td>
<td></td>
</tr>
<tr>
<td>Apodidae</td>
<td><em>Chaetura pelagica</em></td>
<td>Chimney swift</td>
<td></td>
</tr>
<tr>
<td>Hirundinidae</td>
<td><em>Tachycineta bicolor</em></td>
<td>Tree swallow</td>
<td></td>
</tr>
<tr>
<td>Hirundinidae</td>
<td><em>Hirundo rustica</em></td>
<td>Barn swallow</td>
<td></td>
</tr>
<tr>
<td>Family</td>
<td>Scientific</td>
<td>Common</td>
<td>Conservation Status</td>
</tr>
<tr>
<td>-----------------</td>
<td>--------------------------------</td>
<td>--------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Paridae</td>
<td>Poecile atricapilla</td>
<td>Black-capped chickadee</td>
<td></td>
</tr>
<tr>
<td>Paridae</td>
<td>Baeolophus bicolor</td>
<td>Tufted titmouse</td>
<td></td>
</tr>
<tr>
<td>Sittidae</td>
<td>Sitta carolinensis</td>
<td>White-breasted nuthatch</td>
<td></td>
</tr>
<tr>
<td>Certhiidae</td>
<td>Certhia americana</td>
<td>Brown creeper</td>
<td></td>
</tr>
<tr>
<td>Troglodytidae</td>
<td>Troglodytes troglodytes</td>
<td>Winter wren</td>
<td></td>
</tr>
<tr>
<td>Troglodytidae</td>
<td>Troglodytes aedon</td>
<td>House wren</td>
<td></td>
</tr>
<tr>
<td>Regulidae</td>
<td>Regulus satrapa</td>
<td>Golden-crowned kinglet</td>
<td></td>
</tr>
<tr>
<td>Regulidae</td>
<td>Regulus calendula</td>
<td>Ruby-crowned kinglet</td>
<td></td>
</tr>
<tr>
<td>Mimidae</td>
<td>Dumetella carolinensis</td>
<td>Gray catbird</td>
<td></td>
</tr>
<tr>
<td>Turdidae</td>
<td>Catharus guttatus</td>
<td>Hermit thrush</td>
<td></td>
</tr>
<tr>
<td>Turdidae</td>
<td>Catharus fuscescens</td>
<td>Veery</td>
<td></td>
</tr>
<tr>
<td>Turdidae</td>
<td>Hylocichla mustelina</td>
<td>Wood thrush</td>
<td>RC</td>
</tr>
<tr>
<td>Turdidae</td>
<td>Sialia sialis</td>
<td>Eastern bluebird</td>
<td></td>
</tr>
<tr>
<td>Turdidae</td>
<td>Turdus migratorius</td>
<td>American robin</td>
<td></td>
</tr>
<tr>
<td>Bombycillidae</td>
<td>Bombycilla cedrorum</td>
<td>Cedar waxwing</td>
<td></td>
</tr>
<tr>
<td>Vireonida</td>
<td>Vireo olivaceus</td>
<td>Red-eyed vireo</td>
<td></td>
</tr>
<tr>
<td>Vireonida</td>
<td>Vireo solitarius</td>
<td>Blue-headed vireo</td>
<td></td>
</tr>
<tr>
<td>Vireonida</td>
<td>Vireo gilvus</td>
<td>Warbling vireo</td>
<td></td>
</tr>
<tr>
<td>Parulidae</td>
<td>Setophaga petechia</td>
<td>Yellow warbler</td>
<td></td>
</tr>
<tr>
<td>Parulidae</td>
<td>Setophaga pensylvanica</td>
<td>Chestnut-sided warbler</td>
<td></td>
</tr>
<tr>
<td>Parulidae</td>
<td>Setophaga fuscus</td>
<td>Blackburnian warbler</td>
<td></td>
</tr>
<tr>
<td>Parulidae</td>
<td>Setophaga caeruleascens</td>
<td>Black-throated blue warbler</td>
<td></td>
</tr>
<tr>
<td>Family</td>
<td>Scientific</td>
<td>Common</td>
<td>Conservation Status</td>
</tr>
<tr>
<td>------------</td>
<td>----------------</td>
<td>----------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Parulidae</td>
<td>Setophaga coronata</td>
<td>Yellow-rumped warbler</td>
<td></td>
</tr>
<tr>
<td>Parulidae</td>
<td>Setophaga ruticilla</td>
<td>American redstart</td>
<td></td>
</tr>
<tr>
<td>Parulidae</td>
<td>Setophaga virens</td>
<td>Black-throated green warbler</td>
<td></td>
</tr>
<tr>
<td>Parulidae</td>
<td>Setophaga pinus</td>
<td>Pine warbler</td>
<td></td>
</tr>
<tr>
<td>Parulidae</td>
<td>Setophaga palmarum</td>
<td>Palm warbler</td>
<td></td>
</tr>
<tr>
<td>Parulidae</td>
<td>Mniotilta varia</td>
<td>Black-and-white warbler</td>
<td></td>
</tr>
<tr>
<td>Parulidae</td>
<td>Seiurus aurocapillus</td>
<td>Ovenbird</td>
<td></td>
</tr>
<tr>
<td>Parulidae</td>
<td>Geothlypis trichas</td>
<td>Common yellowthroat</td>
<td></td>
</tr>
<tr>
<td>Parulidae</td>
<td>Parkisia motacilla</td>
<td>Louisianna waterthrush</td>
<td></td>
</tr>
<tr>
<td>Fringillidae</td>
<td>Carpodacus mexicanus</td>
<td>House finch</td>
<td></td>
</tr>
<tr>
<td>Fringillidae</td>
<td>Carpodacus purpureus</td>
<td>Purple finch</td>
<td>*</td>
</tr>
<tr>
<td>Fringillidae</td>
<td>Carduelis tristis</td>
<td>American goldfinch</td>
<td></td>
</tr>
<tr>
<td>Thraupidea</td>
<td>Piranga olivacea</td>
<td>Scarlet tanager</td>
<td></td>
</tr>
<tr>
<td>Passeridae</td>
<td>Passer domesticus</td>
<td>House sparrow</td>
<td></td>
</tr>
<tr>
<td>Cardinalidae</td>
<td>Passerina cyanea</td>
<td>Indigo bunting</td>
<td></td>
</tr>
<tr>
<td>Cardinalidae</td>
<td>Cardinalis cardinalis</td>
<td>Northern cardinal</td>
<td></td>
</tr>
<tr>
<td>Cardinalidae</td>
<td>Pheucticus ludovicianus</td>
<td>Rose-breasted grosbeak</td>
<td></td>
</tr>
<tr>
<td>Emberizidae</td>
<td>Pipilo erythrophthalmus</td>
<td>Rufous-sided towhee</td>
<td></td>
</tr>
<tr>
<td>Emberizidae</td>
<td>Spizella arborea</td>
<td>American tree sparrow</td>
<td></td>
</tr>
<tr>
<td>Emberizidae</td>
<td>Spizella passerina</td>
<td>Chipping sparrow</td>
<td></td>
</tr>
<tr>
<td>Emberizidae</td>
<td>Passerculus sandwicensis</td>
<td>Savannah sparrow</td>
<td></td>
</tr>
<tr>
<td>Emberizidae</td>
<td>Melospiza melodia</td>
<td>Song sparrow</td>
<td></td>
</tr>
<tr>
<td>Family</td>
<td>Genus and Species</td>
<td>Common Name</td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------</td>
<td>--------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Emberizidae</td>
<td><em>Melospiza lincolnii</em></td>
<td>Lincoln's sparrow</td>
<td></td>
</tr>
<tr>
<td>Emberizidae</td>
<td><em>Melospiza georgiana</em></td>
<td>Swamp sparrow</td>
<td></td>
</tr>
<tr>
<td>Emberizidae</td>
<td><em>Zonotrichia albicollis</em></td>
<td>White-throated sparrow</td>
<td></td>
</tr>
<tr>
<td>Emberizidae</td>
<td><em>Zonotrichia leucophrys</em></td>
<td>White-crowned sparrow</td>
<td></td>
</tr>
<tr>
<td>Icteridae</td>
<td><em>Molothrus ater</em></td>
<td>Brown-headed cowbird</td>
<td></td>
</tr>
<tr>
<td>Icteridae</td>
<td><em>Agelaius phoeniceus</em></td>
<td>Red-winged blackbird</td>
<td></td>
</tr>
<tr>
<td>Icteridae</td>
<td><em>Quiscalus quiscula</em></td>
<td>Common grackle</td>
<td></td>
</tr>
<tr>
<td>Icteridae</td>
<td><em>Icterus galbula</em></td>
<td>Baltimore oriole</td>
<td></td>
</tr>
<tr>
<td>Sturnidae</td>
<td><em>Sturnus vulgaris</em></td>
<td>European starling</td>
<td></td>
</tr>
</tbody>
</table>

\[E = \] State Endangered

\[T = \] State Threatened

\[RC = \] Regional Concern

\[SC = \] State Concern

\[* = NH Species of Conservation Concern\]

List based on NH Fish and Game (2011) and Partners in Flight (2011)

**Data Sources:** Moosewood Ecological LLC (2011), Ken Klapper (2010-2011), Wendy Ward and ??? (????-????)
<table>
<thead>
<tr>
<th>Family</th>
<th>Scientific</th>
<th>Common</th>
<th>Conservation Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canidae</td>
<td><em>Canis latrans</em></td>
<td>Eastern coyote</td>
<td></td>
</tr>
<tr>
<td>Canidae</td>
<td><em>Vulpes vulpes</em></td>
<td>Red fox</td>
<td></td>
</tr>
<tr>
<td>Canidae</td>
<td><em>Urocyon cinereoargenteus</em></td>
<td>Gray fox</td>
<td></td>
</tr>
<tr>
<td>Castoridae</td>
<td><em>Castor canadiensis</em></td>
<td>American beaver</td>
<td></td>
</tr>
<tr>
<td>Cervidae</td>
<td><em>Alces alces</em></td>
<td>Moose</td>
<td></td>
</tr>
<tr>
<td>Cervidae</td>
<td><em>Odocoileus virginianus</em></td>
<td>White-tailed deer</td>
<td></td>
</tr>
<tr>
<td>Cricetidae</td>
<td><em>Ondatra zibethicus</em></td>
<td>Muskrat</td>
<td></td>
</tr>
<tr>
<td>Felidae</td>
<td><em>Felis rufus</em></td>
<td>Bobcat</td>
<td>SC</td>
</tr>
<tr>
<td>Muridae</td>
<td><em>Microtus pennsylvanicus</em></td>
<td>Meadow vole</td>
<td></td>
</tr>
<tr>
<td>Mustelidae</td>
<td><em>Mustela spp.</em></td>
<td>Weasel</td>
<td></td>
</tr>
<tr>
<td>Mustelidae</td>
<td><em>Mustela vison</em></td>
<td>Mink</td>
<td></td>
</tr>
<tr>
<td>Procyonidae</td>
<td><em>Procyon lotor</em></td>
<td>Raccoon</td>
<td></td>
</tr>
<tr>
<td>Erethizontidae</td>
<td><em>Erethizon dorsatum</em></td>
<td>North American porcupine</td>
<td></td>
</tr>
<tr>
<td>Muridae</td>
<td><em>Peromyscus spp.</em></td>
<td>Deer or White-footed mouse</td>
<td></td>
</tr>
<tr>
<td>Sciuridae</td>
<td><em>Marmota monax</em></td>
<td>Woodchuck</td>
<td></td>
</tr>
<tr>
<td>Sciuridae</td>
<td><em>Sciurus carolinensis</em></td>
<td>Gray squirrel</td>
<td></td>
</tr>
<tr>
<td>Sciuridae</td>
<td><em>Tamias striatus</em></td>
<td>Eastern chipmunk</td>
<td></td>
</tr>
<tr>
<td>Sciuridae</td>
<td><em>Tamiasciurus hudsonicus</em></td>
<td>Red squirrel</td>
<td></td>
</tr>
<tr>
<td>Ursidae</td>
<td><em>Ursus americanus</em></td>
<td>Black bear</td>
<td></td>
</tr>
</tbody>
</table>

SC = State Concern
Data Sources: Moosewood Ecological LLC (2011), Wendy Ward and ??? (????-????), Steve Roberge (2011)
### Amphibians and Reptiles

<table>
<thead>
<tr>
<th>Family</th>
<th>Scientific</th>
<th>Common</th>
<th>Conservation Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Plethodontidae</strong></td>
<td><em>Plethodon cinereus</em></td>
<td>Redback salamander</td>
<td></td>
</tr>
<tr>
<td><strong>Salamandridae</strong></td>
<td><em>Notophthalmus v. viridescens</em></td>
<td>Red-spotted newt</td>
<td></td>
</tr>
<tr>
<td><strong>Bufonidae</strong></td>
<td><em>Bufo americanus</em></td>
<td>American toad</td>
<td></td>
</tr>
<tr>
<td><strong>Hylidae</strong></td>
<td><em>Hyla versicolor</em></td>
<td>Grey tree frog</td>
<td></td>
</tr>
<tr>
<td><strong>Hylidae</strong></td>
<td><em>Psuedacris crucifer</em></td>
<td>Spring peeper</td>
<td></td>
</tr>
<tr>
<td><strong>Ranidae</strong></td>
<td><em>Rana catesbeiana</em></td>
<td>Bullfrog</td>
<td></td>
</tr>
<tr>
<td><strong>Ranidae</strong></td>
<td><em>Rana clamitans</em></td>
<td>Green frog</td>
<td></td>
</tr>
<tr>
<td><strong>Ranidae</strong></td>
<td><em>Rana palustris</em></td>
<td>Pickerel frog</td>
<td></td>
</tr>
<tr>
<td><strong>Ranidae</strong></td>
<td><em>Rana sylvatica</em></td>
<td>Wood frog</td>
<td></td>
</tr>
<tr>
<td><strong>Chelydridae</strong></td>
<td><em>Chelydra serpentina</em></td>
<td>Common snapping turtle</td>
<td></td>
</tr>
<tr>
<td><strong>Colubridae</strong></td>
<td><em>Thamnophis s. sirtalis</em></td>
<td>Eastern garter snake</td>
<td></td>
</tr>
</tbody>
</table>

**Data Sources:** Moosewood Ecological LLC (2011), Wendy Ward and ??? (????-????), Steve Roberge (2011)
## Plants

### Species of Conservation Concern

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Conservation Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Panax quinquefolius</em></td>
<td>Ginseng</td>
<td>T</td>
</tr>
<tr>
<td><em>Hydrphyllum virginianum</em></td>
<td>Northern waterleaf</td>
<td>T</td>
</tr>
<tr>
<td><em>Hackelia virginiana</em></td>
<td>Stickseed</td>
<td>E</td>
</tr>
<tr>
<td><em>Podophyllum peltatum</em></td>
<td>Mayapple</td>
<td>IND</td>
</tr>
<tr>
<td><em>Celtis occidentalis</em></td>
<td>Hackberry</td>
<td>SW</td>
</tr>
<tr>
<td><em>Juglans cinerea</em></td>
<td>Butternut</td>
<td>SW</td>
</tr>
<tr>
<td><em>Plantanus occidentalis</em></td>
<td>Sycamore</td>
<td>SW</td>
</tr>
<tr>
<td><em>Cryptotaenia canadensis</em></td>
<td>Canada honewort</td>
<td>SW</td>
</tr>
<tr>
<td><em>Dicentra canadensis</em></td>
<td>Squirrel corn</td>
<td>SW</td>
</tr>
</tbody>
</table>

E = State Endangered  
T = State Threatened  

**State Watch (SW):** Native plants vulnerable to becoming threatened based on having 21-100 natural occurrences in the state observed within the last 20 years, or plants that are, in the judgement of experts, vulnerable to becoming threatened due to other important rarity and endangerment considerations (population size and trends, area of occupancy, overall viability, geographic distribution, habitat rarity and integrity, and/or degree of protection).

**Indeterminate (Ind):** Indeterminate taxa are under review for listing as endangered, threatened, or watch, but their rarity, nativity, taxonomy, and/or nomenclature are not clearly understood.

**Data Sources:** Moosewood Ecological LLC (2011), Wendy Ward and ??? (????-????)
### Invasive Plants

<table>
<thead>
<tr>
<th>Scientific</th>
<th>Common</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Rosa multiflora</em></td>
<td>Multiflora rose</td>
</tr>
<tr>
<td><em>Lonicera tatarica</em></td>
<td>Tatarian honeysuckle</td>
</tr>
<tr>
<td><em>Lonicera morrowii</em></td>
<td>Morrow's honeysuckle</td>
</tr>
<tr>
<td><em>Frangula alnus</em></td>
<td>Glossy buckthorn</td>
</tr>
<tr>
<td><em>Berberis thunbergii</em></td>
<td>Japanese barberry</td>
</tr>
<tr>
<td><em>Laelagnus umbellata</em></td>
<td>Autumn olive</td>
</tr>
<tr>
<td><em>Celastrus orbiculatus</em></td>
<td>Asiatic bittersweet</td>
</tr>
<tr>
<td><em>Hesperis matronalis</em></td>
<td>Dame's rocket</td>
</tr>
<tr>
<td><em>Iris pseudocorus</em></td>
<td>Yellow flag iris</td>
</tr>
<tr>
<td><em>Polygonum cuspidatum</em></td>
<td>Japanese knotweed</td>
</tr>
<tr>
<td><em>Lythrum salicaria</em></td>
<td>Purple loosestrife</td>
</tr>
<tr>
<td><em>Alliaria petiolata</em></td>
<td>Garlic mustard</td>
</tr>
</tbody>
</table>

List based on USDA NRCS (2011) and NE Wildflower Society (2011)

**Data Sources:** Moosewood Ecological LLC (2011), Wendy Ward and ??? (????-????)
### Habitats and Natural Communities

<table>
<thead>
<tr>
<th>Habitat (fine-scale)</th>
<th>Wildlife Action Plan Habitat Group</th>
<th>Natural Community Type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(Medium to Large-scale)</td>
</tr>
<tr>
<td>Upland forests</td>
<td>Hemlock-hardwood-pine forest</td>
<td>Hemlock-beech-oak-pine forest (S5)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hemlock-hardwood-pine forest</td>
</tr>
<tr>
<td></td>
<td>Appalacian-oak-pine forest</td>
<td>Rich mesic forest (S3)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rich red oak rocky woods (S2S3)*</td>
</tr>
<tr>
<td>Floodplains</td>
<td>Floodplain forest</td>
<td>Silver maple-wood nettle-ostrich fern</td>
</tr>
<tr>
<td></td>
<td></td>
<td>floodplain forest (S2)*</td>
</tr>
<tr>
<td>Grasslands</td>
<td>Grasslands</td>
<td>N/A</td>
</tr>
<tr>
<td>Shrub swamp</td>
<td>Marsh and shrub wetlands</td>
<td></td>
</tr>
<tr>
<td>Streams</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

* = Listed as an exemplary natural community (NH Natural Heritage Bureau 2011)
I have searched our database for records of rare species and exemplary natural communities on the property(s) identified in your request. Our database includes known records for species officially listed as Threatened or Endangered by either the state of New Hampshire or the federal government, as well as species and natural communities judged by experts to be at risk in New Hampshire but not yet formally listed.

<table>
<thead>
<tr>
<th>Natural Community</th>
<th>Mapping Precision</th>
<th>% within tract</th>
<th>Last Reported</th>
<th>Listing Status</th>
<th>Conservation Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rich red oak rocky woods</td>
<td>Good</td>
<td>4.1</td>
<td>1984</td>
<td>Federal</td>
<td>NII</td>
</tr>
<tr>
<td>Silver maple - wood nester - ostrich fern floodplain forest</td>
<td>Good</td>
<td>56</td>
<td>2007</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Ginseng (Panes quinquefolius)</td>
<td>Good</td>
<td>0</td>
<td>2007</td>
<td>Federal</td>
<td>NII</td>
</tr>
<tr>
<td>Northern Waterleaf (Hydrophyllum virginianum)</td>
<td>Good</td>
<td>95.3</td>
<td>2003</td>
<td>--</td>
<td>T</td>
</tr>
<tr>
<td>Stickleseed (Hackelia virginiana)</td>
<td>Good</td>
<td>78</td>
<td>1997</td>
<td>--</td>
<td>E</td>
</tr>
</tbody>
</table>

NIHB records within one mile of the property(s):

<table>
<thead>
<tr>
<th>Vertebrate species (for more information on animal species, contact Kim Tuttle, NH F&amp;G at 271-6544)</th>
<th>Last Reported</th>
<th>Listing Status</th>
<th>Conservation Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jefferson Salamander (Ambystoma jeffersonianum)</td>
<td>1995</td>
<td>--</td>
<td>SC</td>
</tr>
</tbody>
</table>

NOTE: This review cannot be used to satisfy a permit or other regulatory requirement to check for rare species or habitats that could be affected by a proposed project, since it provides detailed information only for records actually on the property.
<table>
<thead>
<tr>
<th>Natural Community</th>
<th>Federal</th>
<th>NH</th>
<th>Global</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcareous riverside seep</td>
<td>1994</td>
<td>--</td>
<td>--</td>
<td>S1</td>
</tr>
<tr>
<td>Red oak - ironwood - Pennsylvania sedge woodland</td>
<td>2007</td>
<td>--</td>
<td>--</td>
<td>S2</td>
</tr>
<tr>
<td><strong>Plant species</strong></td>
<td><strong>Federal</strong></td>
<td><strong>NH</strong></td>
<td><strong>Global</strong></td>
<td><strong>State</strong></td>
</tr>
<tr>
<td>Ginseng (Panax quinquefolius)</td>
<td>1977</td>
<td>--</td>
<td>T</td>
<td>G5</td>
</tr>
<tr>
<td>Dwarf Ragwort (Packera paupercula)</td>
<td>1994</td>
<td>--</td>
<td>T</td>
<td>G5</td>
</tr>
<tr>
<td>Kalm's Lobelia (Lobelia kalmii)</td>
<td>1989</td>
<td>--</td>
<td>T</td>
<td>G5</td>
</tr>
<tr>
<td>Climbing Fumitory (Adlumia fungosa)</td>
<td>1977</td>
<td>--</td>
<td>E</td>
<td>G4</td>
</tr>
<tr>
<td>Showy Orchis (Galearia spectabilis)</td>
<td>1999</td>
<td>--</td>
<td>T</td>
<td>G5</td>
</tr>
<tr>
<td>Shining Ladies' Tresses (Spiranthes lacida)</td>
<td>1988</td>
<td>--</td>
<td>E</td>
<td>G5</td>
</tr>
</tbody>
</table>

**Listing codes:**
- T = Threatened,
- E = Endangered,
- NC = Special Concern

**Rank prefix:**
- G = Global,
- S = State,
- T = Global or state rank for a sub-species or variety (taxon)

**Rank suffix:**
- 1-5 = Most (1) to least (5) imperiled.
- **-** = Not ranked.
- B = Breeding population.
- N = Non-breeding.
- H = Historical.
- X = Extirpated.

A negative result (no record in our database) does not mean that no rare species are present. Our data can only tell you of known occurrences, based on information gathered by qualified biologists and reported to our office. However, many areas have never been surveyed, or have only been surveyed for certain species. An on-site survey would provide better information on what species and communities are indeed present.

**NOTE:** This review cannot be used to satisfy a permit or other regulatory requirement to check for rare species or habitats that could be affected by a proposed project, since it provides detailed information only for records actually on the property.
Known locations of rare species and exemplary natural communities

Sensitive species are labelled but not mapped. All other records are clipped to the property boundaries. Occurrences not on the property are not shown.
New Hampshire Natural Heritage Bureau - Community Record

Rich red oak rocky woods

<table>
<thead>
<tr>
<th>Legal Status</th>
<th>Conservation Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal: Not listed</td>
<td>Global: Not ranked (need more information)</td>
</tr>
<tr>
<td>State: Not listed</td>
<td>State: Imperiled due to rarity or vulnerability</td>
</tr>
</tbody>
</table>

Description at this Location

| Conservation Rank: Historical records only - current condition unknown. |
| Comments on Rank: Large, no recent disturbance, with characteristic vegetation |
| General Area: 1984: Series of terraced bedrock and ledges with talus and rich depressions. Adequate soil and substrate to support closed canopy forest. |
| General Comments: 1984: Very similar to talus slope forest at Park Hill which has *Aldumia*. Need natural community field form. |

Management Comments:

Location

<table>
<thead>
<tr>
<th>Survey Site Name:</th>
<th>Cass Hill</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managed By:</td>
<td>Cheshire County Farm</td>
</tr>
<tr>
<td>County:</td>
<td>Cheshire</td>
</tr>
<tr>
<td>Town(s):</td>
<td>Westmoreland</td>
</tr>
<tr>
<td>Size:</td>
<td>35.4 acres</td>
</tr>
<tr>
<td>USGS quad(s):</td>
<td>Spofford (4207284)</td>
</tr>
<tr>
<td>Lat, Long:</td>
<td>42°57'36&quot;N, 072°27'38&quot;W</td>
</tr>
<tr>
<td>Elevation:</td>
<td>800 feet</td>
</tr>
<tr>
<td>Precision:</td>
<td>Within (but not necessarily restricted to) the area indicated on the map.</td>
</tr>
<tr>
<td>Dates documented</td>
<td>First reported: 1984. Last reported: 1984-08-10</td>
</tr>
</tbody>
</table>

New Hampshire Natural Heritage Bureau - Community Record

Silver maple - wood nettle - ostrich fern floodplain forest

<table>
<thead>
<tr>
<th>Legal Status</th>
<th>Conservation Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal: Not listed</td>
<td>Global: Not ranked (need more information)</td>
</tr>
<tr>
<td>State: Not listed</td>
<td>State: Imperiled due to rarity or vulnerability</td>
</tr>
</tbody>
</table>

Description at this Location

Conservation Rank: Fair quality, condition and/or landscape context ("C" on a scale of A-D).
Comments on Rank: Relatively undisturbed.

Detailed Description:

2007: Canopy is dominated by *Acer saccharinum* (silver maple). *Ulmus americana* (American elm) and *Acer negundo* (box elder) occur in the understory. *Laportea canadensis* (wood nettle) is abundant in the well developed herbaceous layer. Other common species include *Onoclea sensibilis* (sensitive fern), *Matteuccia struthiopteris* var. *pennsylvanica* (ostrich fern), *Impatiens capensis* (spotted touch-me-not), and the invasive *Lysmachia nummularia* (moneywort). *Phalaris arundinacea* (reed canary grass), another invasive species, is occasional. Several other species occur in low cover. 1997: Primarily *Acer saccharinum* (silver maple). Other species present include *Populus deltoides* (eastern cottonwood), *Boehmeria cylindrica* (false nettle), *Onoclea sensibilis* (sensitive fern), *Matteuccia struthiopteris* (ostrich fern), and *Laportea canadensis* (wood nettle). 1988: 70 percent *Acer saccharinum* (silver maple), 20 percent *Acer negundo* (box elder) and 5 percent *Ulmus americana* (elm).

General Area:

2007: This small floodplain patch is bordered on the east by a cemetery and upland forests sloping up to River Road. The Cheshire County Complex lies to the south; residential development to the north. 1998: Alluvial soil. Relatively undisturbed, small size.

General Comments:

1997: Slight bowl shape may trap water longer.

Management Comments:

Location

Survey Site Name: County Farm Site
Managed By: Cheshire County Farm

County: Cheshire
Town(s): Westmoreland
Size: 11.0 acres

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: Just north of County Farm along Partridge Brook, at its junction with the Connecticut River. Park at the bridge along River Road.

Dates documented

First reported: 1988-07-27  Last reported: 2007-07-02

Nichols, Bill. 2007 Field survey to Cheshire County Complex on July 2.
New Hampshire Natural Heritage Bureau - Plant Record

Northern Waterleaf (Hydrophyllum virginianum)

Legal Status | Conservation Status
---|---
Federal: Not listed | Global: Demonstrably widespread, abundant, and secure
State: Listed Threatened | State: Imperiled due to rarity or vulnerability

Description at this Location
Conservation Rank: Not ranked
Comments on Rank:

Detailed Description: 2003: 100-200 plants, with buds, in a tight clump of about 75 square feet. An additional clump of maybe 25 at the top of this gully, about 20 feet north of the main clump.


General Comments: Common plants around the site include ferns and yellow trout lily.


Location
Survey Site Name: Cass Hill, north of
Managed By: Cheshire County Farm
County: Cheshire Town(s): Westmoreland
Size: .4 acres
USGS quad(s): Spofford (4207284)
Lat, Long: 425816N, 0722818W
Elevation:

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: Go to the Cheshire County Farm along the Connecticut River (River Rd.) and park at the River/Woodland Trail parking lot south of the jail. Cross the road and proceed west along this trail toward the river and through a pasture. After passing through the second gate at the west side of the pasture, continue on the trail veering south. Proceed a short distance south along this trail to the first wooden bridge. Proceed 10-15 yards upstream (stay on the north side of the stream) to the gully side site on your left.

Dates documented
First reported: 2003-04-28 Last reported: 2003-05-06

New Hampshire Natural Heritage Bureau - Plant Record

Stickseed (*Hackelia virginiana*)

<table>
<thead>
<tr>
<th>Legal Status</th>
<th>Conservation Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal: Not listed</td>
<td>Global: Demonstrably widespread, abundant, and secure</td>
</tr>
<tr>
<td>State: Listed Endangered</td>
<td>State: Critically imperiled due to rarity or vulnerability</td>
</tr>
</tbody>
</table>

**Description at this Location**

**Conservation Rank:** Not ranked

**Comments on Rank:**

**Detailed Description:** 1997: No details.

**General Area:** 1997: Associated species include *Ulmus rubra* (slippery elm) and *Toxicodendron radicans* (poison ivy).

**General Comments:**

**Management Comments:**

**Location**

**Survey Site Name:** Partridge Brook

**Managed By:** Cheshire County Farm

**County:** Cheshire

**Town(s):** Westmoreland

**Size:** 2.8 acres

**USGS quad(s):** Spofford (4207284)

**Lat, Long:** 423829N, 0722751W

**Elevation:** 230 feet

**Precision:** Within (but not necessarily restricted to) the area indicated on the map.

**Directions:** [From Westmoreland take Rte. 63 north ca. 1.5 miles to left turn on River Road. Continue south ca. 0.7 miles to bridge over Partridge Brook.] Site is on north side of bridge, west side of the road.

**Dates documented**

**First reported:** 1997  
**Last reported:** 1997

Cheshire County Farm

Intervale Consulting

This report is based on a conversation between Mike Gnea and Julie Rubaud,
Nov. 15th, 2011.
Compiled by Julie Rubaud

Cheshire County Farm is a former prison and county farm. There are approximately 50 acres that would be suitable for a mixed vegetable incubator program in the immediate farm complex and more suitable land owned by the county south of the main complex. The county population is 77,000, the area is 729 square miles. The closest markets are in Keene, NH and across the river in Putney and Brattleboro, VT.

Overview - Stakeholders include the county itself, its people and the county government. The farm is currently publicly owned. County government and its delegates are decision makers. The larger agricultural community is also a stakeholder. Currently, the bulk of the arable land is leased to a farmer who has a 5 year lease. He grows corn and grass crops and runs a custom operation that services farmers along the Connecticut River Valley. The farmers tractors and equipment is stored at the site. Some advocates on county board would like to ensure that the land is used in such a way that it benefits more than this one farmer.

Also located on this site is a sewage treatment plan and a retirement home. Both are on county land and county-owned.

Land base: Larger fields with prime soils lend themselves well to mixed vegetable production. A blend of small and mid-sized vegetable growers with some other types of activity for diversity might be the best blend for the site. Farms ranging in size from 2 acres to 15 acres are appropriate for beginning farmers and intermediate level farmers. With the proper equipment, these size plots can be managed at a modest profit as either a second source of income or a sole source of income. The smaller plots are appropriate for newer farmers who are scaling up from a back yard operation or who have spent a year or two working on other farms. The larger size plots are appropriate for growers with 3+ years experience on other farms and who are ready to explore their own venture.

Production and Sales – New farmers are often at a disadvantage in the marketplace where more established growers have developed longer term relationships with accounts. It can be difficult to enter into sales relationships with stores, restaurants and even farmers markets. A successful incubation program must offer some guidance in this area. At the Intervale this type of assistance comes in many ways:

1. An application process which requires a full business plan with markets and products clearly defined. Intervale staff is available to guide the applicant through the business plan writing
process. The Land Committee and the existing Intervale farmers provide feedback on the business plan.

2. Marketing strategies are developed with help of Intervale staff if necessary.

3. Farmers help each other to find unique markets and create an atmosphere of respectful and friendly non-competition.

4. Intervale Center has historically worked to open up new markets such as institutional relationships with Fletcher Allen Medical Center and the Intervale Food Hub. While this type of market development is not feasible for all non-profits, it is important to explore the partnerships and relationships between the private and non-profit sectors and to discover areas where market innovation can take place.

It is recommended that some sort of market study take place that can help guide the creation of an incubator program. The size of the future farms and their product mix must reflect the needs of the marketplace and new farmers can benefit from some guidance in making those determinations.

In the Keene area, three different tiers of market scale could be accessed:

1. Direct market to consumers through farmers markets and CSA’s
2. Direct to retail and restaurant sales
3. Wholesale through distributorships and delivery services into the larger Boston and Hartford metropolitan areas.

The current infrastructure of the prison campus may lend itself well for aggregation of local products into both local and regional markets. Exploring relationships with innovative marketing structures is key to ensuring adequate market share for new growers. Possible models and contacts in this area include:

1. Sona Desai at Intervale Food Hub (375 member CSA with workplace delivery, aggregation of products from 25 farms) contact info: sona@intervale.org, ph 802.660.0440

2. JD Kemp at Food Ex, a logistics and delivery operation that has created an innovative platform to serve institutional buyers and regional growers in the Boston area. Call - 1.888.789.LOCAL(5622) info@orfoodex.com

3. Black River Produce

4. Local restaurants, coops, independent grocery stores

5. Local stakeholders in the farm to school movement

Encouraging a product mix that meets a need in the market place is key to incubators’ success. This can include ornamentals, cut flowers, nursery stock, and fruit production. Using the existing extension knowledge in fruit production is key.
Appendix G. – Jail Adaptive Re-Use Cost Estimate Details

Cheshire County Farm Adaptive Re-use
Revised Preliminary Cost Estimate - Summary

By: Steve Horton Construction Consulting
Date: 5Dec11

Summary of Areas Used for Estimating

<table>
<thead>
<tr>
<th>Area</th>
<th>SF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entire Facility</td>
<td>22,000</td>
</tr>
<tr>
<td>First Floor</td>
<td>12,400</td>
</tr>
<tr>
<td>&quot;Green Zone&quot;</td>
<td>5,600</td>
</tr>
</tbody>
</table>

Summary Cost Estimates with Variable Fit-out Costs (see additional tabs for detailed estimates)

<table>
<thead>
<tr>
<th>Area</th>
<th>&quot;Shell&quot; Estimate</th>
<th>Fit-out Estimate</th>
<th>Total &quot;Shell&quot; + Fit-out</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$50/ SF</td>
<td>$75/ SF</td>
<td>$100/ SF</td>
</tr>
<tr>
<td>Entire Facility</td>
<td>1,490,654</td>
<td>1,100,000</td>
<td>1,650,000</td>
</tr>
<tr>
<td>First Floor</td>
<td>847,731</td>
<td>620,000</td>
<td>930,000</td>
</tr>
<tr>
<td>&quot;Green Zone&quot;</td>
<td>462,779</td>
<td>280,000</td>
<td>420,000</td>
</tr>
</tbody>
</table>

Summary of Total Estimated $/SF Costs with Variable Fit-Out Costs

<table>
<thead>
<tr>
<th>Area</th>
<th>Total &quot;Shell&quot; + Fit-out</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$50/ SF</td>
</tr>
<tr>
<td>Entire Facility</td>
<td>118</td>
</tr>
<tr>
<td>First Floor</td>
<td>118</td>
</tr>
<tr>
<td>&quot;Green Zone&quot;</td>
<td>133</td>
</tr>
</tbody>
</table>
### Cheshire County Farm Adaptive Re-use

#### Revised Preliminary Cost Estimate - Entire Facility

**By:** Steve Horton Construction Consulting  
**Date:** 5Dec11  
**Based On:** Drawings from Land for Good dated 18Jul11, and site walk-through 1Dec11

<table>
<thead>
<tr>
<th>Section</th>
<th>Notes</th>
<th>Quantity</th>
<th>Units</th>
<th>$/Unit</th>
<th>Estimate</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Fixtures and furniture</td>
<td>steel tables, carts, etc.</td>
<td></td>
<td></td>
<td>5,000</td>
<td>5,000 *</td>
</tr>
<tr>
<td>1.2</td>
<td>Bars and grates</td>
<td>torch work</td>
<td></td>
<td></td>
<td>5,000</td>
<td>5,000 *</td>
</tr>
<tr>
<td>1.3</td>
<td>Interior doors</td>
<td>salvage/reuse? - doors only; net jambs</td>
<td>31</td>
<td>each</td>
<td>50</td>
<td>1,550</td>
</tr>
<tr>
<td>1.4</td>
<td>Mechanical equipment</td>
<td>hv. heating system intact</td>
<td></td>
<td></td>
<td>10,000</td>
<td></td>
</tr>
<tr>
<td>1.5</td>
<td>CMU walls - reinforced</td>
<td>incl windows and door jambs</td>
<td>2,400</td>
<td>SF</td>
<td>5</td>
<td>12,000</td>
</tr>
<tr>
<td>1.6</td>
<td>CMU walls - non-reinforced</td>
<td>incl windows and door jambs</td>
<td>4,800</td>
<td>SF</td>
<td>4</td>
<td>19,200</td>
</tr>
<tr>
<td>1.7</td>
<td>Pipes, wires and ducts</td>
<td>plus elec &amp; pbg fixtures; incl. capping</td>
<td></td>
<td></td>
<td>50,000</td>
<td></td>
</tr>
<tr>
<td>1.8</td>
<td>Ceilings</td>
<td>assume non-asbestos</td>
<td>22,000</td>
<td>SF</td>
<td>1</td>
<td>22,000</td>
</tr>
<tr>
<td>1.9</td>
<td>Dumpsters/disposal</td>
<td></td>
<td>10</td>
<td>dumps</td>
<td>800</td>
<td>8,000</td>
</tr>
<tr>
<td>1.10</td>
<td>General Conditions</td>
<td>9%</td>
<td></td>
<td></td>
<td>11,048</td>
<td></td>
</tr>
<tr>
<td>1.11</td>
<td>OH and Profit</td>
<td>5%</td>
<td></td>
<td></td>
<td>7,235</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Out Existing Building</strong></td>
<td></td>
<td></td>
<td></td>
<td>151,932</td>
<td></td>
</tr>
<tr>
<td>2.1</td>
<td>Remove existing windows</td>
<td>incl cutting new RO; staging; removal</td>
<td>40</td>
<td>units</td>
<td>750</td>
<td>30,000</td>
</tr>
<tr>
<td>2.2</td>
<td>Finish new rough openings</td>
<td>assume 4’x6’ typical</td>
<td>40</td>
<td>units</td>
<td>400</td>
<td>16,000</td>
</tr>
<tr>
<td>2.3</td>
<td>New windows installed</td>
<td>aluminum storefront type windows</td>
<td>40</td>
<td>units</td>
<td>1200</td>
<td>48,000</td>
</tr>
<tr>
<td>2.4</td>
<td>Exterior doors - allowance</td>
<td>re-use existing openings</td>
<td>5</td>
<td>units</td>
<td>1500</td>
<td>7,500</td>
</tr>
<tr>
<td>2.5</td>
<td>Dumpsters/disposal</td>
<td></td>
<td>1</td>
<td>dump</td>
<td>800</td>
<td>800</td>
</tr>
<tr>
<td>2.6</td>
<td>General Conditions</td>
<td>9%</td>
<td></td>
<td></td>
<td>9,207</td>
<td></td>
</tr>
<tr>
<td>2.7</td>
<td>OH and Profit</td>
<td>5%</td>
<td></td>
<td></td>
<td>5,575</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Exterior Windows and Doors</strong></td>
<td></td>
<td></td>
<td></td>
<td>117,082</td>
<td></td>
</tr>
<tr>
<td>3.1</td>
<td>Insulate exterior walls</td>
<td>3” polysio; strapping; GWB</td>
<td>18,700</td>
<td>SF</td>
<td>6.00</td>
<td>112,200</td>
</tr>
<tr>
<td>3.2</td>
<td>Insulate roof?</td>
<td>spray foam under metal decking?</td>
<td>10,000</td>
<td>SF</td>
<td>6.00</td>
<td>60,000 *</td>
</tr>
<tr>
<td>3.3</td>
<td>Insulate int. walls/floors?</td>
<td>in ft.-up</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.4</td>
<td>Misc spray foam insulation</td>
<td>tops of walls at bar joists</td>
<td></td>
<td></td>
<td>10,000</td>
<td></td>
</tr>
<tr>
<td>3.5</td>
<td>Dumpsters/disposal</td>
<td></td>
<td>2</td>
<td>dumps</td>
<td>800</td>
<td>1,600</td>
</tr>
<tr>
<td></td>
<td><strong>Exterior Wall Insulation and Air Sealing</strong></td>
<td></td>
<td></td>
<td></td>
<td>210,359</td>
<td></td>
</tr>
</tbody>
</table>
### Core MEP

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
<th>SF</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water in; Sewer out</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plumbing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sprinkler</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heating</td>
<td>22,000</td>
<td>SF</td>
<td>20</td>
</tr>
<tr>
<td>Cooling</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ventilation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HVAC Controls</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrical</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dumpsters/disposal</td>
<td>2 dumps</td>
<td>800</td>
<td>1,600</td>
</tr>
<tr>
<td>General Conditions</td>
<td>9%</td>
<td></td>
<td>79,524</td>
</tr>
<tr>
<td>Oil and Profit</td>
<td>5%</td>
<td></td>
<td>48,156</td>
</tr>
</tbody>
</table>

Total Cost Estimate for "Shell":

1,490,654

### Fit-up

<table>
<thead>
<tr>
<th>Level</th>
<th>SF</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level I</td>
<td>22,000</td>
<td>50</td>
</tr>
<tr>
<td>Level II</td>
<td>22,000</td>
<td>75</td>
</tr>
<tr>
<td>Level III</td>
<td>22,000</td>
<td>100</td>
</tr>
</tbody>
</table>

Total Cost Estimate for "Shell" Plus Fit-out:

3,140,654

$/SF for Area Included:

143

### Soft Costs

<table>
<thead>
<tr>
<th>Description</th>
<th>Percentage</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architecture and Engineering</td>
<td>8%</td>
<td>251,252</td>
</tr>
<tr>
<td>Futures, Furnishings and Equip.</td>
<td>7%</td>
<td>219,846</td>
</tr>
<tr>
<td>Owner-paid Consultants</td>
<td></td>
<td>50,000</td>
</tr>
</tbody>
</table>

Total Soft Costs:

521,098

### Additional Considerations

<table>
<thead>
<tr>
<th>Description</th>
<th>SF</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site work</td>
<td>6,000</td>
<td>3.00</td>
</tr>
<tr>
<td>Fuel storage</td>
<td>2 tanks</td>
<td>2500</td>
</tr>
<tr>
<td>Elevator</td>
<td></td>
<td>5,000</td>
</tr>
<tr>
<td>Remove fences</td>
<td>incl razor wire</td>
<td>550 LF</td>
</tr>
<tr>
<td>Asbestos removal</td>
<td>noted on pipe elbows</td>
<td>5</td>
</tr>
<tr>
<td>Roof repair</td>
<td></td>
<td>5,000</td>
</tr>
<tr>
<td>Mold remediation</td>
<td></td>
<td>10,000</td>
</tr>
<tr>
<td>Food processing kitchen equip.</td>
<td></td>
<td>50,000</td>
</tr>
</tbody>
</table>

* 1.1 Was $25,000
* 1.2 Was $25,000
* 2.3 Added; second site visit revealed that there may be no insulation at roof
* 4.4 Increased from $80,000 to allow for completely new system