

Land Use Planning in Hanover

Policies and Mechanisms for Implementing the Open Space Priorities Plan

By the Students of Environmental Studies 50
at Dartmouth College
Spring 2001

Land Use Planning in Hanover

Policies and Mechanisms for Implementing the Open Space Priorities Plan

By the Students of Environmental Studies 50
at Dartmouth College
Spring 2001

6182 Steele Hall – Room 101
Hanover, New Hampshire 03755-3577
(603) 646-2838

© Environmental Studies Program, Dartmouth College 2001
Permission is granted to reproduce parts of this report with attribution to the
Environmental Studies Program, Dartmouth College

Cover photograph courtesy of Nicholas Dankers '01

for Dana



DONELLA MEADOWS
CONSERVATIONIST
(1941- 2001)

**Students of
Environmental Studies 50
Spring 2001**

Mitsunobu Aoyama	Jakob J. T. Kissel
Michael J. Bayer	Dean V. Krishna
Lindsey I. Bishop	Alison E. Lothes
Robert K. Black	James A. Macintosh
Erika M. Cafarella	Jed D. Manton
Nicholas D. Claassen	Heather J. McLetchie-Leader
Nicholas W. Dankers	Spencer R. Meyer
Jeffrey W. Davidson	Erica S. Morgenstein
Robert B. Delwo	Jane A. Parkin
Scott P. Dionne	Jenna J. Perry
Lydia A. Dixon	Alice E. M. Pope
Jacqueline L. Dresow	Carla N. Prior
Kelly A. Fisher	Drew S. Sheriff
Emily S. Gomez	Roxanne L. Stahl
Eric D. Hogenson	Evan E. Tong
Gabriel A. Horwitz	

Instructor

Richard Howarth

ACKNOWLEDGEMENTS

We, the students of Environmental Studies 50, would like to extend our deepest gratitude and appreciation to the following people for their contributions to making this document a reality and for providing us with their assistance and guidance.

Nancy Collier, Chair, Hanover Planning Board

Jonathan Edwards, Director, Hanover Planning Department

Anne French, Environmental Studies Department, Dartmouth College

Andre Garron of Londonderry

Sherry Godlewski, New Hampshire Department of Environmental Services

Jim Hornig, Professor of Environmental Studies, Dartmouth College

Tom Howard, Society for the Protection of New Hampshire Forests

Richard Howarth, Professor of Environmental Studies, Dartmouth College

Carrie Kershaw, Environmental Studies Department, Dartmouth College

Chris Moore, Vermont Land Trust

Pat Parenteau, Attorney and Professor, Vermont Law School

Kevin Peterson

Mike Ryan, Hanover Town Assessor

Vicki Smith, Senior Planner, Hanover Planning Department

Jason Weatherbee, Land Protection Specialist, Monadnock Conservancy

Karen White of Bedford

EXECUTIVE SUMMARY

In order to realize the goals identified in the Open Space Priorities Plan (OSPP), released in the fall of 2000 by the Hanover Conservation Commission, this report investigates land protection strategies for the town of Hanover. We concur with the long-term conservation spirit of the OSPP and present this document as a logical next phase for the preservation and management of open space in Hanover. By focusing almost exclusively on open space protection tools, this report aims to shift the documented support for open space in Hanover beyond the theoretical realm and into practical implementation. A brief introductory chapter begins the report, followed by three chapters that each comprehensively analyze a different implementation vehicle: Planning and Zoning (Chapter 2), Economic Incentives (Chapter 3), and Conservation Easements and Land Acquisitions (Chapter 4).

Chapter 1: Introduction

The first chapter begins with a brief outline of the OSPP, placing particular emphasis on the structure and format of the document in order to elucidate its approach to defining and organizing different tracts of open space. Twelve specific properties receive attention in two different sections: “Conservation/Recreation Action Areas” and “In-Town Open Space Action Areas.” The value of each open area is qualified using a rubric of open space benefits, and the report concludes by presenting different conservation recommendations and suggestions for their implementation.

Having summarized the work that catalyzed our own efforts, an argument is made for the benefits of open space in accord with the goals inherent in the OSPP. A theoretical argument for open space is presented in tandem with a glimpse into what may happen if protection of open space is not prioritized, most notably the potential for full residential build-out in as few as sixty-five years.

Investigation into Hanover’s natural resource base offers an additional argument for open space protection. The Town’s rich forest and aquatic ecosystems boast a number of unique species, but are disproportionately located in open space areas. We

advocate open space protection as a viable tool to ensure the long-term sustainability of these natural assets.

Additionally, Hanover's residential appeal, best indicated by the Town's growing population and the relative wealth of residents in comparison to neighboring Upper Valley towns, threatens the "small town" ethos of the community. Because the increasing population strains a finite resource base through the development of open space, the Town ultimately risks jeopardizing the fragile relationships between history, ecology, culture, and the Hanover living experience. In conclusion, we believe:

- **There is a clear mandate from the townspeople to implement proactive open space conservation measures.**
- **Open space protection in Hanover has historical precedent, ecological justification, and economic benefits.**
- **Given the potential build-out scenarios and the impending finalization of the Town's Master Plan, the existing open space in Hanover has reached a critical juncture and needs timely protection.**

Chapter 2: Planning and Zoning

Since 1961, the Town of Hanover has worked to implement and revise a Zoning Ordinance that aims to control and direct the impact of new development. In the wake of recent population growth and suburban sprawl, this obligation has become increasingly difficult to sustain. Public sentiments in Hanover indicate that residents support the use of zoning in order to restrict development and to preserve open space. By helping to prevent unchecked growth in Hanover, zoning can be an important device used to guide Town development.

However, this chapter concludes that limiting growth and development through the use of regulations within the Zoning Ordinance is impractical by itself as a long-term option. As a community's interests change over time, zoning ordinances are adjusted to reflect these shifts in public opinion. If open space is to be protected, a permanent clause of the zoning ordinance must be mandated or else long-term conservation is unlikely. The notion of creating permanent zoning ordinances undermines the transient characteristic that makes it a valuable land management vehicle for dynamic

communities. We believe that the interface between open space conservation and zoning should be governed by the following principles:

- **Regulations should be used very cautiously because preserving open space may lead to isolation of certain properties that could be used in the end to promote development and accommodate population growth.**
- **Planners and the Zoning Board must ensure that regulations (such as the Zoning Ordinance) will not compromise the rights of property owners.**
- **The Planning Board should consider other tools for the conservation of open space beyond the exclusive use of the Zoning Ordinances.**
- **When zoning is used, the Town should promote Open Space Development/Cluster Zoning and Large Minimum Lot Size Zoning. These two zoning mechanisms will help Hanover retain remaining open space while still providing housing to residents.**

Chapter 3: Economic Incentives

Financial instruments and policy tools can play significant roles in preserving open space in Hanover. Research indicates that existing economic incentives encourage the purchase of Hanover's rural lands over its in-town lands, thereby depleting residents of available open space resources. This chapter presents the economic benefits associated with the conservation of open space and an in-depth analysis of several economic incentives that can be employed to better conserve Hanover's open spaces.

Many misconceptions exist regarding the fiscal responsibility of preserving open space. One tool that can effectively dispel many of these inaccuracies is a Cost of Community Services (COCS) study, which provides a cost-benefit analysis of land uses in a community at a specific point in time. Nearly all COCSs show that the costs of development and the following drain on community services exceeds tax revenues, causing communities to lose ground from a fiscal perspective. We recommend:

- **A COCS study should be implemented in Hanover in order to highlight the economic benefits of open space as opposed to residential development and to gain public support for establishing funding sources for open space conservation.**

- **Studying other economic impact analysis tools used across the state may help the Town gain a better understanding of further ways in which to obtain information about the fiscal impacts of land uses.**
- **A COCS study used in combination with an assessment of the costs of purchasing conservation easements or directly purchasing lands designated as open space in the Open Space Priorities Plan could be helpful to Hanover, by indicating how the benefits gained through “cost avoidance” can outweigh the costs of preserving open space lands.**

The Current Use Tax Program and the Land Use Change Tax (LUCT) are both effective policy tools that encourage environmentally conscious land use through a combination of tax incentives and penalties. We have found that:

- **New Hampshire’s Current Use Program and the Land Use Change Tax effectively promote open space preservation. The programs should not be significantly altered, except for a suggestion to look into donating more of the LUCT revenue in Hanover to the Conservation Council.**

When used together, Impact Fees and Excise Taxes also provide strong economic incentives to leave open space undeveloped. Impact fees (with significant restrictions) allow towns to charge new developments for the added costs of services, and Excise Taxes levy a fee on the business of subdividing land or developing property. It is our recommendation that:

- **Impact Fees should be established for schools and park/recreation areas using the average cost method.**
- **Impact fees for fire, police, water and sewer should be established using the marginal cost method.**
- **Hanover should consider an excise tax to generate revenue for purchasing land to designate as open space.**

Finally, instruments that transfer development rights, specifically Density Bonuses and Transfer of Development Rights Programs (TDRs), are also important land conservation tools. Density Bonuses provide incentives through zoning exemptions for developers to voluntarily cluster development to one-fourth of their property. A TDR program further preserves open space by allowing for the separation of the rights to

develop a parcel of land from the property holder's ownership rights, thus allowing for the creation of specific "sending" and "receiving" areas of development and conservation. We recommend that:

- **Clear and equitable guidelines should be created regarding the use of Density Bonuses.**
- **Hanover must carefully and clearly defines sending and receiving areas before starting a TDR program in order to avoid legal issues and administrative complications.**
- **The town should be sure that the designated receiving areas are large enough to guarantee that all landowners in sending areas will be able to sell their development credits.**
- **A TDR bank should be used to establish a competitive market and guarantee a fair price for development credits, and the Town should actively promote any implemented TDR program to ensure its use.**

Chapter 4: Conservation Easements and Land Acquisitions

Conservation easements and land acquisition are general mechanisms to establish permanent restrictions on property development, thus facilitating the long-term protection of tracts of open space. An easement is established when a landowner sells or donates his or her right to develop private property to a conservation organization. Easements are beneficial in preserving open space in Hanover because they are flexible, permanent, relatively inexpensive, and allow landowners to retain private property rights. Easements can also be economically advantageous for the landowner in that they lower property value for estate tax purposes, and donations can qualify for income tax deductions from the Internal Revenue Service. Currently, a number of conservation easements are already in place in Hanover. In regards to easements, we recommend the following:

- **In order to use easements as a land conservation tool in Hanover, landowners should be individually contacted and educated as to the potential this option holds for permanent open space preservation and tax incentives.**
- **Local conservation groups should be consulted to facilitate protection efforts and the education of citizens.**

- **A standardized monitoring and enforcement system should be implemented to address violations of conservation easements.**
- **Hanover could further benefit by the addition of easements in areas such as Gilman Island in the Connecticut River, Lord's Hill, and Moose Mountain East.**

Land acquisition is a method in which the full ownership of a parcel of land is transferred from a private citizen to a public or a private conservation organization. There are varieties of land acquisition methods, including outright purchase, donation, bargain sales, and remainder interest, some of which provide significant tax incentives to landowners who are conservation-minded. However, this method of conservation is limited in Hanover because of the outright expense and responsibility that comes with acquiring full ownership. As with conservation easements, it is important to ensure that local conservation groups are involved in all preservation efforts.

In order to utilize these two mechanisms to preserve open space in Hanover, a diverse network of funding is necessary. Funding for projects will need to come from outside sources such as land trusts, local conservation groups, and state and federal grant programs in addition to in-town sources. Money is necessary to the future of open space protection in Hanover, and pursuing a wide range of funding outlets is crucial. With regards to land acquisition and funding, we conclude the following:

- **The Town could benefit from land acquisition if the land in question is economically viable and can produce revenue from activities such as forestry or recreation.**
- **The limited funds currently available for open space protection would best be used on the education of the public, in the hope that increased knowledge will breed motivation for conservation.**
- **Pursuing a number of funding options is necessary in order to facilitate the use of conservation easements and the purchase of land for permanent conservation.**

We, the authors, have written this report to offer a description and analysis of existing land protection techniques applicable to the Town of Hanover in order to further the goals outlined in the Open Space Priorities Plan. We aim to foster additional discussion and debate on the topic of land conservation and the protection of open space.