https://youtu.be/aHiVOgV1yls Link for Part 1 of the January 12, 2022, Board of Selectmen meeting

https://youtu.be/p_L_PwBAYTA Link for Part 2 of the January 12, 2002, Board of Selectmen meeting

The January 12, 2022, Regular Meeting of the Woodbridge Board of Selectmen was convened at 5:00 p.m. by First Selectman Beth Heller, via WebEx in accordance with SB2012. Present via rollover: First Selectman Beth Heller; Deputy First Selectman Sheila McCreven, Joseph J. Crisco, Jr.; Paul Kuriakose; Dr. David Lober; and David Vogel. Present for staff: Mr. Genovese, Administrative Officer/Director of Finance; Ms. Ford, Media Specialist; Mr. Weiner, Town Counsel; Ms. Yagla, Assistant Administrative Officer. Absent: Mrs. Shaw, Clerk

FIRST SELECTMAN’S REMARKS

“Good evening. As you are certainly aware, the Connecticut daily positivity rate has soared into the mid 20’s. In order to protect all Woodbridge residents and others who work, visit, shop and enjoy many of our activities in town, last week I signed an Emergency Order requiring everyone wear masks at all indoor establishments, workplaces and public meeting spaces. This became effective this past Monday, January 10. I have received several “thank you’s” from businesses and residents. This order will remain in place until further notice. It is the right thing to do to keep the Town of Woodbridge safe. Masks, social distancing, vaccines and tests are the simple steps we need to continue to take to keep ourselves and our community safe. You may read the full order on the Town website.

Thank you to our Human Services Department staff, our Police Department members, and our all-volunteer members of our Fire Department for organizing and staffing two COVID-19 at-home test kit distribution events. I was able to help with the distribution on Saturday. This was a very well organized, efficient drive thru effort. Instead of the 1,100 test kits we were told to expect from the State, we received two smaller shipments. We held two events to give them out – last Monday and last Saturday. Both were incredibly cold days! On Saturday, we were also able to hand out N95 masks. The Town also shared N95 masks with staff at the Amity Regional School District, the Woodbridge School District, Ezra Academy, local Day Care Centers, and Town staff.

I would urge everyone to please take advantage of the widespread availability of FREE vaccines and boosters, especially given the quick spread of the COVID-19 Omicron variant. You may find vaccines and tests by visiting ct.gov/coronavirus. Masks continue to be required at all times in Town buildings, all town meetings remain virtual, and in-person programming has been scaled back significantly to help to continue to keep our community safe.

Our ad hoc appointed 2021 Housing Committee is working diligently on the Town’s Affordable Housing Plan. I believe they will release a Woodbridge-specific survey to supplement the regional survey published by SCRCOG soon. We are also planning to offer a town public hearing at some point to listen to our residents’ thoughts and ideas. Hopefully this plan will help us find ways to meet our state and federal mandated obligations regarding affordable housing.

The Diversity & Inclusion Committee is also working on a survey to better understand the experiences, concerns and priorities of residents. They plan to use the data gathered to prioritize their work. Tonight, I am appointing a new member to that committee – Ke Xu. Thanks to former First Selectman Ellen Scaleter and all the members of this most important committee for all their efforts.

As a reminder, the Board of Selectmen recently voted unanimously, that beginning on February 1st, a new fee system for bulk trash will begin. Bulk trash are large items such as furniture and construction demolition. The Town’s Transfer Station has a scale which is used to charge haulers bringing in residential trash. Also on February 1st, the scale will be used for residents and contractors bringing in
bulk trash items. That fee will be $0.10 per pound. As a reminder, cash is not accepted at the Transfer Station.

This modified fee is one way for the Town to prepare for a difficult fiscal future by shifting the cost of the service to those who use it rather than have all residents subsidize it. Currently the Town charges $20/cubic yard, but the Town is charged by the ton, to dispose of trash. In fiscal year 2021, the Town collected $4,511 in bulk trash fees but paid out $69,490 to haul and dispose of bulk trash. The new fee will help to offset the Town’s costs. Additionally, the Town will continue to offer bulk trash pickup five months a year by appointment, but with a fee. Starting on February 1st there will be a $50 per appointment fee. That fee will partially cover the Town’s cost to run this program, including staff time and disposal costs. This evening, we will learn more about a program the state is promoting called “Pay As You Throw.” This is another way for us to reduce trash-related expenses and also hopefully reduce the amount of trash generated in our Town.

We have many important items on our agenda this evening so in the interest of time, I will stop here. Welcome to the new year. Let’s all keep safe. Thank you.

WOODBRIDGE BOARD OF EDUCATION – Superintendent Dr. Jonathan Budd

Dr. Budd briefed the Board on the status of Covid-19 at Beecher Road School. There has been an increase of positive cases in both students and staff. Per State mandate all school sessions are in person. All contact guidelines are being followed and notifications made. Over 50% of the students have received the covid-19 vaccinations and over 99.5% of the staff. About 130 students are participating in a state program to provide free weekly testing to families that elect that option. He said that the school is very grateful for the masks provided by the Town and test kits supplied by the State. Beecher families should contact the school to obtain kits.

Current operating budget/proposed budget for 2022-23 – savings continue to be found in current operations – reducing the projected year end deficit. Dr. Budd said that if approved by the Board of Education he will present a revised proposed 2022-23 operating budget to the Boards of Finance and Selectmen.

Proposed tour – It was agreed that the Board members will tour the school building and grounds once the weather improves.

AGRICULTURAL COMMISSION – Chris Sorensen, Steve Munno

Request to waive Town Plan and Zoning application fees – The Board of Selectmen VOTED UNANIMOUSLY (Heller – McCreven) to waive the Town Plan and Zoning application fee(s) for the Agricultural Commission’s application to revise the Zoning Regulation regarding farm stands.

Follow-up on request for mechanism to extend length of farmland leases – Attorney Weiner reminded the Board that the Charter requires that any purchase, sale, or lease in excess of one year, of property valued at $50,000 or more is subject to approval by Town Meeting. Steve Munno explained that the farmers that hold one-year leases on Town property cannot apply for grants to improve the property as one of the qualifications for eligibility is having control of the property for a minimum of five years. He said that this has been an issue for years and he was disappointed that the approval letters for the 2022 growing season were still for only one year. Mr. Weiner suggested that each request be taken on a case-by-case basis.
Kristyna Hulland said she holds a lease on 160 Pease Road and a portion of 52 Center Road. She wants to apply for a grant to eradicate the invasives on the property. The grant she wants to apply for is due this Friday and there is no time to go to a Town Meeting to extend her lease. Ms. McCreven suggested that the Town may be able to apply as a partner.

Kristyna Hulland, Off Center Farm – The Board of Selectmen VOTED UNANIMOUSLY (McCreven – Heller) to request Town Counsel to investigate the option of the Town working with Ms. Hulland to apply for the Farmland Restoration Grant.

PAY AS YOU THROW TRASH – Kristen Brown of Waste Zero, Chris Nelson of DEEP

Chris Nelson, CT Department of Energy and Environmental Protection/Sustainable Materials Management provided introductory remarks. He said that Connecticut has long relied on aging Waste to Energy facilities to process its trash. Several of these plants are beginning to have repair issues; a large plant in Central CT is closing, all of which leaves the State with capacity issues. The CT DEEP is encouraging programs that divert as much material as possible from disposal. Grants are available to Towns to explore methods of waste reduction. Two methods supported by DEEP are “Pay as you Throw”, and a food waste diversion program.

Kristine Brown of Waste Zero is working with the State and Towns to establish waste reduction programs. Woodbridge is one of the municipalities that has moved to the second tier in the grant application process. Ms. Brown explained the waste crisis in Connecticut and the country, the lack of disposal sites and facilities, and the rising cost of disposal. Stonington CT has instituted the Pay as you Throw program and has reduced per capita waste generation by 1/2. She showed grafts of the results of the successful program in other states.

Next Steps – as mentioned before, Woodbridge is in the second tier of the grant process

Over the next couple of weeks, Ms. Brown will work with staff to develop some potential pilot pathway/projects for the Town. Prior to March 30th staff will gather feedback regarding the proposed projects. If positive, Woodbridge will then apply for round two of the grant.

LIAISON REPORTS

Mr. Vogel: - no report as he was traveling when the committee met.

Ms. McCreven – The Woodbridge Board of Education Finance Committee will recommend to the Board a reduction of $575,000 to the original $17.6 million 2022/23 proposed budget, resulting in a proposed increase of 9.9% instead of the original 13.5%.

Commission on the use of Publicly Owned Properties – no December meeting.

Dr. Lober: Inland Wetlands Agency – received application for proposed duplex homes on 3.2 acres that spans the flood plain and the flood plain review area on Merritt Avenue.

Conservation Commission - voted to send to the Board of Selectmen, with no changes, the November 18, 2022, memo rejecting the Arbor Haven proposal. The Commission’s proposed 2022/23 budget reflects $2,000 to hire someone to take minutes and $400 to purchases badges and/or other related costs associated with the Trail Challenge program, and $200 for boot brushes to clean boot before entering and leaving trails to control Jumping Worms – a new invasive species that destroys the soil. The Commission will conduct a site visit on January 22 to the proposed Merritt Avenue development. The Commission is
considering requesting a possible 10% open space set-a-side for the development with a connection to the West River Trail.

**Human Services Commission** – held a special meeting on December 20th to discuss the proposed budget. The operating budget, net of grants and donations totaling $361,000, will come in at $11,392 less than last year’s budget. The distribution of Covid test kits was successful; still seeking to hiring a driver; budgeted $35,000 to replace the aging sedan (originally a police cruiser) – a sedan is needed to access the parkway; acknowledged donations of holiday baskets, toys, gift cards, and thanked Samantha Woodruff for organizing the paint-party fundraiser.

**Youth Services** – now has a website; an internet safety program has been organized for January 31st.

**Mr. Kuriakose:** Amity Board of Education – not able to attend.

**Mr. Crisco:** Fire Commission special meeting on January 3rd – dispatch matters were discussed in executive session. Covid cases are on the rise, the Fire House is on lock-down and cleaning has been increased. The department is retaining the 10-day quarantine protocol. The Chief noted that Woodbridge received only 600 test kits instead of the 1,000 scheduled. The proposed 2022-23 operating budget was approved as presented. The department is moving forward with the order for Engine 9. Complaints re the siren were discussed and the Chief explained why it was needed and that there can be no modifications. Fire Marshal Joseph Cappucci had 62 appointments since the last meeting. Letters were received from the Orange Fire Department thanking Woodbridge for mutual aid.

**Police Commission** – met on December 20, 2021. Conditional offer of employment as a police officer was extended to Stefano Maurielo. The increase in traffic and accidents on Litchfield Turnpike was discussed. The Commission approved grant applications for the Click-it or Ticket program and the Violent Crime Prevention program. The Stuff a Cruiser and Shop with a Cop holiday programs were very successful. Testing for the Sargent position was approved. Letters of commendation were awarded several officers.

**PUBLIC COMMENTS**
There were no members of the public present who wished to make public comments. Ms. Heller read into the record e-mails from the following residents: Marie Luciano, Gregory Karwowski, Lillian Topf, Joseph & Gloria Porco, Penelope Sampoli, Hui-Jia Dong.

Copies of these comments are entered as public comments and attached to these minutes for the record.

**ADDENDUM** – Recommendation from Conservation Commission re Arbor Haven Proposal is included with these minutes as an addendum to Public Comment.

**COMMUNITY CONNECTIVITY GRANT – Mr. Genovese, Ms. Yagla**
Mr. Genovese said that last year the Town applied for a Community Connectivity Grant which included sidewalk and biking improvements for the Town Center. He said that the State is holding another round, considering applications from last year – and Woodbridge’s is included. Ms. Yagla explained that some of the improvements listed in the original grant were accomplished through a crowd funding campaign and a matching grant from Sustainable CT. This coming grant includes the original sidewalk on the western side of Newton Road to connect the high school to the library, change the asphalt walk in front of the library to concrete, move it closer to the road, and install much needed lighting for people attending evening programs. There is also a plan to install a small sidewalk in front of the Town Hall connecting the walk from the parking lot across the lawn to the Town Hall entrance and/or the cross walk to the other side of Meetinghouse Lane. Currently people and students are walking in the road at both locations – which is a significant safety issue.
ADMINISTRATIVE OFFICER/DIRECTOR OF FINANCE’S REPORT

Monthly Report - Mr. Genovese reported that as of December 31, 2021, he is projecting a year-end budget surplus of $323,343. Because the current Town budget includes an allocation from fund balance of $400,000, decrease to fund balance at year end is projected to be $76,657. Fund balance at June 30, 2022, is estimated to be $6.6M or 12.88% of annual expenses.

FUNDING REQUESTS

#2122-05 - Allocation
To: Fire Dept Part Time Maintenance (1230-00/50330)
From: Board of Finance Contingency (1170-00/56800)
For: Continuation of more frequent cleaning of the Fire House due to COVID-19
(Heller – Crisco) Unanimously Approved

Amount: $10,600.00

#2122-06 - Interdepartmental Transfer
To: Woodbridge Board of Education (1910-00)
From: Revenue – Tuition Revenue (1-6-1910/46800)
For: Transfer payment from the Stratford Board of Education for student-specific costs
(Heller – McCreven) Unanimously Approved

Amount: $75,664.00

STRATEGIC PLAN – DISCUSSION – Mr. Genovese, Ms. Yagla

Ms. Yagla said that of the various Strategic Plans she has researched, the two she finds most useful are Enfield and Tolland. Several of Enfield’s goals match those of Woodbridge. The plan is divided into “buckets” each with a mission statement and initiatives or goals. However, the plan does not identify the department or group that is in charge of each bucket.

Tolland’s strategic plan is included in its operating and capital budget. The plan outlines six goals and lists the department in charge of each goal.

The Board members will review each plan, e-mail any suggestions to Ms. Yagla, who will continue to work on a model for Woodbridge.

AMERICAN RESCUE PLAN ACT FUNDING – update – Ms. Yagla, Mr. Genovese

Mr. Genovese said the Town has received ¾ of the $2.5 Million allotted to Woodbridge. The balance will be received in June 2022. The U.S. Treasury has released the final ruling on allowable expenditures. He said that ruling is more flexible on the replacement of lost revenue. Once the lost revenue is reimbursed, the revenue can be used for an allowable government expense, an expense the Town would normally fund. Mr. Genovese said that he is seeking more clarification on the statement and once he has that clarified work can move forward on involving the public in the choice of projects to be funded.

ASSISTANT ADMINISTRATIVE OFFICER’S REPORT

Community Council is planning an Earth Day celebration for Saturday, April 23, 2022. There will be more details at a future meeting. The Council is also planning a bike event in May to celebrate the Town’s new bike route. The 2030 Task Force is waiting on a proposal from a consultant to do a planning study of the business district. This would coincide with a sidewalk and bike study of the same area and that study is funded through a Department of Transportation grant. The plan is to have these two projects go forward in tandem and be funded by the Federal Infrastructure Funding.
ACKNOWLEDGE RECEIPT OF TOWN CLERK’S REPORTS
The Board of Selectmen VOTED UNANIMOUSLY (Heller - Crisco) to acknowledge receipt of the Town Clerk’s Reports for the month ending December 31, 2021 and cumulative from July 1, 2021 through December 31, 2021.

MINUTES
The Board of Selectmen VOTED UNANIMOUSLY (Heller - Crisco) to approve the minutes of the December 8, 2021, Board of Selectmen Regular Meeting.

APPOINTMENT – Inland Wetlands
The Board of Selectmen received nominations to fill the vacancy of a voting member on the Inland Wetland Agency for a term ending June 30, 2025.

Ms. McCreven nominated Steven Sosensky who currently serves as an Alternate on the Inland Wetland Agency. Mr. Crisco seconded the nomination.

Mr. Vogel nominated Nick Zito and listed his qualifications: he is a professional in the field - a Forester with the Regional Water Authority, holds a degree in Natural Resource Management and a certification in wetlands delineation. Mr. Vogel noted that Mr. Sosensky, though now registered as “Un-affiliated”, was a registered Democrat. Mr. Vogel said that appointing Mr. Zito would bring a professional to the Agency as well as balance the membership. Dr. Lober seconded the nomination.

VOTE: Steven Sosensky – Aye – Heller, Crisco, Kuriakose, McCreven
      Nay – Lober, Vogel

Ms. Heller declared the position filled.

TOWN COUNSEL’S REPORT
Mr. Weiner said he would be reporting in executive session

EXECUTIVE SESSION
The Board of Selectmen VOTED UNANIMOUSLY (McCreven – Kuriakose) to move into executive session to discuss the items listed below and to invite Marianne DuBuque to attend for items a. and b.; further to invite Mr. Weiner and Mr. Genevese to attend for items a. thru e.

a. CGS 1-200(6)(D) Discussion of Arbor Haven proposal to purchase former Country Club of Woodbridge property;
b. CGS 1-200(6)(D) Discussion of Offer from Woodbridge Land Trust/Woodbridge Park Association for conservation easement at former Country Club of Woodbridge;
c. CGS 1-200(6)(D) Discussion of offer from Peter LaTonica to purchase 31 Enoch Drive;
d. CGS 1-200(6)(B), 210 (b)(4) – Strategy and negotiations re Cell Tower Siting Council decision @ 118 Newton Road (pending litigation);
e. CGS 1-200(6)(C)-Security devices re Dispatch issues- Update – Paul Kuriakose

ACTION AS APPROPRIATE ON ANY OF THE ITEMS DISCUSSED IN EXECUTIVE SESSION
When the Board came out of executive session, Ms. Heller stated that no motions were made, or votes taken in executive session.

Item 16a. CGS 1-200(6)(D) Discussion of Arbor Haven proposal to purchase former Country Club of Woodbridge property:
MOTION – The following motion was MOVED by Mr. Kuriakose, and SECONDED by Mr. Crisco: “to authorize the First Selectman, Finance Director/Administrative Officer, and Town Counsel to take the next necessary steps to begin discussions with Arbor Haven in order to finalize purchase price, amount of acreage, open space, mix and amount of residential units, and any other terms and conditions of the offer, in anticipation of a possible referendum whereby voters will decide whether or not to sell the property.”

VOTE:  Aye – Heller, Crisco, McCreven, Kuriakose  
Nay – Lober, Vogel

Ms. Heller declared the motion carried

Item 16b. CGS 1-200(6)(D) Discussion of Offer from Woodbridge Land Trust/Woodbridge Park Association for conservation easement at former Country Club of Woodbridge

MOTION – the following motion was MOVED by Mr. Kuriakose, SECONDED by Ms. McCreven: “to reject the offer from the Woodbridge Land Trust/Woodbridge Park Association for $250,000.00 to place a conservation easement on approximately 140 acres at the former Country Club of Woodbridge property.”

VOTE:  Aye – Heller, Crisco, McCreven, Kuriakose  
Nay – Lober, Vogel

Ms. Heller declared the motion carried

Item 16d. CGS 1-200(6)(B), 210 (b)(4) – Strategy and negotiations re Cell Tower Siting Council decision @ 118 Newton Road (pending litigation)

MOTION – the following motion was MOVED by Ms. McCreven, SECONDED by Dr. Lober: “to retain outside counsel to take appeal of Connecticut Siting Council decision to locate the cell tower at 118 Newton Road”.

VOTE:  Aye – Heller, Crisco, Kuriakose, Lober, McCreven, Vogel

Ms. Heller declared the motion carried unanimously

ADJOURNMENT

On a non-debatable motion by Mr. Vogel, seconded by Ms. McCreven, the meeting adjourned at 8:45 p.m.

Respectfully submitted

Geraldine S. Shaw
Dear Board of Selectmen,

We want to think you for having fought alongside us in the fight against a cell tower at 118 Newton. As you know, we lost by one vote but obtained votes from the current and former Chairman, who recognized that there were a number of unanswered questions in the case and that more work needed to be done by Verizon to fully explore the proposed alternate site. This is not insignificant as they are very senior and experienced members. It also confirms what we have felt all along – that there are many holes in the case that need to be addressed.

We ask that you continue fighting with us and file an appeal. Many CT municipalities have done so in similar cases and it is important in the eyes of the court to see this continued support/ unified front when they evaluate this case. Together we must continue to stand as one.

Sincerely,

Marie Luciano
Dear First Selectman Heller,

Thank you for issuing a strong letter to the Siting Council expressing BOS disapproval and opposition to the construction of a cell tower on 118 Newton Road property and for allowing WNNET to conduct an independent test on a town property identified to the CSC as an alternate site.

We all feel we presented a very good case to the CSC for reconsideration but have not been treated fairly in the process. CSC final vote was split 4 to 2 with the two most senior members supporting our position.

Our community is now faced with the appeal of this unjust decision to the Superior court. As you contemplate whether to support our community in the appeal process, please consider that other towns are doing the same.

In September 2021 the residents of the town of Milford have lost the CSC process documented in docket 500. They, like us do not want a cell tower in the residential neighborhood. The city of Milford filed an appeal with the Superior court on behalf of their community. For your reference the first page of that filing and the link to the court file is attached.

We ask you to consider filing a law suit against CSC decision in support of our community.

Respectfully,

Gregory Karwowski

Attachments: CITY OF MILFORD v. CONNECTICUT SITING COUNCIL: Case Detail - HHB-CV21-6069969-S (ct.gov)
RETURN DAY: December 28, 2021

D.N.________________________ : SUPERIOR COURT
CITY OF MILFORD : J.D. OF NEW BRITAIN
v. : AT NEW BRITAIN
CONNECTICUT SITING COUNCIL and ARX WIRELESS INFRASTRUCTURE, LLC : December 3, 2021

ADMINISTRATIVE APPEAL

TO THE SUPERIOR COURT OF THE STATE OF CONNECTICUT, JUDICIAL DISTRICT OF NEW BRITAIN, comes the City of Milford, appealing from the granting of an application for a certificate of environmental compatibility and public need, and the Plaintiff complains and says:

Parties

1. The plaintiff City of Milford (the “City”) is a municipality in the State of Connecticut.

2. The defendant Connecticut Siting Council (the “Council”) has authority, pursuant to General Statutes § 16-50g, et seq., over applications for a certificate of environmental compatibility and public need, including with respect to telecommunications towers.
I am an extremely upset resident due to the decision the siting committee has made regarding the cell tower on Soundview Drive. I am against the cell tower ruining my beautiful neighborhood. I understand that alternate sites were never truly considered either. This situation cannot happen in this location. I would strongly urge that the Town of Woodbridge help this situation and fight for a relocation of the cell tower.

Thank you,

Lillian & Nathan Topf
With so many other viable locations for this tower must we in Woodbridge loose resale value of our homes just because 1 resident wants to monetize his land ownership. Pls explain.

What other options are available for Woodbridge residents to fight this decision since we've lost case so far?

Why hasn't the Town of Woodbridge been more involved protecting its residents considering we pay extremely high taxes and receive very little services for the said taxes?

Exactly when (date) is this tower expected to be erected and operational?

Joe & Gloria Porco
Dear Ms. Shaw,

I am writing to urge the Board of Selectmen to discuss the advisability of joining the neighborhood group “No Cell Tower Please” in a formal legal appeal of the Connecticut Siting Council’s recent ruling which would allow Verizon to build a cell tower at 118 Newton Road, in blatant violation of Woodbridge town zoning regulations.

The ruling was by no means unanimous. Our neighborhood group lost our case by a single vote. The two Siting Council members who voted against the proposed cell tower argued that Verizon had failed to explore fully viable alternative locations.

It is my belief that the Town of Woodbridge must continue to insist that considerations important to local communities, such as scenic beauty, protection of local wildlife, environmental soundness, and preservation of local property values and by extension, the local property tax base, are given precedence over the purely commercial interests of private entities and that the public interest, defined broadly, is upheld in the state of Connecticut.

Thank you in advance for including the recent CSC ruling in tonight’s agenda.

Sincerely,

Penelope Sampoli
108 Newton Road
Woodbridge, Ct 06525
203 389-9012
Hello,

I am writing this email to express my strong opposition to a cellular tower @ newton Rd. And to support Kiyoko's proposal at today's Woodbridge Township meeting.

Thank you very much for your attention.

Regards,

Hui-Jia Dong

11 Penny lane

---------- Forwarded message ----------
From: kiyoko.k...@gmail.com <kiyoko.karwowski@gmail.com>
Date: Tue, Jan 11, 2022 at 11:22 AM
Subject: Please send your request for Town's support!!! - BOS meeting tomorrow January 12 2022
To: NoWoodbridgeCellTower <nowoodbridgecelltower@googlegroups.com>

BOS meeting will be tomorrow January 12 2022. Please send your request for supporting us to go further to fight against Newton Rd cell tower. More voice will be better, and each voice is important. Thank you very much for your help and time.

Link to the agenda. There is a public comment section at 6 pm.
https://www.woodbridgect.org/AgendaCenter/Board-of-Selectmen-3

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In person attendance will not be permitted nor will the public be allowed to offer public comment, testimony, or other participation unless otherwise specifically stated in this notice. *Comments for the agenda item at 6:00 p.m. may be e-mailed to gshaw@woodbridgect.org until 3:00 p.m. the day of the meeting or shared at the meeting via WebEx.*

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Sincerely,

Kiyoko Karwowski

10 Soundview Drive
RECOMMENDATION FROM CONSERVATION COMMISSION RE
ARBOR HAVEN PROPOSAL
December 20, 2021

TO: Woodbridge Board of Selectmen

FROM: Tim Austin, Chair, Woodbridge Conservation Commission (WCC)

RE: Arbor Haven Development Summary

This correspondence is to convey to the BOS a recommendation from the Conservation Commission regarding the Arbor Haven.

At the request of the Woodbridge Board of Selectmen, the Arbor Haven Development team presented their Development Summary to the Conservation Commission at the commission’s October 21, 2021 meeting. Prior to the meeting, the Conservation Commission had sent to Arbor Haven a list of questions, which Arbor Haven returned with answers, and these answers and other questions were addressed at the October 21 meeting.

The Commission received in person public comment at its November 18th meeting. Following public comment, commission members made observations, voiced concerns, and entertained possible actions viz-a-viz Arbor Haven.

After due consideration, the Commission passed the below motion:

... that the Conservation Commission reject the proposal from Arbor Haven and that we further recommend to the Board of Selectmen that they reject the proposal from Arbor Haven and that we draft a document that documents the specific reasons we discussed tonight for rejecting the proposal.

At the Commission’s December 16th meeting, the Commission passed a motion to send, as is, the Rejection Memo previously constructed by a 3-person working group of the commission. That memo is attached, along with the two studies of the financial benefits of open space to municipalities mentioned therein.

Also attached are the Conservation Commission questions and Arbor Haven answers mentioned above.

Respectfully submitted on behalf of the commission,

Tim Austin
Chair, Woodbridge Conservation Commission

Cc: Woodbridge Conservation Commission members
Memorandum

To: Woodbridge Board of Selectman

From: Woodbridge Conservation Commission

Subject: Arbor Haven Proposal

Date: November 18, 2021

Background

The Conservation Commission met on September 30, 2021, October 21, 2021 and November 18, 2021 and devoted much of these meetings to the analysis, review and discussion of Arbor Haven’s development proposal for the Woodbridge Country Club property. On October 21, 2021 Arbor Haven presented their proposal to the Conservation Commission and answered questions. On November 18, 2021 the Conservation Commission received in person public comment to inform our decision on this important topic. At the Conservation Commission’s November 18, 2021, the Commission voted to issue this letter to the Board of Selectman.

Findings

1) Conservation Commissions charter is to protect the towns natural resources and developing the largest piece of undeveloped property in town for high density housing is contrary to our charter.

2) The town purchased the property in 2009 to protect it from development so to even consider selling the property to a developer to build condos and houses is contrary to the residents wishes and the towns strategy in purchasing the property.

3) The property has wetlands, endangered species and extensive other wildlife that should be protected.

4) The property is historically significant as it was Roger Sherman’s family farm. Roger Sherman (April 19, 1721 – July 23, 1793) was an early American statesman and lawyer, as well as a Founding Father of the United States. He is the only person to have signed all four great state papers of the United States: The Continental Association, the Declaration of Independence, the Articles of Confederation, and the Constitution. The property has remained pristine and undeveloped for nearly 250 years.

5) The master plan for the Greenway in Woodbridge is that it will surround the town. The country club property is a missing link in our Greenway system that is critical in linking other established contiguous Greenway spaces in Woodbridge, Orange and New Haven and should be protected.

6) To call Arbor Haven’s proposal ill-conceived is generous. Arbor Haven has changed their estimates of home values, tax revenue and town costs seemingly to”solve for an answer” and portray the proposal as financially attractive to the town.

a. The estimated tax revenue is grossly overstated. For instance, the developer has estimated that a two-bedroom age restricted attached home would sell for $625,000. The commission felt this was unrealistic and that tax revenue would be much lower than projected.

b. The estimated cost to the town is grossly underestimated. Arbor Haven estimated the number of students using a national average even though we know the Woodbridge home buyer is not comparable. Home buyers in Woodbridge are predominantly families with school aged children. Assuming an honest estimate of the number of school children and using similar to metrics used for the previous development proposals we estimate the impact to be an additional 206 school aged children vs. the developers estimate of 72. The cost per child is also under estimated, Woodbridge is allocated the cost of Amity based on the number of students
enrolled at Amity and this year the cost is $19,732 per child. The estimated additional school costs alone are over $4M.

a. Beecher Road School is currently at its enrollment capacity, so a large influx of students would likely necessitate a large building project, costing tens of millions of dollars.

b. The developer’s proposal is very vague on what would be built and incomplete. The proposal shows “clip art” from the internet as models of what would be built and presents proposed dirt roads in the development as the streets and calls them “Roman Roads”.

c. The homeowner’s association could abandon the roads and they would become the responsibility of the town to pave and maintain in the future as happened on Round Hill.

d. The public walking paths proposed on private property and in back yards in very close proximity to private homes were viewed as a likely source of future disputes between the proposed developments’ homeowners and town residents and unworkable.

7) The Arbor Haven proposal is even more financially detrimental to the town and its impact on the environment is even worse than the first 4 proposals that were rejected by residents.

8) During public comment the Conservation Commission was presented two authoritative studies assessing the overall negative financial impact to communities of converting open space to residential development. We have attached the studies for the Board of Selectmen reference. We also heard public comment from a noted local expert in environmental studies and doctor of veterinary medicine regarding the vital role large undeveloped contiguous parcels play in providing a habitat for endangered wildlife in our area. He further stated that these endangered species can not survive in developments like the one proposed.

Conclusion

The expenses associated with Arbor Haven’s proposal far exceed tax revenue and sacrifices the largest open space in town and once it is gone it is gone forever. This proposal only financially benefits the developer and not town residents. Protection of this property from development is important to maintain the unique and longstanding character of Woodbridge. The Conservation Commission votes to reject the Arbor Haven proposal and strongly recommends the Board of Selectmen also reject the proposal. The Conservation Commission respectfully requests that the Board of Selectmen be more selective in what they send to boards and commissions in the future.

Enclosures:
Woodbridge Conservation Commission

Questions for the
Arbor Haven Country Club Hills Developers

Design
What is the square footage of the various structures?

4BR about 4000 sq ft; 3br about 3000 sq ft; 2br about 2200-2500 sq ft. Pool clubhouse about 2500 sq ft.

Why are the affordable houses and large houses not intermixed but separated?

Town zoning regulation. We follow Residential A zoning for large houses. We generally apply Residential B zoning for all others, except affordable which are designed as "multifamily" under zoning regulation.

What percentage of the total acreage (140) will be built upon or developed?

Approximately 20%, excluding yards, bike paths, public amenities, etc from definition of built/developed.

Are you proposing to charge for the land? And then a separate charge for the house?

Don’t understand. We are building and selling houses (with land). We are not selling land separately.

When built, who will be responsible for road maintenance & snow removal?

Roads within the development remain private and homeowners’ association handles cost of maintenance & snow removal.

Are there retail spaces allowed? How many max?

No retail proposed or allowed under the zoning. We are not asking for a variance. (In the presentation there was something about retail space, but that is a silly idea.)

How many more structures, beyond the proposal in front of us, are you hoping to build on this parcel and what is your profit likely to be.

Proposal is for 145 homes (and the public amenities the town decides upon – pool, clubhouse, etc.) No intention to build more than proposed. Unable to predict profit as there are many variables and situation is fluid because of Covid. We hope to make a profit.

What features of the project will enhance the lives of Woodbridge citizens: e.g., open space, orchard, recreation, beauty etc.?
Features of this project enhancing lives of Woodbridge community include:
- 50 acres of open space, plus another 10-12 acres of open space woven into the development as trails;
- design of project that is consistent the character of the community (e.g. large lots/homes on Ansonia & Woodbridge blend with existing density);
- inclusion of desperately needed affordable homes;
- preservation of nearly all trees on the parcel;
- addition of general public amenities;
- management of water run-off in relevant areas.

There seem to be 2 entrances/exits on Woodfield Road, what is the purpose of the two entrances so close together?

One entrance services the over-55 homes; one entrance services the general homes and recreation facilities.

What utility services will be above ground?

We intend to bury all utilities.

On what road(s) will each of the utility services be connected?

Utility companies tell us water comes in from Ansonia and sewer is serviced on Woodfield. Gas & Electric utilities are studying at moment. Location of service entry/exit to parcel is within jurisdiction of the respective utility.

What materials will be used on the roads & bike/walking paths?

Permeable composite crushed stone build-up. No petrochemicals.

**Affordable Housing**

Affordable homes - less access to land, smaller parcels - why not keep/develop all homes on equal parcel sizes?

We are complying with town’s affordable housing zoning regulation.

Why only 20-25 would be listed as affordable out of the 145?

The town’s zoning regulations (and nobody can make a profit on affordable homes.)

Is any of the affordable housing age restricted? Are there any state of federal regulations concerning this?

Law permitting, we intend to divide the affordable housing equally between regular and age-restricted housing. Your lawyer is qualified to tell you what Fed/state regs apply.
**Open Space**

Please break down the approximately 50 acres, out of the total of 140 parcel acres, of Open Space; i.e., what are the sub-pieces with locale in the parcel? E.g., clubhouse area?

The open space is largely along Woodfield. That area was chosen because it naturally lends itself to open space, maintain rural character of Woodfield, does not disturb current residents, integrates with public amenities, maintains watershed, integrates sledding hill & pond.

Describe the 50 acres being deeded back to the town and why that particular area was chosen?

See above.

Approximately how much of the approximately 12 acres of bike/walking path open space is in deep/wide tree cover?

A rough estimate is 75-80%.

**Build-out**

Once the project is started, what is the length of time that there will be disturbed surfaces before construction is completed?

Start to end construction should take 30 to 36 months. Most of Residential B zoning/affordable homes & public amenities should be finished within 18+ months (assuming Covid related issues continue to abate).

What percentage of the parcel will be left undisturbed?

Using “not dug up” as the definition of undisturbed, about 85% of the parcel will be undisturbed. Dug-up areas generally include trenches for utilities, storm drains and footprint for each home’s basement (which is roughly ¼ the home’s square footage).

What percentage of undisturbed land is already unbuildable, like wetlands?

Probably 10-15%. Only apparent wetlands are near pond. There is a watershed conservation area too – the sledding hill (but that is not a wetland). We don’t propose building in the watershed, but instead deed it to the town as open space.

What intended protections during construction do you intend to employ to mitigate disturbance to undisturbed land? Who will oversee those measures? Will there be reports available to commissions and local citizens regarding those measures?

Penalties against contractors for failing to mitigate. Penalties paid are dedicated to remediation.
How deep do each of the utilities need to be buried? Will blasting be necessary for this?

Local codes may differ, but general depth of a utility trench is 3ft. Water & sewer in CT require 4.5 ft trenches. Don’t anticipate significant or large scale blasting since layout of trenches are up middle of old fairways, where a 3 – 5 ft depth is highly likely. Always a possibility buried boulder(s) are encountered – anticipate those would be removed mechanically or avoided, but some sporadic demolition/ blasting may be necessary.

How many tons of material will be removed from the site? How many tons of material is estimated to be brought to the site? Will there be blasting and if so, how much? Does that go through separate permitting process?

Do not anticipate removing material from site (other than old clubhouse/sheds). Excavation from basements is repurposed on-site for road beds and grading. Stones will be crushed and used as gravel. Material brought to site consists of building materials and probably additional gravel. No estimates at this point. Blasting answered above. Town building dept can tell you when a permit is required.

Is there any accountability for bringing any toxic materials to the site? Who determines what is environmental acceptable materials? Will there be sink disposals used in any of the sinks?

We utilize penalties against contractors for poisoning the land with toxic materials. Penalties paid are dedicated to remediation. Federal/state regulators determine status of “toxic material”. We do not install sink grinders/disposals in our projects.

Is there funding for more building inspectors or is the present staff expected to be adequate to oversee the project?

Generally, permit fees are intended to cover building department operations. Town building department is appropriate party to direct the question.

Are there any assurances that your company is solvent and will not run out of funds due to unexpected costs and desert the project and this leave the town with an environment hazard and fiscal difficulties?

This project will be well funded with more than adequate equity and debt financing.

What (how many structures) is your breakeven number?

Cannot estimate that until we have a handle on costs. Costs cannot be estimated until project is closer to definition.

Are a certain % of house sales or anticipated $$ necessary for construction to be completed?

There are four/five distinct market segments encompassed in this project – large homes, market age-restricted, market mid-size homes, affordable homes & affordable age-restricted.
Each market has its own characteristics, which means each segment has a different percentage. For example, the affordable homes (market or age-restricted) are not predicted to be profitable to us, ever. The best we could hope for on affordable homes is a break-even, but that seems unlikely.

Will there be environmental restriction on the houses?

Don’t understand the question. These are people’s homes.

There is a need of a lot of remediation i.e.: the storage buildings, the old club house, the new club house etc. The remediation of the storage area alone has been estimated to be $800,000. Who will be responsible for known and yet to be discovered contamination mitigation, financial & clean-up? Any intended charge back?

All environmental remediation will be completed at or above mandated standards – these are homes being built and we have no desire to be part of harm to anyone. We have not conducted an environmental review, although one will be required before closing. Any environmental issues uncovered will be addressed if/when that bridge has to be crossed.

Deeding & other protections over time
How will the open space be preserved? By what legal means into perpetuity?

Open space will be deeded fee simple to the town. Trails & trees protected by perpetual easements.

Will the affordable houses remain affordable by deed restriction after resale?

Affordable homes must be deed restricted for 30 or 40 years per federal and state regulations. Resale within restricted time period must be to someone meeting affordable income criteria.

Beyond age restriction where appropriate, are there any other deed restrictions planned?

Standard utility, roadway, police & fire easements, and easements preventing chopping down trees (unless safety hazard) and allowing trails.

Will bike paths on private property be permanently protected by deed in all cases? Any other features protected by deed?

Easements will prevent downing trees (unless safety hazard) and allow/protect trails on private property.

Are the double tree lines on Ansonia & Johnson, and bordering the biking/walking paths on private property? If so, are the trees themselves protected by deed or other means?

Tree lines on Johnson & Ansonia are on private property. Easements will prevent downing trees (unless safety hazard) and allow/protect trails on private property.
What protections are there to keep age restricted housing age restricted?

Deed restrictions.

Will there be any restrictions on planting invasive species in the development?

Not anticipated, but open to suggestions. We plant only native species.

**Sustainability/Environmental**

What sustainability features, both immediate & future use, will be included as part of standard construction? i.e., wiring for electric vehicle recharging etc.

Home design is state of the art and for foreseeable future (10 years). Homeowners will have options for EV batteries, charging stations, solar, heat pumps, etc.

Will there be an evaluation for endangered species for these properties? What wildlife habitats will be destroyed? What remediation is planned? Same questions for flora?

If you have an inventory of endangered species, wildlife habitats and flora on the parcel, we are interested in receiving it. We are building homes on the old fairways, where, generally speaking, main wildlife are rodents. They will be removed/relocated.

Will there be native plants planted? What is the planting plan?

We tend to use only native plants (as they survive). Homeowners generally have their own planting plan.

How much impervious surface is being created? Is there a way to minimize that?

Footprints of the homes/clubhouse, etc are impervious. (There is no way to minimize that.) Roads and trails are permeable.

Will there be any disturbance to any wetlands, vernal pools, water courses, etc.?

No, except to manage watercourses where flooding currently threatens adjoining property owners.

Is there a plan to eradicate invasive species on the property?

If we find invasive species, we eradicate them. If you have an inventory of such species on the parcel, we are interested in receiving it.

Is there a plan to use a % of locally sourced materials and labor?
We anticipate using as much local labor and materials as are competitive in pricing. We will not use local labor/materials that are not competitive.

**Will there be a Green building design for all buildings? What features will help reduce the energy and resource burden of the development?**

Over-insulating is the most effective means of reducing energy consumption, and we utilize that.

**With more impervious surface, there will be increased storm water run-off on the developed space. What would the mitigation strategy to eliminate any increase in storm water run-off?**

We use permeable road/trails and install storm drains where sound civil engineering requires.

**What precautions are being taken to not affect neighbors and neighboring eco systems?**

Federal, state and local regulations protect neighbors and ecosystems. We follow those.

**What investigations are planned into studying the water courses, including underground?**

Civil engineers will study the surface water courses and any obvious subterranean springs, etc.

**Will an air quality study be done?**

No. We are building homes, not an industrial/manufacturing facility.
**Town Impact/Amenities/Recreation**

Will this development put new expensive demands on existing town resources; i.e., fire, police, town hall, roads maintenance, snow removal, SCHOOLS?

Roads within the development remain private and homeowners’ association handles cost of maintenance & snow removal. Cannot speak to police, fire, etc. As to school, the proposed development covers costs of projected incremental enrollments of school age children.

Describe any access for pedestrians, bikers, or cars from existing surrounding neighborhoods accessing some of the amenities.

The bike paths and public amenities will be open to the general public.

Please describe parking considerations for Woodbridge residents wishing to access some of the amenities.

Ample public parking will be available in the area of near the existing clubhouse.

Are all amenities available for public/town recreation? Any private pools or tennis courts? Any limits on usage of Ice-Skating Pond, tennis courts, pools etc. for any Woodbridge resident?

All amenities (pool, tennis, basketball & volleyball courts, sledding hill, pond, etc.) would be open to the general public.

What sizing considerations were given for the amenities? E.g., size of pool

Undetermined at this time.

What are the dimensions and construction materials of the bike paths? Minimum distance from housing units?

We use permeable road/trails and install storm drains where sound civil engineering requires. Trails traverse both

Who will be responsible for the maintenance of the bike/walking paths and other amenities?

Home Owners Association

**Other Questions/Concerns**

Please describe the planned Home Owners Association and the scope of that entity?

Limited to maintenance of roads & trails.

Will there need to be zoning changes for the present plan? For what?

No.
What are the maximum number of homes that can be built under the present zoning regulations on the 100 acres to be bought?

1500 multifamily homes.

What is your involvement after the last house is sold?

Undetermined at this time.
One tenet of the “smart growth” movement is that communities should strive to preserve open space, farmland, natural beauty and critical environmental areas.\(^1\) Conflicts often occur between open space preservation and other goals. In fiscally challenging times, it is particularly important to understand and consider fully the economic benefits of open space.

While the environmental and recreational benefits of open space preservation are readily apparent, the many economic benefits are often less evident. For example, benefits provided by open space, such as water preservation and storm water control, are often significant. In many instances it is less expensive for a community to maintain open space that naturally maintains water quality, reduces runoff, or controls flooding than to use tax dollars for costly engineered infrastructure projects such as water filtration plants and storm sewers. When these benefits, also known as ecosystem services, are overlooked, open space protection may be considered an expense rather than an investment that can mitigate property tax increases, leading to land use decisions that do not accurately weigh costs and benefits.

A review of studies of the costs and benefits of open space protection conducted by the Office of the State Comptroller finds that:

- Open space supports industries that generate billions of dollars in economic activity annually;
- Open space protection can be financially beneficial to local governments by reducing costs for public infrastructure and programs, lessening the need for property tax increases;
- Open space preservation can support regional economic growth; and
- Well-planned open space protection measures need not conflict with meeting other vital needs, such as economic development, municipal fiscal health and affordable housing.

\(^1\) Principles promulgated by the Smart Growth Network (representing a coalition of government and advocacy groups) are available online at [www.smartgrowth.org/about/default.asp](http://www.smartgrowth.org/about/default.asp)
Decision-making that explicitly considers and values the positive economic effects of open space, as well as environmental and quality-of-life implications, will best serve a community’s long-term interests. Accordingly, this report reviews a number of policy issues associated with open space planning and protection. In addition, the report recommends that State and local governments:

- Evaluate protections for lands providing ecosystem services;
- Improve State planning for open space;
- Allow municipalities to establish community preservation funds;
- Support local open space planning; and
- Encourage private land conservation.

Definitions and Challenges

In the most general terms, open space protection programs are actions taken by governments or private entities to preserve open space, either by taking ownership or otherwise controlling the use of land. Open space uses include:

- Public parks with developed facilities such as playgrounds, swimming pools and golf courses;
- Rustic or wilderness parks, such as the Adirondack or Catskill parks, that have little in the way of developed facilities;
- Privately held lands used for farming, forestry, or watershed protection that may have significant modification to landscapes and vegetation and may or may not allow public access; and
- Portions of residential, commercial or industrial lots not containing buildings.

All of these land uses serve specific and sometimes multiple open space functions. Playgrounds, golf courses and wilderness parks provide outdoor recreation. Wilderness parks, farms, working forests, watershed lands and even undeveloped portions of private lots can provide habitat for plants and wildlife, offer scenic views and preserve community character.

Different forms of open space can serve valuable habitat, recreational and natural water management functions, including purifying surface waters, replenishing aquifers and impeding flooding. These water management functions are often referred to as “ecosystem services” or “natural services.”

Sprawl
New York has a unique urban and natural heritage, as well as a rich diversity of communities. These communities include open spaces that need to be conserved or developed in a way that is economically and environmentally sustainable. The alternative is the continuing dispersion of population and development, or “sprawl,” with all its associated costs.

Downstate, high population density and continued growth have created intense pressure on remaining open spaces, generating critical environmental and recreational concerns. Development pressure on open space also exists upstate, even though in this region population growth has remained relatively flat. Many upstate cities, villages and older
inner-ring suburbs are losing population, while communities further out are experiencing rapid growth and development. Much of this new development is low density, and occurs at the fringe of settled areas, forests and farmlands. New infrastructure (water, sewer and roads) may be required even as existing infrastructure elsewhere is underutilized.

A Brookings Institution study describes a pattern of accelerating sprawl in upstate New York even as population growth slows, which is undermining the region’s quality of life and economic health. The study documented that in the years between 1982 and 1997 upstate land was developed at twelve times the rate of population growth, and new housing units were developed about twice as fast as new households were created. In growing areas, sprawl causes transportation problems, environmental degradation and the loss of farmland, natural areas and other open space. Sprawl also increases local taxes for expanded services, particularly for schools.

**Ecosystem Services**
Living organisms and the environment in which they live are often referred to as ecosystems. Ecosystems provide benefits such as food, water, air and natural resources. For example, a privately owned wetland may filter pollution from water used for drinking water downstream, recharge an aquifer that supplies drinking water or prevent downstream flooding. Naturally functioning ecosystems provide services that economists and planners identify as ecosystem services. Ecosystem services, such as those provided by a wetland, can reduce municipal costs or provide clean water used in commercial or industrial activities. The value of these services, however, often goes unrecognized, with the landowner not compensated for providing this benefit by maintaining rather than developing the wetland.

**Economic Benefits**
Open space can provide a variety of public benefits, including drainage and water management, recreational opportunities and a supply of natural resources necessary for certain industries.

**Water Management**
Drainage and water management benefits provided by open space include control of storm water runoff, preservation of surface water quality and stream flows, and infiltration of surface water to replenish aquifers. When lands are converted from open space to other uses, the natural benefits provided by open space often must be replaced through the construction of water treatment facilities to clean up contaminated surface or groundwater supplies, levies to control flooding or other infrastructure to control storm water. Local taxes often pay for the construction of facilities to replace these lost drainage benefits.

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2 For a complete description of these trends in various regions of the State, see Population Trends in New York State's Cities, Office of the State Comptroller (2004) at www.osc.state.ny.us/localgov/pub/research/poor trends.pdf
According to the U.S. Government Accountability Office, on those lands with natural ground cover only 10 percent of precipitation becomes runoff, while 90 percent infiltrates into the ground. However, when 75 percent of the site is covered with impervious surfaces, 55 percent of the precipitation becomes runoff. On paved parking lots, 98 percent of precipitation becomes runoff.

Paving not only significantly increases the amount of storm water than runs off from a parcel of land, but it also increases the speed of runoff. In comparison to open space, streets and parking lots create conditions that prevent groundwater from being recharged. This, in turn, may lead to water shortages.

Increases in the percentage of land covered with impervious surfaces result in greater amounts of storm water that must be managed, which can translate into higher municipal costs. Moreover, storm water managed by engineered controls (e.g., retention basins) is more likely to pollute subsurface water than water filtered through forested open space.

The engineering department at Purdue University estimates that approximately eight times more storm water runs off from impervious surfaces, such as streets, sidewalks and roofs, than from forested land. When the percentage of impervious surfaces in a watershed grows there is a corresponding increase in undesirable consequences:

- Increased frequency and severity of flooding;
- Increased erosion;
- Reduced groundwater recharge; and
- Reduced natural filtration of water—resulting in increased pollution and reduced stream health.

The costs of addressing the negative effects of increased storm water must also be considered when weighing the benefits of preserving open space. Again, local taxes often pay to mitigate these deleterious effects.

On the other hand, natural drainage and water management provided by open space can significantly reduce municipal costs for water treatment. A 2002 survey of 27 water suppliers found that for every 10 percent increase in forest cover in a municipal water system’s watershed, costs of water treatment decreased by 20 percent. A series of studies have found the preservation of open space to be a far more economical way to address storm water requirements. Examples include:

- The New York City Department of Environmental Protection projects that the costs of preserving and restoring natural drainage features in 16 Staten Island

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6 Actual Observations of runoff in Indiana show that actual runoff from impervious surfaces was 63 times greater than runoff from forested land. See https://environnement.purdue.edu/SafeWater/watershed/landuse.html

7 dela Creutz, Avril and Paul K. Barten. Land Use Effects on Streamflow and Water Quality in the North Eastern United States. Boca Raton: CRC Press, 2007. Stream health is measured by a benthic macro invertebrate index related directly to the percentage of impervious surfaces in the watershed. The presence of control measures like stream buffers did not change this relationship (p. 239).

watersheds will save tens of millions of dollars in comparison to the costs of constructing and maintaining storm water control infrastructure.\(^9\)

- An Army Corps of Engineers study on acquisition of 8,500 acres of wetlands adjacent to the Charles River in Massachusetts estimated costs for engineered flood control measures at $100 million compared to a $10 million cost to acquire the wetlands.

- A recent analysis by the Texas Comptroller found that the environmental benefits from Texas urban parks freed up enough capital for private investment to contribute 3,906 jobs, $233.6 million in gross state product and $153.7 million in personal income annually.\(^10\)

**Industries Reliant on Open Space**

A strong link exists between open space preservation and the health of certain industries. Some sectors of the economy, such as agriculture, forestry and industries that rely on forest products, cannot function without access to open space. Other industries, such as tourism and outdoor recreation, are closely related to open space.

![Graph showing contribution of industries reliant on open space to New York State Economy](image)

Natural resources like timber, minerals or agricultural land are critical inputs to economic activity. For example, a study by American Farmland Trust reports that agricultural activity in New York's Hudson Valley generated $434.9 million in 2000—economic activity predicated on access to productive agricultural land. When open lands are converted to

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other uses, production of natural resources may be impeded or even lost. This, in turn, results in increased costs of transportation in order to bring needed materials in from other areas where they are still available.\textsuperscript{11}

To be profitable, agriculture requires access to large parcels of productive soils. As farmland is lost to other uses due to rising property taxes and fragmentation of farmland, the viability of farming is threatened. Without public intervention in the form of agricultural zoning, agricultural property tax abatement and/or purchase of development rights, the strong demand for the conversion of farmlands can be overwhelming.\textsuperscript{12}

Without a critical mass of farms in an area, the support businesses that service farms cannot survive, further threatening the viability of farms.\textsuperscript{13} Agriculture is among New York's largest and most vital industries, encompassing 25 percent of the State's landscape and directly generating more than $4.5 billion for the State's economy each year. In 2007, the income generated directly by farms, combined with income generated by agricultural support industries and by industries that process agricultural products, totaled $31.2 billion.\textsuperscript{14}

Programs to protect farmland can achieve additional economic benefits. A survey of participants in Vermont's program to purchase development rights on farmland found that many farmers reinvested revenues from sale of easements back into their farms. These investments, in turn, improved the profitability of the farms.\textsuperscript{15}

Forestry also requires significant parcels of open space to be viable. While trees can certainly grow in cities and residential neighborhoods, these settings make it difficult for loggers to operate efficiently. New York's forestry industry employs 60,000 people and contributes $4.6 billion annually to the State's economy.\textsuperscript{16} When the value of products manufactured from forest products and the income generated by forest-related recreation and tourism are considered, New York's forests generate approximately $9.0 billion in economic activity on an annual basis.\textsuperscript{17}


Similarly, New York’s open spaces attract significant numbers of visitors, many of whom come from out-of-state. A 1987 study conducted by the President’s Commission on Americans Outdoors cited natural beauty as the most important factor in attracting tourist visits.\(^{18}\) New York’s tourism industry generates approximately $43 billion annually.\(^{19}\) While not all of this money is generated through tourism related to open space, there is evidence that open space is a significant attraction. For example, according to the Adirondack Regional Tourism Council, between seven and ten million tourists visit the Adirondack Park annually.\(^{20}\)

Another way in which open space contributes to the State’s economy is by providing opportunities for outdoor recreational activities. According to information generated by the Outdoor Industry Foundation (OIF), 13.4 million people participated in some form of nonmotorized outdoor recreation in New York State in 2005.\(^{21}\) As reported by OIF, sales of equipment for these pastimes generated $11.3 billion annually in retail sales and services in New York State.\(^{22}\)

A recent study by Parks and Trails New York estimates $1.9 billion in economic activity is generated by the 55.7 million annual visitors to the New York State Park System.\(^{23}\) This demonstrates the economic value of New York’s park system, in addition to its recreational and ecological value.

**Open Space Preservation and Municipal Revenues**

A common misperception is that open space protection translates into a loss of revenues for municipalities. While replacement of farming or forestry land with residential, commercial or industrial uses can produce an increase of gross revenues, that increase can be more than offset by an increase in the demand for services. In addition, conversion of land from less intensive uses to more intensive uses can come at the expense of adjacent urbanized areas, as shown by a Brookings Institution study of upstate New York.\(^{24}\)

Studies have shown that open space demands fewer municipal services than lands in other use. Consequently, open space tends to generate greater municipal tax revenue than the value of services required by these lands. In comparison, lands in residential use typically consume services of greater value than the property tax revenues generated by

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\(^{22}\) *Ibid.*


these lands. Protected open space that remains on municipal tax rolls can produce a net profit for the municipality when the cost of services consumed by the property is compared with revenues generated.

Although the net revenue gain from residential development may be negative, residential development does increase land valuation for property tax purposes. This increased valuation may lead municipal officials to approve development projects that are either inconsistent with municipal planning or improperly sited. These decisions, when coupled with the higher demand for services generated by residential development, can actually increase tax rates and overall tax bills for individual properties. A comparison of towns in New Jersey conducted by the Association of New Jersey Environmental Commissions found that per capita tax increases between 1970 and 1990 were significantly lower in towns with sizable percentages of protected lands and substantial farmlands. In other words, open space preservation can actually help to keep taxes lower.

Conversely, loss of open space can increase per capita tax rates in a community. It can also negatively impact the tax base of adjacent communities. The Brookings Institution studied the causes and effects of loss of open space in upstate New York. The study found that from 1982 to 1997, 425,000 acres of upstate New York were urbanized, an increase of 30 percent. During this time period, population growth in the region was negligible. One of the effects of the new urbanization was the reduction in population and tax base of previously established urban centers. During the decade from 1990 through 2000, the assessed value of property in upstate cities declined by 7.0 percent.

Some forms of open space protection, however, remove the property from the tax rolls. Even in circumstances where the municipality purchases either an easement of development rights or the full ownership rights on the land (known as fee title), several studies report net fiscal benefits to municipalities over relatively long pay-back periods of 15 years or longer. This effect is produced through a combination of maintaining ecosystem services and limiting the growth in demand for services due to the preservation of open space.

In the case of New York State-owned lands, the State pays property taxes to towns, villages, school districts and special taxing districts for some categories of State-owned open space. The broadest categories of land on which property taxes are paid are lands held as State Reforestation Lands, the New York State Forest Preserve and some

32 Ibid.
properties owned by the New York State Office of Parks, Recreation and Historic Preservation.

Property taxes are also paid on other State-owned lands based on specific sections of the New York State Real Property Tax Law. According to projections by the New York State Office of Real Property Services, the State paid approximately $173.4 million in property taxes to local governments in 2007. State reforestation lands and forest preserve lands are primarily held in undeveloped, wilderness uses. In these circumstances, the cost of municipal services for such lands should be minimal, and the net positive revenue impact is, therefore, significant.

Open Space Preservation and Other Policy Goals

There is a tendency to view open space as economically unproductive, contributing minimally to local economies and tax revenues, or even as fiscally damaging to municipal governments. This view fails to consider the many positive economic effects documented from open space. While conflicts may occur between open space preservation and other municipal goals, local decision-making that explicitly examines economic, environmental and quality-of-life considerations will best serve a community’s long-term interests.

In regions of the State with high-value housing markets, such as Long Island, open space protection is sometimes viewed as further increasing already high housing prices by contributing to the scarcity of land for residential development. Since less land is available for development, open space preservation can contribute to increased land values. In addition, due to the aesthetic, recreational and other potential values of open space, property values of adjacent lands often increase. A number of studies support the link between land scarcity and higher housing values. However, this link between land scarcity and higher property values must be assessed while also considering the positive benefits of open space preservation—which can mitigate increases in tax rates by providing ecosystem services and reducing the demand for municipal services.

It is also difficult to single out open space protection as the most significant of all the factors affecting housing affordability, since factors other than open space protection, such as restrictive zoning or long delays in processing building permits, are also highly correlated with increasing housing prices. Rising property tax rates, for example, are widely identified with increased costs of housing.

Since open space preservation may actually assist in holding down property taxes, well-designed open space protection programs that target specific lands, which provide

high value ecosystem services or preserve farmland, timberland or other lands that support economic production, need not conflict with municipal housing goals.

For example, the four largest categories of lands (by acreage) targeted by the Long Island Town of Southampton's Community Preservation Project Plan are Central Pine Barrens Plan—Core Preservation Area (12,461.22 acres), Open Space/Greenbelt Areas (6,446.35), Agricultural Lands (4,252.69), and Wetlands (2,229.22). Together these areas constitute 84 percent of Southampton's overall target of protecting 30,081.53 acres. In the Core Preservation area, development is highly regulated pursuant to State Law, a factor that would complicate use of these lands for purposes other than open space. The list of Open Space and Greenbelt Projects included in the Southampton Plan shows that the majority of these projects comprise headland streams, streams and rivers and their banks, and marshes and swamps.

All of these land types either pose development challenges or may not be ideally suited for housing. For example, wetlands or floodplains pose regulatory and engineering challenges and have drainage features, like flood tendencies, which make them less desirable as development sites. To convert agricultural land to residential use, infrastructure investments, as well as access to transit and other services, may be required. All of these factors, as well as zoning ordinances and administration of ordinances pertaining to development, affect housing prices.

Tools for Open Space Protection: State, Local and Private

Open space protection occurs at the federal, state and local levels and involves a variety of actors and programs.

State Land Acquisition
Currently, New York State ranks first among all states in the country in numbers of state parks, recreation areas and natural areas, and second, after Alaska, in state park acreage.

New York State government generally protects land through:

- The purchase of lands in full fee title, where the State takes ownership of all of the rights in the land in question; or
- The purchase of easements, where the State purchases some of the use rights in the land.

Lands purchased by the State in full fee title for open space purposes may be managed as State forest preserve, State reforestation areas, wildlife management areas or State

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35 Article 67, Title 1, of the New York State Environmental Conservation Law.
parks. The State pays property taxes on lands designated as forest preserve or State reforestation areas, and on some State Parks.

When the State purchases an easement for open space protection purposes, the State typically purchases only those use rights that would interfere with the open space protection purposes of the easement. Easements, where the underlying fee title to the land is retained by a private landowner, are purchased through a variety of programs including farmland protection, conservation easements and public fishing rights. Although State easement programs typically allow ongoing economic use of the land by private landowners, such use may be limited under the terms of the easement.

For example, working forest conservation easements allow the holder of the underlying fee title to practice forestry, but typically require sustainable practices. Conservation easements may or may not include rights of public access. Under the terms of these easements, public access is typically restricted to certain uses that do not interfere with the titleholder’s use of the lands. Private landowners generally continue to be the responsible party for property tax obligations on the lands, although land valuation may be reduced to reflect the diminished development potential due to the terms of the easement.

In the early 19th century, New York State began to create modern urban parks in its population centers. These lands were often already in some form of public use that was converted to publicly accessible open space. For example, Manhattan’s Bryant and Washington parks were potter’s field cemeteries until the 1820s when they were converted to parks. Some of the earliest lands acquired by New York State for open space purposes were timber lands in the Catskill Mountains on which all economically harvestable timber had been cut and on which landowners had stopped paying taxes.

### Significant Government-Managed Open Space Holdings in New York

<table>
<thead>
<tr>
<th>Category</th>
<th>Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adirondack Forest Preserve</td>
<td>2,700 acres</td>
</tr>
<tr>
<td>Reforestation Areas</td>
<td>776 acres</td>
</tr>
<tr>
<td>Conservation Easements</td>
<td>950 acres</td>
</tr>
<tr>
<td>State Parks</td>
<td>330,000 acres</td>
</tr>
<tr>
<td>Catskill Forest Preserve</td>
<td>201 acres</td>
</tr>
<tr>
<td>Wild Life Management and Multiple Use Areas</td>
<td>175 acres</td>
</tr>
<tr>
<td>Federal Wildlife Refuge Historic Sites and Recreational Areas</td>
<td>140 acres</td>
</tr>
<tr>
<td>County Open Space</td>
<td>100 acres</td>
</tr>
<tr>
<td>New York City Watershed</td>
<td>51 acres</td>
</tr>
<tr>
<td>City and Village Open Space</td>
<td>51 acres</td>
</tr>
<tr>
<td>Town Open Space</td>
<td>45 acres</td>
</tr>
<tr>
<td>Farmland Protection Easements</td>
<td>28 acres</td>
</tr>
<tr>
<td>National Forest</td>
<td>16 acres</td>
</tr>
<tr>
<td>Total</td>
<td>5,336 acres</td>
</tr>
</tbody>
</table>


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37 The State also purchases lands for purposes other than open space, such as transportation, correctional and mental health facilities.


Since that time, most lands have been acquired for open space purposes through purchase. To pay for acquisition of land for parks, forest preserve and other open space purposes, the New York State Legislature has placed eleven resolutions proposing bond acts before the State's voters. Voters approved 10 of the 11 bond acts proposed for a variety of environmental purposes. These bond acts have authorized State debt in the amount of $1.2 billion for land acquisition, park improvements and heritage area projects.

In addition, Chapter 610 of the Laws of 1993 established the New York State Environmental Protection Fund (EPF). The EPF provides funding for a variety of environmental conservation programs through three accounts: solid waste; parks, recreation and historic preservation; and open space. Since the inception of the EPF, more than $1.1 billion has been appropriated to the open space account and $730 million has been appropriated to the parks, recreation and historic preservation account. Both accounts fund programs that support open space conservation.

Historically, New York State has been in the forefront of open space conservation efforts. In 1833, New York created the first state park in the nation at Niagara Falls. New York also led the movement to preserve wilderness by creating the New York State Forest Preserve in the Adirondack and Catskill parks in 1885.40

The Adirondack and Catskill parks continue to be models for open space conservation. The Parks include both private and public lands, with approximately 2.6 million acres, or 43 percent, of the Adirondack Park and 287,500 acres, or 41 percent, of the Catskill Park in public ownership. Approximately 130,000 people reside permanently in the Adirondack Park and 50,000 reside in the Catskill Park. In 1894, State constitutional protections were extended to State owned land in the Parks. Article 14, Section 1 of the New York State Constitution prohibits the taking or destruction of timber on the Forest Preserve, or the sale or lease of these lands. The Adirondack Park is distinct in that it is one of the few regions in New York where an overlay of State land use regulations govern certain categories of development projects.

There are two other notable examples of State-established land use management plans with which local land use decision making is coordinated: the Long Island Pine Barrens and the Albany Pine Bush. Both of these regions are representative of rare pitch pine ecosystems and are in areas that were attractive for conversion to residential and commercial land uses. In both cases, State laws were passed to protect habitat and other ecosystem services provided by open space.

Chapter 792 of the Laws of 1988 established the Albany Pine Bush Preserve Commission to protect and manage a pocket of pitch pine-scrub oak habitat in the City of Albany and the towns of Guilderland and Colonie in Albany County. The Commission was charged with development and implementation of a management plan to protect and manage the 2,725 acres of publicly owned lands for habitat protection and recreation. The

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40 Chapter 283 of the Laws of 1885 defined the New York State Forest Preserve as State owned lands in the counties of Clinton, Essex, Franklin, Fulton, Greene, Hamilton, Herkimer, Lewis, Saratoga, Saint Lawrence, Sullivan, Ulster, Warren, Washington. State lands in Delaware and Oneida counties were later added to the Forest Preserve. The boundaries of the Adirondack Park were established by Chapter 707 of the Laws of 1892. The boundaries of the Catskill Park were established by Chapter 233 of the Laws of 1904.
Commission reviews and advises on development projects in a 12,500 acre study region surrounding the Preserve. The Commission has also identified property in the study region that would be suitable to add to the preserve through future acquisition. The Albany Pine Bush Preserve is one of only two known New York State habitats of the endangered Karner Blue Butterfly.

The Long Island Pine Barrens Protection Act (Act), Chapter 262 of the Laws of 1993, identifies 102,500 acres as the Central Pine Barrens, located in Suffolk County. Designed to preserve aquifer recharge and habitat functions in a "core preservation area," as well as to promote compact growth in suitable "compatible growth areas," the Act was an early example of legislation that advanced smart growth. The Act also helped to pioneer systems to transfer development rights. In the Central Pine Barrens, development rights—termed Pine Barrens Credits—can be transferred from privately owned land in the 55,000 acre core area to parcels in the compatible growth area to increase development intensity. Approximately 38,000 acres in the core area are in public ownership. Implementation of the Act is accomplished by the Central Pine Barrens Joint Planning and Policy Commission in conformance with the Central Pine Barrens Comprehensive Land Use Plan.

**Local Government**

Local governments play a vital role in open space protection and have a variety of tools at their disposal, including land use planning and regulation, and acquisition of open space or development rights. In New York, virtually all land use regulation takes place at the municipal level (i.e., in a city, village or town government). Land use planning is also primarily a municipal function, although State law provides for certain planning functions at the county and regional levels.

Land use regulation and planning allow local governments to manage growth and development and to direct development to those locations already served by public infrastructure (water, sewer and roads). The most common method of municipal land use control is to adopt zoning laws, which regulate the use of land by area or district, including the type of development that can occur (e.g., residential, commercial), as well as the density of such development (multifamily vs. single family, acres per building lot, etc.) and other details such as building height, parking and access. Zoning regulations may also designate areas as agricultural or forestry lands. Municipalities can address open space protection through site plan approval and subdivision regulations. These tools can identify appropriate locations for structures, roads and other infrastructure to preserve important natural features of a development site. Open space preservation is also achieved through strategies such as “cluster development”—where construction is concentrated in a portion of a subdivision while the rest of the land is maintained as open space.

In addition, municipalities can adopt ordinances expressly designed to protect certain forms of open space, such as wetlands, or certain features of the landscape, such as scenic vistas. These ordinances typically operate by requiring permits for actions that could harm areas deemed sensitive.
Land use regulations generally implement plans, including those for the protection and enhancement of open space, by managing growth and development in ways that accomplish local goals. Cities, towns and villages are authorized to prepare comprehensive plans, on which zoning and other land use controls will be based. Legal authority exists for either a separate open space plan or inclusion of open space elements within a comprehensive plan. Traditionally, comprehensive plans completed by municipalities include an open space element just as they include elements on transportation, utilities, community facilities, housing and other needs. Communities pursuing local open space planning and conservation should fully integrate those activities with the development and adoption of local comprehensive plans.

As of 2008, 69 percent of towns and 53 percent of counties in New York State had adopted comprehensive plans and 71 percent of towns had adopted zoning ordinances.\footnote{New York State Legislative Commission on Rural Resources Chair Senator George H. Winner, Jr. New York Land Use Tools: Counties, Cities, Towns and Villages. A 2008 Survey of Land Use Planning & Regulations in NYS. \url{www.dos.state.ny.us/lupd/pdfs/RuralResourceSurvey.pdf}} The Department of State provides a comprehensive Open Space Planning Guide as well as training and materials on land use planning, regulation and open space protection.\footnote{New York State Department of Environmental Conservation and Department of State. Local Open Space Planning Guide. May 2007. \url{www.dos.state.ny.us/lupd/pdfs/openspaces.pdf}} For example, the Department's Division of Local Government Services provides training programs for municipal officials on planning for open space protection.\footnote{See \url{www.dos.state.ny.us/less/training.htm}} In addition, a variety of other State programs assist municipalities in specific regions in conservation planning.\footnote{See \url{www.dec.ny.gov/docs/lands_forests_pdf/esc02chapter6.pdf}}

Local governments also can preserve lands through purchase or easements. The General Municipal Law establishes open land preservation as a public purpose and authorizes local governments to expend public funds to acquire interests or rights in real property to preserve open space. After acquisition, the valuation of the open space areas for property taxes may take into account and be limited by the restriction on the future use of the parcel.

General revenues can be spent, or local general revenue bonds can be issued for the purpose of acquiring open space resources. A dedicated revenue stream is another approach to funding open land acquisition or protection. However, no general provision of law allows municipalities to establish open space protection funds. Currently only a limited number of municipalities have been granted authority by the New York State Legislature to create funds—known as Community Preservation Funds—to protect open space. These funds are usually capitalized through a portion of the community’s real estate transfer tax and are subject to a vote of local residents.

\footnote{See \url{www.dec.ny.gov/docs/lands_forests_pdf/esc02chapter6.pdf} The 2009 New York State Open Space Plan contains a comprehensive list of State programs that partner with municipalities and private landowners. In addition the New York State Department of State's, Division of Local Government Services and the New York State Office of the State Comptroller's, Division of Local Government and School Accountability provide assistance and training to local governments.}
Currently, 11 New York State Towns have specific authority to create community preservation funds.\footnote{Section 64 of the New York State Town Law. Towns with authorization to create community preservation funds are East Hampton, Riverhead, Shelter Island, Southampton, Southold, Brodhead, Warwick, Red Hook, Chatham, Fishkill and Northeast.} In addition, Chapter 596 of the laws of 2007 gave municipalities in Putnam and Westchester counties the authority to create these funds. The towns of East Hampton, Southampton, Southold, Riverhead and Shelter Island on Long Island and the Hudson Valley towns of Red Hook and Warwick established community preservation funds through State legislative enactment and a local vote. These towns implemented a planning program to identify open space values to protect, parcels of land in line with these values and mechanisms to protect them.

**Private Protection Programs**

Government and private organizations offer a number of programs to assist private landowners in protecting open space values.

State and federal agencies offer programs that assist landowners in managing their property for open space purposes. For example, the New York State Department of Environmental Conservation runs a Cooperative Forest Management Program that offers private landowners assistance from a trained forester in the development of a forest management plan.\footnote{See \url{www.dec.ny.gov/lands/5230.html}} The plan identifies the landowner’s goals for the forested land and then identifies activities to manage the lands to meet these goals. The federal government offers the Environmental Quality Incentives Program, which offers funding to assist landowners in implementing management actions.\footnote{See \url{www.dec.ny.gov/lands/58625.html}}

Private land trusts are nonprofit organizations dedicated to preserving open space. They work with landowners to develop plans for preserving some or all of the open space values found on their land. Plans can range from purchase of the land in fee title to purchase of an easement that transfers development rights, or from exclusive use rights for the land trust to an informal agreement to use the land in ways that preserve open space values. Typically, land trusts work with landowners whose property contains desirable characteristics such as habitat for endangered plants or animals, or unique recreational opportunities. The New York State Conservation Partnership Program provides grants and technical support to regional land trusts with funds from the New York State Environmental Protection Fund (EPF). This program has assisted 67 regional land trusts in the conservation of more than 11,000 acres of open space. A benefit of the Conservation Partnership is that it helps attract funding from sources other than the State. With an investment of $4.6 million in EPF funds this program has leveraged $10 million additional conservation funding.

**Tax Abatement**

New York State has created programs to abate property and income taxes to encourage landowners to maintain land uses that preserve open space values. To address the needs of agriculture and forestry, New York State Law provides favorable property tax treatment
for certain farm and timber lands. State law also provides tax credits applicable to State income tax obligations for State taxpayers who donate conservation easements.\(^\text{48}\)

New York State’s Real Property Tax policies give significant latitude to local governments in assessing the value of real property, often resulting in significant variability in assessment practices from locality to locality. The financial pressure of property taxes may contribute to decisions by landowners to subdivide and develop their property, reducing the open space value of the land. Assessment practices can contribute to raising tax bills on parcels in ways that make it uneconomic for certain land uses to continue. For example, in areas that are undergoing development, if the characteristics of a parcel and local ordinances would allow subdivision to occur, assessors may assign a value to unused land that is part of a parcel based on its value as a subdivided building lot. Or, in regions where timber production is a predominant land use, assessors may include the contributory value of standing timber in a property’s assessed value.

Landowners must manage forest crops for many years to realize a return on investment, and annual property taxes can make forest management unprofitable. New York State has established tax exemptions on lands in timber production, recognizing their economic value. The program currently in effect—called the 480-a program (Section 480-a of the Real Property Tax Law)—is open to property owners with at least 50 acres of timberland who maintain a timber management plan and harvest timber on a schedule identified in the plan. Under the program, the value of the exemption is 80 percent of the assessed value of certified lands or any assessed value over $40 per acre, whichever is less. At the time of timber harvest, a 6.0 percent yield tax is due to municipal taxing jurisdictions based on the value of timber harvested.\(^\text{49}\)

The 480-a program contains several provisions to ensure that it achieves its goal of promoting forest management, and is not simply an undue benefit for large landowners or real estate speculators. To remain in the program, landowners must commit their lands every year to forest management for an additional ten years. Landowners who do not file this annual commitment lose the tax benefits of the program, but must still adhere to the forest management plan for the life of the most recent ten-year commitment. Violation of the ten-year forest management commitment results in a penalty tax of 2.5 times the tax savings received in the prior ten years plus interest.\(^\text{50}\)

The 480-a program only abates property taxes on land in active timber production. Lands that are part of a parcel enrolled in the program but are unsuitable for timber production, such as lakes, streams, wetlands and rocky outcrops, are excluded from the program. Any protection of ecosystem services beyond timber production is incidental to the program’s purpose.

New York State’s Agriculture Districts Law (Article 25-AA of the New York State Agriculture and Markets Law) provides reduced property tax assessment on lands used for

\(^{48}\) Section 606.1k of the New York State Tax Law.


\(^{50}\) Ibid.
agriculture. The assessment is restricted to properties where at least seven acres of land has been in agricultural production for the prior two years, generating at least $10,000 in income. The value of the assessment on a particular farm is determined from values assigned to categories of soil by the Department of Agriculture and Markets and the New York State Board of Real Property Services.

Some of New York's neighboring states offer less restrictive and more broadly purposed property tax exemption programs to encourage landowners to maintain their lands in open space. For example, Pennsylvania offers property tax abatements for landowners who maintain at least 10 acres of land in either active agricultural use, as agricultural reserve use lands open to public access, or forest reserve use. Tax rates for lands enrolled in this program are set by the Pennsylvania Department of Agriculture.\(^{51}\)

**Recommendations**

New York State should take additional steps to encourage local open space planning and help ensure that the economic benefits of open space are recognized. The Office of the State Comptroller provides the following seven recommendations for State and local governments to consider.

**Support Local Open Space Planning**

New York State should encourage municipalities to undertake and implement plans to conserve the ecosystem services provided by open space. Planning to address water quality is particularly important.

In addition, the State must continue to provide training and other support services to municipalities to ensure that they have the necessary expertise to recognize the value of open space protection, identify valuable open space resources within their jurisdictions and identify appropriate mechanisms to protect open space values.

New York State should encourage good planning at the municipal level, to help ensure that critical local land use decisions are well-supported, because these decisions may raise or lower the cost of infrastructure and other services for all New Yorkers. For example, the New York State Department of Environmental Conservation (DEC) and Department of Health project that it will cost more than $70 billion over the next 20 years to pay for the necessary maintenance and upgrading of New York's water and sewer infrastructure.\(^{52}\) Land use decisions by municipalities related to efficient use of existing infrastructure and preservation of ecosystem services will contribute to either raising or lowering these costs.

Finally, New York State government should consider setting standards for incorporating ecosystem services into municipal land use plans. In addition, the State should provide incentives to encourage municipalities to conduct planning that conforms with standards. An example of this is found in proposed legislation to promote smart growth by giving priority in the distribution of State assistance to local governments that have adopted

\(^{51}\) See [www.timbertax.org/state/taxes/ctates/pocketlist/pennsylvania.asp](http://www.timbertax.org/state/taxes/ctates/pocketlist/pennsylvania.asp)

comprehensive land use plans. New York State should ensure that all municipal
governments have the resources necessary to plan to protect the low cost ecosystem
services provided by open space and reward those municipalities that actually do so.

**Allow Municipalities to Establish Community Preservation Funds**
Currently only a limited number of New York State municipalities have authority granted by
the State Legislature to create funds—known as Community Preservation Funds—to
protect open space. To expand the availability of such funds, legislation could be enacted
by the State to authorize any municipality to create a community preservation fund, rather
than the current practice of requiring a separate, special legislative act for each
municipality. State law granting this authority to municipalities in Westchester and Putnam
counties requires that these municipalities develop Community Preservation Plans that
identify priorities for expenditure of funds. Eligible voters in the respective municipalities
then vote on whether or not to create a municipal funding stream to implement the plan.
This two-step process for creating funds will ensure that municipalities adequately evaluate
the open space values and functions desirable for preservation within their jurisdiction and
that the ultimate plan adopted is supported by local residents.

**Evaluate Adequacy of Protections for Lands Providing Ecosystem Services**
New York State should evaluate existing regulatory programs to determine if they
adequately preserve ecosystem services. For example, wetlands and buffers of natural
vegetation adjacent to water bodies can retain floodwaters and remove contaminants
contained in surface runoff. The DEC should determine if statewide regulation and other
relevant rules and laws addressing land use in wetlands and lands adjacent to water
bodies are adequate to preserve ecosystem functions on the lands in question.

**Improve State-Level Planning for Open Space to Address Funding**
While New York State’s existing Open Space Planning process comprehensively assesses
land conservation needs on a statewide basis, this process does not include identification
of funding needs on a long-term basis, or identify funding sources to meet these needs.
The DEC should include assessment of long-term capital needs for open space
conservation and identify potential sources of funding to address these needs.

**Improve Administration of Funds for Open Space Programs**
The 2009 New York State Open Space Conservation Plan states that between 1996 and
2008, farmland protection projects totaling $556 million were not funded due to insufficient
program resources. These projects represent lost opportunities to promote a healthy farm
economy and to preserve the watershed protection services provided by the farm lands.
Given the fiscal challenges facing the State, it is critical to prioritize available funding
effectively, and to ensure that it is used in areas where demand is greatest and where the
potential return on the State’s investment is maximized. A comprehensive assessment of
administration of the Environmental Protection Fund and other funding available for open
space programs should be conducted to ensure that funds are being appropriately spent
and that available funding is being targeted appropriately.

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Encourage Private Land Conservation

Programs that provide conservation assistance to private landowners, such as the DEC Cooperative Forester Program, promote land management decisions that preserve open space values on the land. In addition these programs may help landowners generate an income from their property which can obviate the need to subdivide and develop the property. New York State should explore opportunities to expand the reach of these programs through working with municipal governments and other programs like Cooperative Extension or soil and water districts that already provide educational services to landowners.

Private land trusts perform a valuable function in educating private landowners on open space values found on their property and developing land use plans that allow them to preserve these values while realizing other goals, such as earning income or allowing recreational use. New York State should explore ways to build on the success and effectiveness of existing public/private partnerships such as the New York State Conservation Partnership Program to encourage private land conservation efforts.

Consider Tax Abatements Reflecting the Value of Ecosystem Services

Numerous studies have shown that natural drainage and water purification services provided by open space can substantially reduce public expenses to provide these services. Property assessment practices that value undeveloped land based on its potential value as development lots create an incentive for landowners to convert their lands in ways that reduce or eliminate water-related ecosystem services. As natural water retention and purification functions are lost, they will have to be replaced with engineered systems administered by municipal entities and paid for by property taxes. This circumstance raises property tax rates for all residents. Studies also show that programs that preserve natural features, such as wetlands or forests (natural infrastructure), that prevent the rapid release of storm water and filter pollutants from surface water can offset the need for investments in engineered storm water management infrastructure, water purification systems and increasing capacity at sanitary sewers.

If it can be established that property tax abatement programs designed to encourage preservation of natural infrastructure provide a broad public benefit, are beneficial to all taxpayers and will not impair the ability of municipalities to provide required services, New York State should consider establishing tax abatements that encourage landowners to maintain natural storm water abatement and water purification features on their lands. This approach is supported by a 1993 report on implementation of New York's forest tax laws produced by the DEC Commissioner and the Secretary of the Board of Equalization and Assessment at the direction of the State Legislature. The report recommended that the State amend the 480-a program to allow participants to manage for a "broader array of forest values," including those addressing water quality.54 Any such program should include protections such as those found in the 480-a program to ensure that the program accomplishes its goals and does not provide an undue benefit to large landowners or real estate speculators.


www.epa.state.ny.us/ret/nurs/forestraws/section1.htm
Conclusion

Well-planned open space protection can work together with other initiatives designed to meet the vital needs of municipalities in economic development, affordable housing and fiscal health. Rather than conflicting with other goals, open space preservation can provide significant economic benefits. Not only does open space indirectly support industries (such as forestry, forest based manufacturing, agriculture, outdoor industries and tourism) that generate billions of dollars in the economy, it directly produces critical ecosystem services. The choice for natural drainage over an engineered replacement can translate into substantial cost savings for a municipality. This, however, is just one example of how public infrastructure costs and therefore, local taxes, can be reduced by utilizing the ecosystem services of open space.

Regional economic growth can also be enhanced by preserving open space, whether by promoting industry, maintaining aesthetic values or offering outdoor recreational opportunities. This, in turn, is linked to property values, which impact local revenue. The potential to rely upon natural ecosystem services, rather than constructing artificial replacements, directly impacts local expenditures. The interconnection among the goals of fiscal health, affordable housing and economic growth makes it ever more important to ensure that open space plans are well designed.

Well-designed plans, however, are predicated upon a thorough evaluation of a community’s goals. State and local governments must clearly identify the uses of open space they wish to pursue. Since conflict can occur between different uses of open space, it is critical to ascertain the desired goals for an area. New York State reviews and prioritizes its statewide open space protection activities every three years as required in a planning process. Many local governments also produce open space planning documents. By engaging in a planning process, municipalities can weigh open space protection goals in concert with other municipal goals to mitigate potential conflict.

55Article 49, Title 2 of the New York State Environmental Conservation Law. The New York State Open Space Plan outlines New York State’s goals in acquiring open space, rates potential parcels of open space and lists specific parcels of land with the preferred method of protecting the land. The Open Space Plan can be viewed on the DEC’s website at www.dec.ny.gov/lands/47990.html.
THE ECONOMIC CASE FOR
CONSERVATION:
A Synthesis of the Economic Impacts of
Natural Resources and Conservation in
New England

Isabel Holland and Spencer Meyer

Key Findings

- Every $1 of state funding spent on land conservation in New England returns between $4 and $11 in economic value from natural goods and services.

- New England’s forests remove more than 760,000 tons of air pollution each year, resulting in an estimated $570M in avoided health care costs.

- 432,000 jobs, $51.6B in consumer spending, and $7.6B in state and federal tax revenues are attributable to New England’s outdoor recreation industry, which relies heavily on public access to protected areas.

- New England’s forest products industry—much of which is conducted on protected land—provides 62,500 jobs and $13.5B in economic output each year. The industry’s indirect impacts generate double those amounts in the three northern states alone.

- In 2012 New England’s agricultural sector (including forestry and fishing) employed 225,500 people and accounted for $41.5B in sales.

- 39 separate studies conducted across New England show that open space is not a tax burden on municipalities. On average open space requires $0.36 of municipal services for every $1 of property tax paid, while residential properties require $1.16.
Executive Summary

Investments in land protection are investments in clean air and water, climate mitigation, human health, recreation, and economic development. New England forests provide robust natural services, including maintenance of air and water quality, carbon sequestration, protection of wildlife habitat, soil stabilization, and flood control. Forests and farmland contribute to key industries in New England, including logging, wood products manufacturing, maple syrup tapping, agriculture, outdoor recreation, and tourism. Land protection is the primary process through which public and private landowners can ensure their land will remain as forest and farmland, thereby continuing to make these important economic and ecological contributions. The goal of this report is to synthesize the best available economic and ecological information about the contributions land conservation make to our economic system, and to identify gaps that should be explored further.

Undeveloped forests and well-managed farmland act as safeguards to air, water, and soil quality and serve as carbon sinks. Natural lands, whether privately or publicly owned, typically provide positive externalities, yielding significant economic benefit without compensation, or often even valuation. According to work conducted by the Trust for Public Land, every $1 of state funding invested into land conservation in New England returns between $4 and $11 in economic value from natural goods and services. The natural water filtration from New England forestland is estimated to be worth $157 million annually. The Quabbin and Wachusett watersheds in Massachusetts supply clean drinking water to nearly 40 percent of the Commonwealth’s residents while the Sebago Lake watershed serves 15% of the entire population of Maine. New England trees remove over 762,000 tons of air pollution per year, leading to annual health benefits of around $570 million, and offset more than 20 percent of the region’s carbon dioxide emissions, which would otherwise exacerbate global climate change.

Protected lands draw residents and visitors alike to New England’s abundance of areas of natural beauty to hike, camp, paddle, ski, hunt and fish, and enjoy the scenic vistas. Recreation occurs on nearly all modes of land protected from development in the region, from iconic publicly owned landscapes such as the White Mountain National Forest to local trail systems that cross private lands. Outdoor recreation in the region provides 432,000 jobs and prompts $51.6 billion in consumer spending. Annual federal tax revenue attributed to outdoor recreation is estimated at $1.1 billion and state and local tax revenue at $3.5 billion. Tourism eclipses forestry and farming as a source of employment in the region’s rural places, with 14.2% of employment in travel and tourism-related trades. In 2016, 13.6 million visitors spent an estimated $805.8 million in local gateway regions while visiting New England’s National Park Service lands such as Acadia National Park, Boston Harbor National Recreation Area, and the Cape Cod National Seashore.

The protection of working forests and farms across New England ensures that housing and development sprawl don’t displace these industries vital to New England’s economy and
sustenance. The region’s forest products industry—including forestry, logging, wood products and paper manufacturing, wood energy, and Christmas tree farming—accounts for 62,500 jobs and $13.5 billion in economic output annually. The agricultural sector (excluding forestry and commercial fishing and aquaculture) employed approximately 165,000 people, with $13.4 billion in sales and a total economic impact of $17.2 billion.

Farmlands and open spaces contribute fiscally to communities. For every $1 generated in revenues from open land, only $0.36 were required in services. Residential lands consistently required more in services than was generated in revenue, necessitating $1.16 in community services for every $1 generated in revenue. On average, commercial and industrial lands required $0.06 more than working and open land. Research shows that protected open space drives up property values, and subsequently increases tax revenues, supporting local economic development.

Permanent land protection is a major way to ensure these vital assets continue to contribute to the region’s economy, yet there are many challenges associated with quantifying the specific economic uplift of land protection. In particular, there is very little research that directly attributes the economic benefits to land protection itself. While we are aware of the natural services provided by forests, including water and air filtration and carbon sequestration, what is the value of those services coming directly from protected land? What is the role of forests remaining as forests in sequestering carbon, filtering water for downstream users, and controlling air pollution regionally? Or farmland remaining as farmland in securing jobs, wages and salaries, direct sales, and tax revenues? Although the benefits provided by goods and services emanating from natural lands are well acknowledged—we all appreciate clean air and water, access to trails and beautiful scenery, and farm and forest products (our Christmas trees, maple syrup, dairy, and apples)—the value of these services stemming from protected lands is unaccounted for.

Land conservation has traditionally occurred via bottom up, community-based initiatives. State and local government have an opportunity to push policy to not only create effective programs to enhance the protection of forests and farms, but provide guidance to make better investments in land protection on a regional scale. Economic impact studies will demonstrate value in terms understandable by legislators, community and economic development authorities, and other entities responsible for allocating increasingly limited resources, as well as the individuals and governments positioned to receive these benefits. We see economic opportunities in land conservation by way of natural services and natural-resource based industries while recognizing the challenge of maintaining these benefits in their scope and impact on New England’s economy and quality of life and need guidance to make better investments. In not only conserving land but linking economic benefits to land conservation, we can spur investment into the vitality of the region and generations to come.
The State of Conservation in New England

Forest cover in all six New England states continues to decline as residential and commercial development fragments forests and consumes farmland. New England has a rich history of protecting its forest and farmland for future generations. Conservationists have operated largely on a moral argument to protect the beauty and natural resources for those to come. While conservationists have begun to make an economic case for land conservation, benefits we derive from our land continue to be undervalued. Consequently, protection is hampered by inadequate public and private funding. The goal of this report is to synthesize the best available information about the contributions land conservation make to our economic system, and to identify gaps that should be explored further.

State and federal funding for land protection is declining across all six New England states, dropping nearly 50 percent from its peak of $1.19 million to $62 million between 2008 and 2014. These state and federal investments are augmented by private philanthropy, landowner donations, municipalities, and private financing. Along with public funding, the pace of conservation slowed from more than 150,000 acres per year in the early 2000s to about 50,000 acres per year since 2010. Even with investment in open space, development pressures threaten unprotected areas throughout the region. Between 1990 and 2015 New England lost an average of 24,000 acres of forestland on an annual basis. If this rate of loss continues, New England will lose an additional 1.2 million acres of forest over the next 50 years.

The costs and quantities of land conservation are well documented and the value of natural lands, working farms, and forests to our society are well understood conceptually. However, the documentation of the benefits, particularly in economic terms, derived from land conservation is less robust. Conservationists may object to trying to reduce the value of conservation to a dollars-and-cents calculation, and doing so should be met with a healthy dose of skepticism. But, in order to shift the dialogue of conservation as a luxury to conservation as a partial solution to our resource-constrained world, the economic argument for land protection must be more robust. Calculating the return on investment (ROI) of land conservation, a quantitative analysis of a land conservation investment’s costs compared to some measure of benefits, allows for conservation managers to inform decision-making and for the public to understand the benefits they receive from their investments. Conservationists can make use of these findings to best allocate scarce resources and identify opportunities to work with private investors, for whom there is evidence of growth and increasing interest in the market.

2 Foster et al.
Public and private investment in land protection result in a range of positive economic and ecological impacts. New England forests provide robust natural services, including maintenance of air and water quality, carbon sequestration, protection of wildlife habitat, soil stabilization, and flood control. These services establish reduced, avoided, or deferred costs by improving water and air quality and in turn minimizing costs relating to water treatment, air pollution control, property damage, and healthcare. Land protection supports key industries in New England, including logging, wood products manufacturing, maple syrup tapping, agriculture, outdoor recreation, and tourism. These natural-resource based sectors contribute directly to the regional economy through goods and services, worker wages, and through the tax revenues and indirect spending that bolster local economies. Open space protection can also increase neighboring property values while minimizing costs of community services and associated tax bills. Investments in land protection are investments in clean air and water, climate mitigation, human health, and rural economic development.

**Quantifying Returns on Investment**

We organized the benefits of conservation by the following broad categories: natural services, outdoor recreation and tourism, forestry, agriculture, and property values, costs of community services, and tax base. For each category, we synthesized what is known about the economic returns using existing studies. We also identified gaps where our current understanding of the economic contributions of conservation are poor and made suggestions for future investigation.

**Natural Services**

Undeveloped forests and well-managed farmland act as safeguards to air, water, and soil quality, prevent flooding and erosion, and serve as carbon sinks. Natural lands typically provide positive externalities, essentially yielding significant economic benefit without compensation. Without these services the costs related to water treatment, stormwater management, and air quality control could be magnitudes greater.

**Water Filtration**

Healthy and functioning watersheds naturally filter pollutants and moderate water quantity, resulting in less flooding and soil erosion, cleaner water downstream, and greater groundwater reserves. The high infiltration rates of forest soils in New England significantly attenuate surface runoff in the region; virtually all water comprising New England streams and rivers has undergone the forest filtration process. Allowing untreated water quality to degrade increases treatment and capital costs, and therefore suppliers can minimize costs through the prioritization of conservation and management of forests in source watersheds. The USDA Forest Service’s Forests to Faucets project uses GIS to model land areas most important to
surface drinking water and the role forests play in protecting these areas (Figure 1). New England forests stand out nationally in terms of importance to drinking water and as threatened by development. The New England Forestry Foundation estimated the value of natural water filtration from forestland in New England to be $157 million annually or $3.9 billion in perpetuity (using a discount rate of 4.4%, the approximate cost of capital for New England states and municipalities). With population and water consumption growth over the next 50 years, that value is expected to increase to $5.4 billion (in 2014 dollars).

The costs — both realized and potential — of water treatment are evidenced in case studies across New England. In Maine, residential development, deforestation, and population growth threaten the exceptional water quality of Sebago Lake, jeopardizing the Portland drinking water supply for 15% of the state’s population. The local utility is currently exempt from the federal requirement to filter drinking water; the loss of this waiver due to reduced water quality would force the utility to install a conventional filtration system at an estimated cost of $97 to $155 million over 20 years. The Trust for Public Land identified significant cost-saving trends for 27 water suppliers in Connecticut through buffering drinking water sources by protecting surrounding forestland and other natural areas. Approximately 50 to 55 percent of the variation in treatment costs amongst the plants was explained by the percent of the forest cover in the source area. For every 10 percent increase in forest cover in the source area, treatment and chemical costs decreased approximately 20 percent.

Air Quality and Health

Forests play an essential role in air quality across New England, removing air pollution by intercepting particulate matter and absorbing gaseous pollutants. A single hectare of forestland can store 50 kilograms of nitrogen, 40 kilograms of calcium, 20 kilograms of potassium, 6


kilograms of magnesium, and 4 kilograms of phosphorus each year. Forests also promote cloud cover that increases precipitation, helping to clean the air of particulates, ozone, and other pollutants. New England trees (both urban and rural) remove 762,100 tons of air pollution per year, with 96.3 percent of pollution removal on rural land (Figure 2). The removal of air pollutants by New England’s trees leads to annual health benefits of around $570 million, with state values ranging from $22 million in Vermont to $250 million in Massachusetts.

Increased particulate and ozone pollution is associated with increased cardiovascular and respiratory disease. A study of 13 Connecticut towns in New Haven County along a strong rural-urban gradient found that reduced disease prevalence of three chronic diseases (hypertension, heart disease, and diabetes) attributable to access to open space translates to an annual avoided healthcare cost of $37 million—a 40% reduction in healthcare expenses and economic losses.

When considering both health care costs and lost agricultural productivity, the New England Forestry Foundation estimated that maintaining forests would save New Englanders nearly $700 million per year. Discounted at the average cost of capital for New England municipalities, the net present value of these benefits is approximately $17.8 billion. Without forests and urban trees, New England would be hotter, more arid, and smoggier and consequently both less healthy and less productive as a population and a landscape.

Carbon Sequestration

Forest ecosystems are the largest terrestrial carbon sink on Earth, with more than half of their net primary production moving to the soil via decomposition of litter biomass. The absorption and storage of carbon removes it from the atmosphere, providing the critical service of mitigating global climate change. New England forests, which comprise 4.2% of all the forests in the U.S., offset more than 20 percent of the region’s carbon dioxide emissions. Forests in

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10 Meyer et al, in review.
the region are currently sequestering atmospheric CO₂ at about 78 to 111 gC/m² per year. In 2015, New England forests stored 1.6 million metric tons in aboveground carbon in live trees. When multiplied by recent weighted-average global carbon prices, the monetary value associated with aboveground carbon storage for New England forests was $102 billion. Urban and community forests in New England alone stored 88.9 million metric tons of carbon valued at $1.2 billion and removed 2.4 million metric tons of carbon annually, a service worth $66.7 million. A model of net primary production, soil heterotrophic respiration, and net ecosystem exchange in New England forests indicated that New England forests are currently acting as carbon sinks, however this status is dynamic. If forest destruction continues at the current rate, New England will lose a significant portion of this service and its associated economic benefits. Reforestation and a reduction of the rate of deforestation via land protection is one method of maintaining New England forests' status as carbon sinks.

Carbon is one of the few ecosystem services for which a market has been created, bringing the theoretical economic value to market by compensating landowners who agree to avoid carbon emissions via sustainable forest management. In New England about $25 million of carbon offsets were sold in the California compliance market since 2013. Another approximately $75 million worth of carbon offset projects have been listed with the California Air Resources Board, indicating significant demand from landowners to sell more offsets in the next few years.

Natural Services Return on Investment Studies

Every $1 of state funding invested in land conservation in New England, returns between $4 and $11 in natural services were generated. These figures were found using a benefits transfer

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methodology (in short, estimating benefits for one context by transferring available information from studies already completed in another location and/or context) by the Trust for Public Land (TPL). In New Hampshire's Land and Community Heritage Investment Program, every $1 invested returned $11 in economic value when considering the benefits of air pollution removal and carbon sequestration.20 Every $1 invested between 2001 and 2011 also leveraged at least $4.95 in additional contributions from federal, local, private, and nonprofit sources. Land conserved by Land for Maine Futures (LMF)—one specific state funding program in Maine—returned $11 in natural goods and services for every $1 invested considering the services of air pollution removal, carbon sequestration, water quality protection, water supply, and food production and livestock goods.21 The total economic value of natural goods and services generated by LMF lands between 1980 and 2010 was estimated at $833 million. Finally, a $4 return was found for land conserved in Massachusetts by the Commonwealth to be used for parks and open spaces, providing $3.17 billion in total economic value from date of purchase to 2023.22

The $7 range of returns between the Maine and New Hampshire ($11 returned per $1 invested) and Massachusetts reports ($4 returned per $1 invested) is likely due to the higher real estate prices in Massachusetts, reflected in the average cost of land acquisition for the three states determined using data from the Conservation Almanac. The average cost of lands conserved using public funds between 1998 and 2015 (both by easement and simple fee) in Massachusetts was $6,380 per acre, compared to $2,51 per acre in Maine and $1,292 per acre in New Hampshire.23 The acquisition cost of land in Massachusetts was 159% greater than that of Maine and New Hampshire averaged.

The annual value of non-market ecosystem services across the state of Massachusetts alone was estimated to be over $6.3 billion per year, as found in a 2003 study by MassAudobon.24 Services include climate regulation, freshwater regulation and supply, water assimilation, nutrient regulation, habitat refugium, soil retention and formation, disturbance prevention, pollination, and recreation and aesthetics. Services provided by forests specifically comprised the largest portion of the $6.3 billion figure (46%), valued annually at $2.9 billion. Based on net forest and agricultural land lost to all forms of development between 1985 and 1999, the state lost over $200 million annually in ecosystem services, in 2001 dollars. These findings suggest that if the same amount of development had occurred through denser and more brownfield

development, so as to reduce impact on forest and agricultural land, the state could have enjoyed the economic benefits of both development and ecosystem services.

This $6.3 billion annual estimation is likely twofold to that of the Trust for Public Land’s $3.17 billion estimation for total economic value of natural goods and services due simply to the greater land base included in the MassAudubon study. The 131,000 acres conserved by the Commonwealth comprise only 2.6% of the nearly 5 million acre state. Both reports provide per acre annual values within a relatively similar range (MassAudubon $0 - $6,253 per acre; TPL $0 - $2,570 per acre). A recent study by the Nature Conservancy found that the Northern Appalachian-Acadian Ecoregion, which extends from the Adirondacks of New York across the Green Mountains of Vermont to the White Mountains of New Hampshire into Maine, to have a natural capital value ranging from $1,500 to $4,200 per acre per year, falling again within a similar range to the two prior studies. Authors included the services of carbon storage, flood control, and air filtration.

The total ecosystem service flow for the state of Maine was estimated at a value of $14.67 billion per year, in a similar valuation study. Authors included services of aesthetic and amenity, disturbance regulation, gas and atmospheric regulation, other cultural services, pollination and seedling, recreation, soil regulation, and water supply and regulation. The highest value cover types were consistently the urban and suburban types, including rivers, wetlands, forests, and herbaceous open space. When combining estimated values of forest services, the forest land cover provides by far the highest value of ecosystem services. The largest value per year by land cover category comes from non-urban forests, at $5.7 billion. Again, the annual estimation of $14.67 billion is much larger than the TPL’s total economic value of $833 million for LMF lands. As was the case in Massachusetts, this difference is likely due to the greater land base included in the statewide study. Lands conserved by the Land for Maine Futures program make up 2.4% of the total state area.

**Gaps**

All of the studies mentioned above noted that their respective value estimates should be considered conservative due to reasons including: lack of available research for many service and land cover combinations, poorly understood and poorly valued understanding of ecosystem services in general, and the compound value of different natured outcomes. While some estimates of natural services provided by forest systems are available, scale and input variables are inconsistent. For example, while carbon sequestration has become recognized as a forest management objective, the full carbon storage potential of forests is not well understood, yet alone the economic value of this capacity. The same can be said for many of


the natural services included in this synthesis, including water and air filtration, storm water management, and others. Ecosystems in close proximity to large groups of humans yield larger calculable benefits than ecosystems with only limited connectivity to beneficiaries, demonstrated in the MassAudobon study. This may skew the perceived value of rural protected lands.

Even with extensive research on ecosystem services and their perceived values, there is a disconnect between ecosystem services and their actual marketable values. Very few markets exist and therefore markets must be developed in order for our economic systems to internalize the services that are now only externalities. The carbon credit market is one of the few examples of a realized market delivering conservation benefits from ecosystem services.

At the current rate of development, another 1.2 million acres of farms and forestland will be lost in New England in the next 50 years, a transformation that will largely undermine the forests’ capacity to yield clean water, mitigate flooding, and provide other necessary services. This could necessitate massive public investments to compensate for impaired and lost natural services. A better overall understanding of the value of natural services is needed in order to quantify gains and potential future losses. A baseline of the economic value of natural goods and services promises to provide investors with current information necessary to make smart and effective investments in conservation.

Outdoor Recreation and Tourism

Conserved lands draw resident and visiting pleasure travelers to the White Mountains, Maine coast, and other areas of natural beauty in New England to hike, camp, paddle, cycle, ski, snowmobile, fish and hunt, and enjoy the region’s many scenic vistas. In attracting visitors, conserved lands stimulate local economies, providing economic benefit via increased employment and visitor spending on accommodations, dining, transportation, and recreation activities. Outdoor recreation is occurring on both private and public lands, an important case as our population grows and outdoor recreation resources decline on a per-person basis, constrained by resource limits. In a recent analysis of 340 conservation easements of various sizes in all six New England states, Moore, Meyer and Thompson found that 38% of easements required some level of public access. Public lands, often held and managed by the state, National Parks Service, and the USDA Forest service, are governed for multiple purposes including recreational use for wildlife watching, hiking, and hunting.

Outdoor recreation is by far the single greatest use of the National Forest System. It is also the single greatest employer, and provides the single greatest stimulus for local economies. Americans get tremendous economic benefits from the various activities on the National Forest System, including outdoor recreation, but also from investments in recreational infrastructure.

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27 Foster et al.
28 Moore, Meyer and Thompson (in preparation).
and in healthy, resilient forests and grasslands. In fiscal year 2011, all activities combined on all units of the National Forest System contributed over $36 billion to America’s gross domestic product, supporting nearly 450,000 jobs. Around 45 percent of those jobs were connected to hunting, fishing, wildlife viewing, and other forms of outdoor recreation on the National Forest System. Outdoor recreation alone in the National Forest System supports about 205,000 jobs, contributing about $13.6 billion to the Nation’s gross domestic product each year. New England is home to both the White and Green Mountain National Forests. The direct spending of visitors to ski areas on the national forests amounts to about $4 billion annually, with the White Mountain National Forest hosting about 1 million skiers every year on Nordic and alpine ski areas in New Hampshire. The average economic value of recreation benefits (use value) for the Eastern Forest Service region, containing New England, was $55.93. This number, in other words, represents the consumer surplus, or average economic value of recreation benefit per activity day that accrues to an individual engaged in a type of recreation activity within the Forest Service region.

![Graph showing jobs in travel and tourism related sectors](image)

Figure 4. Total jobs in industries that include travel and tourism, New England, 1998-2015 (data adapted from U.S. Department of Commerce).

Tourism, directly dependent on the conservation of lands and waters, now eclipses forestry and farming as a source of employment in New England’s rural places. Across New England, 14.2% of employment occurs within the travel and tourism related trades. In Maine alone, tourism puts $10-14 billion into the state economy each year and employs 140,000 workers — almost 22% of the state’s workforce. From 1998 to 2015, employment in travel and tourism in the region grew from 749,368 to 913,783 jobs, a 21.9% increase. All other private employment grew only by 4.5% in that same period. Growth in the

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33 Moholland, DD. Perfect Weather Sparks New England Tourism Rebound. WBZ 1030 Radio, 10/30/10
tourism and travel sectors appeared to be steadier than that in other private employment trends, with minimal fluctuations during the Great Recession (Figure 4; note separate scales).

In New England, an important sector of tourists travel specifically for outdoor recreation, visiting communities to hunt, fish, hike, and boat while spending on meals, accommodations, and specialized equipment. The Outdoor Industry Association estimates that outdoor recreation provides 423,000 jobs across New England and prompts $51.6 billion in consumer spending each year. Federal tax revenue attributed to outdoor recreation is estimated at $1.1 billion across the six states; state and local tax revenue is approximately $3.5 billion. For a state-by-state breakdown of these figures, refer to Table 1.

### Table 1. The spending, direct jobs, wages and salaries, and tax revenues attributed to outdoor recreation in New England.

<table>
<thead>
<tr>
<th></th>
<th>Spending ($ billion)</th>
<th>Direct Jobs</th>
<th>Wages and Salaries ($ billion)</th>
<th>State and Local Tax Revenues ($ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT</td>
<td>$9.00</td>
<td>69,000</td>
<td>$2.90</td>
<td>$743</td>
</tr>
<tr>
<td>ME</td>
<td>$8.20</td>
<td>76,000</td>
<td>$2.20</td>
<td>$548</td>
</tr>
<tr>
<td>MA</td>
<td>$16.20</td>
<td>120,000</td>
<td>$5.90</td>
<td>$911</td>
</tr>
<tr>
<td>NH</td>
<td>$8.70</td>
<td>79,000</td>
<td>$2.60</td>
<td>$528</td>
</tr>
<tr>
<td>RI</td>
<td>$4.00</td>
<td>37,000</td>
<td>$1.20</td>
<td>$293</td>
</tr>
<tr>
<td>VT</td>
<td>$5.50</td>
<td>51,000</td>
<td>$1.50</td>
<td>$505</td>
</tr>
<tr>
<td>New England</td>
<td>$51.60</td>
<td>$432,000</td>
<td>$16.30</td>
<td>$3,528</td>
</tr>
</tbody>
</table>

Investment into the outdoor recreation industry is also investment into gateway communities (cities or towns that lie just outside major tourist attractions such as national parks, wilderness areas, or nature resort areas.) In 2016, 13.6 million visitors spent an estimated $805.8 million in local gateway regions while visiting National Park Service lands in New England alone, including Acadia National Park, Boston Harbor Islands National Recreation Area, and the Cape Cod National Seashore. A USDA study of 311 rural recreation counties across the United States found that recreation and tourism resulted in lower local poverty levels as well as improvements in education attainment and health measures.

Participation levels in outdoor, wildlife-associated recreation are high. A U.S. Fish and Wildlife Service study conducted in 2011 found that across New England, 40.5% of residents had participated in-state and/or out-of-state. The highest rate, at 61%, came from Vermont, followed by Maine at 48%.

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Tourism and outdoor recreation are both strong economic engines that depend heavily on natural beauty and conserved lands. While the numbers included in this report reflect both sectors as a whole, there is no literature quantifying visitor spending and employment directly tied to conserved lands. More than 80 percent of funding for recreation and conservation is generated at the state and local level and four out of six New England states have outdoor recreation funding programs of their own, including Land for Maine’s Future and Vermont Housing and Conservation Trust Fund. State-based funding sources play an important role in acquiring the economic, quality of life, and health benefits associated with recreation and tourism outlined above. If it is shown that land conservation can lead to economic growth in the form of tourism and outdoor recreation, regional planners, the tourism industry, and policy makers can promote conservation as a contributor to economic development.

Forestry

The protection of working forests across New England—largely through conservation easements—reduces the risk that these lands are converted to other uses and fragmented into smaller ownerships. Protected forests provide direct economic contributions via employment, wages, and timber and non-timber product sales. They also provide the many other economic benefits discussed in this report (natural services, recreation, etc.), especially when they guarantee public access. A recent analysis of 24 large working forests easements in New England found that 75% required at least some level of public access. Knowledge of the relative size of the timber industry and its components, how these have changed over time, and how local trends compare to trends in other geographies is important in analyzing how a proposed conservation plan would stimulate growth or decline in industry, whether some geographies would be affected more than others, and given the relative size of the industry if changes to it will affect the broader economy.

The Northeast State Foresters Association (NEFA) estimates that the region’s forest products industry – including forestry, logging, wood products and paper manufacturing, wood energy, Christmas tree farming, and maple syrup tapping – accounts for 62,500 jobs and $13.5 billion in economic output annually. Maine alone generates $8.2 billion of economic output, and when combined with New Hampshire and Vermont, the indirect impacts of the forest products industry account for an additional 62,000 jobs and $11.9 billion in economic output. According to 2015 data from the U.S. Department of Commerce, Maine had the largest percent of total timber employment (2.64%) and Connecticut had the smallest (0.25%). The percent employment in timber across New England was around 0.5 percent. Between 1998 and 2015

there was a 50 percent decrease in the number of timber jobs from 1.14 percent employment to 0.53 percent.

![Bar chart showing percentage of private employment in timber in different states.]

Figure 5. Percent of private employment in timber, 2015 (data adapted from the U.S. Department of Commerce).

Timber harvest on national forest is done under strict environmental law, unlike the harvesting that occurs on private lands. In addition to providing paper and lumber products, sustainable forest management facilitates emerging technology such as bioenergy, biofuels, and substituting wood for products that require high amounts of fossil fuel. Receipts from timber harvesting on the National Forest provide significant income to local communities. Of the nearly 800,000 acres of White Mountain National Forest, approximately 35% is considered suitable for timber operations, and on average each year around 1% of the suitable area is harvested. The Green Mountain National Forest also supports a small but active and growing timber management program that emphasizes community involvement and collaboration.

Maine is a national leader in forest sustainability certification, with upwards of 10 million acres, or more than 50% of its timberland, certified by the Forest Stewardship Council (FSC) or the Sustainable Forestry Initiative (SFI). Tracking economic output from forestry on conserved lands and certified sustainable practices will provide a better understanding of the full economic uptake associated with the sector attributable to protected lands.

Agriculture

Like land dedicated to the forest-based industry, development threatens agricultural working lands as well. Farming holds a significant portion of the landscape and local economy in areas of

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43 White Mountain Forest Management Story Map. [https://www.fs.fed.us/whitemountain/landmanagement/resourcemanager/?cid=F5GPRP549223](https://www.fs.fed.us/whitemountain/landmanagement/resourcemanager/?cid=F5GPRP549223)


New England, produces the food New Englanders consume, generates billions in sales, jobs, and related industry, and often employs good stewards of the land. Farmers hold a stake in land conservation as crop production often relies on upstream public lands that provide water for irrigation, where highly forested parcels and proper management techniques would provide better quality water, affecting yield and output.

The protection of working farms across New England ensures that housing and development sprawl don’t displace these industries, which remain important drivers of job and economic activity. Researchers at University of Connecticut found that in 2012, the total sales from agriculture (excluding forestry and fishing) amounted to $13.4 billion, with a total economic impact of $17.2 billion and 165,376 jobs supported. According to the Census of Agriculture, direct-to-consumer sales in New England increased 62 percent from 2002 to 2007, helping to increase by 30 percent the total market value of agricultural products sold. In 2015, the percent of total farm employment across New England was 0.5 percent. The highest percent of farm employment was in Vermont (2.3%).

![Figure 6. Approximate percent of land area in farms, 2012 (data adopted from the U.S. Department of Agriculture).](image)

Expanding these figures backwards to a 45-year range, more complex trends can be observed. From 1970 to 2015, farm employment shrank from 63,775 to 51,634 jobs, a 19 percent decrease. Like employment, net income shrank from $1,202.3 million to ($133.6) million, a 111.1 percent decrease. With these figures in mind, the size and scope of the farm sector appears to be shrinking in New England, however, the land in farms is valuable for a number of reasons, including food production and the preservation of open space, scenic views, and wildlife habitat. Even with agriculture as a declining component of the regional economy, the

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48 USDA
industry represents a significant portion of the land base. In 2012, approximate percent of land area in farms was 10.5 percent in New England, with the highest portion of farmland in Vermont (21.2%) and the lowest in Maine (7.4%) (Figure 6). 49

Accessible and healthy food is vital to social, economic, and environmental health in New England. Today it takes an estimated 16 million acres to feed New England’s 14.5 million people.50 In acreage terms, New England grows just under half of its vegetables, mainly potatoes and sweet corn, about one quarter of what it consumes in fruit, and over half of its dairy products. Protecting valuable farmlands from development will allow not only for the continuation of existing revenues, but an expansion of the economic sector (with the potential to maximize New England food production) and associated returns. Today, 12% of the existing farmland in New England is permanently protected from development.51 However, agricultural conservation easements do not ensure that the land will continue to be farmed.52 The persistent threats to working lands and open space are clear and two-fold: residential subdivisions and commercial development. The conversion of working lands and open space to residential and commercial properties has significant economic implications, including the loss of direct sales, economic impact, and employment from agriculture.

Property Values, Cost of Community Services, and Tax Base

Farmlands and open spaces, many of which are conserved properties, are helping to maintain fiscal balance, sustaining local economies, and contributing to economic diversity, while shaping overall quality of life in the region. Although from a highest and best use perspective working and open space lands may generate less monetary revenue than residential, commercial, or industrial properties, they require less public infrastructure and fewer community services, including spending on education, public works, and town services, on top of contributing value through natural services, recreation, and other features highlighted in this report. The commonly held belief that residential growth and development are consistently beneficial for the local economy is disproven, with development requiring the extension of costly infrastructure into outlying rural areas leading to higher local taxes or a decreased level of public services, and in some cases both.53 Along with the increased cost of services, open

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49 USDA
51 Foster et al.
space studies have shown land prices decrease when outside an urban growth boundary and increase when inside a greenline.

Cost of Community Services

The American Farmland Trust used a Cost of Community Services (COCS) approach to determine fiscal contributions of local land use, examining local revenues and expenditures and calculating revenue-to-expenditure ratios for residential, commercial/industrial, and open lands (including productive farms and forests). In the five New England states in which COCS studies had been conducted, working and open lands always generated more public revenues than they received back in public services. For every $1 generated in revenues from open land, only $0.36 were required in services, averaged across Connecticut, Maine, Massachusetts, New Hampshire, and Rhode Island.\footnote{American Farmland Trust (AFT). Cost of Community Services Studies. 2010. \url{http://www.communityreservation.org/community_services.pdf}} Residential lands consistently required more in services than was generated in revenue, necessitating $1.16 in community services for every $1 generated in revenue. On average commercial and industrial lands required $0.06 more than working and open land. These values represent averages from 39 COCS studies conducted across New England (Figure 7).

![Diagram showing revenue-to-expense ratios for different land categories.]

<table>
<thead>
<tr>
<th></th>
<th>Residential</th>
<th>Commercial/Industrial</th>
<th>Working and Open Land</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT (average of 11 towns)</td>
<td>1 : 1.11</td>
<td>1 : 0.26</td>
<td>1 : 0.34</td>
</tr>
<tr>
<td>ME (1 town)</td>
<td>1 : 1.29</td>
<td>1 : 0.59</td>
<td>1 : 0.06</td>
</tr>
<tr>
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\textit{Figure 7. Cost of community service studies conducted by the American Farmland Trust (below) and a visually represented (top).}

Like agricultural land, forest land generally contributes more in taxes than is consumed in public service costs. This is evidenced by selected case studies throughout New England: In evaluating
whether to protect a 1,250-acre parcel in Wayland, Massachusetts, the town found developing the property would cost taxpayers $328,350 a year more than they would receive in added tax revenues from new homes and lead to a $7.75 per capita increase in the tax rate, whereas purchasing the property for open space would only add $4.25 to the tax rate. A 1989 study by Statewide Program of Action to Conserve the Environment (SPACE) compared taxes generated and community costs of a 330 acre Londonderry apple farm to those generated if the open space were converted to a 290 single family residential housing development. As a working farm, it was generating $18,830 per year above the cost of services it required from the town. By contrast, the development would have cost the community $643,710 per year above and beyond taxes and fees generated.

It is important to keep in mind that COCS studies do not provide a full picture of the costs and benefits of urban growth, and consequently are subject to criticism. New residents do not just pay taxes and demand services; they contribute to the economic base of the community. Population changes affect the local labor force, which in turn changes employment, income, income taxes, business activity, and property and sales taxes. This economic multiplier effect, not captured in COCS studies, can generate significant revenues in the form of additional sales and services.

**Tax Base**

While a common concern is that land conservation, in preventing development that pays more in property taxes than conserved lands, leads to a smaller tax base and therefore higher tax bills for other landowners, the demand for services discussed in the previous section means that tax bills are actually lower. A study conducted by the Vermont Land Trust across all cities and towns in Vermont concluded that more development tends to lead to higher taxes, and on average, tax bills are lower — not higher — in the towns with the most conserved land. This is not to suggest that conservation will always trump development in terms of economic good. However, a more complex relationship between conserved lands and fiscal health exists.

These findings are supported in other geographies. Studies conducted by Ad Hoc Associates analyzing the relationship between land conservation, development, and property taxes in New York, Maine, Vermont, Massachusetts, and Connecticut show both the long-term and short-term impacts. In the short term, development increased the tax base by increasing property values, whereas land protection did not provide additional tax revenue and may have reduced the tax base. However, in the long term, the lower level of services required on open land versus developed land means increases to municipal budgets and spending are limited over

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time. A 1997 case study across seven sample towns in Massachusetts examined the extent of tax shift given the hypothetical removal of $500,000 in property value from town tax rolls. In the short term, the average property tax bill increased between $0.00 and $4.94, assuming no payment in lieu of taxes. In the long term, across the same seven towns, the tax bills were lowest in towns with the most land per capita and the most area classified as open land. Similarly, the towns with the most permanently protected land had the lowest tax rates, on average.

Although properties conserved by land trusts are eligible for tax exemption, in some cases land trusts are electing to pay property taxes. In these instances, open space is not only minimizing services and associated tax bills, but the land trusts are continuing to contribute by paying taxes. In Maine, nearly 95% of all land trust conserved lands (1.9 million acres with conservation easements and 460,000 acres owned by land conservation organizations) remain on the Tax Rolls. Most of this acreage provides multidimensional benefits, managed as working forests and available to the public for hiking, hunting, fishing, and other outdoor activities.

**Property Values**

Open space protection supports economic development by driving up property values and subsequently increasing tax revenues. An analysis of property value appreciation rates (as measured by resales over time) for open space subdivisions in Concord and Amherst, Massachusetts demonstrated that enhancement value can be important in offsetting negative effects of removing the market value of open space (either exempt from taxes or taxed at a lower rate) from the tax base. In Concord, properties in open space subdivisions appreciated 167.9% between 1980 and 1988, compared to 146.8% as a town, an increase of 14%. In Amherst, houses in an open space development appreciated 462% between 1968 and 1989 while houses of similar size and price not in an open space subdivision appreciated 410% in the same period, an increase of 13%.

Parcels located in towns that contain wilderness near the Green Mountain National Forest have per-acre sales prices that are 13 percent higher than towns without wilderness. Furthermore, the price of parcels decreases by 0.8 percent per acre with each kilometer farther away from the nearest wilderness boundary. Other things being equal, a parcel that sells for $1,000 per

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acre in a town without wilderness would be expected to sell for $1,130 per acre if it were in a town with wilderness.62

There are clear implications for town planning with regard to community services, tax base, and property values. Even larger significance exists within the context of the return on investment from conserved lands. This synthesis has showcased existing studies across New England, however knowledge is both limited and outdated, particularly regarding the cost of community services. With the commission of further studies, the balance between loss of revenue, gains in property values and taxes, and savings on community services would be better understood within the context of land protection.

Challenges

Permanent land protection is a major way to ensure that the vital assets of forest and farmland continue to contribute to the region’s economy, yet there are many challenges associated with quantifying the specific economic uplift of land protection. In particular, there is very little research that directly attributes the economic benefits to land protection itself. This is applicable in the case of outdoor recreation, tourism, forestry, and agriculture in terms of the provision of natural services and economic impacts. Protecting land ensures the current land use, be that forestry, agriculture, public trails, etc., is continued and the current economic contributions associated with that land use are preserved. While extensive research has been done on natural services provided by the landscape of New England, the value attributed to protected areas, both public and private, is unknown. While we are aware of the natural services provided by forests, including water and air filtration and carbon sequestration, what is the value of those services coming directly from protected land? What is the role of forests remaining as forests in sequestering carbon, filtering water for downstream users, and controlling air pollution regionally? Or farmland remaining as farmland in securing jobs, wages and salaries, direct sales, and tax revenues? Although the benefits provided by goods and services emanating from natural lands are well acknowledged – we all appreciate clean air and water, access to trails and beautiful scenery, and farm and forest products (our Christmas trees, maple syrup, dairy, and apples) – the value of these services stemming from protected lands is unaccounted for.

Moving Forward

Land conservation has traditionally occurred via bottom up, community-based initiatives. State and local government have an opportunity to push policy to not only create effective programs to enhance the protection of forests and farms, but provide guidance to make better investments in land protection on a regional scale. Economic Impact studies will demonstrate

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value in terms understandable by legislators, community and economic development authorities, and other entities responsible for allocating increasingly limited resources, as well as the individuals and governments positioned to receive these benefits. We see economic opportunities in land conservation by way of natural services and natural-resource based industries while recognizing the challenge of maintaining these benefits in their scope and impact on New England's economy and quality of life and need guidance to make better investments. In not only conserving land but linking economic benefits to land conservation, we can spur investment into the vitality of the region and generations to come.

**Investing in New England's Future**

Future investment in land protection across New England is essential to the maintenance of ecosystem function, sustainable economic growth, and healthy communities in the face of forest conversion, climate change, and other disturbances. Based on the economic impacts identified in this report, we expect a full accounting of the returns from both public and private conservation investments will show land protection is a prudent long-term investment in our communities and natural resources. Investments in conservation will help sustain and grow important economic sectors including sustainable timber harvesting and agriculture, encourage investment in rural areas, avoid future government and individual costs for basic services such as clean air and water, and promote health and wellbeing. Expanding the knowledge base of goods and services directly attributable to conserved lands will drive significant investment, development, and policy decisions.

**About Highstead**

Highstead is a non-profit conservation organization dedicated to conserving the New England landscape and achieving the Wildlands and Woodlands Vision. Highstead applies science and catalyzes regional collaboration in conservation, conservation finance, ecological research, policy analysis, and land stewardship. Highstead, founded in 1982, is an independent operating foundation based in Redding, CT.

**Isabel Holland**

Isabel Holland is a conservation intern at Highstead. She graduated from Colby College in the spring of 2017 with a degree in Environmental Science, focusing in Conservation Biology, and a minor in Managerial Economics. Prior to Highstead, she gained experience while interning with a grant writer focusing on food sustainability, healthy living, and quality of life care across the state of Maine, volunteering at an adaptive sports and recreation center, and researching highland hummingbirds in Costa Rica.

**Spencer Meyer**
Hi Beth,

When I previously nominated Nick Zito for a Commission, I remember that you commented on his qualifications based on his official duties at the CT DEEP. So allow me to nominate him once again for consideration at our next meeting.

The Republican Town Committee would like to nominate him to fill the vacancy created by the resignation of Barry Joseph, the only non-Democrat on Inland-Wetlands. Nick has checked with DEEP and as long as applications are not related to his field there would be no conflict. He will recuse himself for items related to forestry.

I believe that Gerry Shaw has his resume from the previous nomination, if not I can get another copy to her. Thanks

Season’s Greetings,
Dave

Sent from my iPad
Dear Tim and Members of the Conservation Commission,

Imagine the historic farmhouse at Center and Pease Roads demolished and replaced by a subdivision. It's now Off-Center Farm, a food source for the public good. Imagine a sprawl of townhouses obliterating the 85-acre Townline Farm on Baldwin Road (the protection of which was completed by the Land Trust). Or a development in place of the Massaro Farm. Or the demolition of the old South School on Johnson Road. Or a firehouse on the hayfield at Center and Beecher Road. These threats to our natural and historic resources were faced and overcome by the Conservation Commission under Kathy Gartland and then Maria Kayne, and the public good is richer for it. It's gratifying to see that you, in like manner, have opposed the Arbor Haven development. The value of that open land to the mental and physical wellbeing of town residents is critical, as was made evident during this pandemic.

Thank you for standing for the good of the people of Woodbridge and the greater region.

Jim Urbano
Hello Tim,

Thank you in advance for relaying this message and for your efforts to help protect Woodbridge from this development proposal.

Please let me know if this is too long - it might be hard to believe, but it's already been reduced quite a bit.

Have a good meeting.

Andrea

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Andrea Urbano, M.S.
(203) 815-9056
To the Town of Woodbridge’s Conservation Commission for the consideration by the Town’s Board of Selectman,

Please consider this written word in support of the Woodbridge Conservation Commission’s decision to reject Arbor Haven’s Proposal for developing the Woodbridge Country Club property.

This development will further burden our taxpayers. 39 separate studies conducted across New England show that for every $1 of property tax paid, residential properties require $1.16. These studies find that open space is not a tax burden on municipalities. On average open space requires only $0.36 of municipal services for every $1 of property tax paid.

Woodbridge residents are being misled. The proposal is claimed to reduce taxpayer burden, and maintain open space. The proposed 62 age-restricted homes have deed limits. So, in 30 to 40 years, those homes are subject to younger families who require disproportionately more public services. Based on our new, and unprecedented zoning regulations, the proposed number of homes will be subject to and many well-suited for additional units (up to 14/acre where appropriate), increasing the likelihood of stressing our Town’s finances and environmental quality even more. Though “light” homeowner association dues would be collected, it remains unclear if these would be enough and would last long enough to cover the cost of services.

The 50 acres of proposed open space contains a high percentage of impervious surfaces and is highly fragmented. These types of open space provide dismal services relative to in-tact tracts of land. Though the open space would be available to the public, let us not forget about the immense stress and degradation our public spaces already faced in the thick of COVID and continue to face. Reducing available area not only threatens the health of our natural systems but is also a public health concern.

The current property benefits townspeople by providing a safe, beautiful, and underrepresented landscape to enjoy year-round, while also storing and sequestering carbon, protecting and promoting healthy water supply, providing clean air, supporting mental health and well-being, and wildlife and pollinator populations. Arbor Haven’s proposal does not have a defined or clear environmental impact statement, nor does it contain a plan to limit the development’s carbon footprint. This is not acceptable.

The Woodbridge Country Club is one of the Town’s largest remaining tracts of green space. It would be short-sighted to develop and fragment it. Not only would we not achieve the financial relief we seek, but we would also lose a historic haven. We have another option. Let’s instead support the Woodbridge Land Trust’s and Woodbridge Park Association’s joint proposal. This is the only current option to generate income while preserving the ecological, economic, cultural, and social services the land currently provides.

Thank you for your consideration,

Andrea Urbano

115 Sperry Road
Woodbridge, CT 06525
Dear Tim Austin, members of the Woodbridge Conservation Commission and to the Woodbridge Board of Selectmen,

I am a 15+ year Board member of the Woodbridge Park Association and I have lived in Woodbridge for over 27 years. Prior to my move to Woodbridge, I lived in 12 different states, so I am proud to call Woodbridge my true home town. We chose to move here for proximity to our work locations, the excellent school system and the beautiful, rural community which we have grown to love and enjoy.

I write to you in support of your decision to reject the Arbor Haven proposal for all the reasons you have so eloquently described in the attached Memorandum to the Woodbridge Board of Selectmen. I hope this message will also be shared with the Woodbridge Board of Selectmen as that is my reason for sending this today.

As you have described, the loss of this beautiful property to development would be, in my opinion, one of the worse decisions our town could ever make. The property was purchased by the town taxpayers over 12 years ago. It is my estimate, and I may not have this total correct, that taxpayers have spent over 5 million dollars toward the final purchase of this property, already. So the 11 million offered by the developers is not really a true 11 million since 5 million has already been spent. The developers are paying back almost half their cost for what we have spent already.

I absolutely agree that we must find ways to increase tax revenue for our town. Our high mill rate is discouraging individuals from seeking to live in our town and also deterring our seniors from living here. Since I am one of those seniors, I will admit that purchasing an “over 55 home” on this property for upwards of $400,000-500,000 is not affordable for us. So I do not foresee that many Woodbridge seniors will choose this option. Instead, I fear that we may have an influx of seniors from more affluent communities. Do we want this? And, if seniors like us do move to this community, then our home could potentially sell to young families with children entering the school system.

The Woodbridge Park Association and Woodbridge Land Trust have offered a Grant of Conservation restriction on 145 acres of this land to be protected in perpetuity. There would still be acres remaining to generate town revenue. I realize this is not the same financial offer that Arbor Haven has presented. But Arbor Haven’s proposal requires significant town expenditures as your memo describes. I agree what we need to study are ways to improve our town’s affordable housing options, as well as, town tax revenue. I’m sure this has been mentioned before, but could we seek state or national grant funding to refurbish property that has long been vacant to meet those needs? Other New England towns have done this. Should we destroy this gorgeous piece of property for this purpose?...tax revenue and affordable housing options?

Your letter has outlined so many other reasons why selling this beautiful land to developers is not in the best interest of our town and you highlight the environmental impact. I would also like to note the contribution of this land to carbon sequestration. I am not a trained environmentalist but soil, trees, shrubs and bodies of water all aid in the removal (sequestration) of carbon from the atmosphere. Certainly those natural resources remove carbon more readily than asphalt shingles and pavement would do once 100 houses are built, not to mention potential flooding of low lying areas...
surrounding this property as has already happened in the past. If each home has residents with at least one or two cars, what about that contribution to traffic and pollution?

And last, but not least, I would ask that each member of the Board of Selectmen drive by this property, as I do every day, and picture bulldozed land, 100 foot trees chopped down, rock walls destroyed and 100 houses or condos perched on the rolling hills. What if the entire project turns out to be an eyesore and a town problem for years to come. Would an elected member of the Board of Selectmen be remembered as making the decision to sell out this historical piece of land? Once it is gone, it is gone, forever.

We have all contributed a significant amount of money to save this land thanks to the foresight of former First Selectman Ed Sheehy. Do we want to destroy what has become a most beautiful piece of property for which we can all be proud? Let’s put our hearts and heads together to come up with additional solutions to solve our town’s financial concerns. To destroy this property is not and will never be in the town’s best interests.

Most sincerely,
Georgia Chavent Morgan
23 North Pease Road

Georgia Chavent, M.S., R.D.
Adjunct Professor
Nutrition Science Program

School of Health Sciences
University of New Haven
300 Boston Post Rd. West Haven, CT 06516

T: 203-932-3561
E: GChavent@newhaven.edu
W: www.newhaven.edu

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As a Woodbridge resident for many years, I strongly support the decision by the Conservation Commission to reject the Arbor Haven proposal. I attach my recent letter to the Editor of the Woodbridge Town News that sets out an additional objection to the Arbor proposal on the ground that it will lead to decreased property values.

David W. Schneider
25 Cassway Road
November 30, 2021

Letter to Editor, *Woodbridge Town News*

Dear Editor:

~ Woodbridge is the only town bordering New Haven that is not over developed.

~ This unique feature and its rural feeling make Woodbridge a desirable place to live, increasing the value of residential homes.

~ The Arbor Haven proposal would undermine what makes Woodbridge special and would drive down residential property values.

This is merely one reason, among many others, why the Arbor Haven proposal should be rejected.

~ Do not be blinded by the siren song of easy money; the Arbor Haven proposal is not good for the Town or for Woodbridge home owners.

Virginia and David Schneider
To the Woodbridge Conservation Commission and the Board of Selectmen:

I have been a resident of Woodbridge for 36 years. I fully support the Conservation Commission’s opposition to the Arbor Haven Development Proposal. The WCC’s position is accurate, and covers the issues in detail.

I have historically seen many reasons for supporting open space. In short, they include:

1- QUALITY OF LIFE: Open space provides recreation, cleaner air and water, and less noise.

2- CLIMATE CHANGE MITIGATION: This has become a critical current issue vital for the future of the planet.

3- PROPERTY VALUE INCREASE AND RELATED ECONOMIC BENEFITS: The Conservation Commission has done an excellent job of showing the economic losses incurred with the Arbor Haven Proposal. There have been many studies historically that have shown the fiscal benefit of maintaining open space, farms, and parks.

We have one example in Woodbridge itself with the Massaro Farm, where the community has benefited in many ways from the generosity of the Massaro family in protecting this land. Realtors have mentioned the farm as an asset when dealing with prospective home buyers in Woodbridge.

Further, the Trust for Public Land (TPL) has provided me with some of the current studies showing the economic benefit to communities that protect open space, farms, and parks. I have included an excerpt from one such study in 2013 in Massachusetts. There have been over the past 50 many other similar studies. The excerpt is quoted below from material from TPL: Feel free to contact me for more of the information they sent me.

QUOTATION FROM TPL FOLLOWS citing The Return on Investment in Parks and Open Space in Massachusetts

Studies have consistently shown that ... residential land... contributes less in taxes than it receives in municipal services, representing a net loss to local governments. The national median across 151 communities over 25 years is that for every $1 paid in local taxes,... the average home requires $1.16 in services.

END OF QUOTE.

I fully support the Conservation Commission’s decision to oppose the Arbor Haven Development and would vote against such development in referendum if necessary.

I thank you very much for this wise decision and applaud its accuracy and thoroughness.

Virginia Schneider, 25 Cassway Road
From Adrienne Micci-Smith
17 Ansonia Road
Woodbridge CT 06525

I have read your rejection letter regarding the proposed Arbor Haven project at the Country Club of Woodbridge. Thank you for your insightful analysis and your efforts to protect this important public space. I heartily agree with your conclusions.

Last week I listened to the Board of Selectmen meeting. Your rejection letter states, "The town purchased the property in 2009 to protect it from development so to even consider selling the property to a developer to build condos and houses is contrary to the residents' wishes and the town's strategy in purchasing the property."

I thought this was common knowledge, so I was shocked to hear our First Selectwoman suggest at the BOS meeting last week that the property was not purchased to protect it from development.

What I would like to address is my own experience at the property. My husband and I regularly walk our dog at the CCW. Within the last couple of years the property has grown in nicely. We see all kinds of wildlife there, deer, foxes and all types of birds. Earlier this week as we were walking around the pond I was looking for the resident heron which often uns itself there. All of a sudden we heard a noise and the heron flew right up in front of us; it was majestic and we estimate that it had about an eight foot wing span. A few minutes later we must have disturbed a flock of mallards because they too flew right up in front of us with their green heads. We generally stick to paths but one day we stumbled upon a bird, perhaps a grouse, that was roosting on the ground in the grasses. There are fields and fields of milkweed which is important for the propagation of butterflies. Our son-in-law loves to birdwatch there. Children sied there in the winter and fish there at other times.

This property has become a gem in this town. It would be heartbreaking to see it developed.

I hope that the Board of Selectmen, who appointed you to advise it in these matters, will actually listen to you.

Adrienne Micci-Smith
17 Ansonia Road

Adrienne Micci-Smith
Curtain Call
203-444-9181
curtaincallct.com
Thank you for your referrals!
Dear Tim,

Kindly accept this letter of wholehearted support of the Woodbridge Conservation Commission’s rejection of the Arbor Haven development proposal. As essentially a life-long Woodbridge citizen, with deeply rooted connections to our community, I am genuinely dismayed that the development of the former Woodbridge Country Club property is even a consideration. The people of Woodbridge voted to purchase this property in 2009 for the explicit purpose of protecting the land. This is clear, documented, and undisputed. Notwithstanding the consistent desire of third parties to develop this property, there is no conversation to be had here as it is incongruous with the desire of the people and the town’s strategy in purchasing the property. I applaud the Conservation Commission for keeping true to its charter and, more importantly, remaining vigilant because I fear one day a distracted citizenry may inadvertently allow development of this open space.

Sincerely,
Sal Rubano
I support the Woodbridge Conservation Commission's rejection of the Arbor Haven housing proposal for the Country Club of Woodbridge property. I feel strongly that the CCW property should remain substantially as open space. This is an historic and environmentally significant asset to the Town of Woodbridge and I feel that the Town should recognize its value. Any additional development on the CCW property would destroy a beautiful ecosystem.

Thank you,

Chris

Chris Dickerson
Woodbridge Running Company
203-430-0034
Greetings,

I would like to commend the members of the Conservation Commission for their well-reasoned and fearlessly honest assessment of the Arbor Haven development proposal. Their letter to the Board of Selectmen is of inestimable value in guiding plans for this special property. The letter ought to be read by all Woodbridge residents.

Thank you,
Martha German
(1170 Johnson Road)
> Good Afternoon,
> Please have this email serve as our support of the recent Conservation Commission’s decision to REJECT the recent Arbor Haven Proposal.
> Development of this property is something many have been following and it is imperative we take our time and weigh the pros and cons. To quote a favorite movie of mine, Gone with the Wind, Gerald O’Hara, “You mean to tell me Katie Scarlet O’Hara that Tara, that land means nothing to you? Why land is the only thing worth working for, worth fighting for, worth dying for, as it’s the only thing that lasts”!
> What we decide to do with this land needs to benefit generations! Not just the here and now. I commend the Commission on their hard work, diligence and dedication to such an important decision.

> Thank you,
The McLoughlin’s: Gertrude, Sabena, Susan and Sara

> Sent from my iPhone
Please submit for public comment at your next meeting.

Jeff Hughes
88 Woodfield Rd

I applaud the conservation commission's rejection of the Arbor Haven proposal. This proposal is a short-sighted overdevelopment that would negatively impact our beautiful town. I'm disappointed that our elected officials would even consider and actively promote this type of large scale development on such a unique piece of town property. Once this land is sold, it is lost forever.

-Best
Jeff

Sent from my iPhone
Please submit for public comment at your next meeting.

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88 Woodfield Rd

I applaud the conservation commission’s rejection of the Arbor Haven proposal. This proposal is a short-sighted overdevelopment that would negatively impact our beautiful town. I’m disappointed that our elected officials would even consider and actively promote this type of large scale development on such a unique piece of town property. Once this land is sold, it is lost forever.

-Best
Jeff

Sent from my iPhone
Dear Members of the Woodbridge Conservation Commission:

A heartfelt thank you to the members of the Commission for your recent recommendation not to endorse Arbor Haven’s proposal for the WCC property. My family moved to Woodbridge for its historic, tranquil green spaces and quality schools. Your report rightly recognized the terrible environmental impact this project would bring upon a Founding Father’s historic property, and the financial loss the town and School District would ultimately incur. As the pandemic continues, our family along with many others will continue to safely enjoy the beautiful WCC property, even as it gives refuge to many endangered species our kids spend their schooldays learning about and being empowered to protect. Your recommendation reinforces what they learn all day at Beecher Road School about being good caretakers of the earth, so thank you!

Ryan Mills
Thank you, Gerry!

Hi Tim, I don’t know if you still use your “Hotmail account” - That is where Amey sent the comment.

Dear Mr. Austin - I offer the following public comment for the Conservation Commission’s meeting. Please share it with all of the Conservation Commission members. I have copied Mrs. Shaw on this email to make sure there are no problems with transmission.

To the members of the Woodbridge Conservation Commission - I applaud your recent vote to reject Arbor Haven’s proposed plan to develop residential housing on the former Country Club of Woodbridge. Your action is consistent with the Conservation Commission’s past leadership and with common sense.

Some twenty years ago, the Conservation Commission led the Town’s push to acquire parcels of undeveloped land for permanent protection as open space. The Conservation Commission explained, and it was generally accepted, that it was less expensive for the town in the long run to purchase and protect open space than to provide government services for residential development. Under Kathy Garland’s leadership as Chairman of the Conservation Commission, the town pursued and achieved the permanent protection of many acres.

The records of the Conservation Commission will cite the studies on which the Commission relied in arguing that open space is preferable to housing as a matter of fiscal policy, let alone as a matter of aesthetics, respect for the natural environment, and opportunity for recreational enjoyment. More recent studies affirm the Conservation Commission’s position.

It would be wholly inconsistent with the Conservation Commission’s past history, legal authority, and common sense to support residential housing on the CCW in general and the Arbor Haven proposal specifically. I am so glad that your current Commission membership is remaining true to the Commission’s purpose and laudatory history. Sincerely, Amey Marrella (184 Rimmon Road)