

**SELECT BOARD WORKSHOP
ON CLIMATE CHANGE**

January 16, 2021

10:00 AM

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PRESENT: Select Board Members Bill Greathead, Margaret Scarsdale, and Tony Beattie; Town Administrator, Andrew MacLean

This meeting was remote participation only with approximately 30 members of the community attending.

The meeting was called to order at 10:03 AM. Pledge of Allegiance was said. Mr. Greathead announced that the meeting is being cablecast live, and recorded for future cablecast by Pepperell Community Media. The meeting was recorded on the Go To Meeting platform and is available at Pepperell Community Media's video on demand site, here:

<https://pepperell.vod.castus.tv/vod/?video=2da696e5-8113-4e7e-8bf1-66dbf1eb225f&nav=programs%2FSelect%20Board&volume=.65>

The workshop was organized into four topical areas and Select Board Member Tony Beattie, who had organized the workshop, served as facilitator. Town Administrator Andrew MacLean was the 'scribe' using an on-line white board to document the ideas being generated in the 'brainstorming' aspect of the workshop.

1. DISCUSSION / ACTION ITEMS

1.1 Introduction

After an introduction from Select Board Member Beattie which included a philosophical point as well as instructions for the workshop itself, the agenda topics were reviewed:

- Measuring Our Local Carbon Footprint
- Carbon Sequestration
- Reducing Energy Consumption
- Educating Pepperell

Each topic was then taken in turn for about a 15 minute 'brainstorming/discussion.' Some of the conversations were personal experiences, some were references to resources – texts, state programs, and more, and still others were thoughts about what would come next and Pepperell's community role in combating climate change.

The white board notes and meeting GoToMeeting chatlog are attached to these minutes.

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2. ADJOURNMENT

On a motion made by Mr. Beattie and seconded by Ms. Scarsdale, it was unanimously voted to adjourn the meeting at 12:01 PM.

Respectfully submitted,

Tracie Looney, Executive Assistant

APPROVED:

Bill Greathead, Chairman

Margaret Scarsdale, Clerk

Tony Beattie

*Remotely Approved: February 8, 2021

Chat Log C:\Users\amaclean\Documents\ChatLog Select Board Workshop 2021_01_16 12_04.rtf

Mr Holden NMRHS (to Everyone): 9:56 AM: Good Morning everyone. This is Russ Holden - Environmental Science Teacher at NMRHS... joining for as long as I can this morning... along with a couple students I'm hoping...

anthony w beattie (to Everyone): 9:59 AM: good morning Russ

Mr Holden NMRHS (to Everyone): 10:00 AM: Somehow video not connected... Thanks Mr. Beattie...

James Scarsdale (to Everyone): 10:06 AM: Good morning everyone!

James Scarsdale (to Everyone): 10:09 AM: I noticed that the temperature in Churchill on Thursday night was 23 F. That's about 40 degrees above normal for this time of year The same applies over all of northern Canada.

Mr Holden NMRHS (to Everyone): 10:20 AM:

<https://www.penguinrandomhouse.com/books/220698/the-wizard-and-the-prophet-by-charles-c-mann/>

Andrew MacLean (to Mr Holden NMRHS): 10:21 AM: Thanks Russ. I am adding to a resource page.

Mr Holden NMRHS (to Everyone): 10:23 AM: <https://www.sciencemag.org/news/2017/07/best-way-reduce-your-carbon-footprint-one-government-isn-t-telling-you-about>

Renee D'Argento (to Everyone): 10:24 AM: More in the way of preventive practices and reducing consumption have to become a way of life if we are to reduce our carbon footprint as well as our impact on our web of life, including pollinators. Lawns are the most wasteful in resources in what it takes to maintain, including fossil fuels, water, pesticides and herbicides, and the impact on soil health as well as the balance of insect populations in the environment. How about this: 63,000 square miles of lawn in America... Americans' lawns now cover an area three times larger than any irrigated crop in the U.S.

https://www.huffpost.com/entry/lawn-largest-crop-america_n_55d0dc06e4b07addcb43435d?guccounter=1&guce_referrer=aHR0cHM6Ly9kdWNrZHVja2dvLmNvbS8&guce_referrer_sig=AQAAAMmQT9tcj5eGerMaMkIX7vTzdctpXxCbKPdB-7s5_DSz6pCOXkXVoxHWcN_amlVCpkbyGtQ9rOebtXB9CIT9AQErCrKlfeFdXBrELv8DVg2CNkJGiuGR6FjTLiV8iNQ3jHFKNoa9Sdg9xYXB-3TR7sHoElizi_bTrckRAa2C1okq

Andrew MacLean (to Renee D'Argento): 10:31 AM: Thanks Renee. I will add to the resource page we are collecting today.

James Scarsdale (to Everyone): 10:33 AM: My apologies for unfocused comments.

Renee D'Argento (to Everyone): 10:33 AM: Let's talk about ideas that homeowners can do realistically and afford. Only 27 percent of homes have the orientation to put solar on their home. Converting to another source of energy is expensive and many can't afford the up front cost before you get your rebate. The need is for education combined with grants and low or zero interest loans. We have a lot of old homes in Pepperell that need to get more efficient in lowering their energy use. There are also studies out there that demonstrate weatherization gives the most bang for the buck. There needs to be an increased focus in these programs.

Renee D'Argento (Private): 10:34 AM: Thank you Andrew

Mr Holden NMRHS (to Everyone): 10:34 AM: FYI <https://www3.epa.gov/carbon-footprint-calculator/>

James Scarsdale (to Everyone): 10:34 AM: Great point Renee.

James Scarsdale (to Everyone): 10:36 AM: Would people be willing to respond to a survey about energy usage in order to build a better model of how much energy we use as a town? For instance, would you be willing to anonymously submit a snapshot of a few months of your heating and electricity bills?

Susan Edwards (to Everyone): 10:39 AM: Yes, James, I think people would be willing to take a survey. I would. Maybe through the Civic Engagement program, which would also help build participation in that program.

Renee D'Argento (to Everyone): 10:40 AM: Re: transportation, as we learned from our Master Planning sessions, we are a bedroom community which means most people prior to COVID were commuting to work. If people want to rideshare-there aren't enough spaces in the commuter lots. Also, one must drive to the commuter rail-Ayer is 20-25 minutes away. The last mile for commuters is an issue in transportation.

catherine lundeen (to Everyone): 10:40 AM: I agree with deb. No chemicals on my lawn, just a natural. Its not control the size of the lawn it is the nasty chemicals on the lawn. How to limit chemical usage? Don't understand the love affair citizens have with their lawns?

Andrew MacLean (to Renee D'Argento): 10:42 AM: Russ Holden - I have added your link to two pages of the whiteboard.

Andrew MacLean (to Renee D'Argento): 10:42 AM: Jim - I will put the survey on the Educating Pepperell page

Renee D'Argento (to Everyone): 10:42 AM: REgarding what Deb said on lawns, I don't think she's advocating for having no lawn. A small amount of lawn for people to enjoy being outside recreating is fine, but do it sustainably. Plant low maintenance grasses that require little to no inputs such as all fescue in a portion of their yard. And manage the rest of your yard in a natural state.

James Scarsdale (to Everyone): 10:42 AM: We used to keep a conventional yard here, and noticed almost complete loss of bumblebees, which we had in abundance when we moved here. After planting native wildflowers and reducing amount of traditional lawn past couple of years, bumblebees (and others) have returned. Hope to expand on this and figure out how to make the yard much more beautiful with ideas from Deb.

Tereze Stokes (to Everyone): 10:45 AM: Just as an FYI, regarding automobiles, auto insurance companies are offering pay as you go (per mile) packages now. Another way to cut down

Mr Holden NMRHS (to Everyone): 10:46 AM: <https://www.masssaveapplicationportal.com/mapstart>
Mass Save

Susan Edwards (to Everyone): 10:49 AM: Engaging with local Landscape firms to reduce use of fertilizers, etc. They are interfacing with residences.

Deb Fountain (she/her) (to Everyone): 10:51 AM: I think we need to start small - small changes in our yards can yield big results. I don't think we will ever get to a place where we have no lawns, but we can each take a look at how much we actually use the lawn space and consider reducing it. There are also some native sedges and groundcovers that are wonderful substitutes for lawns and that reduce the need to water and mow, and benefit greatly benefit our native wildlife. As Tony said, embracing a new approach to finding the balance between having a beautiful yard and not harming the environment will be a slow shift. If anyone is interested in learning more about native plant gardening, please feel free to contact me. Also, you may want to read a blog series on the Nashoba Conservation Trust's website on Sustainable Gardening.

Mr Holden NMRHS (to Everyone): 10:51 AM: agreed

James Scarsdale (to Everyone): 10:51 AM: Sue - maybe we could invent a community resource that lets people see simple alternative ways of looking at choices like insulation, new heating systems, new cars, etc. Most of us lead lives where our time and energy is over-committed, and I don't see that changing. Those without the luxury of spending major time & resources on emerging tech will also have to be engaged, and it will be better if better solutions are as commonly visible as less good solutions.

Mr Holden NMRHS (to Everyone): 10:54 AM: Lincoln HS Solar

<https://www.andersonkreiger.com/news/how-a-massachusetts-public-school-pioneered-solar-power/>

James Scarsdale (to Everyone): 10:56 AM: Rob - I'm in favor of a local cooperative. But no new electric cooperatives have formed in Massachusetts in recent years. We could start with microgrid(s) for powering the town and some core homes.

Renee D'Argento (to Everyone): 10:57 AM: Community Choice-Municipal Aggregation is the way to go to get big bang for the buck. Over 170 towns in Mass take advantage of this program. You can have as much in the way of Green energy in your portfolio as you want. And it would cover the entire population in town, saving residents and businesses money. Lowell just renewed their contract this past year and has 45% of their energy as green, and it's a lot cheaper than NGrid. Mass Climate Action has some good information on this: https://www.massclimateaction.org/community_aggregation

Mr Holden NMRHS (to Everyone): 10:58 AM: <https://naomiklein.org/books-and-films/>

Renee D'Argento (to Everyone): 10:59 AM: From MAPC regarding Melrose Community Choice: In January 2017, Melrose finished its first year of implementation of its green municipal aggregation program. Residents saved a total of \$200,000 compared to the utility supply rate, and the community's impact could result in a 1-MW wind turbine being built in New England.

Renee D'Argento (to Everyone): 10:59 AM: That was in 2015 in Melrose

catherine lundeen (Private): 11:02 AM: Andrew can you address this program? This seems like a good first step/action plan for this council, to get Pepperell into the program? Is there a reason we aren't in it already? Can you circle back?

Renee D'Argento (to Everyone): 11:03 AM: Here is a report on the State of Green Municipal Aggregation in Massachusetts. It's a great how to guide - to do it right, as well because not all so called "green energy" is equal.

<https://cdn2.hubspot.net/hubfs/260434/State%20of%20GMA%20Report%202020.pdf>

Andrew MacLean (to catherine lundeen): 11:04 AM: It is in the Master Plan. It is complicated but definitely on our to do list.

Renee D'Argento (to Everyone): 11:05 AM: Sue you are right, I think as an example where the pine forest of mature trees were clear cut on Lowell Rd for the duplexes being built there, instead of being more thoughtful about clustering buildings in a way that preserves them.

James Scarsdale (to Everyone): 11:11 AM: Green Municipal Aggregation seems like a good idea - Climate Change Council should investigate.

Renee D'Argento (to Everyone): 11:13 AM: Here is a great resource on a statewide pilot on lawn watering reduction that includes how they went about public outreach and what was most successful. And perhaps lessons from this can be learned in other outreach efforts on other topics related to reducing wasteful practices. <https://www.mass.gov/doc/water-conservation-pilot-program-lawn-watering-reduction/download>

Renee D'Argento (to Everyone): 11:15 AM: Hi Jim, Green Municipal Aggregation is what I brought up in Master Plan Committee, and is a recommendation in the Master Plan, and what also is on your priority list for the Climate Council that Tony Sherrill and I worked on. So I hope this will be at the top of the list of priorities since it would have a great bang for the buck when everyone in town is covered.

Renee D'Argento (to Everyone): 11:17 AM: NMCOG said they could help us with this as well, and gave a recommendation for a non-profit Good Energy as a purveyor to contract with in creating the portfolio and purchasing the renewable energy itself.

Renee D'Argento (to Everyone): 11:20 AM: One of the recommendations shot down by the Master Planning Committee is to devise rules that would help foster soil health and reduce water usage on lawns, such as having builders provide not just a couple of inches of top soil, but to require a minimum of 6 inches of organic top soils on the site where the lawn is to go.

Mr Holden NMRHS (to Everyone): 11:21 AM: <https://www.mass.gov/service-details/forest-legacy-program>

catherine lundeen (Private): 11:21 AM: The Aggregation looks good. I think citizens would appreciate seeing action being taken on getting Pepperell into the program. Who will be working on that? Is there a board already working on it or is this a project this council is taking on? A lot of great information here.

Andrew MacLean (to catherine lundeen): 11:23 AM: Climate Change Council and Master Plan Implementation are obvious first steps.

Mr Holden NMRHS (to Everyone): 11:23 AM: Model land clearing bylaws
<https://www.mass.gov/doc/model-tree-clearing-ordinance-from-cape-cod-commission/download>

Renee D'Argento (to Everyone): 11:24 AM: A circular economy is more like it

catherine lundeen (Private): 11:25 AM: Obvious, yes, but How long would that process take?

catherine lundeen (Private): 11:26 AM: Just a little frustrated.

Renee D'Argento (to Everyone): 11:28 AM: Unfortunately Tony, I've started researching compost facilities and it's a dirty business as far as potential impact to the environment with what is in the waste, as well as fossil fuels from truck transportation, as well as air and land pollutants from the number of trucks that would be going to that area.

Renee D'Argento (to Everyone): 11:31 AM: When we were fighting Toxic Dirt this is information I found about pollutants from trailer truck traffic: Toxic pollutants including heavy metals and known carcinogens accumulate and persist in the environment—in soil and in plants, pollute water resources via stormwater runoff, from the wearing of tractor trailer diesel trucks components, from leaking fuel and lubricants. Pollutant emissions from heavy duty vehicles that use diesel pose a significant risk to human health and the environment, so what do you think 55,000 tractor trailer diesel trucks will do to us?

<<http://pubs.rsc.org/en/content/chapter/bk9781782628927-00086/978-1-78262-892-7>>

5. What about the CARBON POLLUTION IMPACT from diesel gas burned in 110,000 diesel truck round trips?

For each gallon of diesel burned, 22.4 pounds of CO₂ is produced. The average tractor trailer truck gets 6.5 mpg. Just one 97-mile roundtrip from Boston to Pepperell burns 14.92 total gallons of diesel fuel.

Andrew MacLean (to catherine lundeen): 11:32 AM: I think an aggregation program is several hundred hours of contractual negotiations (involving lots of folks, not 100s individually). Then marketing. There is no direct benefit to the Town - it is the consumers who sign up that save a dollar. The Town would be expected to encourage a high percentage of the Town to sign up.

Renee D'Argento (to Everyone): 11:32 AM: Agree with you Bill.

Renee D'Argento (to Everyone): 11:34 AM: A balanced approach is having development in the right places, per smart growth.

catherine lundeen (to Everyone): 11:36 AM: Nicely stated Chuck

Renee D'Argento (to Everyone): 11:36 AM: In the Master Plan, with the surveys and outreach residents overwhelmingly would like to keep our rural character. And sprawled residential growth as we have been doing is not the way to go.

catherine lundeen (to Everyone): 11:40 AM: Getting Pepperell into the Aggregation would be an excellent first step to show the Citizens green can be affordable, and demonstrates the commitment to affordability.

Tereze Stokes (to Everyone): 11:44 AM: Sorry I have to leave a little early. Have a great weekend. Thank you everyone.

James Scarsdale (to Everyone): 11:44 AM: Welcome to town Brittany

Renee D'Argento (to Everyone): 11:46 AM: Here's an excellent 20 minute video, The Farmer's Footprint that connects regenerative farming practices to our health, increased cancer rates from a highly chemical dependent agriculture, top soil loss - they say conventional farming results in 3-4 tons per acre

of top soil loss per year... such staggering statistics, and they feature a farm family who turned around their conventional farming practices to productive regenerative farming practices in one year.

<https://farmersfootprint.us/watch/?fbclid=IwAR1UB7upyBhUZQXcO0nWBNFIIjCUy4U7VWEUAb4gFBTXu088dmb2qoUmhE>

Susan Edwards (to Everyone): 11:47 AM: ve to help support your efforts. I'm on LinkedIn or here is my telly 9783940651

Beth Faxon (to Everyone): 11:49 AM: perhaps host an Earth Day celebration

Renee D'Argento (to Everyone): 11:50 AM: I like the idea of an Earth Day celebration. Townsend does one each year and has vendors on their common.

James Scarsdale (to Everyone): 11:50 AM: Yes - maybe a post-covid reopening Earth Day party!

Renee D'Argento (to Everyone): 11:51 AM: Creating a regional farmer's cooperative on-line marketplace where farmers can sell their products locally from one place.

catherine lundeen (to Everyone): 11:51 AM: It is a work in progress, INFORMATION< only! NEWS..

catherine lundeen (to Everyone): 11:52 AM: This is the information that wel want,

catherine lundeen (to Everyone): 11:52 AM: Just gettin it, going THANKS!!

Beth Faxon (to Everyone): 11:56 AM: 4-H

Beth Faxon (to Everyone): 11:57 AM: scouts

Renee D'Argento (to Everyone): 11:57 AM: Students could do internships on the various projects of the Climate Council and other committees.

James Scarsdale (to Everyone): 11:57 AM: Mr. Holden - are there kids who would be interested in participating in events that the Climate Change Council might sponsor?

Renee D'Argento (to Everyone): 11:58 AM: Yes, such as students could help with surveys

catherine lundeen (to Everyone): 11:58 AM: Maybe have a youngster come to one of these meetings and speak aobut how the youth see climate change affecting them and what they see as workable solutions..

James Scarsdale (to Everyone): 12:00 PM: Would love that Catherine.

Renee D'Argento (to Everyone): 12:00 PM: Cathy I know that Tony was looking to have a young person on the Climate Council. I thought of a couple of young college age people who aren't available. Maybe you and everyone here could put your thinking caps for a young person to get onto the council.

Deb Fountain (she/her) (to Everyone): 12:01 PM: Re Cathy's idea - could the Climate change council send an invitation to Mr. Holden's class to attend one of their meetings to speak.

catherine lundeen (to Everyone): 12:01 PM: Thank you all! EXCELLENT! Have a great day and stay safe!

Deb Fountain (she/her) (to Everyone): 12:02 PM: thanks for opening the door to conversation with the community

catherine lundeen (to Everyone): 12:03 PM: Yes sending an invitation, grea tidea, and having a youth may bring in a lrger audieince

Susan McCarthy (to Everyone): 12:03 PM: Thank you very much ! Have a fantastic weekend! When we can get all back together I like the earth day idea!

Casey Campetti (she/her) (to Everyone): 12:04 PM: Thank you!

sandra hartnett (to Everyone): 12:04 PM: Where is the town at in regards to the CPA the community Preservation Act? It seems town has zero extra revenue to do anything