



BALANCE • DIVERSITY • VIABILITY • AFFORDABILITY

PRINCETON FUTURE

COMMUNITY INPUT OPEN MEETING #8, MAY 13, 2023

NO ONE KNOWS THE COMMUNITY BETTER THAN THE PEOPLE WHO LIVE, WORK AND PLAY HERE!
YOU CAN PROVIDE VALUABLE KNOWLEDGE. WE INVITE YOU TO HELP US TO SET THE AGENDAS OF OUR
UPCOMING SERIES OF COMMUNITY LISTENING SESSIONS BY SHARING YOUR THOUGHTS

OPEN SPACES

CLIMATE RESILIENCE, EQUITABLE ACCESS & COMMUNITY WELL-BEING

MORE DOWNPOURS
Increase in Heaviest Precipitation Events

Region	% Change (1958-2016)
Northwest	9%
West	10%
Southwest	29%
South	12%
Midwest	42%
East	27%
Northeast	55%

PRINCETON'S EMERALD NECKLACE
Linking greenways to promote equitable access to nature for all

Speed & Scale

THE FOREST WATER CYCLE
Forest soils act as a natural filter, resulting in high-quality source water that requires minimal treatment.

24 Mile Walk

Problem: Land Use is Changing Hydrology

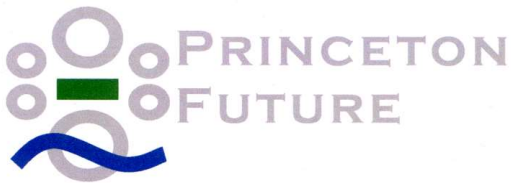
Land Use	Impervious Surface	Impervious Surface Increase
Natural Watershed	10%	0%
Natural Ground Cover	10%	0%
Medium Density Residential	33%	23%
Medium Density Residential (e.g. subdivisions)	33%	23%

All the Trails of Princeton

Welcome to the Mountain Lakes Open Space Area

The Princeton Ramble

"No tool is more powerful or accessible than civic involvement at the local level." – p. 185, *Speed & Scale*



9 AM - Noon, Saturday
May 13, 2023
Please come to the
Community Room of The
Princeton Public Library

PUBLIC LANDS & OPEN SPACES

Of the nearly 12,000 acres of land within the municipality, more than a quarter of it is identified as recreation or open space, valuable in multiple ways. These green spaces are a habitat for wildlife, a home for native plants, and a refuge for residents seeking physical and mental revitalization.

The Hopes for Climate Resilience, Equitable Access & Community Well Being

- Cindy Taylor MS, Open Space Manager, Princeton, NJ
- Patricia Shanley PhD, Ridgeview Conservancy & Princeton's Emerald Necklace
 - Sophie Glovier MBA, Author, *Walk the Trails in and Around Princeton*
 - Stephen Hiltner MPH, Friends of Herrontown Woods, Rogers Refuge
 - Jim Waltman MES, The Watershed Institute
 - Wendy Mager JD, Friends of Princeton Open Space
 - Nancy Faherty, D & R Greenway Land Trust

A COMMUNITY CONVERSATION: What Would You Like to See?

Participants are encouraged to bring forward as many ideas as can be imagined!

4 Starter Questions:

**Can We Connect All of Our Walkways and Bicycle Paths
to Our Forests and Green Spaces?**

What is the '*Speed & Scale*'* of Our Need to Address Climate Change in our Town?

**Can our Undeveloped Lands Serve to Absorb Enough Stormwater
Runoff and to Capture Enough Carbon from the Atmosphere?**

**Stewardship: What Can We Do Together to Keep our
Earth and our Community Habitable and Healthy?**

THIS IS A JOINT PRESENTATION OF PRINCETON FUTURE AND THE PRINCETON PUBLIC LIBRARY

* The title of a good book in the Princeton Public Library:
Speed & Scale by John Doerr
An Action Plan for Solving Our Climate Crisis Now
Penguin © 2021 Beringin Group, LLC

Participants

Cindy Taylor, Princeton Open Space Manager; Kate Krehel, Ridgeview Conservancy, PHS Student; Carlos Rodrigues, Planner, Princeton Future; Nancy Faherty, D&R Greenway Land Trust; Eve Coulson, Chair, Sustainable Princeton; Tom Pinneo, Pinneo Construction; Eve Niedergang, Princeton Council; Patricia Shanley, Ridgeview Conservancy, Rutgers; Wendy Mager, Friends of Princeton Open Space; Melanie Stein, Prospect Ave; Deanna Stockton, Municipal Engineer; Amlaan Parida, Ridgeview Conservancy, Rutgers Public Health; Scott Sillars, Patton Ave, Friends of Herrontown Woods; Owen Leach, Witherspoon St; Katherine Kish, Princeton Future; Rob Tangen, Shadybrook Lane; Michael Timmons, Marion Rd E; Peter Lindenfeld, Harris Road, Secretary, PCDO; Nelson Obus, Russell Rd; Lindsey Kayman, Mt. Lucas Rd; Thomas Kisby, Leigh Ave; Chris Barr, Ridgeview Conservancy; Lisa Levine, Linden Lane; James Bash, South Harrison St; Priti Tandon, Pebble Creek Rd; Andrew Thornton, Princeton Ave; Jack Hall, Pretty Brook Rd; Marina Rubina, Princeton Future; Jim Waltman, Stonybrook Millstone Watershed; Mia Sacks, President, Princeton Council; Zenon Tech-Czarny, TCNJ Sustainability Institute, Princeton Zoning Board; Stephen Hiltner, Herrontown Woods; Sophie Glovier, Author, *Walk the Trails In and Around Princeton*, Stonybrook Watershed, Drakes Corner Rd; Sheldon Sturges, Co-Founder, Princeton Future

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PUBLIC LANDS & OPEN SPACE

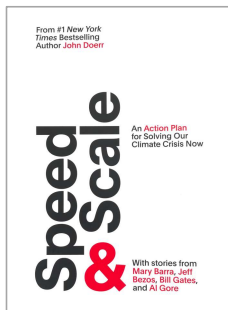
BUILDING EQUITABLE ACCESS, HEALTH AND RESILIENCE



SHELDON STURGES, Co-Founder, PRINCETON FUTURE

Good Morning and Welcome!

I want to thank Kim Dorman and the Princeton Public Library for co-sponsoring this conversation today. And, I want to thank each of you for showing up this morning!!



The major thing that I want to do, just for two seconds, is to try and get everybody here to read this book. In the early 80's, in another life of mine, I was very involved in the beginnings of the computer business. I befriended a guy by the name of John Doerr. John is a quiet, very smart, nice guy. And he sent me this book last June. I think it's one of the most important books ever published. It's basically a book of recipes about how the planet can survive. John is a venture guy who invested as one of the first investors in Google and Amazon. He has to be worth many billions of dollars now, and he's spent a fair amount of it finding the expert in 25 different categories of need to save the planet. I just want everyone to get a copy of this book, get it out of the library. *And read it.* It's basically a book of recipes: How much money? What's the timetable? Who are the

experts? And, it answers the question: "**Do we have a chance?**" It's a very, very serious issue. In this book, in the first half of it, there's a table of contents that talks about how we can **Zero Out Emissions.**

Number one is **Electrify transportation.**

Number two is **Decarbonize the Grid.**

Number three is to **Fix Food.**

Number four is to **Protect Nature.**

Number five is to **Clean Up Industry.**

Number six is to **Remove Carbon.**

What I know is that there are some people in this room who have been involved in number four, **Protecting Nature** for a very long time. And, I know the Friends of Princeton Open Space was founded in 1969. Wendy has just told me she signed in, I think, in 1978 when you moved here. The thing I want to point out in John Doerr's book, on page 185, he writes "**No tool is more powerful or accessible than civic involvement at the local level.**" That's what Princeton Future tries to do! It tries to get people involved, to get them to show up...to listen and to talk...and to listen some more. It looks to me that most of the audience today is mostly the choir. I don't know what everybody else is doing!...but maybe the room will fill up.

Princeton Future is now 23 years old. I have asked Katherine Kish to be our moderator today. She is one of our long-standing board members on Princeton Future. She used to be President of the Chamber of Commerce here and she is now Executive Director of **Einstein's Alley**, a group that is trying to get innovative technology to come to this part of the world. Katherine is a dear friend. I'm going to turn this over to Katherine. She is a much better moderator than I am. Oh, I had one other thing...

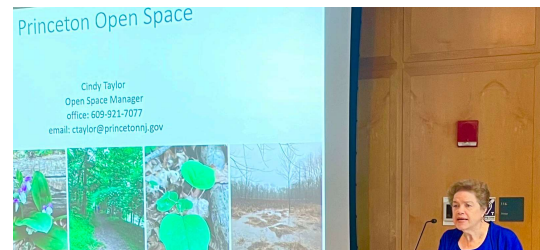
We've been making 'books' about these meetings on our hopes and dreams. One on **the Hopes and Dreams of our Neighbors** and, then, one on the **Hopes & Dreams of the NGOs in Town**...And, two on **Areas of Princeton Most Susceptible to Change**, One workshop on **Mobility and Circulation**... One on **Housing Justice**, for which the room was very full. And then the last one on March 11 on **How Will We Get Around?**



Available in the
Princeton Public
Library!
&
@
www.princetonfuture.net

I should also mention that this month, Governor Murphy has declared this May **Walk and Bicycle to School Month** which is terrific. Here's Katherine...

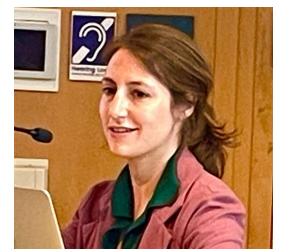
KATHERINE KISH, Princeton Future



The reason I got this job is that I'm a little tougher with the timing than Sheldon is! He lets people go on longer and I kind of call 'time', so bear with me on that. Good Morning everybody! So glad to see you and so glad to meet many of you today that I've heard so much about. What we're going to do today is open our presentation with Cindy Taylor talking about open space. She is the Open Space Manager for Princeton, New Jersey. She's *our* official this morning.

And, then, we're going to have a group of speakers from several wonderful organizations here in town: Patricia Shanley, Sophie Glover, Steven Hiltner, Jim Waltman, Wendy Mager and Nancy Faherty are all going to talk and we'll introduce each one of them. The format for today is going to be first Cindy is going to talk and then we're going to have some time for questions directly on her material. Then we will have each one of the representatives of the other organizations come up and speak for a while. Five minutes, maybe six, and then we'll have a moment if some of you have burning questions that you've just got to ask at that moment of that speaker. We'll have we've got to stanchion microphones and we can always get another one. You'll be able to ask questions directly for just a few minutes. And then, when we get finished with all of the presentations, we're going to have a general q&a session. So, as Sheldon said, this is a group that focuses on listening. And we want to give you all as much opportunity as you need to ask good questions and to get the answers from our experts here today. So, with that, I'm going to introduce Cindy Taylor. Cindy's a fascinating young woman! She's been in the field of conservation for about 10 years. She's been all over the country, the Poconos, Alabama, Costa Rica doing conservation work for all kinds of organizations. We are so lucky to have her background and experience here with us in Princeton as the Manager of Open Space. So, Cindy, why don't you come on up and we'll start?

CINDY TAYLOR, Municipality of Princeton



Thank you! Thank you for the introduction. I'm Cindy Taylor. I'm the Open Space Manager for Princeton. Just a little background. This is a new position for the Municipality. There was not an open space manager before and I've been with Princeton for about a year and a half now. I work under the direction of our Deputy Administrator Deanna Stockton [who's floating around here somewhere!]. She oversees Infrastructure and Operations.



The work that I do spans many departments. I frequently collaborate with our Engineers, our Planners, our Recreation Department and our Department of Public Works, so there is a lot of collaboration happening between the staff of the Municipality. Generally, what I'm involved with is working in the planning stages of conserving land throughout the Municipality and implementing projects on that land...and, then, seeing to some of the maintenance of that land, as well. My goal today is to show you what Princeton has in the way of parks and open space. I want to talk about some of the projects that we have going on in those open spaces, and then what we hope for the future.

When I started at Princeton, again, about a year and a half ago, I met with a lot of our open space nonprofits, on a listening tour to hear what people have been doing in our open spaces... the history of those spaces, and then what they hope to see from the Municipality in the future. As I have never met with Princeton Future, I'm actually really excited to just do a lot of listening today after I get through this presentation and hear what other people are interested in seeing in the future. So just to start: How do we define open space? This is from our ordinances, and I'm going to let everyone quietly read that to themselves, because every time I try to read it out loud, I trip over it, because it's very wordy. So I'll just give everyone a minute to read that.

How do we define open space?

Article 1. General Provisions; T10B-2 Definitions:

“Any parcel or area of land or water essentially unimproved and set aside, dedicated, designated or reserved for public or private use or enjoyment or for the use and enjoyment of owners and occupants of land adjoining or neighboring such open space; provided, that such areas may be improved with only those buildings, structures, streets and off-street parking and other improvements that are designed to be incidental to the natural openness of the land.”

When I read this, a couple of takeaways I have... the terms 'unimproved' and 'natural openness' are quite vague. It's hard to specifically define to what that applies. But one, clear, defining point is that the land is *designated or reserved*. So, open space from our ordinance side does not necessarily mean any place in the municipality that has trees on it or is natural: it's land that has been designated or preserved as such. This is important as we look forward to what other land we want to designate as open space and how we want to take care of that land. The State of New Jersey groups *recreation and open space areas together*. And for essentially the next couple of slides that I'll share. I'm not going to parse those two things separately. And many of our parks tend to be both recreation and open space.

Greenway Meadows is a great example of where we have active soccer fields right next to a natural meadow. **Barbara Smoyer Park** has baseball fields and then, a passive side with picnic tables. We use the term open space generally to talk about parks and open space in Princeton.

Princeton Open Space

Recreation & Open Space Data –

Identifies all land that is designated as a park or open space conservation. This includes land that is:

1. Designated as a municipal or state park
2. Restricted from some development with a conservation easement, deed restriction, or through stipulations of a subdivision
3. Protected by Green Acres regulations
4. Owned by an open space non-profit

Princeton Municipality Connectivity

The map on the screen is the same as the physical maps that are hanging on the walls. All of the colored polygons on this map represent areas that are deemed recreation and open space. The path data on this map shows connectivity: it is very much a draft form of connectivity. Sophie and Rob later will talk about trails and hiking throughout Princeton. In an effort to inspire that conversation, Sophie and I threw this data on the map so we can spark conversation. And, if anyone sees something on that map that's related to trails and kind activities & they think "Oh, this is an error", just write it on there, or pull me aside and say, "Hey, let's fix this data here". It's just the caveat that that data for paths is very much in draft form right now. So Sophie and Rob will talk about that later.


What I'm focusing on is the colored polygons on this map. They represent data that I've been working on since I started at Princeton. *The goal is to get all of our recreation and open open space information in one place.* So when I arrived, we had lists of **our parks**, we had lists of **properties that are protected by Green Acres**. We had **conservation easements** in our deed books, and we're trying to pull all that information so we could look at it all in one place and analyze it all in one place. On this map, the different colored polygons indicate different forms of ownership. And I think one thing I do want to point out is that *all of these different colors really represent how much it takes for an entire community to protect land and create open space.* There are so many different partner organizations that do this. And for this map, what we decided to identify as recreation open space is something that fits one of the **four points** listed on the screen there.

So *first*, any parcel that's designated as a **municipal or state park** is colored in something on this map. That doesn't necessarily mean that that area is protected in some way. It's just designated as a park. We also included **lands that are restricted from development** using tools such as a *conservation easement, a deer restriction or through stipulations of a subdivision and just general terms.* All of those mean a *legal way to restrict the type of development* on a property.

The *third* is land that is protected by **Green Acres regulations**. Green Acres is a New Jersey state program that funds Recreation and Conservation needs. And the properties restricted by Green Acres must be solely used for recreation and open space. And then any changes to those properties. Typically, per Green Acres regulations have to go through a very public process. And then the *fourth* point that we have is any property that's owned by an open space nonprofit, so partners at **DNR Greenway, Friends of Princeton Open Space, Ridgeview Conservancy, the Watershed Institute and New Jersey Conservation Foundation**, anything that they own is also designated as open space.


So, just analyzing the numbers real quick here, we've have about **3,200 acres** designated as recreation open space that's about **27% of Princeton**, and then the ownership breakdown is shown at the bottom of the screen. The **municipality owns outright about 37% of that area**, and about too small and dark on my screen about **41% is privately owned**. The areas that are privately-owned doesn't necessarily mean that it's not open to the public. In fact, *about 40% of privately owned open space does have public access* and just pointing out a few of the big ones here. The **Institute for Advanced Study**, this big brown area down here has public access trails and it's protected through a conservation easement that's held by DNR Greenway and the municipality. This big round property here is the **Coventry Farm**. The Winant Family has their vineyard there and they do allow public access through their property on the south end. That's also protected by DNR Greenway with an easement. And then these other brown areas up here... a lot of them are often properties that are owned by a **homeowner's association** that were protected through the planning board process. So I'm just showing how there are so many different ways that we protect land and methods to get there.

Thinking about the tagline for today hopes for climate resiliency, equitable access and community well-being. I'm going to talk about things that the municipality is doing just to address these points. Most of the work that I do falls into one of these three categories: Conserving Land; Natural Resource Stewardship, and then Improving Access and Use in these spaces. Before I get too far into my own work, I wanted you to know that there's lots the Municipality does that doesn't cross my desk!

 Princeton Open Space

"The hopes for climate resilience, equitable access, and community well being"

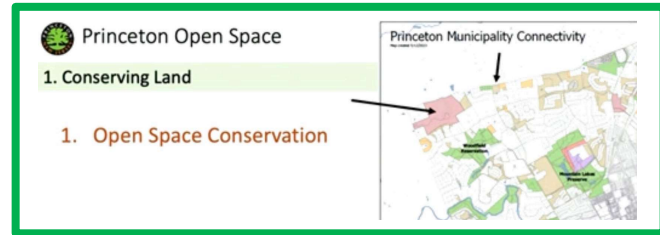
1. Conserving land
2. Natural resource stewardship
3. Improve access or use



We have stormwater regulations that are twice as strict as the state's regulations.

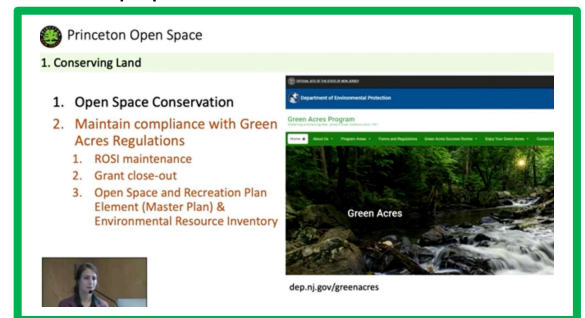
We have a Municipal Arborist, Taylor Sapudar, who plants about **200 trees a year** to try to improve our urban forest canopy. We recently put in Electric Vehicle Charging Stations at 400 Witherspoon Street. What I do is just a very small drop in the bucket as far as what's going on.

As far as conserving land, in the past year and a half, there's two parcels that have been preserved in Princeton. The first one is that big pink one on the northwest side of town. It's **153 acres** off of **Cherry Valley Road and Province Line Road**. It is the last and largest forest tract in Princeton that had not yet been preserved. This is the result of partnerships with non-profits and it is now *co-owned* with a lot of the nonprofit partners that are here today. The second one is this little brown parcel right here which closed a couple of months ago. That is a conservation and public access easement at the corner of **Great Road and Cherry Valley Road**, which will be held and enforced by **Ridgeview Conservancy**. This is an example of the creation of a **public-private partnership** where Trish and the Ridgeview Conservancy put in years of negotiations and technical work to get the property to have a conservation and public access easement. And, then, the Municipality used its open space funds to provide some of the funding to purchase that easement. I don't believe the trails are open on it yet but they are coming.

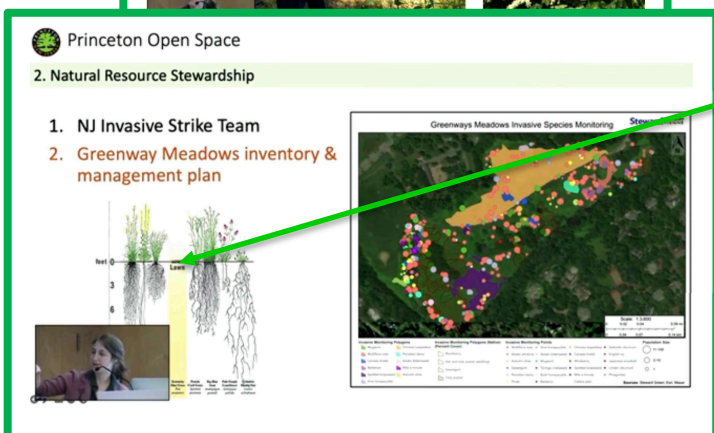
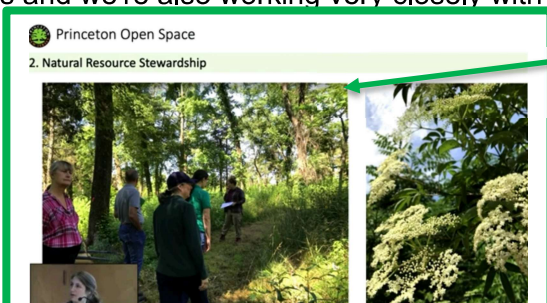


The second part of open space conservation is the very unsexy part of **maintaining compliance with Green Acres** regulations. Again, Green Acres is a state program that provides funding for us to buy all these open spaces. I have to go through this quickly because it's dry. We have to maintain a list of all our open space which is called **ROSI** [recreation open space inventory]. Every time we buy property, we have to prepare "grant close-out" documents. So even though we bought the 153 acres, there's still a lot of paperwork, and encroachment issues to suss out... so the work is continuing.

And then, lastly, **we need an open space and recreation plan** in order to be eligible for Green Acres. I think everyone here knows that we're going through the **Master Plan** process right now and, at the same time, concurrently, we are renewing the **Environmental Resource Inventory** which will help inform the **Open Space and Recreation plan portion of the Master Plan**. Beyond conserving land, managing for **diverse healthy ecosystems to provide habitat and stormwater management and carbon sequestration** is an important part of the Municipality's resiliency. **The Municipality owns about 1400 acres of recreation open space**. So, *meticulous management is difficult*. But we're moving forward with management on some of these parks and we're also working very closely with our nonprofit partners. One of the things that Municipality



does is contract every year with the **New Jersey Invasive Strike Team** which is a nonprofit that goes out into towns and tries to eradicate newly emerging invasive species. These are invasive species that have not yet become widespread throughout the state. And the Strike Team goes out and tries to eradicate them so that they don't become a problem in the future. One of the climate action goals for the Municipality is to **Increase Meadows and No-Mow lawns**. The picture on the left is a pretty classic example describing why native plants are better than the turf grass lawns that we're used to seeing. In the middle of that diagram. That's highlighted in yellow. You can see the lawn has very short roots and whereas the native plants to the left and to the right of it have very long roots which obviously indicate that it's that those plants are more drought resistant, but also importantly, *those roots sequester a lot of carbon*. So, it's also a huge role in carbon sequestration. And then of course above the



Princeton Open Space
2. Natural Resource Stewardship

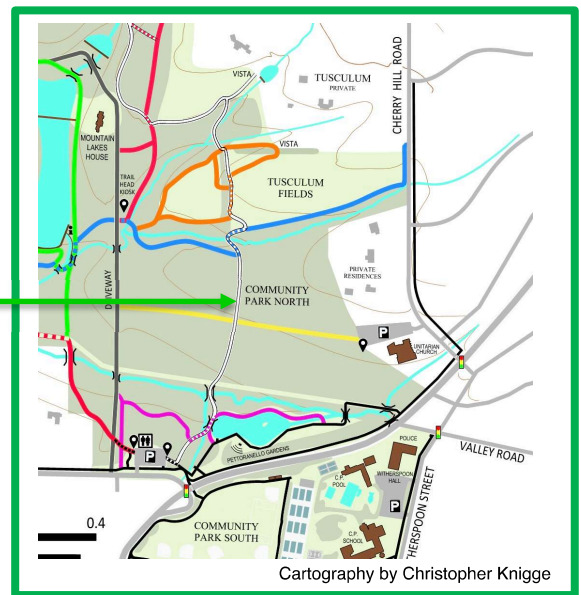
1. NJ Invasive Strike Team

FoHvos New Jersey Invasive Species Strike Team
www.fohvos.info/invasive-species-strike-team/

ground those plants provide habitat and food for native animals. So, as we start to think about increasing our Meadows and No-Mow areas in Princeton, I believe the first step is to make sure that we're properly stewarding the meadows that we do have. **Greenway Meadows** is a great example of a beautiful meadow that Princeton has... it's off Rosedale Road. DNR Greenway has its offices there. We had a consulting company come out to do an inventory for what

we have at Greenway Meadows to help inform us as to what we should manage first and how we should start to steward it. All of the colored polygons you see on the screen to the right, indicate some sort of invasive species. At this level, it looks very overwhelming. But when you break it down into which ones are the most important ones to start managing first, you can take it in bite-sized pieces. We're never going to make this meadow, so it has no invasive species. The goal is to make sure that it's on the right trajectory to have mostly native plants. After doing this inventory, we're now working on a management plan. We'll start greasing the wheels to make sure that we have a good plan in place for managing all these meadows and No-Mow areas.

We are doing a **Community Park North Forest Restoration Project**. Some stewardship that we do is born of opportunity! New Jersey EPA had a grant for natural climate solutions. We applied in partnership with Friends of Princeton Open Space. Now we are planning to do a forest restoration project at Community Park North, right here, across over 206, right next to Mountain Lakes and **north of Pettoranello Gardens**. If you've ever hiked up Mountain Lakes and found yourself in a forest full of *white pine and Norway spruce*, suddenly you're in evergreen, that's **Community Park North!** We're planning to do a forest restoration project there. **We were granted over \$500,000 in funding**, which will improve the resiliency of the forest, increase carbon sequestration and provide lots of education and volunteer opportunities within walking distance of downtown.



As I noted before, the Municipality owns about 1400 acres. Our partnerships with the nonprofits are super helpful and super important. I just want to make sure I take a moment to go through and acknowledge the groups that are doing very meticulous on the ground. The first being we have a group of **Master Gardeners** who have adopted the gardens at **Barbara Boggs Sigmund Park**. They do a lot of maintenance and plantings. They make sure the gardens stay looking beautiful. The neighbors of **Caldwell Park** which is a park that's kind of unknown and hidden because it's behind a bunch of houses that have installed a meadow there to replace some of the turf grass and care for it. The neighbors of **Guyot Walk** post volunteer events with Sustainable Princeton to do cleanups and introduce native species within that corridor. And they have a volunteer event today that starts at one so if

Princeton Open Space
2. Natural Resource Stewardship

1. NJ Invasive Strike Team
2. Greenway Meadows inventory & management plan
3. Community Park North Forest Restoration Project
4. Support stewardship work done by residents & nonprofits that have 'adopted' municipal land

you're interested in walking over there after this meeting, I'm sure they'll take you to help remove some things and put some plants in the ground. I've worked with a couple of students from the nonprofit, **Just Some Help**, wanted to plant milkweed at **Turning Basin Park**. And then of course all of our long-established nonprofits that really take really good care of our open spaces **Friends of Rogers Refuge, Friends of Princeton Open Space, Friends of Herrontown Woods, DNR Greenway Land Trust, Ridgeview Conservancy and the Marquand Park Foundation**.

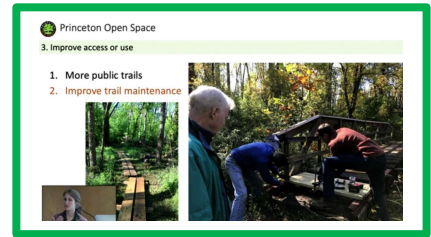
From the aspect of trying to improve access and use and community well-being, we're looking to create more public access wooded trails. The first project is these two brown parcels here on the north side of town. It's currently owned by a Homeowner's Association and with the

Princeton Open Space
3. Improve access or use

1. More public trails

Municipality, it has launched into an agreement where we will accept the donation of that land so we can make it publicly accessible for everyone to hike and walk through there. There's a bunch of steps that lead up to this to include a minor subdivision. **Ridgeview Conservancy has built the trails there.** so as soon as we can make it public, it's ready to go. But what's important about these types of spaces is that they're accessible from areas of high-density housing. That parcel of forest is **accessible by sidewalk from Grigg's Farm.** *We're always looking for where are the communities that don't have a backyard that don't have their own outdoor open space* and this is a great example of one that is walkable from that type of community. Similarly, on the other side, with the other arrow pointing to those kind-of-pink parcels, that's **Mt. Lucas Preserve.** It's owned by friends of Princeton Open Space, the Municipality and New Jersey Conservation Foundation and we plan we're in the beginning stages are planning to install trails there. The property is very, very wet, which means that, if we're doing everything aboveboard, we need to get DEP permits to put in those trails and boardwalks. So, we've hired on a consultant to help walk us through that permitting process, but ultimately, we want to make trails that are accessible. Again, this is another one that is accessible by sidewalk from **Redding Circle.** This is another high-density housing community that will be able to get to open space by foot.

And then of course, we want to try to improve the **trail maintenance** for trails that we already have existing. Our non-profits have done a miraculous job of doing that up to this point. But I did just recently hire on a landscaping company that will go through two or three times a year. Some of our parks that don't have regular robust volunteer groups to maintain them....just to make sure that the trails stay clear. The grass stays low. There's frequently a lot of silt grass in our trails, which we say this every year, but **the ticks are really bad this year,** every year we say that. The goal is to really just **make people make it safer.** For people to walk through and make people feel safer walking through the trails are better defined, they feel like they won't get lost. If they're not walking through grass, they won't pick up as many ticks. So, just at a very basic level

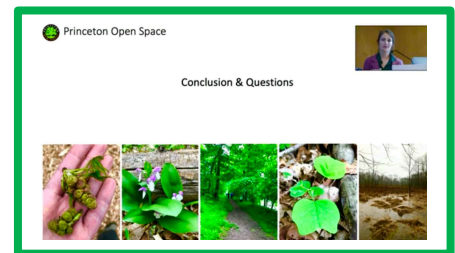


trying to improve our trail maintenance. And then also with access and use, we want to support different types of uses of our open space. The municipality opened a **dog park** at Community Park South this year. I think it's been people are really having a lot of fun over there. And concurrently, **Community Park South** is going through a redesign process which is being managed by the recreation department. And it provides an opportunity to reimagine the space & listen to the public...to see if we can use it more efficiently or, it can more become more suited to how the public wants to use



the land. And, then the other image on the left of the **Veblen House.** Steve Hiltner is here and I'm sure Steve is going to talk a lot more about this a lot more eloquently. In 2020, the Municipality entered into a lease agreement with the **Friends of Herrontown Woods,** to allow them to lease a couple of the historic buildings: the Veblen house itself and the historic buildings surrounding the Veblen House, with ultimately the goal to create a **community education center** where people can come into the woods, learn and, then, hike can be on the trails.

So future goals are: **more accessibility, trying to connect all these open spaces so that they're walkable from downtown, making sure people in the former borough can reach a lot of these beautiful open space trails out on the outskirts of town.** Looking to **our rights of way** to see if we can connect open space that way. **Increasing our signage, website information, mapping,** making sure people know that we have all these gems throughout Princeton... and they know how to get there. And, then, last, of course, **increasing stewardship.** We are at the very beginning stages of that on the Municipal website. So, as we go through the years and we preserve more land and spend less time preserving land, we can always devote more time to the stewardship of that land. And, that's been a trend throughout at the county level, even their open space money used to be specifically for acquiring land. And I think in the last two years or so, they switched it so that 25% of that open space funding goes specifically to stewardship of open space land. So, that's the process we'll see. We're very heavy on land protection, and will over time be able to spend more time doing stewardship and that's it.



PARTICIPANT

I just want to thank you for an excellent, very informative presentation. In looking at the map. I'm just wondering if you could give us a sense of the Mount Lucas parcel and where you were pointing to the northern place, what acreage are what are what are we talking about in size... of? Do you have any idea?



CINDY TAYLOR [with help from Wendy M.]

It's 25 acres. Numbers don't stick in my head very well.

KATHERINE KISH

Other questions?

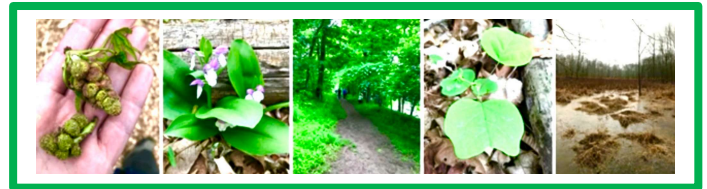
PETER LINDENTHAL

In photographs that you had up a minute ago. Can you point out where those are? I recognize one of them but the others, it's not clear where they actually are, and I think that would be fun to know.



CINDY TAYLOR

So left to right. That I took that those were some of the **flowers from a Sweet Gum Tree** that I found on the ground at the **153 Acres in Princeton**, this **Showy Orchids** and the next photo, I think I took that at **Autumn Hill**. Steve, have you seen showy orchids there? I can't remember. The one in the middle is from a trail right next to the lake at **Mountain Lakes**. I was out working one morning and a walking group came through and I just caught the tail end...It was really nice to be out seeing people enjoy the space as a group on a Wednesday morning. The **Tulip Poplar seedling** on the right, I found on a property when I was out with Sophie. And the third photo on the right or I'm sorry, the last photo on the right is a picture of **Rogers Wildlife Refuge** on a very rainy day. Other questions?



PARTICIPANT

I just want to ask one other thing on that map. Can you point out the Emerald Necklace. And I'm wondering where that is on that map.

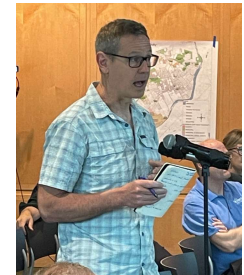


CINDY TAYLOR

I'm going to let one of my partners address that. But generally, it's the idea that we can create a ring of parks around Princeton. We do have somebody who's going to speak about how all of our parks can be connected over time.

TOM PINNEO

Thank you, Tom Pinneo. You talk mainly about the colored polygons. I just would like to point out a couple of things...whether they should be part of the conversation? If so, How? And, if not, Why Not? There are a couple of pieces. One is, of course, is **the Canal**. It's described as a 'bike path'. But, it's really much more than that. I think that as we talk about connections, **the Canal is a central one**.



What is the intent of the University? Is it intended to be open space? Or, is it not open space? What's the distinction between the **Municipal Colored Polygons** and **some of the things right in town that are part of the University?**

And, I think, finally, I wonder about the **very clean line of the Municipality** versus what folks like Sophie and Jim might talk about **the whole Watershed** here, right? There are all of these other things right close to us that are maybe just outside that sharp dividing line of the Municipality.

I think of the really compelling case of **intact Agriculture very close to Princeton...** and why and how that might factor into this conversation. That's another key one for me.



CINDY TAYLOR

So, for the question about the University-owned land: the map is representing parcels that have been designated as recreation and open space and that's ultimately the difference. We're always working to designate more land as open space. There may be parcels, and I know people ask me all the time about the **Butler Tract** here... and people have asked me about the **Textile Resource** property there. Those are definitely possible future open space areas, but at this point, what the map represents is what we have already designated in some way. It helps inform what we should be looking at as still available for the future. Your second question was about how all the neighboring towns are not included in this map. [I have to be honest.] Part of the reason is because I just didn't have enough time to make a map showing all of our neighbors that is nice and clean. But, we've had multiple meetings with Montgomery Township to talk about connectivity between their properties and ours. We've, actually, started talking about a couple of parcels up here that would be helpful to acquire that would allow this high-density community up in Montgomery Township to be able to access Autumn Hill...Connecting our open spaces that way. So those conversations are happening. I just didn't bring a map to represent worse than somebody saying Help me out. Thanks for saying that. Thank you.

MIKE TIMMONS

I spend a lot of time on the Canal Path. I am just curious how that land plays into this analysis, what the municipality does with it. At all?



CINDY TAYLOR

Well, it's state-owned parkland. And honestly looking at this map right now, I feel like a large chunk of that slice is actually outside of the municipal boundaries. We're looking at this. We probably will talk again about it later along with the connectivity to the Emerald Necklace trail loop. The Canal does have a big role. And, when we think about how someone can navigate all around Princeton using that Canal path is obviously a very helpful option

PARTICIPANT



One more quick one. That 153 Acre Woods that you mentioned is that that's the newly acquired property in the upper left, is that right? Yep. And I see there's a nice guide that's here. We're here on the table and someone made very beautiful is that okay? Is that then open to the public and that'd be used or is that still in development?

CINDY TAYLOR

I'm glad you asked that. There is a trail there. I've been telling people they may go there. The caveat is: it does not have a kiosk; it does not have parking. But, there is a trail that people can go and access it from Province Line Road. To your point, Ridgeview Conservancy has a great map. And the kids will talk about this as well. The people here built this trail. So, people can go you can access it. It's just not as nice and tidy as I'd like it to be yet



CARLOS RODRIGUES

What's the town's annual budget?

CINDY TAYLOR

I don't know off the top my head because it's in different pools for different departments. So some of that goes to the Recreation Department. Some of it goes to what DPW does for open space. So it's, it's not all in one group. So I can't answer them the top my head

KATHERINE KISH

Wonderful. We are so excited to have so many wonderful groups in the same room. Often times, each of you does something individually... but to have you all here is a wonderful, wonderful benefit. What we're going to do now, going forward, is we're going to ask each one of the groups to have their representative come up and talk for a few minutes, and then we'll have a few minutes for burning questions for each group. And after all the groups have presented, we will then have a Q & A, a general Q & A . So, you'll have lots of opportunity you know, Sheldon keeps telling us that **Princeton Future is all about listening**, and all about hearing your comments. And so that's what we what we want to focus on today. You have plenty of time to ask questions. We have we're lucky to have the Ridgeview Conservancy here...and Friends of Herrontown Woods, the Watershed, Friends of Princeton Open Space, the D&R Greenway. All of these people are going to be talking today, so I'm very excited about this!! I'd like to start with Dr. Patricia Shanley. If you would come up, please? Trish is going to be talking about the work of the Ridgeview Conservancy.



PATRICIA SHANLEY, The Ridgeview Conservancy

Hi, everybody, thank you to the organizers, to all of you, thank you for showing up. And, for all of you in this room that have worked for decades and decades to create the green spaces in Princeton. We moved here from Indonesia because of you, and those who are not in the room, also. I'll be speaking, followed by my colleagues, **Kate Krehel**, and **Amlaan Parida**. They are Princeton's Future and we will hear from them, too. They are Youth Stewards of the Ridgeview Conservancy.

**Princeton's Emerald Necklace:
Linking greenways to promote equitable access to nature for all**

WOODS & WAYSIDE INTERNATIONAL

Patricia Shanley, Ph.D.
Kate Krehel
Amlaan Parida

RIDGEVIEW CONSERVANCY

Global Scientific Consensus to ensure a habitable earth

In the face of climate change and species extinction

190 countries agreed to protect 30% of earth's land and waters by 2030

US has a national mandate

To achieve – states & municipalities must work toward 30 x 30

Protecting 30 percent of the U.S. by 2030 would require 440 million more acres to be set aside.

2020	12%	289 million acres protected for biodiversity
Goal by 2030	30%	729 million acres

SQUARES SHOWN AT SAME SCALE AS CONTIGUOUS U.S.

RILEY D. CHAMBERLAIN, NO STAFF FOR THE U.S. GEOLOGICAL SURVEY

They've created the trail of the map that you just saw. And, they're working on these newly preserved areas to create trails, so they'll join with me. We'll be talking about the **Emerald Necklace**. I've worked on in the Brazilian Amazon, Indonesia, and in the United States on Forestry Research and Education for 35 years. So, my

Princeton's Emerald Necklace: Promoting Equitable Access to Nature

- Champions of opens space & conservation - parks are green gems, *Grateful hard work, land donations, easements, HOAs, Princeton*
- Scattered - linkages can vastly magnify benefits - String together gems to create Princeton's Emerald Necklace – Olmsted
- Connect parks to each other & downtown by sidewalks, easements, trails – *access to all! Without a car – walking & biking - clean air!*
- Smart growth downtown while protecting strategic green infrastructure (*prevent floodina in the library!!*)

perspective mixes in a lot of different places. And I focus often on **human health and forests**. Basically, with **climate change and species extinction**, scientists have agreed [this is remarkable, you know!] 190 countries have signed on to **30 by 30**, which is *protecting 30% of the Earth's land and waters by 2030*. I am on two Global Forest Expert panels. One is the **Intergovernmental Panel on Biodiversity and Ecosystem Services**, the other is on **Forest and Human Health**. I can tell you that behind the scenes, scientists think it should be 50%. So, 30% is what's politically possible right now, but it's really important for the Earth's health and *our* health to really keep moving towards 50%. So, what have we done in Princeton? When we got to Princeton, I looked at the open space map. I was like, Wow, we almost have Frederick Law Olmstead's Emerald Necklace.

You can see that all the work that you and others have done: **The Institute Woods; DNR Canal; Herrontown Woods; Autumn Hill**; a beautiful pendant in the middle of Mountain Lakes: and, then there's a right-of-way on the other side. We could have an Emerald Necklace, and we can only be certain we can do it because of these champions, here today, who have done it. We just need to link these. Here, we can see that there are no connections. Imagine if we link them on a string, and **we link them to the Downtown**: How much we could leverage and **magnify the benefits for everyone** and not just for those who are near the green space. The idea is to use new trails, sidewalks being finished, little rights-of-way. There are easements all over the place... and really magnify what we have. The idea is: **smart growth downtown, while protecting the critical green infrastructure**. We can't have this library flood again! We don't want that going on again.

Necklaces exist all over our country: Houston, New York, Phoenix. I mean, we have these rights-of-way and all of these marvelous trails. I was just on the one around Bethesda: 23,000 people a week walk that one!! You've got cleaner air. You've got a higher quality of life ...and, you have higher property values. Everybody wants to be on a greenway. So... these are amazing! We have a hero in the room here. His name is Rob Tangen. You'll hear from him later. All of you are heroes to me. **He has walked Princeton's Emerald Necklace. It's 17 miles.** He walked it with his daughter, Kylie, who's also a Ridgeview steward. She said *it was the happiest day of her life*. It was near Father's Day. I mean: we want that to happen to other kids, too! Who doesn't want that? So, why stop at the LHT? Why don't we go for **the LHPMR TRAIL? The Lawrenceville-Hopewell-Princeton-Montgomery-Rocky Hill Trail**. Now, we're talking! right? So, Rob has already figured out that **we can do 17 miles in Princeton**. We can do hundreds if we link to these other places and it will be fabulous.

So, the green legacy this administration, I can't thank Bernie enough. All of you are really champs. So, on the left is the **153 Acre Woods**. It was going to be cut down. We came here from Indonesia. We thought the last two old growth forest we're going to be cut down it's like "Oh, my gosh!", here we've been working in like the Amazon and Indonesia. We found out that these were going to be cut down. You're kidding.



Forests & Open Space and Health

- Massive tonic - positively impact human endocrine, respiratory, nervous, cardiovascular, and immune systems, anti-cancer
- Forests support community building & improve social cohesion
- Forests help to lower aggression & crime
- Forests - positive impact on mental health, ADHD, depression, anxiety, and stress



Forests emit phytoncides which positively impact our physiology

Ridgeview Turtles: Young People Protecting Old Forests





9 years
300 students
225-acres
All Seasons

Teaching in schools

Scale-up -
Revive Youth
Conservation
Corps (YCC)

Massive carbon storage fabulous habitat for endangered species, indigenous and African-American history. So, I have to applaud all of you here. Our hope is that all of this group can create a **consortium and we can all work together...** You can walk that trail now. So that's great. We've got one more to get! We'll get it right. We'll get that one. You've got to walk into it because it creates these **living linkages for flora and fauna**. It's amazing. It's a beautiful path that these kids paint, which is really fabulous to see who else lives in there. So, what you did by saving this, you saved the kitchens and living rooms and the bedrooms of species that are rare. There's a million species at risk of extinction globally. We don't really want to lose ours, do we? So I've got the red-shouldered hawk and the barn owl. This is Erin Kim. Last week, in Ridgeview Woods, she found a box turtle. This happens like every other year, only they used to be a common species. Now, it's a species of special concern. Last year in the 153 acres, where they also found a turtle...It is to be celebrated. That's why they're called the Ridgeview Turtles. Let's keep making sure that there are corridors because **fragmentation is what leads to local extinction**.

Okay, a forest health expert panel is better than any doctor, okay? *Your endocrine system, your nervous system, your cardiovascular and respiratory systems. They are all given a massive tonic and a boost.* It's like a tune-up. You cannot get this in the doctor's office. They lower crime and aggression. And I think importantly, here, they lower the stress and anxiety that kids in school have. This is a crisis. It's really important to have these green spaces that are accessible... and they need to link to Downtown so everybody can get there. Okay, now the best part: the Stewards. **These kids have been working for nine years about 300 students** have gone through the program. **They've worked on 225 acres of pulling out the invasive species** so you get **less ticks** because ticks stay an invasive species. They're now teaching in the schools to get the little kids up on board on this and they want to scale up to revive YCC the **Youth Conservation Corps** in New Jersey and elsewhere. This is a global problem. You know, the Earth's catastrophic climate change and species extinction. We have a global **problem with teen mental health**, and we need to put those two together to heal everyone. So I want to thank all of you, each of you, the consortium, the town of Princeton, its engineering is Bernie, it's Cindy. It's Eve and Mia. And Mark. It's everybody coming together and each of these amazing groups, we're working with, So, I'll turn it over to Kate. Kate is a right in here. She's in that picture and she's going to tell you more about what they do.

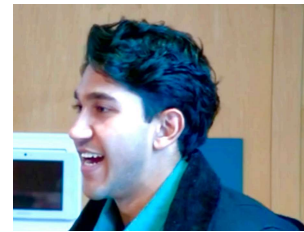


Kate Krehel, Ridgeview Conservancy

Hi, everyone. I'm Kate. As Dr. Shanley said, I'm really, really honored to be here. I've been working with Ridgeview Conservancy since my sophomore year. It's been three years now. At PHS, you have a **50-hour community service requirement** but think I passed that a while ago, but I still go back **every Sunday** for a lot of reasons. So, what we do is we go into forests, me and a group of high schoolers, and we learned about all the different flora and fauna and different species there that and these are things that we never learned in school, and

we helped cut out invasive species, their **invasive species are actually the second biggest contributor to biodiversity extinction**. So, it's really important. It is really great that we get to learn to identify them and you know, cut them out from our forests. And I think it's just super nice for me, and for so many other high schoolers, because, you know, we have so much stress going through school...with academics and college applications and senior year! It the **nature brings a sense of calm** that you really can't get anywhere else, and it's certainly just a **great 'de-stressor'** and, I think with that, it brings a desire to want to share that with everyone. Which is why a lot of us are so passionate about the whole Emerald Necklace project. It's you know, a way by connecting all these different beautiful gems to **give equal access**... so everyone can experience the true magic of forests and, you know, the amazing benefits that forest can have. I've already experienced **living at Grigg's Farm, I can walk to like the 40 acres**, as Cindy mentioned before. We really appreciate everyone who's donated land or easements, or has provided any support in any way because this never would have happened without all of you.

We also want to scale up our program. We want to share the knowledge of the forest that we have by expanding these connections to neighboring towns. We believe we can reach out to including high schoolers from those towns. **We've recently been able to go into elementary schools, like Littlebrook and Riverside, and teach ecology to them.** And, you know, all the elementary schoolers love it. When you know that, **globally, 80% of our forests have been cut down** and you learn that that definitely contributes to climate change. **Forests are one of our best defenses against climate change.** When we learned about this in school, there's kind of a disconnect, because it feels like it's such a big issue that we don't really know how to make an impact. By having programs like Ridgeview, **we're able to take local action to save our forests, restoring them by cutting out invasive species. It gives us a sense of empowerment that we never really had before.** And I know that has really helped me and so many of my other friends I have at Ridgeview feel empowered to make a difference with climate change...and make a really big difference in our community... to improve our community. Thank you!



AMLAAN PARIDA

Hello, everyone! my name is Amlaan Parida. Thank you all for coming here today. It's such a privilege to speak in front of such luminous people who have helped support natural spaces in our town. I'm an undergraduate student at Rutgers University. I'm actually **graduating tomorrow with a degree in cell biology, neuroscience and cognitive science** [!]**...And, a minor in environmental studies. I've been a member and a leader at Ridgeview Conservancy for about six years now.**

Today, I just wanted to speak a little bit about my experience of being a part of this wonderful group, and how it has impacted me and informed my decisions as I pursue a **career in public health and medicine**. Since most of our members are high school students, I want to begin by talking a little bit about what high school was like for me. I moved to Princeton when I was a sophomore in high school from across the globe, from India, when I was 16...in the middle of sophomore year. That was quite a challenge as you can imagine. On my first day at Princeton High as a sophomore, it was my fourth day in America! I had never been outside of India before. I had never talked to a person of another race before. Something that is so commonplace here. All things were brand new, and I was jet-lagged and during my first day in high school, I fell asleep in chemistry class. It was like going to school on a different planet. It was really when I came to Ridgeview Woods to work with this wonderful community that I finally felt that I could call Princeton home. It has a special place in my heart. The point I want to make here today is that **you don't have to move halfway across the globe to feel like you're lost!** I think it's a common sentiment among all high school students.

And after talking to over 100 high school students, I have come to realize that everyone feels that way! ...The way I did as a sophomore. **And it is important to find a way to channel those emotions and to process them. Working in the woods can be an incredible way to do that. When you go outside... When you work outdoors... not only is it inherently therapeutic, but when you couple it with the sense of community.** It builds an incredible support system that you can rely on. When I went to college, I wanted to use everything I learned at Ridgeview Woods to help support other students at Rutgers who may feel misplaced. My research over the last few years in the neuroscience lab is focused on **stress and anxiety**. And, I'm, actually, publishing a **paper on the topic of how stress and anxiety affect motivation and behavior**. After three years of research, I

can confidently tell you that **chronic stress is probably the biggest threat to becoming a successful college student**. It's very important that we weed out chronic stress as soon as we start to see symptoms of it. I established a **club called Nature RX** with Rutgers Psychiatric Services. I obviously got the idea of implementing the philosophy of Ridgeview Woods into this club. **The idea is that Rutgers Psychiatric Services is able to direct students to spend more time outdoors with our club as an alternative to therapy to alleviate the symptoms of anxiety and stress.** In our first year, as a club, we have been able to help 15 students, and we hope to help many, many more as we go on. And, yes, the biggest challenge so far that we've faced is finding a way to make the woods in New Brunswick more accessible to every student on every campus because the Rutgers Campus is huge. Finding a meaningful way to link these natural spaces scattered all over New Brunswick has been a challenge. **We here in Princeton occupy a tremendously privileged position** because we have a way to ensure equitable access to students, and to 'students of all ages' and to all the residents of Princeton through the Emerald Necklace. I just think it will be so advantageous because, in an age where students have a **million reasons not to go outdoors**, it is up to us to make sure that they have **natural spaces within reach**. They can then take advantage of this incredible resource the way I have...in the same way the Ridgeview Turtles do!! I urge you to support this endeavor whenever you can. And I thank you all for coming here. today.

KATHERINE KISH

Thank you to these wonderful, young people for talking about this. In addition, too, I must say, I grew up in Cleveland, Ohio. And one of the proudest things that Cleveland Ohio talks about is their own emerald necklace which is a ring of Metropolitan Parks. We're on to something big here. It's very exciting. I think what we're going to do is move on next to Sophie Grovier. She is the author of **Walk the Trails In and Around Princeton**, Sophie...



SOPHIE GLOVIER, AUTHOR

Thank you very much. So, we are so lucky clearly in Princeton with everything that we have and I am going to posit that *the Emerald Necklace really is already in place*. We have some work to do on some minor linkages, but the fact is that we can work together to activate it and invite people into it, right now. It is just a reminder of all the wonderful open spaces we have...that we've been working on to preserve... helping people access open space in Princeton for over 25 years now. I got involved first, after I moved out of New York City. I became connected to D&R Greenway. I started to be introduced to all the preserves here and I started to walk on the trails. I realized a couple of things. I realized that in some ways, **our open space is hidden in plain sight**. How many people are driving past Mountain Lakes, which is like the doughnut hole in the middle of Princeton... and they have no idea... they've never been in. So that was one really big realization: we have so much of it! But it's invisible in many ways from the car and from everybody's daily life. The second, I would take my friends on walks [because that was what I was doing]. And, I would invite them and they would say *"This is such a great walk. I would never come back here by myself. I'm scared of getting lost."* So, the first thing I would say is *"You really can't get too lost in Princeton, especially if you have your phone"*. But that was one of the reasons that I started to think about doing this book: **Walk the Trails**,

Why Walk the Trails In and Around Princeton

1. Open space can be hidden in plain sight
2. People are scared of getting lost
3. Going to see a specific thing attracts people (Tent Rock, the Swinging Bridge, Devil's Cave)

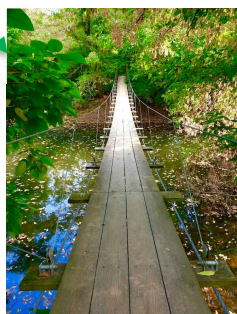
Lessons learned at The Watershed Institute

1. Specific invitations need to be extended
2. Wayfinding is important
3. People are looking for entertainment, fun activities to share with family and friends. (Food is nice too!)

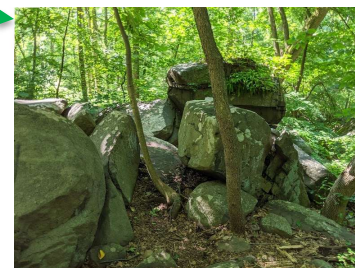


WALK THE TRAILS
IN AND AROUND PRINCETON

which I did with photographer Bentley Drezner. And, the next insight that led to this book was **thinking, understanding and talking to people**. I don't know: going 'to take a walk in the woods'... most of us in this room think that is really exciting. But, for most everybody else that may not be at the top-10 list of their activities. However, if there's **a reason to go somewhere to see something you want to see**, like **Tent Rock**, for example, which is in Woodfields... the **Swinging Bridge** that you can discover in the Institute Woods.



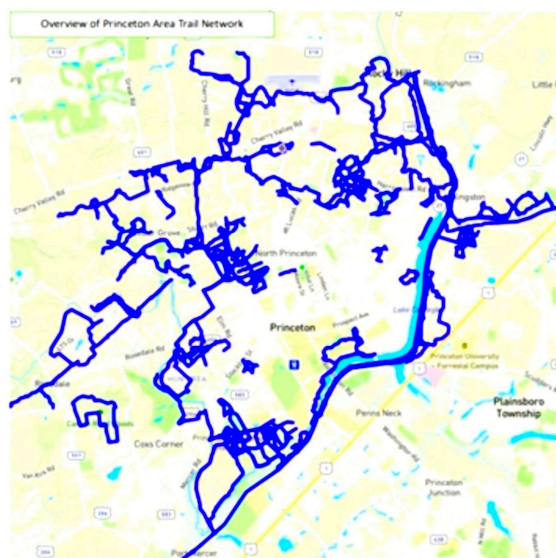
The Devil's Cave, which is in John Witherspoon Woods/Mountain Lakes... Especially when you're talking to children now all of a sudden, "**Let's go!!**" Here's a reason to go. So that those things were kind of the insights that led us to do this *Walk the Trails In and Around Princeton*. At one time, it was Labyrinth books bestseller, believe it or not, and some of the things that make me happiest are when people



who grew up in Princeton, come up to me and they say "*I never knew 'this' was here!. I found it!*" Somebody you know will come up to me and say I moved to Princeton. Somebody gave me this book and, actually, I connected through the development of this program today with Rob Tangen. Well, I'm going to invite up here in a minute... I said, "Oh, have you seen my book?" And, he said, "*Yes, that's how I found the Woodfield Preserve. And it's such a beautiful place!*" So, now I work at the Watershed Institute where we have been doing a lot of work trying to engage people in communities who haven't traditionally felt welcome in our open spaces. We've learned some lessons that I want to share with you because I think they're really important to this idea that the **open space is here and we want everybody to be able to come access it**. The first is that you really, ideally through community groups that people feel affiliated with. I think we all feel as if there's open spaces here. You know, we were thinking, well, the Watershed Institute is here. Why isn't everybody coming? And through work and talking with residents and building community partnerships, what we've realized is **People really need an intentional invitation to be extended** and then once you get them there the first time or they feel invited, then they will come back. The second thing is that **Wayfinding is very important**. You know, people back to that feeling of being lost. It's even more important if entering into open space is something that you haven't done, maybe with your parents. So, that's even a little more intimidating. So, you need to know where you're going. And then, we know through some research that's been done for the Alliance for Watershed Education, which is not rocket science, but sometimes you have to have research to prove these things. **People are looking for fun activities to do with family and friends**. So how can we make open space fun invite people in that way? I think lots of groups are already doing ...Friends at Princeton Open Space...Turtles Ridgeview Conservancy...are getting people out...Friends of Herrontown Woods. But, **maybe, we all need to get together and be a little more intentional about which groups we're inviting**: This is a map...

1. Smaller pieces of open space can be explored as part of one walk
2. The right route makes a big difference
3. There are many places around town that are unofficial paths used by the public (help us find those with the map we have here today)

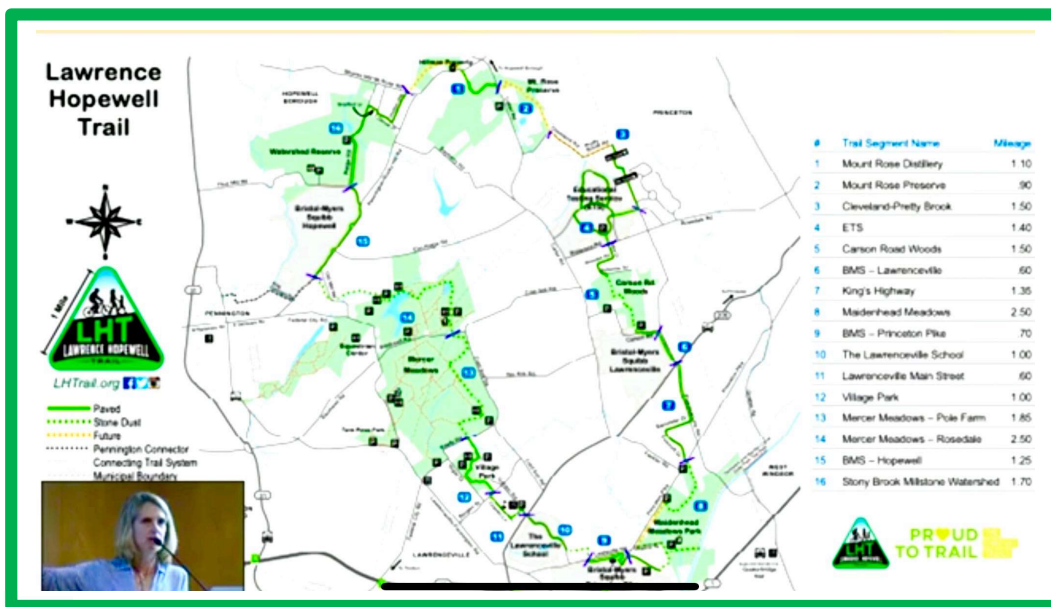
Map: Courtesy of Robert Tangen



and, Rob, if you want to come up, this is a map that Rob made, and it shows all of these, **these are all the trails**, basically. And I just want to point out, first of all, that this, you know, it looks like a lot and there's a lot of little pieces you can string together. This is another insight in my book, that **the route that you take matters** and if somebody gives you a route that matters, I think we need to think about that. And, also, that there are many places around town that even have these **unofficial places** that people use, maybe just the neighborhood knows.

You were telling me about one the other day that is over by **Queenston Place**. And I know there's one along Lake Carnegie. We have this map here today. And, if you know of one of those, please draw that in!! There are markers over there and we can start to integrate them into this map. I just want Rob to tell you...

Oh, by the way, we have a lot to learn from the **Lawrence Hopewell Trail [LHT]** I think...and, when we think about mapping, making things clear, wayfinding and thinking about our open space, in addition to the tonic effect, but something you can use to get from here to there. I need to get to here today or maybe I won't drive maybe I'll walk.



So I think LHT is a great model. This is almost 19 miles and Rob has found us a route that's even longer.

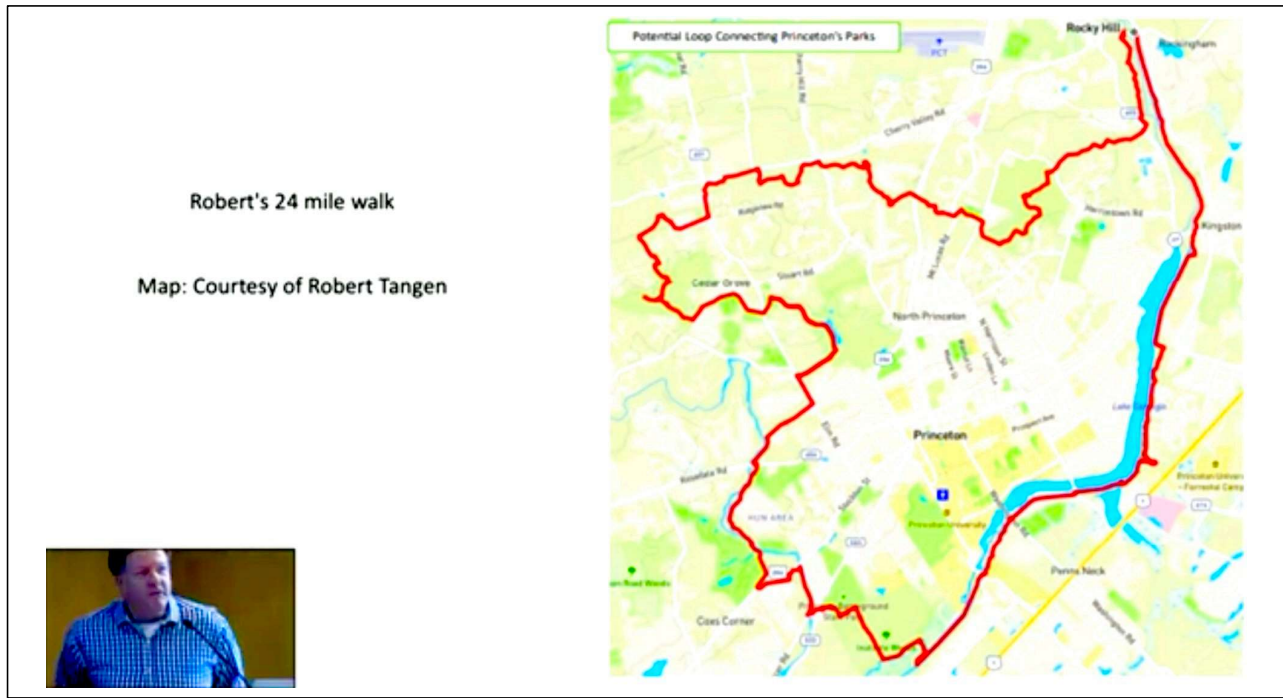
RON TANGEN

Thank you. So, "Hi, everyone". My name is Rob Tangen. I will be very quick to tell you my story. I'm not an expert. **I'm just a person who likes to go walk.**

I moved here about 10 years ago from Colorado. Before that. I was in Washington State, Alaska, Montana. So, when I moved here, I didn't really think that I didn't imagine Princeton would be a place where I would find nature and, you know, I am busy with work and raising family... and, never really... but, I lived in the Littlebrook neighborhood and I would go out to **Herrontown Woods** when I could...and, *I love doing that*. And then I discovered that adjacent did was **Autumn Hill**. And, then I got Sophie's book and I found **Woodfields**, and I say you drive past Mountain Lakes. I'd never been to **Mountain Lakes**. And, I looked at the map, you know, the predecessor of one that Cindy has shown, and I said to myself "You know what I can kind of I came up independently of any I never heard of the emerald necklace or anything was just islands looking at the map and I saw what looked like to me most of a circle. And I started to wonder, in 2020 I had my hips both hips replaced and after I was recovering from that I said, Oh, I want to get out start walking again. So I started walking more and so I wonder if I could get from point A to point B part one to part two.

And, after **over about a year of exploration** of going out on the ground and finding spots and looking at the **tax maps** to see who owns stuff and everything is kind of nerdy. This is what I found and, as Trish mentioned a little





Robert's 24 mile walk

Map: Courtesy of Robert Tangen

bit ago, last Father's Day, [I get choked up, you know] **my daughter and I went and walked this**. It's actually **24 miles**. There were so many questions earlier about, you know, how does **the Canal and the Tow Path** fit?

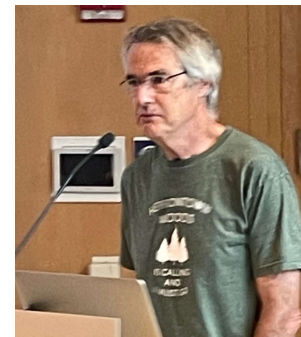
I'm not part of an organization. I **don't care about the borders whose land it is or whatever it is**. Is it accessible or is it not? Right? We actually started up in **Rocky Hill on State land along the Millstone River** and, then, walked through **Autumn Hill, Herrontown Woods, some land owned by New Jersey Conservation Authority, Hilltop Park, Woodfields, the Ridgeview Conservancy lands, the 153 acres that we just acquired**. I was on it before it was 'okay'. **Mountain Lakes lands along Stony Brook, the Greenway Meadows, the InSTITUTE Woods, the Rogers Wildlife Reserve, the Canal Trail and back all the way back up to Rocky Hill**. I have since found out other ways to go, alternates that don't involve being on the Canal Trail for six miles. **It was a 24-mile walk. We did it one day**. We rode our bikes on the Canal Trail, but in total it was 24 miles and like my daughter said **"It was pretty good day!"** for her. And for me, so, anyways, you know, it's not all perfect, right? There were a few spots where we had to walk on the roads for a quarter mile, here or there. And, you know, *some of it is not open to the public per se*. So, that's all I wanted to say. Happy to take questions!...

KATHERINE KISH

Are there any burning questions? Okay, thank you. Yes, this is very, very interesting how we're having these wonderful additional speakers so it's working out beautifully. Next, we are going to have Stephen Hiltner of Friends Herrontown Woods...

STEPHEN HILTNER

I guess this is a pretty good map to have. I did not bring a PowerPoint and if a picture's worth 1000 words, I'm going to have to speak really quickly! I hope that you will understand what I say. I'm with Friends of Herrontown Woods. I founded that group. Curt & Sally Tazelaar back in 2013. This is our 10th year. Before that, I came to Princeton in 2003. I soon got involved with the Environmental Commission and also with Friends of Princeton Open Space. I was on the board briefly before I managed to talk them into hiring me to create a position as their first Resource Manager. That was very nice because my view was and is that if we're saving all this fantastic open space, it's just phenomenal! Especially, if you've lived somewhere else and you don't have organizations like the ones that we have in this town! Being able to save land...well, **it's just really a miracle**.



Saving a lot of open space if the habitat hasn't been managed to protect from invasive species, then, you will effectively have less functional open space for the wildlife. So, the management of the space also expands the notional number of acreage. So, I worked for transplants in open space for about six years. And then, I discovered **The Veblen House** in Herrontown Woods around 2007



and tried to organize a group to work on it...six years later, finally, the Tazelaars came along and we had a core. We formed the Friends of Herrontown Woods. We cleared all the trails. It's incredible to live in a town like Princeton. And, yet, **there are pockets of neglect.** You know, Sophie talks about how people don't know about our open space and drive past by all of it without knowing about it.

Herrontown Woods was the first dedicated open space not only in Princeton, but in Mercer County. It really was the beginning! We have **Oswald and Elizabeth Richardson Veblen** to thank for that. He was a great mathematician. Without Oswald Veblen, we would not have the Institute for Advanced Study. We would not have old Fine Hall on the campus. There's so many things... and we would not have Herrontown Woods. We would not have the Institute Woods... because he was the main advocate for bringing all those parcels together, **600 or 700 acres that eventually became the Institute Woods.** So, they really were the beginning, **the founders of open space preservation in Princeton.** Back in 2013, after Hurricane Sandy...Herrontown Woods was basically impenetrable and Autumn Hills Reservation was as well.

So, we went about clearing the trails. It was like being on the frontier! And then a group got together, originally, to re-open Herrontown Woods. We always wanted to **preserve the buildings as well**, because if you think about it, Herrontown Woods is up in the northeastern corner of Princeton. If you're up there a lot, you start to think about Princeton differently. You start seeing **all the buildings that really complement open space** in western Princeton. **Mountain Lakes House** is fantastic, as is the **Johnson Education Center** and **Updike Farm**, with the historical folks out there... the Clark House Museum at the Battlefield: All of those are pretty much on the western side of Princeton. And what does the eastern side of Princeton have? Well, not really anything, other than Veblen House and Veblen Cottage. We have really had to fight to save those from demolition. And, they're, I think, very important for bringing people together and for getting people out into the woods.

And, we also have the **Botanical Art Garden** out there, which is a merging of **nature, culture and whimsy** with **150 native species of plants, many of which are labeled.** It's a great way to learn about plants! Please come to Herrontown Woods. And visit the botanical art garden... and, we have a café. Once we start serving coffee, people started taking us seriously! Somebody mentioned food as being important... It's getting people out into nature. When you have all of these people in the botanical art garden, we talk about plants because they're right there. Plus, people are enjoying themselves and meeting new people. Then, we have work days where we're pulling out the invasive species. **Maintenance is love, basically.** We also do a little work at **Princeton High School** and have started the **Eco Lab** there. To have nature and habitat right around the schools is a big thing that's happening now, too. So, thank you! guess you can all search for Herrontown Woods... Head out Snowdon Lane and see what happens. I have one other thing to say: the Emerald Necklace is preserved. If we don't preserve the rest of the land for the Emerald Necklace, a lot of other places will become degraded the way Herrontown Woods used to be. Thank you.

This is very exciting and interesting. You know, and I just had a revelation yesterday. I realized that there's a lot of traffic coming down my road that didn't used to come down our road. And I wondered "What's happening?" It just it was a mystery to me. And I realized that Google has changed our lives and it's changed the places where we drive. We need to think about where this extra traffic is coming from as we think about protecting special open spaces. So be aware of that! I don't know how there's a way to stop Google from sending cars down your road to get to somewhere. Do you? Are there any burning questions for Steven? Okay, next we're going to have Jim Waltman talk on behalf of the Watershed.



JIM WALTMAN

Well, it's so great to be with all of you this morning. How are we doing? We're about halfway through the grinder really? Great. Okay. I'm going to switch gears a little bit and talk about what we do at the Watershed and that's **mostly about water**. Before I do that, I just want to thank everybody in the room. I know this has been done before, but as someone who grew up in Princeton, the open spaces, then preserved and some not then preserved, were very important part of my growing up. My parents both lived into their 90s, about the last 15 to 20 years was at Stonebridge, but most of it was near what is now the Mountain Lakes Reserve. That's where **they learned to do daily walks**. They took that daily walking habit up to Stonebridge. I'm convinced that's why they lived such long and healthy lives. So, to all of the people in this room that helped to preserve that particular place... I personally owe a lot to you.

Let's talk a little bit about the Watershed. This is our mission statement. Very simple. **We work to keep water clean, safe and healthy**. And we're a nonprofit, like some of the others you've heard from already today. Thank you for your support to those who support us! If you haven't yet, there's still time. The Watershed deploys 4 basic strategies. These are increasingly integrated...

1. Land Conservation
2. Environmental Advocacy
3. Watershed Science
4. Education.

Our Programs

Our Mission

Keeping water clean, safe and healthy is the heart of our mission.

We work to protect and restore our water and natural environment in central New Jersey.

The Watershed Institute is a 501(c)(3) non-profit organization. Contributions make our work possible.

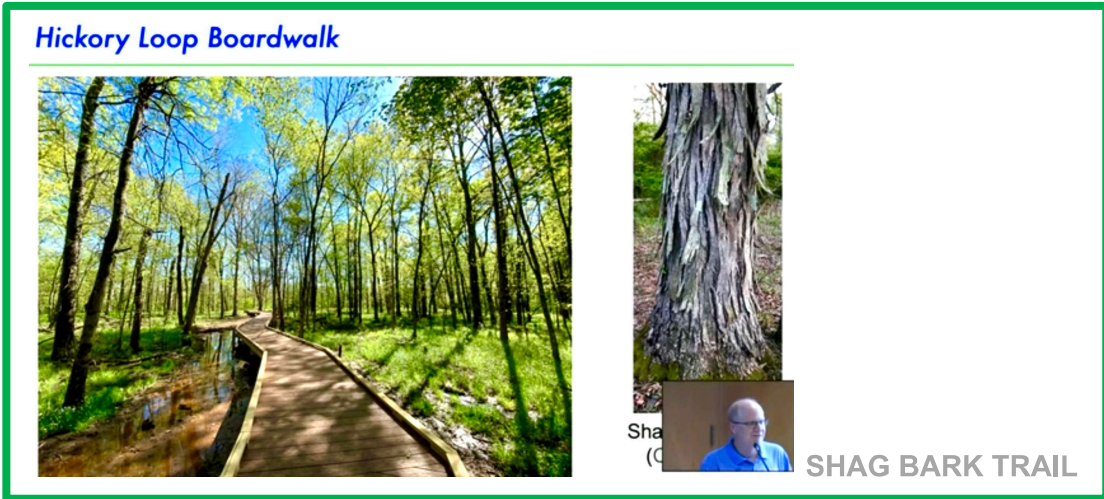
These pull together... and they, in various different ways, actually are often deployed towards preserving open space. You may often see us at planning board meetings, or, if you're lucky, you don't go to planning board meetings but feel good that someone does to fight against the wrong things in the wrong places at the wrong times. And I'm very proud of the work that we've done over the years. We're not a land trust. We contribute to land preservation. We ensure that land is available to be preserved as the first step in ensuring we don't build the wrong things in the wrong places. This is our beautiful Center. This is a this is the Watershed Center.

Our Home

Watershed Reserve

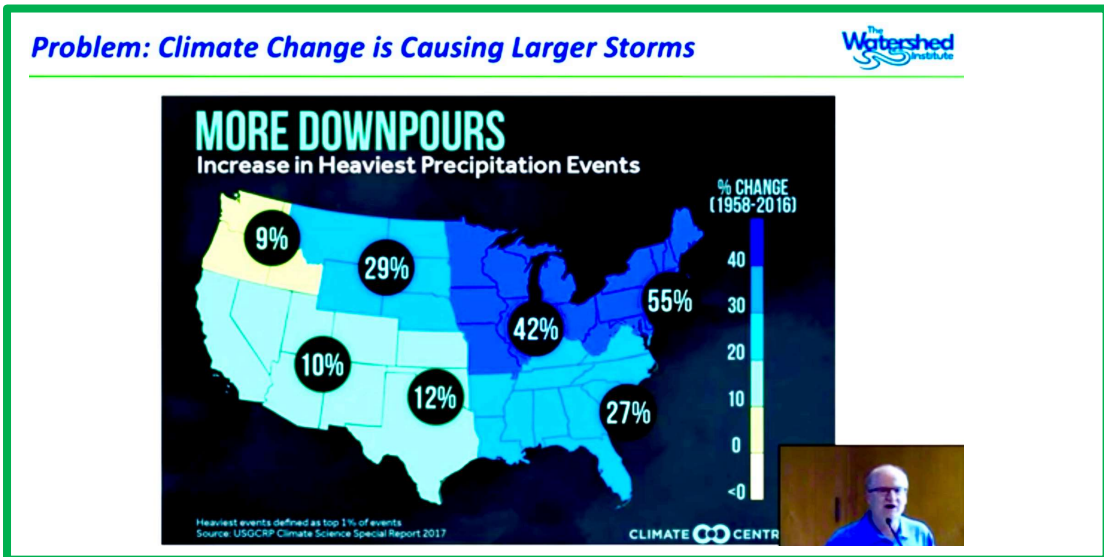
950 Acres

We're over in Hopewell. We're very proud of our LEED Platinum facility, which means it's very green and has a lot of strategies to conserve water and energy, and it's open to the public seven days a week. If you haven't come out, please do! We've got some neat exhibits. And the building of course is located on the **950 acre Watershed Reserve**. There you go about eight miles west of here. This is one of the newer features this beautiful new seven tenths of a mile fully ADA compliant boardwalks.



This is changing a lot of people's lives. I think we're seeing more and more traffic from people that we wouldn't otherwise see. We have built a hiking trail named after a wonderful species of tree, the **shag bark hickory**. We have quite a few of those and you'll see those on the boardwalk.

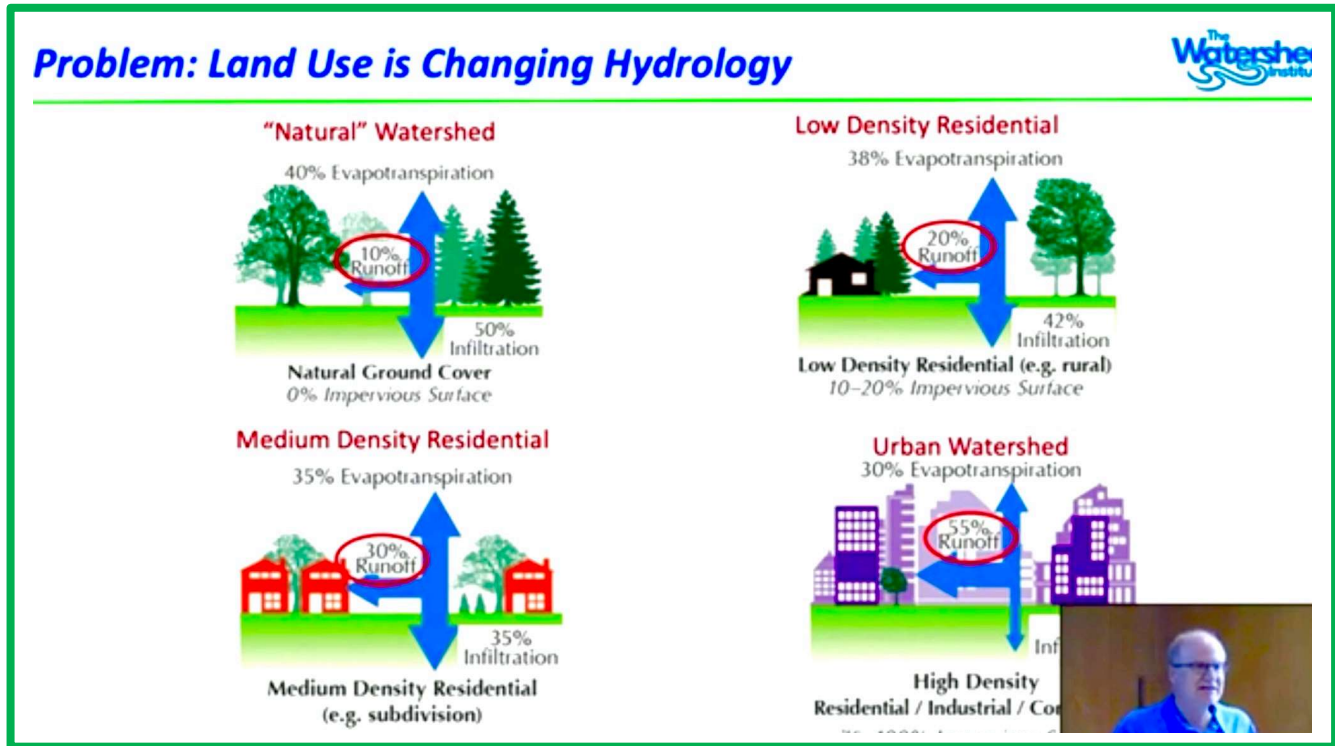
Let's talk about water and climate change just briefly. One of the manifestations of climate change that we worry the most about is the impacts on precipitation. This is a slide from a few years ago, created by another wonderful nonprofit in the area, Climate Central.



It depicts data over about a 60 year run. **What this shows is the amount of water that's landing in the most intense storms. In the Northeast, the amount of water coming in the top 1% of storms went up 55% in just over 60 years** and the trendline is just continuing in that direction.

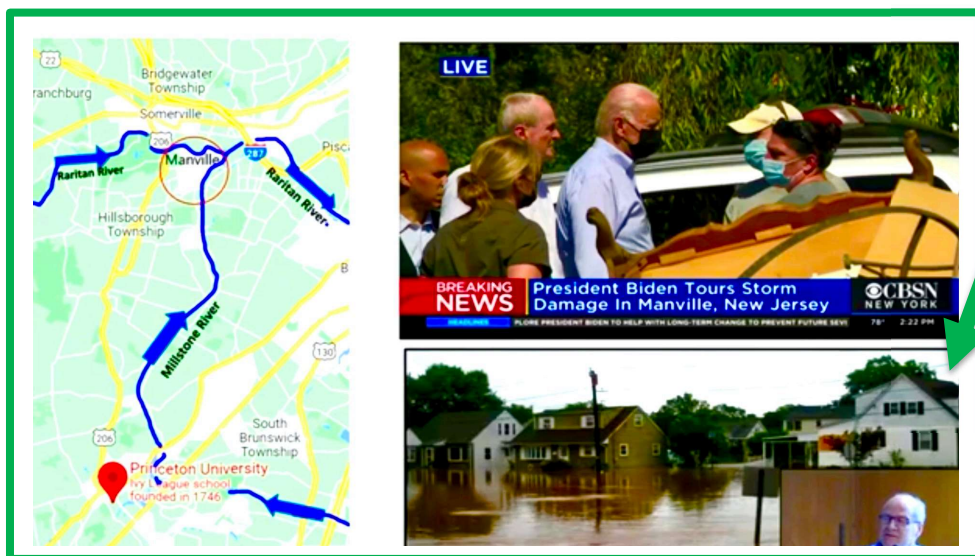
The other thing we know is that **land use change** is having a quite an impact on the water cycle and **flooding**. So, **in a normal or natural watershed, 50% of the water that drops out of the sky is going to infiltrate and is going to percolate down into the soil. Only about 10% of that will run off.** As we add impervious surfaces, roadways, buildings, parking lots etc. you will see more and more of the water is going to run off. **Less and less is going to infiltrate.** That's because of a couple things. The obvious **blacktop**: water doesn't go

through it. It flies off the surface, but also, there is the loss of plants and trees.



Trees do this wonderful process of **evapo-transpiration**. They pull the water up through the roots of the trunk, out through the leaves into the atmosphere. They also just physically block the rain. And then the rain evaporates off those leaves. It's one of those processes that we take for granted. But it has a profound impact on the water cycle. And for those of us who live in urban or more suburban areas, **the problem is flooding**, right? So these are very important. **Unfortunately the trend lines in both climate and land use are heading towards more flooding.**

A quick bit on hydrology. If you didn't know it. **The Millstone River is Princeton's river.** And it's one of those funny rivers that **flows from the South to the North**. Okay, admit it. How many of you didn't know that? Okay, fair enough. Okay, so we taught you something, right? Why is this important? Well, that's why it's important.



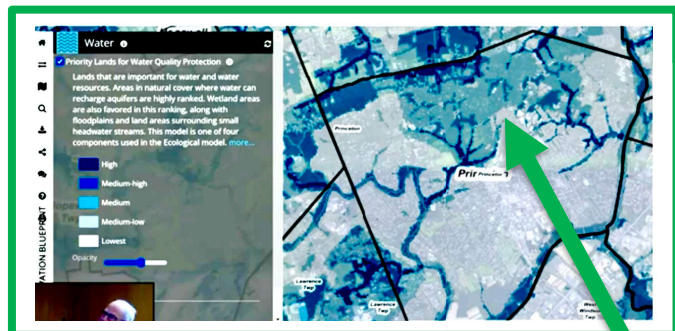
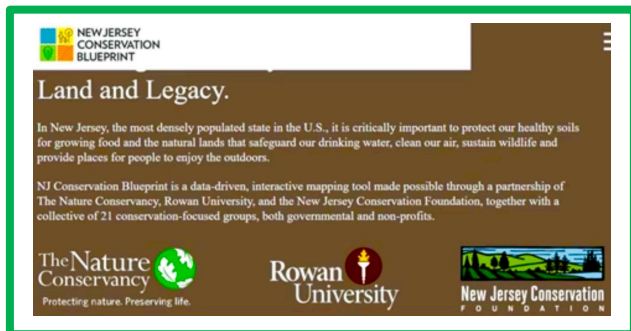
You may have heard of the town of Manville, it's to our north it is downstream from Princeton. It receives floodwaters from Princeton and 23 other towns on the Millstone and about 50 towns on the Raritan River. And

there's a reason for when the President of the United States goes to a town after an emergency: **Joe Biden went to Manville because that was where the flooding from Hurricane Ida was the absolute worst.** Okay, that's what it looks like. Manville is very much an overburdened community. Median household income is less than a third of what Princeton's is...along with educational attainment...all these things. And unfortunately, it's one of the most frequently hammered towns in the state by flooding. So, **Manville is a problem related to what we do in Princeton** and all these other towns.

A couple of more quick slides. **Healthy Forests = Healthy Water.** I talked about evapo-transpiration and blocking

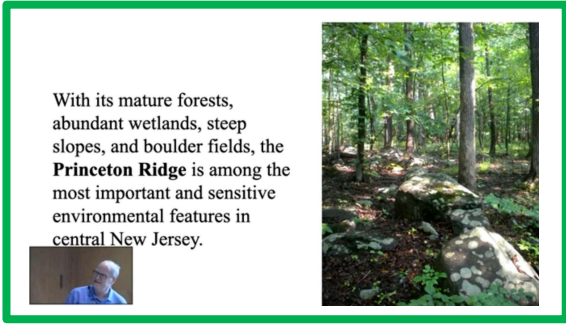
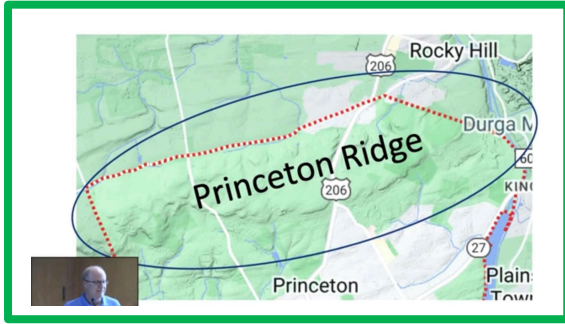


water by the leaves. **The forest soils also help cleanse the water.** This is another hidden, free, incredibly important and valuable service that the natural environment is providing for us. **So, when we're cutting down forests, when we're losing these incredible ecosystems, we're harming ourselves, we're polluting our water.** We're creating flooding. These forests also hold the water. So, *"What's this guy talking about flooding for? we're practically in a drought?"* **Well, the water will be held by the Forest Soils and gradually released** into a stream instead of having it all gone in a flash. **The forest acts as a natural sponge as well.**

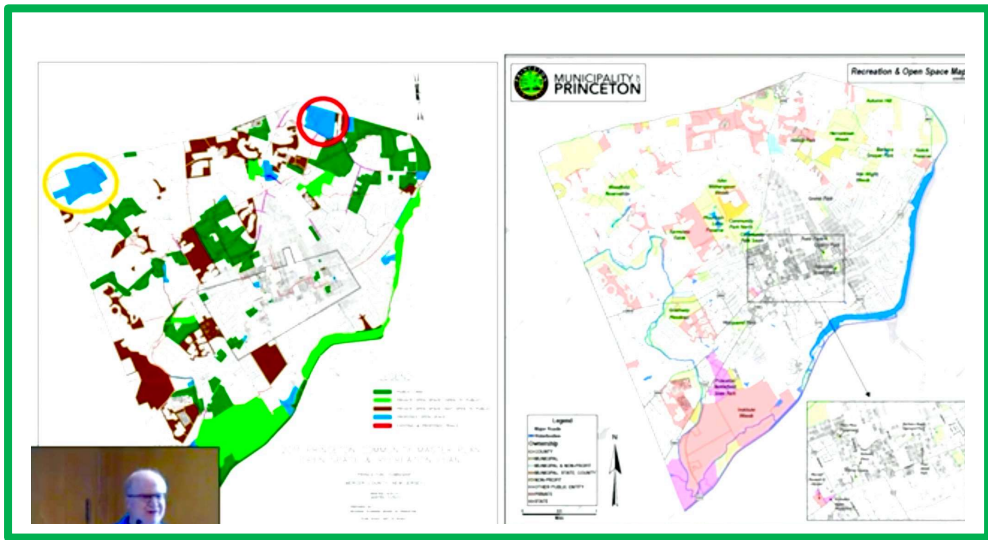


The Watershed Institute as part of a big consortium of groups that was led by the Nature Conservancy, Rowan University and the New Jersey Conservation Foundation that put together this thing called the **New Jersey Conservation Blueprint**. You can find this online, it's very simple. One of the things they looked at was the areas across the state that were providing really important services for our water. So **areas that are important for groundwater recharge, or that hold back floodwaters such as areas that have wetlands and so forth. So that's a map of Princeton.** Pretty much then you can see the high value moderately high and so forth. And generally speaking, there's this band across the **north side of town that this blueprint has identified as most important** for water resources. It pretty much overlaps this area we call the Princeton Ridge on the north end of town. We found this statement from the early 2000s the Watershed Institute made in one forum before the Planning Board. We were suggesting the land

should be preserved. Unfortunately, that piece, the so-called Ricciardi Tract wasn't. But, these are incredible natural assets, even if you don't care about flooding and water and what you're drinking, which I hope you do. It's just an incredibly natural area filled with beauty and wildlife...and, that kind of psychic and the very real health values that are provided for the town. It has known this for a long time.



This is from the **1996 Princeton Community Master Plan**. It identified the real importance of protecting environmentally sensitive areas, including the Princeton Ridge. The 2017 Master Plan re-examination report said the same thing, as did the 2007 as did the 2001. This has been a common theme. You've seen this map quite a few times.



But the one on the left I just found from 2011. What's encouraging about looking at that is the progress the town is made. So, "Go town!" and "Go Nonprofits!" and "Go all of you that worked on creating the wonderful 153-acre piece on the northwest of town!". And, there are a lot of little places that have been preserved as well. And then I just highlight the piece in red, this 90 acre piece that's absolutely critical to also preserve and I'm, I'm hopeful we can, again, work together make that happen, as well.

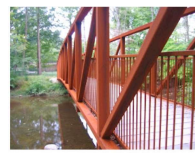


Thank you!



WENDY MAGER

So, before you start the clock, Katherine, I have been asked by Deanna Stockton to put in a plug for an event that's happening later today. It's the unveiling of a plaque honoring our longtime board member of FOPOS, **HELMUT SCHWAB**, for whom the **Stony Brook Footbridge** is being named. This is one of the important connections of open space in Princeton, largely driven by Helmut. It crosses the Stony Brook near Hun School. So I hope if you don't know about it, you can look on the municipal website or ask me and come. It's three o'clock near the Hun School athletic fields and then you'll be able to figure out how to get there from there. Just walk along the edge of the athletic fields. Down the hill to the footbridge.



Funded mostly through a federal grant, the bridge is a vital link in a circum-Princeton trail originally envisioned by a small group of trail advocates in town, including Helmut Schwab and Ted

Thomas, long time trustees with Friends of Princeton Open Space.



The bridge would not have been built if not for the persistence of Helmut Schwab. At the dedication, Helmut gave an account of how the bridge came into being. It was first imagined by

local architect Ron Berlin, one of four people who explored the perimeters of town in search of routes for the circum-Princeton trail. Though the township successfully applied for a \$500,000 federal grant, the project remained in limbo for many years for lack of a plausible way to make the bridge handicapped accessible—a stipulation of the grant. Helmut was finally able to solve the puzzle, gaining help and cooperation from FOPOS, DR Greenway, the Hun School, Princeton Township, Jazna Polana, and the owner of a key parcel of land that allowed room for the switchback trail needed for handicapped accessibility. In his speech, Helmut urged everyone to make a difference in the small part of the world each of us navigates.

LANDS THAT FRIENDS OF PRINCETON OPEN SPACE HAVE HELPED PRESERVE (1/2022)

1. Turning Basin Park
2. Woodfield Reservation
3. Billy Johnson Mountain Lakes Nature Preserve
4. John Witherspoon Woods (purchase and donation of parking area on Cherry Hill Road)
5. Lands of the Institute for Advanced Study (conservation easement)
6. Tusculum (35-acre portion)
7. Ricciardi property
8. Mt. Lucas Preserve (Klepper and Princeton Development Land properties totalling 25 acres)
9. Rosedale Road Woods (adjacent to Johnson Park School)
10. Greenway Meadows Park
11. D'Ambrisi property (addition to Battlefield Park)
12. Nine acres on Drake's Corner/Province Line Roads
13. Coventry Farm and Mountain Lakes North
14. All Saints Church property
15. Mountain Brook headwaters parcel, Ridgeview Road
16. Province Line Woods – 153 acres
17. Non-monetary assistance:
 - a. Western portion of Copperwood development on Bunn Drive
 - b. Barbara Smoyer Park
 - c. Gulick Farm
 - d. Public open space along Stony Brook and Overlook area adjacent to Washington Oaks development (litigation)
 - e. Private open space in Princeton Ridge development (litigation)
 - f. Lot adjacent to Devil's Cave in John Witherspoon Woods (secured donation)



Preserving Nature in Our Community



This first slide shows all the pieces of open space that Friends of Open Space has been involved with since its founding in **1969**. You've heard many of them mentioned today. We're really proud of our record in doing this. Most of this is **wooded passive open space**, but there are exceptions like **Turning Basin Park**, which has a picnic pavilion and a canoe rental facility. And some of the others have, as was mentioned, **open meadows and haying fields**. It's a mix. For some of these, Friends of Open Space was the only nonprofit that was involved. For example, the first four you see listed there... and that includes the **Mountain Lakes Preserve** where we are headquartered. **We preserve that with the Township of Princeton**. Over these many years, particularly since

1980, we've been able to contribute something approaching \$10 million in funding which includes grants from various governmental entities and private foundations, private donations that we've raised, and money from renting out the Mountain Lakes House. The next slide: How do we pay for this open space?



Preserving Nature in Our Community

HOW THE PURCHASE OF OPEN SPACE IS FINANCED

- STATE OF NEW JERSEY – UP TO 50% OF CERTIFIED FAIR MARKET VALUE OF PROPERTY
 - Green Acres matching grants to municipalities
 - Green Acres matching grants to qualified non-profit organizations
 - Source of funding: Corporate Business Tax
- MERCER COUNTY – UP TO 40% OF GREEN ACRES CERTIFIED FAIR MARKET VALUE OF PROPERTY OR \$1.6 MILLION, WHICHEVER IS LESS
 - Administered through County Planning Department/Open Space Advisory Board
 - Source of funding: Mercer County Open Space Tax, 3 cents per \$100 of equalized assessed valuation (\$253 of average tax bill, 2022)
- MUNICIPALITY OF PRINCETON
 - Source of funding: Municipal Open Space Tax, 1.7 cents per \$100 of equalized assessed valuation
 - Impact in 2022 to average tax bill of \$20,545 for assessed value of \$844,781 is \$144
 - General revenues can also be used
- NON-PROFITS SUCH AS FRIENDS OF PRINCETON OPEN SPACE
 - Source of funding: Green Acres grant funds, private donations (individual), grants from foundations
 - FOPOS has contributed millions in grant funds and donations to preserve open space since its founding in 1969

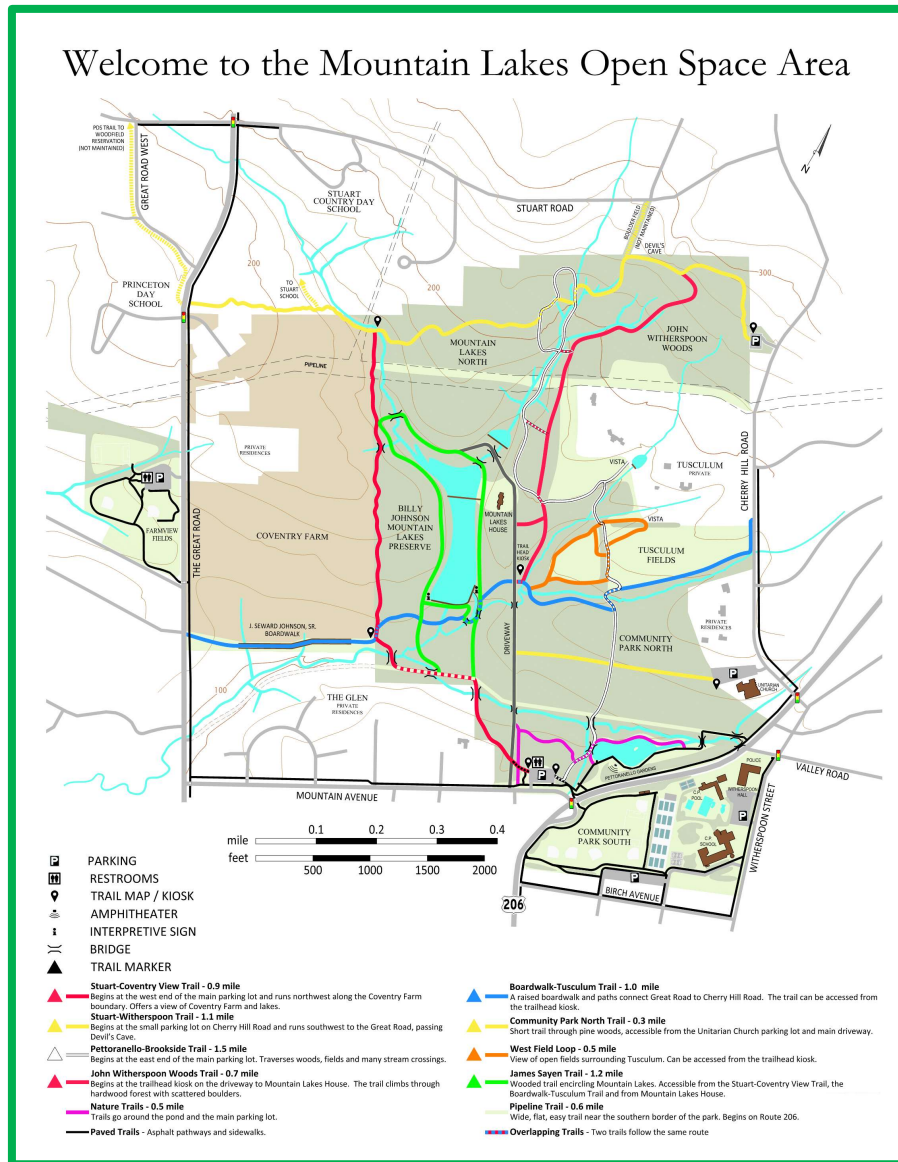


As this slide shows you, we're fortunate that, in the early 1960s, the state set up the **Green Acres** program which provides up to 50% of the certified fair market value of a property as a matching grant. Mercer County also has a grant program that will provide an additional 40% up to a cap of 1.6 million. We have in the Municipality, an open space tax. If anybody ever says to you, "Oh, we shouldn't spend this money on open space because we're taking it away from some other worthy cause". Don't believe them! Our voters put into place an open space tax and it's that money plus these this public money, plus what all the wonderful nonprofits you've heard from today that pay for our open space. The **Mercer County Open Space tax is three cents on every \$100 of assessed value** and the **Princeton Municipal Open Space tax is 1.7 cents per \$100 of assessed value**. For the typical average Princeton property tax bill that represents in 2020: **\$253 to the County and \$144 to the Municipality**. The Municipal Open Space currently brings in about **\$1.23 million a year**. I know there was a question earlier about how that money is divided. In my experience, Scott Sillars, who's here today, is an expert on this, can agree that that varies quite a bit over time. Last year, about \$425,000 of Open Space money was spent on principal and interest on bonds, and interest on notes that were previously issued in order to buy all this wonderful land. The balance was about \$944 million and it was spent on costs such as employee salaries, benefits, equipment and supplies identified with maintaining both our passive open space and our recreation facilities. **It remains the case that most of the ecological maintenance and trail maintenance of our passive open space is done by nonprofits** like the groups that are here. And that's what we found back in 2015 when I chaired something called the **Passive Open Space Advisory Committee**. That committee was constituted following a period when proposals to preserve open space were not infrequently met by concerns about how can we possibly think of buying more land when we're not properly maintaining what we already have. And one of our strongest and best recommendations to come out of that committee was we have really got to hire an open space manager. We have got to have somebody whose focus is on managing and stewarding our open space.



And, God heard us! And, we got Cindy Taylor a few years ago. Thank you, Cindy! You just can't overestimate the value of having somebody in that position. The model of **public-private partnership** for the stewardship of open space is I'm sure going to continue not just because it's been so effective. But also because of new funding opportunities.

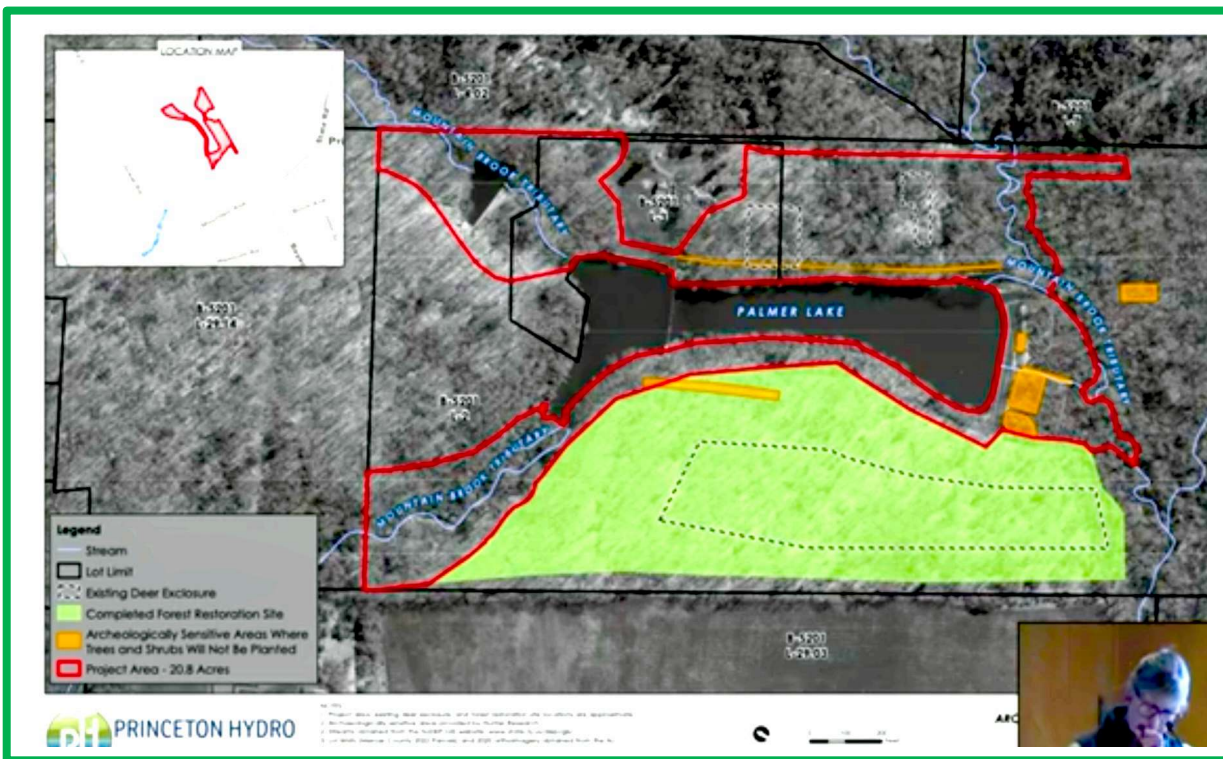
Welcome to the Mountain Lakes Open Space Area



I just wanted to show you this nice map of the Mountain Lakes open space area. I'm pretty sure everybody here has been there. But as I said, that's where we're headquartered. We adopted about **140 acres** of this many years ago. And, **we hold the conservation easements on it and it sits at the center of it over 400 acres of preserved open space and preserved farmland** which you see in the light brown color. That's **Coventry Farm**. There's a wonderful trail system, which is illustrated here. It's about eight and a half or **nine miles of trails**. And during our early history, most of Friends of Open Space's work was oriented towards maintaining trails and building trails in this area, with some smaller ecological restoration projects. Some of which Steve Hiltner engineered.

But, the year 2016 was a turning point. Because in that year, legislation was passed that allows the NJ State Green Acres program to give **open space stewardship grants** to nonprofit organizations. In a recent funding round, we applied for and received a \$50,000 grant for an **18-acre forest restoration project** on the west side of the lake. So you can see that project area in green on this map. You can see the **deer exclusion fence** that was built around about half of that land and that project is complete in some sense, but having spent now approaching \$200,000 on it, the maintenance continues. So, we keep going back. We replace plants if they die, we re attack the invasive species which were removed in large quantities as part of this project. It keeps on keeping on. Community volunteers are essential to our stewardship projects. They are wonderful people. In 2022, we logged over **1000 volunteer hours**. As of mid-April this year, we had logged another 500. But, that was before 115 people turned up to work on **Earth Day** and more on **Arbor Day** and other recent stewardship days. So I'm sure we're already over 1000 hours when you please. I just want to highlight our current project which is outlined in red here, and that is the **riparian restoration project**. As you see it's along the edges of Mountain Lake, also designated here as Palmer Lake and along the streams that run through the Preserve. We will be

continuing our reliance on volunteers for that project to clear about 15 acres of invasive species but we'll also be contracting for some of that.



And then, you did hear from Cindy about how we collaborated with the Municipality on Natural Climate Solutions grant recently, and the exciting thing about combining these projects and the Natural Climate Solutions grant is it's **creating over about 80 acres of contiguous open space that has been ecologically restored**. It truly is, sort of, the birds and the bees + the bogs + the salamanders, all really beautiful for all of you to enjoy!

I hope I've convinced you that the resources are available for high level stewardship of our preserved open space. And especially if we collaborate. If you work for a corporation that gives grants for environmental projects or encourages its employees to volunteer, please get in touch with us. And, because volunteers are so critical to our efforts, I hope you'll consider being one. Thank you very much!

PARTICIPANT

The archaeologically sensitive areas highlighted on this slide where you're not you're not encroaching. What are those about?

WENDY MAGER

For all of these projects out there tell you when we asked the State Historic Preservation Office about the riparian restoration project they said please do not plant trees or shrubs in these areas that are shown in the sort of yellow orange here, because those contain **relics of the operation of the Princeton Ice Company**, which existed at Mountain Lakes preserve and for example, on the right hand those there were were some buildings were aware ice was stored before it was loaded in horse drawn wagons and driven around the Princeton community. So we're going to be careful and not planting any it's just there. Thank you

KATHERINE KISH

And next, we have from the **D&R Greenway Trust**. Okay, Nancy, take it away.

NANCY FAHERTY

Thank you. It's good to go last because most of what I was going to say has been said! My name is Nancy Faherty. I'm representing Linda Meade, who is the President



and CEO of DNR Greenway Land Trust and Tina Notas, Director of Land Stewardship. If Linda was here, she would be pointing to many people in the room that she has worked with closely. And she would say that all the projects that we are talking about today, couldn't happen in a vacuum. It was really people coming together and different organizations coming together to make them happen and everyone brought a different level of expertise.

If Tina was here, she would say **we really need to get those invasive species removed**, and it's really hard to advocate for that. But neither one of them are here. Nancy Faherty is here. So, I would like to say that I enjoyed listening to all of you today, and, I would like to leave you with a takeaway: if you go to this website, do read a lot of what's happening in Princeton and beyond. **D&R Greenway has preserved more than 22,000 acres of land in Central New Jersey since 1989.**



The organization currently maintains 44 miles of trails. Not an easy feat. Those **22,000 acres** we've done with many of the organizations in this room. It's Mother's Day tomorrow! We're going to continue to have conversations around our kitchen islands and dining room tables with grandmothers and mothers and daughters and sisters in the next generations about what we have learned here today!

I'd like you to download a free app called travel stories GPS. If you download the free app and put your location in, you will get **audio tours for free of the healing trails at Greenway Meadows, St Michael's Farm Preserve, Children's Trails, and most importantly for tomorrow, Women and Conservation.** So, Women and Conservation is one of the most recent ones. I had the pleasure of knowing former Princeton Mayor, Phyllis

Marchand. Phyllis did so much in her 13 years as Mayor. When I read her obituary in the New York Times, it led with a paragraph about how she had deer exterminated. As a woman, and as a woman who never will reach the heights that that Mayor Marchand did, I was taken aback because there was clearly, even at the New York Times, a lack of understanding of what deer management is and why it needs to be done. **What invasive species removal is and why it needs to be done.** And, the biodiversity that all of you in this room understand. As a Mom, I'm going to be talking with my children tomorrow. They are 33 and 27 years old. They tell me that their anxiety is related to two things: **#1. the threats to our democracy** and the fact that rooms like this aren't getting filled up with burning questions. And **#2. climate change.** When the pandemic came, D&R Greenway with the leadership of Linda Meade and the Board of Directors decided to do "*Open Spaces Open Emails*". We sent emails maybe too often, but maybe not often enough to tell people how to access the trails. I talked with Margie Harper, one of our longtime donors from Constitution Hill, "Margie, what do I do? The Final Four is cancelled. I've cancelled my travel. I don't know what to tell my kids. What is social distancing? Do I pack up my office for two weeks or two years?" And, Margie said, like a Mother, "**Stay the course!**". She said "**Open Space is going to be a healer.**" Now, I took care of my own mother before her demise and she was blind. And I took her to Greenway Meadows because you could push a wheelchair. Together, we listened to the stories on the Travel Stories, a tour of **resilience, perseverance, and patience.** Sometimes it helped me, sometimes it helped my Mother... I hope it helps my children. And, I hope tomorrow we take what we learned from this room today. Not just in Princeton, not just in our backyard, not just along the Emerald Necklace or along our waterways...ut how **we really need to take what we learned about nature and nurture and understand the balance.** We will remember how our Mayor brought everybody together. She always wasn't well liked but one night she called me at 11:30 at night when she was ill. She said "I just pocket dialed you". And I said "That's okay, let's talk". and she said, "I don't know, I just can't sleep" and I said, "Well, you know, I'm getting ready to go to Palm Springs and I learned about bougainvillea because it's going to be all around, can you tell me about it?" And, she knew about it. She said "Let me tell you about the different colors... but the fuchsia color is going to be the most vibrant. Let me tell you about how it grows in the middle of the desert in Palm Springs. And let me tell you **how Mother Nature is stronger than we'll ever be**". I will close by saying "*Tomorrow is Mother's Day. Happy Mother's Day to everybody who has nurtured a child or a creature and please share what you learned from Cindy and all of these nonprofits around your living rooms and tables tomorrow because it's very important.*" Thank you!



KATHERINE KISH

and now, it's time for questions. So, let us let us begin we will take the next. Let's see, it's now about 11:10. We'll take the next 15 minutes for questions.

PARTICIPANT

May I ask one question? It's been very, very interesting. And I have to go pick up my herbs that the Herb Society before 12. But I guess one question I do have is: **So much of our land is in private hands and homeowner hands and resident hands.** I read a lot about all learning about native plants, choosing native plants... and I'm choosing! I mean, there's a lot of material out there. **I just wonder if there's any organization that works with stewarding homeowners?** I live in the Riverside/Littlebrook neighborhood. If we could get contiguous properties that are in private hands... we focus a lot on open space... and I do see a lot of individual, educational programs all the time. But. **there are a lot of nurseries in the area that sell things that on many lists are invasive.** I've puzzled over it. If you look at the Rutgers educational materials. There are conflicting materials about what's invasive, what's not invasive. I do feel, as a community, we could probably make progress by **trying to educate the entire private homeowner community** to all embrace this one thing... to be excited... to get buy-in. I'm just wondering if any of our organizations in the town could do that.



JIM WALTMAN

Okay, thanks for the question. The Watershed Institute has a program called **River-Friendly.** We work with homeowners. We also work with businesses, golf courses, schools... And, the point is that, you know, everybody is on her or his own journey. I think **what we need to do is try to help people along that journey. We do have a dedicated staff person that will work with you to find ways to green up! A lot of it is focused on water.**

So, a part of the solution is to answer the question **"What to do with the property to make sure you're not part of the problem, and you're restorative". The native species thing is a really key thing.** So it's a great question. Wendy?

WENDY MAGER

I have to say that, you know, part of the reason what we're so happy to have volunteers come and work at Mountain Lakes Preserve is that in the course of removing invasive species and planting native ones, we can offer them information and choices of plants they could be using on their own property in lieu of these bad ones Jim was describing that still get sold at nurseries... and to know what's an invasive species. **I want to urge everybody here to contact your legislators and support, as Friends of Open Space just has, the legislation now pending: to regulate the sale of invasive species in New Jersey,** which is one of five states in the country that don't do that. And it would require a permit from the Department of Agriculture, advised by an invasive species council, to allow the sale of these things that invade our woods and outcompete the plants we want.



NANCY FAHERTY

I just wanted to do a plug for D&R Greenway: it has a native plant sale...**The native plant sales have grown like five times in the last couple of years.** I think what we give out more advice than plants. And, we've actually been bringing corporate teams in to help us prepare, and teach them, as well as we're unloading the trucks. We do two in the spring and one in the fall. We probably could do 20! We're trying our best to keep growing it and to keep teaching the community... **And people are receptive!** And, they're coming from all over. So that's the good news. I have a **River Friendly Watershed teardrop in my backyard.** I live along the river in Lambertville in houses that really should have never been built. But when I moved in, they used to have landscapers just come with weed whackers and like clear the whole riverbank. And I said and I said why do you do that? And they said, so that it's clean. So, we all need to keep learning.



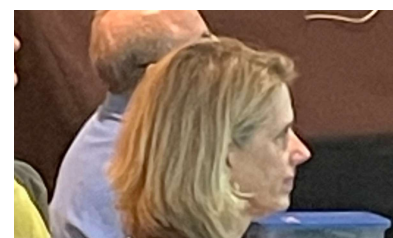
KIM DORMAN

Steve, if I could just... I just want to give Eve a chance because when Mel was asking your question, I was thinking it's a pity we don't have anyone from Sustainable Princeton here, but we do.



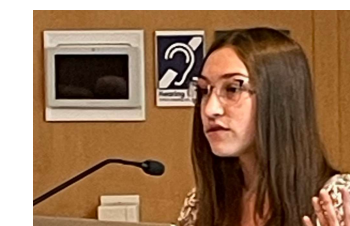
EVE COULSON

For those of you who don't know me, I'm Eve Colson. I'm the Chair of the Board of Sustainable Princeton I've been involved for eight or nine years. And a couple of years ago, we began to focus directly on that issue with a project we call **Changing the Landscape.** We are learning how to proceed because we wanted to educate and bring awareness **to homeowners** at the same time as **to landscapers.** So, I would encourage you to take a look at our website, and I'm happy to talk to anybody further about some of the things that we've been thinking about and doing.



SOPHIE GLOVIER

I just wanted to say that we've done some neat collaborations with Sustainable Princeton because Sustainable Princeton has such a great program called the **Star Neighborhood program where a group of neighbors can get together and then you can get a little bit of funding to do something.** And so we've collaborated on things you know... **you can buy plants,** and we've been able to come in and advise neighborhoods that have had flooding issues. So there's a lot of neat collaborations going on in this space.



KATE KREHEL

For Ridgeview Conservancy...We've kind of been doing a couple things. First, we're going into elementary schools, as I think I mentioned. We're going into elementary schools to teach the kids **how to identify plants, and the**

difference between native and invasive species. The overall goal of that is to empower them to transform their **school courtyards** and everything to get rid of the invasive species because even at Princeton High School, we have **Japanese Barbary right in the front.** Being able to get into our schools and provide change and informing students about how to make that change is pretty important and also Ridgeview Conservancy is actually collaborating with the **New Jersey Invasive Species Strike Team** to bring a **Community Stewardship Field Workshop** that is open to the public to Princeton. You just have to register. It's on **June 10, from 2-4** at which everyone who comes will learn how to identify invasive species through like a pretty, pretty nice workshop and learn all about Ridgeview Woods, its history and everything. So, if you're interested, we have flyers and it's going to be really great. So, thanks.

KATHERINE KISH

Excellent. Other comments Steve?

STEPHEN HILTNER

Well, **I worked a lot over like last 15 years trying to get people to change the way they take care of their yards and I realized people are very disengaged from their yards. They basically are farmers who don't know** they're surrounded by land that they oversee but they know nothing about it. They have professionals come in and push the street leaves out into the street and so forth. **That's about it.** What I finally realized is, one thing I could do that's useful is to create this **Botanical Garden in Herrontown Woods** where people can come and see **how you can slow the water down... how you can play with the water that moves through the landscape** and make it useful to take care of plants...make things thrive... and learn about the plants that way. **Rather than trying to change people, people want nature to be very simple, nature's very complex, and they're baffled by it and if you love nature, then you love the complexity.** But otherwise, it is a nuisance. And you know, somebody said people just want the riverside to be sterile and simple. **It's a real problem trying to figure out how to get seduce people into loving nature** and loving complexity... **learning one planet at a time**, incremental.



KATHERINE KISH

Something else I'm hearing in all of these conferences, **the idea of the collective** and the community. We've got to start thinking about our open space and **our yards**, our little patches of green are part of a whole ecosystem. And we don't often do that. And I think that's what Steve is pointing out.

PATRICIA SHANLEY

On that point, I think it's a great question you asked, and when I moved here from when I moved here from Indonesia, I was like, shocked that you know, it was way like 20 years I came back and it was **there's plastic and pesticides all over Princeton.** Like if there's a place that should not have either of those, it should be here. So I would really love to see these groups here. The watershed in particular sustainable Princeton, really get on people about putting carcinogens on sports fields, and on their front lawns. You know, **dandelions should be a symbol of honor.** Those are, those are amazing. They're nutrient dense, they actually have something against cancer. The root that has been tested in clinical trials in Canada, that we are still in this town throwing these carcinogens canine lymphoma is off the rocks. It just skyrocketed because our, you know, animals are so touching this. So, I think it's really critical and I'd love to see more talk about that because we should really be embarrassed if our lawns do not have dandelions. And that's when you see those big trucks with really, that stuff they don't have to sell in Europe. You know, it's in tiny little vials if needed for a really dangerous plant. And here we have anybody buying at Home Depot. This is should not be happening in Princeton.



WILLIAM WOLFE

I think the lady who asked the question is leaving the room, but as I heard it, you're looking for a source of native plants that you could purchase for your home?



PARTICIPANT

No, it's actually that I have a fairly sizable amount of land. So, I pull invasive species three times a day. But I see these invasive plants all around my neighborhood. The invasives will fly over my fence. Right? I was just wondering, the more you know, we talk a lot about the that list of invasives... but **the reality is most of the land is in private hands.**

And, just I was **wondering about mobilizing communities of private homeowners.** I have a lot of lawn... so, you know, Is there anyone working on the 'standard person'. Thank you.



PATRICIA SHANLEY

She said something wonderful. Fences Don't Stop... Seeds don't stop. And we need to think about that. That goes back to the collective... the fact that we are in the community. You have a question there.

TOM PINNEO

To your point about the collective... **This conversation isn't complete until we also include the conversation about housing... Where we build... What we build.** And, while we are grateful that organizations like the Watershed show up at planning board meetings, **it would be even better if everyone, EVERYBODY** showed up at planning board meetings and discussed why these principles matter. **We encourage this**

Smart Growth Council to keep going on with its work about building here in town. Developing density where we should be building density and then preserving as we've just heard today. I encourage you all to be engaged at the Zoning Board level, the Planning Board level, to help come out and be a voice for that.



KATHERINE KISH

Citizen involvement. What was the children that you used at the front end? **"No tool is more powerful or accessible than civic involvement at the local level"**. I think that comes from the book that Sheldon was telling us about. It's just so, so powerful. Other questions, comments? Yes, sir.

NELSON OBUS

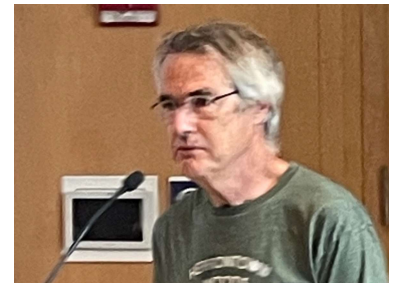
I just had a granular question. Clearly, the whole invasive species thing is trending. I sometimes wonder who's winning here, you know, especially in regard to **Lesser Celandine**. I was just wondering...Once you've defeated the ones that are more vulnerable, , how long is the victory over Lesser Celandine? Because I mean, they got there to begin with. **They got there by overcoming native plants.** And I wonder if there's any thought or any thinking about **how to tilt the balance more towards native plants** once you've gotten them going?



STEPHEN HILTNER

Thanks. **There are a lot of areas in Princeton that have not been invaded by it or just starting to get in.** It's very easy to deal with and I'm sorry, but **we have to use herbicides in a very selective medicinal way.** Not the industrial approach. But to **use herbicides in the medicinal way to just hit the two or three plants that start popping up in your yard. And then you're free of it. You just do that one time here. And then you're done with it.**

There are a lot of areas in Princeton, we can say about this incredibly aggressive plant and garlic mustard, somebody else mentioned garlic mustard...You can, we've pulled it. We've essentially pulled all of it at Herrontown Woods. We've been doing it **year after year and it gets easier year after year.** I think you have to pick your spots and **you can win** and the benefits are tremendous.



KATHERINE KISH

Okay, vigilance is the password there. Yes.

WENDY MAGER

I wanted to respond to that by the way. One of our volunteers at Mountain Lakes Preserve brought me some garlic mustard pesto that he made a couple of weeks ago and you are all invited to pull as much garlic mustard as you want, and do the same because it was delicious. But in response to Nelson, I wanted to say that, you know, one of the **reasons we're planting all these trees is that and protecting the understory with deer exclosures** and sometimes smaller fencing and so on, is because when the trees grow up and **fill the gaps in the canopy, they will shade out things like Japanese stilt grass, which is just as vicious and evasive.** So, yes, as Steve says, "You have to persist. You have to keep at it for a lot of years maybe", but, **eventually nature will help you. Nature will reassert itself. And you can see that in preserves that have an intact canopy and a good understory of native species.**



KATHERINE KISH

Great, great answer. Other questions, other comments?

SHELDON STURGES

One thing that has not been mentioned... Tony Nelessen, who's on the board of Princeton Future. He's in France right now. He has said that **in the downtown of Princeton, there ought to be a park within a minute and a half of every residential unit in the town.** We are a very long way from being able to do that here. But **there are a lot of parking lots in this town in the downtown.** Maybe we could come up with a new idea... Could we say to someone who owns one of the parking lots "Okay, give us a 10th of your large parking lot so we can make a public park, and we'd all be happier!" Anybody have any ideas about how one could do that? Deanna, what do you think? It sounds hard to me. But there is a need for parks in the downtown.



SOPHIE GLOVIER

Well, I think one of the big opportunities that we have is what we have talked about at the Watershed: **Green Infrastructures** or using plants and soil to manage the polluted stormwater runoff. And as we all know, Princeton is a very historic town. A lot of it was built before there was stormwater management. So as sites are being redeveloped, **we do have the opportunity to add in these islands of green** that are going to have multi benefits of bringing green into communities and capturing stormwater helping our flooding problems. So it might not be a park per se, but I think it's a really hopeful, exciting thing that **we can be bringing native plants into our downtown core and also helping to manage our stormwater planting.**



Yes, sir. Scott.

SCOTT SILLARS

I'd also like to point out that, particularly in Princeton, one of the reasons that we're limited is because on one side **we have a big university, which is a lot of open space and parkland per se** and on the other side, is the Princeton Cemetery which is open and green space, as well. And those are not considered parks, but they preclude a park from being established there. It's not just parking lots.



KATHERINE KISH

Well, we can always look at you know, the architects say that parking lots are the land banks of the future. So there's, there's hope this young man has had his hand up. Can we give him the mic? Oh, I'm sorry. Well, there's a young man to let's start with this young man. And then we'll go to that young man. Who's going? You first.

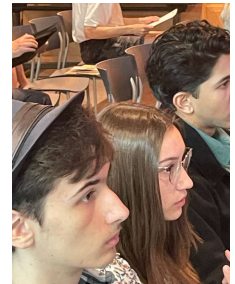
PETER LINDENFELD

Okay. We've talked quite a bit about **the area behind the buildings on the north side Nassau Street**. Much of which is one large parking lot and right for **exactly what we're talking about here. It is unused for any human use**. So, we'll have to learn how to cope with that. But **there's a whole area there which is downtown**, and which could be opened up both for some commercial use and some green use. It is what you're talking about. I'm looking forward to that then.



SHELDON STURGES

That's it. And that's it for him for being persistent, Peter. It's what we've been calling it the **Princeton Mews Walk**. The idea is to get private property owners to cooperate with the Municipality that owns the parking lot behind Dohm Alley. I'm just sitting through a series of lectures by a guy from the Center for Theological Inquiry. He made the point in his last lecture that **mutualism is the key concept... That nature really encourages cooperation at every molecular level...** That you will see plants manufacturing nitrogen even though they don't need it... and things like that. Mutualism may become an interesting new buzzword. I'd never really heard it before.



KATHERINE KISH

Community! This young man in a hat needs a microphone.

THE YOUNG MAN IN A HAT - Ridgeview

I think it's interesting to bring up the topic of having more green spaces within our downtown areas. With the Sustainability Degree I am pursuing, I've done a lot of studying types of city infrastructure: the types of green spaces we should be incorporating. I think when you open that conversation up, you have to talk about: What type of green spaces do we need in certain downtown areas? This might be planting certain trees and different types of shrubs. But, I think another emphasis that we also need to think about that might help with reconnecting would be to offer **insect hotspots** and **pollinator hotspots**. **These would probably be different types of garden spaces that promote certain native plants** which could provide **sanctuary to native plants in the area to make sure that there will some that will still be alive here**. They may be in an ecosystem that is currently being attacked by an invasive species. We can make sure that we will still have a native plant population. We need to keep in mind that **different types of green spaces will be important to downtown infrastructure**. Because it sort of makes sense, like what you were saying about mutualism, to make sure that all flows... so the ecosystem services are still around **to further protect local ecology**.

KATHERINE KISH

Oher comments before we close? Yes.

WENDY MAGER

I just wanted to say in response to your question, Sheldon, and this is also very consistent with what Princeton Future wants to promote. So right now there are public sessions being held about the redevelopment of the Seminary's property in Princeton, and **the intention is to have some affordable housing there**. One of the other things I heard from the planners at the last meeting, is that the Seminary has a green space along Stockton Street. It has always been behind the fence. And part of the plan now is to try to turn that into a green space available to the public. That would be a very good thing. And there will be other opportunities to do things like that. As our smart growth plans proceed. I'm very hopeful about that.



SHELDON STURGES

Good thinking. We do have at least one architect here. It strikes me that there are plenty of



public spaces that are like the one in the front of the Municipal building. There is a park there that nobody uses as a park. We need architects to step forward and say *"This place ought to become a really exciting place where people will come and sit."* For some reason, nobody goes to sit there.

KATHERINE KISH

Today we were talking about another one of our board members' accomplishments, Rich Rein. He is the Editor & Publisher of *TAPinto Princeton* and *US One*. He's written a very interesting book on urbanism, featuring the work of a man named Holly Whyte [William Whyte]. One of the things that I talked about with Wendy this morning, is the fact that one of the wonderful things about Hinds Plaza is **there are chairs to sit in and the chairs are movable!** That's one of the reasons people don't use spaces is often: *they are not invited in*, in some way. Chairs that can be moved about give you an invitation, not only to walk but to sit!

SHELDON STURGES

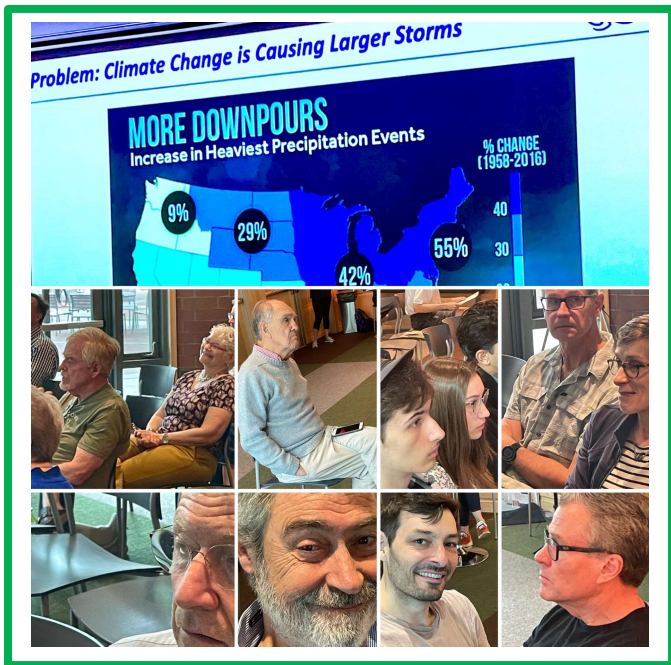
A former member of the PF Board, and our former Mayor of the Borough for 18 years, used to say, very simply: **"People like to sit"**. And those chairs I believe, do not get stolen. I'm not sure but that's my belief. There was a fear that people would come and walk off with them.

KATHERINE KISH

This has been a wonderful morning and I can't thank you all enough...Those who came in and spoke....So, now so a big round of applause....You know, one of the things I am connecting with this morning's conversation is my longtime service to the Nakashima Foundation. I'm a real fan. I worked with **George Nakashima**. He was a famous architect and world-renowned woodworker and furniture maker. He wrote a book called *The Soul of the Tree*. One of the things I feel today: **Today's discussion really brings us together as we realize that the souls of trees and souls people are very, very important and are close together. So, Nature, as Steve talked about today so eloquently, is part of of who we are when we are our best selves.** I thank you all for coming out on a Saturday morning, and we will continue this discussion Thank you.
Thank you Thank you very much.

PS. "As humans, we are hardwired to be reactive rather than proactive"

- Laurene Powell Jobs, p. 301, *Speed & Scale*



"OUR CLIMATE IS BEARING THE BRUNT OF THE MOST POWERFUL SOCIAL TREND ON THE PLANET: URBANIZATION"....AND

"AS CITIES AROUND THE WORLD CHART THEIR FUTURE COURSE, 3 CHOICES DEFINE THE TRAJECTORY OF EMISSIONS IN ANY URBAN DEVELOPMENT..."

- 1. HOW WILL WE DESIGN AND CONSTRUCT OUR BUILDINGS? [PF's HOUSING MEETING ON JAN 21, 2023]***
- 2. HOW WILL PEOPLE GET AROUND? [PF's MOBILITY MEETINGS ON NOV 13 AND MARCH 11, 2023]...AND***
- 3. HOW MUCH GREEN COVER CAN BE RETAINED?" [OPEN SPACES. PF's MEETING ON MAY 13, 2023]***

- p. 255, Speed & Scale by John Doerr

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