

Planning for Connected Natural Areas: Two Hudson Valley Plans

Wednesday, November 9, 2022, 1:30-3:00 pm

Hudson River Estuary Program Conservation and Land Use Webinar Series

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Christine Vanderlan 00:15:58.565 --> 00:16:18.635

Okay, so we are at 130, so I'm going to start our webinar off this afternoon. Welcome everybody. My name is Christine Vanderlan, and I am a Conservation and Land Use Specialist with the Hudson River Estuary Program through a partnership with Cornell University.

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Christine Vanderlan 00:16:18.664 --> 00:16:38.644

Welcome to today's webinar, "Planning for Connected Natural Areas." Before I introduce our speakers, we're going to review a few webinar logistics, and if my slide would advance, that would help.

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Christine Vanderlan 00:16:41.164 --> 00:17:00.934

There we go, so, first, there are options for your audio connection. If you are having difficulty with the audio through your computer, you can choose to switch audio by clicking the 3 dots next to the red button at the bottom of the screen.

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Christine Vanderlan 00:17:00.964 --> 00:17:22.084

And there you will find options to either request a call back or call in by phone. If you need help and have technical questions during the webinar, please reach out to me through the chat icon and that's in the bottom right hand corner of the screen. And then if you have questions

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Christine Vanderlan 00:17:22.114 --> 00:17:43.234

during the webinar, please use the Q and A function. If it's not open already, you can access the Q and A by clicking the 3 dots next to chat in the bottom right corner. Note that your phone lines are muted. The webinar is being recorded and we will notify you when the recording is

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Christine Vanderlan 00:17:43.240 --> 00:18:04.385

Available. That likely will be some time next week. At the end of the webinar, we request that you kindly give us your feedback by answering a 4-question survey, which will pop up on your screen. And then if you are participating and are seeking training credit, you will receive an email

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Christine Vanderlan 00:18:04.415 --> 00:18:11.405

after the program concludes, so a little after 3 o'clock today, confirming your participation.

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Christine Vanderlan 00:18:14.375 --> 00:18:34.715

For those of you, who may be new to the series, the Hudson River Estuary Program is a special program at the Department of Environmental Conservation established to help people enjoy, protect, and revitalize the Hudson river and its Valley. And we work throughout the 10 counties, bordering the tidal Hudson

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Christine Vanderlan 00:18:35.734 --> 00:18:56.554

to achieve many key benefits, including the vital estuary ecosystem, clean water, healthy tributary streams, climate-adaptive communities, conserved natural areas as well as an informed and engaged public and access for all to the Hudson River. Within the estuary program, our

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Christine Vanderlan 00:18:56.559 --> 00:19:17.524

Conservation and Land Use team works with municipalities and regional conservation partners who are working to conserve important habitats and natural areas through local land use planning and decision making. Ingrid Haeckel and I are available to provide technical assistance on a variety of conservation planning projects and

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Christine Vanderlan 00:19:17.794 --> 00:19:18.694

policies.

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Christine Vanderlan 00:19:22.264 --> 00:19:43.084

And i should have said, our website is a clearinghouse for guidance and resources on these topics and you can find a link to that in the chat. And while this is our final webinar for 2022, we are planning a new series for the coming year. And in the meantime recordings of previous webinars are available online so you can

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Christine Vanderlan 00:19:43.114 --> 00:20:04.234

enjoy any that you missed, or refresh your knowledge. And with that, I'm very pleased to introduce our speakers for today. Laurie Heady the Coordinator of the Conservation and Land Use Program will provide a brief introduction to connectivity planning and set the stage. Laura has 20 years of

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Christine Vanderlan 00:20:04.240 --> 00:20:25.385

experience working on biodiversity initiatives in the estuary watershed, creating and implementing science based outreach and technical assistance programs for land use decision makers and developing partnerships and strategies to advance conservation planning. Laura joined the estimate program in two thousand and six

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Christine Vanderlan 00:20:25.445 --> 00:20:46.535

after directing the biodiversity education program at Hudsonia, and her special interests include connectivity, conservation strategizing, and collaborating to reach meaningful outcomes, and clear communication. Laura created and manages the amphibian migrations and road crossings project. She earned her master's of

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Christine Vanderlan 00:20:46.539 --> 00:20:52.324

science in biology with an emphasis in ecology from Idaho State University.

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Christine Vanderlan 00:20:54.334 --> 00:21:14.614

Katrina Shindledecker will present the Green Corridors Plan. Currently executive director of Hudson Highlands Land Trust, Katrina has been with the organization for more than a decade. In her previous role as director of conservation., she was responsible for overseeing acquisition and stewardship. Katrina

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Christine Vanderlan 00:21:14.740 --> 00:21:35.885

Earned a master's of science in environmental policy from Bard College, and a master's of science and environmental science from Pace University. Before joining the land trust, Katrina worked in several roles at the New York State Office of Parks, Recreation and Historic Preservation, including implementing environmental recommendations

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Christine Vanderlan 00:21:35.915 --> 00:21:56.345

at parks and historic sites across the Taghkanic region. And Marissa Codey will be presenting the Taghkanic Headwaters Conservation Plan. And Marissa is the Columbia Land Conservancy's director of farm forest and land use programs. She has been with the conservancy since 2003.

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Christine Vanderlan 00:21:57.064 --> 00:22:18.184

During that time Marissa has helped numerous families and individuals achieve conservation outcomes for their properties. In addition to private land, conservation and acquisition, Marissa has also completed more than 30 farmland protection projects. Many of which include affordability provisions, in collaboration

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Christine Vanderlan 00:22:18.214 --> 00:22:39.094

with funders, partner organizations and state and federal agencies. Marissa serves on the board of the Columbia County chapter of the farm bureau and regularly assists several other local nonprofits and community groups with collective efforts to support and enhance the Colombia county community. Also,

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Christine Vanderlan 00:22:39.454 --> 00:23:00.064

I am personally very pleased that Marissa is here to talk about the Taghkanic headwaters conservation plan as I worked with Marissa at CLC for many years, and also was one of the staff engaged in that plan. I note from our registration list we had several people register who were involved in that plan as well. So we're really glad to see you.

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Christine Vanderlan 00:23:00.515 --> 00:23:21.455

And I hope you're able to participate today. As I invite Laura to share her slides, I just want to remind folks please use the Q and A, for your questions. I'm going to stop sharing. So, then Laura can put her slides up and after each speaker, we'll have a few minutes for questions for that speaker.

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Christine Vanderlan 00:23:21.695 --> 00:23:26.105

And then a longer Q and Aa, at the end. So, Laura, whenever you are ready.

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Laura Heady (she, her) 00:23:29.254 --> 00:23:48.424

Great thanks so much Christine for the introduction and for everybody joining us today, I'll echo a similar, um, excitement about also hearing about the green corridors plan from Katrina 'cause I got to work with the Hudson Highlands Land Trust on that project and did see some folks from the participating towns

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Laura Heady (she, her) 00:23:48.454 --> 00:23:59.404

on our attendee list as well. So, I'm going to jump into a little overview on planning for connected natural areas to kind of set the context for today's webinar.

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Laura Heady (she, her) 00:24:03.124 --> 00:24:23.674

So first, just to talk about what is connectivity so, structural connectivity, considers the physical characteristics that support or impede a connected natural landscape. So it's kind of the form or the structure of the landscape. So it might include things like large forests, human development,

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Laura Heady (she, her) 00:24:23.704 --> 00:24:41.014

water bodies and other features. In the absence of on the ground studies, data collection about wildlife, for example, structural connectivity is often estimated through computer modeling and mapping based on things like land cover.

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Laura Heady (she, her) 00:24:46.235 --> 00:25:04.565

Functional connectivity in contrast describes how well, a landscape actually allows for the movement of organisms and ecological processes or things like seed dispersal or breeding migrations of wildlife, and even genetic exchange and

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Laura Heady (she, her) 00:25:04.684 --> 00:25:25.714

so it's a little bit more involved and so actually, understanding whether there's functional connectivity in the landscape is more of a data driven measure that requires study and monitoring to understand how species interact with the landscape. And in conservation what we really want to achieve is having both structural

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Laura Heady (she, her) 00:25:25.719 --> 00:25:46.864

and functional connectivity, so both the form, and the function, meaning that we have an intact physical landscape with unfragmented habitat that actually provides true ecological connectivity. So, if we think about this, in terms of aquatic connectivity as an example, aquatic connectivity,

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Laura Heady (she, her) 00:25:46.894 --> 00:26:07.564

the ability of fish and other animals to move up and down in a stream channel as well as side to side. In the culvert on the left, the stream appears to be what we would call physically connected because the water from above the culvert is flowing through and connecting to the water below the culvert. But is it providing functional

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Laura Heady (she, her) 00:26:08.165 --> 00:26:29.165

connectivity? I would say, probably not, for species, like small fish or stream salamanders or something like a wood turtle, maybe for a river otter or even American eel. But that's probably not providing really true ecological,

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Laura Heady (she, her) 00:26:29.195 --> 00:26:50.315

functioning connectivity. In the photo on the right we can see the bridge span across the creek is wide enough to enable the stream to flow freely. Probably even during high water levels, with no real impediments to aquatic terrestrial organisms. I probably wouldn't even need to collect data to recognize that. Although the dog does help

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Laura Heady (she, her) 00:26:50.344 --> 00:27:11.464

let us know that terrestrial life can also move freely in the stream here, but in the case on the right we see structural, probably and functional connectivity, and just to point out from the perspective of our human communities, maintaining adequate conditions for high stream flow like, in the creek on the right it's also really important for reducing vulnerability

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Laura Heady (she, her) 00:27:11.469 --> 00:27:17.374

during intense storm events, so what's good for wildlife and fish is also good for us humans.

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Laura Heady (she, her) 00:27:20.314 --> 00:27:41.044

Okay, so that's connectivity. Now, what prevents connectivity is habitat fragmentation. So let's take a minute to think about fragmentation. When we think about landscape connectivity, fragmentation is the process in which that natural landscape is altered or developed and subdivided.

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Laura Heady (she, her) 00:27:41.194 --> 00:28:02.224

And essentially broken up into smaller pieces and patches of habitat, and that original habitat is really just left in fragments. And the drivers of fragmentation include residential, commercial, energy development projects, transportation networks, like roads. And if you think about the stream images

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Laura Heady (she, her) 00:28:02.254 --> 00:28:23.374

and that aquatic productivity in a previous slide, we would think of things like dams, poorly designed and poorly placed culverts as fragmenting features of aquatic habitat. And why is habitat fragmentation bad for wildlife? There are many reasons we want to avoid fragmentation with respect to

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Laura Heady (she, her) 00:28:23.405 --> 00:28:44.495

fish and wildlife, fragmentation really reduces habitat quantity and quality, like the availability of good habitat. And so, when we look at a natural area, in terms of habitat, there's what we call the interior habitat, which is the core of the patch. And so in this diagram, that's the dark green area. And

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Laura Heady (she, her) 00:28:44.529 --> 00:29:05.674

that's where the habitat quality is generally higher. It's protected from disturbances, predators, invasive species and some of the light in temperature differences that occur at the edge of habitat fragments. And in that edge habitat, we are more

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Laura Heady (she, her) 00:29:05.704 --> 00:29:26.824

likely to see species that are tolerant of these lower kind of habitat quality characteristics. In this illustration we see how cutting a habitat patch in half in this case by erode leads to 2 fragments each now with less of that dark green, high quality core habitat and

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Laura Heady (she, her) 00:29:26.854 --> 00:29:47.974

more of the light green edge habitat. So, for example, this was a forest, we would expect to see in the example on the left, we would expect to see songbirds for example, that are less tolerant of nesting edge habitat. So, they want that interior habitat where there there's

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Laura Heady (she, her) 00:29:48.004 --> 00:30:09.004

a sense of less protection, there's more protection from disturbance and we'd see species maybe like oven bird and scarlet tanager. Many of those kinds of interior breeding bird species are in decline, due to the loss of these larger connected core habitats, and you can imagine by looking at that image on the right if we continue to dissect the landscape,

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Laura Heady (she, her) 00:30:09.275 --> 00:30:30.275

we just create more and more of this edge, habitat, this lower quality habitat and we lose that intact habitat in the center that's really needed for these more sensitive species. In addition wildlife closer to the borders of these natural areas are vulnerable to what we call edge effect so, again, you know, increased

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Laura Heady (she, her) 00:30:30.304 --> 00:30:51.394

Predation by edge species that kind of monitor these edge areas for prey. Um, there's also usually more invasive species along edges where there's been disturbance from breaking up the habitat. And also in

smaller patches of habitat, there usually isn't the ability to maintain large populations of species. And so as our wildlife

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Laura Heady (she, her) 00:30:51.429 --> 00:31:12.574

populations decrease in size, um, they become probably less resilient to disease and disturbance, but they also, depending on how they disperse or move across the landscape, they can become genetically compromised as well. So, in general habitat fragmentation not good for in particular sensitive

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Laura Heady (she, her) 00:31:12.664 --> 00:31:33.724

wildlife species. But, let's think about something positive for a minute, just a few examples of what unfragmented connected landscapes look like in the Hudson Valley. So, starting up by the Capital district, we have the Albany Pine Bush, which is a globally rare ecosystem, right in the heart of the capital district with thousands of acres protected, and almost 20 miles of trails.

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Laura Heady (she, her) 00:31:35.884 --> 00:31:54.814

More in the mid-Hudson, we have the Shawangunk grasslands that are managed by the U. S Fish and Wildlife Service for grassland breeding birds. And a little bit further south in the mid Hudson, we have the large unbroken forests in the Hudson Highlands spanning both sides of the Hudson River and with many partners working on their

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Laura Heady (she, her) 00:31:54.880 --> 00:32:16.025

Conservation. So preserving restoring large landscapes like I just showed you or even small scale connections, why does it matter? So, for wildlife connectivity maintains viable populations of species over time. It allows for species to move whether it's for daily

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Laura Heady (she, her) 00:32:16.054 --> 00:32:37.174

movements in this case, this was a photo of a wood turtle I took that, that guardrail actually shows where there's a culvert under the road connecting a stream, but it was doing such a poor job, the wood turtle was actually going above the culverts to cross the road. So we want to allow for species movement just in terms of their

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Laura Heady (she, her) 00:32:37.179 --> 00:32:58.294

daily and seasonal needs, but also for populations to adapt and shift as needed, because of climate change, environmental change. And the same would apply for natural ecological communities. Forests will even be shifting due to increase temperatures, changes in precipitation, drought, things like that. For people

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Laura Heady (she, her) 00:32:58.354 --> 00:33:19.474

There are also benefits. In general, having large connected landscapes, improves quality of life for people. There's more recreational opportunity with large connected, landscapes, trails, better scenery and all this adds to economic value for communities. And during this climate crisis,

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Laura Heady (she, her) 00:33:19.504 --> 00:33:40.624

it's even more important, because large landscapes build community resilience to effects of climate change, like drought and increase temperature and flooding. So if we have all these great reasons to know why connectivity is important, why isn't our landscape all contiguous? There's actually a lot of challenges

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Laura Heady (she, her) 00:33:40.630 --> 00:34:01.775

implementing this in the real world, because of what I like to call the decision making landscape. If you think of the, all the beautiful natural areas of the Hudson Valley and overlay above that 260 individual town cities and villages with their own planning and zoning boards, all making decisions about land use on top of that. Then we have about 80%

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Laura Heady (she, her) 00:34:01.804 --> 00:34:22.924

percent private land ownership of the Hudson Valley and so all of these uncoordinated individual decisions, whether it's at a planning board table, or if it's in somebody's private woodlot, they all can lead to fragmentation even if it's unintentional. So, it's really important to shift our very traditional focus from reviewing site plans, making

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Laura Heady (she, her) 00:34:22.955 --> 00:34:44.075

decisions about site plans, making decisions as a land owner about a parcel of land, to a larger view. And I think the strategy for that is really partnership. Partnerships are critical. The idea of working across municipal boundaries with neighboring communities, for example, or working with partners, or

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Laura Heady (she, her) 00:34:44.104 --> 00:35:05.224

conservation alliances. So I want to just give you a few examples and tools about this. So many of the large protected areas that I showed you, in the earlier slide, like the Hudson Highlands, like the Albany Pine Bush, they're highlighted in our 2006 wildlife and habitat conservation framework

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Laura Heady (she, her) 00:35:05.254 --> 00:35:26.374

which identified and describes significant biodiversity areas in the region. And these areas aren't regulatory in nature, but they provide a blueprint for thinking about some of those larger landscapes where there's opportunities for connectivity conservation at all scales. Whether it's through partnerships, with the state and land

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Laura Heady (she, her) 00:35:26.405 --> 00:35:47.525

trust and watershed groups, or if it's through local communities, or even landowners, and it's not to say the areas between this significant biodiversity areas aren't important and don't benefit from connectivity. But this is just one example of a way to kind of coordinate some of our conservation efforts across boundaries. So I'm going to give you a couple of examples of connectivity planning

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Laura Heady (she, her) 00:35:47.554 --> 00:36:08.674

at different scales in the Hudson Valley before I, um, shift over to our partner presentations. I first wanted to give you a moment to just contemplate this quote from the book *Nature in Fragments*: “When we think about planning for connectivity a new paradigm is needed, one that advances the proposition that instead of developing land

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Laura Heady (she, her) 00:36:08.705 --> 00:36:29.765

with a naive expectation that ecosystem ecosystems will magically rearrange themselves around a new development, a community should first, understand its ecosystems and then place development where it will minimize ecological impact. By doing so we'll bring biodiversity conservation fully into the smart growth equation, creating quality

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Laura Heady (she, her) 00:36:29.854 --> 00:36:50.974

communities that sustain humans and ecosystems on which all life ultimately depends.” So, here's a few inspiring examples, hopefully of where this kind of philosophy has been taken to heart. First, just at the local level, rather than planning and thinking about conservation within one town,

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Laura Heady (she, her) 00:36:51.034 --> 00:37:11.944

work with a neighboring town, so intermunicipal collaboration, a couple of examples: natural resource inventory could be done across municipal boundaries. Here we have an example from Blooming Grove and Cornwall who worked together in Orange County, recognizing they shared natural features. And similarly in Ulster County, the towns of Rochester and Warwasing worked together

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Laura Heady (she, her) 00:37:12.185 --> 00:37:33.275

on an open space plan, uh, again, recognizing that they share natural features, and then taking a recommendation from the open space plan, the town of Warwasing adopted a critical environmental area. So, they use local policy to advance connectivity by identifying an important connection between the Catskills and the

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Laura Heady (she, her) 00:37:33.364 --> 00:37:54.394

Shawangunk Ridge and developing a critical environmental area to help protect that connectivity. At the local level in terms of conservation financing, the town of Red hook is the first example I know of that integrated, it was actually a connectivity model we produced through partners at Cornell

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Laura Heady (she, her) 00:37:54.725 --> 00:38:15.515

Uh, to test how connectivity could be modeled at a municipal scale, and they incorporated that as criteria for conservation in the update of their community preservation plan. That was back in 2016. And then, finally, too, we have a number of regional partners that have taken the lead on thinking about many municipalities,

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Laura Heady (she, her) 00:38:15.724 --> 00:38:36.724

who all share a conservation feature of great importance, and have developed plans and strategies to address the key features and important values, conservation values of these areas. Shawangunk Ridge. There's a regional open space plan done for the ridge. The Rensselaer Plateau created a plan to think about

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Laura Heady (she, her) 00:38:36.754 --> 00:38:57.004

the large connected forests of the plateau, and the Greene county grasslands plan created the landscape scale vision for conservation to management of habitat of threatened endangered grassland species. So, these are all examples of regional plans that again can feed into thinking about connectivity locally and regionally.

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Laura Heady (she, her) 00:38:58.205 --> 00:39:19.025

And so, before we shift over to today's feature presentations, I wanted to share a few opportunities in case your interest is sparked to pursue this yourself first. Oh, don't mind the dates. I should have that that our Hudson River Estuary action agenda. That's our current action agenda, 2021 to 2025, we have a target in there that

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Laura Heady (she, her) 00:39:19.029 --> 00:39:40.084

By 2030, we'd like to see 10 new planning projects completed to support landscape scale conservation. So we always are looking for help to implement that. And a key way to do that is by applying for an estuary grant. We do include connectivity planning as an eligible project. And, pending funding, we expect an RFA for grants next year.

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Laura Heady (she, her) 00:39:40.925 --> 00:40:01.325

Also, our website that Christine mentioned has a section on connectivity planning, and then finally, just to emphasize again, the importance of partnerships, and we're certainly available to help connect you with partners. I'm really thrilled that for today, we'll get to hear from two partner projects that were funded through estuary grants

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Laura Heady (she, her) 00:40:01.329 --> 00:40:14.074

and are helping us reach our target in the current action agenda at the program. So I'm going to stop there. There may be time for questions now. But if not, I think at the end of the webinar.

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Christine Vanderlan 00:40:15.244 --> 00:40:16.894

Thank you Laura. Um.

PICKUP HERE

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Christine Vanderlan 00:40:17.074 --> 00:40:22.084

I have time for a couple of questions now, I will,

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Christine Vanderlan 00:40:22.744 --> 00:40:28.534

pause for a moment and see if anyone's kind of typing those in and they're going to come through.

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Laura Heady (she, her) 00:40:39.784 --> 00:40:57.724

While we're waiting on that, I can see just from a comment I will point out that one of the three Estuary grants that is currently helping us implement our connectivity planning is the town of Bedford who's working on conservation overlay zoning for connectivity. So, we're excited about that project as well. It's just kicking off.

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Laura Heady (she, her) 00:40:57.754 --> 00:40:57.964

Okay.

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Christine Vanderlan 00:41:00.274 --> 00:41:07.534

So, I see a question just came in about what kind of funding is available for towns to do inventories or open space plans.

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Laura Heady (she, her) 00:41:08.164 --> 00:41:18.874

Great so Salvador, I'm not sure where you're from. If you're in the Hudson Valley our Hudson River estuary grants offers support for natural resource inventories, open space plans and

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Laura Heady (she, her) 00:41:18.905 --> 00:41:39.995

Other municipal planning as well as connectivity plans. The Hudson Valley Greenway is another source at the state level. If you're outside of the Hudson Valley, the climate smart communities grants also is providing funding for NRIs and some, some types of plans. I'm not sure what the current funding is supporting.

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Laura Heady (she, her) 00:41:40.029 --> 00:41:42.184

But those are a few examples.

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Laura Heady (she, her) 00:41:47.014 --> 00:41:49.564

And I welcome my colleagues, if you have anything to share on that.

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Christine Vanderlan 00:42:04.264 --> 00:42:06.994

Those are the funding sources that I could think of.

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Laura Heady (she, her) 00:42:07.054 --> 00:42:07.444

Okay.

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Christine Vanderlan 00:42:07.804 --> 00:42:23.284

Not seeing other questions coming through right now. So I think we'll actually for this section, I'll be running the slides and Katrina will be speaking. So, Katrina, if you're ready, I'll share your PowerPoint and we can

87

Christine Vanderlan 00:42:23.885 --> 00:42:25.715

get that started yeah.

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Katrina 00:42:25.805 --> 00:42:26.405

Absolutely.

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Katrina 00:42:34.805 --> 00:42:54.755

Perfect, thank you, Christine. Thank you to Laura for the fantastic kind of introduction to the topic. So, my name is Katrina Shindledecker and, as Christine said on the executive director, at the Hudson Highlands Land Trust, I was invited here today to talk to you about our recently

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Katrina 00:42:54.784 --> 00:43:15.904

completed Green Corridors Plan. That is for the eastern Hudson Highlands. The Hudson Highlands spans both the East and West side of the Hudson River, and we focused this plan on the East side of the Hudson River. Because there is currently a plan for the Western Hudson Highlands. Although it focuses more on recreation than it does

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Katrina 00:43:15.934 --> 00:43:37.054

on kind of being a biotic corridor. Before I start my presentation, I need to say a big thank you to the Hudson River Estuary Program. This project was funded, and largely made possible by a Hudson River Estuary Program grant. Further Laura said that she kind of had worked on the plan,

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Katrina 00:43:37.084 --> 00:43:44.914

and their staff was an incredible resource throughout the entire process. So thank you. Next slide.

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Katrina 00:43:50.975 --> 00:44:07.595

The agenda, the topics I'm going to focus on today include, what is the green corridor? Why was the green corridors plan created? What was the process of developing the plan? What's included in it? And how has and will the plan be implemented?

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Katrina 00:44:10.564 --> 00:44:19.534

You were told a little bit about me, but, I want to give you a little bit of information about the Hudson Highlands Land Trust. So, if you can go to the next slide, please.

95

Katrina 00:44:22.204 --> 00:44:41.914

Fantastic Thank you. The Hudson Highlands Land Trust is a, not for profit community supported organization, or headquartered in Garrison, New York. In the last 33 years we have directly protected land via both conservation easements and preserves. We

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Katrina 00:44:41.920 --> 00:45:03.065

currently hold almost 100 conservation easement across both the East and West Hudson Highlands. Those total more than 2500 acres. We also manage 3 preserves totally more than a 1000 acres in addition to our direct land conservation.

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Katrina 00:45:03.094 --> 00:45:24.214

We have focused and facilitated the conservation of thousands of additional acres of land. In some instances we have can come in in and held land as an interim holder for New York State. Oftentimes looking at kind of corridors and buffers or in-holdings and those circumstances um, in other.

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Katrina 00:45:24.244 --> 00:45:45.364

circumstances we have engaged in partnership projects either. We hold the property or one of our partners does and we kind of help facilitate and then, you know, there are times that we don't hold the land. We haven't kind of invested directly in it, but we have shepherded a project along and provided support, be that kind of

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Katrina 00:45:45.395 --> 00:45:53.525

support or mapping support, or, natural resource expertise. next slide please.

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Katrina 00:45:56.045 --> 00:46:16.385

So, um, very similar to where Laura started. I want to start with a basic question what is a Green Corridor? And green corridors are the land wildlife and in many instances, but not all people need in order to thrive and move across the landscape.

101

Katrina 00:46:18.515 --> 00:46:36.755

Protecting these areas is important for both plants and wildlife. Wildlife requires connected habitat, as Laura said to seek food refuge, and mates, but roads and other development that sever the natural areas can threaten wildlife's ability to move safely.

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Katrina 00:46:37.564 --> 00:46:58.684

Green corridors also provide economic, ecological and social benefits, for example, for us can help clean air, absorb carbon. Wetlands absorb floodwaters and help keep our drinking water clean. The effects of poorly planned, or unconstrained development, coupled with climate change increase the urgent need for wildlife and ecosystems

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Katrina 00:46:58.689 --> 00:47:03.934
to shift and move across the landscape. next slide please.

104

Katrina 00:47:06.755 --> 00:47:26.855
So people move, too. A connected walkable community in the form of linear parks and linkages between conserved areas, greatly benefit wildlife and plants as well because trees do migrate. But they also benefit people. In recent years the term

105

Katrina 00:47:26.915 --> 00:47:48.035
walkable community is becoming more and more commonplace. Additionally publicly accessible places also meet local recreation needs. And this is more than just kind of going for a walk or being able to walk to the farmers market. This also includes hunting and fishing and other kind of outdoor recreation activities. next

106

Katrina 00:47:48.064 --> 00:47:48.994
Slide please.

107

Katrina 00:47:52.295 --> 00:48:12.005
So, this map shows where we work: the Highlands region of New York, the highlands east of the Hudson River covers all of Putnam County, a little bit of Dutchess and Westchester, and then continues into Connecticut. The Highlands region over all is a federally recognized eco-region.

108

Katrina 00:48:12.484 --> 00:48:33.154
And our part of it has many significant natural area features. This includes large forested areas, rare plants and animal species, regionally important, wildlife corridors, and recreational corridors. Conservation organizations and agencies have been successful in protecting significant portions of the

109

Katrina 00:48:33.184 --> 00:48:35.254
Hudson Highlands.

110

Katrina 00:48:36.184 --> 00:48:54.484
Fahnestock and Hudson Highland State Parks is more than 25,000 acres. Now, the focus is really on ensuring that the connections in between those protected areas are identified and safeguarded. Because otherwise they're basically islands. next slide please.

111

Katrina 00:48:58.624 --> 00:49:16.684
In addition to the Hudson highlands land trust, several conservation organizations work in the New York highlands examples include and many of the logos are up here, Scenic Hudson, the open space Institute Westchester land trust, Putnam county land trust, Orange County land trust and Dutchess land Conservancy.

112

Katrina 00:49:17.015 --> 00:49:37.655

You'll also see the logos here for New York state in New York state parks, and the Department of Environmental Conservation, and the Palisades Interstate Park Commission, BlackRock forest, and the New York -New Jersey Trail Conference. One of the foundations of conservation success in this region is these partnerships.

113

Katrina 00:49:38.524 --> 00:49:59.164

The New York Highlands Network was created a few years ago to basically enhance communication and collaboration between the various kind of disparate groups that were working in the region. So now we have a dedicated group of agencies and organizations focused on direct land conservation within the region. Each organization

114

Katrina 00:49:59.195 --> 00:50:17.165

has its own mission, but there's a shared purpose and dedication. Consistent communication along with the willingness to partner and share resources creates a synergy that will allow creative problem solving and solutions. And this is where the Green Corridors plan comes in. next slide please.

115

Katrina 00:50:21.184 --> 00:50:40.054

So, the Hudson Highlands land trust basically took the lead on the Green Corridors plan, to identify links between existing conserved land in the eastern Hudson Highlands. Uh, we wanted to identify forest, marsh, and meadow connections across the Highlands because wildlife are at

116

Katrina 00:50:40.084 --> 00:51:01.204

Risk. Just to highlight some of the things that Laura was saying. In 2019, a UN report said that globally 1 million animal and plant species are now threatened with extinction, many within decades. Across North America more than 3 billion birds have been lost since the 1970s.

117

Katrina 00:51:01.774 --> 00:51:20.794

And bugs like butterflies, which are at the core of our ecosystems, are declining, even faster than birds. Land conservation is part of the solution. But first, we need to identify what lands are most crucial so we can be thoughtful in our actions and dedicate resources to where they're needed most. next slide. please.

118

Katrina 00:51:22.954 --> 00:51:43.504

So, what was the process of creating the green corridors plan? It was a lengthy and multi step process. It included a GIS analysis; stakeholder input from two of the communities; and New York Natural Heritage Program input and review. To help envision the

119

Katrina 00:51:43.509 --> 00:52:04.654

full ecosystems' needs in terms of connectivity, a variety of habitats and movement paths were selected to safeguard. To identify draft priority area, the locations and habitats of 9 focal species were analyzed. The species were selected to represent an array of habitat needs and movement

120

Katrina 00:52:04.685 --> 00:52:25.805

ranges within the New York Highlands region. Nine focal species were selected based on input from wildlife experts at agencies, municipalities, and organizations within the New York highlands. They included a top aviator predator, the bald eagle, a sensitive amphibian, the spotted salamander along with an aquatic species that

121

Katrina 00:52:25.834 --> 00:52:37.894

Connects our streams to the oceans, the American eel. So like, that kind of culvert showing those places that the eel might want to traverse. next slide. Please.

122

Katrina 00:52:40.505 --> 00:53:01.055

Thank you from there, one of the 1st steps was a GIS model that identified important areas for focal species, defined the lands and waters that were most important for those species. Data was analyzed, including known populations of the species within the New York highlands region and known or estimated important

123

Katrina 00:53:01.059 --> 00:53:22.204

habitat areas for those wildlife's, where they reside, or they access. So, you know, where are they migrating through, past, looking for food? Um, these data sources were then analyzed and shown as a series of maps in the plan. So, the first map shown is a scientific analysis of the areas that are most important for

124

Katrina 00:53:22.234 --> 00:53:43.324

wildlife movement. The second map shows, conservation, priorities of organizations that work in this region. Um, so this is map is particularly helpful because towns are oftentimes our partner, and, you know, being able to show the towns where different conservation organizations are working and what properties they have

125

Katrina 00:53:43.359 --> 00:54:01.174

on their radar basically show them potential partnership opportunities. The third map shows community input based on stakeholder feedback. And the final map is an assemblage that combines all the different priorities of the other maps into one. next slide. Please.

126

Katrina 00:54:03.604 --> 00:54:24.244

Thank you. Stakeholder input: as just mentioned we included input from communities and experts that reside in, use and, or know the towns of Phillipstown and Putnam Valley. It is not the full highlands of the East. But, um, those were two communities that really are intimately connected

127

Katrina 00:54:24.274 --> 00:54:45.394

and has a lot of wildlife moving from one to the other. So, given kind of our restraints constraints at the time with funding, we focused on those. Initially, it was actually just going to be Philipstown, but we were able to basically work across the boundaries and feedback was collected via town wide workshops a public

128

Katrina 00:54:45.424 --> 00:55:06.514

survey and small group meetings. As originally envisioned, we were going to hold multiple in person meetings. Unfortunately, our project started just as the covid 19 pandemic hit. Thus we had to get really creative. I believe Karen Strong of Strong outcomes is one of the participants today.

129

Katrina 00:55:06.550 --> 00:55:27.635

And she was a tremendous resource, she helped us navigate the then strange new world of zoom. If you can think back the early days of the pandemic, zoom was new. It was new to us. We were each learning our way through the new technology. Well, then having to lead interactive facilitated meetings.

130

Katrina 00:55:28.174 --> 00:55:48.844

And there was a wide spectrum of technological knowhow. Um, so in some of those can smaller intimate groups where we were kind of having people draw on their computer on maps, we bridged the divide by ensuring that there was enough staff available to guide individuals who needed

131

Katrina 00:55:48.874 --> 00:56:07.174

help in breakout rooms, and in a few circumstances, where the divide was just too wide, we ended up printing maps and dropping them off at people's mailboxes. So, they could draw on the maps and let us know of any places that they thought were remarkably important for connectivity.

132

Katrina 00:56:07.180 --> 00:56:18.815

And then let us know when the maps were back in their, their mailbox and so we could take them back and digitize the information that they provided to us. next slide. Please.

133

Katrina 00:56:20.615 --> 00:56:41.015

Thank you, one critical partner throughout was the New York Natural Heritage Program. At the onset they helped identify the focal species. Then later in the process, the New York Natural Heritage Program staff were brought in to review the draft connectivity, priority areas and determine how

134

Katrina 00:56:41.044 --> 00:57:01.654

They compared with previous studies and current conditions. This was, in essence, a high level litmus test on our modeling. Their staff also conducted field evaluations of the relative conservation value of draft priority areas and produced a corresponding report of the results giving us feedback on

135

Katrina 00:57:02.344 --> 00:57:23.314

refinements, we might want to make with our modeling. They were essentially ground truthing. Um, the results where, we passed the test, albeit it very interestingly some of the smaller parcels had better habitat than one might have thought. And some of the larger properties were more impacted by invasive species than one might have hoped.

136

Katrina 00:57:23.794 --> 00:57:29.584

That was typically, you know, edge habitat those places along the road. next slide. Please.

137

Katrina 00:57:34.024 --> 00:57:52.744

So what's in the plan? Um, in addition to the maps that identify natural area connections across Putnam County, the plan includes resources to help local decision makers and landowners and conservation organizations who want to include include Green corridors in their decision making.

138

Katrina 00:57:53.465 --> 00:58:14.075

The plan has a comprehensive list of tools that can be used to protect green corridors. So, examples include information on conservation easements or more information about how municipalities can create critical environmental areas. I've already mentioned kind of direct land conservation, but

139

Katrina 00:58:14.104 --> 00:58:35.224

other tools include, um, land use plans and education programs to raise awareness of wildlife connections like pollinator pathways and the amphibian monitoring and road crossing volunteer program. And Laura, you're going to have to come up with a better acronym or way to say that. The plan

140

Katrina 00:58:35.254 --> 00:58:56.374

also has an extensive list of funding sources to help protect land and connectivity, including state and federal funding opportunities along with private foundation opportunities. And in that instance, we actually had a grant writer and I'm looking right now. I'm going to get myself a little bit out of the sun, come in and really do

141

Katrina 00:58:56.405 --> 00:59:17.525

a deep dive going through what the different funding sources are to help protect connectivity and instead of kind of keeping that information to ourselves, there is a lengthy and very thorough review of what the different grants are available to help fund, you know, conservation

142

Katrina 00:59:17.529 --> 00:59:22.894

within your municipality. next slide, please.

143

Katrina 00:59:25.534 --> 00:59:45.724

So, once the plan was complete, we pivoted our focus to ensuring it didn't just sit on the shelf. We presented the plan to the municipalities in the East, New York, Hudson Highlands, um, you know, and talk to them about the maps and the priority areas. Um, but then we also,

144

Katrina 00:59:45.754 --> 01:00:06.874

the Hudson Highlands Land Trust and our conservation partners you know, reached out to them about specific projects. The Hudson Highlands land trust has recently protected two properties, listed as a priority in the plan. And we're working with the New York State Office of Parks and Recreation and Historic Preservation to protect two

145

Katrina 01:00:06.905 --> 01:00:27.335

Other properties listed in the plan. We've also included a list of ways others might use the plan on this slide. And on our website, we have videos for municipalities where, if there are kind of incoming planning board members, town board members, if they want an overview of what is in the green corridors plan.

146

Katrina 01:00:28.174 --> 01:00:29.134

Next slide please.

147

Katrina 01:00:31.774 --> 01:00:51.994

So, lastly, I just want to thank you for listening and caring about this topic. It's through all of you that we're going to be able to make a difference throughout the Hudson River Valley. And again, I want to give thanks to the Hudson River Estuary Program for supporting conservation work in the Hudson Highlands. That's all I've got.

148

Ingrid Haeckel 01:00:55.474 --> 01:01:12.364

Thank you so much. Katrina. Hi, everyone I'm Ingrid Haeckel. I'm going to help moderate for a few minutes. This Q and A. so, if anyone has questions for Katrina about the green corridors plan, you can enter your question to the Q and A.

149

Ingrid Haeckel 01:01:16.834 --> 01:01:21.094

Just taking a glimpse here. I'm not seeing any questions yet.

150

Ingrid Haeckel 01:01:28.384 --> 01:01:35.134

Okay, there was, there's a question about what you found to be the hardest part of the process.

151

Katrina 01:01:41.495 --> 01:01:55.475

Oh, goodness, there was I mean, it it was quite a, I, it was a process, I think, throughout the different sections, there were different. I don't want to say obstacles, but things that we had to work our way through. Um.

152

Katrina 01:01:57.574 --> 01:02:18.004

I think when we were doing some of the stakeholder feedback, um, making sure that people understood that we were looking at kind of not just where they like to hike on people's property that they don't necessarily have access to. Um, but, you know, more than that, where we're looking at kind of biotic corridors to be protected.

153

Katrina 01:02:18.009 --> 01:02:39.154

Again, as I said, kind of the technological impacts. Data collection, and kind of scrubbing and making sure that it's, you know, as good as it can be, you know, with any kind of analysis your output is only as

154

Katrina 01:02:39.185 --> 01:02:59.495

good as kind of the input. So taking the time on the front end to make sure that the data that we collected was as good as it can be and that did it include sometimes going out in the fields and saying, you know, is this accurate? So really

155

Katrina 01:03:00.334 --> 01:03:04.654

not just trusting what kind of was, you know

156

Katrina 01:03:06.634 --> 01:03:27.064

I don't want to say spit out by the computer, but kind of assembled. Using data that could be a year old. Something could say it was a fantastic parcel. But then you look and it's been subdivided into 10 lots. So really taking the time and investing on the front end. So that the plan was an accurate reflection of

157

Katrina 01:03:27.099 --> 01:03:30.424

what were the true corridors.

158

Ingrid Haeckel 01:03:33.425 --> 01:03:50.405

Thank you that's great. Um, there's another question about whether you include included small scale, private lands, uh, such as large yards um, in this plan I've been thinking about connectivity, but also restoration.

159

Katrina 01:03:51.275 --> 01:03:51.845

Um.

160

Katrina 01:03:52.534 --> 01:04:09.754

Not as much no, so, you know, within the eastern portion of kind of the, the New York Highlands we are remarkably fortunate to have Fahnestock and Hudson Highlands state parks and, you know

161

Katrina 01:04:10.864 --> 01:04:31.684

Hudson Highlands State Park is actually 3 separate kind of parklets, and there isn't necessarily connectivity, um, going both East -West or North -South. So, um, our focus was really, I'm kind of, I would say that underdeveloped properties were included.

162

Katrina 01:04:31.984 --> 01:04:38.674

Undeveloped and underdeveloped, but not necessarily going through, you know, a neighborhood.

163

Ingrid Haeckel 01:04:39.904 --> 01:04:43.954

Yeah, yeah, that's great. Um.

164

Katrina 01:04:44.164 --> 01:04:53.104

Because you could, I mean, some places in this region, you can have one house on a 100 acres. So we didn't want to kind of pull that from the analysis. But if you have.

165

Katrina 01:04:53.134 --> 01:05:01.324

1 acre zoning, that that's something that was kind of generally not looked at.

166

Ingrid Haeckel 01:05:01.324 --> 01:05:01.894

Hmm.

167

Ingrid Haeckel 01:05:03.424 --> 01:05:23.794

Yeah, I guess I could see situations at a smaller scale, or in a more urban environment, where it might make sense to scale down in that way, or depending on your focus but, you know, the species here you have in mind. Um, and there's their range of movement where it might make sense to focus in, on smaller.

168

Ingrid Haeckel 01:05:24.215 --> 01:05:25.085

properties.

169

Katrina 01:05:26.405 --> 01:05:39.335

We are currently working with the town of Philipstown on a community preservation plan, which is actually looking at a much smaller scale and, you know, some of those more intimate connections.

170

Ingrid Haeckel 01:05:42.335 --> 01:06:02.195

And so, this is actually a question I have, which is just, you know, if there are other land trusts out there that are interested in doing this type of project, if you have any particular high level lessons from this project that you think, you know, other groups might want to take into

171

Ingrid Haeckel 01:06:02.199 --> 01:06:05.404

consideration in thinking about undertaking a similar effort.

172

Katrina 01:06:06.304 --> 01:06:23.344

Um, I think really talking and getting buy in from the communities. But also experts, you know, we have fantastic people on staff, but really, your staff, New York Natural

173

Katrina 01:06:23.349 --> 01:06:44.404

Heritage Program staff, Hudsonia, they, you know, it was fantastic to have this incredibly collaborative process. So that sometimes when you were still myopic, on kind of getting through the plan and to the next step having, you know, outside resources basically

174

Katrina 01:06:44.524 --> 01:07:05.644

Say, "But what about this? have you considered that?" um, is incredibly helpful, you know, might it delay you getting to the next step by a week or 2? Yes, but the plan is going to be so much better and more useful because of it. So really pulling in as many partners as possible for, you know, feedback.

175

Katrina 01:07:05.674 --> 01:07:08.554

And ideas. Incredibly helpful.

176

Ingrid Haeckel 01:07:10.145 --> 01:07:26.255

Yeah, and so there's a follow up question that's related to that, saying not all connectivity plans include ground truthing, like the Green Corridors plan. Did you find that step helped build confidence in the recommendations and priorities?

177

Katrina 01:07:27.545 --> 01:07:30.995

I can tell you, it helped build our confidence in the

178

Katrina 01:07:31.029 --> 01:07:33.424

recommendations and priorities.

179

Katrina 01:07:33.994 --> 01:07:49.654

You know, it, it gave us good insight. Um, so, you know, I can tell you for those people who, here, and who are very familiar with how we did it, it absolutely helped us build confidence. Um, you know.

180

Katrina 01:07:50.794 --> 01:08:10.924

It's like, when you're doing direct land conservation, you know, a map can tell you the property's beautiful and then you can find ATV tracks all over it. And, you know, recognizing that it could be restored, but really knowing, what's on the lands, it helps.

181

Katrina 01:08:12.094 --> 01:08:13.024

I would recommend it.

182

Ingrid Haeckel 01:08:15.635 --> 01:08:28.805

Well, thank you so much Katrina, for that wonderful presentation and I think Marissa Codey our as our last speaker, right? We are seeing your slides.

183

Ingrid Haeckel 01:08:31.924 --> 01:08:33.395

Go ahead Thank you.

184

Marissa 01:08:33.605 --> 01:08:35.285

Sure Yep. Let me just.

185

Marissa 01:08:37.325 --> 01:08:58.444

There we go. All right. I'm glad to go after Katrina, it was really interesting to see the similarities between the plan that they worked on and the plan that we worked on. The Columbia land Conservancy is someone of a similar organization.

186

Marissa 01:08:58.474 --> 01:09:19.594

We're also a local land trust. Our geographic service area is a little more easy to define. It's essentially the Columbia County line. We do somewhat similar work. We have about 30,000 acres that we've protected with private landowners. We own around 4,000 acres of land.

187

Marissa 01:09:19.625 --> 01:09:25.955

And then we have a variety of community outreach programs, public education programs.

188

Marissa 01:09:28.354 --> 01:09:49.204

So this presentation, kind of follows the plan itself. Some of the slides come straight out of the plan and so you can go back and take a look and read a little bit more about how it all came together. We were also funded by the Hudson River Estuary program and worked with Karen Strong and Larissa

189

Marissa 01:09:49.923 --> 01:10:06.364

Read of Strong Outcomes and Common Ground Consulting really to help us pull this plan together. Most importantly, there were a number of stakeholders that I'll pull up in a few slides. You can see how many different people worked to put our plan into place.

190

Marissa 01:10:08.104 --> 01:10:28.684

So, uh, what is the Taghkanic headwaters and how was the plan created? So, our plan focused on a specific water body and protection of that one water body and the headwaters of it. So, those are the stakeholders. Like Katrina, we worked as you can see during the

191

Marissa 01:10:28.714 --> 01:10:30.394

pandemic when

192

Marissa 01:10:31.685 --> 01:10:52.655

The, the original plan for what we were going to do was changed somewhat being converted to zoom meetings. But it happened and we pulled together a number of stakeholders from the towns of Claverack, Copake, Hillsdale and Taghkanic. And these are the

193

Marissa 01:10:52.685 --> 01:10:59.465

stakeholders, several of whom are on the meeting today. We're really happy to have them here to join us.

194

Marissa 01:11:01.475 --> 01:11:22.265

And this is a map showing where we're talking about. So, Columbia County, that's our service area. The area that's in orange is the headwaters area that we looked at. The striped areas there is what we came up with, is that we've been looking at a forest linkage corridor.

195

Marissa 01:11:22.269 --> 01:11:43.414

The conversations earlier today talked a lot about the importance of connectivity. You can see right there, this one kind of going from the southwest corner to the northeast corner of that map. There's this protected or there's this forested swath where it's, we're not just

196

Marissa 01:11:43.444 --> 01:12:04.504

talking about annual migrations, but migrations as the climate warms for species to be able to move up into cooler places where they can adapt. And this is kind of a zoomed in area showing what we're talking about. So, again that orange.

197

Marissa 01:12:05.374 --> 01:12:25.714

This is the upper headwaters of the Taghkanic creek. I don't think I have a way to point on here, but the Taghkanic creek goes through the middle of that orange area. And then, as it comes down to the South is sort of turns Northward again and heads upwards

198

Marissa 01:12:25.719 --> 01:12:46.864

City of Hudson towards the Hudson River. This particular watershed that we looked at there's a little star there that's hard to see in the southern area of the orange boundary. There is an area there where the water essentially gets funneled towards

199

Marissa 01:12:46.895 --> 01:13:08.015

the city of Hudson and provides the drinking water for the city of Hudson, which is our biggest city in the county. And this was the vision statement that the stakeholders worked hard to come up with. What were we trying to do? Why do we care about this watershed? This is a very community-based plan kind of by the community.

200

Marissa 01:13:08.044 --> 01:13:09.154

For the community.

201

Marissa 01:13:11.614 --> 01:13:31.984

Um, and so why do we care about this, as has been sort of already talked about today, the importance of connectivity. Looking here you can see there's forested areas within this watershed. And then the more whiter area is sort of a patchwork of

202

Marissa 01:13:32.015 --> 01:13:53.105

farmland and open lands, all of which are threatened as habitats are throughout the Hudson Valley by development, fragmentation, pests, deers, invasives, climate change. All of those factors together are many of the reasons why protecting these lands

203

Marissa 01:13:53.140 --> 01:13:59.315

in some way and identifying them as areas of importance, rose to the top. Um.

204

Marissa 01:14:01.625 --> 01:14:22.655

Threats to water quality itself, so water withdrawal that if too much water is coming out, most of the watershed is, uses aquifers and groundwater. But then the Taghkanic creek itself again is providing the drinking water to the city of Hudson. Runoff and roads salt,

205

Marissa 01:14:22.774 --> 01:14:43.804

Culverts, invasive plants, and dams as Laura talked about. And so these areas in looking at looking at the upper headwaters themselves, those kind of green circles came to light as the areas of the highest importance. If we were to look within this watershed,

206

Marissa 01:14:44.134 --> 01:15:05.044

where are the places where we really want to want to focus our efforts? And, there are two primary conservation values. It's a little hard to see on this screen, that the stakeholders came up with clean water for people and wildlife and connected forest for plants and animals. So each, each of those areas

207

Marissa 01:15:05.075 --> 01:15:26.195

really, met the criteria of, sort of the highest values for to look at, in terms of where we want to think about protection. So, we had, there were a number of goals about how do we achieve protection and by

208

Marissa 01:15:26.224 --> 01:15:47.284

“protection,” this plan certainly doesn't just mean technical conservation easement or purchase, all the different ways that these lands can be kept intact and well, cared for. So goal one was forest and waters in the watershed are protected and managed. So, the wildlife

209

Marissa 01:15:47.350 --> 01:16:08.495

can move. Goal two: The Taghkanic creek has enough clean water in it. So it's a high quality habitat and meets the needs of the people, fish and wildlife, including the water supply and recreation. So, it's a really, it's a really mixed sort of effort that we're trying to

210

Marissa 01:16:08.524 --> 01:16:29.434

achieve here. Goal 3: in the watershed, build connections among people and communities, including leaders in the watershed in the towns that participated and in the city of Hudson. How do we how do we do that? I think the strength of the plan really is in the,

211

Marissa 01:16:29.674 --> 01:16:50.794

“How do we do it?” We've now identified these areas that we know we need to take care of. We know we care about. What do we do next? And it's a wide mix of tactics. These are some of the tools and strategies. So, education programs, community science is also referred to as citizen

212

Marissa 01:16:50.825 --> 01:17:11.945

Science. And so this is having kind of agreed upon effort that we want community members to engage with a particular, a water monitoring. Is there a creek that we want to monitor every year? How can we bring citizens out to get engaged in the long term about taking care of these resources? Land protection, land planning and decisionmaking,

213

Marissa 01:17:11.974 --> 01:17:32.764

and then land management. Getting the word out: So we worked with the stakeholders themselves and once the plan was drafted, we then started the process of engaging everybody in all of these communities to kind of figure out ways to

214

Marissa 01:17:33.125 --> 01:17:54.245

put everything into action. The stakeholders did a lot of work by bringing sort of summaries of the plans to town board meetings and an event was hosted in collaboration with the library. The Columbia Land Conservancy helped by creating posters, flyers,

215

Marissa 01:17:54.274 --> 01:18:15.394

And hosted a website, really trying to sort of help the stakeholder bring the word out into their individual communities and try to find people who want to help move this forward. We at the Columbia Land Conservancy were awarded water quality improvement grant from the state that we're

216

Marissa 01:18:15.399 --> 01:18:36.544

right now, in the process of thinking about how are we going to implement this it's funding that essentially allows us to look at, identify properties in need of protection, either by easement or acquisition and think about what we can do next. So, I can take questions, too. I would just

217

Marissa 01:18:36.575 --> 01:18:57.695

end by saying, um, really this is just in the beginning stages. We have the plan and now we need to figure out how to make this be long term. What are the ways that communities can engage? Are we going to as a land trust sort of be there as a

218

Marissa 01:18:57.724 --> 01:19:09.904

resource, host meetings and kind of encourage individual communities to come up with actions that we can we can help and support? So I can take any questions that anybody has.

219

Christine Vanderlan 01:19:12.034 --> 01:19:14.674

Thanks Marissa. That was great.

220

Christine Vanderlan 01:19:16.234 --> 01:19:26.074

I'm just gonna take a peek at the Q and A, to see what might have come in or is coming in. Um, see.

221

Laura Heady (she, her) 01:19:40.924 --> 01:19:56.074

Christine, I might suggest asking the same question that one of our audience asked of Katrina, which "what was the hardest part of the process? If you found there was a particular element of the headwaters plan. ?" You could both maybe answer that question since both of you were involved.

222

Marissa 01:19:58.354 --> 01:20:00.034

Yeah, and I might, um.

223

Marissa 01:20:01.294 --> 01:20:22.294

weave that together by saying, maybe it was the juncture. So, Christine really worked on the plan itself that the document, and I'm now trying to take that document and move it further. So I am. One challenge I think is simply like anybody who does a plan.

224

Marissa 01:20:22.300 --> 01:20:40.415

How do you make sure that it's not just a plan once it's once it's published. How do you make sure that it gets buy in and engagement and turns into what we all imagined it to be . But I will defer to Christine who was much more involved in the process itself of putting it together.

225

Christine Vanderlan 01:20:42.934 --> 01:20:57.844

Um, yeah, so, I mean, similar to what Katrina said, that each phase had its own sort of challenges, to work through, I feel like something that.

226

Christine Vanderlan 01:20:59.434 --> 01:21:20.074

we needed to do early on, was to kind of help, define and narrow down what we were going to look at and our scope. Just taking the time early to do that because, there's certainly lots of possibilities there, and different directions you could go with a plan in an effort like this. And especially one engaging, um, members

227

Christine Vanderlan 01:21:20.134 --> 01:21:24.424

the communities that we were working with. So

228

Christine Vanderlan 01:21:26.164 --> 01:21:36.484

Yeah, early on I think that's the greatest difficulty is really narrowing your focus and, creating how you're going to get from the start to the finish.

229

Christine Vanderlan 01:21:47.465 --> 01:21:57.425

Uh, so I have a question, uh, for both projects, were there types of data you wished you had to inform the planning and prioritization?

230

Christine Vanderlan 01:22:01.744 --> 01:22:09.394

And I think I'm just gonna invite, make sure you're unmuted. Looks like maybe Katrina, her, her video's back on. I don't know if that means you want to answer first?

231

Katrina 01:22:09.634 --> 01:22:11.074

That means I'm thinking.

232

Christine Vanderlan 01:22:11.134 --> 01:22:11.674

Okay.

233

Katrina 01:22:11.914 --> 01:22:16.594

The person who was like, sitting there and has my mouth moving and I'm not no, one can hear me. Um.

234

Marissa 01:22:19.444 --> 01:22:40.474

i can say one just point to that question is that for our plan in thinking about the important areas, there's a lot that it's not just the map that we put together say something is there. It is that there are many of these habitats and ecosystems are

235

Marissa 01:22:40.504 --> 01:22:56.434

not mapped at all so kind of in the reverse of the seeps, the springs, the vernal pools. All of those are just purely kind of local knowledge. And so it's possible that, that we all just collectively missed something because no one had had been there and knew they were there.

236

Katrina 01:22:57.724 --> 01:23:01.624

Yeah, I mean, I think it's one of the reasons why we had

237

Katrina 01:23:01.715 --> 01:23:22.415

kind of locals who we knew were, you know, knew natural resources, but really just drawing on some maps. I mean, really just taking sharp markers and basically being like, there's an important here place here, you know, because, you know, 80% of the land is private ownership.

238

Katrina 01:23:22.804 --> 01:23:43.864

Um, you know, there are DEC marked wetlands, but, you know, not every vernal pool or wetland is marked, not every habitat, you know, is known. The one thing that we actually worked on it I did not include in my presentation was

239

Katrina 01:23:44.285 --> 01:24:04.655

we worked with to actually go look at some of the culverts to go look at, you know, what were the road crossings? What did they look like? were they impediments um, were they not impediments? So, some of that really kind of fine filter information just isn't available. You really

240

Katrina 01:24:05.164 --> 01:24:10.054

have to get out into the field and try and develop your own information and data.

241

Laura Heady (she, her) 01:24:14.555 --> 01:24:33.275

Katrina, thanks for bringing that up. I completely forgot to mention that that was an opportunistic timing when the Green Corridors project was just getting going and I said, oh, our colleagues at the Hudson

River Estuary program are actually focusing on Putnam County for their culvert inventories this year, does Philips town or Putnam Valley, or

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Laura Heady (she, her) 01:24:33.304 --> 01:24:53.134

the towns involved in Green Corridors want to be, you know, the kind of the recipients of that survey work. So, that was a really opportune time and again points to that idea of partnership being so important, because it's just knowing who's doing what and connect connectivity, different form, connecting the dots. So everybody can work together on these kind of shared goals.

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Katrina 01:24:53.914 --> 01:24:54.214

Yeah.

244

Katrina 01:24:54.695 --> 01:25:15.365

One of these webinars, um, earlier this year, actually talked about amphibian migration. One of our supporters saw that and she knew that we were doing our own culver testing and she was like, "how can like, what can we do to close a road? What can we do to replace the culverts?" So, I mean, I think information sharing is just central.

245

Katrina 01:25:16.024 --> 01:25:30.304

You know, at a very local level, regional level on state level sharing what what we're doing ,what's working, what's not working and, you know, how can we, you know, work together to move conservation forward.

246

Christine Vanderlan 01:25:34.144 --> 01:25:47.194

Uh, so there's a question here about whether the land trusts commonly take small conservation easements that towns acquire from developers during the approval process for a, a development.

247

Marissa 01:25:50.764 --> 01:26:10.564

I can respond to that. I would say, generally not conservation easements, being in perpetuity. I think, a really important specific tool at specific times. That may sometimes make sense. Sometimes there may be other tools for

248

Marissa 01:26:10.804 --> 01:26:13.294

that kind of land protection, um.

249

Marissa 01:26:15.214 --> 01:26:35.944

There may be other techniques, other than a conservation easement and of itself. I think every consideration is kind of project specific site specific, but conservation easement are the obligations on the, on the land trust are not small, to protect, defendant, enforce whatever is in those easements,

250

Marissa 01:26:35.974 --> 01:26:44.284

kind of forever and so there's a cost to benefit of just trying to find the right land protection tool for the right the right situation.

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Katrina 01:26:46.054 --> 01:26:57.094

You know, I can, I can say that currently the Hudson Highland Land trust does not hold any what I would consider regulatory conservation easement, you know, conservation restrictions that were

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Katrina 01:26:57.125 --> 01:27:17.945

put it on a property in order to get an approval of some kind. That said several municipalities that we work with do place conservation easements on property through their planning board or, you know, their, their process.

253

Katrina 01:27:18.274 --> 01:27:39.394

Um, you know, they have never been kind of conservation easement that meets our threshold. That said, because we do have experience developing baseline documentation reports, drafting easements and monitoring elements, we have engaged in partnerships with some of the municipalities

254

Katrina 01:27:39.724 --> 01:27:54.814

to draft a baseline documentation report for them, conduct their annual monitoring, um, you know, review their conservation easements to see if we think there's anything that's missing, but we don't currently hold any regulatory easement. Some other organizations do.

255

Ingrid Haeckel 01:28:00.304 --> 01:28:18.874

I'm gonna jump in because I see there's a follow up on a question. I'd asked Katrina earlier. This is from Rick LedererBarnes who did the analysis for your plan and, getting back to the question about analyzing yards. He said that the analysis was done.

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Ingrid Haeckel 01:28:18.880 --> 01:28:39.425

At he landscape scale, and only added parcels at the end. So they ignored parcel boundaries during the spatial analysis and then calculated parcel scores based on overlap with the landscape scoring. Um, they did a size threshold of a minimum of 5 acres for the final prioritization output.

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Ingrid Haeckel 01:28:40.054 --> 01:28:43.594

So, that follows up on that earlier question.

258

Katrina 01:28:43.924 --> 01:29:01.174

Thank you, Rick. He worked mostly with Nicole who left and went to the Nature Conservancy in June. So that is a much more thorough response than I could have given. And I have to say that he was fantastic throughout the entire process and has been working

259

Katrina 01:29:01.205 --> 01:29:05.315
with us on another town wide plan since then.

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Ingrid Haeckel 01:29:07.984 --> 01:29:08.644
Thank you, Rick.

261

Laura Heady (she, her) 01:29:09.694 --> 01:29:27.934
I pasted that into chat too. In case people didn't get all the details. I saw there was a question too, about Hudson River program funding and just to specify. So, the DEC issues Hudson River estuary grants generally it's

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Laura Heady (she, her) 01:29:27.969 --> 01:29:49.114
been on an annual basis, for for many years, those grants, it all depends on the annual budget but if there's funding available, those grants are generally, I think the RFA usually goes out in the spring. Um, and we look forward to hopefully that happening again next year. Um, I did want to point out the good news

263

Laura Heady (she, her) 01:29:49.120 --> 01:30:10.265
is that with the bond act being approved by New York state voters, there should even be more funding for land conservation, climate adaptation, which connectivity probably falls into, the, the WQIP grant that Marissa mentioned, too, you know, those kinds of water quality improvement opportunities too, I think there's going to be hopefully a lot more

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Laura Heady (she, her) 01:30:10.269 --> 01:30:18.544
funding, flowing through the state for supporting those kinds of projects. So good news to be able to celebrate that today of all days.

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Christine Vanderlan 01:30:27.934 --> 01:30:43.624
So, I'll just encourage people to make use of the Q and A, and add in your questions. We do have a few more minutes here and so we want to make sure that we make the best use of your time and answer your questions while we can.

266

Laura Heady (she, her) 01:30:49.924 --> 01:31:06.544
I'll ask a question while we wait, I'm just curious with, Marissa and Katrina with those projects. Were there any surprises just in terms of learning more about your service area that was kind of a nice ancillary experience related to actually working on the plan.

267

Katrina 01:31:12.364 --> 01:31:19.654

I mean, I kind of mentioned one, which was some of our, you know, smaller sized parcels.

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Katrina 01:31:21.214 --> 01:31:41.914

That we had kind of reservations about, when the New York Natural Heritage Program staff went out, you know, we were, you know, it, it was nice to see that. You know, but they also kind of affirmed that, you know, kind of the, the network of roads oftentimes

269

Katrina 01:31:41.944 --> 01:31:52.714

brought a lot of edge habitat, and the things that come with that, like invasive species, um, you know, mcdonald's cups and things like that.

270

Marissa 01:31:56.224 --> 01:32:00.664

I'll ask Christine, actually, you might be able to answer that one better than I would.

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Christine Vanderlan 01:32:03.394 --> 01:32:10.324

Let's see, it's going back a ways for me now, but, uh, I think.

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Christine Vanderlan 01:32:14.164 --> 01:32:32.674

I was surprised in, in looking at the information that we had available that, upper Taghkanic creek had not been assessed by DEC. And a nice outcome was, that the town of Taghkanic then sought, DEC had put out a call in

273

Christine Vanderlan 01:32:32.705 --> 01:32:53.825

2021 for communities to propose water bodies that hadn't been assessed to be assessed by DEC, and so the Town of Taghkanic put forward the Taghkanic creek, the segment of it and that actually is happening. So that was a nice surprise based on kind of like, wow, we actually don't have as much information as I thought we would at the

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Christine Vanderlan 01:32:53.829 --> 01:32:54.304

start of the

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Katrina 01:32:54.304 --> 01:32:55.354

project.

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Katrina 01:32:56.674 --> 01:33:17.344

Another thing that, um, was affirming in many ways was, you know, since 2011, the Hudson highlands land trust has had kind of a legacy landscape, kind of plan, which looked, did a GIS analysis. And this is, you know, years back when I think the data was not as robust

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Katrina 01:33:17.854 --> 01:33:38.914

as it is now, and we did it in house, looking at which properties we would prioritize and be proactive, in our land conservation, as opposed to kind of consistently being reactive. Um, and while there wasn't perfect overlap, it really did affirm that some of the projects

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Katrina 01:33:38.974 --> 01:33:44.644

kind of, you know, we kind of knew were important really work.

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Laura Heady (she, her) 01:33:48.514 --> 01:33:50.584

Took the gestalt and made it actual.

280

Katrina 01:33:50.884 --> 01:33:51.154

Yeah.

281

Laura Heady (she, her) 01:33:51.394 --> 01:34:02.194

That's great. Yeah. Yeah. Thanks, Christine. That's a great reminder. That's, uh, I love that the Taghkanic Creek ended up being selected to do that water quality testing. That's great.

282

Laura Heady (she, her) 01:34:13.054 --> 01:34:31.084

Well, I think in terms of the, you both have emphasized the role of the local stakeholders and community members in having knowledge of the landscape in their local areas. I know at least with the towns of Phillipstown and Putnam Valley, they had both engaged in natural resource

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Laura Heady (she, her) 01:34:31.120 --> 01:34:52.115

inventory projects in the last few years, and just to remind everybody on the webinar, just how that ground floor kind of level of inventory and resources in a municipality is such a great springboard for other kinds of plans like this. I'm not as familiar with the municipalities in the Taghkanic Headwaters, but I do think that

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Laura Heady (she, her) 01:34:52.269 --> 01:35:13.144

While it lacks the field surveys, and kind of the mapping of resources that are otherwise not mapped like, vernal pools, it's a great way to either figure out what data are missing that municipality would like to have. And what the, you know, what, again, they might share with neighboring municipalities, or what are some of the ways that planning could advance their contribution goals so

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Laura Heady (she, her) 01:35:13.444 --> 01:35:19.324

I think that was an important kind of baseline step for those municipalities involved in Green Corridors at least.

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Katrina 01:35:21.154 --> 01:35:34.564

I think that bringing multiple municipalities together to kind of talk about land conservation, you know, for us, the drinking water for Peekskill is reliant on, you know, the Peekskill Hollow Brook

287

Katrina 01:35:34.654 --> 01:35:54.874

that runs through much of Putnam Valley, so they lack control over, you know, their own drinking water. So, having municipalities kind of have that open discussion is incredibly helpful because while we oftentimes look at maps and we have these kind of

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Katrina 01:35:55.894 --> 01:36:09.904

you know, these borders in mind, water, animals, plants don't know these artificial boundaries that we've imposed on the land.

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Laura Heady (she, her) 01:36:17.255 --> 01:36:18.395

Did you want to add anything, Marissa?

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Marissa 01:36:20.405 --> 01:36:38.015

Yeah, yes, maybe it goes back to the question, sort of related to challenges or just the thoughts and how to move things forward. Certainly municipalities working together isn't easy the way New York state is structured politically. Just, you know, if we're if

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Marissa 01:36:38.019 --> 01:36:57.664

thinking about any kind of regulatory anything that we want to do, particularly protected to a watershed and just the politics of the different boards in the different towns just how they're structured to work together. The CACs

292

Marissa 01:36:58.535 --> 01:37:18.905

can potentially work together and the Columbia Land Conservancy tries to bring those kind of groups together to at least communicate and dialogue and talk. But that's something that I think we as land trust, practitioners, and conservationists can play a really important role in helping to kind of bridge those gaps and find ways to

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Marissa 01:37:18.909 --> 01:37:40.054

bring people together just to even if it's not regulatory just to sort of share information and ideas on how can we implement this plan. So, I hope, I mean, we're there, we have the blueprint now with this plan of what to do. We just sort of have to figure out how to keep those conversations

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Marissa 01:37:40.059 --> 01:38:01.204

going and maybe maybe it's one thing. Our plan has a number of kind of goals and outcomes and maybe it's just one. And we all agree stream buffers or what we want to do. And can we simply plant stream buffers on all of those feeder streams that are in need of a kind of being cared for. Or maybe every town does something differently.

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Marissa 01:38:01.234 --> 01:38:06.934

So, that's kind of what's next to come in terms of really having this make a difference. I think.

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Laura Heady (she, her) 01:38:12.695 --> 01:38:29.405

Those are all such great points. I think sometimes bringing folks together to work on a project, the process becomes as valuable as the final product because of those relationships, and those connections that are built, you know, people who don't normally sit at a table together to talk about these

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Laura Heady (she, her) 01:38:29.434 --> 01:38:31.294

things, it's really great to see.

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Ingrid Haeckel 01:38:38.495 --> 01:38:54.785

Yeah, I agree, just from my experience working on, um, engaging with the Rensselaer Plateau regional conservation planning process, and the Greene County grassland habitat management plan, that just kind of the engagement of that stakeholder group

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Ingrid Haeckel 01:38:54.814 --> 01:39:15.304

and getting to know each other, um, that those relationships over time can keep these ideas moving forward and that, you know, the biggest outcomes might not necessarily happen right away but it could be 5-10 years from now that some new opportunity emerges. And

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Ingrid Haeckel 01:39:16.354 --> 01:39:19.414

And once again, the plan becomes a key part of that.

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Ingrid Haeckel 01:39:21.964 --> 01:39:38.494

I there was another question that Q, and A, about whether Hudson Highlands land trust and the New York National Heritage Program used a protocol to assess the quality of the habitats when looking at prospective parcels or was it more of a qualitative field assessment?

302

Katrina 01:39:44.464 --> 01:39:55.414

Honestly, Nicole worked with them directly and so I don't want to give misinformation, you know, or you might not have an answer for that.

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Laura Heady (she, her) 01:39:58.054 --> 01:40:17.974

Well, I do know the methods. I'm a little rusty just because it was last year. The methods are in the plan. Um, part of my recollection is the heritage program had already done modeling for connectivity in the Hudson Valley, and they were also kind of squaring the priorities that were developed through the corridors GIS

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Laura Heady (she, her) 01:40:17.979 --> 01:40:38.674

analysis with some of what they had developed too through that modeling and doing, I think a little ground truthing to bring those pieces together and see if the what they were seeing on the ground matched up with that, um, whether or not, they had a specific protocol for kind of methodically going through the corridor's priority areas. I'm not aware of that.

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Katrina 01:40:39.965 --> 01:40:40.445

Huh.

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Laura Heady (she, her) 01:40:40.805 --> 01:40:46.025

But again, it it should be in the, um, the methods were described in the plan.

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Katrina 01:40:47.105 --> 01:41:00.275

And I believe my contact information is available if it doesn't give the level of, you know, information that you want to reach out to me. And I can pull it out from the

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Katrina 01:41:00.364 --> 01:41:06.994

report that they provided, so I can tease that out and follow up if someone wants to follow up with me.

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Ingrid Haeckel 01:41:09.724 --> 01:41:10.504

Great Thank you.

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Christine Vanderlan 01:41:16.084 --> 01:41:32.704

So, I think we may be able to wrap up a few minutes early unless anyone has final last-minute questions or thoughts to share. I will just let folks know that our Conservation

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Christine Vanderlan 01:41:32.709 --> 01:41:47.374

Planning in the Hudson River Estuary watershed website has a page about connectivity planning and that. Let's see if I can share that quickly. You could see what it looks like.

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Christine Vanderlan 01:41:51.155 --> 01:42:01.475

Too many windows open, um, that has links to both of these plans and to some of the other plans that Laura mentioned, we also will be following

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Katrina 01:42:01.475 --> 01:42:02.615

up

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Christine Vanderlan 01:42:02.855 --> 01:42:10.775

with an email that has links to the presentations and the recording and so you'll be able to look back at my.

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Christine Vanderlan 01:42:10.804 --> 01:42:12.904

to the information presented today.

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Christine Vanderlan 01:42:15.425 --> 01:42:25.925

So, I think there's the conservation planning in the Hudson River estuary watershed website, and our connectivity planning page there. So

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Christine Vanderlan 01:42:29.554 --> 01:42:37.804

be sure to check that out too. Thank you. All for attending. Thank you. All for your great presentations. Um, this has been a really,

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Christine Vanderlan 01:42:40.714 --> 01:42:57.064

kind of interesting session. I find it's a great topic, to spend time with and, I hope people do follow up and check out the plans in detail and check out the website. Um, we really appreciate

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Christine Vanderlan 01:42:58.775 --> 01:43:03.395

Marissa and Katrina taking the time to present these plans.

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Christine Vanderlan 01:43:07.684 --> 01:43:09.844

And we wish everybody a great afternoon.

321

Laura Heady (she, her) 01:43:13.264 --> 01:43:14.104

Thanks everyone.

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Katrina 01:43:14.494 --> 01:43:15.244

Thank you.

323

Ingrid Haeckel 01:43:17.704 --> 01:43:18.244
Thank you.