Online Tools for Conservation Planning in the Hudson Valley
July, 20, 2021 1:00-2:15 pm
Hudson River Estuary Program Conservation and Land Use Webinar Series

Webinar transcript

00:00:02.395 --> 00:00:09.205

Hello and good afternoon I can see people are still trickling in, but we're going to get started.
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00:00:09.564 --> 00:00:22.675
My name is Ingrid Haeckel and I'm a Conservation and Land Use Specialist with the DEC's Hudson River Estuary Program through a partnership with Cornell University. Welcome to our Conservation and Land Use Webinar series today.
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00:00:22.855 --> 00:00:35.304
My colleagues and I will be presenting two great online tools that our program created to support local land use and conservation planning the Hudson Valley, the Natural Resource Mapper and our Conservation Planning website.
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00:00:37.320 --> 00:00:42.810
So before we get started, let me just quickly review some important details.
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00:00:42.810 --> 00:00:53.490
You should be able to connect to audio through your computer or by phone and those different options are located at the bottom of the screen through connect audio.
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00:00:53.490 --> 00:01:01.649
If you're having difficulties with sound, I would recommend trying to call in or requesting a call back and we've also put the call in number in the chat.
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00:01:03.865 --> 00:01:17.334
You can direct technical difficulties to us through the chat box in the bottom right corner of the screen. We request that you submit your questions for the speakers using Q and A, if possible and the Q and A function.
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00:01:17.334 --> 00:01:24.084
If you don't see, it should be accessible through those 3 little dots to the right of the chat box in the bottom right.
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00:01:26.844 --> 00:01:39.415
So note, that your phone lines have been muted, the webinar is being recorded and we will notify you when the recording is available in a day or 2. At the end of the webinar there will be a short 3 question survey that pops up.
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00:01:39.415 --> 00:01:44.605
And we appreciate your feedback on the program, and lastly for those of you who are seeking municipal

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00:01:44.879 --> 00:01:56.760
training credit, you'll receive an automatic email confirmation of attendance sent from Webex at the end of the seminar right around 2:15 PM. So keep an eye out for that in your email inbox.

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00:01:58.590 --> 00:02:11.634
For those of you who are new to our series, the Hudson River Estuary Program is a unique program at the New York State Department of Environmental Conservation established to help people enjoy, protect, and revitalize the Hudson River and its Valley.

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00:02:11.965 --> 00:02:13.435
We work throughout the 10 counties

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00:02:13.435 --> 00:02:15.504
bordering the tidal Hudson from upper New York

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00:02:15.504 --> 00:02:15.955
Harbor to

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00:02:15.985 --> 00:02:16.794
the federal dam

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00:02:16.794 --> 00:02:17.365
at Troy,

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00:02:17.634 --> 00:02:23.514
the area on the map here, to ensure many key benefits of a healthy Hudson,

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00:02:23.784 --> 00:02:29.604
including clean water, community resilience to climate change, and the vital ecosystem

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00:02:29.604 --> 00:02:36.625
and its fish, wildlife, and habitats, natural scenery of the river valley, and opportunities for education and access,

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00:02:36.870 --> 00:02:51.689
recreation and inspiration on the river, and within the Estuary Program, our Conservation and Land Use team works with municipalities and regional partners to incorporate important habitats and natural areas into land, use, planning and decision making.

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00:02:53.604 --> 00:03:07.854

So, today I'll be starting off the presentation with an introduction to the Hudson Valley Natural Resource Mapper and its layout, and my colleague, Nate Nardi-Cyrus will then walk us through some of the habitat and water resource layers contained in the mapper.

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00:03:08.155 --> 00:03:17.485
And we'll conclude with some examples for how it can be used. And in the 2nd part of the program, our colleague Laura will introduce our new conservation planning website

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00:03:17.759 --> 00:03:26.039
which is a clearinghouse for information, guidance, and case studies on many of the topics we've covered in the seminar series over the last

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00:03:26.039 --> 00:03:39.835
year or so. I just want to note that after today's program we will be putting the webinar series on hold for a few months. We're planning to resume online programming in November.

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00:03:40.194 --> 00:03:41.125
And in the meantime,

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00:03:41.125 --> 00:03:55.585
we encourage you to check out our archive of about 20 recorded webinars that are available on the Conservation and Land Use website. Those range from biodiversity conservation to stormwater management, and solar

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00:03:55.585 --> 00:03:56.125
Siting.

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00:03:56.365 --> 00:03:58.314
You can stream them or download them.

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00:03:59.034 --> 00:04:13.645
And we will continue to share periodic announcements and opportunities through the DEC Delivers list, which you are hopefully now receiving. And remember, you can sign up for that here on the web page as well.

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00:04:16.529 --> 00:04:21.360
Okay, so let's get started with the Hudson Valley Natural Resource Mapper.

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00:04:21.834 --> 00:04:35.545
I'm going to turn off this for now. Okay. For those of you, we assume many of you are new to the mapper, but I know some of you are probably here for a refresher. Perhaps you've attended a training in the past. Either way,

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00:04:35.545 --> 00:04:43.254
we hope you'll learn something new that you didn't know about it, and we're going to take this opportunity to share some updates as well.
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00:04:44.004 --> 00:04:46.764
The last time we held mapper trainings was in 2019,
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00:04:46.764 --> 00:05:01.733
and at that time, we took the show on the road. We did a series of hands-on workshops across the region and it was really clear from those events that hands on practice is essential for many people to become comfortable with using these online
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00:05:01.733 --> 00:05:02.274
mapping interfaces.
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00:05:02.274 --> 00:05:05.454
They often have many little quirks to them.
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00:05:05.454 --> 00:05:20.004
So I hope you can set aside a little time after today's webinar to explore the tool on your own, or perhaps later in this week, while the material still fresh, and become familiar with it. And if you run into problems, please contact us.
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00:05:20.124 --> 00:05:22.194
And we'll do our best to help you out.

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00:05:24.509 --> 00:05:30.028
Yeah, you know, we always always welcome feedback and we're here to help support your use of this tool.
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00:05:32.093 --> 00:05:45.233
The natural resource mapper is an online interactive tool from the Hudson River Estuary Program that we created to make a wide array of habitat and water resource information available to communities throughout our watershed.
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00:05:45.954 --> 00:05:48.923
And the mapper contains over 40 spatial data layers,
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00:05:48.954 --> 00:05:49.644
organized,
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00:05:49.644 --> 00:05:53.903

thematically under Estuary, Streams and watersheds, Wetlands,

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00:05:53.934 --> 00:05:54.624
Forests,

46
00:05:54.863 --> 00:05:55.553
Biodiversity,

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00:05:55.733 --> 00:06:06.653
and Scenic and recreation areas. And you can turn individual layers on to create customized printable maps as well as click on the map to learn more about individual features.

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00:06:07.613 --> 00:06:21.173
We published this tool originally back in 2018, through assistance from the New York State Office of Information Technology Services, and we're grateful for their continued support in maintaining and updating the tool, which we are doing on a regular basis.

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00:06:23.939 --> 00:06:34.673
We designed the mapper with a few key goals in mind. First of all, we wanted to provide access to a broad suite of habitat and water resource data sets in one easy to use tool.

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00:06:35.334 --> 00:06:43.343
We also wanted to provide a home for unique Hudson Valley data that have been developed by the program and our partners over many years.

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00:06:43.619 --> 00:06:47.129
And lastly, we wanted to encourage

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00:06:47.129 --> 00:06:54.869
kind of thinking beyond municipal and property boundaries, and

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00:06:54.869 --> 00:07:04.588
the ability to turn multiple layers on and visualize the interconnectedness of many natural resources using this tool really aids that process.

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00:07:06.718 --> 00:07:10.288
So, there's often some confusion between

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00:07:10.288 --> 00:07:23.218
the Hudson Valley Natural Resource Mapper and the New York State Environmental Resource Mapper, which is shown here on the right. And indeed they were built by the same staff and they look very similar.

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00:07:23.218 --> 00:07:35.514

The Environmental Resource Mapper is a statewide tool, and that was designed primarily to help identify some of New York's resources and environmental features that are protected, to help project sponsors

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00:07:35.514 --> 00:07:38.723
know when environmental permits might be needed.

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00:07:39.264 --> 00:07:52.673
So, for a project is proposed in an area that's near, or in one of the features shown on that map, the project sponsor is directed to contact the regional DEC office for more information about how to proceed. And in contrast

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00:07:52.949 --> 00:07:59.699
the Hudson Valley Natural Resource Mapper shows a much wider array of information about habitats and water resources.

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00:07:59.699 --> 00:08:06.718
Including many features that are not formally protected, but that may warrant consideration in planning.

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00:08:06.718 --> 00:08:11.999
Also note that, while the extent of many of the data sets in the Hudson Valley Mapper

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00:08:11.999 --> 00:08:24.119
are limited to the Estuary watershed, we have included statewide coverage wherever it's available and we think the tools still has some use for New Yorkers outside of the Hudson Valley region.

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00:08:28.079 --> 00:08:39.264
Okay, so if you search for the Hudson Valley Natural Resource Mapper from a web browser, Chrome, you should end up on the mapper landing page shown here on the DEC website.

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00:08:39.833 --> 00:08:49.823
The URL is provided above and one of my colleagues can put it into the chat box. From here you can launch the mapper by clicking on the link.

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00:08:50.634 --> 00:08:58.913
There is also a fact sheet that can be downloaded, which can be helpful as a handout to share with the public or for your own reference.

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00:08:59.188 --> 00:09:09.028
And there's a link to the latest webinar recording, which will update after today's webinar. There are also some other recordings related to data sets in the mapper.

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00:09:09.028 --> 00:09:22.649

So the mapper should open in any web browser on a computer, a tablet, or a mobile device. Definitely recommend its best to use it on a computer with a mouse preferably.

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00:09:22.649 --> 00:09:33.509
Take note when you, when you click on the map or to enter it, this pop up will appear with a disclaimer explaining that the mapper is for general information and planning purposes.

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00:09:33.509 --> 00:09:42.688
There's also a map instruction document available and that is here and that walks through many of these little quirky things I'll explain shortly as well.

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00:09:43.854 --> 00:09:53.244
And so here we are in the mapper, so next, I'm going to walk you through the layout and functions and once again, I encourage you to check this out further on your own.

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00:09:54.144 --> 00:10:00.234
The first thing I'll point out is this little green icon in the green DEC banner.

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00:10:00.984 --> 00:10:14.274
That allows you to expand to full screen mode, and this is possibly the most important thing to remember about using the mapper because especially if you're working on a tablet or a laptop with a smaller screen,

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00:10:14.844 --> 00:10:16.913
this screen really gets

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00:10:17.188 --> 00:10:24.538
eaten up pretty quickly with all of the New York state banners, so you'll want to enter full screen and that looks like this.

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00:10:24.538 --> 00:10:30.149
So, once again pay attention to that little green arrow to enter full screen.

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00:10:31.014 --> 00:10:39.744
And from here, you can see the tools and information are organized in these expandable tabs along the left hand side of the window.

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00:10:40.313 --> 00:10:47.453
You want to keep in mind that you often need to scroll down within each of these groupings in order to see all of the available data layers.

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00:10:48.149 --> 00:10:53.879
There are also manual zoom buttons. Of course, you can zoom in using your mouse or other ways.

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00:10:53.879 --> 00:11:04.318
And this return to home extent button, if you somehow lose track of where you are, will take you back to the watershed boundary.

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00:11:04.318 --> 00:11:10.708
And again, Here's another link to that instructions document in the upper right corner of the page.

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00:11:10.708 --> 00:11:13.798
So, next.

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00:11:13.798 --> 00:11:25.703
Let's see, I'll point out this search function, which is at the top of that list of tabs on the left, and you can search by address or place name among other options.

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00:11:25.913 --> 00:11:35.094
So, for example, if I put in "Norrie Point," which is where we have an environmental education center on the Hudson River, it appears as a place name. And when I click on that,

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00:11:35.369 --> 00:11:39.658
it'll take us directly to Norrie Point on the mapper.

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00:11:39.658 --> 00:11:43.619
So from here,

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00:11:45.173 --> 00:11:58.073
once you've zoomed into the area of interest, you may want to change the base map imagery. That's the background imagery that's shown. The default is this type of graphic base map, which is

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00:11:59.009 --> 00:12:04.109
I think pretty useful for most purposes, but anyway

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00:12:04.109 --> 00:12:14.668
you can pull down that selection, and among these, you can access New York state aerials, which will pull up the most recent aerial

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00:12:14.668 --> 00:12:19.408
orthoimagery available from New York for the area you're looking at.

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00:12:19.408 --> 00:12:25.769
And that will look like this. So this is an easy way to look at New York state orthos as well.

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00:12:25.769 --> 00:12:33.448

If you want to get rid of this little red square here, go back into the search function and click "clear."

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00:12:34.528 --> 00:12:48.474

Okay, so getting back to the table of contents on the left, the next grouping, below search has tools and that includes a measure function on the left and a print map function.

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00:12:48.744 --> 00:13:00.923

I'm not going to demonstrate the measure function right now, but I do want to point out that it's important to, if you use it, to then remember to turn it off, which basically means clicking on it again, to close it out.

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00:13:01.583 --> 00:13:07.583

Because if you don't, it can interfere with you clicking on other features on the map and pulling up information later on.

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00:13:07.859 --> 00:13:18.808

To print a map, you click on that little printer icon and can select a print out size and

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00:13:18.808 --> 00:13:22.198

it will then open up

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00:13:22.524 --> 00:13:36.474

an image of the map in a new window. You have to make sure that you've disabled pop up blockers in your browser for this to work. Note that, unfortunately, at this time, we still don't have ability to create a legend with the map.

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00:13:37.163 --> 00:13:47.214

So, you can give it a descriptive title if you want, you could always also just take a screenshot of what's shown in the table of contents, if you need to create a legend to go along with it.

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00:13:47.489 --> 00:14:00.629

That's still on our wish list. All right. So we're getting to the heart of the mapper now, which are the data layers. One of the most important things to understand is that layers become visible

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00:14:00.629 --> 00:14:11.099

and turn off at different scales. It's called scale dependency, and this means you may need to zoom in or out in order to view certain data layers.

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00:14:11.783 --> 00:14:23.874

In general, features that are intended for viewing at regional scales are turned off when you zoom too far in and very detailed features,

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00:14:23.874 --> 00:14:30.354

like streams and wetlands will only become visible once you zoom in to the municipal or neighborhood scale.

Because there's just too much data to show at that larger scale.

Layers that are not viewable in the current zoom extent will appear in italics and grayed out in the legend. And if they are visible, they'll look like this, these layers on the left.

The bathymetry layer, for example, which is in black print, it's not in italics, you should be able to click it on and view it at this scale.

Okay, so remember you can click individual layers on, there is this option to turn all layers on at one time. Don't recommend doing that because it's probably going to

make the mapper run pretty slowly. You kind of want to avoid overloading it with data all at once.

Remember you may need to scroll down to access other data layers within the grouping.

And if you do turn on too many things, and you want to somehow, just

turn everything off at once, this little refresh button.

under the home icon will clear the layer selection, will turn everything off for you.

Lastly,

there is a layer information button next to each of the listings in the table of contents and that will take you over to the layer information page,

which has brief descriptions of each of the data sources,

00:15:54.803 --> 00:16:02.303
including when they were published and who published or created the data, links to additional information about that data or resource,

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00:16:03.083 --> 00:16:08.063
and a link to download the data for those of you who use GIS software.

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00:16:08.394 --> 00:16:19.254
So, at this point, I am going to turn the presentation over to my colleague, Nate Nardi-Cyrus, who's going to walk us through some of the map layers in the thematic tabs.

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00:16:19.798 --> 00:16:27.178
Here we go. All right. Thanks, Ingrid. Let me just get my presentation up.

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00:16:33.053 --> 00:16:42.744
Great. All right well, thank you for having me speak today. I'm always really excited to talk about the mapper. When you first open it,

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00:16:42.744 --> 00:16:55.793
if you've never used it before, you might be a little intimidated by just the sheer volume of data that's available, to come in, many different, many different sources with different uses and they're mapped at different scales.

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00:16:55.854 --> 00:17:06.354
And so my goal for today is to help you get a little bit more familiar with the data itself so that you feel empowered and inspired to make this map your go-to resource for your land use work.

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00:17:06.628 --> 00:17:19.288
After the webinar, I highly encourage you to use the mapper just like Ingrid said, but start by exploring places, you know, like your neighborhood or local parkland maybe even a favorite picnic spot.

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00:17:19.288 --> 00:17:26.818
And I can guarantee you once you get started, it's really hard to stop learning about places that you love. At least that's the case for

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00:17:26.818 --> 00:17:29.848
a nerd like me. Okay.

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00:17:29.848 --> 00:17:43.199
Let's get started here. I'm going to introduce you to many of the various data layers by group tab, but there's a lot more that we won't be able to fully cover just because we have a pretty packed schedule today.

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00:17:43.199 --> 00:17:48.898

However, once you get more familiar with the data, I hope that you use the information links.
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00:17:48.898 --> 00:17:54.838
that Ingrid had talked about through either the separate data pages or the hyperlinks.
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00:17:54.838 --> 00:17:58.469
And that you learn more about these data.
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00:17:58.469 --> 00:18:02.548
So, the first grouping of layers describes the Hudson River estuary.
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00:18:02.548 --> 00:18:11.068
And this lower portion of the Hudson River supports numerous tidal wetlands, such as these that you see on this slide and Constitution Marsh.

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00:18:11.068 --> 00:18:16.348
And these are vital, and in some cases, globally, rare habitats for plants, young fish,
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00:18:16.348 --> 00:18:23.159
and shellfish species, and tidal wetlands also support important bird nesting areas and migratory rest stops and
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00:18:23.159 --> 00:18:29.159
they improve water quality and help buffer shorelines against strong storms. So they're clearly very important.
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00:18:29.159 --> 00:18:40.409
Under the Estuary grouping, the Hudson River Estuary grouping, and you can turn on the tidal wetlands and documented areas of submerged aquatic vegetation layers.
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00:18:40.409 --> 00:18:49.584
And these data are only visible when you zoom in. So I encourage you to zoom in and out when looking at the area of interest to make sure that the layers you've clicked on are visible from the map.
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00:18:49.614 --> 00:18:56.334
Just like what Ingrid is saying, these are scale dependent and these are pretty detailed wetlands mpas, for the tidal wetlands.
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00:18:56.578 --> 00:19:04.528
Remember to check the layer name for that gray italic text to make sure that it's on.
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00:19:06.358 --> 00:19:15.538

You can also check to see if there are New York State Department of State-designated coastal fish and wildlife habitats in, or adjacent to, an area of interest.

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00:19:15.538 --> 00:19:22.679
And these indicate the highest quality habitats in New York States, coastal zone, and are linked to coastal review policy.

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00:19:22.679 --> 00:19:29.249
So again, certain types of projects that are within these areas are subject to consistency review.

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00:19:29.249 --> 00:19:37.528
And if you want to learn more about the layers you're viewing, you can click features on the map to open a pop up window. Like you see here.

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00:19:37.528 --> 00:19:44.128
So, in this example, you can see the area of selected as a part of RamsHorn Marsh, significant habitat.

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00:19:44.128 --> 00:19:51.209
But that's just 1 of 3 layers. See, this is 2 out of 3 here. And if I click on these arrows here

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00:19:51.209 --> 00:19:55.048
in this red circle, the box will show all the data that intersects

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00:19:55.048 --> 00:19:59.249
with my area of interest, so if I click the link to the box,

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00:19:59.249 --> 00:20:08.729
it's going to open up the Department of State, coastal fish and wildlife website, which includes descriptions of sites, habitat values, and activities that could cause impacts.

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00:20:08.729 --> 00:20:16.618
The links in these boxes always lead to important and interesting information that's relevant to the data layer. So I highly encourage

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00:20:16.618 --> 00:20:26.368
you to look to those to learn more. Ad moving on, that streams and watersheds grouping has a lot of information again.

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00:20:26.368 --> 00:20:38.094
But, unfortunately, we don't have time to cover it all. So, I'll just look at a couple of them. These data sets describe watersheds, stream, habitats, and water quality and for anyone who's not familiar with the term,

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00:20:38.304 --> 00:20:45.443
"watersheds" are areas of land where all the water drains into a common outlet, which is a stream, lake, or other water body.

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00:20:45.503 --> 00:20:54.594
So we're representing the Hudson River Estuary program and so the Hudson River Estuary watershed is everywhere that drains into the Hudson River.

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00:20:56.159 --> 00:21:05.159
The mapper has 3 different scales of watershed and sub watershed boundaries that can help you understand drainage patterns.

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00:21:05.159 --> 00:21:15.778
And clicking on a particular watershed can bring up statistics about percent previous cover and forest canopy cover in your area. And these are basic metrics of watershed health.

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00:21:15.778 --> 00:21:24.808
So, here, I have clicked on the Fall Kill, which is a small tributary to the Hudson River. It's been the subject of many research and conservation efforts lately.

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00:21:24.808 --> 00:21:32.459
And you can notice that there are impervious and canopy cover percentages for both 2011 and 2016.

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00:21:32.459 --> 00:21:32.759
So,

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00:21:32.753 --> 00:21:33.804
between those 5 years,

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00:21:33.804 --> 00:21:37.584
you can see the Fall kill watershed has lost a lot of canopy cover,

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00:21:37.584 --> 00:21:41.993
or seen some loss if canopy cover and the gain of impervious surface,

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00:21:42.023 --> 00:21:43.493
which includes things like buildings,

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00:21:43.493 --> 00:21:47.693
roads and parking lots, to give some information at the watershed level.

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00:21:49.439 --> 00:22:02.153

The DEC stream classifications are also provided in this grouping, indicate stream class and areas that are known trout waters and see those on the map in dark purple.

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00:22:02.663 --> 00:22:04.763
The remaining of the streams are in light purple.

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00:22:05.784 --> 00:22:17.634
And so, within the Fallkill watershed, you don't see any trout waters and that possibly suggests lower water quality since trout require clean and cool water to survive.

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00:22:17.634 --> 00:22:20.814
So, it gives you a little bit of an indicator of water quality there.

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00:22:21.118 --> 00:22:27.354
The classifications that are viewed, and you can use those by clicking on individual segments.

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00:22:28.074 --> 00:22:40.433
They best reflect the, the best uses for those water bodies as designated by the state and then the basis for New York State's programs to protect those waters.

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00:22:40.463 --> 00:22:53.064
So, keep in mind again that they're broken into segments. So, I can click on 1 segment of the Fall kill. It doesn't reflect the classification for the entire tributary and its subtributaries.

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00:22:53.278 --> 00:23:03.088
The priority waterbody list overlaps that priority layer and links to online reports that summarize general water quality conditions.

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00:23:03.088 --> 00:23:12.804
The degree to which water body supports, as it says, needed uses, including water quality problems, pollutants and sources and efforts taken toward resolving them.

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00:23:12.894 --> 00:23:18.773
So, the Fall Kill click on that has moderate impacts documented through seen by a monitoring.

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00:23:19.169 --> 00:23:31.469
And it, it's listed in the priority water bodies list as here, because of nutrient enrichment, pathogens, various other pollutants, attributed to municipal inputs and urban nonpoint sources.

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00:23:31.469 --> 00:23:35.098
So, I can follow the link to the information in that information box.

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00:23:35.098 --> 00:23:41.128
It's gonna take you to a more detailed DEC rating form where you can learn more about impacts to the stream in question.

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00:23:43.378 --> 00:23:57.868
Recognizing that effective stream conservation and restoration extends beyond the stream channel itself, right? The riparian buffers area, which is mapped by the New York natural heritage program, highlights important streamside areas that

176
00:23:57.868 --> 00:24:03.659
influence stream dynamics, and stream health. The buffers include adjacent upland areas,

177
00:24:03.659 --> 00:24:08.189
streamside wetlands, and the estimated 50 year flood zone.

178
00:24:08.189 --> 00:24:18.719
And a well, vegetated buffer, it helps to manage stormwater, improve stream water quality and help moderate flooding in addition to the services that is provides in

179
00:24:18.719 --> 00:24:33.624
significant wildlife habitat. And these critical areas can be also be good starting points for restoration projects. So, for communities looking undertake a streamside tree planting project, this is a good place to start looking.

180
00:24:35.429 --> 00:24:47.159
In addition the mapper also includes the FEMA of flood hazard zone information in the mapper but note that that data is missing for Columbia and Rensselaer counties,

181
00:24:47.159 --> 00:24:51.388
because we're waiting for those digital remapping efforts.

182
00:24:51.388 --> 00:25:03.479
If you are exploring the mapper during this presentation, or you do so over the next couple of days, you might notice that the layer's not working correctly and we're aware of that issue. And staff is actually in the process of fixing it as we speak.

183
00:25:03.479 --> 00:25:16.558
So stay tuned for that. Wetlands are defined by a combination of their soils, hydrology, and plant indicator species. And so these habitats are extremely diverse ecosystems.

184
00:25:16.558 --> 00:25:20.969
That they provide important benefits to people ranging from clean water to flood control.

185

00:25:21.564 --> 00:25:34.824
Existing wetland maps are known to contain a lot of inaccuracies, and there's really no substitute for getting out there on the ground and doing a delineation by trained experts to develop accurate wetland maps for a site.

186
00:25:34.854 --> 00:25:39.144
But these data sets can be a useful starting point for identifying wetlands.

187
00:25:41.098 --> 00:25:46.679
Okay, going to start with DEC's regulated, freshwater wetlands,

188
00:25:46.679 --> 00:25:57.269
and those primarily include wetlands larger than 12.4 acres, but there is a few smaller wetlands of unusual local importance that are also regulated, sometimes.

189
00:25:57.269 --> 00:26:00.929
The map also shows a check zone surrounding each wetland.

190
00:26:00.929 --> 00:26:06.298
And that reflects known accuracies in the map. DEC also regulates

191
00:26:06.298 --> 00:26:09.689
The 100 foot adjacent area around state protected wetlands.

192
00:26:09.689 --> 00:26:23.669
And a more precise delineation is typically needed to determine where those boundaries might lie. So, remember this kind of light colored green here that's not that 100 foot adjacent area. That is that 500 foot area. That's

193
00:26:23.669 --> 00:26:28.558
really just designed to capture inaccuracies in the original mapping.

194
00:26:28.558 --> 00:26:36.028
The US Fish and Wildlife Service's national wetlands inventory includes wetlands of all sizes.

195
00:26:36.028 --> 00:26:41.368
And that provides some habitat information such as distinguishing between riverine, emergent and

196
00:26:41.368 --> 00:26:51.509
And forested or shrub wetlands, although you can see this in the map ,there's many additional wetlands here compared to those DEC wetlands.

197
00:26:51.509 --> 00:26:59.429

But they still do underestimate total wetland area and often omit smaller and dryer wetlands like vernal pools.

198
00:26:59.429 --> 00:27:04.558
Keep in mind also that these maps were created by the federal government.

199
00:27:04.558 --> 00:27:08.788
But they do not show the jurisdiction of federal wetlands protection. Sometimes that's a

200
00:27:08.788 --> 00:27:15.929
common misconception, that these are the federal wetland jurisdiction maps. They're not, they're created by the US Fish and Wildlife Service.

201
00:27:15.929 --> 00:27:19.648
Uh, primarily for planning and identification purposes.

202
00:27:19.648 --> 00:27:26.699
okay, lastly, the wetland soils layer shows drainage class

203
00:27:26.699 --> 00:27:35.159
for selected soils, and that indicates additional possible or probable wetland areas to consider and evaluate in the field.

204
00:27:35.159 --> 00:27:39.778
So, where the prior two layers tend to underestimate the presence of wetlands in the landscape,

205
00:27:39.778 --> 00:27:50.699
Wetland soils often overestimate their abundance, but this gives you a good idea of where you might be able to find smaller wetlands that were missed by both of those other mapping products.

206
00:27:52.318 --> 00:28:03.838
Forests are the dominant habitat type in New York and they provide numerous important benefits ranging from wildlife habitat, clean water, climate moderation, and, of course, forest products.

207
00:28:04.403 --> 00:28:18.923
Forests are particularly abundant in the Hudson Valley but in many places, they've been fragmented by roads and development into smaller patches that are really no longer suitable for forest interior birds and other wildlife that depend on larger habitat areas

208
00:28:19.169 --> 00:28:24.298
that are isolated from disturbance. Of particular concern to our human communities,

209
00:28:24.298 --> 00:28:34.528

disease ecologists have identified relationships between shrinking forest size and dramatic increases in the exposure to Lyme and other diseases

210
00:28:34.528 --> 00:28:40.858
carried by ticks that that are carried around by white footed mice.

211
00:28:40.858 --> 00:28:46.913
And those mice actually thrive in smaller patches that are unsuitable for many other species.

212
00:28:46.913 --> 00:28:57.263
So, the long and the short of it is that the, the overall diversity is lower, the diversity of mice is lowered and that allows for, in balance, more mice,

213
00:28:57.479 --> 00:29:04.229
more ticks, more Lyme disease. That's just one consequence of forest fragmentation of forests.

214
00:29:05.759 --> 00:29:11.098
So the Forest Condition Index and Core forests were created by the New York Natural Heritage Program

215
00:29:11.098 --> 00:29:21.269
through a partnership with the Estuary Program, to kind of get a better idea of forests, and their fragmented nature, and what they look like on the landscape.

216
00:29:21.269 --> 00:29:30.328
The forest condition index identifies these individual forest patches in our region and ranks them based on 22 attributes, including size, again

217
00:29:30.328 --> 00:29:35.038
fragmentation, proximity to other large forests,

218
00:29:35.038 --> 00:29:39.449
presence of rare species, and that's just a few of these many variables.

219
00:29:39.449 --> 00:29:49.074
And here you can see the dark blue colored forests, dark colors in the corner of the screen. They're within the top 5% of all Hudson Valley forests.

220
00:29:49.074 --> 00:29:55.673
So again, those forests are ranked against each other and you get kind of the top most important forests.

221
00:29:56.459 --> 00:30:02.519
So, if I click on this patch, I can actually learn more about why a specific forest area is more important.

222
00:30:02.519 --> 00:30:13.048
The patch is in about 97 percentile of forests, because it's well connected to other large forests, it maintains a high level of habitat diversity,

223
00:30:13.048 --> 00:30:17.999
and it's relatively large. This patch also has a lot of core forest.

224
00:30:17.999 --> 00:30:24.568
And that's what's mapped in this black hatching. Cores are at least 300 feet from the edge of forest

225
00:30:24.568 --> 00:30:30.628
which is usually associated with human disturbance that can disrupt certain species of wildlife that are more sensitive.

226
00:30:30.628 --> 00:30:33.628
So, for example, forest birds like the wood thrush

227
00:30:33.628 --> 00:30:39.209
often nest within these core areas, but avoid that edge habitat that's outside of it.

228
00:30:39.209 --> 00:30:49.888
Zooming out to the regional scale, matrix forests, which are also in the mapper, represent the largest most intact forest in the Northeast region.

229
00:30:49.888 --> 00:30:53.459
They're large enough to bounce back from large natural disturbances

230
00:30:53.459 --> 00:30:57.328
and to support intact ecological processes, natural communities,

231
00:30:57.328 --> 00:31:01.709
and those populations of interior wildlife species.

232
00:31:01.709 --> 00:31:13.618
So, the New York, or yes, the New York Natural Heritage Program, and the Nature Conservancy also mapped these areas of regional forest linkage zones in this lighter color.

233
00:31:13.618 --> 00:31:18.209
And that highlights this largely intact landscape that

234
00:31:18.209 --> 00:31:22.679
can function as corridors for species moving between these, these kind of

235

00:31:22.679 --> 00:31:35.128
darker colored patches. The large forests we were looking at and the forest condition index is within the forest matrix block in the middle of the screen. And so now we can actually see why this forest is such an important wildlife corridor for

236
00:31:35.128 --> 00:31:38.548
those species migrating northward in response to climate change.

237
00:31:39.778 --> 00:31:48.689
Our next data group is biodiversity, which refers to the diversity of all life, from genes to species to habitats

238
00:31:48.689 --> 00:31:55.229
or ecosystems, even, and it's important to note that all the resources that I've mentioned so far have value for biodiversity.

239
00:31:55.229 --> 00:32:09.384
But the layers in this grouping reflect areas that have been recognized to support high quality or significant natural communities, or known locations of rare plants and animals, such as this endangered northern cricket frog, which I have here this beautiful picture.

240
00:32:09.743 --> 00:32:16.493
And that frog by the way is sitting on a fingertip. Just to give you an idea of how small that is.

241
00:32:18.929 --> 00:32:20.003
At the regional level,

242
00:32:20.003 --> 00:32:22.733
the New York State Department of Environmental Conservation,

243
00:32:22.733 --> 00:32:28.374
and Cornell have identified 23 significant biodiversity areas in Hudson River Estuary watershed,

244
00:32:28.403 --> 00:32:35.663
which are landscape areas with high concentrations of biodiversity or unique ecological features described in the Hudson River

45
00:32:35.663 --> 00:32:36.173
Estuary's

246
00:32:36.384 --> 00:32:37.074
Wildlife

247
00:32:37.104 --> 00:32:39.173
Habitat Conservation Framework.

248
00:32:39.173 --> 00:32:42.953
Which you can see right here that's a great resource, if you don't use it already.

249
00:32:43.679 --> 00:32:46.949
Many places you'll notice these overlap with

250
00:32:46.949 --> 00:32:50.759
Important bird areas identified by the state,

251
00:32:50.759 --> 00:32:55.528
Audubon New York, and you can see those in red on the map.

252
00:32:55.528 --> 00:33:02.759
And again, if you click on one of those areas, we have Fahnestock Hudson Highlands state park here.

253
00:33:02.759 --> 00:33:10.709
That'll bring up the link on Audubon website, which gives you a lot of great information about what kind of birds you may find in these areas.

254
00:33:10.709 --> 00:33:22.798
At an even finer scale. The mapper also shows known important areas mapped by the New York state Natural Heritage Program, which expand on existing state records of rare plants and animals,

255
00:33:22.798 --> 00:33:27.148
to define areas that would sustain known populations of those species.

256
00:33:27.148 --> 00:33:30.179
So, the important areas are modeled

257
00:33:30.179 --> 00:33:38.878
based on species' habitat requirements as well as associated areas that are critical to maintaining the overall habitat quality for those species.

258
00:33:38.878 --> 00:33:48.058
So, in 2018, the Heritage Program updated this data set to show more detail about the types of species that were modeled for a given area.

259
00:33:48.058 --> 00:34:02.548

And again, I want to encourage people - on that landing page for the mapper, there is a separate webinar on both the Forest Condition Index and this Important Areas Data set. So, if you want to know more, definitely follow up with those webinars there.

260
00:34:02.548 --> 00:34:12.719
But you can see areas in brown here that is looking, you can see that that is important for terrestrial animals and it doesn't say which.

261
00:34:12.719 --> 00:34:15.989
But that might be something like rattlesnakes or bald eagles.

262
00:34:15.989 --> 00:34:23.789
Here we have purple showing areas that are important habitat quality for fish

263
00:34:23.789 --> 00:34:26.938
 like American eel or possibly river herring.

264
00:34:26.938 --> 00:34:31.918
Areas for wetland animals are shown in the light green and might include

265
00:34:31.918 --> 00:34:36.539
Northern cricket frog that we just saw, or something like a pied billed grebe.

266
00:34:36.539 --> 00:34:40.889
Their plants are kind of all lumped together and shown in this dark color.

267
00:34:40.889 --> 00:34:51.268
And then we have this this great layer for important area for rare bats during the summer. So this summer foraging habitat, and that is shown in these large areas of gray.

268
00:34:51.268 --> 00:35:02.608
While these layers account for much of the range in regional biodiversity, they should not be interpreted the only important areas, since many of them have not been surveyed by biologists.

269
00:35:02.608 --> 00:35:05.878
And if you want to know more about this, you can

270
00:35:05.878 --> 00:35:15.298
submit an information request to the New York Natural Heritage Program to obtain more detailed species specific information associated with these areas,

271
00:35:15.298 --> 00:35:19.739
If it is for the purposes of conservation, land use, planning or project review.

272
00:35:19.739 --> 00:35:28.768
Finally significant natural communities are habitats that the Heritage Program documented as either rare or of exceptional quality.

273
00:35:28.768 --> 00:35:37.199
And for detailed descriptions of these natural communities, you can follow up following the pop up to the New York Natural Heritage Program website.

274
00:35:37.199 --> 00:35:40.829
And it gives you kind of general descriptions of those habitats.

275
00:35:40.829 --> 00:35:47.128
Not specific information on that exact habitat, but they're, they're great resources.

276
00:35:47.128 --> 00:35:55.139
Okay, the mapper also offers some limited information about scenic and recreational resources in the region but

277
00:35:55.139 --> 00:36:03.719
I'm running up against the wall in time, so I won't go into the section in detail, but I do encourage you to explore further when you're looking at the mapper again.

278
00:36:05.304 --> 00:36:20.094
The last group I want to talk about includes important references that should be used when you're viewing data and all the other 6 tabs. These layers, consistent of useful tax boundaries. We have tax parcel information in here that's compiled annually by New York state.

279
00:36:21.088 --> 00:36:33.028
And keep in mind that the only the parcel ID is provided for that tax parcel information, but it can be just used in conjunction with your county's tax parcel mapping system. And most counties have one of those.

280
00:36:33.028 --> 00:36:39.719
New York protected areas layer is also on this, and that displays an updated

281
00:36:39.719 --> 00:36:44.039
2018 version of the New York protected areas database,

282
00:36:44.039 --> 00:36:48.958
which uses the term protected in a broad way to include a range of

283

00:36:48.958 --> 00:36:53.518
public and private lands that may be open or closed the public,

284
00:36:53.518 --> 00:36:56.909
permanently protected from development or not,

285
00:36:56.909 --> 00:37:00.659
Um, or subjects to future changes.

286
00:37:00.659 --> 00:37:05.849
It's a good starting point, but it's not kind of a comprehensive look at all of the protective lands.

287
00:37:05.849 --> 00:37:13.829
But do note that, you know, properties marked as no public access- It's definitely not open to the public.

288
00:37:13.829 --> 00:37:21.539
And entering without permission of the landowner could be trespassing, so pay close attention to that before you use this to go into properties.

289
00:37:21.539 --> 00:37:32.608
If you do have a question, there's generally information on the property owner so I encourage you to follow up with whatever land trust or property owner, if you have questions about that.

290
00:37:32.608 --> 00:37:40.708
So, even with all these limitations, it's again still a great starting point to inform future conservation efforts and land use decisions.

291
00:37:40.708 --> 00:37:47.668
Also note that this kind of reference section also includes

292
00:37:47.668 --> 00:37:55.228
critical environmental areas, which are locally designated areas that receive additional consideration during certain types of local project review.

293
00:37:55.228 --> 00:38:01.528
And you can see those on the map in purple. It's a little obscured right now, but that's a good resource.

294
00:38:01.528 --> 00:38:07.318
So, I couldn't take the rest of the webinar to talk more about these data, but we do have

295
00:38:07.318 --> 00:38:14.280
Laura's great presentation to look forward to and Ingrid finishing up with how we're going to use this. So I want to wrap it up now.

296
00:38:14.280 --> 00:38:21.090
Again, I encourage you all to explore those pop up windows and layer information pages and dive into some of the external links.
297
00:38:21.090 --> 00:38:27.150
If you're looking for more, you run across any technical issues or problems that map display as Ingrid said
298
00:38:27.150 --> 00:38:31.710
First, I recommend starting your browser and trying to from a different browser,
299
00:38:31.710 --> 00:38:41.699
turning layers on and off individually and remembering to turn off layers and tools that you no longer using because that'll help the application run a little faster.
300
00:38:41.699 --> 00:38:53.340
But if all this, and you're finding a reoccurring issue, don't hesitate to reach out to Ingrid and myself or any other staff at the program, we can make sure to look into any issues for you.
301
00:38:53.340 --> 00:38:57.840
That's all I have so thank you very much.
302
00:38:57.840 --> 00:39:02.429
Thanks, Nate.
303
00:39:03.085 --> 00:39:16.914
All right so I'm going to just finish up with a couple of final slides on uses for the natural resource mapper.
304
00:39:17.184 --> 00:39:30.775
I wanted to note. I see a couple of questions coming in through the chat and the Q and A. So if you do have questions feel free to enter them now and we should have a few minutes to answer them before Laura's presentation.
305
00:39:31.855 --> 00:39:36.114
So our program advocates for this basic framework

30600:39:36.864 --> 00:39:42.625
for environmental and land use conservation planning that begins with identifying what you have.
307
00:39:43.284 --> 00:39:52.195
The mapper can be a very valuable reference for identifying natural resources in your community whether you're reviewing a project at the site scale or planning at the municipal scale,

308
00:39:52.704 --> 00:39:56.275
having good information about the land and water resources

309
00:39:56.460 --> 00:40:05.610
in your area lays the foundation for establishing local conservation priorities and developing practices plans and policies to

310
00:40:05.610 --> 00:40:08.789
protect and manage those resources for the future.

311
00:40:08.789 --> 00:40:23.159
So first off, the mapper can be used as a reference for the review of proposed development projects in particular as a preliminary screening tool to help identify potential resources of conservation concern

312
00:40:23.159 --> 00:40:33.929
on or near a project site, and to understand the overall environmental context of the project, how the resources on that site relate to the surrounding area.

313
00:40:34.465 --> 00:40:49.074
Again, many of the features identified in the mapper may not have regulatory protection, but they still may be worthy of consideration as you evaluate development proposals that are going to have long term consequences for the land.

314
00:40:49.800 --> 00:41:02.005
Ideally, this sort of screening should be completed at the earliest stages of project planning preferably in preparation for a pre-conference or pre-application meeting with an applicant.

315
00:41:02.394 --> 00:41:07.675
So that potential areas of concern can be discussed and ideally inform design of the project.

316
00:41:08.364 --> 00:41:18.985
Of course, you should always conduct site visits to verify features and identify resources of concern that may not appear on maps, these maps are not perfect.

317
00:41:19.554 --> 00:41:28.735
So, this sort of work can be completed by members of your planning board or zoning board of appeal, or the conservation advisory council or board in your community.

318
00:41:29.579 --> 00:41:36.539
I also want to note that, since we've published the mapper a couple of years ago, it's become clear that many

319
00:41:36.565 --> 00:41:45.085
Agency staff are regularly using the natural resource mapper as well as planning consultants and others for their own screening work.

320
00:41:45.385 --> 00:41:58.945
And so, even those of us who are regularly using GIS can find the mapper is a faster, efficient, more efficient way to very quickly pull up a certain piece of information, rather than opening up

321
00:42:00.025 --> 00:42:00.835
GIS. So, it.

322
00:42:01.079 --> 00:42:04.679
it has uses for people kind of all different

323
00:42:04.679 --> 00:42:08.849
ends of the spectrum I would say.

324
00:42:08.849 --> 00:42:23.550
Information from the mapper can also be incorporated into site plan and subdivision application checklists as a way to raise awareness with applicants about areas of concern to the planning board or the larger community.

325
00:42:23.550 --> 00:42:26.789
And to standardize the environmental review process.

326
00:42:26.789 --> 00:42:35.460
Applicants can easily provide printed maps from the mapper with the parcel boundaries turned on as part of their submission

327
00:42:35.460 --> 00:42:39.449
or include certain information directly on their plans.

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00:42:41.880 --> 00:42:54.960
An example here of a detailed site resource analysis checklist from the town of Rhinebeck subdivision regulations, which is included as a case study in an appendix of our Creating a Natural Resources Inventory Guidebook.

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00:42:54.960 --> 00:43:05.820

Some of the questions that could be answered by applicants using the natural resource mapper include the presence or proximity of streams, wetlands and water bodies,

330
00:43:05.820 --> 00:43:20.159
potential for significant wildlife, habitats or corridors, significant natural areas, extending into abutting properties and adjacent to public recreation areas, or other or protected areas.

331
00:43:23.695 --> 00:43:38.034
Our program has been working with many communities on natural resource inventory, or NRI projects in the last couple of years and an NRI is a compilation of maps and information describing the naturally occurring resources in a given area.

332
00:43:38.335 --> 00:43:49.974
Typically, including geology, land forms and soils, water resources and habitats. And sometimes, including cultural resources, such as scenic areas, and recreation and historic sites.

333
00:43:50.730 --> 00:44:02.789
The mapper can help inform decisions about what to include in NRI and it can also be a companion tool that allows you to interactively query information that might be in your NRI.

334
00:44:03.114 --> 00:44:18.085
Nevertheless, we don't see it as a substitute for an NRI, for a couple of reasons. First of all it doesn't have all of the information that would typically be in an NRI, and some of the information is not viewable at the town wide scale using the mapper.

335
00:44:18.780 --> 00:44:30.480
There are also maybe valuable information sources at your local or county scale that are not included in the mapper. Remember that we've only included data sets here that have a regional coverage.

336
00:44:30.480 --> 00:44:35.639
And in many cases there are good local data available out there.

337
00:44:35.639 --> 00:44:48.090
But perhaps most importantly, the mapper does not provide the type of customized description, interpretation and analysis of features in your community that should ideally be part of the NRI.

338
00:44:48.090 --> 00:44:51.719
So we think this is a great companion tool, but not a substitute.

339
00:44:52.525 --> 00:45:06.925
For communities that are taking the next step toward prioritizing resources for an open space inventory plan, or a comprehensive plan, or perhaps for land trust staff who might be engaged in similar planning efforts,

340
00:45:07.199 --> 00:45:16.230
the mapper can similarly be a companion tool that can help identify where priority features occur and how they overlap with each other.

341
00:45:16.735 --> 00:45:31.315
Some of the typical types of considerations include, where are the highest quality areas, where are unique features or areas that support rare species? What about areas identified as county or regional priorities?

342
00:45:31.800 --> 00:45:42.780
The prioritization process should, of course, be informed by community input. And this is an example from the town of Pleasant Valley's open space and farmland protection plan.

343
00:45:42.780 --> 00:45:52.230
This sort of analysis can also inform development of local land use policies, such as the establishment of critical environmental areas, which Nate mentioned,

344
00:45:52.230 --> 00:45:55.710
Or conservation overlay zoning districts.

345
00:45:57.985 --> 00:46:10.675
And so, lastly, I want to note that DEC has some additional online maps that you may want to check out if you're not already familiar with them. I mentioned the environmental resource mapper at the beginning of this talk.

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00:46:11.155 --> 00:46:20.574

In addition, the DEC info locator is a newer tool, and that can be used to access permits, other documents, and related public data

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00:46:20.880 --> 00:46:27.300
pertaining to environmental quality of various sites around New York state as well as outdoor recreation

348
00:46:27.300 --> 00:46:31.260
information, so that is available.

349
00:46:31.260 --> 00:46:37.679
If you go to Google online maps from DEC, you should be able to pull it up.

350
00:46:38.664 --> 00:46:40.735
All right, so thank you very much for listening.

351
00:46:40.735 --> 00:46:55.195
Thanks to our partners at New York State office of Information Technology Services for helping to create this wonderful tool and we'll leave you with a final request to consider adding a link to the natural resource mapper to

352
00:46:55.469 --> 00:47:07.644
your website, whether you are a volunteer with a municipality, or if you have other web pages, where this might be relevant, this would help us increase public awareness about the tool and the information it contains.

353
00:47:07.974 --> 00:47:18.264
So, before we move on to the next presentation, Nate, and I can take a couple of questions and again, please put those in through the chat, if possible.

354
00:47:18.539 --> 00:47:25.980
So, I, I did notice I'm going to jump right in

355
00:47:27.150 --> 00:47:41.844

to a question I noted before, which is how we decide what data sets to include and or not include in the mapper. There's so many data sets out there regarding habitat bio diversity from different sources, federal state and local.

356
00:47:42.025 --> 00:47:49.525
That's a great question. And so there are a couple of parameters we're looking for, looking for information that's available,

357
00:47:50.699 --> 00:48:05.550
at least at the scale of the, the 10 county region where we're working, we know that there great data sets that may have been developed for specific counties. But we've refrained from including those and

358
00:48:05.550 --> 00:48:11.760
there are also certain requirements in terms of data documentation and meta data from.

359
00:48:11.760 --> 00:48:26.280
ITS staff that we have to be pay attention to, and I guess in general, we've relied on our own expert opinion about data sets that we become familiar with and that we think are useful. But we're

360
00:48:26.280 --> 00:48:38.670
always open to suggestions. No, we don't want to overload the mapper with too much information, but if you have other ideas for things that maybe would be useful to include, let us know.

361
00:48:38.670 --> 00:48:46.710
And I'm trying to pull up the Q and A window right now.

362
00:48:46.710 --> 00:48:56.519
Nate Nardi Cyrus speaking: Sure, yeah, so another question is how often are the areas we surveyed and information updated to the mapper?

363
00:48:57.750 --> 00:49:01.679
Ingrid Haeckel: I think this question was relating to,

364
00:49:01.679 --> 00:49:06.719
Probably I noticed it coming in around the time we were talking about the,

365
00:49:06.719 --> 00:49:12.300
The important areas dataset from the New York Natural Heritage Program and

366
00:49:12.300 --> 00:49:16.590
that data set in particular is

367
00:49:16.590 --> 00:49:23.039
based on modeling for occurrences of rare species

368
00:49:23.039 --> 00:49:30.599
that date back to the 1980. So the Heritage Program has criteria for what they consider a recent

369
00:49:30.599 --> 00:49:36.449
record and those date back into roughly around the middle 1980s.

370
00:49:36.449 --> 00:49:44.489
Some of those occurrences have been surveyed more recently; others have not so

371
00:49:44.489 --> 00:49:58.469
I think there was another question in that I saw in the chat about how to find out more information about one of those areas, important areas for rare animals, for example. And so if you're

372
00:49:58.469 --> 00:50:03.119
working either on a municipal plan, or

373
00:50:03.119 --> 00:50:17.369
project review, you can submit an information request to the New York natural heritage program. In fact, the pop up window in the mapper will include the link for requesting heritage data.

374
00:50:17.369 --> 00:50:20.969
Now, depending on the use,

375

00:50:20.969 --> 00:50:34.230
you may be able to get a detailed response. Our program can also provide a town level list of species that have been had important areas modeled for them in your community.

376
00:50:34.614 --> 00:50:45.445
There's some sensitivity around publicly sharing information about the location of rare plants and animals, so feel free to follow up with us more about that.

377
00:50:45.445 --> 00:50:59.425
But I guess the short answer going back to how, how often are areas surveyed and updated. Many of these features are not being re-surveyed on a very regular basis. Some of the layers like

378
00:50:59.730 --> 00:51:03.360
the forest condition index, for example, is based on

379
00:51:03.360 --> 00:51:10.469
satellite imagery data for Forest cover that is being updated every couple of years. So that's more

380
00:51:10.469 --> 00:51:21.420
recent in some ways, but it's it really is a range of dates and so get it looking more into individual data layers will

381
00:51:21.420 --> 00:51:26.340
give you a better sense of how recent that information is and how it was created.

382
00:51:26.340 --> 00:51:37.289
Nate Nardi-Cyrus: Ingrid, I don't want to cut into Laura's time too much, but I do want to give you this one last question: Are the data sets available as Web services by New York IT?

383
00:51:38.309 --> 00:51:46.889
Ingrid Haeckel: They are not currently, but feel free to follow up about that. That's been something that's been under discussion.

384
00:51:46.889 --> 00:51:52.139
Nate Nardi-Cyrus: Great yeah. All right. Um.

385
00:51:52.139 --> 00:51:58.079
Ingrid Haeckel: Well, we will have a little bit more time for questions at the very end as well but maybe right now we'll

386
00:51:58.079 --> 00:52:03.210
turn it over to Laura if I can,

387
00:52:03.210 --> 00:52:08.489
pull up my screen.

388
00:52:08.489 --> 00:52:13.530
That's participants. Here we go.

389
00:52:18.420 --> 00:52:23.039
Laura Heady: Great can you hear me.

390
00:52:23.039 --> 00:52:27.420
Yes, and can you see the Web site? Yes.

391
00:52:27.420 --> 00:52:41.664
Great okay, thanks. So much Ingrid and Nate for the great introduction and overview of the webinar, which is one of the tools that we're so excited to be sharing with everybody

392
00:52:41.664 --> 00:52:43.764
and so great to hear about you're using them.

393
00:52:44.815 --> 00:52:59.695
I'm going to jump right into talking about our conservation planning website and for those of you who don't know I'm Laurie Heady and I'm the Conservation and Land Use Program Coordinator at the Estuary Program through the partnership

394
00:52:59.695 --> 00:53:00.235
with Cornell.

395
00:53:00.539 --> 00:53:03.989
And so our new website was launched.

396
00:53:03.989 --> 00:53:08.130
Last year, and the timing was especially fortuitous.

397
00:53:08.130 --> 00:53:12.570
As you may have noticed the DEC and other state agencies

398
00:53:12.570 --> 00:53:26.364
are in the process of simplifying their websites and reducing content to make navigation of those sites easier by the public. But after being around for 20 years, our team had a lot of resources and tools

399
00:53:26.364 --> 00:53:29.304
we wanted to continue sharing through the Internet.

400
00:53:29.610 --> 00:53:37.230
In addition, one of our targets in the last Hudson River Action Agenda was that by 2020

401
00:53:37.230 --> 00:53:40.949
all Hudson Valley municipalities would have access to current,

402
00:53:40.949 --> 00:53:53.699
science based information, and so the online natural resource mapper fulfilled this target, but we also wanted a website to share in depth guidance, publications, and also have the ability to continually update

403
00:53:53.699 --> 00:53:59.519
the Web site with new information, announcements and case studies from the Hudson Valley.

404
00:53:59.519 --> 00:54:04.380
So, while we kept a few trimmed down pages on the DEC website,

405
00:54:04.380 --> 00:54:15.480
we worked with Cornell over the last couple of years to develop this comprehensive new site on conservation planning in the Hudson River watershed, which has about 40 pages.

406
00:54:15.804 --> 00:54:29.304
And so finally, I'll note for those of you from outside the watershed while our program focus is on the Estuary watershed, much of the site's content has applicability in other locations. But I will add that

407
00:54:29.304 --> 00:54:39.594
all of the photos in the website are people and places from the Hudson Valley. So no stock images. They all should be places that might look familiar to many of you.

408
00:54:39.929 --> 00:54:49.920
Okay with that, I'm going to stop my video so that I can save some bandwidth here if I can do that easily. Let's see.

409
00:54:51.269 --> 00:54:54.599
Yeah, okay. And I'm going to get into the website.

410
00:54:56.215 --> 00:55:07.824
So, here we are on the home page, and there are a few features I want to point out before I start getting into content at the top. Here we have a search function, which is the little magnifying glass.

411
00:55:07.824 --> 00:55:14.875
So, if there's anything in particular, you want to look for, you can just type in a keyword or words to search the site.

412
00:55:15.179 --> 00:55:19.650
And that search function appears on every page.

413
00:55:20.005 --> 00:55:33.144
We have some introductory information, and I want to point out that in that introductory section is a gray box here with a link to a short survey on survey monkey where you can comment on your experience using the site.

414
00:55:33.445 --> 00:55:35.815
And I'm super interested in your feedback.

415
00:55:36.929 --> 00:55:51.570
And if you can take a few minutes to share your thoughts on the site, after you've had time to explore it, that would be great. And I'd really appreciate that. The hope is that you'll like the map, or you'll routinely use this site for your own land use work.

416
00:55:52.824 --> 00:56:06.175
Beneath that we have a program highlights and new resources section, that has just half a dozen shortcuts to key program features and new resources, where you can click directly to get to the corresponding page.

417
00:56:06.175 --> 00:56:18.864
So, for example, just for ease, we have the webinar series web page right here. And that's where this webinar today is described as well as links to all the past webinars.

418
00:56:19.224 --> 00:56:27.565
And then we just recently added a new handbook on creating and maintaining Hudson River views. So, you can click right to that in this highlight section.

419
00:56:27.869 --> 00:56:32.880
And this section will be updated periodically as new resources are available.

420
00:56:32.880 --> 00:56:38.969
Further down on the page is the news and announcement section, which focuses on

421
00:56:38.969 --> 00:56:42.329
Hudson Valley municipal planning and land trust projects,

422
00:56:42.329 --> 00:56:56.789
funding announcements, and DEC press releases that are relevant to our conservation partners. And so this is also updated pretty regularly. And if you click on the "all news" link here at the top, right,

423

00:56:56.789 --> 00:57:03.269
you can access pages of previous news posts. And the advance

424
00:57:03.269 --> 00:57:09.025
buttons are on the bottom, so you can see in this case, we have now 4 pages. I expect this will keep expanding.

425
00:57:09.355 --> 00:57:19.284
And my hope is that by learning about projects in different communities, they may inspire and inform your own land use and conservation initiatives.

426
00:57:20.425 --> 00:57:34.375
Let's go back to the previous page and underneath this new section is our event section where you can find webinars, trainings, and other educational opportunities from our team and our partners.

427
00:57:34.375 --> 00:57:40.405
And so it might be a little quiet this summer. But check back regularly to see what we're offering later in the year.

428
00:57:40.710 --> 00:57:54.360
So, you can return to the home page any time through the site by either clicking on the home button here on the top navigation, or going to the title of the website, which is hyperlinked.

429
00:57:54.360 --> 00:58:03.030
Okay, so now that we've explored the homepage, I want to take you through the top menu navigation here.

430
00:58:03.030 --> 00:58:15.175
The main navigation pages are the home site, the natural areas and biodiversity tab, conservation planning, maps and data opportunities, library, and about us.

431
00:58:15.445 --> 00:58:28.284
So the ones that have this little upside down triangle, have a pull down menu. And I want to point out that for those that have a pull down menu, the topic itself is a page.

432
00:58:28.284 --> 00:58:40.375

So, I would recommend starting by just clicking on that first, lead topic before exploring more information beneath that tab. So, as an example, I'll start with natural areas and biodiversity.

433
00:58:40.650 --> 00:58:46.289
And this is a key section of the Web site with a lot of resources on watershed habitats,

434
00:58:46.289 --> 00:58:50.579
wildlife and plants as well as sources for more detailed information.

435
00:58:51.114 --> 00:59:04.284
And so, in the case of the natural areas and biodiversity section, we see within that there are 3 subsections, which again, you can see by pulling down the menu here or by looking at the navigation on the right hand side.

436
00:59:05.215 --> 00:59:13.554
So, there's some general information on the landing page, and then we can go, for example, to conservation priorities in the watershed.

437
00:59:13.855 --> 00:59:25.704
And so, in addition to a broader discussion of priorities on this first page, you can also visit sub pages to learn more about habitats, wildlife,

438
00:59:26.010 --> 00:59:39.565
plants, or to see if your municipality has requested a customized habitat summary from our team and I want to point out that these pages here would not have been evident ifyou only use the upper menus.

439
00:59:39.565 --> 00:59:46.585
So, just to remind you that if any of these topics are of interest, make sure you drill down to learn about what other resources are included.

440
00:59:47.545 --> 00:59:51.385
So let's click on learn more about plants as an example.

441
00:59:52.704 --> 00:59:53.094
So,

442
00:59:53.094 --> 00:59:53.485
here,

443
00:59:53.485 --> 00:59:58.164
we have information on learning about plants in the Hudson Valley,

444
00:59:58.525 --> 01:00:03.295
but I wanted to show you just an additional navigation feature is this jump to section,

445
01:00:03.804 --> 01:00:09.264
which has a menu of what appears on that page with each item linked to the corresponding section.

446
01:00:10.284 --> 01:00:23.965
So, for example, helpful links, I wanted to point out to you that most pages have a helpful link section at the bottom, which lists the key resources mentioned in the tech sections above for easy reference.

447
01:00:24.505 --> 01:00:27.264
And it also may include some additional related resources.

448
01:00:27.539 --> 01:00:36.269
Let's go back to the top. I also wanted to click on this page summaries for municipalities.

449
01:00:36.894 --> 01:00:50.034
There are for those of you not familiar, habitat summaries are these customized compilations of maps and narrative that our team has put together for municipalities for many years.

450
01:00:50.394 --> 01:01:04.795
And if you want to see if your community has a habitat summary there's a click, this list section here. If you check this list, it actually has a list of summaries for municipalities that have been developed in the last 11 or 12 years.

451
01:01:05.070 --> 01:01:09.150
So, I'm going to just go back and

452
01:01:09.150 --> 01:01:17.425
go back up to natural areas and biodiversity and just point out that along with the priority section we've just looked at together,

453
01:01:17.695 --> 01:01:28.945
you can also read about ecosystem services and economic benefits of nature in the 'why is this important for people' section? And you can also explore some of the threats to biodiversity in the watershed.

454
01:01:29.219 --> 01:01:42.210
Okay, so next I want to take you to the conservation planning section, which is probably the most substantial on the site here. You'll find information on conservation principles, municipal roles,

455
01:01:42.210 --> 01:01:44.394
inventory and planning, conservation

456
01:01:44.394 --> 01:01:48.175
financing and local conservation policy. Again,

457
01:01:48.175 --> 01:01:53.965
the section landing page has a brief introduction and I want to point out this diagram,

458
01:01:53.994 --> 01:01:58.885
which should be familiar to you if you've come to any of our presentations or webinars over the years.

459
01:01:59.275 --> 01:02:11.215
And this outlines this basic planning approach that we encourage and I just wanted to point out that the website is essentially designed to help communities and conservation organizations move through this process.

460
01:02:11.460 --> 01:02:17.969
So looking at the sub pages over here, on the right which again correspond to the drop down menu.

461

01:02:17.969 --> 01:02:25.110
You can see that in the section we have, let's just start with conservation principles.

462
01:02:25.110 --> 01:02:35.039
This is a list of principles that can be adapted by a municipality, for example, for a comprehensive plan. And I wanted to just show you that

463
01:02:35.039 --> 01:02:44.610
almost all of the pages in this planning section, have it "in practice" component at the bottom of the page, and this in practice section

464
01:02:44.875 --> 01:02:50.184
shares 2, 3 or 4, so examples or case studies from the Hudson Valley relevant to this page topic.

465
01:02:50.184 --> 01:03:00.295
So, in this case, we see examples from the town of Pleasant Valley and the town of Esopus where they incorporated these conservation principles into their comprehensive plans.

466
01:03:02.755 --> 01:03:09.594
If we go back up to the, the topics in conservation planning, I also wanted to show you municipal role.

467
01:03:10.045 --> 01:03:17.905
This is another example of where there may be more sub pages within a topic that might not be apparent from the top navigation up here.

468
01:03:18.900 --> 01:03:28.949
So, in this case, there are sub pages on the roles of conservation advisory councils, and the roles of planning and zoning boards in conservation planning.

469
01:03:31.289 --> 01:03:44.639
Another significant component of the conservation planning section is inventory and planning and as you can see here from the right hand navigation, inventory and planning includes comprehensive planning and

470
01:03:44.639 --> 01:03:53.760

open space planning, connectivity planning and scenery mapping and planning, which is a new section we just added last month.

471
01:03:53.760 --> 01:03:59.429
I'd love to explore all these with you. I hope you'll do it on your own, but I'll start with just NRIs as an example.

472
01:04:01.644 --> 01:04:12.204
There we go this section includes what is a natural resource inventory, creating an NRI, links to enterprise and the estuary watershed and again helpful links.

473
01:04:12.534 --> 01:04:23.244
I want to show you links to watershed because we're often asked about examples of existing NRIs by communities that are just getting started on their own project.

474
01:04:23.605 --> 01:04:37.375
And so this list includes examples of county, town, and city NRIs that have been completed in the watershed. And each of them is hyperlinked to a corresponding website. We will keep adding to this list as more NRIs become available.

475
01:04:37.795 --> 01:04:42.025
But I wanted to point out to you for any hyperlinks throughout the site, if you right

476
01:04:42.025 --> 01:04:56.965
click on the hyperlink you can actually open the link in a new tab, and that enables you to save your place, keep this website open and then you can go over to the link as a separate page. So, in this case here we have the city of Rensselaer NRI

477
01:04:56.994 --> 01:04:58.224
which was recently completed.

478
01:04:59.875 --> 01:05:14.394
Okay, let's see, going back up to the conservation planning menu again, which is again here on the right or at the top. We see there are just 2 sections left, which you could explore on your own in the NRI section.

479
01:05:14.394 --> 01:05:14.905
Just or.

480
01:05:15.300 --> 01:05:18.539
Yeah, let me go back up to

481
01:05:19.465 --> 01:05:32.425
conservation planning. Okay. Right so the sections that we won't go over today, there's conservation financing, which talks about ballot measures and community preservation funds, and also the local conservation policy section, which talks about CEAs,

482
01:05:34.260 --> 01:05:41.369
overlay districts, and wetland and watercourse protection and each of these sections again has the in practice components.

483
01:05:42.264 --> 01:05:54.505
Okay, so moving right along back up to the top menu. We see the maps and data section and so, again, besides this landing page from apps and data, there's four subsections on biological data.

484
01:05:54.565 --> 01:06:00.894
And this is where you can find information about watershed-wide data products

485
01:06:00.894 --> 01:06:11.425
that our program has developed with partners, like the natural heritage program and many of these were just described because we have them on the mapper as well, but then further down on the page

486
01:06:11.454 --> 01:06:17.275
there are descriptions of some local, biological projects and data sets that might be of interest to you.

487
01:06:17.905 --> 01:06:25.255
These local projects are just - that data sets for smaller areas in the watershed that were generated from town

488
01:06:25.255 --> 01:06:25.764

wide

489
01:06:25.914 --> 01:06:35.364
habitat mapping and training projects as well as intermunicipal biodiversity plans and woodland pool mapping that was done

490
01:06:35.364 --> 01:06:42.744
In Putnam and Westchester counties, and again, we'll continue to update these kinds of pages as new datasets arise.

491
01:06:44.065 --> 01:06:56.034
You're already familiar with the natural resource mapper, which is also in this section, but you may be less familiar or unaware that every county has, almost every county has a county web map.

492
01:06:56.425 --> 01:07:05.514
We have them hyperlinked here and also we have a link here to a report that we funded on options for municipal web maps.

493
01:07:05.844 --> 01:07:13.105
Because we know that some municipalities are considering options for maybe posting their NRI on their town or municipal website.

494
01:07:13.554 --> 01:07:21.054
And here's an example from the city of Poughkeepsie who created an NRI website through an interactive map.

495
01:07:22.525 --> 01:07:24.715
The other mapper section,

496
01:07:25.465 --> 01:07:31.434
or sub page of this section includes a list of 10 web mappers covering topics,

497
01:07:31.824 --> 01:07:38.304
a full range of topics from sea level rise to soils and you can explore those

498
01:07:38.304 --> 01:07:42.445
and again, this is an example of the page will update as new resources become available.

499
01:07:43.554 --> 01:07:52.344
So, finally, I'll just wrap up with these 3 other tabs. First, is the opportunities tab, which I anticipate will be expanding in the future

500
01:07:52.344 --> 01:08:04.974
but for now, it gives an overview of technical assistance, funding assistance, training opportunities as well as our amphibian migration road crossing volunteer project.

501
01:08:04.974 --> 01:08:11.844
And so these are all opportunities available to you through our Conservation and Land Use team at the Estuary program.

502
01:08:14.335 --> 01:08:14.724
Also,

503
01:08:14.724 --> 01:08:20.755
probably of value to you is our library tab. As it states at the top of the page,

504
01:08:21.145 --> 01:08:24.114
this page includes resources that were linked

505
01:08:24.145 --> 01:08:31.704
or referenced in the previous pages along with other websites, publications, and tools about conservation and land use planning.

506
01:08:31.979 --> 01:08:40.260
They're organized by topic, and when available, links to online resources are included in the first column the title column.

507
01:08:40.260 --> 01:08:47.994

The goal here really is to help you find resources you might have noticed while browsing the other pages or find additional information about a topic.

508
01:08:48.444 --> 01:08:59.784
So, as you can see over here in the 'jump to' menu, the library's organized by themes that really mirror the website organization. So, we start with natural areas and biodiversity.

509
01:09:00.024 --> 01:09:05.034
We have information on ecosystem services, threats to biodiversity, and NRIs,

510
01:09:05.310 --> 01:09:17.274
Open space planning, conservation finance and so forth and I'll just scroll down. So you get a sense. You know, these are pretty long lists and we have given you a descriptor on the format.

511
01:09:17.274 --> 01:09:24.475
So, you get a sense of what the depth of the resource is and also the citation or the source.

512
01:09:24.750 --> 01:09:31.770
So, I'm hoping this is useful and as we add new information to the site, I'm continually updating this resource list.

513
01:09:33.175 --> 01:09:33.925
Finally,

514
01:09:33.954 --> 01:09:35.844
there's the about us tab,

515
01:09:35.875 --> 01:09:40.824
which includes background about our conservation and land use team, our staff,

516
01:09:40.824 --> 01:09:41.664
our partners,

517
01:09:42.055 --> 01:09:43.284

the Estuary program,

518
01:09:43.284 --> 01:09:54.954
and our watershed where we work as well as results from an evaluation of 10 years of our program that we conducted in collaboration with the Cornell Center for Conservation

519
01:09:55.284 --> 01:09:58.314
Social Sciences and for practitioners of programs,

520
01:09:58.314 --> 01:09:59.994
like ours or training programs,

521
01:09:59.994 --> 01:10:02.664
maybe through municipal planning federations and the,

522
01:10:02.664 --> 01:10:03.055
like,

523
01:10:03.595 --> 01:10:04.675
some of the report,

524
01:10:05.520 --> 01:10:09.029
results of the study and reports might be helpful to you.

525
01:10:10.524 --> 01:10:23.185
And so, with that, I'm going to go back to our home page. Thank you all for exploring the site with me today. We really want this website to be a helpful tool.

526
01:10:23.515 --> 01:10:37.824
So, I'm going to make a plug again for sharing feedback either via that survey or just by sending me an email. Even, if you notice that there's a broken link or that we're missing an important resource, or there's some news item that might be of interest to our audience.

527
01:10:37.854 --> 01:10:42.145

I encourage you to definitely feel free to contact me at any time.

528
01:10:42.449 --> 01:10:53.279
So, I'm going to stop sharing my screen and turn on my video and turn it over back to Ingrid.   Ingrid Haeckel: Thanks, Laura. That was great.

529
01:10:53.279 --> 01:11:00.000
Yeah, if there are additional questions feel free to add them to the chat or the Q and A

530
01:11:00.000 --> 01:11:05.970
window . Questions for Laura or additional questions about the mapper.

531
01:11:07.890 --> 01:11:20.189
And just a note that we will in our follow up correspondence include some of these links that we've been adding in a chat box and mentioning. We'll share those again with you that way.

532
01:11:26.609 --> 01:11:36.060
Okay, I am not seeing anything coming in, just some

533
01:11:36.060 --> 01:11:39.539
nice comments from folks. Thank you.

534
01:11:44.819 --> 01:11:59.039
Yeah, I see that. I like to joke that the website was my COVID baby, because it really helped working from home over covid on the website. It really helped the transition from working at the office to working from home to have this project.

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01:11:59.039 --> 01:12:02.939
Yeah, and it really for those of you who have been involved

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01:12:02.939 --> 01:12:14.939
at all in our trainings over the many years, you know, really helps kind of put everything together in one place and we hope that clearing house serves the purpose in meeting your needs and local land use planning. So.

537
01:12:14.939 --> 01:12:20.220
Yeah, so I think together with the mapper, it kind of is a nice online set of tools.

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01:12:20.694 --> 01:12:21.055
Ingrid Haeckel: Yeah,

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01:12:22.404 --> 01:12:24.265
and as I mentioned with the mapper,

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01:12:24.265 --> 01:12:37.885
we've been continuously trying to update it as both as we've completed new data sets like the updated important areas and forest condition index and core forest data.

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01:12:38.694 --> 01:12:51.895
Each year, we're updating the culvert information coming from our watershed team as new culverts and road stream crossings are being assessed. We're also trying to make sure that all of the hyperlinks are are staying live.

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01:12:51.895 --> 01:12:54.564
So, if you notice needs for updates, let me know.

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01:12:56.010 --> 01:13:00.779
And we'll be happy to pass those along. Okay.

544
01:13:00.779 --> 01:13:11.310
Nate Nardi Cyrus: I've also heard quite a few comments on people who already say they use the mapper and that's that's fantastic. And you're using the website. That's great too. And if you have any stories about

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01:13:11.310 --> 01:13:17.220
you know, projects that you might have used either of these resources on. Of course, we'd be happy to hear all about them and

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01:13:17.220 --> 01:13:25.949

for us to understand how people are using these products and share some of your successes. If you're willing to do so.

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01:13:25.949 --> 01:13:34.859
Laura Heady: Yeah, that's a great point. And I would echo Ingrid requests to along with

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01:13:35.545 --> 01:13:49.765
linking to the mapper on your own web pages, if you can link to our conservation planning website as well. So that more and more people become aware that it exists and that it's a resource for land use planning in the Hudson Valley that would be really helpful.

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01:13:57.840 --> 01:14:03.060
Ingrid Haeckel: I'm not seeing any additional questions right now.

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01:14:03.060 --> 01:14:15.449
One last thing maybe I'll mention related to the mapper is just that I am hoping to produce a much shorter, like, 5 minute tutorial, reminder, walking through

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01:14:15.449 --> 01:14:24.359
the tools and where things are located so, keep an eye out for that. Hopefully in the next few weeks, we'll get that out as well.

552
01:14:26.069 --> 01:14:30.090
A shorter version than what we presented today.

553
01:14:30.090 --> 01:14:35.819
Well, well, it looks like.

554
01:14:35.819 --> 01:14:40.890
Is that anything? New? Okay. Great.

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01:14:40.890 --> 01:14:52.800
Well, thank you, Nate and thank you Laura for your presentations as well. Thanks to everyone for attending and a reminder we're going to be taking a little break from the webinars

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01:14:52.800 --> 01:15:04.590
for the next few months, but please keep in touch with us. We'll send announcements through DEC delivers and hopefully we'll be back on our monthly webinar schedule starting in November.

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01:15:06.600 --> 01:15:11.909
So, we hope you all take care and have a good rest of your afternoon.

558
01:15:11.909 --> 01:15:16.829
Thanks thanks. Bye. Everyone thanks for being here.

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01:15:16.829 --> 01:15:20.430
Bye.