

## **Habitat Assessment: A Tool for Conserving Biodiversity During Site Design**

June 9, 2022, 1:00 – 2:30 pm

Hudson River Estuary Program Conservation and Land Use Webinar Series

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00:00:03.144 --> 00:00:15.593

Good afternoon, everyone. Thank you for joining us. My name is Ingrid Haeckel, and I'm a conservation and land use specialist with the Hudson River Estuary program through a partnership with Cornell University.

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00:00:16.013 --> 00:00:19.224

Welcome to the conservation and land use webinar series.

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00:00:19.553 --> 00:00:32.213

Today's webinar will provide an overview of how habitat assessment can be used during reviews of proposed development to identify and conserve biodiversity resources in the process of site design.

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00:00:32.664 --> 00:00:40.134

You'll learn about guidelines that can be adopted or employed to establish a standardized habitat assessment process.

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00:00:40.374 --> 00:00:48.503

And hear a case study about how the town of Warwick has implemented habitat assessment within a biodiversity conservation overlay zone.

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00:00:52.560 --> 00:01:04.980

so before we start, let me review a few webinar details. If you're having difficulty with the audio. you can switch to the audio using the switch audio.

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Function by clicking the 3 dots next to the red exit button at the bottom of the screen and there you will find options to request a call back or to call in by phone.

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00:01:17.814 --> 00:01:29.784

If you need help, please reach out to us, using the chat function in the bottom, right Corner of the screen. And if you have questions for the presenters, once they begin, please use the Q and a function.

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00:01:30.444 --> 00:01:37.224

If it's not open already, you can access. Q. and a, by clicking the 3 dots next to chat in the bottom right Corner.

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00:01:38.094 --> 00:01:51.594

Note that your phone lines have been muted. The webinar is being recorded and will notify you when the recording is available at after the program at the end of the webinar we kindly request your feedback through a short survey.

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00:01:51.594 --> 00:01:56.125

That will pop up and lastly for those of you seeking municipal training credit.

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You'll receive an automatic email confirmation of attendance from webex at the end of the program.

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For those of you who may be new to this series the Hudson River program is a special 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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We work throughout the 10 counties,

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00:02:18.985 --> 00:02:28.044

bordering the title Hudson from upper New York harbor to the federal dam in Troy shown in the area shown on the map here to achieve many key benefits,

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00:02:28.074 --> 00:02:32.965

including the vital ecosystem and its fish wildlife and habitats.

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00:02:33.539 --> 00:02:46.259

Clean water, healthy, tributaries, climate, adaptive communities, conserve natural areas in the watershed and informed and engaged public and access for all to the Hudson River.

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And you can read more about the program at the link below and in our action agenda.

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Within the program,

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our conservation and land use team works with municipalities and regional conservation partners to incorporate important habitats and natural areas into local land

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use,

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00:03:04.854 --> 00:03:09.264

planning and decision making and fellow conservation and the new specialist Christine,

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00:03:09.835 --> 00:03:18.775

who joined our team this spring and myself are available to provide technical assistance on a variety of conservation planning and policy projects,

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00:03:18.985 --> 00:03:22.284

and Christine will help with moderating the Q and a,

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00:03:22.314 --> 00:03:23.455

for today's webinar.

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00:03:24.145 --> 00:03:34.525

Our program website shown here is a clearing house for guidance and resources on these many topics, including habitat assessment. And we'll share that link through the chatbox as well.

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00:03:37.014 --> 00:03:48.085

So we're going to take a break from webinars over the summer, but we are offering a small In Person field workshop on habitat assessment in followup to today's webinar.

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And that's tentatively planned for Friday, July 15th, and will be held at Pound ridge reservation in Westchester County. And that will be led by Gretchen.

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Stevens

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00:03:58.854 --> 00:04:04.134

who's presenting today from Hudsonia. We will visit a site for a,

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00:04:04.134 --> 00:04:07.705

to look at a mock proposed subdivision proposal

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00:04:08.155 --> 00:04:23.154

and use the model habitat assessment guidelines that Gretchen will talk about today to walk you through the field portion of a habitat assessment and review and discuss the subdivision proposal in light of our findings. I will provide information about how to register for this workshop

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00:04:23.154 --> 00:04:25.165

When we follow up with you after the webinar.

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And with that, I'm pleased to introduce today's guest speakers. Gretchen Stevens is director of the biodiversity resources center at Hudsonia, a nonprofit, environmental research and education institute based in Dutchess county.

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She has over 35 years of experience as a field biologist, and is a long time partner with the program in delivering education programs to local land use decision makers throughout the Hudson Valley.

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And Ted Fink is the principal of Greenplan,

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a professional planning firm that provides general community planning services throughout the Hudson Valley and upstate New York. Ted has over 4 decades of experience in planning and land use controls and helps communities,

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00:05:10.134 --> 00:05:13.403

develop their own unique vision for conservation and development,

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00:05:13.403 --> 00:05:18.954

he's also an adjunct professor with Marist colleges school of science,

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00:05:18.954 --> 00:05:24.923

teaching environmental science and policy courses and he is the town planner for the town of Warwick.

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So just a quick note to participants again, to please enter your questions as we go along using the Q and a box in the bottom Right

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Corner of the screen. We will take about 10 minutes for questions after Gretchen's presentation and we'll leave another 10 minutes or more at the end of the presentation from Ted about Warwick's biodiversity

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conservation overlay zone.

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So thank you both for joining us today. And I'll go ahead and,

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Hand the control over to Gretchen

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00:06:09.899 --> 00:06:16.408

There do you see that opening screen.

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00:06:16.408 --> 00:06:25.348

Yes. Okay. That's good. Yeah, so hello everyone and thanks for being with us today.

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I'm going to 1st, just tell you a little about what we're going to talk about this afternoon. We'll, we'll start with just a discussion about habitat assessments.

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why And when to conduct them, will say a few words about the regulatory authority that municipalities have.

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To request or require habitat assessments for environmental reviews

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we'll talk about when to conduct an assessment and by whom,

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00:06:59.213 --> 00:06:59.723

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00:06:59.783 --> 00:07:00.384  
who

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00:07:00.384 --> 00:07:02.124  
who should carry out the assessment.

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00:07:02.783 --> 00:07:14.153  
we'll discuss some of the basic elements of a habitat assessment.  
and, and then we'll actually have a Q and a around then and then, uh.

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00:07:14.519 --> 00:07:22.408  
Ted will tell us about the experience of the town of Warwick, with  
habitat assessments.

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00:07:23.699 --> 00:07:24.598  
So,

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00:07:24.653 --> 00:07:25.103  
um,

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00:07:25.314 --> 00:07:29.274  
First of all why to conduct a habitat assessment well,

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00:07:29.274 --> 00:07:32.874  
the basic reason is really just to understand the,

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00:07:33.053 --> 00:07:33.713

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00:07:33.803 --> 00:07:37.223  
natural resource sensitivities of a site,

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00:07:37.283 --> 00:07:37.793

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before siting and designing new land uses.

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00:07:42.564 --> 00:07:51.744

and also to provide the basic information needed to, assess potential impacts of a proposed project.

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So the project can be designed to avoid, the, the most significant impacts as much as possible. Any of you, who've been on planning boards or conservation advisory councils for some time.

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Are probably well aware that most land use applications that come before the board have very little information about the natural setting, the habitats and the potential impacts to resources of concern.

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00:08:17.994 --> 00:08:24.413

And while the planning board can request more information about the site often.

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The inertia of the review moves everything along so quickly that the project is approved before the applicant or the planning board, even knows what sensitive resources are at risk.

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The consequence

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Is the piecemeal loss and fragmentation and other degradation of habitats that has led to the declines of many of our wildlife populations and degraded our streams and lakes and so forth.

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So recognizing this problem a few years ago. We put together some simple guidelines to help

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00:09:03.803 --> 00:09:13.283

An applicant gather the kinds of basic information that the planning board needs to understand the site and to better assess potential impacts.

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why is it important to establish guidelines, for these assessments.

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They help to ensure that the information provided to the planning board, meets a minimum standard of quality and thoroughness.

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Those of you who are on planning boards might think that, since you and your board have never asked for a habitat assessment that you might be overstepping your authority.

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00:09:45.563 --> 00:09:58.163

if you require one of your applicants, but the federal and New York state law does require a certain protections for water resources and rare species.

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For example, the federal Clean Water Act require certain protections of, wetlands and streams that meet the federal jurisdictional requirements.

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The federal Endangered Species Act, requires certain protections for plants and animals that are listed as endangered, or threatened at the federal level.

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And in New York, the state does grant much authority to municipalities to regulate land uses and other activities to protect the public health and welfare.

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The, New York, environmental quality

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review,

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law is,

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authorized under the,

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00:10:39.894 --> 00:10:40.073

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New York state,

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environmental conservation law,

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which is the main instrument for protecting water and habitats and case  
law in New York holds that lead agencies,

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conducting reviews of land development projects must take a quote,

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hard,

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look,

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00:10:56.693 --> 00:11:01.104  
unquote at the potential impacts on resources of concern.

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the environmental quality review law or SEQOR requires that certain  
procedures be followed to identify which resources might be affected by a  
new project.

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00:11:14.124 --> 00:11:25.374

and to assess the potential impacts the SEQR law requires that an environmental assessment form or EAF, be completed by the applicant.

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And the lead agencies to help the agency gather and assess information relevant to the review.

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The short EAF does have some questions related to water and habitats.

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Um,

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for example,

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13 a,

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does any portion of the site contain wetlands,

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or other water bodies regulated by a federal state,

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00:11:48.264 --> 00:11:50.933

or local agency and 13 B,

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would the proposed action physically alter or encroach into any existing wetland or water body

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So there are.

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Online sources, that will get you part of the way to answering these questions but you should know that many many wetlands And streams are not shown on the state and federal wetland maps or other maps in the public domain.

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So you should not assume that The wetland and stream Information provided in the online mapper or the Hudson Valley natural resource

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Mapper is complete, but that's where, a habitat assessment, based on site observations comes in.

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Also, you should be aware that the less obvious wetlands, for example, are not necessarily recognized by an engineer or land surveyor.

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A biologist or a wetland specialist.

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Has the technical expertise to identify those wetlands.

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Another question - does the site of the proposed action, contain any species of animal or associated habitats listed by the state, or federal government is threatened or endangered. Well, again, there are online sources.

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That will get you part of the way to answering this question. But, in fact, unless there have been specific surveys for rare species at the proposed development site, in most cases.

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The only correct answer to this question is unknown.

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The New York natural heritage program do keep records of known occurrences of threatened and endangered species.

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But the records include only those occurrences that have been reported to them or that they know from their own surveys. Most places have never been surveyed for rare species or their habitats.

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So, on one knows whether or not rare species occur on a particular site.

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That's where a habitat assessment comes in. the assessment can determine whether habitats, occur on the site that could support certain rare species.

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And thus the likelihood of rare species occurrence in the absence of existing records.

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If you use the online,

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mapper to complete some parts of the form,

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00:14:11.933 --> 00:14:20.693

the mapper provides answers based only on heritage program records with regard to rare species occurrences.

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But the DEC website explicitly says that if no locations of endangered and threatened species are documented from the project site, it does not mean that none are there.

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It only means that New York natural heritage has no information about the area and further information from onsite surveys, or other resources may be required to fully assess the presence of threatened or endangered animals.

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Unquote. the lead agency, usually the planning board can ask applicants for whatever information the agency feels.

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It needs to make sound decisions, in the interest of protecting the public welfare. insisting on a habitat assessment is well within the authority and the responsibility of the lead agency.

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In fact, not having a habitat assessment has been found to violate the requirement for taking a hard look at potential impacts of a land development project.

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In 2006, when the planning board of the town of Liberty New York was reviewing a proposed subdivision project, the applicant provided letters from the heritage program and the DEC stating that those

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Agencies had no records of rare species occurrences at the site,

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the planning board considered this to be sufficient evidence that development of the site would cause no detrimental impacts to endangered threatened or special concern species and finding no other cause for concern.

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They issued a negative declaration.

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But that decision was challenged and in 2008, the New York Appellate court ruled that those letters from the, and the

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Heritage program were insufficient for determining that there would be no environmental impacts or only minor impacts from the project and the planning board needed further evidence to support their negative declaration.

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The court stated that by relying solely on those letters The planning board quote "failed to take the requisite hard look at the effect of the proposed development on wildlife" unquote.

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And that quote, "there is no record evidence of any meaningful investigation into this area of environmental concern" unquote.

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So, what kinds of projects deserve a habitat assessment.

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Many of the projects that are reviewed in the SEQR process. an assessment during the review of a subdivision,

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for example,

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can determine how to configure the new parcels,

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in ways that reduce habitat fragmentation and reduce interference with streams and wetlands and other sensitive areas. for a project undergoing a site plan review a habitat assessment can help the applicant locate a new

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00:17:20.513 --> 00:17:25.463

driveway and a building envelope in places that would best protect the resources.

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Habitat assessment for a project, within a conservation overlay district can give the applicant and the lead agency, a more detailed view of the resources of concern for which that district was established.

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In fact, any, place with a known, sensitive resource, is a good candidate for a habitat assessment when there is some proposed, new land use.

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00:17:54.898 --> 00:17:59.729

when to conduct a habitat assessment.

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00:17:59.729 --> 00:18:09.689

The best time is in the early stages of planning for a new land development project so that the results can guide the project design right from the start.

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The field components of the assessment can be conducted at any time the time of year.

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00:18:17.398 --> 00:18:26.489

really, when at least when the ground conditions are not obscured, say, by snow or ice or flooding.

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But the habitat assessment report should explain the limitations of the field observations and should recommend further field work at other seasons, or in other conditions if needed.

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So, if you're doing your assessment in November or February, lots of things won't be evident. So, recommendations for

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other studies at other times, might be appropriate.

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Who should conduct the assessment.

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Some aspects of it can be conducted remotely, really, by anyone, using online data or other or other sources.

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But the field component must be carried out by a biologist, or a naturalist who is familiar with the habitats and species of conservation concern in the region.

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Why do I say that?

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00:19:23.634 --> 00:19:29.513

Well, practically anyone can distinguish a forest, from a shrubland or a meadow.

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00:19:29.874 --> 00:19:41.604

It often takes a specialist to identify which particular forest or shrublands or meadows have these special characteristics needed by certain rare species.

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00:19:43.314 --> 00:19:55.794

for example, you might not recognize the habitat in this photo as anything special. It looks like a shrubby area, some meadow in the foreground.

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Um, and then, scattered shrubs and small trees, the photo taken in the fall, but this particular kind of shrubland could be home to the New England cottontail.

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A rare rabbit of the Northeast that is classified as a species of greatest conservation need in New York and in, I think all the New England states.

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00:20:20.878 --> 00:20:25.618

If you were visiting this site, how would you describe the habitat.

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00:20:30.173 --> 00:20:37.344

It looks like at the very least an old field or a wet meadow, Ah, with some marsh in the background.

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00:20:37.374 --> 00:20:47.513

I see some cattails, but a specialist would recognize this as a fen based on the specific kinds of plants that we see there in the foreground.

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00:20:48.534 --> 00:20:57.564

This is an uncommon kind of wetland that supports rare plants and animals. And is the critical habitat for the bog turtle, an endangered species in New York.

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00:21:01.259 --> 00:21:09.058

And what does this look like to you?

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00:21:09.058 --> 00:21:22.733

You'd be correct to call it a rocky deciduous forest, but a specialist might also recognize this as potential habitat for the Virginia snake root. A threatened plant in New York.

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00:21:25.528 --> 00:21:37.828

And what about this? this place with pitch pine and scrub oak and exposed ledge

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00:21:37.828 --> 00:21:51.868



is what we would call an oak heath barren and this is, potential habitat for rare snakes and rare moths and rare plants.

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00:21:53.814 --> 00:22:07.374

This is the kind of thing that a specialist might recognize where someone who's less familiar with, on unusual habitats and the kinds of places that support many of our rare species.

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00:22:07.733 --> 00:22:10.584

Um, in the region.

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00:22:13.229 --> 00:22:17.249

The purpose of a habitat

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00:22:17.249 --> 00:22:20.634

Assessment though is not to find rare species,

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00:22:21.144 --> 00:22:21.713

um,

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00:22:21.743 --> 00:22:23.153

or rare habitats,

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00:22:23.423 --> 00:22:26.394

but to assess and describe,

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00:22:26.453 --> 00:22:26.604

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00:22:26.634 --> 00:22:34.344

habitats and water resources to assess the suitability of habitats for species of concern.

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00:22:34.618 --> 00:22:38.909

Ah, and to identify potential impacts

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00:22:38.909 --> 00:22:42.929

On those resources of a proposed development project.

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00:22:46.344 --> 00:22:46.614

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00:22:46.644 --> 00:22:48.864  
so who hires the specialist.

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00:22:48.894 --> 00:22:57.983  
the assessment would ordinarily be done by a consultant hired by the applicant. another model is for the municipality to have their own consultant,

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00:22:57.983 --> 00:23:02.034  
who does the assessment and the cost is passed on to the applicant.

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00:23:02.094 --> 00:23:06.983  
The municipality may also hire their own specialist to review the applicants assessment.

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00:23:08.334 --> 00:23:18.263  
You should be aware, though, that some consultants might not recognize any of these habitats as out of the ordinary, or as potential habitat for rare species.

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00:23:18.294 --> 00:23:26.513  
So, it's important that the field component of the assessment be done by someone who has the right kind of knowledge and experience.

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00:23:27.209 --> 00:23:41.669  
So, the elements, the basic elements of a habitat assessment that are outlined in the guidelines, are these, the guidelines are set up,

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In the format of a report outline, and the contents of each section of the assessment report, are described starting with a, general site description.

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00:23:56.304 --> 00:24:08.394  
the report should describe the site in terms of topography and bedrock geology and soils and vegetation cover types like forest or meadows and streams so forth,

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00:24:08.453 --> 00:24:08.663

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00:24:08.663 --> 00:24:09.713

water bodies,

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00:24:09.713 --> 00:24:14.153

general elevations you can find that kind of information in,

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00:24:14.423 --> 00:24:14.844

you know,

201

00:24:14.844 --> 00:24:16.134

lots of different sources.

202

00:24:16.134 --> 00:24:28.223

Some municipalities have a natural resource inventories, you can get this information from the Hudson Valley natural resource mapper. You can look at air photos.

203

00:24:28.584 --> 00:24:34.673

You can look at the online web soil survey, lots of other online sources. You're probably well aware of those.

204

00:24:36.713 --> 00:24:47.814

The report should include descriptions in some detail of the habitats, both habitats on the site and near the site.

205

00:24:47.844 --> 00:24:53.814

Offsite areas can be assessed by maps and aerial photos. But, uh.

206

00:24:54.088 --> 00:24:54.269

207

00:24:54.294 --> 00:25:00.054

on site areas should be assessed by onsite observations for each habitat,

208

00:25:00.084 --> 00:25:00.324

209

00:25:00.354 --> 00:25:02.364

or ecological community,

210

00:25:02.933 --> 00:25:03.294  
the,

211  
00:25:03.324 --> 00:25:03.534

212  
00:25:03.564 --> 00:25:06.413  
dominant trees and shrubs and herbs should be,

213  
00:25:06.443 --> 00:25:06.743

214  
00:25:06.773 --> 00:25:09.773  
listed and mention any

215  
00:25:10.378 --> 00:25:17.094  
Species that are unusual or that may be indicative of special habitat conditions.

216  
00:25:17.604 --> 00:25:30.084  
And for this purpose, you don't need a comprehensive plant lists, just something to give the general sense and condition and quality of the habitats. The habitat should

217  
00:25:30.894 --> 00:25:41.124  
Describe the, I mean, the report should describe the habitat quality to the extent possible given the season or other field conditions.

218  
00:25:41.124 --> 00:25:55.854  
And that would just be things like the size of trees, whether they're old or young, the quality of the of the forest floor, or the metro floor. Does the forest have, lots of down wood?

219  
00:25:55.884 --> 00:26:01.193  
is it rocky? is it moist or dry?

220  
00:26:01.463 --> 00:26:13.523  
Is the meadow covered with thatch beneath the standing vegetation or it hasn't been mowed clear and is it mainly bare soil under the grasses?

221  
00:26:13.943 --> 00:26:22.763  
Um, the size of the habitat area, any micro habitat features that seem worth mentioning

222

00:26:23.124 --> 00:26:23.604

Um,

223

00:26:23.634 --> 00:26:26.183

the presence and abundance of non native,

224

00:26:26.304 --> 00:26:26.874

um,

225

00:26:27.473 --> 00:26:29.304

or invasive plant species,

226

00:26:29.874 --> 00:26:30.203

227

00:26:30.203 --> 00:26:30.653

the,

228

00:26:31.104 --> 00:26:34.013

the observable quality of water,

229

00:26:34.044 --> 00:26:34.344

230

00:26:34.374 --> 00:26:35.213

resources,

231

00:26:35.213 --> 00:26:35.844

like the,

232

00:26:36.144 --> 00:26:43.104

the depth or clarity of water in ponds or streams, the flow and so forth  
and the connectivity,

233

00:26:43.134 --> 00:26:43.403

234

00:26:43.403 --> 00:26:45.054

with other habitat areas.

235

00:26:45.598 --> 00:26:56.368

The report should explain the timing of the survey and the limitations of the survey and make recommendations for further surveys. If needed.

236

00:26:58.913 --> 00:27:12.443

The report should explain the general setting of the site in terms of the connections, between significant habitat areas, both within the site and with offsite areas.

237

00:27:12.804 --> 00:27:13.104

238

00:27:13.134 --> 00:27:15.413

and any barriers to connectivity,

239

00:27:15.413 --> 00:27:16.374

such as roads,

240

00:27:16.374 --> 00:27:17.273

or driveways,

241

00:27:17.273 --> 00:27:18.473

or pavement,

242

00:27:18.503 --> 00:27:20.003

or curbs, walls,

243

00:27:20.094 --> 00:27:20.814

buildings,

244

00:27:21.233 --> 00:27:22.074

culverts,

245

00:27:22.223 --> 00:27:22.973

dams,

246

00:27:23.364 --> 00:27:23.723

247

00:27:23.723 --> 00:27:30.534

and other features that might impede the movement of small and large animals through and between habitats.

248

00:27:31.943 --> 00:27:38.213

This is a color infrared aerial photo showing a mostly forested landscape.

249

00:27:38.243 --> 00:27:48.653

with a parcel outlined in green. this, if you're not used to reading color infrared, the red areas are, those are conifer trees.

250

00:27:49.013 --> 00:27:59.634

the reddish brown areas are deciduous trees. This is mostly flowers that we're looking at. Although there are some meadows down in the southern part.

251

00:27:59.814 --> 00:28:04.193

Um, the parcel itself outlined in green is mostly forested.

252

00:28:05.334 --> 00:28:12.233

It has a meadow area in the South. It's bounded by a road and a residential lot on the South, another on the West.

253

00:28:12.294 --> 00:28:23.814

Um, but it is otherwise, Ah, quite well-connected, to the surrounding forest. there aren't barriers, like roads or, developed lots or anything.

254

00:28:25.318 --> 00:28:32.159

The assessment report should also include a map of the site.

255

00:28:32.663 --> 00:28:46.973

And vicinity illustrating the habitats and watercourses, including watercourses that may not show up on public maps. it should include existing developed features

256

00:28:47.124 --> 00:28:58.644

So looking at that site again, Here's a close up, showing a proposed subdivision project. Here's that site.

257

00:28:58.673 --> 00:29:12.233

The aerial photograph where different habitats have been outlined, you can still see the subdivision lines and this is the same habitats that are color coded here.

258

00:29:12.778 --> 00:29:23.818

This can be just a sketch at this stage. No need for a map like this 1 or anything fancy, or no need for an engineer's or surveyor's drawing

259

00:29:23.818 --> 00:29:27.449

At this stage.

260

00:29:27.449 --> 00:29:39.689

Um, another thing that should be included in the habitat assessment report is a discussion of species of conservation concern.

261

00:29:40.074 --> 00:29:53.034

The report should discuss the results of an inquiry to the DEC or the heritage program about records of rare species and exemplary natural communities on and near the site.

262

00:29:53.094 --> 00:30:03.923

the inquiry letter to the heritage program, and the site location map that went with that letter. And the heritage program's response should be appended to the report.

263

00:30:05.398 --> 00:30:06.384

But that's not enough,

264

00:30:06.923 --> 00:30:08.364

considering the habitats,

265

00:30:08.394 --> 00:30:08.574

266

00:30:08.604 --> 00:30:10.403

present on and near the site,

267

00:30:10.433 --> 00:30:22.673

the report should list and discuss the plants and animals of conservation concern that do or may use the site and nearby areas and may be affected by the proposed project.

268

00:30:22.733 --> 00:30:23.753

consider data

269



00:30:23.753 --> 00:30:25.913  
From the heritage program certainly,

270  
00:30:26.304 --> 00:30:26.574

271  
00:30:26.574 --> 00:30:27.864  
and also from the

272  
00:30:27.894 --> 00:30:28.344

273  
00:30:28.374 --> 00:30:30.114  
state breeding bird Atlas,

274  
00:30:30.114 --> 00:30:30.534  
the,

275  
00:30:30.594 --> 00:30:32.183  
the state herp Atlas,

276  
00:30:32.634 --> 00:30:33.054  
um,

277  
00:30:33.324 --> 00:30:35.273  
that can help you determine,

278  
00:30:35.304 --> 00:30:35.604

279  
00:30:35.634 --> 00:30:38.183  
the likely or potential occurrence on the site,

280  
00:30:38.183 --> 00:30:40.943  
but don't limit your assessment to those sources,

281  
00:30:41.364 --> 00:30:41.903  
um,

282  
00:30:42.263 --> 00:30:43.763  
for this purpose.

283

00:30:43.794 --> 00:30:51.713

The species of conservation concern that we're concerned about are,

284

00:30:51.989 --> 00:30:55.199

species that are listed.

285

00:30:55.703 --> 00:30:56.003

By the DEC

286

00:30:56.814 --> 00:30:57.983

as endangered,

287

00:30:58.433 --> 00:30:58.703

288

00:30:58.733 --> 00:31:01.493

Threatened, special concern or rare,

289

00:31:02.273 --> 00:31:02.874

290

00:31:02.903 --> 00:31:04.584

those listed by the DEC,

291

00:31:05.304 --> 00:31:05.814

as,

292

00:31:05.844 --> 00:31:06.384

293

00:31:06.443 --> 00:31:09.983

New York state species of greatest conservation need,

294

00:31:11.153 --> 00:31:13.854

and those listed by the heritage program as,

295

00:31:14.574 --> 00:31:19.013

S1 or S2 or S3. Back in January the Estuary program,

296

00:31:19.074 --> 00:31:19.403

297

00:31:19.403 --> 00:31:21.413  
actually held a webinar on,

298

00:31:21.443 --> 00:31:21.743

299

00:31:21.773 --> 00:31:26.243  
the topic of species of conservation concern

300

00:31:26.273 --> 00:31:27.262  
Here's a link to that,

301

00:31:27.262 --> 00:31:27.624  
but we'll,

302

00:31:27.653 --> 00:31:28.943  
we'll send that to you later.

303

00:31:28.943 --> 00:31:36.894  
There's a recording of that that you can listen to and see, in case, you  
want to learn more.

304

00:31:40.763 --> 00:31:45.473  
When thinking about species of conservation concern on the site,

305

00:31:45.473 --> 00:31:47.963  
you should consider habitat uses for,

306

00:31:48.594 --> 00:31:49.104

307

00:31:49.284 --> 00:31:50.453  
for lots,

308

00:31:50.513 --> 00:31:50.933  
you know,

309

00:31:50.933 --> 00:31:51.173

I mean,

310

00:31:51.173 --> 00:32:00.923

lots of different ways certainly for breeding or nesting for nursery areas for foraging hunting for seasonal migrations for over wintering

311

00:32:00.953 --> 00:32:02.064

habitat.

312

00:32:02.153 --> 00:32:07.433

Um, so if you have large meadows say of.

313

00:32:08.064 --> 00:32:19.493

10 acres are larger, the report should discuss their known or potential uses by grassland breeding, birds of conservation, concern, such as Bobolink or meadowlark

314

00:32:19.523 --> 00:32:21.384

If you have a large forest,

315

00:32:21.413 --> 00:32:21.894

316

00:32:22.314 --> 00:32:22.644

317

00:32:22.644 --> 00:32:28.614

the report should discuss their known or potential uses as nesting sites for forest,

318

00:32:28.614 --> 00:32:30.233

interior breeding birds,

319

00:32:30.503 --> 00:32:37.463

or if you have vernal pools discuss their potential uses for breeding by Jefferson or blue spotted salamander.

320

00:32:37.763 --> 00:32:48.503

Um, and the uses of the surrounding forest, for those and other amphibians of those pools or for forging by, by spotter turtle.

321

00:32:48.989 --> 00:33:02.818

If there's a cold water stream, discuss the known or potential use by wild brook trout and so on. all of that, those kinds of discussions, should be in the habitat assessment report.

322

00:33:02.818 --> 00:33:06.084  
given what,

323

00:33:06.114 --> 00:33:06.594

324

00:33:06.624 --> 00:33:07.013

325

00:33:07.074 --> 00:33:08.604  
was learned in the steps

326

00:33:08.634 --> 00:33:08.993

327

00:33:09.023 --> 00:33:13.913  
above the report should describe the areas of the site that may be,

328

00:33:13.913 --> 00:33:19.013  
especially sensitive to the disturbances associated with the proposed development.

329

00:33:19.614 --> 00:33:30.263  
and then should describe the proposed development project and assess the potential impacts of the project on biological and water resources.

330

00:33:31.554 --> 00:33:35.243  
Consider the effects of habitat loss or fragmentation,

331

00:33:35.273 --> 00:33:35.753

332

00:33:35.784 --> 00:33:36.054

333

00:33:36.084 --> 00:33:37.463  
the edge effects of,

334  
00:33:37.644 --> 00:33:37.973

335  
00:33:38.003 --> 00:33:39.294  
human activities,

336  
00:33:39.294 --> 00:33:43.794  
such as lights and noise and predation by pets

337  
00:33:43.824 --> 00:33:46.463  
the effects of impervious surfaces,

338  
00:33:46.884 --> 00:33:50.003  
the effects of increased runoff of surface water,

339  
00:33:50.334 --> 00:33:52.733  
the effects on streams and on groundwater.

340  
00:33:53.213 --> 00:33:57.534  
the potential contamination of surface water or ground water.

341  
00:33:58.163 --> 00:33:58.733  
Um,

342  
00:33:59.124 --> 00:34:04.074  
and finally the report should describe the measures that could be employed,

343  
00:34:04.104 --> 00:34:04.703  
um,

344  
00:34:05.273 --> 00:34:11.034  
to avoid or reduce or mitigate any adverse effects of the proposed projects,

345  
00:34:11.364 --> 00:34:11.813

346  
00:34:11.844 --> 00:34:15.594  
measures that could be included in the site design,

347  
00:34:15.594 --> 00:34:16.193  
or the,

348  
00:34:16.224 --> 00:34:16.403

349  
00:34:16.434 --> 00:34:17.873  
engineering or the,

350  
00:34:18.173 --> 00:34:18.443

351  
00:34:18.474 --> 00:34:19.824  
infrastructure features.

352  
00:34:21.623 --> 00:34:34.583  
Because this assessment is carried out at an early stage of planning.  
This discussion is expected to be fairly general and need not be  
accompanied by engineer's drawings or anything expensive like that.

353  
00:34:36.719 --> 00:34:37.588  
So,

354  
00:34:38.304 --> 00:34:40.164  
how to use the assessment once,

355  
00:34:40.193 --> 00:34:40.434

356  
00:34:40.434 --> 00:34:43.164  
once you have the information. First of all

357  
00:34:43.193 --> 00:34:50.813  
a good consultant will interpret the habitat information and explain the  
implications of the proposed development and that,

358  
00:34:50.873 --> 00:34:51.143

359  
00:34:51.173 --> 00:34:53.934  
information should be in the assessment report.

360  
00:34:54.684 --> 00:34:57.293  
So, back to this site,

361  
00:34:58.614 --> 00:35:12.684  
Some of the interesting places biologically are things like the 2 virtual  
pools, the large forest, both on the site and off the site, a  
Calcareous wet meadow there.

362  
00:35:13.014 --> 00:35:17.184  
which is part of a large meadow that meadow is

363  
00:35:17.909 --> 00:35:23.548  
Roughly 10 acres this whole site is a little over a 100 acres.

364  
00:35:23.994 --> 00:35:37.134  
There is a fen identified there there's a hardwood swamp there's a  
stream. There are several ledger areas. Many of these features would not  
be evident without a habitat assessment.

365  
00:35:37.373 --> 00:35:43.793  
In fact, none of the wetlands show up on the federal or state wetland  
maps. for example.

366  
00:35:44.184 --> 00:35:53.273  
also the, the stream that runs north to south through the property,  
does not show up on public stream maps.

367  
00:35:54.088 --> 00:36:03.239  
The assessment report should include a discussion of all the sensitive  
areas of the site and how to protect them.

368  
00:36:03.653 --> 00:36:04.224  
This is,

369  
00:36:04.253 --> 00:36:04.643

370  
00:36:06.114 --> 00:36:06.954  
these red,

371  
00:36:07.014 --> 00:36:07.403



372

00:36:07.434 --> 00:36:09.864  
circles are the 750 foot,

373

00:36:09.864 --> 00:36:09.954

374

00:36:09.954 --> 00:36:10.344  
so,

375

00:36:10.344 --> 00:36:12.773  
called conservation zones that many ecologists

376

00:36:12.773 --> 00:36:12.893

377

00:36:12.893 --> 00:36:20.724  
recommend be observed around vernal pools to protect the forest areas  
that the pool breeding amphibians,

378

00:36:20.934 --> 00:36:21.233  
um,

379

00:36:21.233 --> 00:36:22.494  
need to,

380

00:36:22.523 --> 00:36:22.914

381

00:36:22.943 --> 00:36:24.054  
for in fact,

382

00:36:24.083 --> 00:36:25.284  
most of the year,

383

00:36:25.284 --> 00:36:27.653  
they use the pools mainly in the spring,

384

00:36:27.653 --> 00:36:27.773

385  
00:36:27.773 --> 00:36:28.373  
or

386  
00:36:28.733 --> 00:36:29.063

387  
00:36:29.094 --> 00:36:30.773  
or in the fall for,

388  
00:36:30.773 --> 00:36:30.833

389  
00:36:30.833 --> 00:36:31.224  
for,

390  
00:36:31.224 --> 00:36:31.704

391  
00:36:31.733 --> 00:36:33.173  
for breeding and,

392  
00:36:33.414 --> 00:36:33.653  
um,

393  
00:36:33.653 --> 00:36:37.103  
but they need the forest around the pools,

394  
00:36:37.103 --> 00:36:38.603  
and they need to be able to travel,

395  
00:36:38.603 --> 00:36:38.724

396  
00:36:38.724 --> 00:36:39.623  
freely and safely.

397  
00:36:42.659 --> 00:36:49.289  
Um, but the lead agency should also.

398

00:36:49.943 --> 00:36:57.353  
Educate themselves, on basic conservation principles, and measures  
that can be applied.

399  
00:36:57.384 --> 00:36:58.043  
Generally,

400  
00:36:58.554 --> 00:37:00.594  
this will take some of the guesswork,

401  
00:37:00.623 --> 00:37:01.014

402  
00:37:01.043 --> 00:37:06.923  
out of completing the SEQR process and will help the agency more  
confidently,

403  
00:37:07.043 --> 00:37:08.153  
carry out resource,

404  
00:37:08.153 --> 00:37:14.094  
protection policies and help apply the policies fairly and consistently  
between projects.

405  
00:37:14.153 --> 00:37:19.014  
There are readily available sources of information for more specific  
measures.

406  
00:37:19.014 --> 00:37:29.844  
Once you know about the resources on your site, for example, the New York  
natural heritage program website has conservation guides for many of the  
rare species in New York.

407  
00:37:29.903 --> 00:37:35.963  
Um, for example, this is, first page of the barn owl conservation guide.

408  
00:37:36.503 --> 00:37:44.094  
You see the contents on the right this will include a discussion of  
habitat and the range and,

409  
00:37:44.634 --> 00:37:45.173  
um,

410  
00:37:45.353 --> 00:37:50.184  
and also the conservation and management practices,

411  
00:37:50.543 --> 00:37:51.114  
um,

412  
00:37:51.324 --> 00:37:54.804  
that might be especially relevant when you're helping an applicant.

413  
00:37:54.833 --> 00:37:58.673  
design a new project.

414  
00:37:59.903 --> 00:38:03.414  
The nature serve website,

415  
00:38:03.474 --> 00:38:03.684

416  
00:38:03.713 --> 00:38:07.103  
has lots of information about plants and animals of conservation

417  
00:38:07.103 --> 00:38:08.844  
concern their status,

418  
00:38:08.844 --> 00:38:09.833  
their ecology,

419  
00:38:09.833 --> 00:38:13.103  
and their stewardship. many municipalities now

420  
00:38:13.134 --> 00:38:15.114  
have natural resource inventories,

421  
00:38:15.114 --> 00:38:20.844  
or open space plans that highlight areas of special conservation  
importance to the community.

422  
00:38:23.485 --> 00:38:33.985  
And the biodiversity assessment manual for the Hudson River Estuary  
Corridor gives lots of recommendations for protecting habitats of  
concern.

423

00:38:34.795 --> 00:38:46.525

The Hudsonia website also has habitat fact sheets, with concise summaries about many habitats, including conservation recommendations.

424

00:38:51.300 --> 00:38:51.929

So,

425

00:38:51.925 --> 00:38:55.224

considering the ecological constraints on this site,

426

00:38:55.255 --> 00:38:55.465

um,

427

00:38:55.914 --> 00:38:57.684

including the large forest,

428

00:38:57.715 --> 00:38:58.644

the large meadow,

429

00:38:58.644 --> 00:38:59.574

the vernal pools,

430

00:38:59.574 --> 00:39:00.324

the Calcareous

431

00:39:00.324 --> 00:39:00.985

wet meadow,

432

00:39:01.465 --> 00:39:02.094

the fen,

433

00:39:02.094 --> 00:39:02.605

the forest,

434

00:39:02.605 --> 00:39:06.474

The swamps the streams and the ledges -- many of these features,

435

00:39:06.625 --> 00:39:07.224

you know,

436

00:39:07.255 --> 00:39:09.534

only because of a habitat assessment.

437

00:39:10.195 --> 00:39:21.655

Um, and alternative subdivision design could look something like this, with, 9 lots outlined in red at the south end of the site.

438

00:39:21.684 --> 00:39:35.304

8 of them clustered, near the road so that they minimize, fragmentation of the forest and the large meadow they avoid the conservation zones around the 2 vernal pools.

439

00:39:35.784 --> 00:39:41.545

They don't require disrupting the wet meadow the fen or the hardwood swamp or the ledges.

440

00:39:41.909 --> 00:39:53.010

You might come up with another design that would be similarly protective, but this is one way to use the information from the habitat assessment.

441

00:39:57.025 --> 00:40:11.364

So, finally, I, I just want to remind you that development is forever, in our public roles, in on planning boards, and other municipal positions, involved in environmental reviews.

442

00:40:12.025 --> 00:40:17.094

Our decisions determine the more or less permanent future of the land.

443

00:40:17.489 --> 00:40:29.130

The more we can understand about natural resources, at the early planning stages for new projects, the better equipped we will be to protect biodiversity and water.

444

00:40:30.054 --> 00:40:37.764

Another thing to remember is that most land is and will continue to be in private ownership without any formal conservation status.

445

00:40:37.764 --> 00:40:50.184

So, protection of significant habitats and waters lies most importantly with private landowners. parks and preserves and conservation Easements are wonderful.

446

00:40:50.244 --> 00:41:02.034

but they will ultimately protect only a small fraction of the land needed to support our ecosystems. So, our conservation efforts really must take place on every

447

00:41:02.639 --> 00:41:17.034

small and large parcel, you know, 3 acres, 5, acres, 500 acres, through the actions of individual landowners and these are the land parcels that are subject to new subdivision and development proposals.

448

00:41:17.034 --> 00:41:20.155

and to local environmental reviews.

449

00:41:23.304 --> 00:41:24.054

Right now,

450

00:41:25.014 --> 00:41:26.394

while we still have

451

00:41:26.425 --> 00:41:26.815

452

00:41:27.054 --> 00:41:30.835

lots of large habitat areas and high quality habitats,

453

00:41:31.195 --> 00:41:38.425

we are in the privileged position to guide new land uses in ways that preserve the most important areas.

454

00:41:39.025 --> 00:41:45.264

So, I hope that you'll find the habitat guidelines helpful as you carry out this work in your own community.

455

00:41:45.690 --> 00:41:55.199

So that's much of what I wanted to say and if there are any questions in the

456

00:41:55.199 --> 00:41:58.769

In the Q&A

457

00:41:58.769 --> 00:42:02.130

I can answer a few right now right now.

458

00:42:02.130 --> 00:42:06.000

And

459

00:42:06.000 --> 00:42:14.099

Great Thank you. Gretchen. There are a couple of questions in the Q and a. so we have 1 question.

460

00:42:14.099 --> 00:42:23.849

I have known of consultants who check that threatened and endangered animals are not present just by looking at the DEC website.

461

00:42:23.849 --> 00:42:27.059

Are habitat assessments always required?

462

00:42:27.059 --> 00:42:30.449

How do we know they are done by consulting firms?

463

00:42:30.449 --> 00:42:36.000

464

00:42:36.000 --> 00:42:46.440

They are, they are rarely done by consulting firms if they have done an on site assessment.

465

00:42:46.440 --> 00:43:01.255

That will be evident in the information that they submit. I will to restate that -- rare species surveys are rarely done. or if they have been done, they will be reported.

466

00:43:01.585 --> 00:43:05.184

Um, habitat assessments are sometimes done.

467

00:43:05.304 --> 00:43:05.815

Um,

468

00:43:06.144 --> 00:43:06.804

and,

469

00:43:06.835 --> 00:43:07.074

470

00:43:07.074 --> 00:43:13.704



you need to read them carefully to see if they are done in a way that would actually identify,

471

00:43:13.735 --> 00:43:14.184

472

00:43:14.605 --> 00:43:15.085

473

00:43:15.235 --> 00:43:16.135

habitats,

474

00:43:16.164 --> 00:43:16.554

475

00:43:16.585 --> 00:43:22.855

of conservation concern that might be supporting species of conservation concern.

476

00:43:27.449 --> 00:43:31.949

Thanks for that.

477

00:43:31.949 --> 00:43:41.695

I want to encourage folks we do have about 5 or 6 minutes planned in for Q & a, at this time. So we're not rushed for time. Which is great.

478

00:43:41.755 --> 00:43:56.364

So, please, do, if you have questions for Gretchen, use the Q and a, to add those in and now I'll go to another question that is in the Q and a, how does the professional person or people use assistance

479

00:43:56.639 --> 00:44:01.769

From local community members? is a public meeting useful.

480

00:44:03.780 --> 00:44:07.260

Yes,

481

00:44:07.855 --> 00:44:08.905

It can be,

482

00:44:09.355 --> 00:44:10.014

um,

483  
00:44:10.945 --> 00:44:11.425

484  
00:44:11.875 --> 00:44:12.445

485  
00:44:12.474 --> 00:44:22.315  
that information can actually be very helpful to a consultant. community members who are knowledgeable about the plants and animals and habitats,

486  
00:44:22.585 --> 00:44:22.945

487  
00:44:22.974 --> 00:44:26.155  
might be able to convey information that is simply,

488  
00:44:26.394 --> 00:44:26.815

489  
00:44:27.025 --> 00:44:27.894  
unavailable.

490  
00:44:27.925 --> 00:44:30.324  
otherwise,

491  
00:44:31.105 --> 00:44:38.244  
so, and certainly a community meeting might be a good way to get at some of that information.

492  
00:44:38.244 --> 00:44:50.545  
There are other ways that it can be solicited from the public, that information does need to be vetted, to make sure that the observers are reliable.

493  
00:44:50.574 --> 00:44:59.215  
But there are lots of excellent naturalist who live in the region and can be wonderful sources of information.

494  
00:45:01.409 --> 00:45:05.309  
I have a follow up of my own about,

495

00:45:05.309 --> 00:45:20.125

You know, these habitat assessments could have information about protected species and that's information that we don't necessarily want broadcasted/ posted on the town's website, you know, freely available to protect those species.

496

00:45:20.155 --> 00:45:30.534

Could you talk about kind of how to handle that information to be protective of the locations of species that might be vulnerable to collecting, or other disturbance.

497

00:45:30.869 --> 00:45:37.050

Yeah, now that's a very good point. We are

498

00:45:37.050 --> 00:45:41.909

and we encourage everyone to be very careful about the

499

00:45:41.909 --> 00:45:54.925

ways that they share information about rare species. Rare plants and rare animals, are subject to illegal collecting.

500

00:45:55.494 --> 00:45:59.815

Um, some animals are subject to harassment.

501

00:45:59.905 --> 00:46:11.755

Um, some plants have been over collected in the past by, over enthusiastic people, and it has depleted their populations.

502

00:46:12.235 --> 00:46:12.744

Um,

503

00:46:12.894 --> 00:46:16.585

some of our rare snakes in particular have been,

504

00:46:16.614 --> 00:46:16.885

505

00:46:16.914 --> 00:46:18.355

had been over collected,

506

00:46:18.355 --> 00:46:20.635

have been intentionally killed,

507  
00:46:21.054 --> 00:46:21.505  
um,

508  
00:46:21.505 --> 00:46:22.014  
for,

509  
00:46:22.105 --> 00:46:22.494

510  
00:46:22.525 --> 00:46:23.724  
for no good reasons,

511  
00:46:23.724 --> 00:46:25.375  
but reasons that people are,

512  
00:46:25.405 --> 00:46:25.675

513  
00:46:25.764 --> 00:46:27.144  
simply unaware,

514  
00:46:27.684 --> 00:46:28.135  
um,

515  
00:46:28.164 --> 00:46:30.835  
of their importance and their value

516  
00:46:30.864 --> 00:46:31.255  
um.

517  
00:46:31.530 --> 00:46:39.119  
Um, importance in the landscape, we do, try to, keep.

518  
00:46:39.144 --> 00:46:39.954  
Rare species,

519  
00:46:39.954 --> 00:46:40.554  
location,

520  
00:46:40.554 --> 00:46:41.275

information,

521

00:46:41.275 --> 00:46:42.235

confidential,

522

00:46:42.235 --> 00:46:49.945

except when it needs to be made known to a particular individual or agency,

523

00:46:50.155 --> 00:46:54.054

or in some cases known to the public where there is

524

00:46:54.324 --> 00:46:54.715

525

00:46:55.074 --> 00:46:55.284

526

00:46:55.315 --> 00:46:56.965

possibly an imminent threat.

527

00:46:57.655 --> 00:46:58.164

Um.

528

00:46:58.530 --> 00:47:13.320

So, to the extent that you can keep the information confidential, do that, but it, if it is needed in the, review of an important project,

529

00:47:13.320 --> 00:47:19.679

then, in some cases, it can be made public, but, do that do that carefully

530

00:47:22.440 --> 00:47:29.849

Thanks and we have another question asking if you could talk about type 1 actions.

531

00:47:29.849 --> 00:47:33.750

And how habitat assessment might.

532

00:47:33.750 --> 00:47:39.719

Result in a full environmental impact statement for a project.

533

00:47:40.980 --> 00:47:50.280

Christine, could you repeat that? My mic was off for a second. Okay. Can you talk about type 1 actions?

534

00:47:50.280 --> 00:47:58.230

And how habitat assessment might elevate an EAF to a full environmental impact statement.

535

00:47:59.849 --> 00:48:06.719

Um, yeah,

536

00:48:06.719 --> 00:48:14.639

I guess there are situations where it could do that if the habitat assessment

537

00:48:14.639 --> 00:48:28.139

Turned up the habitat, or even the known occurrence of an endangered or threatened species

538

00:48:28.704 --> 00:48:43.315

Um, I suppose it could elevate the review to requiring an environmental impact statement. It would not necessarily do that, to my knowledge.

53

00:48:43.735 --> 00:48:47.184

Um, and the reason I say that is that if a.

540

00:48:48.054 --> 00:48:55.465

site is known to harbor an endangered, or threatened species.

541

00:48:56.065 --> 00:48:56.514

Um,

542

00:48:56.965 --> 00:49:00.295

an alternative is to simply design a,

543

00:49:00.355 --> 00:49:00.684

544

00:49:00.744 --> 00:49:03.385

the new project in ways that,

545

00:49:03.474 --> 00:49:03.773

546

00:49:03.804 --> 00:49:04.614  
avoids,

547

00:49:04.675 --> 00:49:05.065

548

00:49:05.695 --> 00:49:06.175  
or,

549

00:49:06.204 --> 00:49:06.655  
um,

550

00:49:06.775 --> 00:49:10.824  
or extremely minimizes any impacts to

551

00:49:10.855 --> 00:49:11.934  
to those species.

552

00:49:12.385 --> 00:49:15.925  
Um, and so I think that a, uh.

553

00:49:16.230 --> 00:49:30.804  
A project could proceed without an EIS in in that case, if it were simply assumed that the, the species is there, that the habitat has been delineated and the project has been designed to avoid it.

554

00:49:33.355 --> 00:49:46.764  
If there are other, if it's the kind of project where those kinds of measures cannot be designed into it, it's possible that the lead agency, would require an EIS.

555

00:49:50.340 --> 00:50:00.150  
Thank you for that. we're going to do one more question and then Ted is going to start his presentation. So, Ted

556

00:50:00.150 --> 00:50:03.510  
Ingrid is about to pass you the controls.

557

00:50:03.715 --> 00:50:16.375

And for folks, we have about 3 questions, we won't be able to get to in this question and answer period, but we may be able to at the very end because we have a question and answer time scheduled there too. So hang on.

558

00:50:16.914 --> 00:50:19.255

so the question that we have,

559

00:50:19.559 --> 00:50:31.260

Is from someone serving on a planning board who says that it seems the forms submitted by an applicant would always err on the side of not finding rare species.

560

00:50:31.260 --> 00:50:38.159

So, should we on the planning board always do a site visit before we decide to take their word for what exists.

561

00:50:39.449 --> 00:50:42.750

Yes, I would say.

562

00:50:42.835 --> 00:50:43.554

In general,

563

00:50:43.554 --> 00:50:45.025

whatever is on the EAF

564

00:50:45.775 --> 00:50:48.085

the planning board should make a site visit,

565

00:50:48.474 --> 00:50:48.835

566

00:50:49.045 --> 00:50:55.945

or at the very least have the conservation advisory council make a site visit and give a report to the planning board

567

00:50:55.974 --> 00:50:58.494

the site should always be seen

568

00:50:59.244 --> 00:50:59.695

and,

569



00:50:59.695 --> 00:51:00.114  
um,

570  
00:51:00.144 --> 00:51:00.625  
so,

571  
00:51:01.135 --> 00:51:01.824  
um.

572  
00:51:02.875 --> 00:51:17.034  
that's not to say that a habitat assessment always needs to be done -  
sometimes a site visit by knowledgeable people on the planning board or  
the conservation advisory council might be enough.

573  
00:51:17.425 --> 00:51:19.585  
Um, but,

574  
00:51:19.860 --> 00:51:29.909  
that's a decision that can be made at that stage. But I would never  
simply.

575  
00:51:29.909 --> 00:51:35.219  
look at an EAF and if a box is checked, uh.

576  
00:51:35.219 --> 00:51:42.960  
no, I, I wouldn't I would never just leave it at that. A site visit  
is always a good idea.

577  
00:51:46.889 --> 00:51:51.630  
Thank you so, TED, you should have the controls.

578  
00:51:51.630 --> 00:51:56.250  
And be able to share your slides and get started.

579  
00:51:59.280 --> 00:52:04.050  
Okay, thank you. Christine. Can you hear me? Okay.

580  
00:52:04.050 --> 00:52:10.139  
Yes, Okay. I do not have any controls yet.

581  
00:52:12.539 --> 00:52:16.829  
you should be able to share your screen at this point.

582

00:52:16.829 --> 00:52:19.980

Or share your file again.

583

00:52:19.980 --> 00:52:24.780

Share the file again. Okay. Well.

584

00:52:24.780 --> 00:52:27.809

Let's see, let's make sure.

585

00:52:33.690 --> 00:52:42.000

I think it's gonna go through that same loading process.

586

00:52:43.559 --> 00:52:47.429

So, we'll just wait a moment for that to happen.

587

00:52:59.610 --> 00:53:02.820

Okay. can you see that.

588

00:53:02.820 --> 00:53:12.420

Yes, great. Okay. Terrific. All right. Well, good afternoon. Everyone and thank you for attending

589

00:53:13.284 --> 00:53:13.764

590

00:53:13.764 --> 00:53:15.835

the habitat assessment webinar,

591

00:53:16.224 --> 00:53:20.934

what I'd like to do is to walk you through one of the case studies,

592

00:53:21.684 --> 00:53:34.315

that the Estuary program is focused on and that's the town of Warwick which is now in its 12th year with what is called a biodiversity conservation overlay district,

593

00:53:34.375 --> 00:53:37.434

so I'd like to tell you a little bit about the district how it works.

594

00:53:38.394 --> 00:53:47.485

But before I do that, I think it's important to tell you a little bit about the context for it. So, what I'm going to do, I'm going to go to the next slide.

595

00:53:47.485 --> 00:54:01.945

And this basically is going to be the topics that we'll be talking about, which includes the southern Wallkill biodiversity plan, which included the town of Warwick and 2 other towns that we'll get to in a moment.

596

00:54:02.695 --> 00:54:09.625

I'd like to take you through how we went about identifying and then

597

00:54:10.164 --> 00:54:13.135

Integrating a biodiversity

598

00:54:13.135 --> 00:54:16.255

conservation district into its planning and zoning program,

599

00:54:17.125 --> 00:54:24.775

and it really started first with its comprehensive plan and then integrated that plan with the zoning,

600

00:54:26.003 --> 00:54:29.514

the zoning regulations in effect today.

601

00:54:29.514 --> 00:54:31.045

And for the last 12 years now.

602

00:54:31.320 --> 00:54:45.989

Have involved the planning board in the review of both subdivisions as well as site plans. And then I'd like to give you just a very brief overview of the outcomes of the process in Warwick.

603

00:54:45.989 --> 00:54:49.769

So, let's see, let's go to the.

604

00:54:50.784 --> 00:55:04.494

Let's go to the next one, so a little bit about the context for any of you, that may not be familiar with Warwick. It is a town That's right on the New Jersey border. It's about 50 miles north west of New York City.

605

00:55:05.034 --> 00:55:12.385

It's a large town. It's the largest town in Orange County in land area, and even in population. It has 32,000 residents.

606

00:55:12.385 --> 00:55:21.085

That's larger than a lot of the cities that we have in the Hudson Valley, like Poughkeepsie, Peekskill, Kingston, places like that.

607

00:55:21.085 --> 00:55:27.655

And one of the features of Warwick is that it has a very large area of black dirt,

608

00:55:27.655 --> 00:55:38.545

which is a very fertile farmland that the town shares with Waywayanda, Minisink, Goshen, and Chester as well.

609

00:55:38.545 --> 00:55:52.045

And not, surprisingly, agriculture is the largest industry in the town, and the town has established a purchase of development rights program and has protected over 4,000 acres of agricultural lands in the community.

610

00:55:52.045 --> 00:56:02.574

But that's not all that it's protected. And that's what I'm going to get into next, in, in terms of trying to give you a little bit of a background as to how all of this happened.

611

00:56:02.574 --> 00:56:12.085

Because the process of this really started about 30 years ago, which coincidentally was when I started to work for Warwick as their town planner.

612

00:56:12.085 --> 00:56:19.135

What had happened is the town had a new comprehensive plan and new zoning That was put into place in 1989.

613

00:56:19.135 --> 00:56:30.684

and as soon as the zoning came into place, what started to happen was very large development projects, started to appear. 1st, a 240 lot subdivision than a several hundred unit townhouse development appeared.

614

00:56:30.684 --> 00:56:45.264

And then the Sterling Forest development, the mother of all projects in the Hudson Valley appeared, and that was 13,500 residential units and 8 Million square feet.

615

00:56:49.769 --> 00:57:03.030

Commercial development spread over the town of Warwick, the town of Tuxedo, and the town of Monroe. So there were 3 different towns involved. So that was the, the overall background around 1992 and.

616

00:57:03.295 --> 00:57:15.235

Residents started showing up at town hall saying there's something wrong with this picture. This is not what we anticipated when we got our new zoning and 1989 and so the town began a new planning process at that time.

617

00:57:15.235 --> 00:57:21.054

And after a number of different committees, all came to the same conclusion.

618

00:57:21.054 --> 00:57:33.355

What they found was that the residents really had a vision for their community, and that was to preserve the natural environment and the rural quality of life of the community.

619

00:57:33.355 --> 00:57:43.014

And these 2 different factors are really intricately linked together through the planning program in Warwick.

620

00:57:43.014 --> 00:57:46.405

because by being a rural community,

621

00:57:46.405 --> 00:57:48.804

and having a rural quality of life,

622

00:57:48.804 --> 00:57:56.125

it means really that nature is going to be a predominant influence in the community in terms of its landscapes.

623

00:57:56.125 --> 00:57:56.454

So,

624

00:57:56.454 --> 00:57:56.755

that nature,

625

00:57:56.755 --> 00:57:58.434

the fields,

626

00:57:58.434 --> 00:58:00.625  
the forest, the farms,

627  
00:58:00.625 --> 00:58:01.344  
the,

628  
00:58:01.344 --> 00:58:02.244  
the wetlands,

629  
00:58:02.275 --> 00:58:06.264  
the water resources in the community our predominant,

630  
00:58:06.264 --> 00:58:12.144  
and development is takes really 2nd place within the community.

631  
00:58:14.304 --> 00:58:14.755  
Doesn't mean,

632  
00:58:14.755 --> 00:58:29.605  
that it doesn't exist or that it can't grow but it means that the rural  
quality of life is protected simply by having lower densities of  
development and where the natural environment is protected and

633  
00:58:29.605 --> 00:58:30.175  
reserved.

634  
00:58:30.565 --> 00:58:41.844  
And so the town created this priority to preserve its farms to preserve  
its environmentally sensitive areas and especially areas like wetlands  
and habitats.

635  
00:58:42.295 --> 00:58:49.704  
And so the town's 1999 plan had a number of recommendations within it for  
accomplishing these sorts of purposes.

636  
00:58:49.704 --> 00:58:58.434  
And one of the things that came out of it was a purchase of development  
rights program where the town sponsored a referendum.

637  
00:59:01.525 --> 00:59:10.105  
For floating a bond to be able to purchase develop purchase development  
rights on farms and other open space in the community.

638

00:59:10.795 --> 00:59:22.465

And then shortly after that, the town because of the 1999 plan, really had a very different focus for the community. New zoning was adopted in 2002.

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00:59:26.244 --> 00:59:35.905

And this put in place, both the 1999 plan, had policies and the 2002 zoning law had a purposes statement that was coordinated.

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00:59:35.934 --> 00:59:49.554

So, that as far as habitats and biodiversity, it basically said that the town's policy is to protect habitats for diversity of flora

641

00:59:49.554 --> 00:59:55.344

And fauna, to protect wetlands as important environmental resources and to protect environmentally sensitive areas.

642

01:00:00.864 --> 01:00:07.525

So, since that time, the 1999 plan, the town worked to update its comprehensive plan.

643

01:00:07.525 --> 01:00:21.835

It did so in 2008, 2016, and overwhelmingly the town policies to protect habitats and water quality really came to the forefront. And this is what people continued to want to see happen.

644

01:00:21.835 --> 01:00:32.275

They did not want to see the suburbanization that was starting to emerge in the early 1990. But they wanted to make sure that the beautiful farms and, and natural areas within the community.

645

01:00:32.275 --> 01:00:46.945

Were protected for present and future generations and so really what that meant was that we had to find new tools to be able to plan for protection of habitats and protection

646

01:00:47.184 --> 01:00:48.204

of water quality.

647

01:00:48.204 --> 01:01:02.335

And along in that time, period, before the next plan update happened, the southern wallkill biodiversity plan appeared, it was actually a multi-year effort.

648

01:01:09.804 --> 01:01:21.204

But it was presented to the town in 2005, and it really had a whole series of compelling recommendations that, I think made a lot of sense to the community. It made sense to town officials.

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01:01:21.204 --> 01:01:35.994

And so we began a process to study the plan to look carefully at what were the goals and purposes of the southern wallkill biodiversity plan and a number of things came out of

650

01:01:35.994 --> 01:01:36.264

it.

651

01:01:36.264 --> 01:01:48.715

1st, of all. Just to tell you a little bit about the southern Wallkill biodiversity plan, it was prepared by the metropolitan conservation alliance and it was a partnership between that, which was a part of the wildlife conservation society.

652

01:01:48.715 --> 01:01:59.545

The Hudson River Estuary program was a partner in it and the 3 towns were Warwick, Chester, and Goshen. Each of those 3 towns participated in this process.

653

01:01:59.574 --> 01:02:13.764

It went on for several years and the goal of preparing, and then disseminating the biodiversity plan was to establish a regional approach to land use planning.

654

01:02:13.764 --> 01:02:19.614

So that wildlife habitats could be conserved within all 3 communities.

655

01:02:21.985 --> 01:02:36.954

One of the findings of the plan was that the southern Wallkill area had impressive habitat diversity, but it also faced intense development pressures as well. And just quoting from the plan itself.

656

01:02:36.985 --> 01:02:46.135

There was a wave of sprawl, pulsing through the region and yet vibrant habitats and diverse assemblage are found in all 3 towns.

657

01:02:46.375 --> 01:02:57.324

And so, one of the things which the plan goals for the effort was to minimize those effects and sprawl, which aligned very much



658

01:02:57.324 --> 01:03:05.755

with the kinds of things that that residents in the town were trying to bring about for the town of Warwick.

659

01:03:06.175 --> 01:03:17.454

And I think it's important to note that one of the things that the biodiversity plan was very careful to articulate was that there was a need to strike a better balance between economic growth

660

01:03:17.730 --> 01:03:21.510

And environmental integrity to have both at the same time.

661

01:03:24.835 --> 01:03:26.304

So essentially,

662

01:03:26.844 --> 01:03:28.224

the plan itself,

663

01:03:28.614 --> 01:03:29.304

um,

664

01:03:29.394 --> 01:03:32.965

it relied on a number of things. One was,

665

01:03:32.994 --> 01:03:33.414

um,

666

01:03:33.414 --> 01:03:37.735

the geographic information system spatial data sets

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01:03:37.764 --> 01:03:40.945

which were still under development at that time,

668

01:03:40.945 --> 01:03:42.235

and they were emerging.

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01:03:42.474 --> 01:03:55.974

So that there was very good information on a variety of different natural resources available for this area of Southern Orange County. and it was supplemented with field surveys conducted by the team.

670

01:03:56.244 --> 01:04:11.184

Um, Michael Klemens was one of the persons involved in that. And they conducted their field surveys throughout the 3 towns on both public and private lands. They worked with partners, these were volunteers from each of the towns.

671

01:04:11.184 --> 01:04:22.344

And in Warwick it happened to be the conservation advisory board. They also contacted landowners for permission to be able to conduct the field surveys on private properties as well.

672

01:04:22.764 --> 01:04:28.795

So, for a period of 7 years from 1997 to 2004, these field surveys were undertaken.

673

01:04:28.795 --> 01:04:41.005

They integrated New York natural heritage program data and data that had been developed by Orange County for preparation of their county open space plan.

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01:04:44.155 --> 01:04:56.755

Um, they had a team of technical advisors that assisted them with development of the plan itself. They provided progress reports to the partners on a regular basis.

675

01:04:57.054 --> 01:05:03.894

And then they assembled it all, by analyzing the data, preparing maps of the 3 towns.

676

01:05:03.925 --> 01:05:15.684

And then preparing the plan, which included not only the rationale for why it was important to protect biodiversity and habitats within 3 towns. But also with...

677

01:05:21.059 --> 01:05:25.409

the findings that were in the southern wallkill plan.

678

01:05:25.409 --> 01:05:30.360

So, Warwick, uh

679

01:05:34.349 --> 01:05:40.050

And, you can see on this map that - Ted, you just cut out for a second.

680

01:05:40.050 --> 01:05:43.230  
I'm going to start the slide. You still hear me? Yeah.

681  
01:05:43.230 --> 01:05:57.480  
Can you hear me now? Okay. Yeah, I'll just repeat what I, what I just said. So essentially what you're looking at now is the map that was prepared for each of the 3 towns. Can you see the cursor.

682  
01:05:59.130 --> 01:06:04.974  
Can you see my cursor moving on the screen? No, unfortunately not. No. Okay. Okay.

683  
01:06:04.974 --> 01:06:16.704  
Well, if you look at the map, the area, right along the flat line running from Northwest to Southeast that's Warwick's border on New Jersey.

684  
01:06:16.974 --> 01:06:29.125  
And then up to the left is Goshen and to the right is the town of Chester and the orange areas are the areas that had been identified in the southern wallkill plan as important for biodiversity.

685  
01:06:29.664 --> 01:06:30.864  
And so,

686  
01:06:30.864 --> 01:06:32.724  
when Warwick took a look at the plan,

687  
01:06:32.724 --> 01:06:34.164  
took a look at a recommendations,

688  
01:06:34.195 --> 01:06:46.945  
it seemed to be in good alignment with kinds of policies that where we had already developed and integrated into their comprehensive plan to support protection of habitats in biodiversity.

689  
01:06:47.844 --> 01:07:02.394  
So, at that time, Warwick was ready to act on it and to begin the process of identifying a way to be able to take the information from the southern Wallkill plan, and translated it into zoning amendments.

690  
01:07:02.425 --> 01:07:16.074  
And at that time, we invited Chester and Goshen to cooperate. And to coordinate their efforts, if they were interested, and they were both

certainly interested but I think the timing wasn't right for them to be able to do it.

691

01:07:16.074 --> 01:07:22.135

And so, at that time Warwick went it alone. And what we did was to.

692

01:07:22.920 --> 01:07:26.909

Um, we developed.

693

01:07:26.909 --> 01:07:33.565

A whole new section of the zoning, and I'm going to get into a moment how all of that works.

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01:07:33.565 --> 01:07:36.505

But what I wanted to do is to tell you that,

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01:07:36.684 --> 01:07:41.994

when the biodiversity conservation overlay district was considered,

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01:07:41.994 --> 01:07:42.835

by the town,

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01:07:43.105 --> 01:07:48.474

there were other portions of the towns planning tools that,

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01:07:48.925 --> 01:07:53.425

that they already had that address the issues of water

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01:07:53.425 --> 01:08:01.675

quality and habitat and protection of rural character and so forth and so some of the other tools that were used,

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01:08:01.675 --> 01:08:03.715

and it's important to point this out,

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01:08:03.715 --> 01:08:12.925

because I think some of them have worked in concert with the biodiversity overlay zoning that you'll learn more about in just a few moments.

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01:08:13.494 --> 01:08:27.715

Conservation subdivision Also known as cluster development or cluster subdivision was one that was part of the 2002 zoning, the town developed and enacted in the inter municipal agreement with a village of Warwick.

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01:08:27.715 --> 01:08:36.175

So, that density could be transferred from areas in the town that the town wanted to see protected, to the village.

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01:08:36.175 --> 01:08:45.024

The town had a whole section devoted to open space in the zoning and there were other

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01:08:46.345 --> 01:09:01.045

Aspects of it as well that I think are important for any community that is considering this kind of regulation to also examine to see whether or not it has applicability for the community.

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01:09:01.255 --> 01:09:10.314

And that would be things like, smart growth tools like traditional neighborhood developments - Warwick is one of the very few communities was the first in the Hudson Valley

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01:09:10.314 --> 01:09:20.604

I believe that created a community preservation plan, which is essentially it's a plan That has been provided by the New York state legislature

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01:09:20.604 --> 01:09:31.375

That allows the town to collect a real estate transfer tax on real estate transactions from the buyers of property that are moving into Warwick.

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01:09:31.885 --> 01:09:40.675

And then the transfer tax revenues can be used by the town to protect lands that have been identified within the community preservation plan.

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01:09:42.354 --> 01:09:55.614

So, basically, the town studied the southern Wallkill plan, when you look at the map here on the right and you see the biodiversity zoning overlay, you can see that these areas

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01:09:55.914 --> 01:10:05.244

If you were to compare that with the map that I showed you showing Goshen and Chester would line up almost Precisely- so.

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01:10:05.520 --> 01:10:19.164

The town took the areas identified as important for biodiversity and established the biodiversity conservation overlay zoning district. It was important.

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01:10:19.164 --> 01:10:34.135

I think, from the standpoint of the leadership role that the town supervisor Mike Sweeten took on this. Mike worked very hard to make sure that this was

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01:10:34.649 --> 01:10:46.829

Properly vetted as far as public engagement with the community to make sure that people were on board with it. it went through a number of different changes. and

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01:10:47.395 --> 01:11:02.154

It wound up being adopted in 2010, and I think it's important to understand that when this was done, the town did already have some other ways to be able to balance the biodiversity conservation with

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01:11:06.239 --> 01:11:14.579

Development that would occur, for instance, in Hamlet areas where these would be done with compact, mixed use development.

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01:11:15.595 --> 01:11:29.965

So, a little bit about the overlay process, and how this works for any of you that are not familiar with an overlay zoning district. Essentially, it takes the existing zoning district uses and density.

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01:11:30.270 --> 01:11:34.409

And it treats them by doing nothing.

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01:11:34.645 --> 01:11:46.375

Okay, so all of the standard zoning regulations that are affect for residential office commercial industrial developments. They all remain exactly the same.

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01:11:46.675 --> 01:12:00.774

And the way that an overlay district works is to put on top of the regulations for land uses and for the density of those uses. And imposes new rules.

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01:12:00.774 --> 01:12:14.814

That would apply specifically designed to conserve a specific resource in this case biodiversity. What You're seeing here on the graphic on the right side of your image. This is simply an overlay district.

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01:12:14.814 --> 01:12:27.774

That could be imposed for a stream corridor. For instance, where a community wanted to protect the water quality and upland habitats or riparian habitat along a stream corridor and so.

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01:12:28.704 --> 01:12:40.465

Basically, in devising the rules for this, you have 2 different components. One is the zoning map and that's the one that I'll just go back to this.

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01:12:40.645 --> 01:12:40.854

So,

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01:12:40.854 --> 01:12:49.225

you have a new map and the map that you're seeing on the right of the screen is in addition to the regular zoning map,

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01:12:49.225 --> 01:12:55.675

that shows all of the residential commercial and office districts that exist within the community.

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01:12:56.579 --> 01:13:10.380

And the rules, they are specifically key to things like, identification of habitats, onsite assessments by a qualified biologist of habitats and.

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01:13:10.380 --> 01:13:20.760

Importantly, and this is a follow up on much of what Gretchen was talking about is it redesigned to avoid identified biodiversity areas.

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01:13:20.935 --> 01:13:26.935

Right. and this gives you a little idea of the kinds of things That Warwick was also considering at the same time.

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01:13:26.935 --> 01:13:36.805

And, in fact, the time when biodiversity overlay district was enacted in 2010, the town also had proposed a traditional neighborhood development in one of its hamlet areas.

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01:13:36.805 --> 01:13:37.375

And so,

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01:13:37.375 --> 01:13:45.774

I think the important takeaway from that is that when you're doing planning for conservation of a specific resource,

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01:13:45.774 --> 01:13:50.545

it's important to take note of the potential for any kind of effects,

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01:13:50.545 --> 01:13:52.404

like the effect on affordable housing,

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01:13:52.404 --> 01:14:02.364

or the effect on the availability of housing for people and so this aligns with one of the recommendations that was made in the southern walkkill plan,

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01:14:02.364 --> 01:14:05.635

that thoughtful development adds value to and interconnects protected areas.

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01:14:05.664 --> 01:14:15.145

And so essentially your comprehensive plan should be a document that guides both growth and environmental protection within the community.

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01:14:16.529 --> 01:14:21.119

So, the district intent of the

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01:14:21.119 --> 01:14:23.154

biodiversity conservation overlay district,

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01:14:23.574 --> 01:14:26.185

it's pretty clear to conserve biodiversity,

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01:14:26.215 --> 01:14:36.595

reduce habitat fragmentation and minimize habitat loss while providing for residential and commercial development in in an appropriate locations.

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01:14:36.835 --> 01:14:48.114

And I think it's important to understand the connection between those 2, because this biodiversity overlay district did not change any of the underlying zoning rules.



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01:14:48.114 --> 01:15:00.595

So that if people were entitled, property owners were entitled to a certain number of development units, a certain number of lots, it did not have any change in the density that would be applied to them.

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01:15:01.045 --> 01:15:03.595

But it did work with.

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01:15:04.020 --> 01:15:12.204

The cluster development rules that the town had for conservation subdivisions within the biodiversity conservation overlay district.

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01:15:12.265 --> 01:15:20.725

And so what I want to tell you about next is the applicability of the work that goes on.

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01:15:21.270 --> 01:15:26.755

In the biodiversity conservation overlay districts. so when an application is filed the first thing,

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01:15:26.755 --> 01:15:28.944

the planning board does is to,

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01:15:29.154 --> 01:15:29.784

um,

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01:15:29.994 --> 01:15:31.375

to look at whether or not,

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01:15:31.375 --> 01:15:33.444

it's a major or a minor subdivision,

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01:15:33.805 --> 01:15:37.704

all major subdivisions are subject to the habitat assessments.

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01:15:38.005 --> 01:15:47.545

However, if it's a minor subdivision, and it's proposed as a minor cluster subdivision, then it does not need to go through the habitat assessment process.

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01:15:48.085 --> 01:16:02.125

It's a conventional subdivision and a minor one and that's essentially 4 or fewer lots that it does need to go through the habitat assessment process. So there's some exemptions for that for any site plan. If it disturbs more than a quarter acre of land.

755

01:16:02.364 --> 01:16:13.284

If it's within, if any development is within 100 feet of water, has a special habitat, a vernal pool, or is endangered threatened species habitat, then it does need to go through the habitat assessment process.

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01:16:14.520 --> 01:16:22.020

And the assessment process, of course, there's an identification of the habitats.

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01:16:22.045 --> 01:16:29.635

Any sort of development intrusions into those habitat areas are identified along with mitigation to avoid impacts under SEQOR.

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01:16:29.994 --> 01:16:37.225

And then the planning board makes a determination as to whether, or not further work a site specific habitats assessment is required.

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01:16:37.494 --> 01:16:50.395

And that really relates to whether, or not there is going to be the potential for any impacts identified on the preliminary work that's been done to assess habitats on that site.

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01:16:50.454 --> 01:16:51.324

And so,

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01:16:51.625 --> 01:16:55.555

the assessment process itself it's based on the methodology,

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01:16:55.555 --> 01:17:00.864

and the biodiversity assessment manual for the Hudson River Estuary corridor prepared by Hudsonia

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01:17:00.864 --> 01:17:01.375

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01:17:01.404 --> 01:17:05.664

and Gretchen - Gretchen was involved in the review of the,

765

01:17:05.814 --> 01:17:06.414  
um,

766

01:17:06.444 --> 01:17:11.125  
the methods and the requirements for conducting the habitat assessments.

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01:17:11.244 --> 01:17:17.725  
Karen Schneller-McDonald is a biologist who was also involved in the development of the language within this,

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01:17:17.725 --> 01:17:23.845  
and the kinds of things that have to be identified in terms of the habitat, soil, geology,

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01:17:24.175 --> 01:17:25.524  
the habitat types,

770

01:17:25.795 --> 01:17:26.784  
vegetation,

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01:17:26.814 --> 01:17:27.354  
adjacent,

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01:17:27.384 --> 01:17:29.574  
habitat and that's an important one to,

773

01:17:29.814 --> 01:17:30.324  
um,

774

01:17:30.354 --> 01:17:42.954  
to address the issues of connectivity with other habitats and other sites other than the site specific ones that's being done for an application that's been filed by with a planning board.

775

01:17:44.005 --> 01:17:52.375  
Things like acreage lost any areas that are impaired by development these all have to be integrated into the habitat assessment process.

776

01:17:54.265 --> 01:18:04.284  
Special areas must be identified. the condition and the quality of the habitat, whether or not, there's any endangered species and so forth.

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01:18:04.494 --> 01:18:14.125

And then there's an evaluation of that habitat for breeding nursery, foraging, nesting dispersal and so forth. That is also integrated into that process.

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01:18:15.835 --> 01:18:30.623

Reporting is done and this follows pretty much on what Gretchen was talking about, in terms of the report to the planning board location map, The methods that were used in the assessment, the results of the assessment, and most importantly impacts.

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01:18:30.654 --> 01:18:33.895

What's the magnitude of the impacts on the habitat area?

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01:18:34.225 --> 01:18:48.085

The spatial extent, the duration, the probability of occurrence - and you can see that the kinds of example that on the right of your screen is, this is actually from the zoning and it shows how the species of conservation

781

01:18:48.390 --> 01:18:59.640

Conservation concern would be identified and characterized within the reports for the species, for the habitats, for the quality, the habitat and so forth.

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01:19:02.335 --> 01:19:14.694

And so, just in, in closing here, the habitat assessments, they can take on a very simple, 2 page report such as the one

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01:19:14.694 --> 01:19:25.345

you see on the left of your screen. the one on the right of the screen - the ecological resources report. this was a 100 page document, it was much more involved.

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01:19:25.345 --> 01:19:39.175

It was a much larger development, but the range in the kinds of reporting that we get really depends on the extent of the potential impact on the habitat areas that are identified as part of the habitat assessment process.

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01:19:40.944 --> 01:19:52.255

And so the one thing that I can tell you about the outcomes is that, this process is integrated with the SEQR review of applications.

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01:19:52.645 --> 01:19:59.935

And the findings of the habitat assessment process are directly imported into the SEQR review process.

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01:19:59.965 --> 01:20:10.074

There's an identification of mitigation were alternatives and in all of the years that I've worked on this - and I've been involved in this for the for 12 years and it's been in effect

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01:20:10.074 --> 01:20:23.395

Now, there has not been 1 project where there has been any loss of lots as a result of identification of biodiversity. And on the contrary, what work has done was that there's been hundreds of

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01:20:23.814 --> 01:20:34.704

Lots within the biodiversity conservation overlay district that have been created, and they've been created with redesign plans and the one that you can see on the right here is a redesign plan.

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01:20:34.944 --> 01:20:35.454

Um,

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01:20:35.484 --> 01:20:41.034

the area on the far right of the graphic was wetlands as both the state and federal wetland,

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01:20:41.305 --> 01:20:49.194

the applicant had originally proposed 100 foot buffer but because of a sensitive habitat within that wetland,

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01:20:49.345 --> 01:20:49.944

um,

794

01:20:50.154 --> 01:20:50.784

the,

795

01:20:50.845 --> 01:20:51.475

um,

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01:20:51.595 --> 01:20:55.465

the area of the buffer was extended to 300 feet,

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01:20:55.465 --> 01:20:57.625

so if you're looking at the map,

798  
01:20:57.625 --> 01:20:58.555  
and you know what you're seeing there,

799  
01:20:58.555 --> 01:21:11.994  
you're looking at septic systems and houses and driveways and that sort  
of thing - they were all moved out of the area and moved more than 300  
feet away from the wetland in order to protect the areas of adjoining  
that,

800  
01:21:11.994 --> 01:21:12.954  
that special habitat.

801  
01:21:15.835 --> 01:21:16.255  
So,

802  
01:21:16.255 --> 01:21:17.545  
a couple of the other things just,

803  
01:21:17.574 --> 01:21:17.755

804  
01:21:17.784 --> 01:21:19.734  
very quickly to sum up here,

805  
01:21:19.914 --> 01:21:20.335  
um,

806  
01:21:20.364 --> 01:21:22.074  
the town in addition to,

807  
01:21:22.284 --> 01:21:23.005  
um,

808  
01:21:23.064 --> 01:21:25.194  
going through this process

809  
01:21:25.225 --> 01:21:27.324  
if it's within the biodiversity

810  
01:21:27.324 --> 01:21:29.005

conservation overlay district,

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01:21:29.064 --> 01:21:32.545

the town requires map notes that

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01:21:32.640 --> 01:21:47.545

Um, potential future owners of the lots that are created within the biodiversity area that, these are notes that are filed with the deeds. So, they become declarations that there are certain restrictions in place on the property.

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01:21:48.685 --> 01:21:52.284

That would govern the sensitive areas of those properties.

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01:21:53.005 --> 01:22:06.715

The town also reaches out at the very earliest stages of an application when it's presented to the planning board and an early neighborhood notification letter is sent out to anybody that would be receiving at a later time

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01:22:07.104 --> 01:22:20.364

a notice a public hearing, and one of the things, which I think is very interesting about this is that biodiversity now gets attention not only inside of the biodiversity conservation overlay district, but outside as well.

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01:22:20.635 --> 01:22:32.154

And there has been talk in the town about the possibility of looking at other areas to be able to identify above and beyond the southern walkkill biodiversity plan,

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01:22:32.364 --> 01:22:34.015

a natural resource inventory,

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01:22:34.015 --> 01:22:38.515

or some other way to be able to identify other important areas within the community.

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01:22:39.024 --> 01:22:39.625

So.

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01:22:39.930 --> 01:22:50.154

That pretty much sums it up and I would be very happy to answer any questions that anyone has on this and, provide some further information here.

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01:22:50.154 --> 01:22:57.925

There's a link to the actual rules that work has adopted for the university conservation overlay district at

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01:22:58.829 --> 01:23:03.779

The URL that you see on the screen, and I'll turn it back over to you Ingrid.

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01:23:04.404 --> 01:23:15.954

Thank you, TED. thanks very much for the presentation. This is an example that we have mentioned many times in our outreach and it's great to hear more about how it's being implemented.

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01:23:16.435 --> 01:23:26.154

Um, we have a couple of questions in the Q, and a, and participants can add more at this time. We'll try to answer a few before 2:30.

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01:23:26.154 --> 01:23:40.585

um, the 1st, question relates to the boundaries of the overlay zone and how those were delineated. and I know you talked about the southern Wallkill biodiversity plan, but maybe you can just.

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01:23:41.460 --> 01:23:45.119

Um, review again how the map was created.

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01:23:45.119 --> 01:23:48.569

In the southern Wallkill plan.

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01:23:48.569 --> 01:23:53.670

Well, that was used for the overlay zone. Yeah. Yeah.

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01:23:54.505 --> 01:24:07.015

Yes, well, so most of the areas that have been identified, they had 20 some individual habitat areas that were identified within this southern wallkill biodiversity plan.

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01:24:07.555 --> 01:24:21.085

These were areas that had been identified by the team that had gone out throughout the town. And, you know, I tried to provide some background to how they went about identification of these areas.



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01:24:21.295 --> 01:24:26.814

I was not involved in that particular study. But, you know, you can

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01:24:27.090 --> 01:24:32.550

Read the biodiversity plan and see.

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01:24:32.550 --> 01:24:44.845

You know, for yourself, all of the methods that they use, but it was quite extensive. they did use spatial data. They used natural heritage program records. They did field checking of those records.

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01:24:45.265 --> 01:24:56.965

They looked deeper, by looking at private lands. where they could get permission, they looked at the public lands, and they tried to connect all of those different resources. So.

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01:24:57.270 --> 01:25:02.369

Um, that was that was pretty much how they went about doing that.

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01:25:03.475 --> 01:25:05.694

Great and for participants,

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01:25:05.725 --> 01:25:11.034

we'll share all the links that have been mentioned in these presentations with you in our follow up email,

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01:25:11.425 --> 01:25:13.765

including the overlay district and,

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01:25:14.095 --> 01:25:14.305

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01:25:14.664 --> 01:25:20.664

the link to the plan that Ted has described. Has the overlay zone been tested in court?

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01:25:22.170 --> 01:25:25.319

No, we've.

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01:25:25.319 --> 01:25:29.069

Yeah, and in fact.

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01:25:29.545 --> 01:25:44.305

It's, it's important to understand that in Warwick This is what people were asking for and so there's been an acceptance and we've actually, that was one of the things that I tried to convey in that last slide, was that.

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01:25:44.760 --> 01:25:45.210

It's,

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01:25:45.265 --> 01:25:45.475

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01:25:45.505 --> 01:25:53.095

there's been a greater awareness in the community about the importance of biodiversity to the health of the environment within Warwick and so,

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01:25:53.125 --> 01:25:56.875

even on properties where there are not,

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01:25:57.234 --> 01:25:57.534

you know,

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01:25:57.534 --> 01:25:58.404

they're not within the,

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01:25:58.404 --> 01:25:59.484

by biodiversity conservation,

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01:25:59.484 --> 01:26:01.585

Overlay district there are.

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01:26:01.859 --> 01:26:09.505

Um, assessments that are conducted, so, this is not by any means the only places where there are habitat assessments that are conducted within the community.

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01:26:09.534 --> 01:26:15.145

If there is a area through SEQR that's been identified as an important,

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01:26:15.324 --> 01:26:16.045

um,

855

01:26:16.465 --> 01:26:17.574  
national resource,

856

01:26:17.604 --> 01:26:17.935  
um,

857

01:26:17.935 --> 01:26:18.145  
you know,

858

01:26:18.145 --> 01:26:20.875  
important habitat area by the natural heritage program,

859

01:26:20.875 --> 01:26:22.314  
or others,

860

01:26:22.555 --> 01:26:23.935  
then these are now,

861

01:26:23.965 --> 01:26:24.685  
um,

862

01:26:24.715 --> 01:26:30.534  
and pretty much become part of the regular standard of review for  
planning board applications.

863

01:26:31.319 --> 01:26:39.029  
Thanks, and does this process pertain to single lot improvements within  
the zone.

864

01:26:41.484 --> 01:26:44.875  
Well, yes, it does, through the site plan review process.

865

01:26:44.875 --> 01:26:45.175  
So,

866

01:26:45.175 --> 01:26:47.635  
if it requires site plan review,

867

01:26:47.965 --> 01:26:50.845  
and it meets those thresholds meets,

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01:26:50.845 --> 01:26:53.875

or exceeds those thresholds of a quarter acre of disturbance,

869

01:26:54.145 --> 01:26:57.295

or if it has any disturbance within 100 feet of water feature,

870

01:26:57.295 --> 01:27:00.414

like a wetland or a stream and it,

871

01:27:00.414 --> 01:27:02.395

it doesn't distinguish just protected streams.

872

01:27:02.395 --> 01:27:08.005

So even class C or class D, streams would be included in that. but.

873

01:27:09.930 --> 01:27:24.779

For a single lot. No, then that would not, you know, that doesn't apply to the building department, which would be for, you know, a building permit to put up a house. It would only be for a subdivision. If a property was to be proposed for 2 lot subdivision.

874

01:27:25.890 --> 01:27:30.569

now there's a question about how the

875

01:27:30.569 --> 01:27:37.890

Conservation cluster process operates in the final lot count.

876

01:27:37.890 --> 01:27:42.420

Does this process simply result in clustering Lots away from areas.

877

01:27:42.420 --> 01:27:49.409

Identified for conservation, or is there ever a required reduction of lot counts allowed.

878

01:27:50.609 --> 01:27:53.699

Um, that's a great question. So.

879

01:27:53.699 --> 01:28:08.364

Simple answer is no, there's never been a lot count that has been reduced as a result of this. And in fact, the way that the lot count is determined is through a conventional subdivision plan.

880

01:28:08.664 --> 01:28:16.704

Um, it's a, it's a hypothetical plan because if it's going to go through the conservation subdivision design process, then.

881

01:28:17.010 --> 01:28:22.734

There needs to be that identification of how many lots are achievable under the zoning.

882

01:28:23.154 --> 01:28:34.675

And then there's a 4-step process where the 1st step in the process is to identify all of the important conservation values that exist on the property and this includes biodiversity

883

01:28:34.675 --> 01:28:48.654

But it includes other things as well important Prime farmland soils, scenic views, cultural features, like barns, stone walls, things like that. These are all included within the conservation subdivision and.

884

01:28:49.109 --> 01:28:53.279

Through that process of identifying the resources on a property.

885

01:28:53.279 --> 01:28:58.890

The areas that are not deemed to be important natural features.

886

01:28:58.890 --> 01:29:12.750

Are considered the development areas, and that's where the houses are sited. So they're sited automatically away from those sorts of things and the cluster subdivision conservation subdivisions have become the standard in Warwick as well.

887

01:29:14.609 --> 01:29:29.250

Thanks, and I guess I'll squeeze in one last question is almost 2:30, which is whether cluster developments have ever included public access as an aspect of the conservation set aside.

888

01:29:29.250 --> 01:29:34.260

Um, things like walking paths or other types of public access.

889

01:29:34.260 --> 01:29:39.989

Yes, but only for the cluster.

890

01:29:39.989 --> 01:29:48.689

Residents, not general, public access. The town actually has an incentive

891

01:29:48.689 --> 01:29:57.840

That would allow for more units than they're entitled to under the zoning  
If they provide public access.

892

01:29:57.840 --> 01:30:10.350

It's interesting another thing is, if they do things, like, offer to make  
some of the lots available as affordable.

893

01:30:10.350 --> 01:30:24.475

Um, in other words, you know, affordable for, I think it's 80% of the  
median household income for Orange County. Then they get a benefit. They  
can have additional an additional 1 or 2 lots. so the town has tried to  
incentivize that whole program.

894

01:30:28.020 --> 01:30:33.960

that would benefit the community in general.

895

01:30:36.024 --> 01:30:47.154

Well, thank you so much, TED, for your presentation and again to  
Gretchen Stevens as well. I'm sorry, we didn't get to every question,  
from the audience.

896

01:30:47.154 --> 01:30:47.635

But,

897

01:30:47.664 --> 01:30:48.024

um,

898

01:30:48.055 --> 01:30:50.545

I'll share these with the presenters and,

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01:30:50.604 --> 01:30:50.845

900

01:30:50.875 --> 01:30:58.104

we will also share their contact information and you can feel free to  
follow up with them for more information about these,

901

01:30:59.515 --> 01:31:01.524

about habitat assessment guidelines,

902

01:31:01.555 --> 01:31:04.824

or this particular model from Warwick.

903

01:31:04.854 --> 01:31:17.545

And again, we're going to take a break from future webinars over the summer. We hope everybody has a very relaxing summer and hope that we will see some of you potentially on July 15th.

904

01:31:17.970 --> 01:31:24.960

For the field workshop in followup to today's webinar. so thank you again to.

905

01:31:24.960 --> 01:31:29.130

everyone for participating this afternoon, have a great rest of your day.

906

01:31:32.579 --> 01:31:39.779

Bye bye. Bye. Bye.