

Headwater Streams: Protection

November 17, 2021, 3:00 – 5:00 pm

Hudson River Estuary Program Conservation and Land Use Webinar Series

1

00:00:02.874 --> 00:00:16.373

All right. Hello, everyone my name is Nate Nardi Cyrus, I'm a Conservation and Land Use Specialist at the DEC Hudson River Estuary Program through a partnership with Cornell University. Welcome to the third session of our 3-part webinar series about headwater streams.

2

00:00:16.974 --> 00:00:22.974

This program is offered through a partnership between the Hudson River Estuary Program, Cornell University, Hudsonia.

3

00:00:23.280 --> 00:00:23.399

,

4

00:00:23.425 --> 00:00:27.445

But we'll also be showcasing presentations from the Hudson River Watershed Alliance,

5

00:00:27.655 --> 00:00:28.015

Gordon and Svenson, LLP,

6

00:00:28.015 --> 00:00:30.714

and the town of Poughkeepsie,

7

00:00:30.714 --> 00:00:37.284

and its consultant. Our speakers will take a deep dive into regulation at the federal, state, and local level,

8

00:00:37.524 --> 00:00:43.825

which we hope will help you gain a fuller understanding of how headwater streams are protected here in the estuary watershed.

9

00:00:45.869 --> 00:00:59.875

Before we get started, let me quickly review a few important webinar details. You should be able to connect to the audio through your computer, or your phone, and you can find different audio options at the bottom of your screen clicking this dot dot dot symbol that I have highlighted here.

10

00:01:00.295 --> 00:01:08.334

, if you have difficulties with audio through your computer, I recommend calling in by phone or/ and, , requesting a call back and you can do that through that button.

11

00:01:08.700 --> 00:01:13.769

And we'll also put that call in number in the chat box. , in case you can't find it.

12

00:01:14.965 --> 00:01:27.564

You're having other technical difficulties, please direct those questions, our panelists, the chat box in the bottom right. Hand corner of the screen. You should be able to use the question answer function

13

00:01:27.594 --> 00:01:41.155

and that'll be for just submitting questions. So try to keep the chat for technical issues and the Q and A for questions for our presenters. Note that your phone lines have been muted, as your cameras have also been turned off.

14

00:01:41.459 --> 00:01:48.629

And the webinar is being recorded, so we'll notify you when that recording is available. And we'll share that with you in a follow up email.

15

00:01:48.629 --> 00:01:57.239

At the end of the webinar, there's gonna be a three-question survey that pops up and we appreciate your response and any feedback you have on our programming.

16

00:01:57.239 --> 00:02:08.520

And last, for those who are seeking municipal training credit, you're gonna get an email that's going to be sent right after this program ends and you can use that to self-certify your attendance on this webinar.

17

00:02:09.840 --> 00:02:20.965

For those of you who may be new to our series, the Hudson River Estuary Program is a unique program at the New York State Department of Environmental Conservation, established to help people enjoy, protect, and revitalize the Hudson River and its Valley.

18

00:02:21.085 --> 00:02:23.965

So our program works throughout the 10 counties,

19

00:02:23.995 --> 00:02:25.194

bordering the tidal Hudson,

20

00:02:25.495 --> 00:02:25.794

,

21

00:02:25.824 --> 00:02:26.844

from New York harbor,

22

00:02:26.844 --> 00:02:30.354

to the federal dam at Troy, to achieve many key benefits,

23

00:02:30.414 --> 00:02:31.854

including those you see here,

24

00:02:31.854 --> 00:02:32.664

clean water,

25

00:02:32.694 --> 00:02:33.175

community

26

00:02:33.175 --> 00:02:34.104

resilience to climate

27

00:02:34.104 --> 00:02:34.555

change,

28

00:02:34.914 --> 00:02:37.104

a vital estuary ecosystem,

29

00:02:37.314 --> 00:02:38.125

for fish,

30

00:02:38.305 --> 00:02:38.814

wildlife,

31

00:02:38.844 --> 00:02:39.474

habitats,

32

00:02:39.504 --> 00:02:43.284

natural scenery of the valley, and opportunities for education,

33

00:02:43.314 --> 00:02:43.735

access,

34

00:02:43.735 --> 00:02:48.594

Recreation, and inspiration on the river. And I encourage all of you to read our newly released,

35

00:02:48.625 --> 00:02:48.775

,

36

00:02:48.805 --> 00:02:49.675

action agenda.

37

00:02:50.155 --> 00:02:53.875

You can find that on our website for more information on the direction of our program.

38

00:02:55.770 --> 00:03:07.495

Within the Estuary program, our conservation and land use team works with municipalities and regional conservation partners like land trusts to incorporate important habitats and natural areas into local land use, planning and decision making.

39

00:03:08.004 --> 00:03:17.425

, so our program has a new website that I have showcased here that's a clearing house for guidance and resources on many of the topics that your communities are concerned about.

40

00:03:17.875 --> 00:03:26.664

My colleague Beth is gonna be sharing a link to the website through the chat box, but keep in mind many of those resources are also going to be shared in that follow up email I talked about.

41

00:03:28.919 --> 00:03:42.895

So, we're really excited to share next month's webinar offering, which is going to be Protecting Wildlife Habitat through Land use Planning. Doctors Glennon and Kretser will discuss the issues facing wildlife in our region and we'll share regionally

42

00:03:43.104 --> 00:03:54.775

examples of municipal efforts to address the threats to these wildlife and habitats. So Beth's going to share the link to that registration in the webinar for that webinar in the chat as well.

43

00:03:56.784 --> 00:04:00.324

As I said before this is unfortunately the last series or the last session,

44

00:04:00.324 --> 00:04:14.335

rather in our headwater stream series. And note that each series was created to be kind of a stand alone resource and they're all recorded and are going to be available for viewing on our website at the end of the series. During day one,

45

00:04:14.365 --> 00:04:25.495

our presenters defined headwater streams and their component parts, touted the benefits to humans and wildlife, and gave an overview of threats and some potential mechanisms for protection. On day

46

00:04:25.495 --> 00:04:33.894

two, we explored available online resources, practiced using topography to map unmapped small streams and learn about urban streams.

47

00:04:34.345 --> 00:04:41.305

We were also introduced to watershed and municipal conservation planning approaches that can be used to help protect our small streams.

48

00:04:42.718 --> 00:04:46.944

But today we're gonna be looking more specifically at,

49

00:04:47.033 --> 00:04:47.213

,

50

00:04:47.244 --> 00:04:56.274

Protections. Gretchen is going to start the webinar with an introduction to state and federal stream protection regulations and the role of streams in environmental review,

51

00:04:56.903 --> 00:05:05.483

then we're going to pass it on over to Emily Svenson who's going to summarize the role of municipal governments and how they can plan,

52

00:05:05.514 --> 00:05:06.053

,

53

00:05:06.084 --> 00:05:08.184

in regulating streams in their municipalities.

54

00:05:08.423 --> 00:05:18.863

And then we'll end with a case study from Kristen Taylor and Karol Knapp from the town of Poughkeepsie. We're gonna talk about that community's aquatic resource protection law. So, it's gonna be really exciting.

55

00:05:19.584 --> 00:05:33.713

I hope you all did a little research on your communities and what regulations you have in place. So that we can have kind of back and forth at the end of the presentation and you can direct any questions to our presenters on what you have.

56

00:05:34.408 --> 00:05:40.738

So, that's all I have right now. I am going to pass it on over to Gretchen.

57

00:05:40.738 --> 00:05:44.428

So, Gretchen, you should be able to share your screen now.

58

00:05:44.428 --> 00:05:50.788

And while Gretchen's doing that, I'm going to give her a brief introduction.

59

00:05:50.788 --> 00:05:59.903

Gretchen Stevens is the Director of Biodiversity Resources at Hudsonia, a nonprofit environmental research and education institute based in Dutchess County.

60

00:06:00.324 --> 00:06:12.324

So, Gretchen has had over 35 years of experience as a field biologist, and has been a longtime partner in developing educational programming, with the Estuary Program to local land use decision makers throughout the Valley. And with that

61

00:06:14.218 --> 00:06:26.278

I'll Gretchen, you take it away. I'm not able to see

62

00:06:26.278 --> 00:06:38.459

you Gretchen.

63

00:06:38.459 --> 00:06:44.999

Gretchen might be having some difficulties. Can you unmute Gretchen?

64

00:06:54.389 --> 00:06:58.288

65

00:06:59.879 --> 00:07:04.918

Gretchen, can you hear me? Gretchen Stevens: I can. Can you hear me? Nate Nardi Cyrus: Yes.

66

00:07:04.918 --> 00:07:08.819

but you're having trouble sharing the presentation.

67

00:07:08.819 --> 00:07:13.829

Gretchen Stevens: Yes. Nate Nardi Cyrus: I saw it up on the screen a second ago.

68

00:07:15.689 --> 00:07:20.608

Gretchen Stevens: Hello.

69

00:07:23.608 --> 00:07:28.199

Nate, could you unshare?

70

00:07:28.199 --> 00:07:32.699

And take it back and then, and then hand it back to me. Nate Nardi Cyrus: Sure. Thing.

71

00:07:32.699 --> 00:07:35.999

All right.

72

00:07:35.999 --> 00:07:40.379

Okay, try that again Gretchen.

73

00:07:45.629 --> 00:07:51.689

Okay, I can see your presentation.

74

00:07:51.689 --> 00:08:00.809

Did you see that? Yep. Looks good. Gretchen Stevens: Okay great. I'm sorry about that. So, , in this session.

75

00:08:01.584 --> 00:08:02.004

,

76

00:08:02.033 --> 00:08:10.944

I'm going to talk about the existing regulatory protections for headwater streams at the federal and state levels and,

77

00:08:11.064 --> 00:08:11.694

78

00:08:11.814 --> 00:08:18.593

also a little about incorporating stream protection into environmental reviews of development projects.

79

00:08:20.004 --> 00:08:27.204

First of all the federal authority for protecting streams and wetlands comes from the 1972 Clean Water Act,

80

00:08:27.204 --> 00:08:35.514

which provides some protections to what are referred to as "waters of the United States" or "wotus" for jurisdictional purposes.

81

00:08:35.514 --> 00:08:41.153

Waters of the United States are defined in section 404 of

82

00:08:41.153 --> 00:08:52.163

the Clean Water Act as so called "navigable waters," and at the time the justification for protecting these waters was for the commercial interest in navigation.

83

00:08:52.163 --> 00:09:04.163

Protection of wetlands and streams under the Clean Water act is mainly administered by the Army Corps of Engineers sometimes in consultation with the USEPA and the US

84

00:09:04.644 --> 00:09:06.563

Fish and Wildlife Service.

85

00:09:11.813 --> 00:09:14.303

Over these many decades there have been,

86

00:09:14.333 --> 00:09:15.264

there's been much,

87

00:09:15.533 --> 00:09:15.833

,

88

00:09:15.864 --> 00:09:22.793

controversy over the limits of what should be considered navigable waters and wotus and thus,

89

00:09:22.913 --> 00:09:25.913

which streams and wetlands deserve protection,

90

00:09:25.943 --> 00:09:26.244

,

91

00:09:26.274 --> 00:09:28.014

under the Clean Water Act.

92

00:09:28.823 --> 00:09:40.283

For example, what about waters that feed those navigable waters, without which the navigable streams would no longer be navigable?

93

00:09:41.183 --> 00:09:54.803

I won't go into all the arguments, but in general, development interests, lobbyists for farmers, ranchers, industrial interests, and property rights advocates have long pushed for a narrow interpretation.

94

00:09:55.583 --> 00:10:00.714

And environmentalists have advocated for a broad interpretation of wotus.

95

00:10:02.244 --> 00:10:14.634

There have been many different administrative interpretations of waters of the United States over the years and many lawsuits, challenging the Army Corps' jurisdictional determinations.

96

00:10:15.173 --> 00:10:18.864

Some pivotal cases have even reached the U.S. Supreme Court.

97

00:10:21.719 --> 00:10:32.729

In 2020, the Trump administration replaced an Obama-era interpretation, and established the navigable waters protection rule.

98

00:10:33.323 --> 00:10:46.644

But a U.S. district court decision in August of this year vacated that rule on the ground. So that leaves so many streams and wetlands unprotected that it does not fulfill the purposes of the Clean Water Act.

99

00:10:46.673 --> 00:10:59.994

So, for the time, being the Corps of Engineers, and the EPA are now interpreting wotus according to the conventions in place prior to 2015. The Biden administration is working on a new interpretation of wotus.

100

00:10:59.994 --> 00:11:04.644

So we haven't heard the end of this. But, in the meantime.

101

00:11:05.818 --> 00:11:09.899

What is currently regulated?

102

00:11:09.899 --> 00:11:16.139

Activities in all tidal waters and all interstate waters.

103

00:11:16.344 --> 00:11:17.514

All other waters,

104

00:11:17.783 --> 00:11:18.144

,

105

00:11:18.173 --> 00:11:22.644

for which the use, degradation, or destruction,

106

00:11:22.673 --> 00:11:23.004

,

107

00:11:23.033 --> 00:11:25.764
could affect interstate or foreign commerce,

108
00:11:26.063 --> 00:11:26.783
including,

109
00:11:26.813 --> 00:11:27.024
,

110
00:11:27.053 --> 00:11:27.653
travel,

111
00:11:27.923 --> 00:11:28.943
recreation,

112
00:11:29.364 --> 00:11:29.994
,

113
00:11:30.083 --> 00:11:32.364
existing or potential harvest of fish,

114
00:11:32.393 --> 00:11:33.234
or shellfish,

115
00:11:33.264 --> 00:11:33.443
,

116
00:11:33.474 --> 00:11:40.734
for commercial or industrial purposes, also tributaries of any of those

117
00:11:41.278 --> 00:11:52.678
streams, and also wetlands adjacent to any of those streams, except wetlands used as waste treatment systems.

118
00:11:54.058 --> 00:12:01.288
Wotus does not include prior converted cropland, that is land that was formerly wetland, but was drained

119

00:12:01.644 --> 00:12:14.214

to improve its usability for agriculture. The details of the current wotus definition and the current interpretation are on the EPA website,

120

00:12:14.244 --> 00:12:18.264

so you can get into the all of the weed

121

00:12:18.293 --> 00:12:18.504

,

122

00:12:18.563 --> 00:12:25.974

if if you wish to. What kinds of activities are regulated under the Clean Water Act?

123

00:12:26.033 --> 00:12:32.724

The basic activities that need a permit from the Army Corps of Engineers are filling of wetlands or streams,

124

00:12:32.754 --> 00:12:32.994

,

125

00:12:33.024 --> 00:12:34.283

and disturbance of,

126

00:12:34.344 --> 00:12:34.644

,

127

00:12:34.673 --> 00:12:36.744

the stream or channel banks.

128

00:12:37.708 --> 00:12:41.609

What areas are not regulated?

129

00:12:41.609 --> 00:12:45.839

Ephemeral streams.

130

00:12:46.583 --> 00:12:48.293

Some intermittent streams.

131

00:12:48.594 --> 00:12:48.894

132

00:12:48.923 --> 00:12:53.783

The jurisdictional decisions will be made on a case by case basis,

133

00:12:53.813 --> 00:12:54.024

134

00:12:54.053 --> 00:12:56.573

by the Corps of Engineers in those cases.

135

00:12:57.413 --> 00:13:05.153

Isolated wetlands are not regulated, and there are no universal requirements for setbacks or buffer zones.

136

00:13:05.183 --> 00:13:11.453

But those can be imposed on a case by case basis at the discretion of the Army Corps of Engineers.

137

00:13:13.313 --> 00:13:18.744

The definitions of intermittent and perennial streams haven't changed from those

138

00:13:18.744 --> 00:13:30.203

I read to you from the Federal Register last week. A perennial stream is one where surface water flows continuously year-round in a year of typical precipitation.

139

00:13:31.014 --> 00:13:42.894

And an intermittent stream is one where the surface water flows continuously during certain times of a typical year, but not merely in direct response to precipitation.

140

00:13:46.224 --> 00:13:54.833

And how are these activities regulated under the Clean Water Act to reduce the bureaucratic burden

141

00:13:55.104 --> 00:13:55.614

142

00:13:55.644 --> 00:14:10.073

on both the Corps of Engineers and the applicants? The Corps has long used a device called the nationwide permit for projects whose size and expected environmental impacts fall below certain

143

00:14:10.073 --> 00:14:10.734

thresholds.

144

00:14:11.333 --> 00:14:19.793

These permits allow certain projects to proceed with minimal red tape, even if there are some adverse impacts to streams and wetlands.

145

00:14:21.239 --> 00:14:36.203

Projects expected to have more significant impacts to streams or wetlands must obtain what's called an individual permit requiring a much more lengthy review process, sometimes taking a year or even several years.

146

00:14:37.048 --> 00:14:45.269

Nationwide permits are used very widely.

147

00:14:45.803 --> 00:14:57.173

Here's an example of one, which is often invoked for projects that come before municipal agencies for approval. Nationwide permit 29 applies to residential developments.

148

00:14:57.173 --> 00:15:05.514

It allows for filling of non-tidal streams or wetlands for construction of residential buildings and residential subdivisions.

149

00:15:05.514 --> 00:15:15.354

But only if the fill disrupts no more than a half acre of non-tidal waters and no more than 300 linear feet of stream bed.

150

00:15:20.484 --> 00:15:35.394

The applicant must submit a preconstruction notification to the Corps of engineers and that notice sometimes triggers a site visit by the Army Corps staff to determine the extent of jurisdiction and of impacts to the resource.

151

00:15:35.394 --> 00:15:39.083

But the permit is often then certified by a simple letter

152

00:15:39.083 --> 00:15:52.014

from the Corps. Since this is much preferable to the sometimes years long process of obtaining an individual permit, many developers and other applicants try to design their projects

153

00:15:52.014 --> 00:15:58.823

so that impacts to streams and wetlands fall within the limits of the nationwide permits. There are many more

154

00:15:59.634 --> 00:16:14.333

such nationwide permits for different kinds of projects. All are intended to allow projects that are predicted to have only minor effects on wetlands and streams proceed, without a long permit review process.

155

00:16:14.783 --> 00:16:17.663

What we've actually just learned that

156

00:16:17.969 --> 00:16:18.239

,

157

00:16:18.264 --> 00:16:19.793

just this month,

158

00:16:20.063 --> 00:16:21.474

a federal district,

159

00:16:21.504 --> 00:16:21.803

,

160

00:16:21.833 --> 00:16:23.514

decision in California,

161

00:16:23.964 --> 00:16:24.594

,

162

00:16:25.193 --> 00:16:26.153

,

163

00:16:26.274 --> 00:16:26.874

has,

164

00:16:26.903 --> 00:16:28.104

,

165

00:16:28.134 --> 00:16:35.844

led to the Corps of Engineers deciding to suspend its use of many of the nationwide permits,

166

00:16:36.024 --> 00:16:37.073

including this one,

167

00:16:37.073 --> 00:16:37.344

the,

168

00:16:37.884 --> 00:16:38.303

,

169

00:16:38.994 --> 00:16:39.323

NWP 29,

170

00:16:39.323 --> 00:16:40.644

which is the one that is,

171

00:16:40.673 --> 00:16:41.033

,

172

00:16:41.153 --> 00:16:42.384

most often invoked

173

00:16:42.384 --> 00:16:43.673

for

174

00:16:44.428 --> 00:16:49.379

projects that come before the planning board.

175

00:16:51.234 --> 00:17:03.683

We'll wait to see what happens there. In general, though, that's an overview of the federal regulatory program, for streams and wetlands.

176

00:17:04.314 --> 00:17:10.943

The interpretation of waters of the United States is also in flux.

177

00:17:10.973 --> 00:17:19.703

So could change over the next few months or years so do pay attention the, usually, this information is fairly prominently

178

00:17:20.368 --> 00:17:28.108

shown on the opening pages of the Corps of Engineers webpage.

179

00:17:28.614 --> 00:17:35.784

So, the New York state regulations are a little different. Under the New York State Environmental Conservation Law

180

00:17:36.054 --> 00:17:47.183

A so-called "protection of waters permit" is required for disturbing the bed or banks of a stream classified as double A, A, B, C-T

181

00:17:47.548 --> 00:18:00.773

or C-T-S or for excavation, or filling in, so called navigable waters. In this case, the term "navigable waters" refers to streams and other waters

182

00:18:00.773 --> 00:18:11.064

that are navigable in fact by commercial vessels, houseboats, and pleasure craft, but not stream that are only navigable by rowboats, canoes, or kayaks.

183

00:18:11.094 --> 00:18:20.453

So, this use of the term by the state is more restrictive than that in the federal definition of waters of the United States.

184

00:18:23.124 --> 00:18:27.144

There is no setback or buffer zone requirement that is standard.

185

00:18:28.193 --> 00:18:28.794

,

186

00:18:29.183 --> 00:18:32.124

Many of the headwater streams,

187

00:18:32.453 --> 00:18:32.963

,

188

00:18:32.963 --> 00:18:36.354

with perennial flow are in one of these letter classes,

189

00:18:36.354 --> 00:18:47.334

but many are not and most of the intermittent streams that are also unclassified and most headwater streams are not navigable under this definition.

190

00:18:47.334 --> 00:18:54.384

So many headwater stream segments are entirely unprotected under the New York State Environmental Conservation Law.

191

00:18:56.729 --> 00:19:04.499

The state law as I mentioned, has no set back or buffer zone requirement.

192

00:19:04.499 --> 00:19:12.989

I should mention also that somewhat different regulations apply to lands within the watersheds of the New York City

193

00:19:12.989 --> 00:19:25.884

Department of Environmental Protection, for the New York City reservoirs in the Catskills region of Schoharie, Delaware, Ulster and Sullivan counties,

194

00:19:25.884 --> 00:19:37.374

that's the green area in the upper part of this map, and in the Croton watershed region of Putnam, Westchester and Dutchess counties in the lower right, the green in the lower right

195

00:19:37.374 --> 00:19:38.273

part of this map,

196

00:19:39.023 --> 00:19:40.044

the New York City,

197

00:19:40.193 --> 00:19:40.493

,

198

00:19:41.634 --> 00:19:44.753

has their own set of restrictions for activities

199

00:19:44.753 --> 00:19:46.614

in and near jurisdictional streams,

200

00:19:46.614 --> 00:19:46.943

which,

201

00:19:47.513 --> 00:19:53.844

in their case includes all perennial and intermittent streams in the reservoir watersheds,

202

00:19:53.844 --> 00:19:55.523

but not ephemeral streams.

203

00:19:57.419 --> 00:20:09.419

So the state and federal laws, and the New York City watershed regulations, leave many headwater streams or segments of those streams entirely unprotected.

204

00:20:09.983 --> 00:20:22.493

But local legislation can fill the gap and can impose buffer zone requirements for all jurisdictional streams. We'll talk more about the possibilities for local legislation later today.

205

00:20:22.493 --> 00:20:30.233

But right now I can answer any questions that you have about stream protections at the federal or state levels.

206

00:20:30.624 --> 00:20:42.683

and then I will go on to talk a little about environmental reviews at the local level and incorporating headwaters streams into those reviews.

207

00:20:43.193 --> 00:20:45.653

So I'm gonna hand this back to you, Nate.

208

00:20:57.598 --> 00:21:07.709

Hello.

209

00:21:12.239 --> 00:21:24.838

Nate Nardi Cyrus: I apologize, I was muted on that. But if anyone has any questions for Gretchen, I encourage you to put them in the chat box or the Q and A.

210

00:21:26.818 --> 00:21:39.898

And if not, just, you know, hold on to those questions, you can continue to post them throughout the rest of the presentation. And we should have time, at the end to have kind of a larger conversation and get to all questions.

211

00:21:42.659 --> 00:21:46.318

All right.

212

00:21:47.699 --> 00:21:55.648

So, Gretchen, you were planning on presenting the next part of your presentation or is that all you had?
Gretchen Stevens: Yes.

213

00:21:55.648 --> 00:22:00.778

Ah, tell me, what do you see on the screen now?

214

00:22:00.778 --> 00:22:15.473

Nate Nardi Cyrus: I see questions. Gretchen Stevens: Good. Good. Good. Okay. Okay. Yeah, so I'm going to say a few things about incorporating headwater streams into environmental reviews at the local level.

215

00:22:16.253 --> 00:22:16.673

,

216

00:22:16.854 --> 00:22:19.493

These are usually conducted by planning boards,

217

00:22:19.523 --> 00:22:20.064

,

218

00:22:20.094 --> 00:22:22.044

or zoning boards of appeal,

219

00:22:22.403 --> 00:22:28.193

or town boards often with the assistance of conservation advisory councils,

220

00:22:28.223 --> 00:22:28.794

,

221

00:22:28.824 --> 00:22:31.163

or conservation boards ,

222

00:22:31.403 --> 00:22:32.453

for things like,

223

00:22:32.483 --> 00:22:33.022

,

224

00:22:33.084 --> 00:22:34.794

reviews of,

225

00:22:34.824 --> 00:22:35.513

,

226

00:22:35.544 --> 00:22:39.594

subdivision plats or site plans,

227

00:22:40.253 --> 00:22:40.673

,

228

00:22:40.703 --> 00:22:44.693

zoning variances or special permits, comprehensive plans.

229

00:22:45.419 --> 00:22:48.689

I'm sorry, I'm...

230

00:22:50.159 --> 00:22:59.098

Yes, and local zoning or legislation related to land uses.

231

00:22:59.098 --> 00:23:06.838

, I'm sorry that my slides aren't

232

00:23:06.838 --> 00:23:14.788

Tracking this...Here we go.

233

00:23:15.413 --> 00:23:15.864

,

234

00:23:16.163 --> 00:23:20.183

The first task in an environmental review for say,

235

00:23:20.183 --> 00:23:29.304

a subdivision or land development project is to gather whatever information you can about the site and neighboring areas from site maps,

236

00:23:29.364 --> 00:23:30.054

,

237

00:23:31.074 --> 00:23:33.864

from the online resources that Nate,

238

00:23:33.894 --> 00:23:34.374

,

239

00:23:34.403 --> 00:23:36.294

described last week.

240

00:23:36.653 --> 00:23:38.784

and from your own field visits.

241

00:23:39.653 --> 00:23:40.074

,

242

00:23:40.403 --> 00:23:41.243

for example,

243

00:23:41.243 --> 00:23:45.144

Are there any streams mapped or unmapped on,

244

00:23:45.144 --> 00:23:50.064

or near the site ? Would any of the proposed development features such as forest

245

00:23:50.094 --> 00:23:50.334

,

246

00:23:50.364 --> 00:23:51.084

clearing,

247

00:23:51.144 --> 00:23:51.683

Ah,

248

00:23:52.013 --> 00:23:52.854

roads,

249

00:23:53.334 --> 00:23:53.784

,

250

00:23:53.814 --> 00:23:54.503

driveways,

251

00:23:54.503 --> 00:23:55.074

culverts,

252

00:23:55.074 --> 00:23:55.463

lawn,

253

00:23:55.463 --> 00:23:56.483

septic systems,

254

00:23:56.513 --> 00:23:58.523

or buildings be located,

255

00:23:58.523 --> 00:24:00.773

where they might adversely affect the streams,

256

00:24:01.134 --> 00:24:01.403

,

257

00:24:01.433 --> 00:24:05.304

directly or indirectly? Would the development features,

258

00:24:05.334 --> 00:24:05.574

,

259

00:24:05.604 --> 00:24:12.294

be likely to alter the volumes or timing of runoff from the site into the streams?

260

00:24:14.124 --> 00:24:28.344

We strongly recommend that planning boards, hold a pre-application meeting, at the earliest stage of an applicant's planning for a new land development project.

261

00:24:28.403 --> 00:24:41.364

The uses of such a meeting are several. Certainly to learn about the project's location and scope; to begin to identify the site constraints, such as small streams.

262

00:24:41.364 --> 00:24:48.923

that may be affected; to inform the applicant about zoning or other restrictions that apply to the site

263

00:24:48.983 --> 00:25:02.334

or the project; to offer preliminary feedback on the development proposal, and to request additional information from the applicant if needed for the planning board to make an informed decision.

264

00:25:03.834 --> 00:25:18.054

A Pre application meeting can help to inform both the planning board and the applicant, and can be the beginning of a collaborative relationship between the two. By learning about environmental constraints

265

00:25:18.084 --> 00:25:28.673

early on the applicant is better equipped to design the project right from the start in ways that avoid or minimize harm to the most sensitive areas.

266

00:25:30.118 --> 00:25:33.929

This can ultimately hasten the review process and avoid

267

00:25:33.929 --> 00:25:38.909

costly redesign of the project later on in the review.

268

00:25:40.134 --> 00:25:51.173

We think that reviewers should initially become familiar with the local, state, and federal regulations that might apply to the site,

269

00:25:51.173 --> 00:25:56.153

or the project, and consider whether that might apply to the site,

270

00:25:56.183 --> 00:25:56.423

,

271

00:25:56.453 --> 00:25:58.074

and the project ,

272

00:25:58.703 --> 00:25:59.153

and,

273

00:25:59.183 --> 00:25:59.453

,

274

00:25:59.453 --> 00:26:03.144

whether the proposed design complies with the existing regulations.

275

00:26:03.773 --> 00:26:17.364

Even though many headwaters streams are not within the protected classes of streams, you can still request that the development features be reconfigured to avoid impacts to any streams and other sensitive areas.

276

00:26:18.054 --> 00:26:29.933

You can also recommend or require modifications of the project to ensure that direct disturbance of the streams is avoided and that impervious surfaces are minimized

277

00:26:29.933 --> 00:26:31.943

and that measures such as detention

278

00:26:31.943 --> 00:26:32.544

ponds,

279

00:26:33.144 --> 00:26:33.834

,

280

00:26:33.864 --> 00:26:35.064

rain gardens,

281

00:26:35.183 --> 00:26:45.144

vegetated swales, and or permeable pavement are installed to help ensure that stormwater runoff does not harm streams or wetlands.

282

00:26:47.273 --> 00:27:01.314

We put together this checklist of site assessment questions that you can use to remind you of the kinds of questions to ask and answer in the course of a review. For example,

283

00:27:03.203 --> 00:27:17.784

questions like, are there intermittent or perennial streams on or near the site? Are the streams classified as trout or trout spawning streams or sensitive cold water streams? Is there a mapped flood zone on the site?

284

00:27:17.814 --> 00:27:21.713

Have the proposed development features been located .

285

00:27:22.884 --> 00:27:31.584

to protect broad, undisturbed buffer zones along the streams? Have the proposed features been located outside of flood zones?

286

00:27:32.304 --> 00:27:43.943

Are storm water management measures, designed to preserve preconstruction patterns and volumes of, of water run off from the site? And there are many more such questions.

287

00:27:44.364 --> 00:27:51.743

The checklist will be available to you at the end of this webinar along with other materials that we refer to.

288

00:27:53.368 --> 00:27:57.269

If your review.

289

00:27:57.269 --> 00:28:01.828

Is

290

00:28:01.828 --> 00:28:11.338

Sorry, sorry I sorry I lost my place here.

291

00:28:11.338 --> 00:28:14.578

Let's see.

292

00:28:17.519 --> 00:28:26.219

If your review is part of the state environmental quality review,

293

00:28:26.513 --> 00:28:34.344

We encourage you to pay close attention to the questions on wetlands and water bodies.

294

00:28:34.763 --> 00:28:35.304

,

295

00:28:35.753 --> 00:28:36.233

,

296

00:28:36.263 --> 00:28:37.403

And on,

297

00:28:37.673 --> 00:28:38.304

,

298

00:28:38.334 --> 00:28:39.054

Streams.

299

00:28:39.653 --> 00:28:40.163

,

300

00:28:40.554 --> 00:28:44.304

Use your own knowledge and analysis and judgment,

301

00:28:44.334 --> 00:28:44.693

,

302

00:28:44.723 --> 00:28:45.203

to,

303

00:28:45.233 --> 00:28:45.473

,

304

00:28:45.503 --> 00:28:49.913

answer those questions or or to help the applicant answer those questions.

305

00:28:50.874 --> 00:29:05.423

Require thorough and accurate answers to those questions. Consult expert help if needed, say an engineer to help with questions about storm water management.

306

00:29:05.729 --> 00:29:16.709

And apply the best information to your review and recommendations. So why do I bother to say all this?
It's because

307

00:29:16.709 --> 00:29:28.858

too often, I see that environmental assessment forms are completed and reviewed in such perfunctory and inadequate way that little information is provided.

308

00:29:29.693 --> 00:29:40.973

But the SEQR process in the environmental assessment forms can actually be powerful tools for gathering and evaluating environmental information. When used to their best advantage.

309

00:29:41.513 --> 00:29:51.473

This is a fact sheet on how to use the SEQR process and the environmental assessment form most effectively to protect streams

310

00:29:51.473 --> 00:29:58.223

and other natural areas. We will make this available to you with other materials after this webinar.

311

00:30:00.209 --> 00:30:13.378

So once, you know, where the streams are, both on and near a development site, then what kinds of measures will be most effective for protecting them? Here are just a few examples. Of course, any

312

00:30:13.378 --> 00:30:27.683

I want to avoid any direct disturbance of the streams, or it's banks. You'd want to maintain stream connectivity as much as possible. That is don't install culverts that disrupt the stream flow.

313

00:30:28.193 --> 00:30:38.483

Make sure that any culverts are properly sized and properly installed so that the stream flow, and the stream substrate are continuous through the culvert.

314

00:30:38.969 --> 00:30:47.009

Establish broad buffer zones of undisturbed soils and vegetation bordering the stream. The broader the better.

315

00:30:47.009 --> 00:30:52.288

Maintain forested corridors along streams wherever possible.

316

00:30:52.288 --> 00:30:56.969

Minimize impervious surfaces on any development site.

317

00:30:57.983 --> 00:30:59.364

Install detention,

318

00:30:59.364 --> 00:30:59.814

ponds,

319

00:30:59.814 --> 00:31:00.804

rain gardens,

320

00:31:01.013 --> 00:31:14.334

vegetated swales, permeable pavement and other measures that will facilitate infiltration of rainwater and snow melt to the soils and prevent rapid run off of surface water entering streams.

321

00:31:15.838 --> 00:31:29.608

A common question, though, is this, what can a planning board or other reviewing agency do to protect headwaters streams if there are no explicit stream protections in local laws and regulations?

322

00:31:31.673 --> 00:31:41.993

I would urge you to not give up on those streams, but remember that municipal agencies are charged with protecting the public health and safety

323

00:31:42.413 --> 00:31:51.203

and it's likely that your comprehensive plan and zoning ordinance explicitly relate natural resources to the public welfare.

324

00:31:52.044 --> 00:31:55.553

Although an applicant can certainly raise a legal challenge

325

00:31:55.553 --> 00:32:08.364

if they perceive regulatory overreach on the part of the reviewing agency, citizens can also challenge a reviewing agency for neglecting to take a hard look at environmental impacts.

326

00:32:08.604 --> 00:32:12.413

And there is now a lot of case law in support of those challenges.

327

00:32:14.394 --> 00:32:25.584

But there are still limits to what the planning board or other reviewing agencies can insist on in municipalities that lack specific stream protection ordinances. For that

328

00:32:25.584 --> 00:32:35.153

and other reasons we urge you to use the review process to build collaborative instead of adversarial relationships between the applicant

329

00:32:35.183 --> 00:32:36.743
and the reviewing agency.

330

00:32:37.763 --> 00:32:39.023
When you see that,

331

00:32:39.023 --> 00:32:40.523
a stream is at risk,

332

00:32:40.554 --> 00:32:41.574
but there is no,

333

00:32:41.604 --> 00:32:41.814

,

334

00:32:41.844 --> 00:32:45.023
local or state law that would effectively protect it,

335

00:32:45.054 --> 00:32:51.023
use the review process to educate the applicant about the benefits of maintaining an intact and well

336

00:32:51.023 --> 00:32:57.713
buffered stream for the safety of project infrastructure, for the stream's

337

00:32:57.894 --> 00:33:00.864
ecological and water resource values and

338

00:33:00.864 --> 00:33:02.453
for aesthetic values.

339

00:33:03.624 --> 00:33:03.983
Also,

340

00:33:03.983 --> 00:33:18.953

you can use stream protection as a negotiating factor in which the reviewing agency might bend on some other discretionary aspect of the project such as a property boundary setback in return for stream protection measures

341

00:33:19.193 --> 00:33:20.423

in the project design.

342

00:33:23.334 --> 00:33:38.304

Another good outcome of the education process is that developers and other applicants who come before the board repeatedly for different projects will learn that headwater streams are of ongoing concern to the board.

343

00:33:38.304 --> 00:33:47.963

So that the applicant may start to design their projects with stream protections in mind, right from the start to everyone's advantage.

344

00:33:49.709 --> 00:33:59.009

So, I'll be happy to answer any questions. That's all that I wanted to say at the outset and

345

00:33:59.009 --> 00:34:09.389

I can send this back to you, Nate. Nate Nardi Cyrus: All right. Great. Well, thank you so much Gretchen. That was that was terrific. Did you have a couple of questions that have come in? So.

346

00:34:09.389 --> 00:34:18.443

I'll take back the hosting privileges, or actually, I will pass this along to Emily and you can get all cued up if you'd like, Emily.

347

00:34:18.773 --> 00:34:31.434

But the first question we have is going back to your prior presentation, Gretchen, asking again, are there setbacks or buffers required for federal, perennial, or intermittent streams?

348

00:34:32.753 --> 00:34:47.304

Gretchen Stevens: There's no, there are no standard setbacks required. The Corps of Engineers does sometimes on particular projects require setbacks, but that's on a very case by case basis.

349

00:34:47.393 --> 00:34:52.884

So, the short answer is, no, except in special cases.

350

00:34:54.384 --> 00:35:08.934

Nate Nardi Cyrus: Great , then next, we have a kind of two-part next question First one asking if the checklist can be provided in a word document version so that folks can update their own and modify it to their community, which I think is a great idea.

351

00:35:09.293 --> 00:35:09.833

.

352

00:35:10.108 --> 00:35:22.648

And hopefully, we can accommodate that. The next question, Gretchen, can you comment on current versus future stormwater runoff predictions and the impact of climate change,

353

00:35:22.648 --> 00:35:29.849

including the obsolete definition of the "100-year storm?" So, maybe just talking about how climate change

354

00:35:29.849 --> 00:35:33.059

may or may not be impacting these things.

355

00:35:33.443 --> 00:35:37.103

Gretchen Stevens: Yes may or may not right? Well, definitely.

356

00:35:38.423 --> 00:35:38.813

,

357

00:35:39.143 --> 00:35:39.594

yes,

358

00:35:39.623 --> 00:35:39.983

,

359

00:35:40.793 --> 00:35:41.273

the,

360

00:35:41.273 --> 00:35:41.664

,

361

00:35:41.724 --> 00:35:42.023
you know,

362
00:35:42.023 --> 00:35:42.143
the,

363
00:35:42.204 --> 00:35:44.724
the climate scientists are predicting,

364
00:35:44.753 --> 00:35:45.384
,

365
00:35:45.443 --> 00:35:45.923
,

366
00:35:46.014 --> 00:35:46.853
many,

367
00:35:46.914 --> 00:35:47.153
,

368
00:35:47.184 --> 00:35:47.784
more,

369
00:35:47.963 --> 00:35:48.204
,

370
00:35:48.233 --> 00:35:51.954
large storms and much larger storms than we're used to,

371
00:35:52.284 --> 00:35:52.554
,

372
00:35:52.583 --> 00:35:54.563
over the coming decades.

373

00:35:54.563 --> 00:36:07.074

We've been experiencing those for a while now. What used to be called the so called 100 year storms, , are now happening much more frequently. We've had

374

00:36:08.123 --> 00:36:15.474

at least a couple of 500 year storms in the Hudson Valley, in different parts of the Hudson Valley, just in the last decade, or so.

375

00:36:15.474 --> 00:36:23.543

So our streams will be will be stressed by these huge amounts of waters coming through

376

00:36:23.543 --> 00:36:33.293

at times they are streams will be changed the infrastructure around streams will be will be stressed our roads and bridges and culverts

377

00:36:33.293 --> 00:36:47.574

and that's one excellent reason for municipalities to be reviewing their, the advocacy of their culverts to handle the water that they need to handle now

378

00:36:47.574 --> 00:36:50.903

and will be needing to handle in the future.

379

00:36:52.559 --> 00:37:07.438

There are lots of other, , effects of climate change that will be affecting streams. , Nate mentioned some of these in the session a week ago. The warming temperatures

380

00:37:07.438 --> 00:37:14.998

will also be warming temperatures in stream water and many of our stream organisms require

381

00:37:15.414 --> 00:37:25.554

cool water temperatures, high levels of dissolved oxygen, and they will be very much stressed by warming streams.

382

00:37:25.583 --> 00:37:32.184

Another great reason to maintain forested corridors along streams, and forested watersheds.

383

00:37:35.634 --> 00:37:50.364

Not sure if that answered all the aspects of that question. Nate Nardi Cyrus: Yeah, I think you were able to hit on a lot of those. Another question, since we have a little bit of time for these questions. What about underground streams?

384

00:37:50.393 --> 00:37:51.864

Is there anything

385

00:37:52.974 --> 00:37:59.693

regulatory related to that? That's what I'm understanding this question to mean. Gretchen Stevens: Yeah, that's a good question.

386

00:37:59.693 --> 00:38:09.923

And I will say I'm not entirely up to date on this, but in the past, in general, underground streams are not automatically regulated.

387

00:38:10.403 --> 00:38:12.594

But if it can be shown,

388

00:38:12.773 --> 00:38:13.134

,

389

00:38:13.164 --> 00:38:18.893

by dye tests or other such means that an underground stream is,

390

00:38:18.923 --> 00:38:19.583

,

391

00:38:20.063 --> 00:38:20.514

,

392

00:38:20.543 --> 00:38:21.653

is connected to,

393

00:38:21.893 --> 00:38:22.523

,

394

00:38:22.673 --> 00:38:22.974

,

395
00:38:23.003 --> 00:38:24.233
above ground streams,

396
00:38:24.233 --> 00:38:24.802
that are,

397
00:38:24.864 --> 00:38:27.713
that are jurisdictional the Corps of engineers,

398
00:38:28.074 --> 00:38:28.554

,

399
00:38:29.034 --> 00:38:29.273

,

400
00:38:29.273 --> 00:38:31.074
will regulate them,

401
00:38:31.164 --> 00:38:31.494

,

402
00:38:31.523 --> 00:38:34.643
as they would the stream segments on the surface.

403
00:38:35.333 --> 00:38:35.873

.

404
00:38:36.985 --> 00:38:51.864
There might be someone else on this in this meeting who knows something more about that or how the, the Corps is treating underground streams these days. But that is, as I understand it, how they have been treating them in the past.

405
00:38:56.099 --> 00:39:07.135
Nate Nardi Cyrus: I have nothing to add to that. Unless Emily wants to jump in or Carol or Kristen. We'll just move on, , thank you, Gretchen. Next, kind of getting back.

406

00:39:07.135 --> 00:39:16.644

I, I missed a portion of the, the first question you answered, are state and federal stormwater runoff projections being reviewed and expected to be updated in the near future?

407

00:39:16.949 --> 00:39:20.610

I don't know if you know the answer to that

408

00:39:20.610 --> 00:39:25.440

Gretchen Stevens: If that's a question of are the are the flood zones being

409

00:39:25.440 --> 00:39:28.769

reviewed and updated, .

410

00:39:30.565 --> 00:39:31.945

I believe they are,

411

00:39:31.974 --> 00:39:35.635

but I'm not sure that the timing of

412

00:39:35.784 --> 00:39:36.324

,

413

00:39:36.505 --> 00:39:36.833

of,

414

00:39:36.864 --> 00:39:37.135

you know,

415

00:39:37.164 --> 00:39:37.885

new maps,

416

00:39:37.914 --> 00:39:39.684

new flood zone maps from say,

417

00:39:39.684 --> 00:39:40.224

FEMA,

418

00:39:40.764 --> 00:39:41.364

,

419

00:39:41.784 --> 00:39:48.505

I'm not sure when to expect any updated maps and I don't know if there's a regular schedule for those updates.

420

00:39:48.954 --> 00:40:02.514

There have been somewhat recent updates in certain parts of this region certain parts of the of the Hudson Valley but in general, we are relying on old data.

421

00:40:03.119 --> 00:40:09.719

In many cases data that predated hurricanes Irene and Sandy a decade ago.

422

00:40:12.835 --> 00:40:24.085

Nate Nardi Cyrus: All right, great. Well, thank you, Gretchen. , we're gonna move move on, but if you think of other questions, , please put them in the Q and A, and we'll get to them at the end. Emily's, all cued up.

423

00:40:24.355 --> 00:40:36.235

Emily Svenson is a partner at the Poughkeepsie law firm Gordon and Svenson. She counsils and represents residents, nonprofit organization,s and municipalities on government and land use matters.

424

00:40:36.295 --> 00:40:48.715

Emily began her career in state government, managing water pollution prevention programs, and she served as an elected town board member and deputy town supervisor. With that, I'll let you take it away, Emily.

425

00:40:53.309 --> 00:40:56.880

You're muted Emily, so, made the same mistake I did.

426

00:41:05.394 --> 00:41:20.215

Emily, you're still muted. Okay. There you go. Emily Svenson: Can you hear me? All right. Sorry I lost my controls when I shared my screen. So sorry about that. Or do we have the correct view? Now?

427

00:41:20.244 --> 00:41:22.045

You have the full screen? Nate Nardi Cyrus: Yep.

428

00:41:22.344 --> 00:41:26.333

Everything looks great. Emily Svenson: Perfect, thanks so much thanks for your patience.

429

00:41:27.264 --> 00:41:41.275

Thanks to the Estuary Program, Cornell, and had Hudsoniafor presenting this, , this webinar series and for inviting me to be a part of it as Nate said, I am a partner in Gordon and Svenson here in Poughkeepsie.

430

00:41:41.304 --> 00:41:54.264

, here's a picture from the walkway right here in Poughkeepsie and really happy to be here with you today and thank you all for, for attending. , we're gonna have.

431

00:41:54.599 --> 00:41:57.414

We're gonna take this in in a few parts.

432

00:41:57.414 --> 00:42:10.135

First, I'd like to talk about why, , why we should why municipalities may want to regulate streams, and then go through some options for how you might do that.

433

00:42:10.164 --> 00:42:22.074

One option is a comprehensive wetland and watercourse ordinance, we'll talk about what that involves, and then we'll go through a number of other approaches that may work for your municipality as well.

434

00:42:22.614 --> 00:42:28.764

And then just spend a few minutes talking about the process of enacting a water resource protection regulation.

435

00:42:29.514 --> 00:42:41.664

So, hopefully, you all got the homework assignment to take a quick look at what your municipality may already have in terms of stream regulations.

436

00:42:41.815 --> 00:42:49.045

My guess is it runs the gamut from nothing to something very comprehensive and everything in between.

437

00:42:49.045 --> 00:43:03.025

So, hopefully, you'll learn more about the options and what you might want to pursue to improve those regulations in your community. So, first, let's talk a few minutes about why local regulation.

438

00:43:03.204 --> 00:43:16.585

So, this, I'm not going to belabor this because Gretchen already covered a lot of it, but just to reiterate the limitations of state and federal regulations to protect streams in your community.

439

00:43:17.880 --> 00:43:18.119

,

440

00:43:18.114 --> 00:43:19.554

As Gretchen covered,

441

00:43:19.585 --> 00:43:19.735

,

442

00:43:19.735 --> 00:43:22.014

the New York state regulations,

443

00:43:22.554 --> 00:43:34.014

only the protection of waters permit article 15 program requires a permit to disturb the bed and banks of a protected stream if it's class C-T or higher.

444

00:43:34.014 --> 00:43:39.025

So, class A, class B and class C-T for trout.

445

00:43:39.715 --> 00:43:42.684

If it's a regular class C or class D,

446

00:43:42.864 --> 00:43:46.675

New York state doesn't regulate it at all and the,

447

00:43:46.675 --> 00:43:47.244

,

448

00:43:47.304 --> 00:43:48.085

as far as,

449

00:43:48.114 --> 00:43:54.175

as far as protection of waters permit. C and D streams may be covered by SPDES,

450

00:43:54.204 --> 00:43:56.545

which would regulate what you can discharge into them,

451

00:43:56.545 --> 00:44:02.605

but they're not covered under protection of waters, which is what regulates disturbing the stream itself.

452

00:44:02.969 --> 00:44:09.269

So those class C and D streams do not have any coverage

453

00:44:09.775 --> 00:44:24.474

from New York. Stream bed and banks, and even for the ones that are covered, the C-T and higher the banks only cover the sloped area generally up to 50 feet from the sides of the stream.

454

00:44:24.474 --> 00:44:29.184

So, it doesn't go very far as far as covering a buffer.

455

00:44:29.460 --> 00:44:43.885

Federal regulations as Gretchen described, the Clean Water Act, it's, it's spotty and even for the water bodies that it does cover there are these general permits that allow you to fill up to a half acre.

456

00:44:44.635 --> 00:44:48.775

And so it's, it's not reliable for protecting a lot of small streams.

457

00:44:49.079 --> 00:45:03.625

So, that's why you may want to consider a local regulation. This is just an example of a project that I was involved in opposing this was a glamping, proposal.

458

00:45:03.925 --> 00:45:14.844

And just as an example to look at this, this is a part of a larger site. It had a DEC protected wetland on one side, and the developer stayed far away from that.

459

00:45:15.204 --> 00:45:30.085

But in this part of the site, there was a pond, and then this small stream, which was mapped as a federal wetland, because it would fall under the federal wetland disturbance requirements.

460

00:45:30.295 --> 00:45:42.775

And you see, the developer looks at a site like this often just wanting to see what's the path of least resistance. So, in this case, they knew that they could fill parts of the wetlands

461

00:45:44.215 --> 00:45:58.735

under a general permit without much trouble and so they went ahead and laid out their project crossing the stream twice here and putting these small culverts through it and basically building, these are all the glamping sites,

462

00:45:59.393 --> 00:45:59.784

right.

463

00:46:00.355 --> 00:46:10.164

Very close to and cutting through the stream, knowing that they could do that just with a pretty simple federal general permit. So

464

00:46:11.159 --> 00:46:20.369

If you, you know, in your municipality, you don't want streams to be disturbed like that, then you can put local regulations on them to protect them.

465

00:46:21.804 --> 00:46:32.934

And where does your authority come from to do that? Municipal Home Rule Law Section 10 codifies a power that comes from the New York state constitution,

466

00:46:33.204 --> 00:46:37.434

which says that municipalities can enact local laws to protect and

467

00:46:37.434 --> 00:46:39.594

enhance the physical and visual environment

468

00:46:40.045 --> 00:46:41.155

And, .

469

00:46:41.875 --> 00:46:51.534

To govern and protect the order of the, for the government protection order, conduct, safety, health, and well, being of persons or property in the municipality.

470

00:46:51.864 --> 00:46:59.755

So these are powers that municipalities have and they give your municipality the authority to protect environmental resources.

471

00:47:02.875 --> 00:47:16.824

Okay, so with that you can then think about, in your municipality, what do you want to protect? Which streams? Do you want to protect buffers adjacent to them? Include streams and wetlands together?

472

00:47:17.065 --> 00:47:24.085

And what activities do you want to regulate? And so we're gonna talk about some options for doing that.

473

00:47:24.144 --> 00:47:35.875

So first, I want to point out this really great resource that New York State has on online the New York State Department of State put out a guide to local laws to increase resilience.

474

00:47:36.625 --> 00:47:41.664

It was released just last year and it's based on climate resilience.

475

00:47:41.695 --> 00:47:54.864

But the laws and strategies that are in there that are in this guide can protect streams, wetlands, other environmental resources for multiple benefits, not just to protect from climate change.

476

00:47:55.704 --> 00:48:08.244

And I think this is a great guide because it gives you lots of options. And it allows you to tell the municipality, these are these are models that the state supports. This isn't just something

477

00:48:08.550 --> 00:48:21.510

I came up with. This is something that New York State has put its stamp of approval on. So I think that's helpful for a lot of folks trying to, to get their municipality to buy into these local laws.

478

00:48:23.070 --> 00:48:28.769

So one section within this website has wetland and watercourse protection measures.

479

00:48:28.769 --> 00:48:41.699

And in that section, it has a lot of different types of local laws and sample laws. And so you can take your time and go to the website and look

480

00:48:42.534 --> 00:48:43.585

through those,

481

00:48:43.644 --> 00:48:43.855

but,

482

00:48:43.885 --> 00:48:44.335

,

483

00:48:44.425 --> 00:48:45.204

what it'll do is,

484

00:48:45.204 --> 00:48:56.485

it'll it gives you information about different methods for protecting streams and wetlands and then it gives you examples from different communities and as Nate pointed out,

485

00:48:56.485 --> 00:48:57.474

you can use that E-

486

00:48:57.505 --> 00:49:01.315

code website to look up other municipalities'

487

00:49:01.434 --> 00:49:02.364

local laws.

488

00:49:02.574 --> 00:49:16.014

And, you know, simply cut and paste, it's all open source and available for anyone to, you know, imitation is the sincerest form of flattery. Right? So if you find one that works, you can just go ahead and adapt it to your municipality.

489

00:49:17.514 --> 00:49:25.525

Another great resource is the, the Cornell Conservation Planning in the Hudson River Estuary Watershed website.

490

00:49:25.525 --> 00:49:33.594

They have a page with a lot of local laws and information on adopting local laws. So I would

491

00:49:34.050 --> 00:49:37.079

direct you to check that website out also.

492

00:49:39.690 --> 00:49:40.764

And so what I'd like to do,

493

00:49:40.764 --> 00:49:43.554

first is talk about one type of local law,

494

00:49:43.585 --> 00:49:47.724

which is a comprehensive wetlands and water course ordinance. Just go through that,

495

00:49:47.724 --> 00:49:48.625

as an example,

496

00:49:48.625 --> 00:49:53.994

and look at some of the components of it and talk about how you can regulate headwater streams,

497

00:49:54.445 --> 00:49:54.864

,

498

00:49:54.925 --> 00:50:00.295

and then we'll go back and talk about some of the other options after we take sort of a deep dive into this option.

499

00:50:04.135 --> 00:50:11.034

So you'll find a sample wetland and water course ordinance in that Department of State guide.

500

00:50:11.244 --> 00:50:26.005

If you go into the, the Department of State guide to the wetlands and watercourses section, it's actually in the wetland section, but it covers both wetlands and watercourses. So, you'll find it in section 2.1.4, , if you want to go later onto that website and look.

501

00:50:27.690 --> 00:50:41.400

And they present a comprehensive wetland and watercourse law that you can customize to your municipality. It protects streams and wetlands and also their buffers and

502

00:50:41.400 --> 00:50:53.039

we'll talk about some ways of customizing it based on, on what's unique to your community. Both whatever is unique environmentally, but also the political constraints.

503

00:50:55.829 --> 00:51:00.329

So, looking at, sort of the anatomy of a wetlands law.

504

00:51:00.329 --> 00:51:07.855

Kind of have to jump to the middle of a typical law to find the, the action part, which is what activities are regulated.

505

00:51:08.034 --> 00:51:22.614

So, in this sample law, if you go to section 4, and you don't have to do this now, but if you want to later go on the website and look through the sections of the sample, I'm putting out the sections as we go through here.

506

00:51:23.155 --> 00:51:23.605

Section

507

00:51:23.605 --> 00:51:38.215

4 talks about what acts are subject to review, so most wetlands and watercourse laws don't prohibit activities, some do, but more often, they set which activities are regulated.

508

00:51:38.215 --> 00:51:47.425

And then, for those activities, if you're going to, if you want to do one of those activities in a regulated area, you need to go get a permit. So that's usually the structure.

509

00:51:47.875 --> 00:51:50.454

So this section for defines,

510

00:51:50.454 --> 00:51:52.434

which are the regulated activities,

511

00:51:53.244 --> 00:51:56.155

and for this sample construction,

512

00:51:56.155 --> 00:51:58.764

obviously also draining and excavation,

513

00:51:58.764 --> 00:51:59.394

filling,

514

00:51:59.394 --> 00:52:00.085

grading,

515

00:52:00.684 --> 00:52:01.855

clearing trees,

516

00:52:02.034 --> 00:52:03.324

applying pesticides,

517

00:52:03.355 --> 00:52:03.954

et cetera.

518

00:52:04.465 --> 00:52:13.945

And then it also sets some exempt activities because you'll probably want to exempt agriculture, public health activities, things like that.

519

00:52:16.650 --> 00:52:30.449

Another key item is what areas are included, and those are, you'll find that in the definition section. So, here, going back here, it says, .

520

00:52:31.074 --> 00:52:44.574

it's unlawful to conduct any of the following activities in a wetland, watercourse, or buffer area. So those are your regulated areas: a wetland, watercourse, or buffer area. So, if you go to the definitions, it defines what those are.

521

00:52:44.574 --> 00:52:55.434

So watercourse, it has a description here of what a watercourse is. If you're concerned about headwaters streams in your community, you can make sure that this water course definition

522

00:52:56.425 --> 00:53:09.804

it would include the qualities of headwaters stream that you want to ensure included here whether or not there, this type of stream that would be regulated by other by other agencies.

523

00:53:10.170 --> 00:53:21.570

You can also establish a buffer area. Sometimes the buffer area is keyed to the type of resource. It might be larger or smaller for different size stream.

524

00:53:21.570 --> 00:53:30.119

And that's all, you know, up to your discretion and what you can realistically do in your community.

525

00:53:31.980 --> 00:53:44.969

Section 6 of the model law talks about how permitting works, and that's something to really think about when you're setting up a wetlands and think about how it's going to work in your municipality.

526

00:53:44.969 --> 00:53:57.119

Not not only what criteria you want applied when someone is, is asking for a permit but how it's actually going to be processed who, which local officials handle it, et cetera.

527

00:53:59.099 --> 00:54:06.690

And then finally you want to figure out how violations are addressed and that's in section 12 of the model law.

528

00:54:07.980 --> 00:54:14.065

And I want to just talk a few minutes about things particular to headwater streams.

529

00:54:14.275 --> 00:54:14.574

So,

530

00:54:14.574 --> 00:54:15.085

as I said,

531

00:54:15.085 --> 00:54:22.945

Before, you want to think about how you define streams to make sure you're including the small headwater streams that you want to include,

532

00:54:23.335 --> 00:54:23.695

,

533

00:54:23.724 --> 00:54:37.675

think about whether you want to have your local law rely on a map or not for it can be difficult to create a map when some resources are only, you,

534

00:54:37.704 --> 00:54:42.144

you don't have the ability to map them remotely.

535

00:54:42.414 --> 00:54:48.445

So, you know, if your community has gone through a really thorough.

536

00:54:48.690 --> 00:55:03.659

Natural Resource Inventory or mapping process, maybe you have good maps and you want to create a map for your local law. Some communities are unable to create a map.

537

00:55:03.985 --> 00:55:04.554

So,

538

00:55:04.554 --> 00:55:14.485

I just wanted to point out to make sure that if you aren't going to map the resource to think about talking to your

539

00:55:14.514 --> 00:55:16.255

to your municipal attorney,

540

00:55:16.255 --> 00:55:19.673

about being sure that you're meeting the requirement for

541

00:55:19.704 --> 00:55:20.664

for notice

542

00:55:22.315 --> 00:55:31.585

Legally, in order to make sure that people know what is subject to regulation in the community, to know whether they're regulated or not.

543

00:55:32.394 --> 00:55:45.775

You need to make sure that your regulation is specific enough that the standard is kind of a funny standard. The standard is whether a person of ordinary intelligence would have fair notice that they're contemplated conduct is forbidden.

544

00:55:46.195 --> 00:55:54.474

So, for instance, a good case to look at is the case with the New Paltz Wetlands Law went to court several years ago.

545

00:55:54.715 --> 00:56:07.614

And in that case, one of the questions was, they were regulating quality vernal pools and those were not mapped because it was really impossible to map them without going onto every individual property.

546

00:56:08.425 --> 00:56:18.144

But the court found that the people did have that, a person of ordinary intelligence did have adequate notice based on two things.

547

00:56:18.144 --> 00:56:27.775

One was that there was a good definition of quality vernal pool in New Paltz's wetlands law that a person could read that definition

548

00:56:27.775 --> 00:56:40.494

and have a pretty good idea, whether the, whether a resource on their land would be considered a quality vernal pool. And then the second thing was that the town of Newport's provided a free inspection.

549

00:56:40.494 --> 00:56:47.454

So, if a land owner wanted, the town would send out their wetlands inspector to see whether there was a quality vernal pool.

550

00:56:47.454 --> 00:56:58.764

So, between those two things, the court found that there was adequate notice. That's not to say that you have to have those same things, but that's just one thing to think about. If you're going to be regulating a resource

551

00:56:59.099 --> 00:57:05.639

that is not mapped and that may be a little difficult to define.

552

00:57:06.474 --> 00:57:07.764

And then another thing to think about,

553

00:57:07.764 --> 00:57:08.784

if you do have a map,

554

00:57:08.815 --> 00:57:09.295

how,

555

00:57:09.324 --> 00:57:10.764

how is the map adjusted,

556

00:57:10.764 --> 00:57:14.184

based on field conditions so,

557

00:57:14.215 --> 00:57:14.545

,

558

00:57:14.574 --> 00:57:16.704

the map might be a first step,

559

00:57:16.735 --> 00:57:20.994

but then you might want there to be a field visit and,

560

00:57:21.025 --> 00:57:21.625

,

561

00:57:21.684 --> 00:57:26.485

a more specific delineation of the resource in the field,

562

00:57:26.514 --> 00:57:28.105

so you want to cover that in your law.

563

00:57:31.079 --> 00:57:40.829

Okay, so moving on from the comprehensive wetland and watercourse ordinance, just gonna talk about some other possible approaches that may make sense in your community.

564

00:57:42.179 --> 00:57:51.989

So, again, wetlands and watercourse ordinance either as a standalone ordinance or as part of your zoning law.

565

00:57:51.989 --> 00:57:55.920

Oops.

566

00:57:56.844 --> 00:58:10.315

There we go another option is, is setbacks that you could put into the zoning code itself. So, for instance, the town of Gardiner adds 100 foot setback from the top of the bank of a DEC regulated stream.

567

00:58:10.315 --> 00:58:23.304

So, that uses the DEC stream maps as its basis. But then as we said before the DEC regulations only protect the actual bed and banks of the stream.

568

00:58:23.304 --> 00:58:27.385

So, the town of Gardiner adds 100 foot set back beyond that.

569

00:58:33.474 --> 00:58:35.514

Another option is overlay zoning.

570

00:58:35.844 --> 00:58:49.315

So for instance, if there is a particular part of your community that has a concentration of natural resources, you can use an overlay to add additional regulations on top of the underlying zoning district.

571

00:58:49.525 --> 00:58:49.764

,

572

00:58:49.795 --> 00:58:56.094

This map is from the village of Trumansburg. They have this greenish area is a wetland overlay,

573

00:58:56.125 --> 00:59:06.684

and the blueish area is a stream overlay, and all the parcels in those overlays are subject to additional regulations based on the

574

00:59:06.715 --> 00:59:10.434

the types of resources that their villages wants to protect.

575

00:59:14.219 --> 00:59:19.855

Another regulatory option is having a stream buffer in your subdivision code.

576

00:59:20.155 --> 00:59:30.655

If you're mainly concerned about residential subdivisions, then this is a way, you know, maybe your community isn't ready for a full-fledged stream in wetlands law.

577

00:59:30.684 --> 00:59:41.094

But you do want to make sure that for new subdivisions stream buffers are being protected. So, you could put a buffer provision in your subdivision code.

578

00:59:44.369 --> 00:59:56.070

Another option is stronger stormwater regulations. This wouldn't directly protect streams, but it would protect or it would regulate runoff to streams.

579

00:59:56.070 --> 01:00:07.375

So, in New York State, stormwater regulations apply to projects that disturb one acre or more or less. There's a little more complicated than that.

580

01:00:07.375 --> 01:00:15.625

But generally, 1 acre, I'm sorry one acre or more projects that disturb one or more acres, have to go through a stormwater planning process.

581

01:00:15.925 --> 01:00:27.445

But in your municipality, you can make smaller, smaller disturbances, subject to storm water regulations, or you could increase the standards beyond what the state requires.

582

01:00:27.474 --> 01:00:31.344

So, that's more of an indirect way of protecting your streams.

583

01:00:34.230 --> 01:00:45.655

Another approach, this is kind of an older approach, but some municipalities that didn't establish one of these 30 years ago, are doing it now, a clearing, grading, and filling law.

584

01:00:46.045 --> 01:01:00.144

As I just said, stormwater regulations from the state requires stormwater plan if you're disturbing one acre or greater, but, some municipalities establish a clearing grading and filling law

585

01:01:00.480 --> 01:01:03.804
so that if people are doing site work,

586
01:01:03.835 --> 01:01:09.144
they haven't so say an applicant hasn't come in yet for a subdivision application,

587
01:01:09.414 --> 01:01:13.434
but they just kind of start doing some work on the site. They start clearing trees,

588
01:01:13.434 --> 01:01:18.414
or they start bringing in fill your municipality may have no,

589
01:01:18.445 --> 01:01:18.744
,

590
01:01:18.775 --> 01:01:21.204
no permitting associated with that.

591
01:01:21.235 --> 01:01:21.925
So,

592
01:01:21.954 --> 01:01:22.525
,

593
01:01:22.585 --> 01:01:26.275
regulating smaller amounts of fill can ensure that,

594
01:01:26.275 --> 01:01:36.684
before someone starts doing work on a site that that streams and wetlands had been checked ,that
runoff won't be altered through the,

595
01:01:36.684 --> 01:01:37.135
,

596
01:01:37.164 --> 01:01:38.364
the work that they're doing.

597

01:01:39.114 --> 01:01:49.554

It can protect from clear cutting and advanced of a project, which is a problem and a lot of places and also illegal dumping is a concern in places and

598

01:01:49.860 --> 01:02:04.829

I worked on one project where, until they had brought in over an acre of fill, they hadn't, they hadn't violated any law. ,So and some of that was not clean fill. So

599

01:02:06.000 --> 01:02:11.670

establishing a clearing, grating, and filling law can give you oversight over those activities.

600

01:02:13.949 --> 01:02:28.735

So, switching from regulatory approaches to process approaches as Gretchen talked about, you have SEQR review for construction projects. One thing a municipality can do that's not exactly regulatory,

601

01:02:28.945 --> 01:02:37.675

you can establish critical environmental areas and that's a way of documenting the important natural resources in,

602

01:02:37.704 --> 01:02:38.005

in a,

603

01:02:38.034 --> 01:02:43.434

in a sensitive area to ensure that those resources are evaluated in the,

604

01:02:43.465 --> 01:02:44.875

in the SEQR process.

605

01:02:45.179 --> 01:02:58.679

And the Estuary program has some great guidance on critical environmental areas. This is an example in the town of Hyde Park where it was the headwaters of the Maritjekill stream were established as a critical environmental area.

606

01:03:01.079 --> 01:03:07.230

Another process related option is to

607

01:03:07.230 --> 01:03:13.014

to map sensitive resources before a subdivision is laid out.

608

01:03:13.014 --> 01:03:13.434

So,

609

01:03:13.434 --> 01:03:14.125

for example,

610

01:03:14.125 --> 01:03:15.594

in the town of Pine Plains

611

01:03:15.925 --> 01:03:17.485

they have a process where,

612

01:03:17.485 --> 01:03:20.454

before you can come in with a subdivision application,

613

01:03:20.755 --> 01:03:31.795

there's a preliminary process of mapping all the natural resources and deciding which areas should be set aside before anyone draws any lot lines or houses or anything on the map,

614

01:03:32.155 --> 01:03:32.664

they,

615

01:03:32.695 --> 01:03:34.855

they go through that process of deciding,

616

01:03:35.094 --> 01:03:35.485

,

617

01:03:35.514 --> 01:03:36.264

what

618

01:03:36.630 --> 01:03:43.260

to be protected. So that's an option similar to what Gretchen talked about with preapplication meetings.

619

01:03:44.550 --> 01:03:46.525
A little further outside the box,

620
01:03:46.554 --> 01:03:50.574
completely non-regulatory ways of protecting streams,

621
01:03:51.385 --> 01:03:52.434
permanent protection,

622
01:03:52.434 --> 01:03:53.485
for example,

623
01:03:54.474 --> 01:03:59.125
using easements or direct purchase of land to protect

624
01:03:59.155 --> 01:03:59.394

,

625
01:03:59.394 --> 01:04:00.025
streams,

626
01:04:00.054 --> 01:04:02.335
particularly sensitive stream corridors.

627
01:04:02.784 --> 01:04:15.385
In Red Hook, there was this Hook trail project. That was a combination of creating a recreational trail and protecting the stream that supplies water for Bard College.

628
01:04:16.679 --> 01:04:22.764
That was a project through Winnakee Land Trust and then also,

629
01:04:22.764 --> 01:04:27.114
I always like to remind municipalities that in addition to regulating,

630
01:04:27.114 --> 01:04:34.675
you can look at your own facilities and make sure that you're doing what you can as a municipality to reduce impacts to streams.

631

01:04:35.364 --> 01:04:47.275

For example, the way you manage your roads and ditches; the way you manage your municipal facilities that can all affect how your streams' health as well.

632

01:04:51.150 --> 01:05:02.730

So this is our last section just want to talk briefly about enacting local regulations and some things to think about when you get into that process, hopefully we've given you some ideas on.

633

01:05:02.730 --> 01:05:08.400

On options, so here are some tips for the process.

634

01:05:08.400 --> 01:05:23.184

So again, in a municipality, it's the town board, village board, city council that has the authority to adopt a regulation. Anyone can draft it.

635

01:05:23.184 --> 01:05:26.574

It could be the conservation advisory council that drafts

636

01:05:26.574 --> 01:05:39.385

It. It could be some other organization, but you do want to make sure you're working with that, that legislative agency to make sure that they're going to be willing to adopt the law you're drafting.

637

01:05:39.804 --> 01:05:54.385

So, you know, expect a lengthy process, take your time to strategize. And draft a law that is appropriate to your natural resources and also your political reality and your capacity to enforce.

638

01:05:55.139 --> 01:06:09.054

As far as the SEQR review, Gretchen talked about SEQR review of individual projects, but remember that a local law also goes through a SEQR review and which that may seem a little silly.

639

01:06:09.054 --> 01:06:21.295

Of course, you're putting in a wetland or stream protection law in order to protect natural resources. So, why do you have to look at the environmental impact of that? That is a requirement and it can actually be used to your advantage.

640

01:06:21.295 --> 01:06:31.525

It can be an opportunity to analyze what the effects of this law would be. Obviously, it would have some positive effects on the environment.

641

01:06:31.885 --> 01:06:44.755

How much land would actually be affected? Would development potential be affected? If you, if you analyze those things, you'll really set yourself a strong groundwork for any challenges to your law.

642

01:06:44.784 --> 01:06:51.594

So, I'd encourage you to use that SEQR review to your advantage while you're developing a local law.

643

01:06:53.485 --> 01:07:07.614

And then also, you may need to have a consultant work with you on creating a local law. The Hudson Hudson River Valley Greenway has small grants that are available quarterly. And that's a good source of funding

644

01:07:07.614 --> 01:07:13.704

if you need to hire a planner or some other professional to help you develop a local law.

645

01:07:16.829 --> 01:07:26.190

Remember to work with other partners who have similar...

646

01:07:26.190 --> 01:07:41.130

whose goals may align with yours. So, streams protecting streams obviously has lots of different benefits from flood prevention, climate resilience, drinking water protection, recreation, fishing.

647

01:07:41.130 --> 01:07:52.800

People who share all of those different interests can all come together behind a protection law. So think about that and, and building a coalition of support for your law.

648

01:07:55.164 --> 01:08:09.085

Avoiding pitfalls, remember that local laws for environmental protection should go through the 209 M review, sending it to county planning; just like any zoning law. Also mind the overlap.

649

01:08:09.114 --> 01:08:20.814

If you're regulating wetlands that are already regulated by other agencies, just make sure that that's covered properly in your law. Your town attorney can help with that.

650

01:08:23.425 --> 01:08:33.805

So, I think that covers what I had, and we're just about on time. I'd love to take some questions, but I'd also welcome people to contact me anytime.

651

01:08:34.015 --> 01:08:42.024

This is my contact information and that's my website and I'd love to hear from you. So, Nate, do we have any questions now?

652

01:08:42.329 --> 01:08:55.260

Nate Nardi Cyrus: We do, and I'll clarify that, you know, we will definitely share Emily's website and the model local law that she was working on. So you don't have to worry about scrambling to find that the follow up email will have all this information.

653

01:08:55.260 --> 01:09:03.239

We do have a couple of questions. One, does New York state exempt agricultural development under the protection of waters?

654

01:09:05.640 --> 01:09:09.090

Emily Svenon: New York state.

655

01:09:09.090 --> 01:09:14.039

Nate Nardi-Cyrus: So, I'm assuming do they, they're asking, do they regulate agriculture

656

01:09:14.039 --> 01:09:17.189

through the protection of waters.

657

01:09:17.189 --> 01:09:25.170

Emily Svenson: I don't know the exact answer to that. I'm not going to guess I can I can find out if you want. I know that.

658

01:09:25.170 --> 01:09:31.800

Agriculture is not necessarily exempt from local, environmental laws, but

659

01:09:31.800 --> 01:09:43.649

it can, it can be a tricky area because of the right to farm provisions that are that are in place through New York state. , I honestly don't know and I could find out if you'd like.

660

01:09:43.649 --> 01:09:47.909

Right.

661

01:09:47.909 --> 01:09:52.409

Nate Nardi Cyrus: I'll try to include that response and a follow up .

662

01:09:52.409 --> 01:10:03.444

Another question that we have sites of one acre or more, seem to be a common phrase. Can you talk about options to reduce the additive impacts of development on smaller sites than one acre?

663

01:10:03.475 --> 01:10:09.895

Are there some, some of the options that you just shared more usable than others for this type of approach?

664

01:10:12.835 --> 01:10:26.664

Emily Svenon: Yeah, the one acre or larger is the, the limit for when you need a SWIPP through the New York state stormwater program. But you can certainly regulate smaller resources through local laws.

665

01:10:26.694 --> 01:10:31.614

You can regulate smaller wetlands streams, et cetera. So yeah. .

666

01:10:32.725 --> 01:10:46.824

Absolutely. Is there a specific question there? Yeah. Nate Nardi Cyrus: Yeah I guess just getting at the fact that I think you answered it that regulation can go down to that, sub acre level. I've I've often seen

667

01:10:46.854 --> 01:10:52.885

wetlands, regulated to a 10th of an acre or even any, , in some cases. So, .

668

01:10:53.159 --> 01:11:06.390

And then, of course, there's, there's other ways to protect it involves stewardship. And you know, if you manage your own lands, obviously, that's, you know, kind of, , voluntary methods of protection that can be employed there as well.

669

01:11:06.390 --> 01:11:10.229

Another question,

670

01:11:10.465 --> 01:11:21.114

If issuing of permits gives developers the green lights to encroach on wetlands. How do you recommend strengthening of wetlands, buffers and ordinances?

671

01:11:21.175 --> 01:11:34.284

So, for example, could regulated activities, perhaps be, , defined as prohibited , do you know any municipalities that would deny permits? that prohibit the disturbance of wetlands on their buffer

672

01:11:34.560 --> 01:11:37.560

where a permit is not an option?

673

01:11:39.444 --> 01:11:54.175

Emily Svenson: So you have to be careful if you're completely prohibiting what that you're not getting into an area of unconstitutional taking. So, usually there's a permitting process but.

674

01:11:54.479 --> 01:12:06.359

Could you prohibit activities altogether? You probably could. You just want to be real careful that you're not taking away someone's

675

01:12:06.359 --> 01:12:11.789

economic use of their property completely, because then you, you could get into a

676

01:12:11.789 --> 01:12:20.640

constitutional takings problem, but there are certainly examples where activities are prohibited entirely, not just regulated.

677

01:12:23.279 --> 01:12:27.569

Nate Nardi Cyrus: Great. This is wonderful. We're getting a lot of questions coming in.

678

01:12:27.569 --> 01:12:36.840

Can you talk about the role of wetlands inspectors and implementing local wetlands and water course protection laws? Does that tend to be a staff position in the town?

679

01:12:36.840 --> 01:12:43.859

Emily Svenson: I've seen it as a staff position. I've seen it as a consultant position.

680

01:12:43.859 --> 01:12:55.914

And sometimes there isn't a specific person assigned to that task, and the municipality relies on the applicant for to provide their own wetlands mapping.

681

01:12:56.545 --> 01:12:59.364

It can rely on volunteers to go out in the field.

682

01:13:01.079 --> 01:13:10.529

But I'd say that often, there's either a part time staff person, or a consultant, or that type of person.

683

01:13:12.689 --> 01:13:26.100

Great yeah, and we're actually gonna be hearing next, from the town of Poughkeepsie. And you can see how they've divided that that work up themselves. I think I'm going to use this opportunity actually to pivot to

684

01:13:26.100 --> 01:13:36.654

Poughkeepsie, and we'll again, continue to have put questions in and we can, we can stay on until after the presentation, up until, 5 or so and answer any questions that come in.

685

01:13:37.314 --> 01:13:42.175

So I'm going to pass this over to, Kristen.

686

01:13:43.590 --> 01:13:46.680

And you should be able to load up your presentation.

687

01:13:52.645 --> 01:14:05.904

Okay, as a Kristen's getting this all keyed up, I'm gonna give her a quick introduction. Kristen Taylor is a planner with the town of Poughkeepsie, with a BS in meteorology, and a minor in geography from

688

01:14:06.390 --> 01:14:15.774

SUNY Oneonta and an M.R.P. or masters in regional planning with the concentration in environmental planning from SUNY Albany.

689

01:14:16.255 --> 01:14:23.694

She worked as a planner in the private sector for 3 years serving communities across New York state before making the jump into the public sector in 2017. Kristen

690

01:14:23.694 --> 01:14:28.854

wears many hats in the town serving primarily to review applications before the planning board,

691

01:14:28.854 --> 01:14:31.614

but also as a staff support for the towns recently reinstated,

692

01:14:31.614 --> 01:14:35.574

CAC and as a staff liaison to the town's

693

01:14:35.574 --> 01:14:36.085

climate smart communities

694

01:14:36.085 --> 01:14:39.414

task force. We're also going to be hearing from Karol Knapp

695

01:14:39.414 --> 01:14:50.574

Who is a principal at Aspen Environmental and who manages the logistics for implementing the town's aquatic resources protection law. So, with that and my butchered pronunciation

696

01:14:52.920 --> 01:14:56.069

Of a SUNY school, we're gonna pass it over to, you.

697

01:14:56.454 --> 01:15:08.784

Kristen Taylor: That's "O-knee-on-ta". Nate Nardi Cyrus: I confuse it with "Auntie-or" out here and I just I know totally. It throws me all right. Kristen Taylor: No problem. No problem. All right. Thanks, Nate and thank you everyone for joining us.

698

01:15:08.784 --> 01:15:22.975

And thank you for the opportunity to invite the Town of Poughkeepsie to present. Again. I'm Kristen Taylor planner with the town. And with me is Karol Knapp of Aspen Environmental. Karol is the town's wetlands.

699

01:15:23.850 --> 01:15:36.329

guru, an environmental consultant and we thought it best to present as a team, just because I know that I know just enough about today's subject to get myself into trouble.

700

01:15:36.329 --> 01:15:45.954

And so that with that said, you'll notice that our presentation is largely framed in the planner lens, and I would like to say, also, thank you to Gretchen and Emily.

701

01:15:46.314 --> 01:15:55.614

You set me up really well. Happy to hear that the town is doing some of the things that you have mentioned of course, there's always room for improvement.

702

01:15:56.130 --> 01:15:59.250

So with that, oh.

703

01:15:59.250 --> 01:16:12.840

Let me make sure I'm clicking the right thing here. All right, so again, that's us on the right side of your screen. I just wanted to give you a quick snapshot of the, the area that we're talking about.

704

01:16:12.840 --> 01:16:18.960

Town of is one of the largest if not the largest municipality in Dutchess county. We are.

705

01:16:18.960 --> 01:16:32.909

We're all over and we're just going to move right into an agenda. We thought it would be helpful to discuss and share with you several fast facts about the town as some of you might know more about the community than others listening in.

706

01:16:32.909 --> 01:16:44.970

And we'll go ahead and review some of the language found in our aquatic resource protection law, reviewing its intent, regulated and permitted acts, and thresholds for buffers as they apply to aquatic resources.

707

01:16:44.970 --> 01:16:54.149

Then I will kindly ask you to buckle your seatbelts and follow us into a short review of the planning process and how this all comes together and works together.

708

01:16:57.989 --> 01:17:03.359

So the town of Poughkeepsie or affectionately known here in shorthand as TOP,

709

01:17:03.359 --> 01:17:14.430

is home to approximately 45,000 people give or take a couple of 1000 over the past decade. We have remained relatively steady.

710

01:17:15.024 --> 01:17:28.795

Swaying just again, only a couple of 1000 in one direction, or the other. The town is approximately 31 square miles, or approximately 20,000 acres with approximately 7 miles of the western border of the town being the Hudson River.

711

01:17:28.795 --> 01:17:36.744

Most of that property is served by private property owners, including establishments, such as IBM and Silicon.

712

01:17:37.770 --> 01:17:44.550

They are not listed here, but undoubtedly worth pointing out. The town is also home to Dutchess community college,

713

01:17:44.550 --> 01:17:49.890

Marist college and Vassar college. We actually worked with a

714

01:17:49.890 --> 01:18:01.890

couple of student or classes, I should say to create those logos at the right side of the screen. It was a studio course so they were able to work with our volunteers and create logos. So.

715

01:18:01.890 --> 01:18:05.909

For all of those organizations that, you know, are working in the town.

716

01:18:05.909 --> 01:18:19.409

Speaking of partnerships, which I know was mentioned earlier. So, and then also, of course, can't go without saying that we are home to several creeks, most notably Fall Kill, Wappingers, and Casper kill.

717

01:18:19.409 --> 01:18:29.729

In 2000, the town became a Greenway Compact Community with, which is a planning initiative that encapsulates the idea of thinking regionally as communities planned locally.

718

01:18:29.729 --> 01:18:41.369

There are 5 criteria that frame or guide this planning initiative approach and they are natural and cultural resource protection, regional planning, economic development, public access, and heritage and environmental education.

719

01:18:41.369 --> 01:18:44.460

Also the town as Nate had

720

01:18:44.460 --> 01:18:54.779

stated in the intro, our CAC has been sort of reinstated. We have a new group of volunteers again. Those are volunteers putting in time. .

721

01:18:54.779 --> 01:19:06.925

And and who have conservation on on there as a priority, at the forefront of their mind and goals it is comprised again of volunteers appointed by the town board.

722

01:19:06.925 --> 01:19:13.015

These volunteers served to advise the town board and the community at large on a host of environmental related matters.

723

01:19:13.409 --> 01:19:19.319

We are also excited to announce the town board took the New York state.

724

01:19:19.704 --> 01:19:33.774

Climate Smart Community pledge in 2018. This enabled the establishment of the town's climate smart task force. As a result of the hard work of the town's task force over the past few years, we've recently we were recently granted, granted, the bronze level certification.

725

01:19:36.840 --> 01:19:43.770

And with that, I'm just going to pause and allow Karol to jump in. I don't know Karol if you'd like to unmute.

726

01:19:43.770 --> 01:19:54.569

Karol Knapp: I'm sure I am. Unmuted. Ah, perfect. So, since this is a conversation about headwater streams, I cannot say that there are no headwater streams in the town of Poughkeepsie.

727

01:19:54.569 --> 01:20:03.600

But the town and the town does not have the cold and cool high gradient headwater streams that much of the attention is rightfully focused upon. And that was a

728

01:20:03.600 --> 01:20:12.779

subject of some previous conversations. The Wappingers Creek, for example, is the town's largest aquatic resource other than the Hudson River itself

729

01:20:13.015 --> 01:20:17.395

within the town and it flows over 10 miles from near the Northeast border to the Southwest border.

730

01:20:17.395 --> 01:20:28.975

But its headwaters began some 30 miles north in the town of Pine Plains, near the northern edge of Dutchess County, and just because of the jurisdictions, , the varying jurisdictions of waters it

731

01:20:29.489 --> 01:20:30.175
Of course,

732
01:20:30.234 --> 01:20:30.744
,

733
01:20:31.255 --> 01:20:32.484
as an element of of,

734
01:20:32.515 --> 01:20:32.904
,

735
01:20:33.145 --> 01:20:34.375
just not confusion,

736
01:20:34.375 --> 01:20:34.645
but,

737
01:20:34.824 --> 01:20:35.005
,

738
01:20:35.034 --> 01:20:36.234
cooperation in order to,

739
01:20:36.385 --> 01:20:37.914
to maintain these streams,

740
01:20:38.574 --> 01:20:38.904
,

741
01:20:38.904 --> 01:20:39.625
The town's two

742
01:20:39.654 --> 01:20:41.965
the town's two other prominent streams the Fallkill,

743

01:20:41.994 --> 01:20:45.145
which originates in the northern Hyde Park region,

744
01:20:45.503 --> 01:20:46.465
and the Casper kill,

745
01:20:46.465 --> 01:20:49.104
which lies entirely within the town and the city of Poughkeepsie.

746
01:20:49.619 --> 01:21:02.904
And it does in fact, have its headwaters in Peach Hill park. Unfortunately, we know how this goes. Within the town limits the best stream quality is typically a NYSDEC class C and in some areas

747
01:21:02.904 --> 01:21:05.755
and especially where it runs into the city of Poughkeepsie,

748
01:21:06.114 --> 01:21:07.704
it does drop to a D,

749
01:21:08.454 --> 01:21:08.814
,

750
01:21:08.845 --> 01:21:10.225
and that's not our desire,

751
01:21:10.255 --> 01:21:16.074
but not entirely unexpected because is highly developed and much of that development,

752
01:21:16.104 --> 01:21:18.595
especially the development among the waterways

753
01:21:18.869 --> 01:21:24.359
is decades old and far predates most of our environmental protection laws.

754
01:21:24.359 --> 01:21:30.180
It is also a Hudson River coastal town, meaning that many of our streams are at the end of the road.

755

01:21:30.180 --> 01:21:34.439

And not headwaters. That's not to say that there's no hope.

756

01:21:34.439 --> 01:21:44.460

Or help, the current town of aquatic protection law was enacted in 2003, having superseded one from 1976

757

01:21:44.460 --> 01:21:49.979

And the ordinance follows many of the principles and measures found in model water resource protection codes.

758

01:21:49.979 --> 01:22:03.840

And some measures are significantly strict, such as the need for careful consideration and authorization of aquatic resource disturbance, including buffer disturbance of over a 10th of an acre. But there is definitely room for improvement.

759

01:22:05.819 --> 01:22:14.760

Kristen? Kristen Tayler: Thank you, Karol. So we figured out what would be helpful next is to to.

760

01:22:14.760 --> 01:22:21.720

obviously just put up what our outline is of our aquatic resource protection ordinance and code language.

761

01:22:21.720 --> 01:22:33.420

We, our code is available on e-code so if you just do a quick search in Google, you would be able to pull ours up if you wanted to and take a look at what some of the

762

01:22:33.595 --> 01:22:44.935

language that's in there. I thought it would be important rather than go through every single section of the code that we would hit on intent, definitions, regulated and permitted acts, and permit issuance.

763

01:22:45.354 --> 01:22:52.284

I've italicized definitions to remind myself to point out and this has already been brought up a couple of times this afternoon,

764

01:22:52.829 --> 01:22:58.229

you know, word choice and phraseology is important, clearly defining what it is

765

01:22:58.229 --> 01:23:05.130

that the town or your municipality, your community wants to do very clearly and articulately is important.

766

01:23:05.130 --> 01:23:11.850

So we'll just go through a couple of those items and I, you know, I think it's also important to

767

01:23:11.850 --> 01:23:25.380

point out, too that in our finding section of this code language, there is one sentence that I think really hits on everything. "The town desires to prevent acts inconsistent with the protection of aquatic resources."

768

01:23:25.380 --> 01:23:30.720

So that is the goal. So, our intent

769

01:23:30.720 --> 01:23:35.034

section is comprised of three sharp points and I don't typically,

770

01:23:35.154 --> 01:23:37.675

I'm not usually a fan of just sitting here reading a slide,

771

01:23:37.675 --> 01:23:48.385

but I'm going to go ahead and do that for this particular slide. It is the intent of the town of Poughkeepsie to protect aquatic resources. It is the intent of this chapter to exercise concurrent jurisdiction with New York

772

01:23:48.385 --> 01:24:00.475

DEC and army corps overall aquatic resources within the town. It is the intent of this chapter to incorporate the protection of aquatic resources into the land use development approval and construction inspection procedures of the town.

773

01:24:05.399 --> 01:24:12.024

So here are a couple of important definitions. Of course, our definition section is rather comprehensive again, though

774

01:24:12.024 --> 01:24:24.354

admittedly, some of the language might be able to be cleaned up but water body and watercourse are clearly defined in the code. And you'll notice that we do hit on that permanent.

775

01:24:24.630 --> 01:24:39.595

and intermittent public or private, these are the kinds of things you want to be watching out for when you're crafting the language of your code. And again, as it's been indicated, you would be working with potentially maybe a consultant, or you would be working with counsel.

776

01:24:39.895 --> 01:24:45.534

Most probably would be working with some sort of counsel. And of course, you'd be working with

777

01:24:45.869 --> 01:24:51.600

you know, we're keeping it at minimum, keeping inform the agency that would ultimately be adopting the law.

778

01:24:54.840 --> 01:25:06.654

So, moving onto our buffer section, this section, or the slide outlines buffers is actually found in the definition section of our ordinance.

779

01:25:07.465 --> 01:25:17.694

And the way that it works is that there's sort of this graduated approach to protection for aquatic resources, depending on the size of the aquatic resource.

780

01:25:17.994 --> 01:25:32.725

There's also specific call outs in our code about Wappingers Creek, as, as it relates to the stream bank and distance from the stream bank. And then, of course, what are other tools that might exist for protection?

781

01:25:32.755 --> 01:25:44.425

We were reviewing this in preparation of this presentation and, of course, there are a number of things, which I'll get to later in our presentation that the town is hoping to bring together and work through.

782

01:25:44.425 --> 01:25:51.774

But what other tools exists for protection what can we be doing better? And again, I think I might pause for Karol to jump in here.

783

01:25:52.050 --> 01:25:56.609

Karol Knapp: You know, what why don't you just we'll go back to that right after you finish the

784

01:25:56.609 --> 01:26:01.109

what the code says, okay.

785

01:26:37.194 --> 01:26:52.164

Kristen. Perfect. So, there's also permitted acts as you've heard already today a couple of times. Those are acts that might fall under a Type two classification under a SEQR environmental review. Let's say a property owner is looking to mow or remove diseased vegetations. It wouldn't necessarily permit that they come into the town. But they're still have to follow zoning ordinances. They're encouraged to contact the building department, zoning and planning. We do get those inquiries and we go forth as appropriate based on that activity, there are also a number of regulated activities within our code again. This is a snapshot. This is not all this is not comprehensive. You can view the entire code online, but these activities are not necessarily not permitted.

786

01:26:52.645 --> 01:26:53.185

.

787

01:26:53.460 --> 01:27:02.460

But not not printed, but they are permitted with regulation. And so this is, this is where, you know

788

01:27:02.460 --> 01:27:14.609

planning and my role here as a planner specifically in the town of Poughkeepsie starts to help bridge the gap between okay, let's have protection. But then how do we enforce it?

789

01:27:14.609 --> 01:27:21.359

Would you like me to go Karol or? on page 14.

790

01:27:21.359 --> 01:27:25.199

Okay, great. So, for the planning process, .

791

01:27:25.944 --> 01:27:40.704

Funny enough this is the inside. This is what a, a snapshot of the inside of my brain looks like on a regular basis. So, it's no wonder that I'm escaping for run or hike after a long day or a week, but jokes aside.

792

01:27:40.765 --> 01:27:47.215

If you notice the red box that I've tried to outline here, and I don't expect you to be able to read this. This was just a

793

01:27:47.845 --> 01:28:02.425

as part of a snapshot of another planning effort within the town, but the red box is the area in the process where, if an applicant has made it this far, they've submitted an application to the town and we've already sat

794

01:28:02.425 --> 01:28:10.225

and again, I'll go through in a little more detail in a moment, our Pre-application procedure, and the applicant has submitted information. And this would be a point where I would be,

795

01:28:10.680 --> 01:28:23.784

"Hey, Carol, we've got some, , an assessment submitted there might be some wetland delineation required or, you know, they submitted an assessment said everything's great. We don't have to worry about anything and I say, okay, hold the phone,

796

01:28:23.784 --> 01:28:27.774

We're going to we're going to bring Karol in and take a look about at what's going on."

797

01:28:30.060 --> 01:28:33.960

So, moving on to just an abbreviated

798

01:28:34.345 --> 01:28:47.064

review of the planning process here in the town of Poughkeepsie. I think first I'd like to point out the fact that we have town staff here. We have we have a robust planning department in the sense that we have staff.

799

01:28:47.095 --> 01:28:49.885

There are municipalities and communities across

800

01:28:51.145 --> 01:29:04.104

the US, but of course, in New York state that do not have the ability to designate somebody to a review or sit down with someone or take calls or have someone walk up to a doorway and say, hey, can you help me with this?

801

01:29:04.104 --> 01:29:06.503

So, we are fortunate enough to have that here.

802

01:29:06.503 --> 01:29:06.895

So,

803

01:29:07.255 --> 01:29:07.704
typically,

804
01:29:07.704 --> 01:29:08.484
how it goes is,

805
01:29:08.484 --> 01:29:09.385
we'll get an inquiry,

806
01:29:09.385 --> 01:29:11.425
whether it's from a property owner directly,

807
01:29:11.425 --> 01:29:16.944
or they've hired a professional such as an engineer an architect they reach out. Eric,

808
01:29:16.975 --> 01:29:18.265
the other town planner here,

809
01:29:18.265 --> 01:29:19.795
Eric Coleman or Mike,

810
01:29:19.795 --> 01:29:31.704
Volty director of municipal development or myself will gladly help someone through a preliminary review of what they might expect and that usually includes a Pre-application meeting.

811
01:29:31.734 --> 01:29:45.685
I just want to point out a Pre-application meeting in the town of Poughkeepsie isn't necessarily what we were hearing earlier this afternoon and some of the presentations. But, this is actually a Pre-application meeting with staff. It's informal and application has not been submitted yet.

812
01:29:45.954 --> 01:29:53.635
But if the applicant or potential applicant is game, we will go ahead and facilitate an informal meet up 30 minutes to an hour.

813
01:29:53.664 --> 01:30:02.935
We'll review a conceptual plan, get any nonstart issues out on the table immediately and start setting those expectations for the applicant.

814

01:30:04.074 --> 01:30:11.064

You know, and that's really important and I think that's probably the most important. Sure. Getting your approval a

815

01:30:11.064 --> 01:30:22.765

and the actual construction is important, but really setting expectation is something that we've been working on here and striving for and we do get a lot of positive feedback. And, of course, just trying to find the balance.

816

01:30:23.039 --> 01:30:31.050

And then next we move into application the formal application review, whether it's site plan, special use permit, a subdivision.

817

01:30:31.795 --> 01:30:41.185

and the environmental review, and any implications there, we let the applicant know pretty much right up front like, "hey, you're going to need to provide this report.

818

01:30:41.875 --> 01:30:47.604

You might even want to go out to the site and start getting that delineation underway or marking out your area."

819

01:30:47.850 --> 01:30:54.810

We tend to not mess around in that area at this point. And again, this is at the

820

01:30:54.810 --> 01:31:07.409

benefit of the town having town staff to be able to sort of facilitate and have that bandwidth to facilitate that conversation. And then, of course, moving through a SEQR classification.

821

01:31:07.409 --> 01:31:21.055

Then everything's great. We move through field, visits board reviews. This is an extremely streamlined overview of what this process actually looks like. It could take months sometimes a year or more for an applicant to get an approval.

822

01:31:21.055 --> 01:31:23.965

It really just depends on the scale. And scope of the project.

823

01:31:24.420 --> 01:31:28.614

And then we move right into preconstruction and construction and close out.

824

01:31:28.614 --> 01:31:41.664

And that's another thing where planners are working with consultants and the developer, and their consultants, and by no means is the project through the planning board review effort. And then we say "good luck."

825

01:31:42.385 --> 01:31:50.994

We're actually tasked with also trying to maintain tabs on all of those projects as they come to fruition and close out and

826

01:31:51.270 --> 01:31:54.988

you know, they're all set to go.

827

01:31:54.988 --> 01:32:09.149

So, and then, of course, I can't not point out the fact that I included this Ron Swanson picture here. I hope that some of you on the liner are aware of Parks and Recreation, but not to worry. I have a permit. This just says I can do what I want.

828

01:32:09.149 --> 01:32:17.878

That happens pretty much every once a month here so I have to find humor in it in some way but of course, we tried to eliminate that.

829

01:32:18.323 --> 01:32:19.734

So one of the tools that we use,

830

01:32:19.734 --> 01:32:21.203

when we're going through that review effort,

831

01:32:21.234 --> 01:32:21.833

whether it's,

832

01:32:21.863 --> 01:32:22.104

you know,

833

01:32:22.104 --> 01:32:22.314

our,

834

01:32:22.583 --> 01:32:24.444
the formal SEQR review process,

835

01:32:25.073 --> 01:32:32.783
or maybe we're prepping preparing for that conceptual level pre-application meeting with the applicant and other town staff here,

836

01:32:33.413 --> 01:32:33.743
we'll,

837

01:32:33.774 --> 01:32:35.663
we'll take a look at the Hudson Valley

838

01:32:35.663 --> 01:32:37.134
natural resource mapper.

839

01:32:37.163 --> 01:32:50.243
Of course, there's a number of other wetland wrappers and biodiversity mappers and all of that great information that's just so readily available and free of free for use online.

840

01:32:50.873 --> 01:33:00.863
So we do take advantage of that. We also have an abundance of studies, and we're currently working on a number of things at the town that are building and even more

841

01:33:01.583 --> 01:33:02.033

,

842

01:33:02.724 --> 01:33:07.194
inventory to work off of to allow not only town staff,

843

01:33:07.224 --> 01:33:13.944
but the board's making decisions and voting on applications and permit decisions and project decisions,

844

01:33:13.974 --> 01:33:17.694
allowing them and affording them the ability to make informed decisions.

845

01:33:17.878 --> 01:33:28.529

You know, of course, we don't live in a vacuum. There's always this finding a balance things, change the community evolves. But again, we're on that later.

846

01:33:28.529 --> 01:33:35.639

And then, of course, depending on the project at hand, again, once again, you know, the

847

01:33:35.934 --> 01:33:46.554

planning board might be making the decision it might come down to the building department or the zoning department but largely the projects that I've seen and again, I've only been here about 4 years.

848

01:33:46.554 --> 01:33:55.944

So it's not saying too much, but, largely that review approval comes through the planning board application process. So

849

01:33:56.219 --> 01:34:02.309

we would be flagging that and, yeah, so I'm gonna pause again and allow Karol to jump in.

850

01:34:02.333 --> 01:34:11.274

Karol Knapp: Alright, so I'll just jump in here. So now with the town's draft comprehensive plan update completed and the natural resource inventory underway

851

01:34:11.724 --> 01:34:11.963

,

852

01:34:11.963 --> 01:34:12.713

the town is,

853

01:34:13.283 --> 01:34:22.764

committed to reevaluate its mechanisms for protecting aquatic resources and we know that we need to do a better job protecting and maintaining intact natural communities,

854

01:34:22.793 --> 01:34:27.894

which surround our natural aquatic resources as well as enhance or improve those buffers.

855

01:34:27.894 --> 01:34:30.413

where development is permitted and reasonable.

856

01:34:31.229 --> 01:34:35.609

So a standard 200 buffer would be desirable, but that one size fits

857

01:34:35.609 --> 01:34:41.849

approach is simply not practical, so where the town, the town can look at

858

01:34:41.849 --> 01:34:46.889

, into other mechanisms, such as increasing the overall required buffers.

859

01:34:46.889 --> 01:34:54.809

Increasing buffers, where slopes are steep or soil vulnerabilities high or where non-FEMA flooding is known to occur.

860

01:34:54.809 --> 01:35:02.128

They can look into setting, we can look into sending primary and secondary buffers, which can have different functions and different restrictions.

861

01:35:02.128 --> 01:35:09.328

And we could also prioritize stream and wetland overlays protection with overlay zones or sensitive area designations.

862

01:35:09.328 --> 01:35:17.908

The town could also look into requiring native species plantings within all stream and wetland buffers, which a disturbance permit was issued.

863

01:35:17.908 --> 01:35:26.609

And we could look into requiring one foot contours where potential aquatic resource impacts need to be further and more carefully analyzed.

864

01:35:26.609 --> 01:35:38.698

And after the review, and permitting is completed, the town could require more frequent, expect more frequent inspections during the early site development stage.

865

01:35:38.698 --> 01:35:43.583

This seems to be the time when most of the violations occur and when permanent damage is done,

866

01:35:43.974 --> 01:35:44.394

,

867

01:35:44.423 --> 01:35:55.042

often when the trees are first cut and removed or when heavy equipment is moved in first and the areas outside of the limit sub disturbance are cleared.

868

01:35:55.314 --> 01:36:07.463

So, we can really get into more frequent inspections and escrow for doing that. So, similarly, the town can strengthen its ability to immediately close down a site, should a violation be observed.

869

01:36:07.769 --> 01:36:11.878

And finally there are some stream sites in the town of Poughkeepsie

870

01:36:11.878 --> 01:36:20.969

with severe stream bank erosion that we know about, and we could work to improve these degraded sites by making.

871

01:36:20.969 --> 01:36:25.078

the requirement of future site plan, I'm sorry, we can

872

01:36:25.078 --> 01:36:28.979

Improve these graded sites by putting in conditions that

873

01:36:28.979 --> 01:36:40.019

the degradation of the stream has to be improved, and that's part of a site plan approval. And in closing, I just want to say that protection of wetlands is often the first step

874

01:36:40.019 --> 01:36:51.029

in the protection of streams as well as truly are the headwaters of so many streams and so anything that we can do to protect the initial sponge would well serve downstream.

875

01:36:53.309 --> 01:36:57.118

Kristen. Kristen: Thank you, Carol.

876

01:36:57.118 --> 01:37:00.418

So, I just want to close on a couple of.

877

01:37:03.719 --> 01:37:10.889

As I mute myself, , I want to close on a couple of things here and and really that's, .

878

01:37:11.363 --> 01:37:11.724

One,

879

01:37:11.724 --> 01:37:13.554

I just have a little bit of an anecdote for you,

880

01:37:13.554 --> 01:37:13.823

you know,

881

01:37:13.823 --> 01:37:28.764

we get a variety of applications here in the planning department and I think it's interesting to share with you that we get it, developers want to develop and and oftentimes the planning staff here is working with the professional

882

01:37:28.764 --> 01:37:29.394

that was hired,

883

01:37:29.394 --> 01:37:33.054

so that's their business and they're serving a client.

884

01:37:33.594 --> 01:37:36.953

But what's fascinating to us is that sometimes we will get

885

01:37:36.953 --> 01:37:37.613

for example,

886

01:37:37.613 --> 01:37:43.073

an application in for a lot line revision and site plan and it's like,

887

01:37:43.104 --> 01:37:43.314

oh,

888

01:37:43.314 --> 01:37:43.554

yeah,

889

01:37:43.554 --> 01:37:56.724

we want to build this building on this lot and it's going to be a warehouse or an office building and we want to go through a lot line revision path because we want to demonstrate that

890

01:37:58.048 --> 01:38:03.088

the proposed development is no longer on

891

01:38:03.088 --> 01:38:17.309

the site that contains the aquatic resource. I find it fascinating and entertaining that they think that just because you're changing the property line

892

01:38:17.694 --> 01:38:29.844

doesn't mean, that you're any further away from the aquatic resource. So those are the kinds of things that, you know, when you have staff, and you can kind of meet informally and work with an applicant and let them know right off the bat,

893

01:38:29.844 --> 01:38:39.293

"Like, hey, this isn't going to fly. You need to do this, you need to do that." We're fortunate again. Fortunate enough here to have the have the staff to be able to

894

01:38:39.628 --> 01:38:42.293

Sort of head that off,

895

01:38:42.323 --> 01:38:42.984

early on,

896

01:38:43.283 --> 01:38:55.613

but those are the sorts of things that we're dealing with here and we really do hope to be able to take some of these items that are listed on this slide where I'm saying to find balance and Karol is has indicated,

897

01:38:55.854 --> 01:38:59.904

let's find that balance. Let's look at some of the past planning initiatives that have gone on,

898

01:38:59.904 --> 01:39:09.533

in the town. Again we have recently in October 6th after a 3 year process have recently adopted an updated comprehensive plan

899

01:39:09.533 --> 01:39:23.663

We are currently working on a natural resources inventory and open space plan. And so we're creating all these wonderful materials to set us up hopefully, for success.

900

01:39:23.663 --> 01:39:27.684

And the comprehensive plan will lend itself to hopefully

901

01:39:29.094 --> 01:39:43.554

formally adopting or implementing specific recommendations, such as taking a look as it is currently documented in our updated plan, taking a look at our aquatic resources protection code language and how do we strengthen it. And let's revisit it.

902

01:39:43.554 --> 01:39:49.194

And it's been, you know, since 2003, it's been almost 20 years. Let's take a look at it and see what we could be doing better.

903

01:39:50.338 --> 01:40:01.913

I mean, maybe there are things that that are working and we just leave alone, but that's, you know, you have to be determined. And then again with the natural resources inventory, we're going to have a whole new set of mapping to work with.

904

01:40:02.394 --> 01:40:11.844

We'll be able to at the benefit of a conservation analysis, we'll be able to pull out specific areas throughout the town. Again. This is almost a 20,000 acre town

905

01:40:12.748 --> 01:40:19.319

that we're trying to keep track of and tabs on and hoping to protect in some way.

906

01:40:19.319 --> 01:40:33.503

So, and, oh, I'm seeing a comment come in and I was just getting to Hudsonia plan, but yeah, we're hopefully able to implement some of the information that was so carefully crafted and brought to light at that point.

907

01:40:34.344 --> 01:40:34.703

So,

908

01:40:34.913 --> 01:40:35.243

you know,

909

01:40:35.274 --> 01:40:38.543

I do hope that those listening if you,

910

01:40:38.543 --> 01:40:41.213

if you work on a board or you're volunteering your time on a CAC

911

01:40:42.323 --> 01:40:42.533

you know,

912

01:40:42.533 --> 01:40:42.894

your,

913

01:40:42.894 --> 01:40:50.274

your role is important and we do hope that you were able to walk away with something from our presentation today.

914

01:40:50.274 --> 01:40:58.974

And what we're going through here in the town of Poughkeepsie, but again, we don't live in a vacuum and things are constantly changing. And communities are constantly.

915

01:40:59.429 --> 01:41:05.399

Balancing that development pressure with protection of our natural environment and we do

916

01:41:05.399 --> 01:41:10.439

look to the past in order to inform the future here. And so

917

01:41:10.439 --> 01:41:21.234

You know, we're really looking forward to continuing with our growth with connections to communities regionally and partnerships in and around the town and outside of the town's boundaries.

918

01:41:21.654 --> 01:41:29.993

And I think it's also important to consider that while there may be a number of opportunities to proactively protect

919

01:41:30.024 --> 01:41:43.854

I think another word that really comes to mind, in all of this is restoration and getting back to that natural community. So we look forward to thinking regionally while planning locally and we really thank you for your time.

920

01:41:43.854 --> 01:41:46.793

And we look forward to any questions. You might have for us.

921

01:41:50.304 --> 01:41:51.323

Thank you so much,

922

01:41:51.354 --> 01:41:51.503

,

923

01:41:51.533 --> 01:41:53.243

Nate Nardi-Cyrus: Kristen and Karol that was,

924

01:41:53.243 --> 01:41:58.224

that was terrific and I thought it did a really great job of kind of bringing together a lot of what we've been talking about,

925

01:41:58.252 --> 01:41:58.644

,

926

01:41:58.764 --> 01:42:00.323

not only earlier today,

927

01:42:00.323 --> 01:42:00.894

but also,

928

01:42:00.894 --> 01:42:02.934

over the course of this entire series,

929

01:42:03.354 --> 01:42:03.654

,

930

01:42:03.684 --> 01:42:06.384

I do want to hold questions for a second,

931

01:42:06.413 --> 01:42:06.923

,

932

01:42:07.073 --> 01:42:07.913

folks can,

933

01:42:07.944 --> 01:42:08.154

you know,

934

01:42:08.154 --> 01:42:10.283

continue to pop those into the question and answer.

935

01:42:10.554 --> 01:42:16.673

But I do want to pass the ball on over to , , Gretchen, and she's gonna,

936

01:42:17.484 --> 01:42:31.884

before we kind of get to that part of the presentation, she's going to give us a little bit of a summary of what we've learned in the series so far and and give us a path forward there. So, Gretchen, I just shared.

937

01:42:32.094 --> 01:42:34.463

you should be able to share your screen at this point.

938

01:42:46.769 --> 01:42:56.338

All right, we can see your screen, Gretchen. Gretchen Stevens: Okay. Good. Can you hear me? Nate: Yes, you just have to put it in the presenter view and you're set to go.

939

01:42:56.338 --> 01:43:00.899

Gretchen Stevens: Okay, yeah, so I

940

01:43:00.923 --> 01:43:03.503

just wanted to give you a brief,

941

01:43:03.533 --> 01:43:03.743

,

942

01:43:03.774 --> 01:43:06.203
reminder of some of the things that we've discussed,

943
01:43:06.234 --> 01:43:06.474

,

944
01:43:06.503 --> 01:43:08.243
since day one,

945
01:43:08.634 --> 01:43:09.144

,

946
01:43:09.474 --> 01:43:13.493
back then I began with an introductory talk on headwater streams,

947
01:43:13.493 --> 01:43:15.533
how to define them

948
01:43:15.623 --> 01:43:24.503
some of their values as habitat, as sources of groundwater recharge, as sources of water and organic materials,

949
01:43:24.953 --> 01:43:25.404

,

950
01:43:25.404 --> 01:43:31.224
and organisms for downstream areas. And the basic problem that they are mostly,

951
01:43:31.524 --> 01:43:31.823

,

952
01:43:31.854 --> 01:43:35.453
unnamed and unrecognized and unprotected.

953
01:43:36.564 --> 01:43:37.104

.

954

01:43:38.064 --> 01:43:45.173

Then, Beth Roessler talked to us about watersheds and riparian zones.

955

01:43:45.384 --> 01:43:55.253

She explained how the character and quality of any stream depends on what happens on the land throughout the watershed, whether the land is forested or pasture,

956

01:43:55.253 --> 01:43:56.123

or crop land,

957

01:43:56.123 --> 01:44:00.774

or paved, has a very large influence on the habitats of the stream,

958

01:44:00.774 --> 01:44:10.493

the water volumes and the water quality and she spoke about the special importance of riparian zones, a well vegetated riparian

959

01:44:10.493 --> 01:44:17.243

zone can filter and process pollutants. It can reduce stream bank erosion can help to maintain

960

01:44:17.453 --> 01:44:30.743

cool stream water temperatures can provide high quality, organic materials for the stream food web and habitat structure. It can help recharge groundwater. It can reduce

961

01:44:30.988 --> 01:44:43.109

downstream flooding and provide important wildlife habitat. Beth explained the great importance of buffer zones along streams, and especially forested buffers.

962

01:44:43.703 --> 01:44:44.484

And she mentioned,

963

01:44:44.993 --> 01:44:45.354

,

964

01:44:45.444 --> 01:44:46.163

this,

965

01:44:46.194 --> 01:44:46.554

,

966

01:44:46.583 --> 01:44:48.533

study in the Delaware River basin,

967

01:44:48.533 --> 01:45:00.413

and showing that each acre of intact stream buffer provides 10,000 dollars worth of services per year in terms of things like nutrient retention and carbon storage and air quality

968

01:45:00.413 --> 01:45:03.083

improvement and recreation and that

969

01:45:03.809 --> 01:45:14.279

dollar figure doesn't even include flood mitigation or wildlife habitat. So presumably the real figure would be much much higher.

970

01:45:14.694 --> 01:45:19.554

She talked a little about how to think about appropriate buffer zones to achieve different goals,

971

01:45:19.793 --> 01:45:21.953

such as stream bank stabilization,

972

01:45:22.314 --> 01:45:22.673

water

973

01:45:22.673 --> 01:45:31.344

quality protections and wildlife habitat. And then Nate talked to us about threats to headwater streams,

974

01:45:31.344 --> 01:45:33.953

including things like direct and,

975

01:45:33.984 --> 01:45:34.524

,

976

01:45:35.154 --> 01:45:37.823

nearby water extraction or diversion,

977

01:45:38.274 --> 01:45:38.634

,

978

01:45:38.663 --> 01:45:39.923

channelization,

979

01:45:40.373 --> 01:45:41.213

,

980

01:45:41.453 --> 01:45:42.054

,

981

01:45:42.113 --> 01:45:43.073

barriers,

982

01:45:43.104 --> 01:45:45.113

like dams and culverts,

983

01:45:45.474 --> 01:45:46.073

,

984

01:45:46.104 --> 01:45:49.073

impoundments in the stream that disrupt the stream

985

01:45:49.104 --> 01:46:00.533

continuity and cause other ecological problems, pollution from point a nonpoint sources and invasive plants and animal species both in the stream and on the stream banks.

986

01:46:02.123 --> 01:46:15.503

And the problem of unvegetated buffers, , and threats from the effects of climate change, such as droughts and floods and raised stream temperatures, which leads to reduced dissolved oxygen in stream water.

987

01:46:17.394 --> 01:46:31.974

On day, 2, Nate showed us several online map sources that can help you identify headwater streams and their watersheds and he walked us through how to use those sources to get the stream information you need.

988

01:46:32.573 --> 01:46:32.844

,

989

01:46:32.873 --> 01:46:34.673

He included the Discover GIS

990

01:46:34.703 --> 01:46:35.243

,

991

01:46:35.963 --> 01:46:40.194

New York site where you can obtain leaf off Ortho imagery,

992

01:46:40.194 --> 01:46:44.753

which reveals lots of details of the landscape that are undetectable on,

993

01:46:45.323 --> 01:46:45.654

,

994

01:46:45.684 --> 01:46:50.333

in the leaf-on aerial photos that you might get from other sources

995

01:46:50.333 --> 01:46:51.833

like Google or Bing.

996

01:46:53.663 --> 01:47:07.524

He also showed you this interesting slide, which compares the publicly available stream data. That's the top image. With the much more detailed stream map prepared by Hudsonia at the bottom image.

997

01:47:07.554 --> 01:47:15.173

All those little purple lines are the streams that we identified that do not show up in in the public data.

998

01:47:15.804 --> 01:47:29.453

This is just a reminder that the public maps omit many of the headwater streams and the only way to find them really is to do a detailed remote analysis of topographical maps and aerial photos

999

01:47:29.453 --> 01:47:31.703

like, we showed you at the last session.

1000

01:47:32.154 --> 01:47:32.543

,

1001

01:47:32.814 --> 01:47:35.573

And to find them during field visits to a site.

1002

01:47:35.604 --> 01:47:42.894

We really cannot overemphasize the importance of site visits to find unmapped streams and to discover other,

1003

01:47:43.583 --> 01:47:44.484

,

1004

01:47:44.573 --> 01:47:45.564

features of,

1005

01:47:45.594 --> 01:47:45.894

,

1006

01:47:45.923 --> 01:47:47.304

conservation importance.

1007

01:47:48.774 --> 01:47:49.073

Then,

1008

01:47:49.073 --> 01:47:54.083

I did show you how to analyze topographical maps to find unmapped streams,

1009

01:47:54.533 --> 01:47:54.804

,

1010

01:47:54.804 --> 01:47:56.694

and pointed you to a

1011

01:47:56.783 --> 01:47:57.083

,

1012

01:47:57.113 --> 01:47:59.154

virtual field visit,

1013

01:47:59.213 --> 01:47:59.543

,

1014

01:47:59.573 --> 01:48:00.984

to the Millbrook Preserve,

1015

01:48:01.344 --> 01:48:01.583

,

1016

01:48:01.613 --> 01:48:03.623

to see some of the streams that,

1017

01:48:03.654 --> 01:48:04.854

that you mapped remotely.

1018

01:48:05.394 --> 01:48:11.274

We'll send you the link again to that virtual field visit with follow up materials after today.

1019

01:48:13.104 --> 01:48:25.073

Then Emily Vail talked to us about urban streams, many of which are generalized on the surface or else buried beneath pavement where they can cause big problems for infrastructure and flooding.

1020

01:48:25.793 --> 01:48:38.844

She told us about her very neat project rediscovering the Tannery book a stream that figures large in the city of Kingston history, but it has been buried beneath the city for

1021

01:48:39.389 --> 01:48:51.269

Decades. She mentions, , some of the great advantages of day-lighting these burried streams and advantages both to infrastructure into the stream ecology.

1022

01:48:51.833 --> 01:48:54.234

She talked about the benefits of green infrastructure,

1023

01:48:54.234 --> 01:48:55.373

such as rain gardens,

1024

01:48:55.373 --> 01:48:56.844

and bioswales,

1025

01:48:57.113 --> 01:48:57.623

pervious

1026

01:48:57.623 --> 01:48:58.194

pavement,

1027

01:48:58.194 --> 01:48:58.524

street

1028

01:48:58.524 --> 01:48:58.944

trees,

1029

01:48:58.974 --> 01:48:59.963

open spaces,

1030

01:49:00.384 --> 01:49:00.743

,

1031

01:49:00.774 --> 01:49:09.113

to facilitate the infiltration of rainwater and snow melt to the soils and reduce the pressure on storm sewers and roads and to reduce flooding.

1032

01:49:10.283 --> 01:49:24.684

She mentioned some of the state funding sources for projects to understand and characterize watersheds to detect and analyze flooding and pollution problems and to protect and restore urban streams.

1033

01:49:25.944 --> 01:49:26.753

On day three,

1034

01:49:26.904 --> 01:49:27.444

today,

1035

01:49:28.104 --> 01:49:28.793

,

1036

01:49:29.543 --> 01:49:30.984

I started with

1037

01:49:31.014 --> 01:49:31.524

,

1038

01:49:31.554 --> 01:49:35.783

an overview of federal and state regulatory programs for streams,

1039

01:49:36.144 --> 01:49:36.384

,

1040

01:49:36.413 --> 01:49:37.884

and their limitations.

1041

01:49:38.484 --> 01:49:39.083

,

1042

01:49:39.413 --> 01:49:40.014

Most

1043

01:49:40.073 --> 01:49:40.283

,

1044

01:49:40.314 --> 01:49:45.144

headwaters streams are unprotected or minimally protected by those programs,

1045

01:49:45.863 --> 01:49:46.163

,

1046

01:49:46.163 --> 01:49:50.814

and many municipalities lack meaningful local legislation related to streams.

1047

01:49:51.413 --> 01:49:59.814

And I also gave a brief talk on incorporating headwaters streams into environmental reviews of land development projects.

1048

01:50:01.793 --> 01:50:02.213

Then,

1049

01:50:02.213 --> 01:50:02.604

,

1050

01:50:02.634 --> 01:50:04.134

and we showed you,

1051

01:50:04.134 --> 01:50:08.154

these checklists this checklist for site resource assessment,

1052

01:50:08.543 --> 01:50:09.024

,

1053

01:50:09.173 --> 01:50:10.404

talked a little about,

1054

01:50:10.434 --> 01:50:10.644

,

1055

01:50:10.673 --> 01:50:12.713

the SEQR review and how to use it,

1056

01:50:12.743 --> 01:50:13.224

,

1057

01:50:13.524 --> 01:50:14.184

to,

1058

01:50:14.213 --> 01:50:14.694

,

1059

01:50:14.904 --> 01:50:15.354

to,

1060

01:50:15.384 --> 01:50:15.503

,

1061

01:50:15.533 --> 01:50:16.524

better inform,

1062

01:50:16.554 --> 01:50:17.184

,

1063

01:50:17.274 --> 01:50:17.543

,

1064

01:50:17.573 --> 01:50:19.913

decisions about land uses.

1065

01:50:20.243 --> 01:50:29.064

, and we will send you this fact sheet on using SEQR to protect streams and other natural habitats.

1066

01:50:29.783 --> 01:50:30.024

Then,

1067

01:50:30.024 --> 01:50:35.604

Emily Svenson talked about the various kinds of local legislation that can be used to protect streams,

1068

01:50:35.604 --> 01:50:37.463

such as freestanding stream

1069

01:50:37.463 --> 01:50:38.003

protection

1070

01:50:38.003 --> 01:50:38.394

law,

1071

01:50:39.024 --> 01:50:39.533

,

1072

01:50:39.984 --> 01:50:40.373

stream

1073

01:50:40.404 --> 01:50:40.854

overlay

1074

01:50:40.854 --> 01:50:41.423

district,

1075

01:50:41.423 --> 01:50:43.764

or other stream related zoning,

1076

01:50:44.154 --> 01:50:44.753

,

1077

01:50:45.234 --> 01:50:51.533

a critical environmental area or stream related provisions in a subdivision code.

1078

01:50:54.083 --> 01:50:56.363

Local laws can specify,

1079

01:50:56.453 --> 01:50:56.753

,

1080

01:50:56.783 --> 01:50:59.963

buffer zones with restrictions on land uses,

1081

01:50:59.963 --> 01:51:00.264

and,

1082

01:51:00.264 --> 01:51:00.953

for example,

1083

01:51:00.953 --> 01:51:03.684

setbacks for buildings or septic systems,

1084

01:51:03.743 --> 01:51:04.314

wells,

1085

01:51:04.314 --> 01:51:07.344

or applications of fertilizers pesticides,

1086

01:51:07.644 --> 01:51:10.644

storage of chemicals, removal of vegetation.

1087

01:51:11.033 --> 01:51:25.703

She recommends that local legislation have very clear definitions and explicit provisions for penalties and corrective actions and also stress the importance of considering your municipalities capacity for enforcement.

1088

01:51:26.543 --> 01:51:34.283

She recommended a Department of State document providing model local laws to increase climate resilience.

1089

01:51:35.639 --> 01:51:48.958

And finally, Kristen Taylor and Karol Knapp, with the town of Poughkeepsie planning department, told us about how the stream protection law in the town of Poughkeepsie works.

1090

01:51:48.958 --> 01:51:55.944

And so we've covered a lot, over these three days. All the sessions have been recorded.

1091

01:51:55.944 --> 01:52:10.583

So, if you want a refresher on any of these sessions or want to see a session that you missed you can view those recordings which, Nate will be sending.

1092

01:52:10.889 --> 01:52:19.673

Sometime in the next day, or so. All of the presenters will stay on zoom for more Q and A and discussion.

1093

01:52:20.123 --> 01:52:33.173

But after you leave the meeting, you'll be asked to fill out a very brief 3 question evaluation. So, please do that as it will help us understand how we can improve these programs.

1094

01:52:33.984 --> 01:52:44.274

So that's all I wanted to say, I'm going to pass this back to Nate, and we can continue the discussion with all of you.

1095

01:52:45.689 --> 01:52:59.729

Nate Nardi Cyrus: All right, thank you so much, Gretchen. That was a great overview. If you hadn't attended those prior sessions, it gives you an idea of what we covered and I will share the links

1096

01:52:59.729 --> 01:53:11.908

to the prior recordings that were done over this past month. Let me jump right into some more questions because we're running up against the edge of everybody's time.

1097

01:53:11.908 --> 01:53:23.663

I do want to say one question asked, can municipalities adopt local laws on ditch maintenance and Emily Svenson answered that question. Typically, ditches are maintained by municipal highway departments.

1098

01:53:23.844 --> 01:53:31.944

So the municipality can make its own policies on management practices. Just in case someone wasn't looking at the, Q and A there.

1099

01:53:32.338 --> 01:53:46.948

We just had a question come in, are there regulations dealing with the protection of aquifers? Are there any examples of this type of regulation and I'm not sure. Maybe Emily maybe you want to start out the conversation on this.

1100

01:53:48.863 --> 01:53:49.194

Emily Svenson: Sure,

1101

01:53:49.194 --> 01:53:50.333

there are lots of those,

1102

01:53:50.363 --> 01:53:50.694

,

1103

01:53:50.724 --> 01:54:05.634

it's it's commonly a good opportunity to use overlay regulations where an overlay is established over either like the key recharge area for the aquifer or different parts of the town

1104

01:54:05.634 --> 01:54:10.104

are defined into different aquifer areas and different overlays are established.

1105

01:54:10.944 --> 01:54:16.884

I don't think we can get into that in detail today, but it's certainly a common

1106

01:54:17.189 --> 01:54:23.548

regulation type, and I'd be happy to if the person wants to get in touch with me, I could send them some examples.

1107

01:54:23.548 --> 01:54:35.128

Nate Nardi Cyrus: Great, thank you Emily. Not sure if the Poughkeepsie has an aquifer overlay district or ordinance I don't think so. Right? Yeah.

1108

01:54:35.904 --> 01:54:46.014

Any other questions we'll wait on the line for a few minutes. I don't see anything else queued up yet, but we'll give you all an opportunity to kind of digest what we've all heard.

1109

01:54:46.014 --> 01:54:51.413

And and this is a great opportunity to talk with some local experts on these, these issues.

1110

01:55:07.828 --> 01:55:18.088

And, of course, if the presenters have any questions for each other, that's also that's not out of bounds in this case as well. I thought the presentations went really nicely together.

1111

01:55:23.248 --> 01:55:33.569

Gretchen Stevens: I have a question for Kristie or Karol. This is Gretchen. , I'm wondering if the.

1112

01:55:33.569 --> 01:55:37.019

If the town actually uses the

1113

01:55:37.019 --> 01:55:43.583

the habitat map, and the report that Hudsonia prepared for the town several years ago.

1114

01:55:44.033 --> 01:55:44.423

,

1115

01:55:44.753 --> 01:55:45.293

and I'm,

1116

01:55:45.323 --> 01:55:47.243

I'm asking that just because the,

1117

01:55:47.543 --> 01:55:48.684

the stream mapping,

1118

01:55:48.713 --> 01:55:49.104

,

1119

01:55:49.134 --> 01:55:50.963

in that document is likely,

1120

01:55:50.993 --> 01:55:51.203

,

1121

01:55:51.234 --> 01:55:52.463

much better than any,

1122

01:55:52.703 --> 01:55:53.094

,

1123

01:55:53.154 --> 01:55:59.064

what any other maps that you're using because it involved a lot of field work on our part

1124

01:55:59.094 --> 01:56:13.134

and so the streams are mapped more comprehensively and more detail. I'm just wondering if that is a regular part of the reviews that the planning department, or the planning board does for projects in Poughkeepsie.

1125

01:56:13.498 --> 01:56:22.469

Kristen: Yeah, so I can take a stab at that Carroll if you want me to first and, , my, my initial.

1126

01:56:22.469 --> 01:56:30.868

answer is, of course. Yes. And secondly, to point out too, that we were actually working with Nate in.

1127

01:56:30.868 --> 01:56:39.029

while we're developing our, our open space planning and Hudsonia's information has actually

1128

01:56:39.113 --> 01:56:53.033

been incorporated. I already correct me if I'm wrong here, but we've made sure that because it was just an incredible amount of work in terms of its reference specifically.

1129

01:56:53.694 --> 01:57:06.594

Of course, we, we're aware of the report, it's, it's readily available online, but when we have those Pre-application meetings, or we get an inquiry where, you know, we're, we want the applicant to take a look

1130

01:57:07.644 --> 01:57:22.434

at a specific part of the town yes, it's referred to them. And again, this goes back to, I think someone had pointed out that, you know, we do put a lot of pressure on applicants in the sense that we want informed mapping submitted right off the bat.

1131

01:57:22.434 --> 01:57:25.224

And that's where the setting expectations comes in.

1132

01:57:25.498 --> 01:57:35.519

And we do put a lot on them upfront in order for us to do our own due diligence. And also to be better to inform the planning board.

1133

01:57:35.519 --> 01:57:41.759

Who, you know, honestly, at times has follow up questions or wants to see more.

1134

01:57:41.759 --> 01:57:47.099

Karol Knapp: We use it extensively also for the blandings turtle habitat.

1135

01:57:47.243 --> 01:57:54.293

Absolutely, Nate Nardi Cyrus: yeah, the color in how it's used in the NRI as well.

1136

01:57:54.503 --> 01:58:02.543

We made sure that the streams, both intermittent and perennial were marked on the base map and every other subsequent map just

1137

01:58:02.543 --> 01:58:10.944

so that that context is kind of carried through for whoever is looking at any of the series of maps that make up the NRI itself.

1138

01:58:13.708 --> 01:58:23.519

All right great question, Gretchen. Another one. This is, is it generally safe to assume that a Hudsonia study includes headwaters?

1139

01:58:23.519 --> 01:58:31.529

I'll let you answer that. Gretchen. Gretchen Stevens: well, yes, absolutely. We

1140

01:58:31.529 --> 01:58:45.444

the Hudsonia studies that you may be referring to are the town wide habitat mapping projects that we do, among other things and yeah, we map the whole landscape.

1141

01:58:45.474 --> 01:58:49.734

We map upland habitats. We map

1142

01:58:49.979 --> 01:58:59.698

Wetlands. We map streams everywhere where they occur. And which certainly includes all the headwater streams that we can find.

1143

01:59:02.158 --> 01:59:13.769

Nate Nardi Cyrus: And I'll jump in there again too, just because, I mean, really those Hudsonia habitat maps at the municipal scale. And at the the smaller kind of sub municipal scale

1144

01:59:13.944 --> 01:59:17.003

are really the most detailed resource that a lot of communities have,

1145

01:59:17.033 --> 01:59:25.104

but even that being said it's still important to make sure that there's still site visits, that there's folks checking out to make sure that there's not additional resources because,

1146

01:59:25.314 --> 01:59:25.583

you know,

1147

01:59:25.583 --> 01:59:26.783

it's just impossible for,

1148

01:59:26.993 --> 01:59:27.293

,

1149

01:59:27.323 --> 01:59:30.743

for biologists to get absolutely everywhere and to see absolutely everything.

1150

01:59:30.743 --> 01:59:34.404

And so just that kind of caveat there.

1151

01:59:36.234 --> 01:59:47.783

Gretchen Stevens: Yeah, and that's a very important point. The maps that we produce in those town wide projects they are all they're just sketch maps. We're not out there with survey equipment.

1152

01:59:47.814 --> 02:00:01.283

We're just throwing what we can and we do not see every site. That's impossible for a variety of reasons. So, keep that in mind the, and the mapping should always be field verified.

1153

02:00:01.644 --> 02:00:08.573

And it's not really suitable for detailed site specific planning.

1154

02:00:09.298 --> 02:00:24.179

Nate Nardi Cyrus: Great thank you thank you, Gretchen. We have another comment just talking about the complexity of questions that have come in and asking that, you know

1155

02:00:24.179 --> 02:00:34.798

we kind of elaborate provide further elaboration for folks, in our follow up email and we'll definitely make sure to do that. I'll take a note on that right now.

1156

02:00:36.503 --> 02:00:45.833

Okay, all right last chance. It's 5 o'clock now. So I know a lot of you will be getting off at this point

1157

02:00:45.894 --> 02:00:56.154

but I will, thank everyone again for attending, and thank everyone for you know taking the time out of their days to learn about these valuable resources.

1158

02:00:56.423 --> 02:01:06.743

So if you have any questions to any of our presenters from any of the sessions, we're gonna have all their contact information available. So, they've all offered to you know

1159

02:01:07.048 --> 02:01:16.588

to respond and be of assistance where they can be. So thank you all again I appreciate you coming and, have a great night.

1160

02:01:16.588 --> 02:01:20.351