```
00:00:06.110 --> 00:00:19.830
Mary Beth Kolozsvary: Also. please keep yourself muted through the
presentations. If you have any questions at all, just put them into
the chat, and I and others will be monitoring it during the session.
00:00:20.550 --> 00:00:28.400
Mary Beth Kolozsvary: and if you want to enable closed captioning, you
can do that yourself on your own screen, and if you have any questions
with that.
00:00:28.470 --> 00:00:31.189
Mary Beth Kolozsvary: just please let us know in the chat.
00:00:32.360 --> 00:00:42.800
Mary Beth Kolozsvary: so I'll turn this over to our Emcee, Dr. Lori
Anderson from Ohio, Wesleyan. She'll introduce her role in Mefa and
Erin.
00:00:42.900 --> 00:00:46.449
Mary Beth Kolozsvary: Talk a little bit about Erin, and then introduce
the speakers.
00:00:50.590 --> 00:01:01.329
Laurie Anderson: Everyone. Thank you for being here today for this
fourth virtual event of the Macro systems, ecology for all research
coordination network.
00:01:01.490 \longrightarrow 00:01:16.849
Laurie Anderson: I'm really pleased to be here. And to Mc the event,
as Mary Beth said. And I'd like to kind of introduce you to the
context in which we've created this event. I'm going to share my
screen and just show a couple of
00:01:16.920 --> 00:01:20.649
Laurie Anderson: quick slides. so let me do that.
q
00:01:24.770 --> 00:01:25.959
Laurie Anderson: and I will
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10
00:01:27.050 --> 00:01:30.549
Laurie Anderson: get the slideshow mode going on.
11
00:01:34.470 --> 00:01:36.130
Laurie Anderson: See here!
12
00:01:39.110 --> 00:01:40.630
Laurie Anderson: Oh, sorry!
00:01:48.750 --> 00:01:53.630
Laurie Anderson: Sorry! I have to pause for a moment to make sure that
the slideshow is
00:01:53.760 --> 00:01:55.210
Laurie Anderson: proceeding.
15
00:02:20.090 --> 00:02:21.489
Laurie Anderson: See if I can
00:02:27.310 --> 00:02:28.759
Laurie Anderson: get it to.
17
00:02:28.810 --> 00:02:53.229
Laurie Anderson: There we go. Sorry about that. all right, so I'd like
to introduce you briefly to the Macro systems ecology for all network.
We are funded by the National Science Foundation, starting in 2022 and
continuing through 2027. I work with a team of wonderful copies and
senior personnel, many of whom are on the
18
00:02:53.270 --> 00:03:01.360
Laurie Anderson: the call today, and Christy and Mary Beth as
organizers of this group are part of that network management team.
19
00:03:01.730 --> 00:03:19.729
Laurie Anderson: Our goals are to expand teaching faculty training in
macro systems, ecology and data science to create a network that is
focused on diversity, equity, inclusion, and justice and welcome
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people from all backgrounds to our group.

00:03:20.240 --> 00:03:33.589

Laurie Anderson: We enable collaborative macro systems research by supporting these multi-institution projects. And one of our key focus is to have a work plan designed around Bei principles.

21

00:03:33.800 --> 00:03:44.090

Laurie Anderson: We also want to educate undergraduates through engagement with these projects. So we have a multi-layered educational Dei and research mission.

22

00:03:44.430 --> 00:03:54.990

Laurie Anderson: And we're basically halfway through the second year of our funding, we have 141 members of our Rcn. We'd like to encourage you to join.

23

00:03:55.060 --> 00:04:14.890

Laurie Anderson: and we have so far given 4 of these webinars. This is the fourth. We have held a hybrid annual meeting at Swarthmore College last summer, and 6 incubator projects have emerged from that where collaborative teams are working on the topics that you can see on the screen.

24

00:04:15.030 --> 00:04:28.220

Laurie Anderson: and I'd like to right now, just make sure that I invite you to our second hybrid meeting. That isn't this. July 2024, July twenty-thir, 20, fourth, 2024,

25

00:04:28.270 --> 00:04:34.849

Laurie Anderson: and the applications are due March one. So there's a QR code on the screen. If you'd like to scan that.

26

00:04:34.990 --> 00:04:40.890

Laurie Anderson: So if you like what you learned here today, then please feel free to join us.

27

00:04:43.070 --> 00:04:58.659

Laurie Anderson: So we're going to get going right now with our event we are going to go ahead and hear a talk by Bethan Garaman Merkel, and then we'll hear from Nataky Osborne jelts, and if time allows we will have some questions.

28

00:04:58.840 --> 00:05:06.390

Laurie Anderson: so I will stop sharing and introduce Bethan Geriman-merkle. and we'll proceed.

29

00:05:07.700 --> 00:05:09.619 Laurie Anderson: So let me

30

00:05:10.950 --> 00:05:14.220

Laurie Anderson: get ready here to introduce Bethann

31

00:05:14.900 --> 00:05:26.019

Laurie Anderson: Bethan Geriman-merkle directs the University of Wyoming Science Communication Initiative, where she is on the faculty at Uw. In the department of Zoology and Physiology.

32

00:05:26.270 --> 00:05:42.069

Laurie Anderson: Bethann's work Integrates Art and creative writing, social justice, inclusive science, communication and organization change and leadership to enhance people's capacity to share science for the good of society and the planet.

33

00:05:42.190 --> 00:05:43.549

Laurie Anderson: Welcome, Beth Ann.

34

00:05:48.210 --> 00:05:52.969

Bethann Merkle: thank you. getting myself unmuted. Here I am going to

35

00:05:53.080 --> 00:05:58.500

Bethann Merkle: get us rolling and just have to make sure screens are doing things that screens are supposed to do.

36

00:06:03.060 --> 00:06:04.129
Bethann Merkle: Give me a moment.

37

00:06:10.450 --> 00:06:11.410

Bethann Merkle: Alright.

38

00:06:11.950 --> 00:06:21.689

Bethann Merkle: Okay. I think we can roll. Let me make sure you can see when I'm hoping you can see. Can you see, just a screen on the slide. Kind of slide. Great?

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39
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00:06:21.710 --> 00:06:22.740

Bethann Merkle: Okay?

# 40

00:06:24.120 --> 00:06:36.290

Bethann Merkle: Alright. So I'm gonna ask us to get started by actually doing something kind of light, though, in the chat. Could you please post something that you hope to get from today's session?

### 41

00:07:24.880 --> 00:07:44.599

Bethann Merkle: Okay, well, we are going to do most of these things. So you're in the right place. The next thing I want to note for us is that we are on a pretty snug schedule here today, so we are not going to deep dive into. Why.

## 42

00:07:44.600 --> 00:08:04.360

Bethann Merkle: you might wanna do community engaged research. We're not deep diving into foundational evidence around communication models like dialogue and coproduction, and why those are more ethical and effective than just telling people facts. We're gonna stick really tightly to this idea of short stories for sharing science.

## 43

00:08:04.430 --> 00:08:08.570

Bethann Merkle: And if you want to connect about anything

#### 44

00:08:08.890 --> 00:08:29.409

Bethann Merkle: else on that list, we can absolutely do that outside or after this session. I also wanna frame up for you. We're gonna do more or less kind of 3 activity chunks. So if you get lost or bumped off a zoom in some kind of transition between those just know that there's roughly 3 different things. We're going to

# 45

00:08:29.930 --> 00:08:32.129

Bethann Merkle: play around with a little bit this morning.

## 46

00:08:32.510 --> 00:08:39.350

Bethann Merkle: Okay, so I am also going to ask you to please Pop, open this Google, Doc.

### 47

00:08:40.530 --> 00:08:42.809

Bethann Merkle: Please let me know if it's not working.

```
48
00:08:46.220 --> 00:09:02.079
Bethann Merkle: And on page 2 you should see a prompt that's asking
you to just drop a point into a table, and the table is so that people
don't accidentally overwrite each other. I'm just gonna ask you to
type in there what you think of when you hear the word story?
49
00:09:07.220 --> 00:09:09.489
Bethann Merkle: One to 3 sentences, Max.
00:09:09.500 --> 00:09:15.270
Bethann Merkle: Is it working, Christy? The document isn't letting us
edit it open.
51
00:09:15.340 --> 00:09:17.829
Bethann Merkle: Good. Good. Okay.
52
00:09:18.700 --> 00:09:20.040
Bethann Merkle: I'm sorry.
53
00:09:31.570 --> 00:09:36.289
Bethann Merkle: Alright. Would you mind refreshing and see if it will
let you do that now?
54
00:09:39.080 --> 00:09:40.810
Bethann Merkle: Great thanks so much, Christine.
55
00:10:30.780 --> 00:10:34.370
Bethann Merkle: Alright. Take maybe another 30 s to wrap up.
56
00:10:49.330 --> 00:10:50.190
Bethann Merkle: Okay
57
00:10:50.860 --> 00:11:05.860
Bethann Merkle: amongst us all, we have a range of fairly specific and
some general ideas about stories. And as you can see those ideas are
kind of grouping into a couple of concepts. We're gonna build on that
next.
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00:11:05.880 --> 00:11:21.629

Bethann Merkle: So why are we talking about stories? Let's just touch base on that for a minute. First of all, this is part of our evolutionary and social history. So stories are a really deeply rooted part of being a human.

59

00:11:21.740 --> 00:11:26.090

Bethann Merkle: Why does that do for us? Well, it does a few things for us.

60

00:11:26.980 --> 00:11:42.310

Bethann Merkle: By about the age of 4 or 5 we are able to empathize with other people through stories as in stories, help us empathize with other people. And also, if you don't give a 5 year old a story, they will make one up for you

61

00:11:42.350 --> 00:11:47.600

Bethann Merkle: 2 circles of tracing a triangle around like they will, they will narrate

62

00:11:48.120 --> 00:12:15.499

Bethann Merkle: narrative interactions between things. And these are really important elements of how we function socially, both as individuals. And then culturally. So we're we're recognizing that stories are just a deeply baked in part of being human. Okay? And people have been being nerds about stories for just about as long as we've been using them. We have records at least as far back as Aristotle kind of positing, that

63

00:12:15.500 --> 00:12:30.380

Bethann Merkle: there were certain uniform and universal aspects of stories that were told all around the world, and people are still studying this extensively today. So we really like to talk about our stories, not just tell them

64

00:12:30.380 --> 00:13:00.289

Bethann Merkle: also part of why this matters to humans as a species is that stories are a big part of how our brains make meaning and patterns from what is otherwise actually fairly random things that happen in the world. And humans, as you can probably relate, don't do super well with just randomness. And I don't know what's happening next. So we tend to build stories around our own life experiences our intentions and our goals, the things that other people do or don't do or say to us.

00:13:00.360 --> 00:13:05.989

Bethann Merkle: And stories are so basically a central crux of how we get meaning out of life.

66

00:13:06.930 --> 00:13:35.649

Bethann Merkle: And then, importantly, for us, as scientists today, science articles themselves are narratives with expository elements. We are not writing papers that are just a list of information. We are always building some kind of structure that's tying a this and then this and then that, and usually some sort of dilemma or caveat. Lots of common elements from stories show up in pretty much every scientific article

67

00:13:35.750 --> 00:13:50.329

Bethann Merkle: talks are the same, of course, and we have some research that indicates that articles with narrative abstracts are actually cited more. So while we're here today to talk about how engaging with other people through story can be productive.

68

00:13:50.600 --> 00:14:07.540

Bethann Merkle: We also know that at the end of the day a lot of us are getting evaluated. On how many paper beams we have created, and how many beams other people have used to recognize that we made our beans so it doesn't hurt that a narrative abstract might get a little bit more professional attention.

69

00:14:07.590 --> 00:14:21.049

Bethann Merkle: and finally, and at the very bottom of all of this, narratives are more engaging, understandable, and persuasive than our presentations that are quote unquote, purely rooted. In fact.

70

00:14:21.120 --> 00:14:30.619

Bethann Merkle: same is true for most advertisements. So we have a whole bunch of reasons why we might want to be talking about stories at all.

71

00:14:30.630 --> 00:14:51.480

Bethann Merkle: and then where that gets us is that we use stories as a species to connect with each other and to make sense of the world. And that's exactly what we're trying to do with community research community based community engaged, co-produced. We are trying to do precisely this connect with other people and understand the world.

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72
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00:14:51.570 --> 00:14:54.519

Bethann Merkle: and probably make the world a better place.

# 73

00:14:54.910 --> 00:15:18.969

Bethann Merkle: Which means. And this is the important part is actually very ethical to use effective communications methods to do and share science. So a lot of times folks will be worried that something like story or narrative based approaches, or, you know, entertaining videos on Tiktok, or whatever you might think of, are gonna spin your science and make it less credible.

#### 74

00:15:19.300 --> 00:15:42.769

Bethann Merkle: Most evidence around effective communication of science indicates that it's really the opposite. Internally, within stem fields. We can experience some judgment from people who don't value or practice or approve, engaged in ethical and effective methods of communication, but realistically, in most of the rest of society.

#### 75

00:15:42.770 --> 00:15:52.900

Bethann Merkle: This is the way that we are actually effectively going to reach people. So we should be pursuing these kinds of options for ourselves. Okay, so

## 76

00:15:53.040 --> 00:15:57.699

Bethann Merkle: you may not have even needed that being talked into part. But just in case.

# 77

00:15:58.090 --> 00:16:20.059

Bethann Merkle: Now let's go. Do a couple of things, and the first one is to think about. If we don't shape the narrative around our work, we don't have any real say in what that narrative comes out like. But as we were just discussing a minute ago, everyone are over. The age of about 3 is gonna come up with a narrative for our work. If we don't, so let's do some of that, then.

## 78

00:16:20.240 --> 00:16:27.469

Bethann Merkle: So the first thing I'm going to ask you to do is a little bit of very fast thinking.

#### 79

00:16:27.810 --> 00:16:28.670

Bethann Merkle: Okay.

00:16:29.420 --> 00:16:40.720

Bethann Merkle: we're going to think a bit about values. Okay? Why? Because in every story someone wants or needs something, they try to get it, or maybe they resist

81

00:16:41.180 --> 00:16:52.599

Bethann Merkle: dealing with obstacles is is a central element of this, and then usually the main character or someone else. That's significant to the story is going to change

82

00:16:52.620 --> 00:17:05.190

Bethann Merkle: as a result of all of this. And so in this case, if you're the one who's telling the story, we need to figure out what you care about, so that there's a compelling or driving thread to your story.

83

00:17:05.470 --> 00:17:09.169

Bethann Merkle: So we're gonna think a little bit about your values.

84

00:17:10.300 --> 00:17:34.140

Bethann Merkle: And the other reason we need to think about these values is not just so that we create a meaningful story. Values are at the root of basically everything that people do. And they drive a lot of our interactions with other people whose own values are doing the same from their side. And this is, of course, one of the major opportunities and conundrums of doing community engaged science right? We're trying to find a way to actually connect all of that stuff.

85

00:17:34.230 --> 00:17:46.049

Bethann Merkle: So the reality, then, is that to tell a story that's gonna matter to somebody else, we have to really understand what our own values are, and then try to actively connect those to the values of the people that we're working with

86

00:17:46.060 --> 00:18:04.959

Bethann Merkle: and research on public trust. And scientists tells us that people around us know that we also have values, and we're less credible when we pretend to be neutral. So it's alright for us to consider what is informing and motivating our work, and to be

87

00:18:05.380 --> 00:18:13.579

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Bethann Merkle: not necessarily, you know, emotionally dumping on
people that we're trying to collaborate in with in communities. But to
at least be
88
00:18:13.600 --> 00:18:18.090
Bethann Merkle: ready to be a human alongside them.
89
00:18:18.300 --> 00:18:25.330
Bethann Merkle: So let's do a little values work. The first thing I'm
gonna do is give you about 2 min. You're gonna write really fast.
90
00:18:25.960 --> 00:18:34.999
Bethann Merkle: See if you can list down 10 things that you care about
the most in your life. These might be places, people, activities,
objects
91
00:18:35.950 --> 00:18:40.789
Bethann Merkle: up to you 10 things that you care the most about in
your life.
92
00:18:53.630 --> 00:18:55.990
Bethann Merkle: Barry. You'll just have to remember your list.
93
00:19:57.440 --> 00:19:59.150
Bethann Merkle: You have about a minute left.
94
00:20:44.900 --> 00:20:55.880
Bethann Merkle: Alright. Hopefully, you have a bit of a list. Yeah,
Barry, you're on it and don't worry. You're welcome to have your video
on. I'm just teasing you.
95
00:20:56.260 --> 00:21:06.409
Bethann Merkle: Okay. So it's possible that you have a list that looks
roughly, something like this, or it might look very, very different.
96
00:21:06.770 --> 00:21:09.820
Bethann Merkle: These are things that we care a lot about.
97
00:21:09.980 --> 00:21:36.760
Bethann Merkle: but that doesn't necessarily looking at these things,
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help us say, what do I value in a way that I could synthesize this into a story, or any kind of narrative about myself or my work. So I'm going to look at the commonalities between some of those things. I said I cared a whole bunch about and on my list. A bunch of those things relate to being outside.

98

00:21:37.040 --> 00:21:56.540

Bethann Merkle: But being outside is more of an activity than it is really a value word. So I'm going to think about actual words that I could use that might distill this down. And I used a huge list of words that I'm going to drop into the chat right now. You might want to download this list unless you really

99

00:21:57.040 --> 00:22:10.500

Bethann Merkle: really up on valued words today. But some of the things that might possibly relate to being outside our words like adventure and beauty, the environment, learning, nature, serenity, etc.

100

00:22:10.500 --> 00:22:30.159

Bethann Merkle: So if you grab that list that I just dropped in the chat. What I'm gonna ask you to do is something fairly similar, matching the things that are on your list of stuff you really care about to those words. I'm gonna give us another 2 min, and I'll just remind us we're we're constraining this just so that we all can do some other things with our morning.

101

00:22:30.160 --> 00:22:35.539

Bethann Merkle: But you might come back to this and spend more than 4 min on it eventually. Okay.

102

 $00:22:35.670 \longrightarrow 00:22:37.370$ 

Bethann Merkle: so I'm going to give you 2 min

103

00:22:37.580 --> 00:22:47.389

Bethann Merkle: start somewhere in that values words list and try to map some of those value words onto those people, places, activities, things that you really care about.

104

00:23:14.540 --> 00:23:22.089

Bethann Merkle: And I should say you can have lots of words. That's there's no concern about having, you know one to one or anything like that

00:24:03.970 --> 00:24:05.850

Bethann Merkle: have about a half a minute left.

106

00:24:45.000 --> 00:24:46.040

Bethann Merkle: Alright.

107

00:24:47.220 --> 00:24:50.030

Bethann Merkle: So then, we're going to think about

108

00:24:50.890 --> 00:25:08.819

Bethann Merkle: the reality of that list. And if we have a whole bajillion values. We don't really have any priorities. And there's definitely way too many to fit into one single narrative which isn't to say that we can't tell lots of different stories. But if today we're thinking about a story we could tell.

109

00:25:08.860 --> 00:25:24.139

Bethann Merkle: having 15 or 40 value words is not super helpful. So for me. At least, I don't actually go out into nature very much for adrenaline level adventures. So I'm gonna cross adventure off the list, even though it was a relevant word to be outside for some folks.

110

00:25:24.370 --> 00:25:25.779

and I feel like

111

00:25:25.790 --> 00:25:36.799

Bethann Merkle: of all of these, I probably would lean more into the other 4 than the environment. So basically, what I'm going to ask you to do next is get yourself down to a list of a maximum of 10 value words.

112

00:25:38.260 --> 00:25:49.739

Bethann Merkle: And I'm going to not give us a whole lot of time. So this is going to be your gut instinct right now. You might make a slightly different list. If you did this again. try to get yourself down to 10 of them.

113

00:26:16.300 --> 00:26:25.009

Bethann Merkle: Alright, and you can probably see where we're going. 10 is still too many to tell a story around. So I'm gonna ask you to

get yourself down to 7, get rid of 3 more.

114

00:26:43.070 --> 00:26:50.550

Bethann Merkle: and that's still too many for a story. So I'm gonna ask you to drop a couple more. Get yourself down to 3 words.

115

00:27:16.900 --> 00:27:18.520

Bethann Merkle: Where does that leave us?

116

00:27:18.630 --> 00:27:33.299

Bethann Merkle: It leaves us hopefully, a little bit aware of all of the things in the world that we might care about, but also capable of identifying a couple of specific things that we might want to weave into a story. So

117

00:27:33.850 --> 00:27:43.410

Bethann Merkle: let's talk a little bit about how we can connect some values to the work that you do as researchers. So we're going to think about

118

00:27:43.710 --> 00:27:55.159

Bethann Merkle: this from the point of view of not just. We don't have a whole lot of time together today. But also there's a limit to what people can focus on and remember. And a lot of really compelling stories are quite simple.

119

00:27:55.160 --> 00:28:14.220

Bethann Merkle: So I'm gonna ask you to pick one thing. And I'm gonna ask you if you can hop back over into that Google activity, Doc, and if you go to the next page below your story definitions. You'll see a spot in there where you can say, what's a specific result from your research or a specific action that you might want someone to take.

120

00:28:15.410 --> 00:28:20.619

Bethann Merkle: And maybe that's building a research effort. Or is it not working again?

121

00:28:22.150 --> 00:28:23.870 Bethann Merkle: Oh, sure. Yeah.

122

00:28:31.860 --> 00:28:34.579

Bethann Merkle: Okay, sharing the link in the chat.

123

00:28:35.470 --> 00:28:52.590

Bethann Merkle: So maybe it's an action that you'd like someone to take to help you build some sort of community engaged research project. Or maybe it's an action that you want someone to take because you have done that kind of research, or it's a result from some of your work that you think might have bearing on community.

124

00:28:53.960 --> 00:28:56.320

Bethann Merkle: Go ahead and drop something in the

125

00:28:56.390 --> 00:28:57.790 Bethann Merkle: doc, please.

126

00:29:38.880 --> 00:29:39.850 Bethann Merkle: alright.

127

00:29:41.310 --> 00:29:50.619

Bethann Merkle: And then we're gonna think about how we can dive, tie our values together with this one idea or result that we're trying to convey

128

 $00:29:50.700 \longrightarrow 00:30:08.470$ 

Bethann Merkle: a. And the reason that we're gonna use stories to do this is because we're trying to make sticky messages and sticky messages are messages that are really easy to hang on to. They're easy to remember, so they're both easy to follow as they are told or heard, and then easy to remember.

129

00:30:08.590 --> 00:30:13.850

Bethann Merkle: In some way they fit with our or the listener's sense of the world.

130

00:30:14.130 --> 00:30:23.200

Bethann Merkle: They hopefully offer some element of surprise or something we didn't anticipate and or they please us in some way.

131

00:30:23.220 --> 00:30:35.900

Bethann Merkle: The great thing is that stories are really good at being sticky messages like this. and the very best stories are

basically creating an experience for listeners

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132
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00:30:36.160 --> 00:30:41.870

Bethann Merkle: that make them actually want to remember and retell the story themselves.

#### 133

00:30:44.440 --> 00:30:46.959

Bethann Merkle: What does that actually look like? Well.

## 134

00:30:48.160 --> 00:30:50.279

Bethann Merkle: what's the slogan for this logo.

#### 135

00:30:51.450 --> 00:31:04.119

Bethann Merkle: You don't have to say it out loud, but we probably all know what is. But then I'm gonna ask you to think for yourself in the back of your head for a minute. What does that phrase actually mean to you personally when you hear it?

#### 136

00:31:10.020 --> 00:31:11.769
Bethann Merkle: Okay, what about

#### 137

00:31:13.320 --> 00:31:15.850

Bethann Merkle: this logo. What's its slogan?

#### 138

00:31:18.510 --> 00:31:22.749

Bethann Merkle: And what are you hearing when you say or think that slogan?

## 139

 $00:31:23.310 \longrightarrow 00:31:27.929$ 

Bethann Merkle: What does it mean to you? What kind of memories might you have associated with it.

#### 140

00:31:31.440 --> 00:31:52.290

Bethann Merkle: So the important thing that we can borrow from advertising is that whether we like it, whether we use the product or not doesn't even matter. These countries, their Logos, their slogan or countries. These companies and their Logos and Slogans, have completely penetrated our experience of life.

## 141

00:31:52.290 --> 00:32:07.369

Bethann Merkle: At least, if we live in the United States. We have probably thought about what these slogans mean or could mean for us, why we agree with them, or totally disagree with them. We might even have really specific memories associated with these products. That

142

00:32:07.370 --> 00:32:23.010

Bethann Merkle: is a sticky message. Okay, we can't necessarily nike our way into our communities with our science. But we can keep in mind that level of efficacy, and think about how we can connect people with, or even help make

143

00:32:23.080 --> 00:32:29.550

Bethann Merkle: our science their science, so that it is actually part of their experience and their identity.

144

00:32:30.710 --> 00:32:47.990

Bethann Merkle: And so as much as we can, we want our science communication and our community engaged research to be sticky, and that's totally a tall order. But there's some really specific attributes of sticky messages that we can identify in our own work. And that's what we'll do next.

145

00:32:47.990 --> 00:33:07.039

Bethann Merkle: So we're gonna use this tool from the American Association for the Advancement of Science, or Triple A. S. They call it the 3 M's, and there's 3 attributes, and we're gonna try to identify them. And then I will tell you this isn't about time today. This is about the way that we think in like

146

00:33:08.600 --> 00:33:13.620

Bethann Merkle: hyperreal 3D. About all of our work. The tricky part

147

00:33:13.680 --> 00:33:29.629

Bethann Merkle: is keeping ourselves to the 3 M. Of these messages when we're trying to share stories with people. So the elements are, I'm gonna read them to you. And then we're gonna actually work through them to try to keep your messaging miniature no more than 3 points

148

00:33:30.170 --> 00:33:35.239

Bethann Merkle: to, as we were just talking about a minimum ago. Make sure that it's memorable.

00:33:35.270 --> 00:33:55.389

Bethann Merkle: and then try to ensure that it is also meaningful. So how do we do this? The first one is miniature 3 points. So I asked you to get it down to 1 point, but I would bet you that one result has a caveat or some sub point, or a little bit of context, that you would want to connect it to.

150

00:33:55.550 --> 00:34:11.519

Bethann Merkle: We are doing this so that we don't overwhelm people. And we are also doing this so that we stay on topic enough that we can create something that they can digest. And it's memorable. So what I'm going to ask you to do is now you have your one result or action.

151

00:34:11.770 --> 00:34:18.339

Bethann Merkle: Gonna ask you to make yourself a couple of really specific notes who one specific group of people.

152

00:34:18.449 --> 00:34:35.090

Bethann Merkle: So this is ideally as real a group of people as possible. If you know these people in the world, this will help you, not stereotype them. Identify the actual group of people that you would want to communicate that result to, or that you would want to be taking action.

153

00:34:35.639 --> 00:34:38.089

Bethann Merkle: So identify that group of people.

154

00:34:44.030 --> 00:34:55.470

Bethann Merkle: And then I'm gonna ask you to answer at least one of these questions down here, the starting point questions. So you have that action or result. So what? Why would those people care?

155

00:34:56.000 --> 00:35:03.309

Bethann Merkle: What are the benefits to them, or possible solutions that you and they could identify together.

156

00:35:03.990 --> 00:35:06.949

Bethann Merkle: based on that one result or action.

157

00:35:43.250 --> 00:35:47.630

Bethann Merkle: Alright, we'll take just a few more moments to get

ourselves

00:35:48.430 --> 00:35:50.759

Bethann Merkle: to a pausing place.

159

00:35:57.280 --> 00:36:19.300

Bethann Merkle: Next thing to think about is what even is actually memorable. Well, the brilliant things that stories are memorable. So elements of stories are the things we wanna be thinking of. So I'm going to ask you to try to identify one or 2 things that somehow fit into this list, so are there analogies or comparisons, and these might not necessarily be.

160

00:36:19.300 --> 00:36:31.770

Bethann Merkle: You know, horses are like the dolphins of the sea. Not necessarily that kind of an analogy. But maybe the thing or the project that you are working on has an analog

161

00:36:31.770 --> 00:36:51.570

Bethann Merkle: somewhere else in the world, and that might make what you're trying to do, recognizable to someone anecdotes. These are the the building blocks of stories. So do you have an anecdote about why you care about this, or why someone in your community cares about it, that you could build your message around?

162

 $00:36:52.440 \longrightarrow 00:37:06.940$ 

Bethann Merkle: And or are there visuals that you have access to? Because visuals are a vital part of a lot of effective storytelling. Can you think of a visual or a couple of visuals that might be really effective for your message.

163

 $00:37:07.470 \longrightarrow 00:37:12.309$ 

Bethann Merkle: I'm gonna give us, maybe about a minute to just

brainstorm some of this

164

00:38:11.190 --> 00:38:13.419

Bethann Merkle: right? About a half a minute left

165

00:38:43.620 --> 00:39:06.790

Bethann Merkle: alright. And the next thing, remember we had 3 M. So the next one is making sure that the elements of our stories and our messaging are actually meaningful to us and meaningful to the community members that we are trying to connect with. So I'm gonna ask

you to actually take a minute and articulate how these different ideas of being miniature and memorable.

166

00:39:06.820 --> 00:39:16.840

Bethann Merkle: actually would be meaningful to the people that you are intending to work with or share your science with in a genuinely engaged way.

167

00:40:28.160 --> 00:40:29.110 Bethann Merkle: Alright.

168

00:40:29.880 --> 00:40:47.249

Bethann Merkle: we're gonna add another layer to this. So how do we take all of that and actually make some kind of story out of that? Well, we're gonna do some of the story nerdery for a minute. So these are some of the typical types of plots that we see, at least in things like

169

00:40:47.850 --> 00:40:58.389

Bethann Merkle: fiction and plays literature, drama, that kind of stuff. And some of these can feel really formulaic and narrow, and that might

170

00:40:59.090 --> 00:41:15.330

Bethann Merkle: make us feel like we can't tell a story, if that's what a story has to be. You know everybody wants something. They have some trouble, and somebody or something changes by the end that that might not feel like the arc of your story. So I wanna just throw up here for us to

171

 $00:41:15.330 \longrightarrow 00:41:35.509$ 

Bethann Merkle: have in the back of our head that there are a lot of different structures or moments or transitions that happen in a lot of storytelling. And a lot of these are more familiar to us than we kind of remember to think about when we're planning our own message sharing in the world. I'm not asking you to take a big

172

00:41:35.510 --> 00:41:49.000

Bethann Merkle: list of notes on this, and if someone wants in the chat later, I can drop in the reference. You can just go dig this table out of the paper paper that it's in. But the point here is, there are a lot of ways to think about how you could formulate

00:41:49.150 --> 00:42:02.700

Bethann Merkle: that situation of where somebody needs something. Stuff comes up. something happens. and then there's not necessarily a perfect tide, bow resolution. But something has changed.

174

00:42:03.600 --> 00:42:17.580

Bethann Merkle: while that might seem really unrelatable to the kind of work you're doing. We also have narratives and plot points in virtually every paper. As I was saying earlier, that we write, and Phillips in 2012.

175

00:42:17.760 --> 00:42:29.819

Bethann Merkle: With this great paper this is only half of his structure. He came up with roughly 8 different plot types in an analysis of about 700 Earth Science

176

00:42:30.580 --> 00:42:52.799

Bethann Merkle: papers, and I'm just throwing throwing up here 3 of or 4 of them for you to have a look at. But, as you can see if let's just say you're an Earth Scientist. There's some sort of standard progressions and elements of the kind of what goes wrong. What we're curious about, what we can learn about it. Oh, wait! Here's how things are related.

177

00:42:52.860 --> 00:42:57.040

Bethann Merkle: kinds of storytelling that happens in Earth science papers, and I

178

00:42:57.830 --> 00:43:10.519

Bethann Merkle: would absolutely love to see what this analysis looks like for your disciplines. Likely there's some table of typical plots that we tell each other within our science disciplines.

179

00:43:10.570 --> 00:43:20.469

Bethann Merkle: The question, then, is how we use those typical plots tied with our more standard storytelling plots like Sleeping Beauty or Star Wars.

180

00:43:20.580 --> 00:43:28.810

Bethann Merkle: to tell stories that are meaningful to the people in our communities that we are doing science with and sharing science with.

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181
00:43:29.520 --> 00:43:33.449
Bethann Merkle: So we're gonna think a little bit about how to put
this stuff together.
182
00:43:33.460 --> 00:43:38.699
Bethann Merkle: So we're gonna think about kind of 3 different
elements of that
183
00:43:38.910 --> 00:43:44.120
Bethann Merkle: result or that action and how that ties to your
community's values.
184
00:43:44.690 --> 00:43:49.379
Bethann Merkle: So I'm going to ask you. We'll have 3 more pages in
the
185
00:43:50.010 --> 00:44:05.309
Bethann Merkle: activity, Doc, and the very the next page. I'm gonna
ask you to identify one to 3 challenges that are related to that
action or that result that you've been thinking about during this
workshop.
186
00:44:06.140 --> 00:44:08.830
Bethann Merkle: And there's the link to that activity.
187
00:44:09.910 --> 00:44:21.930
Bethann Merkle: There's the link to that activity, Doc, if anyone
needs it again. So hop over in there and share 1, 2, or Max 3
challenges that relate to that action your community relationships
188
00:44:22.090 --> 00:44:24.950
Bethann Merkle: and or the result that you would want to convey.
189
00:45:41.140 --> 00:45:49.250
Bethann Merkle: Alright. the next one is in order to deal with
challenges. We usually have to do something right. So
190
00:45:50.240 --> 00:46:07.279
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Bethann Merkle: what might we possibly do? Share in the next page in

the activity, Doc. 1, 2, or maybe 3 elements of your situation that could relate in some way to being curious, trying to track down the answer to some kind of question.

191

00:46:08.770 --> 00:46:17.190

Bethann Merkle: the sort of creative, and quote unquote discovery dimensions of doing science, working with communities.

192

00:46:20.160 --> 00:46:22.790

Bethann Merkle: the potential for an Aha moment.

193

00:47:06.600 --> 00:47:09.339

Bethann Merkle: Alright! About a half a minute left on that one.

194

00:47:27.800 --> 00:47:38.900

Bethann Merkle: And then what kind of changes, growth or transformation can you either anticipate or already share a story about?

195

00:47:38.930 --> 00:47:42.639

Bethann Merkle: And that would be the next page on that activity sheet.

196

00:49:10.830 --> 00:49:14.750

Bethann Merkle: Alright. Take maybe another half a minute to wrap up what you're thinking about.

197

00:49:33.620 --> 00:49:34.500

Bethann Merkle: Okay.

198

00:49:35.970 --> 00:49:48.610

Bethann Merkle: okay, if you're not quite done, maybe you can think and update a little bit in the background. But I'm gonna ask you to kind of come back into the group now with your thinking and experience. And I'm gonna ask you to share in the chat

199

00:49:49.230 --> 00:50:00.060

Bethann Merkle: one sort of reaction, or thought or take away. You know, if we had enough time to jump in the breakout rooms, this would be where that would probably be where you would do something like that. But just to save us some transition time.

00:50:00.510 --> 00:50:06.560

Bethann Merkle: share back into the room something that you're thinking about so far, and this doesn't have to be

201

00:50:06.680 --> 00:50:12.509

Bethann Merkle: affirmative of anything, either. It could be. Maybe this is not for me sort of reaction.

202

00:50:37.120 --> 00:50:45.559

Bethann Merkle: I totally agree, Laurie. I love that paper. and I don't do anything in the Earth sciences. But it's still fascinating

203

00:50:57.660 --> 00:51:20.549

Bethann Merkle: great. Okay. Some folks are liking some of the facilitation methods, and I'll also say that can be part of how you're thinking about how you're engaging people right? Maybe you can only meet with your community engaged research groups virtually so. How do you have time for people to simultaneously be sharing things while still keeping to some sort of time constraint?

204

00:51:21.130 --> 00:51:35.840

Bethann Merkle: Alright. Next thing is, I'm gonna ask you to think a little bit about how you can actually use some of these ideas. And we'll remember we ran through a bunch of ideas very quickly. So this is your chance to try to digest them a little bit.

205

00:51:36.160 --> 00:51:40.610

Bethann Merkle: Every source thing I'm gonna ask you is based on all these ideas.

206

00:51:40.910 --> 00:51:48.540

Bethann Merkle: What's one thing that you might do in the next month, and you can take these. You can take these notes for yourself. You don't need to share them with anyone.

207

00:51:49.020 --> 00:51:55.090

Bethann Merkle: So one thing that you might do with one thread of all of this in the next month.

208

00:52:31.010 --> 00:52:44.249

Bethann Merkle: and then you'll see where this is headed, what's something you might do by the end of the semester? So something that's maybe a little more ambitious could take a couple of steps might need a collaborator or someone else something you might need a bit more time

209

00:52:44.880 --> 00:52:46.249 Bethann Merkle: to take on.

210

00:53:20.060 --> 00:53:28.319

Bethann Merkle: And then what's something a bit bigger? What's something that you might try to invest in or work through by the end of this year.

211

00:54:34.780 --> 00:54:40.710

Bethann Merkle: Okay? And then I'm gonna ask you to go back and look at those 3 actions for a moment and think about who do you need

212

00:54:41.430 --> 00:54:56.610

Bethann Merkle: to do them? Can you do them by them yourself? Do you want to do them by yourself? Who might. You either need to recruit, reconnect with, reinforce your relationship with? If you're already working with them, who do you need to do those things?

213

00:55:26.380 --> 00:55:28.429

Bethann Merkle: And then what do those people care about?

214

00:55:30.210 --> 00:55:39.339

Bethann Merkle: Can you? You probably can't get it down to their 3 value words and be 100% accurate. But you'll have some idea what are the things they care about.

215

00:55:39.390 --> 00:55:48.209

Bethann Merkle: and you might even think about how those things that they care about may prevent them from wanting to be involved with the work that you're doing.

216

00:55:48.520 --> 00:56:02.589

Bethann Merkle: Not necessarily. I disagree with you sorts of presents, but if their value is exercise and family time, they may say no to protect that, or something like that. So what? What do they care about? And how might you

00:56:02.750 --> 00:56:06.710

Bethann Merkle: need to account for that? Let's say

218

00:57:06.750 --> 00:57:17.750

Bethann Merkle: alright, we could definitely keep going on all of this, but we won't. We're gonna hand the mic over to Natak, and then we'll have some time to chat at the end.

219

00:57:23.510 --> 00:57:32.549

Laurie Anderson: Thank you so much, Bethan, that just gives me so much to think about. And I'm thinking a lot about ways to apply it in my teaching as well as in communicating

220

00:57:32.650 --> 00:57:36.870

Laurie Anderson: with the public. So thank you. Really appreciate that.

221

00:57:37.660 --> 00:57:44.679

Laurie Anderson: I'd like to now introduce Dr. Nataki Osborne Jilks.

222

00:57:45.220 --> 00:57:51.230

Laurie Anderson: Nataki is an environmental health scientist, focused on disparities in urban systems.

223

00:57:51.350 --> 00:58:03.250

Laurie Anderson: She develops implements and evaluates community-based initiatives to enable and empower low income and communities of color to improve health and quality of life.

224

00:58:03.610 --> 00:58:16.939

Laurie Anderson: She is currently Cole leading urban heat, a Tl. A research initiative in which Atlanta based students and community members are mapping urban heat Islands. With community science.

225

00:58:17.090 --> 00:58:30.319

Laurie Anderson: Nantaki has earned numerous prestigious awards. Most recently the Damus Smith Environmental Health achievement award from the environment section of the American Public Health Association in 2023

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226
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00:58:30.680 --> 00:58:32.720

Laurie Anderson: Nataki. Thank you for being here.

### 227

00:58:34.140 --> 00:58:43.950

Na'Taki Osborne Jelks: Thank you so much for inviting me, and thank you for that gracious introduction. I am going to attempt to sh share my screen and get started here.

# 228

00:58:45.520 --> 00:58:50.799

Na'Taki Osborne Jelks: Okay. hopefully, you can see that

#### 229

00:58:54.560 --> 00:58:58.139

Na'Taki Osborne Jelks: not always have a trouble. Just kind of navigating.

#### 230

00:58:59.170 --> 00:59:12.260

Na'Taki Osborne Jelks: looking good. Okay, excellent, excellent, excellent. It's not yet in slideshow mode. But I had the same issue. So

## 231

00:59:12.620 --> 00:59:15.450

Na'Taki Osborne Jelks: here we go. Okay, hopefully, it's there now.

#### 232

00:59:15.650 --> 00:59:24.420

Na'Taki Osborne Jelks: okay. So what I thought I would share today is a little bit about my work.

# 233

00:59:24.590 --> 00:59:36.340

Na'Taki Osborne Jelks: in engaging communities. And what I like to kind of call, you know, sort of applied ecology, since I know that I am here with us semicologists.

#### 234

00:59:36.340 --> 01:00:01.189

Na'Taki Osborne Jelks: And so the work that I'll share comes from sort of an ongoing project and ongoing engagement with community members in Atlanta. So I live on the west side of Atlanta, and my institution spelling colleges also located in West Atlanta, and I engage with a lot of community members on the west side of Atlanta, and engage them in the work

01:00:01.190 --> 01:00:22.319

Na'Taki Osborne Jelks: that that I'm doing. And I really like to think about the urban environment, you know, as my laboratory and engaging with folks who live in this urban environment. And really trying to bring in their local knowledge. And you know, community stories has been very

236

01:00:22.320 --> 01:00:38.769

Na'Taki Osborne Jelks: beneficial to to our collective work. As as I find that community members are very interested and have been very engaged over a number of years and trying to advance equity as well as urban watershed protection.

237

01:00:40.810 --> 01:01:03.500

Na'Taki Osborne Jelks: So just oops. Sorry about that. Just a a brief kind of overview of what I'll talk about. I'll introduce you to the Proctor Creek watershed, which is where my institution is located, where I previously been a long term long time resident. And where I'm engaged with a number of community residents and community based organizations.

238

01:01:03.500 --> 01:01:18.380

Na'Taki Osborne Jelks: I'll talk a little bit about one community engaged collaborative partnership. Talk a little bit about the work that we did with that. And then I share actually a story of one of the community members who has been engaged in that work.

239

01:01:19.220 --> 01:01:47.350

Na'Taki Osborne Jelks: So Proctor Creek, is a watershed that is located in that northwestern quadrant of the city of Atlanta. It's the only major watershed in the city of Atlanta that is totally located. Just in one jurisdiction, you know, in the city. Many of the other major watersheds will cross over into other jurisdictions, but this is the only one that is totally located in you know. In the city.

240

01:01:47.760 --> 01:01:55.329

Na'Taki Osborne Jelks: Proctor Creek is impacted by a number of factors, including combined sewer overflows

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01:01:55.430 --> 01:02:03.620

Na'Taki Osborne Jelks: sanitary sewer overflows not point source pollution and legal dumping and erosion and sedimentation.

01:02:03.660 --> 01:02:28.630

Na'Taki Osborne Jelks: It's about 9 miles in length. It covers about 16 square miles, and there are over 38 38 neighborhoods located in the Procter Creek watershed. Just a couple of other things to note about the watershed. Is that when you talk about sort of Atlanta being the cradle of the Civil Rights movement. A lot of that activity happens in the Procter Creek watershed the adult home of the Reverend Doctor Martin Luther King, Jr.

243

01:02:28.630 --> 01:02:48.699

It's in the Procter Creek watershed, and the Procter Creek watershed is also the home of the Atlanta University Center, which is the largest consortium of historically black colleges in the nation. And so Sponsored College, Morehouse College, Clark, Atlanta University, and 3 other institutions are located within the Atlanta University Center.

244

01:02:49.850 --> 01:03:19.839

Na'Taki Osborne Jelks: So Procter Creek as a natural resource has for a number of years been a source of pride for West Atlanta communities, a place where children have played a place where people fished in place where people were baptized. Procter Creek is now one of the most environmentally impaired Creeks in Metropolitan Atlanta, although it's changing, it's changing as a result, in part because of community stewardship and efforts to an effort set community members

245

01:03:19.840 --> 01:03:33.460

Na'Taki Osborne Jelks: are engaging in to not only raise awareness about the issues and challenges that impact water quality. But you know also due to the actions that they're taking to improve. The status of Procter creed.

246

 $01:03:33.540 \longrightarrow 01:03:58.519$ 

Na'Taki Osborne Jelks: It is impacted by numerous pollution sources. Is not meeting. It's you know, state mandated water quality requirements. Commonly they're high. Excuse me, high levels of E coli. It doesn't mean it's this designated use as a place where there should be fishing and anecdotally through stories of community members. We know that to this day community members

247

01:03:58.520 --> 01:04:10.509

Na'Taki Osborne Jelks: in some parts of the watershed still Fish and Procter Creek. Some people still swim in it. But because of the contaminants that are often found in the creek, it's not fit for those activities.

01:04:11.530 --> 01:04:40.640

Na'Taki Osborne Jelks: Proctor Creek, as a watershed also or part of the watershed, was identified as the number 4, top hotspot in a list of the top. 5. Environmental justice hotspots in the city of Atlanta. This is in a report that is over 10 years old now. But, the findings of that report still resonate quite a bit. That report is called the patterns of pollution, and looked at demographics and pollution sources in Atlanta. And so these Hotspots were areas

249

01:04:40.640 --> 01:05:01.459

Na'Taki Osborne Jelks: that had some of the highest highest numbers of cumulative environmental hazards or pollution sources, but also had high levels of social vulnerability in terms of communities of color, low income communities, as well as language, isolated communities. So that's Procter Creek

250

01:05:01.950 --> 01:05:26.899

Na'Taki Osborne Jelks: in terms of the community engage research partnership that I want to briefly share about today. This was led by the Us. Fish and wildlife service. Also, a key partner is the West Atlanta Watershed Alliance, a community based organization that operates in the proctor and Sandy Creek watersheds, and these are 3 contiguous watersheds that cover the west side of Atlanta.

251

01:05:26.900 --> 01:05:51.890

Na'Taki Osborne Jelks: and II have this is a a real pride point for me in terms of this particular partnership. Because it was led by a former biologist at the Us. Fish and wildlife service, who was a mentor miti. Excuse me of mine. And so it was great to have her engaged in leading this project. Essentially the Us. Fish and wildlife service was a part of the urban

252

01:05:51.890 --> 01:06:16.689

Na'Taki Osborne Jelks: waters. Federal partnership, which is a partnership that was launched by EPA in 2,013 in which they were looking at about 19 different priority waterships across the country. And you know, looking at issues around water quality, but also not just water quality. Looking at areas where there was, you know, dense development and where there may have been also social vulnerability or even economic

253

01:06:16.690 --> 01:06:41.649

Na'Taki Osborne Jelks: mobility in terms of the populations who lived

around or who interacted with those water resources. And so there were about 9 Federal agencies involved in the Procter Creek urban watership urban watershed partnership. Excuse me, and the fish and wildlife service was one of them, and so, as a part of their work. They wanted to. Just understand what biodiversity look like in Procter

254

01:06:41.650 --> 01:06:52.219

Na'Taki Osborne Jelks: Creek, a watershed that was highly impacted by urban development. But thought to still, perhaps, you know, have some significant life in it.

255

01:06:52.220 --> 01:07:03.529

Na'Taki Osborne Jelks: and in this partnership we worked with the Student Conservation Association. The Proctor Creek Stewardship Council, which is a group of community residents in the area. Atlanta public schools.

256

01:07:03.530 --> 01:07:20.419

Na'Taki Osborne Jelks: local colleges and universities, including Spellman College and Agnes Scott College, both who are colleges for young women. and then, of course, the Us. Environmental Protection Agency as the lead agency for the urban waters, Federal partnership.

257

01:07:21.380 --> 01:07:41.060

Na'Taki Osborne Jelks: So through this research initiative. That was focused on trying to get a better sense of what biodiversity look like in the Procter Creek watershed. We engage with students and community members lay community members who we call community scientists or in some cases we might call them watershed researchers.

258

01:07:41.060 --> 01:07:53.300

Na'Taki Osborne Jelks: And so we engage in things like visual stream surveys water quality, monitoring crayfish surveys and we look for any and every manner of aquatic life that we could find.

259

01:07:53.410 --> 01:08:07.730

Na'Taki Osborne Jelks: We launched into things like visual stream assessments. That help us to determine if there were observable problems in the stream, and also helped us to try to characterize the environment through the environment through which the streams flowed.

260

01:08:07.850 --> 01:08:34.660

Na'Taki Osborne Jelks: We'd assess factors such as wrap hearing and

zone thickness. Channel a alteration. We looked at things like the levels of algae blooms or pools for fish cover. We also use multimeter probes to monitor the water quality. We looked at parameters such as phonectivity dissolved oxygen. Coliform bacteria levels, etc. And you know.

261

01:08:34.660 --> 01:09:04.449

Na'Taki Osborne Jelks: doing this in a very handsome way with community members, with interns from local colleges and universities, as well as K, through 12 students. Primarily high school students from the Atlanta public school system. Help people to get connected to their local watershed, and all of the kind of non students who were engaged in the work were residents of these of the Proxy Creek watershed. So both the community members as well as the high school students

262

01:09:04.460 --> 01:09:28.950

Na'Taki Osborne Jelks: the crawfish and wildlife surveys were, I think, the most fun. Both for community members, and students alike. Just being able to put their hands on the nets. Using their bare hands in some cases using funnel traps and kick sains. It was, you know, really a rewarding experience, as we're told for the community members and students. To learn

263

01:09:28.950 --> 01:09:36.299

about. You know how to conduct the surveys, to learn about just the simple tools that we use

264

01:09:36.300 --> 01:09:46.810

Na'Taki Osborne Jelks: to conduct those surveys, and then to begin to to use field guides and to try to, you know. Look up. You know the types of species that we found, you know, in in that work.

265

01:09:46.899 --> 01:10:12.980

Na'Taki Osborne Jelks: You know. They also, you know, documented, you know, the the various species that we found you know they you know, measured, you know, the aquatic life. Try to understand. If there were, you know, things that were really unusual that we were finding, and it created a really rich, robust, learning ecosystem for these community members, for students as well as for the wildlife biologists from the Fish and Wildlife service.

266

01:10:13.470 --> 01:10:24.440

Na'Taki Osborne Jelks: In 1993 Usgs published, a document. What fish

live in the streams! Metropolitan Atlanta! And this was a part of a national water quality assessment.

267

01:10:24.490 --> 01:10:49.159

Na'Taki Osborne Jelks: and since that time there had not been a lot of studies, you know, conducted and these urban streams. Lots of work have been done in the North Georgia mountains, for instance, but not a lot, you know, focus in the urban streams, in part, perhaps, because of the impairment that people, you know, perceive there to be because of the urbanization because of the dense development happening in those urban areas.

268

01:10:49.160 --> 01:11:12.719

Na'Taki Osborne Jelks: And so, after just one month our team found some species that were previously unreported. By Usgs for this particular area. And so this is a particular pride point for our community scientists and watershed researchers as well as the students and the students both at the collegiate and at the high school level who were engaged in the process.

269

01:11:14.180 --> 01:11:33.669

Na'Taki Osborne Jelks: So at the onset of this project the Us. Fish and Wildlife Service biologists were asking, you know, how did Proctor Creek. How might it have changed, you know, over the past 25 years. Over, you know. Throughout the time that you know, from the time that the original you know, assessment was conducted.

270

01:11:33.670 --> 01:11:44.089

Na'Taki Osborne Jelks: And you know, what we found is that even though Procter creed was impacted by a lot of challenges. There is indeed life in Procter Creek.

271

01:11:44.090 --> 01:12:08.970

Na'Taki Osborne Jelks: and so now I want to pivot from the presentation and share about 3 or 4 min. In my remaining. I think, 7 or minutes that I have left. I'd like to share. A community story. Coming from one of the community members who passed away about a year ago. But was, you know, very instrumental, you know, in this

272

01:12:08.970 --> 01:12:33.140

Na'Taki Osborne Jelks: pro in this project, and her story was one that you know, really motivated me. To, you know, engage a community members in this work? So that we could, you know, learn from them and their stories and their lived experiences. To help guide the the

scientific research that we are collectively trying to conduct.

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273
01:12:33.240 --> 01:12:41.290
Na'Taki Osborne Jelks: And so I am not gonna attempt to share video
here, that hopefully, you all will be able to hear in just a second.
274
01:12:47.850 --> 01:12:49.520
you
275
01:12:55.890 --> 01:12:57.010
and
276
01:12:58.950 --> 01:13:00.560
you.
277
01:13:01.720 --> 01:13:02.580
278
01:13:04.790 --> 01:13:19.980
me Mmm? Well, as a child, I remember growing up around the creek,
playing in the creek. sitting around the tributaries, probably just
observing the atmosphere.
279
01:13:20.530 --> 01:13:33.240
and got involved with by just being a part of it need not to pray. And
a lot of I learned about the environment was from sitting around out
creaking our community
280
01:13:35.470 --> 01:13:46.440
so. But when I kind of call myself getting grown and moved away, but I
came back. and when I came back it was a tremendous change in the
community.
281
01:13:46.650 --> 01:13:58.090
The Proctor Creek had got toxic. It wasn't a good environment to sit
around it anymore, because the whole habitat of the cricket changed.
282
01:13:58.190 --> 01:14:12.690
and they had a lot of debris trace in the creek. and I wanted to know
myself what happened to it. But by me, moving back, I got involved
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with the Neighborhood Association

283

01:14:13.380 --> 01:14:27.240

and got more involved with trying to find out a way to clean the community back up. But yes, the devastation of it shocked me to know that I lived in a community so beautiful.

284

01:14:27.580 --> 01:14:36.220

and had so much purity in it, and come back to the community and see how it had changed tremendously.

285

01:14:41.080 --> 01:14:52.620

We are out now, scouting around and trying to see how much Parka Creek has changed. looking for the environment of

286

01:14:53.160 --> 01:15:04.349

what type. Species or fish are still around, and I am finding out, as we go up and down the stream. that it has lie still in it.

287

01:15:04.840 --> 01:15:15.510

But it's in certain spots, and I'm want to be a part of they clean up to change the environment back to a better place to live.

288

01:15:20.640 --> 01:15:40.440

Hey? We're out in Proctor Creek. It's a watershed on the west side of Atlanta. It's in the city limits of Atlanta. and we were looking for what we defined. All the aquatic wildlife, and we recorded it. So we went to 3 sites. They all look different, and they all had different types of species, but it was really cool, because

289

01:15:40.740 --> 01:15:52.069

all around the streams there's like houses. You have some abandoned warehouses, etc. But you still have nature really powerful nature, and there's lots of thriving life. Inside of the creek.

290

01:15:54.320 --> 01:16:13.150

We have several people, we have volunteers, students, we have interns, we have community members as well as fish, wildlife employees. What we do is half of us take a big net what they call the same, and they run it through the stream, and that's a way to catch a bunch of fish at one time, and then a lot of us have smaller nets they call dip nets.

01:16:13.150 --> 01:16:26.400

and we walk upstream, and we catch whatever we can find. The reason why we're doing that is because we don't really have much information on what's in Practice Creek in the first place. And right now we're working with many partners, both federal and private

292

01:16:26.400 --> 01:16:50.030

as well as community based organizations. They're working to restore Project Creek. It was once a very polluted stream. There was actual sewage flowing right through the actual stream and through lots of community members getting together and getting involved. They've removed quite a bit of pollution, and hopefully, through time, we'll be able to say there has been an improvement of.

293

01:16:50.030 --> 01:16:59.320

I guess, the different bio indicators, the bioindicative species from what we found now in 2,017, and what we can find maybe 10 years from now, when we do some ecosystem restoration.

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01:17:06.480 --> 01:17:11.659

Na'Taki Osborne Jelks: So I'll try to switch back to my presentation for just a second here.

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01:17:23.400 --> 01:17:25.170 Na'Taki Osborne Jelks: So just in

296

01:17:25.550 --> 01:17:27.619 Na'Taki Osborne Jelks: in

297

01:17:28.660 --> 01:17:30.740 Na'Taki Osborne Jelks: conclusion,

298

01:17:31.420 --> 01:17:59.090

Na'Taki Osborne Jelks: basically, you know, this was a a an amazing project. And it has contributed to ongoing data collection in the Proctor Creek watershed, and it's helped to fill in some knowledge and gaps about the status of water quality as well as the status of aquatic life. Within Proctor Creek. I think we we learned that it was important through this process to integrate local community knowledge with traditional research methodologies.

01:17:59.090 --> 01:18:28.409

Na'Taki Osborne Jelks: We let the community be co-defineders. And what we study, how do how we develop the methodologies in the ways in which we share the results, you know, to the broader community. And I think that most people engage came away with this idea that community engaged research should be the norm. When we're engaged in researching place phenomenon. And so with that, I will say, thank you and

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01:18:28.590 --> 01:18:32.200

Na'Taki Osborne Jelks: shut stop sharing my screen to see if there are any questions.

301

01:18:40.150 --> 01:18:43.759

Na'Taki Osborne Jelks: Wonderful! I think we do have some time for questions.

302

01:18:43.880 --> 01:18:45.340

Laurie Anderson: and

303

01:18:45.720 --> 01:18:55.269

Laurie Anderson: that was that was a great story really inspiring. It's really amazing to see the creek transform back into its natural state.

304

01:18:55.780 --> 01:19:02.809

Laurie Anderson: So please place any questions in the chat. and we can read them out from there.

305

01:19:04.360 --> 01:19:09.429

Laurie Anderson: Questions either for Bethann, Merkel or for Natakey, Osborne, Jelts.

306

01:19:10.650 --> 01:19:35.249

Na'Taki Osborne Jelks: and I forgot to mention I will put in the chat links to 2 articles. One article about this project that I specifically shared with you today. Called implementing community engage research in the Project Creek watershed, and then another article about community engage learning. A process in which I had my students or connected my students to Park Creek community members to

307

01:19:35.360 --> 01:19:42.479

Na'Taki Osborne Jelks: help monitor water quality and some of what

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came out of that interaction. So I will share both of those.
308
01:19:43.290 --> 01:19:44.249
Na'Taki Osborne Jelks: in the chat
309
01:19:47.480 --> 01:19:48.310
Laurie Anderson: great.
310
01:19:56.980 --> 01:19:59.049
Kristy Hopfensperger (she/her): I'll ask a quick question.
311
01:20:00.700 --> 01:20:11.229
Kristy Hopfensperger (she/her): since II don't see any in the in the
chat. My question is for Bethan, I was thinking about your experience
in
312
01:20:11.260 --> 01:20:15.440
Kristy Hopfensperger (she/her): watching scientists learn how to write
stories.
313
01:20:15.470 --> 01:20:23.049
Kristy Hopfensperger (she/her): does it get easier over time? Do you
see them improve? The more they do it.
314
01:20:23.070 --> 01:20:29.999
Bethann Merkle: I mean, I would think repetition is good. Yes, and and
I will say, My
315
01:20:30.330 \longrightarrow 01:20:38.779
Bethann Merkle: my training mode is to do some of the core thinking
before doing the activity. So if we had had
316
01:20:38.900 --> 01:20:40.780
Bethann Merkle: hours together, we would have
317
01:20:40.860 --> 01:20:51.230
Bethann Merkle: identified some kind of story that you could either
tell or write up in some kind of way that would have probably made it
feel slightly less abstract or slightly less
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01:20:51.620 --> 01:20:56.300

Bethann Merkle: really hard. All the bits need to be wrangled. If you

319

01:20:57.220 --> 01:21:11.480

Bethann Merkle: let's put it this way. In a former life, before I had anything to do with academia, I did science, journalism and outdoor education and sustainability education for a fairly income, depressed

320

01:21:11.810 --> 01:21:14.789

Bethann Merkle: neighborhood and the city that I lived in, and

321

01:21:15.500 --> 01:21:43.649

Bethann Merkle: I was doing a lot of different kinds of writing and helping people do a lot of different kinds of writing, and I think one of the things that gets in our way as scientists and academics is that we don't know when to stop and anding right like, there's all the details. And we're so invested in all these details. And we work with amazing people like we just heard about, and we move work in these incredible places, and we found something new, and we did it this. And you know, and we

322

01:21:44.070 --> 01:21:46.000

Bethann Merkle: sometimes we need to breathe.

323

 $01:21:46.020 \longrightarrow 01:22:04.960$ 

Bethann Merkle: And so I think part of what can be really hard is that wait, what's what's a little scope that I can make a digestible story out of. And that's part of why I structured our work earlier in this session in that kind of a way, helping us find some small things that we can PIN.

324

01:22:05.160 --> 01:22:10.750

Bethann Merkle: And then I gonna suggest a couple of things. If you're interested in writing

325

01:22:10.810 --> 01:22:17.290

Bethann Merkle: about science for people who aren't technical scientists, there's a book

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01:22:17.290 --> 01:22:41.239

Bethann Merkle: called the Science Writers, Essay Handbook. It's a

really short, really great little book, and I can put information about it into the chat. And then, if you want to be telling effective stories. This is my absolute favorite book. It's by somebody who has won the moth storytell telling competition a whole bunch of times. And now runs his own story system. And this book is basically a workshop.

327

01:22:41.750 --> 01:22:56.420

Bethann Merkle: but a very sustained workshop that walks you through exactly how to think through several different types of story frames, and also the things that go into effectively telling those kinds of stories. And I'll drop that information in the chat as well.

328

01:22:56.480 --> 01:23:17.209

Bethann Merkle: But yeah, Christy, I think it does actually get easier because we start recognizing how much can fit into one story. and whether we might want to tell this story or that story in a given setting, whether that's in a paper or in a talk, or in a anecdotal situation.

329

01:23:17.770 --> 01:23:18.640

Bethann Merkle: Yeah.

330

01:23:21.070 --> 01:23:28.219

Bethann Merkle: So yes, II think you can consider that it will get easier. I also think it really helps to use resources that

331

01:23:28.260 --> 01:23:36.789

Bethann Merkle: have been made by people who are especially good at this, and you know, maybe you're going to toastmasters and practicing kind of live delivery of stuff

332

01:23:40.050 --> 01:23:43.940

Laurie Anderson: question for Nataky in the chat.

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01:23:46.150 --> 01:23:47.739

Laurie Anderson: It says,

334

01:23:48.010 --> 01:24:01.580

Laurie Anderson: oh, go ahead, Mary, that okay, I was just gonna do the same thing you were, says, is there a part of your work that gathers stories from community members about their personal experiences with the watershed and with a research

01:24:01.810 --> 01:24:06.679

that video was so inspiring, and it would be great to hear more stories.

336

01:24:08.270 --> 01:24:15.720

Na'Taki Osborne Jelks: Yes, thank you so much for that question. That is actually something that I've been working on. We've not actually

337

01:24:15.720 --> 01:24:40.659

Na'Taki Osborne Jelks: really launched it yet. But I have some undergraduate students who are have gotten interested in community stories and like oral histories. And so one dimension of what we wanna look at is is just to to better understand. You know, from this perspective of you know, urban dwellers, you know what has been your relationship, you know, with your local creek or stream in Atlanta. We live, you know, options.

338

01:24:40.660 --> 01:24:46.179

times along the creeks and streams. They flow through our front yards, backyards, school grounds and public parks.

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01:24:46.180 --> 01:25:11.140

Na'Taki Osborne Jelks: So there is some awareness and and interaction. And there has been sort of this movement, especially in black communities of of, you know, watershed stewardship, you know, both activism and people, you know, being engaged in water quality, monitoring creeps. And you know, education, you know, initiatives and that sort of thing. So you know, we wanna kinda tap into understanding what that might.

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01:25:11.140 --> 01:25:16.580

Motivation has been, sort of how people are, you know, connected to their natural resources.

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01:25:16.580 --> 01:25:27.129

Na'Taki Osborne Jelks: One piece of that has started with one of my students. Who, you know, had gotten really interested in kind of community members

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01:25:27.130 --> 01:25:53.700

Na'Taki Osborne Jelks: engagement as Stewarts of a local green space.

And so we we sort of started off, you know, looking at you know, kind of the the connections between people and their watersheds, and she really got engaged and kinda took it in a different direction. So I have another student who is getting ready to to get kind of the more watershed focus stories. You know, sort of started. And we have

343

01:25:53.890 --> 01:26:17.769

Na'Taki Osborne Jelks: in in in the midst of, you know, working with community residents, gotten some, you know, feedback and collected some stories about their engagement, you know, in research and community engage research, initiatives, and you know, just for for the time being, have been just using that to shape further engagement. But I think there, you know, could be a way to

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01:26:17.770 --> 01:26:31.530

Na'Taki Osborne Jelks: you know, kind of collect those stories, and perhaps even to have you know those community members, you know, write about them or share about them, you know. Kind of ban their own words you know what they're getting out of engaging in research endeavors.

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01:26:32.200 --> 01:26:33.540

Na'Taki Osborne Jelks: So thank you for that.

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01:26:38.030 --> 01:26:42.600

Laurie Anderson: Think we're out of time for further questions, but

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01:26:42.640 --> 01:26:51.970

Laurie Anderson: I want to thank Dr. Osborne, Jelks, and Bethan Merkel again, and I'd like to take one moment to share my screen.

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 $01:26:52.090 \longrightarrow 01:27:00.270$ 

Laurie Anderson: Just one more time and encourage you all to join Mifa.

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01:27:00.370 --> 01:27:03.530 Laurie Anderson: and let me

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01:27:04.830 --> 01:27:07.650

Laurie Anderson: so from my current slide. There we are.

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01:27:08.430 --> 01:27:22.379

Laurie Anderson: You can join our network. If you're interested in hearing more about these kinds of ways of creatively engaging with communities and research, we're really interested in that as part of our mifa mission.

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01:27:22.440 --> 01:27:25.219

Laurie Anderson: We're also interested in projects that

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01:27:25.320 --> 01:27:40.910

Laurie Anderson: basically connect across scales. So maybe you're doing work at a local scale. But perhaps there's a way that can con connect with things that are happening at larger scales, issues like climate change or land use change or

354

01:27:40.910 --> 01:28:01.469

Laurie Anderson: the movement of invasive species or migrating species across the landscape. So we're interested in that macro systems perspective. We're also interested in using existing environmental data and seeing how that can empower communities. We have a lot of data actually about the environment. But we feel it's kind of underused.

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01:28:01.660 --> 01:28:10.670

And we also want to teach undergraduates a lot of people in the mifa community are teachers first in their job descriptions.

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01:28:10.750 --> 01:28:34.230

Laurie Anderson: And we want to make sure, as we develop these plans, that we really keep diversity, equity, and inclusion in mind. So we invite you to come to our meeting and brainstorm projects that kind of integrate all of these things. It's a hard job, but it's an exciting job. And we think that we can do some really cool, transformative science with all of you.

357

01:28:34.490 --> 01:28:45.510

Laurie Anderson: So we've got one QR code up there under the orange that allows you to go to the Mefa website. We've got another QR code under the green that gives feedback.

358

01:28:45.680 --> 01:28:57.669

Laurie Anderson: and that helps us plan other events. So we encourage you to take the survey right away. And I believe there's also a link in the chat that you can access

01:28:57.690 --> 01:28:58.920 Laurie Anderson: the survey

360

01:28:59.500 --> 01:29:05.880

Laurie Anderson: and we appreciate you. We appreciate you being here. Thank you once again to our speakers.

361

01:29:06.400 --> 01:29:12.470

Laurie Anderson: and yeah hope to see you in future. Future, Meefa. Events.