



# Fishing for Data

A 4-part podcast series from the Net Gains Alliance, Duke University and EM4Fish.

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## Fishing for Data: Episode 2 Guide

Digital Fisheries: Areas of Potential Secondary Data Usage

## Episode Summary

Among catch monitoring programs in fisheries management, interest accelerates for Electronic Monitoring (EM) and Reporting (ER) due to its capacity to monitor fishing more efficiently from time and cost perspectives. In the fisheries context, Electronic Monitoring includes a residential monitoring device aboard the fishing vessel, for instance a camera or activity sensor. The device tracks and records the fisher's daily activity and catches. The collected video/data can incentivize better management of the fish resources and better compliance. Video data are collected by EM technology with fisheries management objectives in mind. However, progress in implementing the EM program is slow, in part due to concerns raised in the fishery industry over the potential for (in their view) unintended, environmental, and non-environmental secondary uses of the data. As recent incidents have illustrated, this video may serve other purposes to various stakeholders. The cameras aimed to monitor catch may record a crime that occurs onboard, may record information relevant to an insurance investigation, or provide information relevant to a host of third parties not originally contemplated when adding EM technology to the vessel. Thus, fishermen may expose themselves to potential inconvenience and even liability, far beyond the fisheries management and enforcement purposes.

## Learning Outcomes

This episode intends to present frankly and concretely several potential secondary uses of the video data, through hypothetical fishery and incident; to discuss steps actors within the industry have taken to limit these potential secondary uses as well as NOAA's role in limiting or indeed facilitating these secondary uses.

## Transcription available

Please see the full transcript at the end of this document. Transcript was provided by Rev.com.

## Content

### *Part 1: Introduction*

00:04- 04:16

### *Part 2: The National Oceanic and Atmospheric Administration (NOAA) mission creep*

04:29- 20:14

Speakers:

- Jane DiCosimo, fisheries consultant on national and regional fishery issues, former observer program coordinator for NMFS
- Amanda Barney, CEO of Teem Fish Monitoring
- Featuring Brett Alger, NOAA - National Electronic Monitoring coordinator

*Part 3: Non environmental uses and other law enforcement - subpoenas, warrants*

20:30 - 43:50

Speakers:

- Jane DiCosimo, fisheries consultant on national and regional fishery issues, former observer program coordinator for NMFS
- Amanda Barney, CEO of Teem Fish Monitoring
- Keith Porcaro, Director of the Digital Governance Design Studio at Duke Law
- Melissa Sanderson, Chief Operating Officer at Cape Cod Commercial Fishermen's Alliance
- Featuring Brett Alger, NOAA - National Electronic Monitoring coordinator

## Relevant Terms

- **EM/R:** Electronic Monitoring and Reporting
- **MSA/MSFCMA:** Magnuson-Stevens fishery conservation and management act
- **NOAA:** National Oceanic and Atmospheric Administration
- **NMFS:** National Marine Fisheries Service
- **FOIA:** Freedom of Information act
- **MMPA:** Marine Mammals Protection act
- **OLE:** Office of Law Enforcement

## Applicable laws

- Magnuson-Stevens Act

## References

- [NMFS report](#)
- NOAA podcast: *Monitoring today for a sustainable tomorrow*

- [Monitoring Today for a Sustainable Tomorrow: Podcast #1 | NOAA Fisheries](#)
- [Monitoring Today for a Sustainable Tomorrow: Podcast #2 | NOAA Fisheries](#)
- [Monitoring Today for a Sustainable Tomorrow: Podcast #3 | NOAA Fisheries](#)

## Questions?

Questions, comments, and inquiries are welcome at [fishingfordatapodcast@gmail.com](mailto:fishingfordatapodcast@gmail.com)

Future episodes will be posted at <https://law.duke.edu/dclt/em>

# Transcript

## *Part 1: Introduction*

Libba Rollins ([00:04](#)):

Hi, I'm Libba, and welcome to the Fishing for Data Podcast series. This podcast is produced by the Duke University Center on Law & Technology, in cooperation with and in support of the Net Gains Alliance, a global initiative in support of sustainable management of ocean resources through data modernization, and EM4Fish, a digital hub for fisheries data and tech.

Kyle Medin ([00:24](#)):

In this episode, we will be exploring potential secondary uses of EM data. That is whether and to what extent EM data can be used by NOAA, by other government agencies, and by fishermen themselves, to accomplish various other objectives beyond fisheries management. To help us learn the ins and outs of the secondary usage of EM data, we'll be talking with Amanda Barney, the CEO of third-party EM provider Teem Fish, who's keeping a close eye on these issues.

Inès Ndonko Nnoko ([00:51](#)):

This program is intended to be educational in nature, and as such, we do not intend that the information we discuss be taken as legal advice. If you would like to determine your or your fisheries liability, or plan your own response to these issues, we recommend that you seek legal representation to assist you with your specific situation. That said, we are welcoming questions on this topic until June 15, at [fishingfordatapodcast@gmail.com](mailto:fishingfordatapodcast@gmail.com). On Friday, June 28, we will host a live reaction and Q&A with speakers from the show, and we may answer your questions. More information about the Q&A live session will be released soon on [www.netgainsalliance.org](http://www.netgainsalliance.org).

Libba Rollins ([01:43](#)):

I'm Libba Rollins.

Inès Ndonko Nnoko ([01:44](#)):

I'm Inès Nnoko.

Kyle Medin ([01:47](#)):

And I'm Kyle Medin, and we'll be your hosts here on the Fishing for Data Podcast.

Libba Rollins ([01:53](#)):

Welcome back to Fishing for Data. In case you missed it, last week was the first episode in this series and we looked at video and image data in fisheries and how it interacts with the Federal Records Act and the Freedom of Information Act. This week's episode we will examine secondary uses of EM video data.

Inès Ndonko Nnoko ([02:11](#)):

To start off, we wanted to discuss what we mean when we talk about primary and secondary data usage of EM video.

Libba Rollins ([02:19](#)):

Right, and the differences between the two can really depend on who you talk to. This topic was born out of conversations we had with various folks who mentioned that part of the reason some fishermen hesitate to embrace putting EM systems on boats is a concern that video or image data from their vessel could be used for purposes outside strictly the fisheries' management.

Kyle Medin ([02:42](#)):

Yes, if you talk with folks from within the fishing industry, you might hear the opinion that EM systems have been set up very narrowly to measure specific data about fishing efforts, and that NOAA using the EM video for monitoring protected species or bycatch would be a secondary use.

Libba Rollins ([02:57](#)):

On the other hand, NOAA would probably consider that a primary use.

Inès Ndonko Nnoko ([03:01](#)):

There are really endless potential uses of EM data that fit more clearly in the secondary use category. Fishermen using EM video data to get better or cheaper insurance coverage for seafood traceability is one example, or the Coast Guard using EM video to investigate the cause of vessel sinking is another potential secondary use.

Libba Rollins ([03:26](#)):

So, there are secondary uses of EM video on the part of NOAA, such as using the video to do something related to compliance or monitoring that's not specifically part of the program. In these cases, it is our understanding that NOAA would need to be in possession and control of the video to do so, meaning it would become a federal record.

Kyle Medin ([03:45](#)):

Right, and we talked about when video and image data become a federal record in Episode One of this series, so if you missed that, be sure to go back and give it a listen.

Libba Rollins ([03:53](#)):

And then we have secondary uses that could occur if an EM provider holds the video, such as a subpoena from law enforcement. There is a large range of things you could classify as a secondary use.

Inès Ndonko Nnoko ([04:03](#)):

Right, Libba, and many of these secondary uses could be hugely beneficial to fishermen. We will be covering some of those uses in the second part of this episode which will air next week.

Kyle Medin ([04:16](#)):

Later today, we'll cover some potential secondary uses of EM Data within NOAA that might deviate from the narrow mission of managing fisheries specifically. This is a category of uses we'll refer to as mission creep.

## *Part 2: The National Oceanic and Atmospheric Administration (NOAA) mission creep*

Inès Ndonko Nnoko ([04:29](#)):

But before we get started talking more about mission creep within NOAA, let's quickly return to the difference between primary and secondary use of EM data. In this context, how does NMFS seem to differentiate between these two categories?

Libba Rollins ([04:48](#)):

Yes, we do not have an explicit answer on this from NMFS, but from our conversations with experts and inferences from recent guidance, it seems that the agency takes a somewhat broad view of how they can use EM data. Our research suggests that NMFS broadly considers primary EM data uses to be those that replicate existing data collection processes on commercial fisheries. Mainly that would be data collected by fishermen in logbooks and by human observers onboard commercial vessels.

Inès Ndonko Nnoko ([05:18](#)):

That way of thinking about the purpose of EM data will be consistent with how electronic monitoring shows up in the MSA currently.

Kyle Medin ([05:28](#)):

Exactly, because right now, EM only appears in the MSA as a subset of observer information, so essentially, the statute just considers EM to be another way of collecting that fisheries' data, similar to what observers would normally be recording.

Inès Ndonko Nnoko ([05:44](#)):

So before we dig deeper into the various potential uses of EM data within NMFS, let's briefly cover the purpose and design of the observer program. Here's Jane Dicosimo, who we introduced in our last episode, talking about these topics. Jane formerly worked as the NMFS National Observer Program Coordinator.

Jane Dicosimo ([06:08](#)):

Since the early '70s, NMFS has used fishing observers to collect catch and bycatch data and take biological samples from commercial fishing and processing vessels. Around the same time in the mid 1970s, Congress passed The Magnuson Fishery Conservation and Management Act that Americanized the fisheries in the 200 mile exclusive economic zone of the coast of the entire United States, created eight regional fishery management councils and authorities for managing US fisheries, including observer programs.

Jane Dicosimo ([06:41](#)):

In 1999, the National Observer Program was formed to provide overarching advocacy policy and budget support. There are about 900 observers, and that's who monitor, who sample more than 72,000 days at sea each year. The early focus of observer programs was to monitor fishery interactions with marine mammals by foreign fishing vessels. After these fisheries were fully Americanized, and NMFS moved towards a more fully documented science-based strategy for US fisheries management, the agency emphasized a two-pronged approach for data collection. That is, NMFS scientists collect fishery

independent data on NOAA vessels or commercial vessels it contracts with, and fishery observers and at-sea monitors collect fishery-dependent data directly on commercial fishing vessels while they're at sea or in the processing facilities.

Jane Dicosimo ([07:41](#)):

Both sets of scientific data are used by NMFS to perform stock assessments, develop fishery management plans and regulations, develop bycatch reduction devices, and identify the need for regulations for protected species. Observer activities vary widely from fishery to fishery because of the differences in their fishing locations, types of vessels and gear, interactions with protected or prohibited species, and overall program objectives.

Inès Ndonko Nnoko ([08:11](#)):

Broadly speaking, many EM systems have been designed to replace some of these observer functions Jane mentioned, as well as all the data that will be recorded by vessel crews in logbooks.

Libba Rollins ([08:25](#)):

But most EM programs are not set up to provide raw EM footage directly to NMFS for review. In our last episode, we introduced the concept of the third-party system for EM data collection, analysis, and management.

Kyle Medin ([08:37](#)):

And these third parties are often private companies that contract with fishermen and fisherman's associations to support the adoption of EM systems on commercial vessels and supply the resulting numerical data to NMFS directly.

Libba Rollins ([08:50](#)):

As we mentioned, fishermen and managers at NMFS may disagree somewhat on the primary uses of EM data. As the intermediary between the two, third-party providers have to make sure there is as little ambiguity as possible about what they are measuring and recording in their EM data reviews.

Inès Ndonko Nnoko ([09:07](#)):

We spoke with the CEO of a third-party provider to better understand the role of these intermediaries in determining what EM data is used for.

Amanda Barney ([09:18](#)):

My name is Amanda Barney and I'm the CEO of a company called Teem Fish Monitoring.

Libba Rollins ([09:23](#)):

Amanda's company acts as the intermediary between the fisherman with EM systems and fisheries managers. One of the most important responsibilities of her company is to translate streams of raw video footage into actual data that satisfies regulatory requirements for the fisherman.

Amanda Barney ([09:40](#)):

We provide the electronic monitoring of commercial fisheries services, which is really easy to say. In a nutshell, what we do is we have hardware that we put on commercial fishing vessels that sends



information, video, GPS, sensor data, to a centralized onboard computer, that computer aligns the data with each other, compresses the video, and then it is sent to an online cloud server where we have a data analysis and video review platform. And from there we generate datasets, electronic monitoring datasets that are used by federal regulators, or the fishing industry, or researchers in a variety of different forums.

Kyle Medin ([10:33](#)):

And we heard Jane mention how widely observer functions can vary from fishery to fishery, and the same is true for EM systems. The primary use of that EM data is really going to depend on the specifics of each program and each fishery. And as an example, Amanda told us about the work Teem Fish does for the New England Groundfish Fishery.

Amanda Barney ([10:51](#)):

In that fishery in particular, we're looking at discards of bycatch species by weight. So we're identifying discarded fish to species and collecting weight estimates for those discarded fish, that information is then being compared to logbook data by the regional regulators, then the regional regulators do a comparison with the reported discard from the logbooks, and that data is used in stock allocation and management in that fishery. So, our video reviewers are watching to identify the howling events, identifying the discard events, and then identifying to species the fish that are discarded and measuring them.

Amanda Barney ([11:43](#)):

In other fisheries, what you might be doing is watching the video and looking at the sensor files to make sure, okay, there's no fishing occurring in a closed area, there's no fishing occurring with gear types that they're not allowed to use. So they're using Dungeness crab traps and they're not using King Crab traps. There's really a variety of things that the video analysts can do, but their main priority is collecting the fisheries-specific data that is been laid out by that fisheries monitoring program. In some fisheries, it's really around compliance, and then in other fisheries, it's really around stock assessment.

Libba Rollins ([12:30](#)):

All of this data collection from EM footage fits in the category of primary data use. The EM provider, in this case, Teem Fish, analyzes the video to generate the data about the catch that the fishermen would usually record themselves. But the reviewers may also have to note other things they see on the footage, similar to what an observer might record when standing on the deck, that could go beyond the EM program objectives depending on who you ask.

Amanda Barney ([12:56](#)):

We also have to note if there are these rare events, so are we seeing interactions with any particular marine mammals? Are we seeing interactions with any bird species or any species that are of significance to some or another agency or policy? If we were watching a video and there was a marine mammal that was entangled in the gear, things like that would have to be noted, or if there was a Coast Guard boarding, you just have to note it. You are not assessing anything about it, you're just making a note for these other rare events. Was there a safety issue? Sometimes you might note, did something happen with the gear? And again, these are not the primary focus of the program, but these are rare events that would also be noted in a fisherman's logbook.

Inès Ndonko Nnoko ([14:09](#)):

So, these are lens that fishermen will have to note in their logbooks anyway.

Libba Rollins ([14:14](#)):

Yes, exactly. Though some fishermen might not agree, third-party providers, noting information that would go in the logbooks anyway is fairly standard. While recording a Coast Guard boarding or a marine mammal interaction does not have anything to do with say, measuring discards of bycatch, it's still a requirement of most EM programs.

Kyle Medin ([14:35](#)):

So, what is a secondary use of EM data?

Libba Rollins ([14:38](#)):

Yes, so secondary use is a bit harder to define because it is a category that could include any EM data use outside of these primary functions that we've been discussing. As we mentioned, the secondary uses are sometimes referred to as mission creep. One of the big concerns that fishermen have is that once NMFS has possession of EM data, there might be some mission creep towards using the footage for purposes outside the objectives of the EM program.

Inès Ndonko Nnoko ([15:05](#)):

Then what do we know about secondary uses of EM data by the agency? What does that include and how do fishermen feel about it?

Kyle Medin ([15:16](#)):

Well, as we discussed in last week's episode, once EM video comes into the agency's possession, it becomes a federal record, and who exactly can access that information within the federal government and for what purpose is not entirely clear.

Libba Rollins ([15:30](#)):

What is clear is that this is a concern for fishermen. Earlier this year, the Pacific Fisheries Management Council and regional EM program participants specifically asked NMFS whether non-EM program staff at the agency could use raw EM data for non-EM program related uses.

Inès Ndonko Nnoko ([15:49](#)):

Yes, and in answer to that question, NMFS said, "Yes, once the raw video is in NMFS possession, it becomes an agency record, which then allows NMFS to consider additional uses of such raw EM data." But the agency also went on to say, "NMFS intends to use the same policies regarding access to the role and summary EM data as we use for other sensitive fishery data, like observer data, ownership interest data, and economic data."

Kyle Medin ([16:33](#)):

And here's Brett Alger, the NMFS electronic technologies coordinator speaking at a meeting on May 20th, at the NOAA Council Coordination Committee on what NOAA might do with that raw EM data once it's in their possession.

Brett Alger ([16:45](#)):

The agency may provide access to staff and contractors. Similar to other forms of NOAA data that we gather and manage such as observer data, economic data, we expect the EM programs to examine the nature of data requests, to determine if raw data is even necessary to be provided versus some of the summary reports and compliance reports and things of that nature. We point out that access may be given to other federal agencies, but that must be in support of fisheries conservation and management.

Libba Rollins ([17:18](#)):

I think we can all agree this guidance is pretty vague. Do we have any idea of what other secondary fisheries management purposes the raw EM video could be used for?

Inès Ndonko Nnoko ([17:27](#)):

Right now, no. It seems like it could be used for everything from monitoring protected species bycatch to enforcement purposes. Here's Jane Dicosimo speaking on how NOAA might use the video for enforcement purposes, based on her experience as the former coordinator of the observer program.

Jane Dicosimo ([17:50](#)):

So, if NMFS holds the raw EM video, NOAA General Counsel or the Office of Law Enforcement may access the raw data to look for compliance infractions. However, in nearly all instances, NMFS receives just summary data from the raw EM video and not the video itself. And I point out that the video itself is not in a form really to be used for non-EM purposes. The agency holds very little EM video, but it does have the ability to go into the datasets to look for whatever it may have been alerted could be, basically, a fishery regulation infraction.

Kyle Medin ([18:40](#)):

So it sounds like NMFS does retain a small amount of EM data just to ensure third parties are accurately generating the numerical data. They seem to be using it more as an auditing tool.

Libba Rollins ([18:51](#)):

Yes, and different NMFS regions have been operating under different protocols about whether to acquire raw EM data when they are doing secondary review.

Inès Ndonko Nnoko ([19:00](#)):

Exactly. But shortly after our conversation with Jane, the new guidance from NMFS was released to solve this ambiguity. The new guidance suggest NMFS will now retain all the EM data they are using for this secondary reviews. This is still a very small subset of the total amount of EM data being collected on vessels.

Kyle Medin ([19:25](#)):

We have spoken to fishermen who are concerned that the Office of Law Enforcement at NOAA or OLE, will go searching through that raw video to look for infractions. And whether or not they will actually do that still remains unclear.

Inès Ndonko Nnoko ([19:39](#)):

And as Jane said, we should point out that the Office of Law Enforcement may look at the raw EM data for things that they've been alerted to, which is different than fishing around, no pun intended, for infractions. So they could be alerted to things by the video reviewers or some other avenue.

Libba Rollins ([20:04](#)):

Overall, I think it is fair to say we don't yet have a clear answer from NOAA about the extent to which fishermen need to be concerned about mission creep.

Kyle Medin ([20:14](#)):

Right. And we should add that all of our reporting on the new NMFS guidance on these topics is based on presentations by Brett Alger and not the actual guidance itself. And we are expecting that formal document to be published any day now, and it could have more specific information on some of those topics.

### *Part 3: Non environmental uses and other law enforcement - subpoenas, warrants*

Libba Rollins ([20:30](#)):

So, we've been talking about mission creep by the agency, and the agency using that EM data for secondary environmental uses, but there's also non-environmentally secondary uses of the EM data that would also implicate other federal agencies. Here's Brett again on that.

Brett Alger ([20:47](#)):

The agency has limited jurisdictions for what it can enforce in terms of non-fishing events. We may refer potential violations to the Coast Guard or other enforcement partners, and in doing so, we may apply certain Magnuson Act exceptions and disclose information.

Inès Ndonko Nnoko ([21:07](#)):

As we have discussed in the last episode, observer information on the mechanism is confidential and not to be shared, but there are specific exemptions listed there. Most of them have to do with fisheries management related business. But the agency will share observer information and those EM data when required by court order. The agency will also share observer information in support of homeland and national security activities, primarily the Coast Guard's Homeland Security missions. These security activities of the Coast Guard are outlined in the Homeland Security Act of 2002 and include ports, waterways and coastal security, drug interdiction, migrant interdiction, defense readiness, and other law enforcement objectives. So those are some of the types of things that could get flagged and require the EM video to be handed over the other authorities.

Libba Rollins ([22:15](#)):

And here's Jane Dicosimo on non-environmental secondary usage.

Jane Dicosimo ([22:19](#)):

So, if an observer identifies what they suspect may be an illegal act, they would flag that for the Office of Law Enforcement and then OLE would work with NOAA general counsel to determine next steps. One area that OLE and general counsel are prioritizing is physical harassment and sexual harassment of

observers. The agency takes that extremely seriously and has successfully charged individuals in the fishing industry. NOAA is primarily focused on infractions of fishery regulations, however, if something criminal or illegal is flagged for them, they may pursue it with the appropriate agency. OLE he is not routinely looking for such activity, but it could request to examine video that is held within the records' retention timeframe to go back and look at the history of a particular fisherman or vessel or other instances of this similar type infraction.

Kyle Medin ([23:25](#)):

Okay, so if an observer identifies something they suspect maybe illegal, then they flag it. But what about if a third-party video reviewer sees something in that tape?

Libba Rollins ([23:34](#)):

Yes. Well, here's Amanda Barney again on this issue.

Amanda Barney ([23:38](#)):

Everyone has worked really hard to make it so that the expectation isn't that any member of the government could just sit down and watch somebody's video from start to finish. But if there is an expectation that if certain events are seen on video and they will go unreported, that is not necessarily a reasonable expectation, there's got to be a level of understanding that if certain events happened to be captured on video and are part of the video that is being reviewed during normal data collection, there's some events that can't go unnoted, or reported, or questioned.

Amanda Barney ([24:23](#)):

There is lots of video that's captured that has no fishing events, and that under normal course of business, we're not reviewing frame by frame. There could be a high speed review and they're like, we're in between halls, and you can just watch people walking around on deck and they're not doing anything, and you're not slowing it down, and you're not seeing exactly what you're doing, you're just looking for the next fishing event. If that were happening and we saw someone fall overboard, this could be really important information for the fishing vessel, for the insurance company, for the Coast Guard.

Amanda Barney ([24:54](#)):

Again, it's private information that we wouldn't just send out, but if we saw something as scary or tragic as that, or if we saw someone go over and then that person got retrieved, that would be an event that we wouldn't just be like, wow, we saw someone fall overboard, there would be a discussion with the vessel owner, most likely, there would have been a mayday and there'd be an associated Coast Guard event. And it could be that the Coast Guard requests the fishermen and us permission to view it. So again, it does not just get sent to the Coast Guard, but if that vessel owner says, yes, I want the Coast Guard to be able to view this as part of their investigation, then there's different ways that data can be shared. And what we set up are very tight data sharing agreements. So, there's an understanding that, as the service provider, we can't just willy nilly download stuff and send it to someone. Wow, they caught this really rare species of fish, I'm going to send you a cool video of it, that can never happen.

Libba Rollins ([26:04](#)):

We asked Amanda about how they communicate these reporting policies with their customers. And she said her company focuses on having upfront conversations with their customers to make sure they understand all these potential uses of the data.

Amanda Barney ([26:17](#)):

And it is often something that they may not be aware of until we sit down, and we have those contracting conversations. And it's certainly something where you want to make that clear and connect the dots and say, we are not putting cameras on your boat to watch you and look for things, we are putting cameras on your boats to collect video that will allow us to create these datasets, but there are certain things that if we see them, we are obligated to report them, but that is different than us looking for them. And so, we do try to lay that out, but it is not always clear to fishermen when they walk in the room, that that could happen, or they don't have faith or confidence that needing to report something seen is at all different than looking for that, because they are different, but there's no language that says, don't look for stuff.

Amanda Barney ([27:31](#)):

But the intention of the program is to use video to collect fisheries data, and I will say that that has been a big discussion and is the slipperiest slope, that scope creep in EM is just like, but you could just have every inch of the boat covered and you could look for everything. And it's like, well, that's not why this program was set up, and if that's what you turn electronic monitoring into, I think every camera in the states is coming off of boats. So yes, we do work really hard to inform the fishermen that are going to participate in EM programs of the intention of the program but then everything outside of that core intention that we may be obligated to report and what the implications of that reporting might be, we work really hard to inform them of all of that so that they can make a really informed decision. And it sometimes really comes down to the individual.

Inès Ndonko Nnoko ([28:42](#)):

One key thing I picked up from what Amanda said, is that video reviewers are there to watch the fishing events, and they are fast forwarding through the non-fishing parts of the video, and that really begs the question, when is the video on for this EM programs? As soon as they leave the dock, is it throughout the entire trip?

Libba Rollins ([29:06](#)):

Yes, that is a good question. During the May 20th NOAA CCC meeting where Brett was presenting on the new EM draft policy guidance, someone asked him a question about the secondary review, wondering if NOAA would need the whole video or could they somehow just have an edited video with just the fishing events. Their question came from a place of cost concerns rather than secondary usage concerns. Cutting down on file size, bedding out the non-fishing relevant parts would cut down on costs. And Brett's response may have implications for non-fishing related secondary uses that originate at the agency or through third-party review.

Brett Alger ([29:46](#)):

That is where AI and machine learning is actually starting to thankfully weave its way into our EM programs where in addition to some of the sensor data and some of the GPS information, as now we are advancing towards being able to cut out large portions of information. Only focused on when the gear's coming out of the water, when the gear's going in the water. I know that folks are working on technologies where you are focused on when there's crew on deck, which is, of course a great indicator that there's fish on deck. So, I cannot necessarily with 100% certainty, say, in every EM program, that they are not watching transiting footage, but we share the concern of industry of not wanting to watch all that either.

Inès Ndonko Nnoko ([30:32](#)):

So, by clipping the video, anything that occurs during non-fishing events will vanish from the agency's eyes, and potentially the third-party review was asked to.

Libba Rollins ([30:44](#)):

Yes, this raises some interesting questions. How do we balance the ethical considerations of limiting access to these data? To what extent should we limit them at all? On the one hand, by clipping the data to just the fishing events, we are protecting the privacy of the crew. On the other hand, we may be missing other important information in the edited parts that could be helpful for other legitimate environmental or perhaps safety related objectives, even if those uses were not originally intended.

Kyle Medin ([31:13](#)):

Those sound like questions that could spawn a whole other series of podcasts, but they are important to mention and to keep in mind as we discuss this topic when we come back.

Libba Rollins ([31:24](#)):

Dear listeners, please submit your questions and comments at [fishingfordatapodcast@gmail.com](mailto:fishingfordatapodcast@gmail.com) by June 15. We look forward to reading your thoughts. Stick around, we will be right back.

Inès Ndonko Nnoko ([31:42](#)):

We are back. So, one last broad area of non-environmental secondary usage lies in the realm of data request, from law enforcement outside of NOAA's Office of Law Enforcement. We are going to be talking about subpoenas and search warrants that could be issued to third-party providers who hold and store all EM video on behalf of fishermen.

Libba Rollins ([32:10](#)):

To talk through this particular topic, amongst other topics in the podcast series, we spoke with Keith Porcaro.

Keith Porcaro ([32:16](#)):

My name is Keith Porcaro. I am the Director of Digital Governance Design Studio at Duke. My work focuses mostly on data governance, which I sort of define as the way that communities make decisions about what to do with data and code, how to collect it, how to manage it, how to share it.

Kyle Medin ([32:41](#)):

And Keith is both an attorney and a technologist. And we should add that Keith is not a stranger to the fisheries world. He previously worked with the Cape Cod Commercial Fishermen's Alliance to explore opportunities and possible models for community managed data ecosystems, which familiarized him with many of the issues we will be talking about today. Here is some more from our interview with Keith.

Libba Rollins ([33:01](#)):

Can you explain to us what a subpoena is and what a search warrant is?

Keith Porcaro ([33:05](#)):

Sure. And I'll say this with the usual caveats of like, not a litigator and not sort of a law enforcement or a prosecutor, but the basic gist is that a search warrant ... they're both requests for information, and request here means like, they're mostly not optional. So, a search warrant, usually comes from law enforcement. It's initiated by law enforcement and usually comes to a judge or a magistrate. And it's used to get either physical property or information. A subpoena is also a sort of a request for information. It usually comes as a result of a civil suit. So, a party in a lawsuit will issue a subpoena to either the other party or a third party. Those are a little bit more challengeable, especially if you're not actually a party to the lawsuit, so you can push back on a subpoena for it being overly broad or sort of unfulfillable because it'll be too expensive or too time consuming, or this sort of not enough nexus to the sort of suit in question. But I think starting from the default stance that, these requests are not optional. It is a good starting point.

Libba Rollins ([34:23](#)):

So, when we think about the third-party model for EM programs, who will be issued a subpoena and so forth?

Keith Porcaro ([34:30](#)):

It depends. It depends on a couple of things. Part of it would depend on the contractual relationship between the provider and the client. So usually, you see, like for instance, big tech companies have policies and processes for handling government records requests. And so that may or may not include notification of the user, the user in this case being the fishery. Generally, the answer is it can go to whoever has ability to access the data or access the information. So, you could imagine a scenario where like an EM provider holds encrypted data that they are not able to decrypt, where only the fishermen and NOAA would be able to decrypt it. That is not common now, but you could imagine a scenario like that, where they would not be able to respond to it. Sort of no matter who receives it, if they can fulfill the requirements of it, then they pretty much have to respond.

Libba Rollins ([35:31](#)):

So, there's not a lot of control really, that fishermen on EM tech company have when it comes to responding to subpoenas.

Keith Porcaro ([35:40](#)):

The best that you are going to be able to do is to make sure that there are like good notice procedures in place where providers are giving ... where they can sort of giving heads up like we got a subpoena, we got a search warrant, we got a whatever. And with subpoenas they can be a little bit more feasible again, especially if the fisherman is not actually party to the lawsuit, no pun intended, you can't use them as fishing expeditions. It's a concern, but there's not a lot you can do about it.

Libba Rollins ([36:10](#)):

We asked Amanda Barney about how Teem Fish handles general requests from law enforcement, as well as subpoenas and warrants.

Amanda Barney ([36:17](#)):

So, it depends on what happened and what's being requested. So, depending on who we're contracted with, it would always be the vessel owner, it could be the captain and the crew. If it is a vessel that is inside a sector, it could be that sector manager. If the vessel is part of an association, it could be that we



have a contract with the association that represents all of the fishermen. So, you kind of have to go back to who were contracted with to provide the services, what are the data requirements and federal regulations associated with that data collection contract. Maybe it is not a subpoena, but maybe the reg say, if we see X, Y, or Z, these certain data releases, or video releases occur, and so the fishermen would have known that in signing the contract, so we kind of have to look at our contract, we have to look at the regulations, policies, and implicit releases that are associated with the contract.

Amanda Barney ([37:27](#)):

Those two sets of documents, regulations, policies, and contracts kind of dictate who it is, we have to inform and get consent from before anything is shared in a way outside of our normal data collection protocols. In cases of subpoenas, then it actually triggers a whole different set of protocols around chain of custody, and suddenly, we have to follow all of the protocols associated with evidence versus data release protocols associated with data collection, because this data, or this video footage is suddenly potentially evidence. So, then there is a different set of security protocols and sharing protocols because video footage, or the EM data associated with video footage has suddenly become evidence as opposed to data. And it could be data that is evidence, but now that it's got this classification of evidence, a whole new world of forms opens up to us. And that is usually captured in the contract. So that there's an understanding from the fishermen that if the data highlights an event that needs to be reviewed under criminal law, or fisheries law, and then that video is deemed evidence, they know a certain thing is going to happen.

Inès Ndonko Nnoko ([38:57](#)):

When we talk about requests from law enforcement to access EM video, there is a particular incident that comes to mind for the community. Last year, the vessel of the coast of Massachusetts sank, and tragically, the crew on board died. We spoke with Melissa Sanderson, about this incident, and other topic later in this episode. Here is some of our interview with her.

Melissa Sanderson ([39:25](#)):

I am Melissa Sanderson. I am the Chief Operating Officer at the Cape Cod Commercial Fishermen's Alliance, which is in Chatham, Massachusetts.

Inès Ndonko Nnoko ([39:32](#)):

Melissa, what can you tell us about the vessel that sank last year where the crew tragically died and the subsequent investigation? From what we understand, the coast Guard wanted to look at the EM video.

Melissa Sanderson ([39:45](#)):

Yes, so that vessel was one of the vessels participating in the audit model program, so it was a boat that I worked with, and it was incredibly tragic and we are still dealing with the aftereffects of that. The vessel that sank, it took its EM system with it. The vessel was not recovered, and so there was no footage of the event available to share with the Coast Guard. However, during the Coast Guard's investigation, they did request other possibly relevant footage for review. And we had no precedent for how to handle such a request within our program or throughout the country. Nobody had ever dealt with this before. And as a result, we were initially very protective of the video since it is considered confidential and privileged under the Magnuson-Stevens act.

Melissa Sanderson ([40:37](#)):

Consequently, the EM service provider did not release the video to the Coast Guard without first getting permission from the vessel owner, which the vessel owner provided. Throughout this process, the program partners, and the fishermen, we did work with some lawyers to better understand the fishermen's rights in this situation. And what we learned is that, generally a request from the Coast Guard during a major marine casualty investigation, which is what this was, cannot be denied without consequences. So, the Coast Guard essentially has subpoena power during an investigation like that. So even if the vessel owner had not given the service provider permission to release the video, the Coast Guard still could have compelled access to the video for the investigation.

Libba Rollins ([41:26](#)):

So, in these sorts of cases, where the Coast Guard is requesting access to EM footage, fishermen or third parties don't really have the ability to say no to that.

Inès Ndonko Nnoko ([41:36](#)):

Well, at least not during a marine casualty investigation. Other types of investigations may also give the Coast Guard subpoena power.

Kyle Medin ([41:46](#)):

Also notable is that the EM provider in this scenario sought permission from the vessel owner to release that video to the Coast Guard. And while it was subsequently revealed that the EM provider would have had to release the video to the Coast Guard anyway, regardless of whether the owner gave them permission. The provider was demonstrating good data governance practices in doing that.

Inès Ndonko Nnoko ([42:07](#)):

Throughout this episode, we have been talking about secondary uses of EM video by government agencies and law enforcement. This is a data ecosystem that has been designed really on behalf of the federal government for regulatory purposes. But that is not the only way we have to think about EM or the larger data ecosystems, operating in fisheries.

Keith Porcaro ([42:30](#)):

There are two ways that you can imagine a data ecosystem here, or a digital ecosystem. One is, you could imagine basically a surveillance ecosystem, where it is a bunch of cameras, it's a bunch of sensors, the fishermen can see what's happening on the cameras, they can see the sensors, but like most of it is produced for the government. They sign a contract, they are a client of a service provider, but they are not really the client of the data, the data is not produced for them. The other is a data ecosystem where collectives of individual fishermen or even just individual fishermen on their own, are able to use data to ... like a big company does to track and improve what they do.

Libba Rollins ([43:20](#)):

Soon, we will be releasing part two of this episode, where we talk with Keith Porcaro, and others on a fisherman-first data ecosystem, looking at beneficial secondary uses of EM data.

Inès Ndonko Nnoko ([43:32](#)):

Yes, because most of what we have discussed today has sort of revolved around neutral to even adverse secondary users from the perspective of fishermen. So, tune in soon for more discussion on beneficial secondary users.

Kyle Medin ([43:50](#)):

In the meantime, thanks to our guests for joining this conversation. Listeners, if you have any thoughts or questions, as always, please drop us a line so to speak at [fishingfordatapodcast@gmail.com](mailto:fishingfordatapodcast@gmail.com). And be sure to get those in by June 15. If you would like us to cover them at our live Q&A. We look forward to hearing from you and thanks again for listening.

## About this podcast series

Fishing for Data is produced by a legal, policy, and environmental science team of fellows from the Duke Center on Law & Tech and sponsored by the [Net Gains Alliance](#), a nonprofit global initiative dedicated to better information for better oceans.

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