Transcript

NOAA Fisheries media teleconference on East Coast whale strandings

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Participants:

- Lauren Gaches, NOAA Fisheries Public Affairs Director
- Benjamin Laws, deputy chief for the permits and conservation division, NOAA Fisheries Office of Protected Resources
- Sarah Wilkin, coordinator of the Marine Mammal Health and Stranding Response Program, NOAA Fisheries Office of Protected Resources
- Brian Hooker, biology team lead, BOEM's Office of Renewable Energy Programs
- Erica Staaterman, bioacoustician, BOEM's Center for Marine Acoustics

00:00 Operator: Thank you for standing by. At this time, our participants are in a listen-only mode until the question and answer session of today's conference. At that time, you may press star one on your phone to ask a question. I'd like to inform all parties today's conference is being recorded. If you have any objections, you may disconnect at this time. I would now like to turn the conference to Lauren Gaches with the NOAA Fisheries, thank you, you may begin.

00:20 Lauren Gaches: Hello everyone, and good afternoon, and thank you for joining us today to discuss recent whale strandings along the East Coast. Again, my name is Lauren Gaches and I am the media contact for today's call. And another reminder, that this media briefing is being recorded. So if you do not wish to be recorded, please disconnect at this time. On the call today, I am pleased to be joined by Sarah Wilkin, coordinator of the Marine Mammal Health and Stranding Response Program in NOAA Fisheries, Office of Protected Resources; Benjamin Laws, Deputy Chief for the Permits and Conservation Division in NOAA Fisheries, Office of Protected Resources; Erica Staaterman, bioacoustician from BOEM Center for Marine Acoustics; and Brian Hooker, Biology Team Lead from BOEM's Office of Renewable Energy Program.

01:05 Lauren Gaches: Before we take questions, I wanted to provide a little background for our media partners on the line. Since January 2016, NOAA Fisheries has been monitoring an Unusual Mortality Event for humpback whales with elevated strandings along the entire East Coast. There are currently 178 humpback whales included in the unusual mortality event. Partial or full necropsy examinations were conducted on approximately half of the whales. Of the whales examined, about 40% had evidence of human interaction, either ship strike or entanglement. And to date, no whale mortality has been attributed to offshore wind activities. We know of several factors that may be driving these interactions. As the humpback whale population has grown, their occurrence in the Mid-Atlantic has increased. These whales may be following their prey - which we're hearing from our partners in the region - are reportedly close to shore this winter. More whales in the water and traveled areas by boats of all sizes increases the risk of vessel strikes.

02:02 Lauren Gaches: We know that our climate is changing, and one of those key changes is the warming of our oceans. In response to this, we're seeing populations of many marine species adapting by moving into new areas where conditions are more favorable. Changing distributions of prey impact larger marine species that depend on them. This can lead to increased interactions with humans as some whales move closer to near-shore habitats. NOAA Fisheries is dedicated to minimizing risks to protected resources, habitats, and managed fisheries throughout the life cycle of offshore wind energy projects.

02:33 Lauren Gaches: The agency is responsible for several regulatory processes that help reduce the impacts to marine animals and their habitats from human activities. And NOAA Fisheries is a science agency, and like our collaborators on the Marine Mammal Stranding Networks, our scientists perform this work because they value marine life and are dedicated to conserving these marine species. We'll now take questions on these recent strandings from media partners on the line. A reminder to please use your name and affiliation when coming off mute to ask your question. Operator, can you please review the instructions for asking a question with our participants?

03:08 Operator: Thank you. We'll now begin the question and answer session. If you'd like to ask a question, please press star one, unmute your phone, and record your name clearly. Your name's required to ask a question. If you need to withdraw your question, press star two. Again, to ask a question, please press star one, it will take a few moments for the questions to come through, please standby.

[pause]

04:01 Operator: Our first question is from Mark Harrington from Newsday. Go ahead, your line's open.

04:07 Mark Harrington: Hey, thanks very much. A couple of questions. One is I think you're discussing humpback whales here. Could you just give me, again, I didn't quite hear the number that you mentioned. And also, is there a larger number for the total number of whales that have been stranded in this region over the last year? Whales in general.

04:33 Sarah Wilkin: Hi, this is Sarah Wilkin. So I'm the coordinator for the Marine Mammal Health and Stranding Response Program, and I can address this. So we have been talking in the greater Atlantic region. There have been nine large whale strandings from December 1st to present, of which there were two sperm whales, and the other seven were humpback whales. Then the concern recently about this increased number and all of these happening in a relatively tight geographic area, and time since December until present. As far as whether there have been increased strandings, as Lauren mentioned, we are in the middle of an ongoing unusual mortality event that has been ongoing since 2016, and that is specifically for the humpback whales. So, while elevated, we also have had this period of elevated humpback whale mortalities for several years to date. There are also ongoing unusual mortality events for minke whales in the North Atlantic and North Atlantic right whales along the Atlantic coast. So unfortunately, it's been a period of several years where we have had elevated strandings of large whales, but we are still concerned about this pulse over the past six weeks or so.

05:51 Mark Harrington: Given that, and I understand that there have been some discussions about changes, and I realize that there's no construction happening at this point for offshore wind. But given some of the concerns, now is there any discussion? I think the National Marine

Fishery Service has made recommendations for a buffer zone and some changes to wind farm designs to further protect these animals, but is there any concern that once pile driving starts on a very large scale for numerous wind farm projects that this could further exacerbate the problem? And what kind of protections is the federal government looking to make, given that these are, this seems to be some pretty unusual activity?

06:43 Benjamin Laws: Hi, this is Ben Laws with the Permits and Conservation Division of NOAA Fisheries Office of Protected Resources. I would refer you to our website where we make available all our pending incidental take authorizations where we have a number of pending authorizations for planned construction activity. We have addressed these questions in those documents. In summary, at this point based on the information that we do have, we do not believe that the evidence supports that those planned construction activities would exacerbate or compound these ongoing unusual mortality events. In those proposals, we have included the mitigation measures that NOAA fisheries believes are sufficient to minimize the impacts of those construction activities on the affected marine mammal species or stocks, which would be sufficient to achieve the least practicable adverse impact as is required under the Marine Mammal Protection Act.

07:52 Mark Harrington: And the last question was, there has been some concern that survey work could somehow affect the whale sonar and soundings. Is there any study of that to determine if that's the case? Because there has been increased survey work in recent weeks and months, whether survey work of some of these offshore wind vessels could have some sort of an impact?

08:20 Benjamin Laws: This is Ben laws again, I cannot speak to the idea that there's been increased survey work in recent weeks and months. We know that NOAA Fisheries has issued incidental take authorizations associated with survey work in the same region since around 2017. We do not have evidence that would support the connection between the survey work and these recent stranding events or any stranding events in the last several years. In terms of study, we leave that to the examinations of the carcasses that are discovered and so forth. What we do in our analysis is to review the available literature and what we know about these sound sources to understand what we think are the potential outcomes from use of those sources. We can say that these active acoustic systems that are used during these surveys are commonly used around the world. There are no historical stranding events that have been associated with use of systems like these.

09:32 Mark Harrington: Okay, and just one clarification, the 178 number, what was that you started out the conference, is that the number of strandings that have been taken place since 2016? 178?

09:45 Lauren Gaches: That number was the number of humpback whales included in the Unusual Mortality Event?

09:52 Mark Harrington: So to translate the number that have washed ashore, that have died since 2016, is that right?

10:00 Lauren Gaches: Sarah, do you want to clarify?

10:05 Sarah Wilkin: Yes, those are confirmed humpback whale mortality since January 1, 2016.

10:10 Mark Harrington: Okay, that's all I was asking. Thank you very much, that's it. Thank you for your time, I appreciate it.

10:16 Operator: Our next question is from Ella Nelson with CNN. Go ahead, your line's open.

10:21 Ella Nelson: Hi all, thanks so much for taking my question and holding this. I just was wondering if there was anything, I know that NOAA has been studying this Unusual Mortality Event for a number of years, but if there are any findings or preliminary findings from that that you can point to for the death of these whales. And then the other question that I had was once construction starts, and I don't know if this is already happening with the survey work, can you walk us through a little bit about safeguards in terms of observers on ships to spot marine mammals that might be in the area, and just kind of what safeguards are in place for some of these projects to attempt to protect marine mammals in the area?

11:18 Sarah Wilkin: This is Sarah, I can take the first part about causes for the Unusual Mortality Event. So as Lauren briefly mentioned at the beginning, we've done an examination on about half of the whales. And so there's a large number of reasons why we might not be able to examine them. Some of these animals are reported floating, sometimes very far offshore and so it's just logistically not feasible to get a crew out to them or try and tow the whale into the beach. Sometimes when the whales, by the time they're first reported or first detected, they're already very decomposed. And so that means that any kind of examination that we can do is going to be inconclusive. And also because these are large animals and it is very labor intensive to try and do a necropsy.

12:07 Sarah Wilkin: And they typically, in order to be performed well, require the use of heavy equipment like front loaders and backhoes. And so the other factor that plays in is where these whales strand, sometimes it's very remote on a barrier island, for instance, sometimes it's on a protected area where there's nesting seabirds. And so our ability to actually access them and do a full examination can be really limited. But of those half of the whales that we have done an examination for, about 40% have shown either entanglement or vessel strike. So those are human interactions that are potentially linked to the mortality of the animal causing them to be injured and die. The other animals have been inconclusive, and that's for a large variety of reasons, some of which I've mentioned. Generally, the state of decomposition plays a big role and it can make it really hard for us to determine a definitive cause of death.

13:09 Sarah Wilkin: And that can be frustrating. We want to know the answers and our partners in the Stranding Network want to know the answers. We want to do these examinations to try and understand what impacts are happening on whales and other marine mammals in the ocean so that we can inform management, so that we can make changes to human activities that can reduce the injuries and deaths that could be being caused by our activities—but it just isn't possible in many cases. And large whales are very, very challenging. And we know that our partners in the Stranding Network and Fisheries work very hard on all of these cases to try and get as much as we can. And for the second part of your question, I think I will turn that over [to others].

13:58 Brian Hooker: Yeah, this is Brian, Ben, do you want to take it first and I can follow up?

14:03 Benjamin Laws: Sure, Brian. That sounds great. This is Ben Laws again, I'll speak first to the survey work that's currently ongoing. Incidental take authorizations issued under the Marine Mammal Protection Act do have fairly standard requirements for the use of what we refer to as protected species observers. These are vessel-based surveys and during the use of

the particular acoustic sources that we anticipate have the potential to have impacts on marine mammals, it is required that protected species observers be on duty at all times. A minimum of one observer during daylight hours and two observers at night using night vision devices to maintain visual observation of zones within which they would conduct or implement a shutdown of those acoustic sources to try to minimize or prevent impacts on marine mammals.

14:56 Benjamin Laws: For the forthcoming construction actions. The specific measures may vary from action to action, but there is sort of a basic plan that's followed, which similarly uses qualified protected species observers during installation of foundation piles. A typical plan might entail the use of a minimum of two protected species observers that would be on the actual pile driving vessel, with another two stationed on secondary dedicated vessels for monitoring purposes. Importantly for the construction actions, there is the additional requirement to use acoustic monitoring to help in the detection of whales that might be present. Brian, anything to add there?

15:45 Brian Hooker: No, I think you covered that well. I think the only thing that I would add is in addition to those measures to protect against acoustic disturbance, we also do have measures in place to reduce the likelihood of vessel strikes. So, from measures such as reduced speeds in times when animals are present, to maintaining PSOs [protected species observers] or vigilant watch on deck at all times to ensure that these vessels are not interacting with marine mammals. And we do have a pretty rigorous reporting requirement for all of these vessels so that if they do have any interaction with a protected species, they report that immediately to us.

16:33 Brian Hooker: And that goes in, that goes for construction and operations as well as these pre-construction surveys. And then lastly, there's the kind of long-term operational side where we have looking at long-term passive acoustic monitoring, as Ben mentioned, to be able to monitor through the operation of the facility, as well as an environmental studies program where we could look at trends in animal distribution before and after construction and so forth, thank you.

17:07 Ella Nelson: And I just had a quick follow up question. So you guys mentioned at the top of the call that to date, no whale mortalities have been attributed to offshore wind. I was curious out of the things that you were just talking about, what in the construction of an offshore wind turbine, bunch of turbines, could potentially understanding that it hasn't been proved or hasn't been linked, but is the acoustic monitoring the biggest threat to whales? Is it just the ship themselves to whales, and sorry, and other marine life? What are the potential hazards that that could be posed?

17:55 Benjamin Laws: This is Ben Laws, I'll take the first cut here, see if my colleagues have anything to add. Largely, and I'll refer to—just so we're clear what we're talking about—I'll refer to the definitions of harassment under the Marine Mammal Protection Act. Harassment under the Act is defined as either Level A harassment, which is essentially an injury, or Level B harassment, which is essentially a behavioral disturbance. So in all of the proposals that we have issued to date relating to construction activity, we have proposed to authorize primarily Level B harassment or behavioral disturbance with some limited instances of expected Level A harassment, which would be in the form of auditory injury resulting from noise exposure.

18:45 Benjamin Laws: There is the potential for some types of activities that may be associated with wind surveys or development to have more severe impacts because of the possibility that a strike could occur, a vessel strike. As Brian described earlier, though we do

have specific vessel strike avoidance protocols, and as we've described in all of our proposals, thus far, we do not expect that strikes are in fact likely to the point that they should be expected.

19:24 Lauren Gaches: Thank you both. This is Lauren. We're going to move on to our next question, just to be mindful of folks' time. I want more reporters to have a chance to ask, if that's alright.

19:33 Operator: And our next question is from Dinah Pulver from USA Today. Go ahead. Your line's open.

19:38 Dinah Pulver: Hi, it's Dinah Pulver and thanks for holding the call. I have a few questions, but I'll hold a couple maybe for the end if I can have another turn. I wondered if it's possible to find out how many dead whales total along the Atlantic coast since December 1st, not just in New York and New Jersey? I also wondered, you said that, there was no evidence of offshore wind impacts on the humpback whale UME. I wondered if you had any evidence of offshore wind impacts on any whales at all? And then there's been a fair amount of conversation on social media about whether ear bones are being harvested during these recent necropsies. And I wondered if ear bones are typically sampled during the whale necropsies, and if so, have they been sampled during these recent necropsies?

20:26 Lauren Gaches: Hey, Dinah, my apologies. I think Sarah just got disconnected and so she'll be dialing back in and I think that that is a question that's squarely in her lane. Dustin, our operator, if you could please look for Sarah Wilkin to come back into the call so that we can add her in.

20:45 Benjamin Laws: In the interim, this is Ben Laws again. I'll just respond to the first part of that question by stating that while some of our answers, Q&A's have focused on humpback whales because of the recent strandings, the same information or the same response would hold for other large whale species. There are no known connections between any of this offshore wind activity and any whale stranding regardless of species.

21:19 Dinah Pulver: Thank you. While we're waiting for Sarah, Ben, you said there were no historical stranding events associated with systems like these. Could you be a little more specific on what kinds of systems you mean?

21:35 Benjamin Laws: Sure. So typically for these site characterization surveys, the operators potentially could use a wide variety of acoustic systems. The most impactful one that we're looking at typically is something called a "sparker," and I think I'll ask if Erica, you want to speak to that?

22:00 Erica Staaterman: Sure. This is Erica Staaterman at BOEM. Yeah, I just want to clarify that there's a pretty big difference between some of the sound sources used in the oil and gas industry compared to what's typically used in site characterization for offshore wind. Those in oil and gas are called seismic air guns, and they're specifically designed to penetrate kilometers into the sea floor. So they're very high energy, very loud sources. As Ben mentioned, the ones that are used here are called high resolution geophysical sources, and they're typically smaller in the amount of acoustic energy they put into the water column, but also they have a couple of other characteristics. So, for example, many of them are used for very short periods of time with a long quiet time in between. So that means that they're only on for several milliseconds and then for about 15 seconds it would be quiet.

22:49 Erica Staaterman: Another key piece is that they are not necessarily omni-directional. What that means is some sound sources produce sound in all directions, like air guns, that means that they can insonify or essentially produce sound all the way around a given source. Whereas a lot of these sources used for the site assessment phase are actually narrower in their beam. So they only produce a very narrow cone of sound. For example, multi-beam echo sounders have only about a two degree beam width. So they're very narrow, and that means that the likelihood of an animal encountering and coming right into that sound beam is quite low. So, overall the sound sources used here are generally expected to be much lower in impact than seismic air guns. And back to the original question, there's no evidence that any of these sound sources used in HRG surveys are attributed to any of these kind of impacts to Baleen whales.

23:43 Lauren Gaches: Thanks Erica. This is Lauren again, I believe Sarah is back on. Dinah, if you're able to re-ask your question.

23:52 Dinah Pulver: Oh, is it possible to find out how many dead whales total along the Atlantic coast dating back to December 1 and not just in New York and New Jersey? And also are ear bones typically sampled during necropsies, and if so, have ear bones sampled during these recent necropsies?

24:10 Sarah Wilkin: Yes, we can absolutely follow up with you about total dead whales, there have been some strandings in the southeast region, so we can provide that after the call. As far as ear bone samplings, so ear bones are something that can be looked at in a necropsy to try and assess acoustic trauma. It is very challenging, and generally it's done for toothed whales and small cetaceans where it's logistically more feasible, to obtain them. They also decompose very quickly, even more so than some of the other features of the animal. So if you have a whale that is already moderate to advanced decomposition, and then it's logistically very, very challenging to access the part of the body where the ear bones would be, they're buried fairly deep near the skull. It is not routine for a lot of our large whale necropsies, which can also be time limited, and just otherwise very challenging.

25:14 Dinah Pulver: Very good, thank you.

25:21 Operator: Our next caller is Katie Richmond from NBC Nightly News with Lester Holt. Go ahead, your line is open.

25:27 Katie Richmond: Hi. Thank you. My question was actually already answered, it was about the sonar. Thank you.

25:32 Lauren Gaches: Thank you. We'll take our next question.

25:34 Operator: The next question is Heather Richards with Energy and Environment News. Go ahead, your line is open.

25:39 Heather Richards: Hey, thank you guys so much, for doing this call. I wonder if somebody could talk a little bit more about comparing what we know from the Gulf of Mexico with the limited survey activity we have for offshore wind up in New England. So if we have a long history of pile driving to put platforms in the Gulf of Mexico, a long history of seismic activity with loud sounds to kind of look at the subsurface, we should know to some degree how this affects marine life, when it's done more extreme, right? So can somebody talk a little bit about whether or not we've had strandings, for example, in the Gulf of Mexico that would be tied to

seismic, and compare that to what has been done so far in New England to do site surveys, etcetera, for offshore wind.

26:25 Lauren Gaches: Erica, I'm not sure if you have anything to offer on a comparison acoustically, but then Sarah, perhaps you can address any unique stranding scenarios that you may be aware of.

26:40 Erica Staaterman: This is Erica, I can go first. Just again comparing those sound sources. So what we're looking at for offshore wind is quite different from what's been done in with seismic surveys in the Gulf of Mexico for oil and gas. That said, there are some usage of these high resolution geophysical sources in the Gulf of Mexico, and as far as I know there's never been any incident or strandings associated with those sources. I'm going to pass it over to somebody at NOAA related to other data from the Gulf of Mexico.

27:14 Sarah Wilkin: This is Sarah and I can chime in. We do occasionally get large whale strandings in the Gulf of Mexico, particularly Sperm whales and the Rice's whale, which are the two main species that inhabit there. And so that's one thing that is quite different, I think between the Gulf of Mexico and the Atlantic Coast, is the abundance of whales and the distribution of whales close to shore. So we also know that for strandings we only see a fraction of the animals that we think have died or that we know have died based on population surveys. So animals have to die relatively close to shore and then wash ashore for us to detect them. So there can be oceanographic processes and wind and waves that happen that might mean that we're not recovering a lot of mortalities. But also having lots of whales in nearshore waters means that we are going to have more strandings of those whales, and so that's a way that the mid-Atlantic, and the Gulf of Mexico are pretty different when it comes to Baleen whales especially.

28:28 Operator: The next question is from Wayne Parry with Associated Press. Go ahead, your line is open.

28:36 Wayne Parry: First one, of the 178 whales that you mentioned, what is the geographic range of those incidents, from where to where?

28:47 Sarah Wilkin: Thanks. Yeah, great question, and we do have a webpage on this unusual mortality event, but that is from Maine down through Florida, so the entire Eastern, US Atlantic coastline.

28:58 Wayne Parry: Okay, thank you. And then my second question is, can you describe specifically what type of site preparation is underway right now off of New York and New Jersey? What sort of work is being done right now in this area?

29:19 Brian Hooker: This is Brian Hooker at BOEM. Most of the surveys off of New York and New Jersey now are characterizing the sea floor, and the immediate sub-bottom, for the purposes of engineering purposes, for the foundations of offshore wind facilities, as well as, for looking at cable burial risks, along that route. So identifying the cable corridor to shore, as well as characterizing the sea floor for engineering purposes and as well as for environmental purposes, we use some of that same survey data for helping to inform, what that sea bed looks like from an environmental impact perspective. I hope that answers your question.

30:18 Wayne Parry: Oh, how is it done physically? What sort of equipment is used? What does it do?

30:24 Brian Hooker: Oh, I'm sorry. Well, I can touch on that and then I might ask Erica to jump in with the different types of equipment, but as I think Erica already touched upon, there's like a typical types of equipment, suite of equipment, it includes like a multi-beam echo sounder, a side-scan sonar, and then some type of, sub-bottom, profiler, usually a what's referred to as a chirp sub-bottom profiler. And for geotechnical work, which is also going offshore, there may be a cone penetrometer test, and or other types of borings as well that may be occurring. Erica, do you have anything to add on the equipment, or Ben for that matter?

31:16 Erica Staaterman: This is Erica. I can just quickly note that the way that most of these surveys work is they would have one of these pieces of equipment that's emitting sound paired with a receiver. And so from the vessel, they would be towing the instrument along in sort of a zigzag fashion or around the area that they're trying to sample. And they would be looking for the reflection of that sound wave off of the sea floor back on the receiver. And that's how they get essentially an image of what's on the sea floor or just below the seafloor.

31:45 Wayne Parry: And one of the companies that's currently doing the work said this week that they're using something called, and forgive me if I get the acronym wrong, CPT or CTP sampling, which involves putting some sort of a probe into the seafloor to do measure resistance, is that an accurate description of that?

32:04 Brian Hooker: Yes, it's Brian again, and yes, that was the cone penetrometer test, CPT for short, that I mentioned. And that is an accurate description. Yeah.

32:13 Wayne Parry: Okay. And none of these things, again, just to be crystal clear, has been shown to affect harm or potentially even kill whales or marine mammals, correct?

32:27 Brian Hooker: That is correct as Ben stated earlier, I think the way we've been describing it, and I invite Ben or others to describe there, it has the potential to have a behavioral influence, and that's what's been the primary effect that we anticipate could occur. But we have no documented cases of it actually occurring in the field. But I don't know, Ben, if you want to clarify anything I said there.

33:01 Benjamin Laws: Well, I just want to be unambiguous, there is no information that would support any suggestion that any of the equipment that's being used in support of wind development for these site characterization surveys could directly lead to the death of a whale.

33:20 Wayne Parry: Okay. Thank you.

33:23 Operator: Our next question is from Steve Rogers from The Star-Ledger. Go ahead. Your line's open.

33:29 Steve Rogers: Thank you so much. Most of my questions were answered. I had just one, based on unusual mortality event data or other month to month data from NOAA, does December and January fall into what could be considered a peak period for these kinds of whale strandings? And if so, can you elaborate?

33:50 Sarah Wilkin: This is Sarah. We are still in the process of trying to compare the six-week period with others in the past. We do typically get humpback whale strandings in the winter months in the mid-Atlantic especially. But we're still working on the data to try and determine if it was elevated, and if so, how significantly.

34:16 Steve Rogers: Thank you, Sarah.

34:18 Operator: The next question is from Julie Scharper from the Baltimore Banner. Go ahead. Your line's open.

34:25 Julie Scharper: Yes first of all, I'm also interested in the figure of the total number of whale strandings since December along the eastern seaboard. And secondly, I'm interested in finding out what you know so far about the whale that was found in Assateague this week. If there's any results from the necropsy that you can share at this point, or other preliminary findings.

34:53 Sarah Wilkin: Yeah, that whale was examined yesterday, and I'm going to have to get back to you with specifics on it.

35:03 Julie Scharper: Okay. I also have seen conflicting figures, some, I think the Park Service described it as being 20 feet long. And then I spoke with someone from NOAA earlier who said it was 33 feet long.

35:19 Sarah Wilkin: Again, I can't speak to that particular whale. We do usually have some variable estimates until we actually get to the whale with the tape measurer.

35:29 Julie Scharper: Okay, thank you.

35:33 Operator: Next question is from Kristin Hunt from LA Voice. Go ahead, your line's open.

35:37 Kristin Hunt: It's Philly Voice, but yeah, thanks for taking my question. I was just wondering if in layman's terms you could explain what Incidental Take Authorizations are, and also what's been authorized for the Orsted projects in terms of the harassment A or B levels you mentioned, or any other kind of impacts?

35:58 Benjamin Laws: Sure. This is Ben Laws. So what we're talking about here with “take” is it's a regulatory definition of the Marine Mammal Protection Act, which includes a variety of things, including harm, hunt, kill, these sorts of things, but also harassment. And so, I went through earlier the definitions of harassment under the Marine Mammal Protection Act, which include potential for injury and potential for behavioral disturbance. That's level A and level B harassment respectively. So incidental means that it is not something that is purposeful. So we know that whether it be construction, acoustic surveys, that sort of thing, when you have an activity that's putting noise into the environment, you might have the potential for the unintended consequence of effects to marine mammals. So that is incidental take. It is expected, but is not the purpose of the activity.

37:05 Benjamin Laws: And so, when an activity may be reasonably anticipated to result in the incidental take of marine mammals, action proponents can apply for an Incidental Take Authorization under the Marine Mammal Protection Act. And so that's the process that we've gone through here for these surveys. For the specific Orsted project that you mentioned, I don't have numbers in front of me. What I can tell you is that for all of the Incidental Take Authorizations that have been issued associated with site characterization surveys, the only form of take that is anticipated and that has been authorized is level B harassment, behavioral disturbance. So no injury and certainly no mortality. Mortality cannot be authorized through the incidental harassment authorizations that we're doing for these surveys.

38:01 Kristin Hunt: Okay, great. Thank you so much.

38:05 Operator: Next question is from Megan Viviano from Chesapeake Bay Magazine. Go ahead, your line's open.

38:10 Megan Viviano: Hi, there. Thanks for taking my question. I have some of the same questions that Julie did from The Banner, and I know that we'll need to follow up later on that. So I'd love to get any information that becomes available as Julie has asked. One of my questions was under the assumption that the whale was 20 feet, but maybe you can address this in a more general way. I noticed that at least one of the other reports of one of the ones up in New Jersey was also 20 feet, and I was wondering if there has been any trend either in this most recent pulse of whale deaths or in general, during the mortality event of, are there more younger whales? Because obviously 20 feet is actually not very large for a humpback, and I would assume that a 20 foot whale would most likely be a juvenile. So I'm wondering if you could speak to that. Are the juvenile whales more at risk during this mortality event and have you seen evidence of that?

39:08 Megan Viviano: And then one follow-up question; there is a voluntary Right Whale Slow Zone Program that we systematically see put into place when the presence of right whales have been detected off of places like Ocean City, Maryland. I'm wondering, is there any program like that for humpbacks? I know that in the mariner community, it's a controversial thing, for offshore fishermen it’s a controversial thing. Is there anything like that for humpbacks or could something like that be triggered by this increase in deaths? It was just like a two-part question.

39:47 Sarah Wilkin: I can tackle the first part. For the whales that we've been seeing since the start of December, and then more broadly for the unusual mortality event, there has been several sub-adults as part of that group. In fact, I think most of them we would categorize as a sub-adult humpback whale. And that is not uncommon when you look at strandings as a whole. We do tend to see more of our stranded animals fall into the sub-adult juvenile categories, and I think there's just a higher rate of mortality in sub-adults. Yeah, I'll stop there.

40:37 Brian Hooker: This is Brian Hooker. I think the only thing I'll add there is that for offshore wind vessels, we do have requirements that go above and beyond the voluntary nature of those Slow Zones, especially the Seasonal Management Areas, and that they're not optional. We make them a requirement for vessels operating under our authority. So it isn't optional for them, they do slow down in those seasonal management areas.

41:09 Megan Viviano: Thank you.

41:13 Operator: Next question from James Dinneen from New Scientist. Go ahead, your line's open.

41:20 James Dinneen: Hi, there. Thanks for taking my question. I had two questions. You mentioned that the necropsies on the humpback whales had attributed 40% to human-related strikes and entanglements, and I'm curious if that 40% number is also unusually high, and also if the necropsies offer any other insight into what was specifically behind those strikes or entanglements, or the location they might have occurred or any other information? Thanks.

41:50 Sarah Wilkin: Yeah, so it's a great question. When we look at the unusual mortality event as a whole, we do compare it to the baseline. So data that were collected prior to the start of the

unusual mortality event. There have been some other unusual mortality events for humpback whales in the Atlantic, unfortunately. So it's hard to find a comparison. Off the top of my head, I can't say whether the percentage is significantly different than outside of the UME, so we'd have to get back to you on that. There can be some other factors that happen, such as once we have a declared unusual mortality event, there is more of an effort to examine each and every carcass to the extent possible. As I said earlier, there are oftentimes logistical factors that make that challenging or impossible, but when possible, we do tend, we do try to examine every large whale as thoroughly as we can.

42:50 Sarah Wilkin: And so that might mean that we're detecting things like vessel strikes more than we are if there's no ongoing unusual mortality event. And then as far as the specific causes in some cases we have a report of a vessel strike, and there's a carcass associated with that. Sometimes for entanglements there is identifying marks on the gear but very frequently in most of the cases we don't get those two factors. So we have animals with signs of vessel strike or animals with signs of entanglement, but we can't definitively or conclusively state what kind of vessel it was, what kind of entanglement it was. Sometimes, particularly with the vessel strikes, we can have an estimate of a time period how long ago that animal was struck, but because whales can swim quite far distances, even if they're injured, it's not necessarily conclusive. And for entanglements similarly, sometimes it's a pretty fresh wound. And so we think it might have happened relatively close to where it stranded, but other times they could be very chronic and have gone on for some period of time, so then we can't say where that animal might have been entangled.

44:07 James Dinneen: Thank you very much.

44:11 Operator: Next question is from Tim Ferry from Recharge. Go ahead. Your line's open.

44:16 Tim Ferry: Okay. Thank you very much for this. Yeah, I just have a couple of quick questions. One is, what is a usual mortality event? I realize that this is a challenging question, but what is the baseline that you guys are using to determine unusual? What do the necropsies that have been conducted on the nine whales that we're discussing right now, what do they tell us about the cause of death as well? And then I have another question on the hearing of whales.

44:44 Sarah Wilkin: Sure. So an unusual mortality event is a process that was established under the Marine Mammal Protection Act to identify strandings that are unexpected and involve elevated numbers of mortalities in a particular species or population. So for the humpback whales, they started at the beginning of 2016, elevated strandings. And generally we are looking at the data and also our stranding network partners are working with us to say this is higher than what we're used to. And so we compare that with the baseline stranding rates for that location and that time and months of the year. And then we work with a group of experts called the Working Group on Marine Mammal Unusual Mortality events that use some standard criteria to evaluate the current event and determine if it qualifies as unusual. So once they make that decision, then NOAA's Assistant Administrator can declare that a UME has begun.

45:48 Sarah Wilkin: We then work with an investigative team and work with our partners in the stranding network to investigate animals that come in that are meeting the criteria. So in this case, humpback whales in the Atlantic. And we keep tabs on the overall kind of stranding rates and work with that external group of experts to try and determine when an unusual mortality event might be over, when the stranding rates might return down to the baseline of what we would expect. And so this particular case is, this UME is ongoing and has been since 2016. For

the whales that have stranded, there have been some individuals that had signs consistent with vessel strike. So that includes significant amount of bruising. There are other animals where there was no signs from what we call the examination or the necropsy on the beach. However, samples are collected for most of these cases that will be sent off to different laboratories and other scientists for analysis that may give us some answers in the weeks and months to come. But it may also, unfortunately, they may remain inconclusive.

47:07 Tim Ferry: Okay. Thank you. I wonder if you can also share a little more about the hearing. At what range do Baleen whales hear in terms of hertz and kilohertz? And at what range do toothed whales hear, and what range is the equipment that is being deployed for the offshore wind sector, at what ranges does that equipment operate?

47:33 Erica Staaterman: Sure. This is Erica Staaterman at BOEM, I can handle some of this. So, Baleen whales are considered to be low-frequency whales, which means they hear in the lowest frequencies of any of the marine mammals. The other odontocetes toothed whales, typically hear much higher up into several hundred kilohertz. So the sources that are typically used in these high resolution geophysical surveys, most of them are in the hearing range of most of those mid-frequency and high-frequency cetaceans. Some of them are actually out of the hearing range completely of Baleen whales. So for example, multibeam echo sounders or side scan sonars might not even be audible to whales like humpbacks because they are not even in their presumed hearing range. So it's important to keep that in mind. It's a really good question actually, and it's one of the first things we look at when we're trying to predict the potential impacts of acoustic sources on marine mammals, is whether they can even detect the sound. And I'm sorry, I think there was another part of your question that I may have missed. I'm not sure.

48:36 Tim Ferry: Yeah, actually, I was just wondering if the fact that we're seeing sperm whales, I believe there was two sperm whales in the mix, and so we got Baleen and we got toothed whales. Does that give evidence that this is not related to these surveys that are ongoing at the moment?

48:58 Erica Staaterman: Well it's actually hard to say because multiple different sound sources could be used under the greater umbrella of high resolution geophysical surveys, it's hard to say exactly. So some of them might be out of the hearing range of certain species, whereas others would be within the hearing range. So it's really hard to say whether any particular survey, depending on the equipment they use, would be audible or not. And I do want to point you to a couple of resources though that we can follow up with on our BOEM Center for Marine Acoustics website. We actually have a pretty detailed technical paper that we just published with some of our other colleagues about these high resolution geophysical sources and whether they would be predicted to have any impact on marine mammals. And that covers a range of species. So it's not just the Baleen whales but all of the marine mammals. We also have a video that describes how these surveys are typically conducted. That would be very useful. So we can certainly distribute those resources to all of you after the call and that will give a lot more detail.

50:01 Tim Ferry: Thank you, Lauren.

50:02 Lauren Gaches: Operator, this is Lauren. We have time for one more question.

50:06 Operator: Our last question today is from Courtney De George from Fox News. Go ahead, your line's open.

50:12 Courtney De George: Hi, I just wanted a quick clarification question. You guys had mentioned that some of these, you have a rigorous reporting process when vessels hit whales. Does that apply to just the people who are doing the mapping of the sea floor or does that also include, say, freight boats that are coming through?

50:37 Brian Hooker: This is Brian. And I can talk to what's under BOEM's authority and our lease conditions are specific to geophysical survey vessels, not commercial transport vessels or things of that nature. We do have additional conditions associated with construction vessels, so vessels that are involved in active construction that are similar to the measures we have for geophysical survey vessels. But we don't regulate commercial freight traffic. So I'll turn it over to NOAA Fisheries if they want to respond to that.

51:23 Benjamin Laws: This is Ben Laws. Similar to what Brian said, we can speak to the incidental take authorizations that we've issued. And those do require that any vessel, should any vessel associated with the activity strike a whale, then that would be notified to us.

51:46 Sarah Wilkin: This is Sarah. And the other thing that I would add is, the number one thing that people can do is to report. So if someone finds an entangled whale or finds a floating whale or an injured whale, we have hotlines. There's one for the northeast region and one for the southeast region. So we would ask that folks report it as soon as possible because that gives us our trained responders the best opportunity to be able to decide how to proceed and how to recover the animal and investigate.

52:26 Courtney De George: Thanks. And just one quick follow up, do you have any idea why you think that the vessel strikes are perhaps becoming more common?

52:36 Sarah Wilkin: This is Sarah. So I'm not sure, first of all, that they are more common. It was a finding in a couple of the animals that were examined, but as I said, in the unusual mortality event as a whole, we do have a pretty significant number of animals that have vessel strikes. Vessel strikes are of occurrence when there is overlap between where the whales are and where vessels are in the water. And there are changing patterns, there may be, the whales will be following their prey. And so as prey shifts, we will get shifts in distribution of the whales. As whale abundance increases, we will get more whales in different places. So and then vessel patterns change too. So as you with the seasons and with recreational boaters and commercial entities, there's all kinds of different patterns. So we are definitely looking at vessel strike and looking at ways to try and minimize or mitigate the impacts of vessels on whales. But there's a lot of different reasons for why we might be seeing vessel strikes in stranded animals.

53:53 Courtney De George: Thanks so much.

53:54 Lauren Gaches: Alright, thanks everyone again, this is Lauren. As we wrap up, I want to thank each of today's speakers for participating in today's media call. Thank you to Sarah Wilkin and Benjamin Laws from NOAA Fisheries and Erica Staaterman and Brian Hooker from BOEM. And I do want to close with a reminder, really, just as Sarah said, we ask anyone that sees a dead or injured marine mammal or sea turtle in the Northeast region in particular to please call the Northeast Marine Mammal and Sea Turtle Stranding hotline. That number is 866-755-6622 to be directed to a trained responder. The best way to assist these animals and to keep them and yourself safe is by calling a trained responder and maintaining a football field length distance away. Once again, my thanks and a recording of today's briefing will be available upon request. If you have any additional questions, please reach out to me and the NOAA Fisheries team at nmfs.pa@noaa.gov. This concludes today's call, thank you for joining us.

55:00 Operator: That concludes today's conference. Thank you for participating. You may disconnect at this time.