

**NWX-DOC CONF -1**

**Moderator: Jim Milbury  
August 13, 2018  
12:00 pm CT**

Coordinator: Welcome and thank you for standing by. At this time all participants are in a listen-only mode. At the end of today's presentation, we will conduct a question and answer session. To ask a question, please press star one. Today's conference is being recorded. If you have any objections, you may disconnect at this time. I would now like to turn the meeting over to Mr. Jim Milbury. You may begin

Jim Milbury: Great, thanks Brandon. Good morning everyone. Thanks for joining us on a call this morning for an update on operations that occurred over the weekend and plans for later in the week for J50. My name is Jim Milbury, J-I-M M-I-L-B-UR-Y and I'm a Public Information Officer for NOAA Fisheries. My phone number is 562-980-4006 and my email is Jim J-I-M.Milbury [M-I-L-B-U-R-Y@noaa.gov](mailto:J-I-M-Milbury@noaa.gov). I want to let you know that should you miss part of the conference – or you need a copy – we can provide the audio recording if you request it.

We're going to continue to post our updates on our website for J50 as well as J35. The web site is [www.westcoast.fisheries.noaa.gov](http://www.westcoast.fisheries.noaa.gov). And just look under the heading of what's new and for the status response update. And on that web page you'll

also find photos on our Flickr site and we keep trying to update those and continually upload photos there. So just check back often and also just email me if you need that link to the site.

I also want to note this is going to be our last planned media call. We're going to alert you if we have another call scheduled. But in the meantime, just please check our updates on a web site or call or email if you have a question and we'll try to make sure you get the answers (unintelligible) you need. But right now this will be our last scheduled call. If something else should occur, we'll reschedule a call.

And we're going to try to focus on J50. We don't have really any new information on J35. We know there've been reports J35 has released her calf and that may be the case. We haven't been able to really independently confirm that. So, as you may know, J50 also known as Scarlet was born about three and a half years ago. She has always been small for her age, but researchers over the last few months I've noticed increased emaciation which has led us to where we are today in efforts to try to restore her health.

Today's call will begin, will last for 45 minutes. Ask reporters to limit yourself to a question follow-up. If we have time, we will of course come back and answer remaining questions. So let's go ahead and begin. We have two speakers today making an introductory statement. One is Brad Hanson, B-R-A-D H-A-N-S-O-N. Brad is a NOAA Fisheries Wildlife Biologist at the Northwest Fishery Science Center, Seattle.

Over the weekend. Brad was part of an effort to evaluate the sending of stamina to J50 for possible delivery of medication in the future. The team was also able to gather fecal samples from members of JPod for analysis.

Our second speaker is Debora Giles, D-E-B-O-R-A-H Giles G-I-L-E-S. She is a killer whale biologist for the Center of Conservation Biology with the University of Washington and she's also the Science Research Director for Wild Orca. On the line – and available for questions – will be Andrew Thomson, A-N-D-R-E-W Thompson T-H-O-M-S-O-N. He's the Regional Director for Fisheries Management Pacific Region for Fisheries and Oceans Canada.

We also have Sheila Thornton S-H-E-I-L-A T-H-O-R-N-T-O-N. She's the Lead Killer Whale Research Scientist also from Fisheries and Oceans Canada. And finally, we have Lynne Barre L-Y-N-N-E B-A-R-R-E, NOAA Fisheries Southern Resident Killer Whale Recovery Coordinator. And they're there if you have a question for them. But Brad and Deborah will be making the opening statements. So I'd like to open it now for Brad to let us know what happened over the weekend, what's going to happen in the future.

Brad Hanson: Thanks Jim. Yes, so fortunately JPod was present in inland waters off the -- primarily on the west side of San Juan Island as they do during the summer. So we were able to encounter them both Saturday and Sunday. And during our Saturday encounter, we primarily spent time following J50 down the west side of San Juan. And during that time she was both with members of her pod as well as spending time away from the pod.

One of the things that -- one of the environmental conditions that was of interest this particular weekend was -- we had fairly big tides and the strong current. And so what transpired on Saturday, and we saw this, repeated this to a certain extent on Sunday, was that eventually she did separate from her group and hid on Saturday afternoon and spent about an hour or so just, essentially swimming into the tide without making much progress while other pod members essentially moved by.

So this was something that we hadn't seen before. We had descriptions of her being separate from other pod members. And so this, the sort of situation of strong tides indicated why this separation may have occurred previously.

So on Sunday, we were able to get out again and encountered the whales off the west side of San Juan at the time that we encountered her. She was down on the south side of the island and we followed her for a couple of hours until the animals were about midway up on San Juan Island where they grouped up and, and rested for a while. And then they proceeded to turn south.

It was about that same time that we had coordinated with a (unintelligible) bring out fish. We had gone through a trial run of the deployment of these fish back last week when whales were not present. The whales – after an hour or so of milling -- all started to head south. And by the time we got down around the Pile Point area, which is sort of the south side of San Juan, the pod had split up into some of its matrilineal groups.

And I should mention that, at, at the time that this split up occurred, we also were able to collect the fecal sample from the J16s, which essentially is the J16 mother J50 as well as J42, which is another sibling of J50s. And while we don't know who the fecal sample came from, that sample has been sent back to Seattle and will be distributed to a various variety of different labs for analysis.

We're just going to make the assumption at this point that it could be potentially from J50. We will be running the genotyping on that this week and hopefully we'll have an answer as to whether it came from J50 or not here in the next few days.

But we're going to go ahead and take, have a variety of labs and take a look at it just to do some different analyses. So, as I mentioned, then later on we were able to actually set up like we had done the other day, many of the media were

out and saw that setup where we had the elimination had fish on their vessel and for about an hour we deployed about eight fish directly in front of J50. And this was again, we still had a relatively high current situation. We did not see her directly taking fish.

She, for the most part, just seemed to continue to, you know, buck into the tide. There were other animals from her natural line that were in the area. We did see what appeared to potentially be a response to some of those – well, at least two (unintelligible) fish, whether it was the fish that was deployed or not, we're not sure.

The conditions were such that we were not able to go back and collect to see if there were any scale samples because there was quite a bit of current there because of the tide and any samples, any scales or prey remains that would (unintelligible) would have been obscured by the current. It was quite rough in the, in this particular area, off of Pile Point.

But overall, logistically, it was very successful. I mean, we were able to deploy the fish very quickly, the boat driving by the elimination was right on in terms of keeping the -- their distance boat about 100 meters or so in front of J50 and that was fairly challenging with currents that we had.

So all in all, we were very happy with the, you know, that -- this particular aspect of the deployment because it's important to remember that this type of thing has never been tried before and there was lots of potential things that could potentially go awry.

So we were very, very pleased that we're able to do this, you know, yesterday in terms of the animals being around. So and it looks like -- from the reports this morning -- they are headed west. So we're basically going to be on standby for the next

few days to see when they do come back in. And that pretty much wraps up what we did on the weekend.

Jim Milbury: Right. Thanks Brad. Deborah, do you have a -- I'm sorry, Deborah, can you hear me?

Deborah Giles: What? Oh, yes, mm-hmm, sorry. I was muted myself. Sorry about that.

Jim Milbury: That's okay. Go ahead.

Deborah Giles: Well I don't have too much to add. Just to let everybody know that we did get a fecal sample from somebody in the J16s on Saturday. It was a very small sample, after we spun it down in the centrifuge, it was about less than two mils and so that's not really enough to do the analysis that NOAA needs.

And so we'll retain that sample for analysis in Dr. Sam Walters' lab and we'll be able to do genotyping so figure out who left the sample as well as some basic nutrition information (unintelligible) hormones, kind of the litany what (unintelligible) in Dr. Walters' lab.

Jim Milbury: Okay, great. And this isn't confused with the sample that (unintelligible) got yesterday.

Deborah Giles: That is correct. We got one the day before and it was considerably smaller than the one that Brad and his team were able to collect yesterday.

Jim Milbury: Thank you. I think we can open up for questions. Brandon, go ahead and let's get our first question started.

Coordinator: Thank you. We will now begin the question and answer session. If you would like to ask a question, please press star one. Please unmute your phone and record your first and last name clearly when prompted. Your name is required to introduce your question. To withdraw your question, you may press star two. Once again, at this time, if you would like to ask a question, please press star one. And our first question is from Linda Mapes with the Seattle Times. Your line is open.

Linda Mapes: Good morning. Where did the fish come from? Were these again hatchery fish from the Marble Mountain Hatchery. And secondly, do intend to feed more fish this week if the conditions are right and are you still thinking about medicating fish and presenting those to the whales?

And I understood from your comments, we don't know if anybody ate these fish yesterday or what happened to him. I'm curious if you were able to tell if the fish themselves survive just because they're in their fresh water stage and they're going abruptly into salt water. I don't know what that does to a fish.

Man: Well they were certainly alive when they were released. As going back to your first question, I believe that they were hatchery fish, but I'd have to double check that to make sure. So yes when they hit the water they were in fact alive. And we did have a drone up to capture footage, that we haven't had a chance to get a look at that imagery to see what, you know, what the responses were. I don't think that they would just die immediately on the emerging into fresh water.

There were some of the fish didn't survive the trip out there. There were some issues relative to oxygen levels in the tank, but and the, the amount of time that that fish were in the tank because we had to wait several hours until the conditions were right

for deployment. They had been, they'd gotten out there about 1 o'clock or so and it was a going on close to 5 o'clock by the time the deployment started.

And as far as plans for later in this week, at this point, we're just going to essentially see how the animals' use of the area plays out. They were headed west. Typically this time of year, when they go out to the west, they're going to stay out there for a few days or so, maybe a week. And once they come back in we'll reevaluate what the plans would be. A main thing would be once they do return, to try to get a look at J50 and see what sort of conditions he's in and make plans from there.

Man: Thank you.

Coordinator: Our next question is from Lisa Johnson with CBC News. Your line is open.

Lisa Johnson: Hi there. I'd like to hear I guess from both sides of the border about sort of, but starting with, with NOAA, about sort of the pros and cons of this strategy. I understand that I'm wanting that the trial is partly I've heard in the past to look at ways of administering antibiotics that can't be done by injection. There's obviously also a risk to, you know, feeding a wild animal habituating from a boat, all of those sorts of things.

So can you talk a bit into what, what was it like why NOAA, why you're doing it, and then (unintelligible), what some of your, sort of would be weighing. I know it's not permitted at this point in Canada.

Brad Hanson: Sure. It's, I mean, it's the situation with the animal where we are concerned about its condition. And so we felt that it was necessary to take this, you know, this sort of step in order to try to see if we could improve the animal's condition. So we realized that there is a potential for habituation. We've



taken some mitigation measures along that line relative to, you know, using, a deployment tube so that the animals, if they do happen to see the fish being deployed, that there's not, you're not making the association with people and the boat.

These animals can be quite – well they're quite intelligent so they have very good eyesight. So they do pick up on, these types of things sometimes very quickly. So we're cognizant of that. But again, our concern is just that we're sort of in a situation with the condition of the animal that we felt that this was warranted.

Man 2: So, from the Canadian side, was that -- Sheila, would you be able to answer that? Or Andrew?

Sheila Thornton: I can speak to some of that and certainly Andy can as well. So we're working -- this is Sheila Thornton with the (CFO), we're working very closely with our colleagues at NOAA to ensure that the actions that we take do benefit J50, but also don't have adverse effects or negative impact on the rest of the population. So we are monitoring very closely what, what the outcomes are of each step of this process and it is quite iterative.

So as we move forward with each step really evaluating along the way. And so we are working closely with NOAA and this, you know, if the situation warrants it will have further discussions on Canada's role in the process. But at this time we're certainly working with our colleagues to ensure that we do what's best for not only J50, but the rest of the population.

And so what at this time we are awaiting the outcome of both (unintelligible) and fecal samples to see, you know, if there is further intervention required and if there is a disease state that we should be concerned about.

Lisa Johnson: And if I could just ask – thank you Sheila and Brad. If I could just ask a follow-up. Last week when you were talking about, we're hearing about digestion being one of the key things that would be like digestive issues would be looked (unintelligible), that's part of why the fecal sample, etcetera. one question that we keep getting from people and I don't know what for the scientist who actually on this, if it sounds wing nutty (ph) or possible, is whether there might be any J50 might have ingested anything that would be blocking digestion in some way.

Like, you know, we hear a lot about, there's a lot of public attention on marine garbage or plastic in the gut. Is that something that's totally off base or something that is being considered in this?

Brad Hanson: No, I don't think it's off base. And because it's certainly something is been documented quite widely in a variety of wildlife species. So the -- I don't know that foreign body block has been specifically been discussed relative to in during the veterinarian calls. But there has been some concern that that passage rate is not – or passage capability -- is somehow impaired.

And whether that's due to an anthropogenic source or a natural condition that's associated with disease or congenital defect or something, you know, is certainly something that, you know, it was being evaluated...

Lisa Johnson: And sorry passage rate, is that like amount of poop or like, I'm not sure what that means.

Brad Hanson: Well, yes, exactly. It's whether or not the passage capability or you know, we can't evaluate passage rate, but you know, we, we are interested in if the animal is deprecating and because that – if it's not, then it would indicate that there's an issue going on in the digestive track potentially.

Lisa Johnson: Okay. So I just want to make sure that I understood that. You're saying that it hasn't been something that, you know, to have – it's not a crazy idea. It's not something that, you know, to have to come up when the vet called. But you do have concerns about the defecation rate as part of the adjustment thing or that's something you would be looking at?

Man: Well that's something we would be looking at. But again, it would be extremely challenging to determine the defecation rate with the whale, but what we're attempting to do as least collect samples that may indicate that she – A, is defecating and then B, we would be able to evaluate her condition through, through analysis of those particular samples.

But yes, what I was getting at was that passage could be impaired either through, you know, some type of unnatural, you know, object ingested or there is some condition in the animal, either disease or something else that is restricting passage.

Lisa Johnson: Okay. Thanks. So while she's swimming around, it's very difficult to know, so you guys are taking the clues you can.

Brad Hanson: That's correct.

Lisa Johnson: Okay, thank you.

Woman: And just to add to that, I think that's part of the whole differential diagnosis process that that our veterinarians are going through. We have an animal who is in obvious, poor body condition, and if that animal is foraging and defecating, there may be some reduced ability to procure nutrients from the fish that it is eating.

So that that is one aspect of the investigative process, whether there's a disease state, whether the animal is foraging and unable to obtain the nutrition from the fish that it's consuming. These are all options that -- as the information comes in -- they're able to start ruling out some issues and start focusing on potential other differential diagnoses.

Lisa Johnson: Thanks very much.

Coordinator: Our next question is from (Mark Leronyoung) with (unintelligible). Your line is open.

(Mark Leronyoung): Hi. I gather there was an attempt to feed J50 initiated and it was aborted when it hit Canadian waters. Is Canada approved for feeding yet? And if not, why not?

Andrew Thomson: Hi, it's Andrew Thomson, T-H-O-M-S-O-N and I can answer that. It's simply that we have not received an application for a feeding trial or attempt to feed in Canada. There is of course a different regulatory process in Canada for permitting that type of activity, under, both marine mammal regulations and species at risk regulation.

So if we receive an application to a try feeding within Canada, we'll have to assess the risks of that, would be present for both the individual and also for the pod and then determine if those risks are mitigated through appropriate measures and then then make the determination whether or not we would issue a permit. We just simply don't have an application currently to do something.

(Mark Leronyoung): Who would you need the application from?

Andrew Thomson: Parties that are going to feed it, such as the Lummi (unintelligible) or NOAA.

(Mark Leronyoung): Okay.

Brad Hanson: This is Brad. If I could just add that one of the issues that we have looked at on this is just the logistics of actually, you know, bringing fish to areas within the range of the whales. And our feeling was that the optimal location would be one of their primary foraging areas off the south west side of San Juan Island in U.S. waters.

And so because we know that the whales spend a fair amount of time there and forage there extensively, part of our assessment is looking at the behavioral status of the whales and trying to get them at a time when they are interested in foraging and typically that's what's occurring on the southwest side of San Juan Islands.

So because it's also relatively close to the location where the elimination is situated, you know, transporting fish to that area, it is probably the most workable at this transport up into Canada would be a more extended time and whatnot. So again, those are the things that I think have gone into our consideration and why we have just stuck with a U.S. deployment at this point in time.

(Mark Leronyoung): Got you. I just happened to see some of them at East Point on Friday night. So one of the other things I was wondering about is another whale watch (unintelligible). But I gather kayakers and other viewers may not be. Is there anything you can do to keep people clear?

Andrew Thomson: Yes. So again it's Andrew Thomson. You know, the marine mammal regulation applies to all vessels, kayakers, paddleboarders, all the way up. So, you know, there are individuals that are not respecting the current 200 meter

buffer around the killer whales that's in place in BC, then, I would certainly encourage people to report them to our hotline or through our website, which also can report violations. We have fisheries officers actively monitoring the situation. We have also, I made use of our aerial surveillance platform as well. But of course we can never be everywhere.

And so, we certainly encourage the public to – A, respect the regulation and follow the rules which is to stay at least 200 meters away. And as I asked previously even further away from these animals in this distress if possible. But if they're not respecting those regulations, then I certainly encourage people to report them to the OR line and we'll follow up with the federal enforcement action.

Brad Hanson: Yes, this is Brad. I just wanted to add that, you know, we've been on the water several days with the animals now and so, Sound Watch and Straight Watch are both groups that provide on water, education and, and, essentially approaching boaters that might be trying to get – or not trying to – either trying to or inadvertently getting too close to the whales.

They've done a great job. And by the same token, a Washington Department of Wildlife -- Fish and Wildlife has been out with their enforcement vessel and they've also been doing a great job of keeping a perimeter in around the whales. So, WDFW was present yesterday during our fish deployments and whatnot, as was Sound Watch and Straight Watch to a certain extent. And it just really hasn't been an issue because they've been doing a really good job of maintaining distance.

And part of it too is just whale watch operators have been essentially standing off and so they think then in general, some of the recreational boaters that cue off of some of the whale watch boats have generally not been coming around where we've been at. And part of it too is just that J16s have typically been usually separated, although as I mentioned, part of yesterday, they were all,

they were grouped up. But so there's been a number of factors. But, I think the main thing is just that some of the partners that we've had to work with on to helping them maintain that perimeter have been doing a really excellent job.

(Mark Leronyoung): Thanks.

Coordinator: Our next question is from Terri Theodore with the Canadian Press. Your line is open.

Terri Theodore: Hi. I'm wondering about, any, any indication that she might be feeling a little better and, you know, I don't know, maybe I'm just transposing when I feel better after a few days of taking an antibiotic. Is there any indication she's looking better or anything like that?

Brad Hanson: Well, I think we're still concerned. I mean one of the things that, you know, he, we've now seen her on three or four days and during the times that she's with other animals, my feeling is she tends to be looking better than when she's been off by herself.

I mean, what caught our attention the last two days was just when she was having to swim into the current it, whereas other animals were essentially sprinting by her, it seemed like she was not able to swim much faster than what she was doing and perhaps was actually getting somewhat tired, because during the time that we were off of a one site on San Juan Island, she was actually moving backwards in the tide during the latter part of the period, which was about an hour long.

So, you know, she is – as we talk about her body condition is really quite poor. You know, early assessments, where she was essentially with other animals, encouraged us. We haven't seen her partake in any sort of

socialization where she would be, you know, splashing around and that type of thing, which is not uncommon with southern residents.

So, you know, her, she doesn't look really vibrant into her activity. It's just she's sort of going along and maintaining. But we're not seeing, other things would indicate a worse condition in terms of having trouble surfacing or perhaps a rigid rigidity to the body, which we have seen in other cases of animals that are really sick.

Terri Theodore: And was there any indication that she either said the fish went by here and you couldn't see was there. I mean, did she not want to eat, you just couldn't see that she was eating. What was that about?

Brad Hanson: Well, there was not, yes, she did not change her course and direction during the time of the deployments. And so it's, you know, it's a question of did she detect the fish. We don't know what. I mean. This is something that we're just learning about now with some of her (unintelligible) is that how do the whales queue in on fish that are distributed in the wild.

We think based on some studies that had been done previously that their detection range, you know, may not be more than a 100 meters or so. And so that's why we, you know, set up to position the deployment, the fish deployment vessel about 100 meters in front of her. One of the things to keep in mind though is that with this current, the fish could, you know, may have been going by faster than they are able to detect them. Again, this is part of what we're trying to learn from some of our DTAG studies is how these whales perceive their environment in terms of finding these fish, through their echolocation capabilities.

Terri Theodore: Thank you.



Coordinator: Our next question is from John Ryan with KUOW radio. Your line is open.

John Ryan: Hi. Thank you. So you've been trying to apply antibiotics and I wonder what are the risks of doing that? I guess if you don't even know that there is a bacterial disease, could you be eliminating harming the whale by eliminating its beneficial microbes?

And then also just what are you using?

Brad Hanson: Well, at this point, no antibiotics have been applied in into the fish. There was a broad spectrum antibiotic that was applied a couple of days ago and with the idea that this is an antibiotic that's been used by veterinarians in (unintelligible) setting for situations where, they're just, they're not quite sure what the underlying issue is with an animal, but it just provides a, a boost to their system.

In this case, of course, we're very limited in the, our ability to completely assess what conditions are. But based on the veterinarians that were -- had been on the panel calls, this was, felt to be the best approach at this point in time.

John Ryan: And what antibiotic?

Brad Hanson: I would have to check with them. I'm not 100%. I don't recall what the precise antibiotic was at this point in time. So I'll have to check on that and get -- we'll get that information back to you.

John Ryan: I can come in. I'll follow up on that. Thanks. Okay. I mean, if I go to a doctor and have a viral disease and they say I'm going to give you an antibiotic, and they say, no, that's poor practice, you shouldn't do that for various reasons. Is that a fair analogy?

Brad Hanson: Well, I don't know, if, if that is a fair analogy, in, in this particular setting, of course, you know, we have -- humans that there's sometimes antibiotics are essentially overused in this particular case for an animal is clearly compromised. You know, is this something that, you know, in veterinary practice in captive display settings has been employed for.

John Ryan: Okay. Thank you.

Coordinator: Our next question is from (Reed Phise) with Global National. Your line is open.

(Reed Phise): Hi. Thank you for taking my call. I appreciate all the J50 updates. Is there any way, just to get to, I know you mentioned quickly off the top, J35, you have reports from the Center for Whale Watching that she's no longer carrying her calf. I'm just wondering, will there be any efforts from either U.S. or Canadian officials to confirm that themselves and if not, why not?

Brad Hanson: Sure. This is Brad Hanson. Yes, we will certainly try to check up on her. As we have time and, and they are able to the animals. When we were with them, yesterday, J35 was in part of that relatively large group that was resting. We didn't want to try to get in too close to get us, you know, precise look at whether or not she was carrying a calf. But, we will certainly be monitoring her and, and, I'll let Sheila speak to what Canada is planning to do, but I'm sure they will be very interested in trying to get a look at her.

Sheila Thornton: Yes, we will also be keeping a close eye on her end and the rest of the pod as well, just to ensure that she was returned to a more normal behavior in the whole group.

(Reed Phiser): Thank you.

Coordinator: At this time I would like to remind participants that if you would like to ask a question, please press star one. Our next question is from Brian Flores with Q13 News. Your line is open.

Brian Flores: Hey guys. Good morning. A lot of the questions have been asked already. But, I guess I'll just ask this question. I mean, where do you go from here? I know that you guys are on standby in terms of observing, but do you guys, when you guys head back out on the water again, when do you coordinate with the (unintelligible) to perhaps a gather more fish? Can you kind of give us game plan on that?

Brad Hanson: Well, fortunately this time of the year, there are fish that are readily available, because a lot of these fish are returning to various hatcheries and whatnot, so they're aware that we're basically on standby at this point. We did have a report this morning at the whales were westbound off of (unintelligible), which would suggest that they're probably going to be gone for a few days.

And I think that, you know, once they do return in the waters we'll be getting back on the water trying to assess J50's condition again and then make a call from there in terms of what plan might be for any additional feeding trials.

Brian Flores: I have a question about the antibiotics. How quickly or how quickly does it work? How would you know it works?

Brad Hanson: Unfortunately that's a question I think the veterinarians would have to answer. And so I think that we can get that to the veterinarians and get that answer back to you.

Man: Yes, Brian, if you can maybe contact me after the phone call and I'll get you in contact with along with (Jack) with the veterinarian at Vancouver Aquarium.

Brian Flores: Sounds good. And then I think this question may have been asked already, but, I just, how would you describe J50's demeanor? I mean, was she generally playful -- something like that?

Brad Hanson: No. I mean that was part of our concern was that, you know, despite the fact that in some cases she's with the other animals and we've seen her, you know, showing interest. You know, one of the things yesterday was that J26, one of the males look to be in the process of chasing a fish. She did show interest in swimming over toward him, but then he essentially raced off to the south probably in pursuit of the fish and, and then she fell behind.

So seeing the interest that she's expressed in terms of joining up with other whales because the day before, when we were up off of Point Roberts, we had been looking for her and this was on Friday. We hadn't been able to find her for a couple of hours. And so we had gone back to be with the J16s and it was just J42 and J16, which is the mother, and then her brother, J50s brother.

And then right in the middle of them being involved in a forging event, she popped up and then continued to stay with them and we were only there for about another 30 minutes or so while they continued to travel south.

And so that was encouraging to see that behavior. But like I say yesterday was the day before were a bit worrying because, it just seemed like she was essentially slogging along and not necessarily able to keep up with the rest of the whales.

Coordinator: Okay. Thank you. Our next question is from Sharon Kivisto with the San Juan Islander.com. Your line is open.

Sharon Kivisto: Okay. Thank you. I have a question about the antibiotic. When you get the dart injection, you said only half of the amount went into the whale. And I just wondered, are you going to do another injection to make sure she gets a full dose or is further antibiotic injections dependent on what the fecal samples and other testing shows?

Brad Hanson: Yes, it's being considered a. But again, as more information comes in, just as you were suggesting, that will be revisited.

Sharon Kivisto: Okay. And then if I could ask one more thing. Is there any estimate of how much this whole operation has cost?

Jim Milbury: We've had that question. We don't have those numbers yet. We hope to get those. It will be further down the line.

Sharon Kivisto: Okay. Thank you.

Jim Milbury: We have time for like one more question.

Coordinator: And our last question is from Linda Mapes with Seattle Times. Your line is open.

Linda Mapes: Thank you. I just wanted a clarification of one of the reporters earlier posed the question and the frame that the feeding operation was aborted because the animals drifted into Canadian waters. Is that so? That wasn't my understanding. I thought you did what you wanted to do and then you just

stopped and that you were in Washington waters the whole time. Can you please clarify?

Brad Hanson: Yes, no. I don't know where that information came from, but that is incorrect. We were -- the feeding operation that we conducted yesterday, was in U.S. waters. We weren't near Canada during that timeframe.

Linda Mapes: Thank you. And then a question about the state of the fish runs. I know these are a hatchery fish, they're readily available. I mean, one of the things we've been postulating about -- hypothesizing about -- this morning on the calls, well maybe she's got an obstruction or she's unable to absorb nutrients.

Is it also possible that there just aren't enough fish? And this is, this is for Fisheries Oceans Canada, Dr. Thomson. What is the state of the Frazier River Run? What is the state of abundance of Chinook salmon in the areas that these animals utilize at this time?

Andrew Thomson: So it is Andrew Thomson, I'm not Dr. Thomson.

Linda Mapes: Okay, fine, thank you.

Andrew Thomson: It is a nice compliment. I just don't want to take credit for something I didn't do. So, we certainly do have some concerns for some (unintelligible) stocks and that's we put in place some significant restrictions on both tourist and rein (unintelligible) to recreational harvest as well to both provide potentially more fish for southern resident killer whales, but also to reduce the competition or the noise aspect score by recreational fishers in those areas.

So we are definitely taking action to address. But yes, there are some stocks of Fraser River Chinook that are in what we call the red zone. And so we are looking to try and find ways to rebuild and improve the stock groupings.

Linda Mapes: Thank you.

Jim Milbury: Okay, I think that's our last question. If you need to reach me, again, you have my phone number – 562.980-4006 and email is [jim.milbury@noaa.gov](mailto:jim.milbury@noaa.gov). So thank you very much for covering this issue. It's -- really appreciate you being on the call and thanks of course to everybody on the speakers and the people answering questions. That was very, very helpful. So really appreciate that.

So unless we have anything else come up, this will be the last scheduled call and we may talk to you again later. So thank you very much. And that's it for today.

Coordinator: Thank you for participating in today's conference. All lines may disconnect at this time.

END