

NOAA MARINE FISHERIES

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PUBLIC MEETING ON A PERMIT APPLICATION  
FROM MYSTIC AQUARIUM

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IMPORT OF 5 BELUGA WHALES INTO THE  
UNITED STATES FOR SCIENTIFIC RESEARCH PURPOSES

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MONDAY  
NOVEMBER 18, 2019

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The Public Meeting convened in the  
Great Hall at the Silver Spring Civic Center, 1  
Veterans Place, Silver Spring, Maryland, at 1:00  
p.m., Amy Sloan, Moderator, presiding.

STAFF PRESENT:

JENNIFER SKIDMORE, Biologist, Permits and  
Conservation Division  
AMY SLOAN, Deputy Chief, Permits and  
Conservation Division  
COURTNEY SMITH, Principal Scientist with Ocean  
Associates  
SHASTA McCLENAHAN, Biologist, Permits and  
Conservation Division  
CARRIE HUBARD, Biologist, Permits and  
Conservation Division  
AMY HAPEMAN, Biologist, Permits and Conservation  
Division  
JORDAN RUTLAND, Sea Grant Fellow, Permits and  
Conservation Division

## P-R-O-C-E-E-D-I-N-G-S

1:00 P.M.

MS. SLOAN: Good afternoon, everyone.

And thank you for coming to the public hearing on the permit application, File No. 22629 submitted by Mystic Aquarium.

My name is Amy Sloan. I'm the Deputy Division Chief of the Permits and Conservation Division of NOAA Fisheries, Office of Protected Resource.

Today, I'm going to give a very brief presentation. I'll try to go through this as fast as I can to give speakers time. We'll just go over the logistics, the purpose, and a review of the application, an overview of the process that we use to make a decision on the application, and then I'll pause and take questions on our process.

And then we're going make sure that everyone has had a chance to register. I'm glad we were allowed to let you guys in early because I think most everyone is registered and then

1 we'll take oral comments and you'll be speaking  
2 at the front.

3 As you know, there's two registration  
4 tables. I think everybody is fine then, so I  
5 don't really have to worry about going over  
6 those. I do want to make sure everybody filled  
7 out a speaker card. If you did not fill out a  
8 speaker card, and you need to speak, please do it  
9 when I'm done with my presentation.

10 And also, sign in. We have an  
11 attendance sheet, so we would like to have your  
12 name and contact information.

13 You may also submit written comments  
14 before or after you speak and we would upload  
15 those to the FDMS.

16 We're going to randomize the order of  
17 speakers. The time limit, and we're hoping to  
18 give everybody at least five minutes, but right  
19 now we already have 28 speakers, so it looks like  
20 it might be around four minutes, but what we'll  
21 do is when I finish my presentation, we'll do a  
22 double check on where we are on time and then

1 we'll give you a final time limit.

2 As I mentioned, you'll be speaking up  
3 at the front, but when it's time for questions,  
4 Jordan Rutland in the back will hand a microphone  
5 around if you have questions on the process when  
6 I get to that point.

7 We do have a court reporter, who will  
8 be taking a written record of the hearing today,  
9 and we will post that on our website when it's  
10 available.

11 And please take a moment to silence  
12 your cell phones right now, if you don't mind and  
13 I think everyone will be courteous and kind  
14 during the presentations.

15 So the purpose of the hearing is for  
16 you, the public, to be able to provide oral  
17 comments on the permit application submitted by  
18 Mystic Aquarium. It's not for discussion or for  
19 debate. It's for you to stand up and provide  
20 your comments.

21 And then also as I mentioned, it will  
22 be an opportunity if you have questions on the

1 permit process.

2           So for the application, Mystic  
3 Aquarium has requested a scientific research  
4 permit to import five beluga whales from  
5 MarineLand of Canada to Mystic Aquarium. The  
6 beluga whales proposed to be imported were born  
7 in captivity at MarineLand of Canada and at least  
8 one parent is from the depleted Russian stock.

9           Mystic proposes to conduct health  
10 related research studies and develop non-invasive  
11 research techniques to contribute knowledge and  
12 inform the management and recovery of beluga  
13 whale populations in the wild, including  
14 endangered and depleted populations.

15           There are eight research studies  
16 proposed which are detailed in the permit  
17 application itself and they include neural  
18 immunological studies, as I mentioned, developed  
19 as non-invasive techniques, hearing and  
20 physiological response to sound, photogrammetry,  
21 diving physiology, microbiome, behavioral and  
22 reproduction studies which would involve natural

1 breeding only, and testing of prototype telemetry  
2 devices and cameras.

3 In order to achieve those objectives,  
4 Mystic would train the beluga whales to  
5 voluntarily participate in the studies. They  
6 propose to have the whales on display incidental  
7 to the research, and if deemed necessary for  
8 health or welfare, they propose to transport a  
9 whale or whales to Georgia Aquarium where the  
10 same research would occur.

11 Regarding public comments, as I  
12 mentioned, oral comments given today will be  
13 recorded in writing and that written record will  
14 be posted on our website which is at the bottom.

15 The written records may be also turned  
16 in today and if you do turn your written records  
17 in today in a hard copy format, we will scan them  
18 and upload them to regulations.gov and that is  
19 where public comments may be submitted in writing  
20 electronically through close of the comment  
21 period which is December 2nd.

22 And the permit application and

1 instructions for submitting the comments are on  
2 our website.

3           Regarding our decision process, so we  
4 will review each and every comment that's  
5 submitted. And then we will take into  
6 consideration the relevant and substantive  
7 comments, the statutory issuance criteria under  
8 the Marine Mammal Protection Act Section 104, the  
9 Marine Mammal Protection Act regulatory issuance  
10 criteria, and then we will prepare the National  
11 Environmental Policy Act documentation. And then  
12 our office director will make a final decision on  
13 the application.

14           So I'll pause for a moment to see if  
15 there are any questions on this process. Okay.

16           Oh, yes? Could you go to the  
17 microphone, please?

18           PUBLIC COMMENTER: If we submit--

19           MS. SLOAN: --You are on.

20           PUBLIC COMMENTER: If we submit  
21 written comments today, can we also submit a  
22 different set of comments at some later point?

1 MS. SLOAN: Yes. Thank you. Thank  
2 you for the question. Any others? Great.

3 So has anyone who wants to speak not  
4 filled out one of these cards? So I think we're  
5 good.

6 As I mentioned, the speaker order will  
7 be random. What I'll do is I'll call the first  
8 speaker. You're going to come up here and speak.  
9 Jennifer and Courtney will remind you of your  
10 time and then I'll introduce the next speaker and  
11 we'll just go that way.

12 So if you can just pardon me for a  
13 moment and I'll go confer with them.

14 (Pause.)

15 Okay, great. I'm sorry, I'm sorry, I  
16 can't give you five minutes, but you will get  
17 four minutes. And so without further ado, I'd  
18 like to invite Carey Richard from Mystic Aquarium  
19 to be the first speaker.

20 MS. RICHARD: Good afternoon. My name  
21 is Carey Richard. I'm the Assistant Curator of  
22 Marine Mammals at Mystic Aquarium where I've been



1 an animal care professional for the past 20  
2 years.

3           During my tenure at Mystic, I've had  
4 the opportunity to work closely with a wide  
5 variety of species of marine mammals including  
6 beluga whales. Every day, I have the privilege  
7 to engage with guests during their visit and  
8 every day I see the spark of excitement from  
9 adults and children alike when they see an  
10 animal, especially a beluga, for sometimes the  
11 first time in their lives.

12           I entered this profession to make a  
13 difference in the lives of the animals that call  
14 the ocean home. My work with the beluga whales  
15 and all our care has allowed me to have a direct  
16 impact on the conservation of the species.

17           With the husbandry and research  
18 behaviors that I have helped develop and  
19 implement, I provide a service to scientists who  
20 are dedicated to research efforts that will help  
21 inform important recovery plans and policies. My  
22 efforts ensure that the whales are participating

1 voluntarily towards this incredibly important  
2 goal.

3 I know that together with the species  
4 ambassadors that we care for every day that we  
5 are having a direct and meaningful impact on an  
6 average of over 800,000 guests each and every  
7 year. I know this because I answer questions  
8 from guests who would have never have had the  
9 opportunity to see a beluga whale if not for a  
10 visit to Mystic Aquarium. I know this because  
11 I've seen my own sons and family members begin to  
12 take more responsibility for their impact on our  
13 ocean, by beginning to use reusable shopping bags  
14 and mugs, stop utilizing straws, and take more of  
15 an interest in recycling after a visit to our  
16 aquarium. And I know this because I witness it  
17 firsthand every single day with my own seven-  
18 year-old son's awareness of his impact on our  
19 planet.

20 My husband, an animal behavior  
21 researcher, who you will hear from today, and I  
22 have had many privileges throughout our career

1 including recording behavior of wild belugas in  
2 the Arctic, working together with researchers at  
3 Mystic Aquarium and other respective  
4 organizations including NOAA, to better  
5 understand factors that are affecting populations  
6 of wild belugas and assisting with the successful  
7 rehabilitation of a beluga whale calf named  
8 Tyonek from the endangered Cook Inlet population.

9 I could not have been a part of the  
10 amazing team that rehabilitated Tyonek had it not  
11 been for the animal care skills that I have honed  
12 at Mystic Aquarium. Tyonek is a true  
13 conservation success story, made possible only  
14 through years of scientific and husbandry  
15 research.

16 I have been privileged to have had  
17 these experiences, but most people and their  
18 lives will not be so fortunate and this is where  
19 using aquariums matter the most, bringing  
20 understanding of animals in ecosystems to people  
21 who cannot experience in any other way. You may  
22 be familiar with the saying in the end we will

1 conserve only what we love. We will love only  
2 what we will understand. And we understand only  
3 what we are taught.

4 The aim of Mystic Aquarium, each and  
5 every day, is to realize this mission, to inspire  
6 people to care for and protect our ocean planet  
7 through conservation, education, and research.

8 Approval of this permit allows our  
9 facility to continue to fill our responsibilities  
10 to beluga whale conservation by broadening our  
11 resources to continue non-invasive, voluntary  
12 research, to help validate processes so that they  
13 are applicable to endangered and threatened  
14 populations. We have the ability to ensure that  
15 this species is around for my son's lifetime, as  
16 well as his children and their children.

17 I watched my son grow into a  
18 magnanimous, funky, and wildly intelligent young  
19 boy who because of his accessibility to Mystic  
20 Aquarium has quite literally had the unique  
21 experience to learn about and from marine mammals  
22 himself. My husband I lead our son by example,

1 so he understands our responsibility as members  
2 of the human race to leave this earth much better  
3 than we found it.

4 I made this trip today because  
5 approval of this permit is critically important.  
6 We must act now to ensure that the depletion of  
7 beluga whale populations is halted and that  
8 recovery efforts continue to be well informed.

9 I urge you to approve this permit  
10 application and I thank you for your time and  
11 consideration.

12 MS. SLOAN: Can everybody hear okay?  
13 Okay, great. Thanks.

14 I'd like to invite Laura Thompson from  
15 Mystic Aquarium to come up, please.

16 MS. THOMPSON: My name is Dr. Laura  
17 Thompson. I am a researcher at Mystic Aquarium  
18 and a co-PI on this permit. I'm here to urge the  
19 approval of this permit to bring five belugas to  
20 ensure the future of belugas conservation  
21 research and the education of future generations  
22 of conservation biologists, researchers, and

1 educators.

2           Mystic Aquarium has a proven history  
3 of world class beluga care and research and a  
4 dedication to education. I myself am a testament  
5 to Mystic Aquarium's commitment to these  
6 programs. Having grown up visiting the aquarium,  
7 my aspiration to become a marine biologist was in  
8 no small part shaped and inspired by exposure to  
9 the belugas at Mystic.

10           My career in beluga research and my  
11 participation in beluga conservation now are the  
12 direct results of the educational and  
13 professional development opportunities I have  
14 received through Mystic Aquarium, first as an  
15 undergraduate, and then as the first graduate  
16 student to complete a joint Ph.D. program between  
17 the Mystic Aquarium and the University of  
18 Connecticut and through post-doctoral research  
19 funded by the Office of Naval Research. I  
20 continue as a scientist at Mystic today.

21           During my Ph.D. studies working under  
22 Dr. Tracy Romano, I developed my specific

1 research interests related to beluga physiology  
2 and conservation concerns. I studied the  
3 relationship between dive behavior and health as  
4 it relates to immune function in these animals.  
5 Only a few institutions carry out any immune  
6 function work for marine mammals and Mystic  
7 Aquarium is a leader among them.

8 With my work, we were the first lab to  
9 describe adaptation of beluga immune cells to  
10 diving and continue to investigate what  
11 conditions may interrupt these adaptations.

12 The goal of my work is to understand  
13 how belugas maintain health during diving and how  
14 human activity or a changing environment impacts  
15 their ability to do so. For example, we know  
16 belugas are changing their dive patterns in  
17 response to the changing distribution of their  
18 prey with warming Arctic waters, as well as the  
19 presence of boats and sound in the ocean. The  
20 significance of these changes in behavior is  
21 unknown, cannot be determined from tag studies,  
22 and it may not be detectable by observation at

1 all.

2 Our research is working towards  
3 understanding these consequences on individuals  
4 and ultimately population health and it is only  
5 made possible through the belugas in our care.  
6 Indeed, a key factor in assessing these important  
7 physiological responses is our ability to collect  
8 repeated samples from the belugas at Mystic and  
9 directly relate our results to specifically  
10 trained and observed dive behaviors. These are  
11 truly unique beluga studies that are not being  
12 conducted anywhere else in the world and have  
13 clear implications for understanding the health  
14 challenges belugas face in a rapidly-changing  
15 Arctic. Yet, this work not be possible in the  
16 field, a point that I speak to from experience.

17 As part of Mystic Aquarium's  
18 dedication to the health of wild beluga  
19 populations, I have had the extraordinary  
20 opportunity to travel to two locations to  
21 participate in wild beluga studies. I have seen  
22 where remote environments and minimal



1 infrastructure limit accessibility, make it  
2 difficult, and even dangerous to collect samples,  
3 and limit our laboratory analyses as well as the  
4 ability to interpret results.

5 Yet research involving belugas at  
6 Mystic Aquarium is helping to fill these gaps in  
7 knowledge and develop new approaches to field  
8 research. This contribution of knowledge is an  
9 invaluable asset to the future of beluga  
10 conservation and this permit is a critical  
11 component to securing such an asset for the  
12 success of future conservation and management  
13 efforts.

14 Admittedly, these studies have been  
15 limited by access to a very small number of  
16 animals. With the addition of five belugas will  
17 not only speed results, but will increase our  
18 confidence in results. A decision to not approve  
19 this permit will only impede beluga research and  
20 have unfavorable consequences on the progress of  
21 beluga conservation. I encourage you to use  
22 Mystic Aquarium's high standards of education and

1 research to set the precedent for belugas under  
2 human care, approve this permit, and allow these  
3 animals to truly be ambassadors for their species  
4 and help forge the way towards protection of wild  
5 populations. Thank you.

6 MS. SLOAN: Our next speaker-- the  
7 next speaker I'd like to invite up is Kate  
8 O'Connell from the Cetacean Society  
9 International.

10 MS. O'CONNELL: Good afternoon. My  
11 name is Kate O'Connell. I'm a resident of the  
12 State of Connecticut and a member of the Board of  
13 Directors of Cetacean Society International, a  
14 marine conservation organization that is  
15 headquartered in West Hartford, Connecticut. I'm  
16 speaking today on behalf of the Society and its  
17 many members and supporters throughout the state.

18 Our organization is deeply concerned  
19 by the proposal from Mystic Aquarium to import  
20 five beluga whales from MarineLand in Canada for  
21 purposes of scientific research.

22 We are aware that the Canadian

1 Government recently adopted a law, S-203,  
2 prohibiting the public display, breeding, import,  
3 and export of whales and dolphins. Although  
4 Mystic is well known for its research programs,  
5 we feel that given the size and configuration of  
6 the facility any imported whales will be  
7 incidentally on public display as noted.

8           Although the new Canadian regulation  
9 prohibits breeding, Mystic Aquarium has stated in  
10 its U.S. permit application that it will allow  
11 the imported beluga whales to mate and produce  
12 offspring, although reproduction is not essential  
13 for the research it is proposing. As noted by  
14 CSI's President, David Kaplan, in a letter to the  
15 editor of The Bay, a newspaper based in Southeast  
16 Connecticut, our organization is worried that the  
17 proposed import will create a back door to get  
18 new blood into U.S. captive beluga breeding  
19 programs.

20           We worry that Mystic Aquarium's  
21 proposal will stretch the boundaries of both  
22 Canadian and U.S. laws, opening the door to those

1 whose motivations and expertise are not of the  
2 same caliber. There are several U.S. facilities  
3 that keep belugas as the breeding programs of  
4 this species in captivity has largely failed and  
5 none have the research reputation of Mystic.

6 There is a real possibility that some or all of  
7 these facilities will try to import MarineLand's  
8 belugas for public display and with Mystic's  
9 precedent set, they might well succeed.

10 We are especially concerned that  
11 Mystic is partnering at this moment with Georgia  
12 Aquarium on this venture and that some of the  
13 whales could in future be transferred to Georgia.

14 We urge NMFS to deny this permit and  
15 to encourage Mystic to work directly with  
16 MarineLand to improve the conditions of the  
17 belugas and establish a research program there.  
18 This will spare these whales the stress of  
19 transport and separation from their social group  
20 and Mystic, the negative attention that this  
21 dangerous precedent invites.

22 We are hopeful that Mystic Aquarium

1 will continue with its work on belugas in the  
2 wild, so we respect not only the letter, but the  
3 spirit of the laws that seek to end the global  
4 trade in belugas. Thank you.

5 MS. SLOAN: I'd now like to invite  
6 Holley Muraco from Mystic Aquarium.

7 MS. MURACO: Good afternoon. My name  
8 is Dr. Holley Muraco and I'm the Director of  
9 Research for the Mississippi Aquarium. I've been  
10 working in the zoo and aquarium industry for over  
11 20 years in a variety of roles including animal  
12 trainer, welfare consultant, reproduction, and  
13 behavior expert, director, and researcher. I'm  
14 here today on behalf of marine mammal researchers  
15 who are able to study animals under the care of  
16 humans and apply that knowledge and to direct  
17 conservation action.

18 It is unfortunate that zoos and  
19 aquariums who house cetaceans have become the  
20 primary target of extremist groups and their  
21 financial campaigns. Not only are the claims  
22 made against zoos and aquariums unfounded, the

1 end result, if they are successful, would prevent  
2 critical research advances that would directly  
3 benefit wild species.

4 Take for example our new Mississippi  
5 Aquarium. We will open in 2020. It's located on  
6 the Mississippi Sound in the northern Gulf of  
7 Mexico. Some of you might be familiar with this  
8 region. It is too often overlooked, forgotten,  
9 or disregarded. Our aquarium is going to bring  
10 much needed awareness about this area to the  
11 public. The Mississippi Sound and across the  
12 northern Gulf of Mexico is home of bottlenose  
13 dolphins, Kemp's ridley sea turtles, hammerhead  
14 sharks, sperm whales, giant squid, rail sharks,  
15 manta rays, and killer whales. It is also home  
16 to one of the most endangered whales in the  
17 whale, the Gulf of Mexico Bryde's whales where  
18 there are less than 100 individuals remaining.

19 The biodiversity of this region is  
20 remarkable and highly under studied. It has been  
21 hit with back to back natural and man-made  
22 disasters including hurricanes like Katrina and

1 the Deepwater Horizon oil spill that resulted in  
2 a four-year UME with over 1100 stranded marine  
3 mammals.

4 We're currently experiencing yet  
5 another dolphin UME and it may be associated with  
6 the historic long term opening of the Bonnet  
7 Carre Spillway resulting in trillions of gallons  
8 of freshwater pouring into the Gulf.

9 The Mystic Aquarium is going to be a  
10 research hub and collaborate for vertebrate study  
11 in the Northern Gulf of Mexico. Our aquarium,  
12 along with very well cared for dolphins who were  
13 all born in human care that will live there will  
14 serve as a living laboratory of students and  
15 researchers. We have combined an in situ and ex  
16 situ program where scientists can be fully  
17 engaged in multi-disciplinary research  
18 advancements.

19 Our field studies are going to  
20 identify and understand reproductive success,  
21 failure, pathology in wild dolphins based  
22 directly on our knowledge of reproductions from

1 dolphins in aquaria. We will disseminate this  
2 information to the public to bring conservation  
3 awareness and inspire a sense of urgency for wild  
4 restoration and protection.

5           Currently, our aquarium is under  
6 construction and we have no animals. Yet, anti-  
7 aquarium extremist groups are already protesting  
8 against us. It is unfathomable to me the massive  
9 waste of money being spent on a completely  
10 unfounded pretense when wild animals are truly  
11 suffering and need help.

12           My research focuses on the  
13 understanding of the natural reproductive biology  
14 of marine mammals with animals in human care and  
15 the application of that knowledge to wild  
16 studies. Truly understanding reproduction and  
17 infertility requires daily monitoring in real  
18 time. In order to collect data from cetaceans in  
19 aquariums researchers need access to the animals  
20 as well as having an environment conducive to  
21 research.

22           Mystic Aquarium and other accredited



1 zoos and aquariums in the U.S. are uniquely  
2 suited to providing researchers with the  
3 necessary requirements. I highly urge the  
4 passing of the approval of this permit.

5 MS. SLOAN: Thank you, and I apologize  
6 for getting your affiliation wrong.

7 Next, I'd like to invite Katie Cubina,  
8 I don't know if I said that right. At Mystic  
9 Aquarium. Did I get it right?

10 MS. CUBINA: Cubina

11 MS. SLOAN: Cubina. Thank you.

12 MS. CUBINA: Good afternoon. My name  
13 is Katie Cubina. I'm the Senior Vice President  
14 for Mission Programs at Sea Research Foundation's  
15 Mystic Aquarium where our mission is to inspire  
16 people to care for and protect our ocean planet  
17 through conservation, education, and research.

18 I'm here to testify in support of the  
19 research permit that has been submitted by Mystic  
20 Aquarium to NOAA's National Marine Fisheries  
21 Service. My role at the aquarium is to fully  
22 integrate our education, research, and exhibits

1 department in order to maximize our conservation  
2 impact as one of the most trusted, science based,  
3 cultural institutions in New England. As such,  
4 our conservation work begins with rigorous and  
5 credible science and is always aimed at enhancing  
6 the health of aquatic ecosystems.

7 Research has, and always will be, core  
8 to our organization. As evidenced by the  
9 recently released IPBES Global Assessment Report,  
10 in order to halt biodiversity loss, slow the  
11 deterioration of nature, and meet biodiversity,  
12 climate, and sustainable development goals by  
13 2030, we must act boldly and we must act now.

14 Amongst other sobering statistics, the  
15 report indicates that more than a third of all  
16 marine mammals are threatened with extinction.  
17 While our research portfolio addresses a range of  
18 critical topics aimed at stemming the tide of  
19 what is now popularly being referred to as the  
20 sixth mass extinction, none of this research is  
21 more timely or critical than our work on beluga  
22 whales whose Arctic home is disproportionately

1 threatened by climate change and related threats  
2 of industrial development.

3 As you are aware, Sea Research  
4 Foundation is a center for global research on  
5 beluga whales with a core team of scientists  
6 studying belugas within a larger world renowned  
7 marine science research program. Our leadership  
8 in this area is evidenced by the fact that in  
9 March of 2019, we hosted the second international  
10 conference on beluga whale research and  
11 conservation.

12 Beluga studies at Sea Research  
13 Foundation advanced knowledge of immune  
14 responses, indicators of health, hearing and  
15 sound issues, diving physiology, and the  
16 development of non-invasive research techniques.  
17 Our research tools and findings directly aid in  
18 the conservation of endangered beluga populations  
19 such as those in Cook Inlet, Alaska and the St.  
20 Lawrence Estuary, as well as declining  
21 populations elsewhere. Sea Research Foundation's  
22 research is key to advancement and recovery and

1 sustainability plans that are supported by  
2 indigenous community members, scientists,  
3 wildlife managers, and others.

4 Translating the science in order to  
5 inform the public, educate students and  
6 educators, cultivate environmental stewards and  
7 inform management policy is our job. And we take  
8 that job very seriously.

9 Aquariums play a critical role in  
10 engaging the public in conservation. Countless  
11 research studies including a 2014 study by  
12 Impacts indicate that people's underlying concern  
13 for the ocean is heightened by a visit to an  
14 aquarium, that they expect, trust, and appreciate  
15 information about conservation, and that they  
16 want to be part of a solution. From this  
17 research, our own experiences, and that of  
18 colleagues in our profession, we know that we  
19 occupy a unique niche within society as it  
20 relates to our ability to inspire and motivate  
21 conservation action.

22 Mystic Aquarium engages over a hundred

1 thousand students annually in our conservation  
2 education programs and an additional 50,000  
3 individuals in direct public conservation  
4 programs where they serve as citizen scientists  
5 in a range of initiatives that include marsh  
6 restoration, population monitoring, and marine  
7 debris removal events.

8           Furthermore, many of our educational  
9 initiatives are aimed at students from high need  
10 communities, locally, regionally, and nationally.  
11 Sea Research Foundations dedicates millions of  
12 dollars annually to support implementation of  
13 these programs across the nation. Of note, we  
14 recently hosted an NSF funded scientific,  
15 cultural, and educational exchange program with  
16 Alaskan Natives and Native American teams focused  
17 squarely on beluga research and conservation.

18           Thank you for your time and careful  
19 consideration of this important matter.

20           MS. SLOAN: Ok, the next speaker will  
21 be Justin Richard from the University of Rhode  
22 Island.

1                   MR. RICHARD: Good afternoon. My name  
2                   is Dr. Justin Richard and I am here to voice my  
3                   strong support of Mystic Aquarium's permit  
4                   application. As an Assistant Professor at the  
5                   University of Rhode Island, I am studying the  
6                   reproductive biology of aquarium beluga whales in  
7                   an effort to develop tools and to generate data  
8                   that can be used to improve the management and  
9                   conservation of beluga whales in the wild,  
10                  especially the endangered Cook Inlet beluga  
11                  whales.

12                 Belugas live in one of the harshest  
13                 environments on the planet, the Arctic. Hidden  
14                 from view for much of the year by sea ice and  
15                 cold water, we know next to nothing about their  
16                 reproductive behavior and physiology outside of  
17                 the summer season. By sending trained belugas at  
18                 Mystic Aquarium, we hope to gain insight into the  
19                 lives of these animals in a way that is simply  
20                 not possible in the wild.

21                 For example, my research has focused  
22                 on validating non-invasive research tools that

1 can be used to study belugas. Developing non-  
2 invasive methods to study wild whales is critical  
3 as we desperately need data on wild populations  
4 in order to first understand why some populations  
5 are struggling so that managing agencies can  
6 develop strategies to eliminate these impediments  
7 to recovery.

8 A key feature to the success of this  
9 research is the ability to monitor individual  
10 animals longitudinally. Repetitive, non-invasive  
11 sampling and behavioral observations throughout  
12 the year allow research projects that are  
13 logistically impossible to conduct with wild  
14 belugas. My current research focuses on  
15 simultaneous monitoring of physiology and  
16 behavior to elucidate beluga reproductive  
17 strategies which is critical for understanding  
18 population growth in the wild.

19 With the belugas in close proximity to  
20 the marine mammal experts and research  
21 facilities, more robust and cost-effective  
22 research is possible. The training expertise and

1 experience of the husbandry and veterinary staff  
2 Mystic Aquarium is also critical to the success  
3 of these research projects.

4 In addition to enabling critical  
5 research on belugas, the increase in research  
6 capacity will create opportunities to train the  
7 next generation of scientists who will one day be  
8 responsible for improving our understanding and  
9 management of these animals.

10 Since 2013, over 40 college  
11 undergraduates have gained independent research  
12 experience by assisting with my research. I am a  
13 product of the educational opportunities and  
14 research training made possible by Mystic  
15 Aquarium veterinarians and scientists. Dr. Tracy  
16 Romano is an extremely important mentor to me as  
17 a scientist and her support and guidance made my  
18 Ph.D. research possible. I intend to continue to  
19 collaborate with the Mystic Aquarium research  
20 team as we work together on our shared passion of  
21 beluga conservation.

22 This effort is a deeply personal one



1 for me. There is no doubt that I am doing what  
2 I'm doing today because of my experiences at zoos  
3 and aquariums as a child and my experience as a  
4 husbandry professional at Mystic Aquarium. I  
5 have devoted my professional life to advancing  
6 our understanding of these animals with the  
7 ultimate goal of conserving the species for  
8 future generations.

9           During my 20-year affiliation with  
10 Mystic Aquarium, I've been fortunate to  
11 contribute to this goal as an educator, trainer,  
12 and researcher. My wife, an expert in beluga  
13 husbandry with 20 years of professional  
14 experience, shares my passion for beluga  
15 conservation. I am inspired by the hard work,  
16 compassion, and expertise that it takes to  
17 provide exceptional care for the animals that we  
18 are learning so much from.

19           Through the skilled training of the  
20 whales by Mystic trainers and the expertise in  
21 the marine mammal veterinarians using non-  
22 invasive methods, Mystic Aquarium routinely

1 provides novel data on belugas that has  
2 implications for the management of wild belugas.  
3 Having a larger social group of belugas at Mystic  
4 will facilitate more valuable research that is  
5 crucial as wild populations increasingly require  
6 active management due to anthropogenic factors  
7 and I look forward to contributing to these  
8 efforts. Thank you for the opportunity to  
9 express my support.

10 MS. SLOAN: Okay, the next speaker  
11 will be Tonia Osborne from Mystic Aquarium.

12 MS. OSBORNE: My name is Tonia and my  
13 Inupiaq name is Tyonek (phonetic). I grew up in  
14 Northwest Alaska near the ocean. Our family and  
15 whole community depends on traditional foods to  
16 survive and thrive.

17 Living in Alaska is extremely  
18 expensive with limited food availability. In  
19 village stores what is available is either frozen  
20 or off the shelf. For this reason, many families  
21 depend on subsistence hunting of traditional  
22 foods such as seals, whales, fish, and caribou as

1 they have been for millennia. These animals  
2 weren't only a source of food, but also became  
3 incorporated into a medicine and identity to this  
4 day.

5 My cultural identity and passion for  
6 science has allowed me to combine indigenous and  
7 traditional knowledge with western science. The  
8 Mystic Aquarium's National Science Foundation  
9 funded research internship, I had the amazing  
10 opportunity to participate in beluga whale  
11 research at Mystic Aquarium and travel to the  
12 Arctic to conduct research.

13 At the aquarium, my mentor, Dr. Tracy  
14 Romano and her team of conservation researchers  
15 taught me not only laboratory protocol, but also  
16 how to collect--how you are utilizing aquarium  
17 belugas to collect non-invasive biological  
18 samples, via their blow spray, to learn about  
19 their health.

20 I had the amazing opportunity to  
21 participate in beluga whale research and join the  
22 cultural exchange between Mashantucket Pequot

1 Tribe and the Inupiat people of the Arctic.  
2 Through these close collaborations between  
3 scientists and indigenous people, we were able to  
4 conduct beluga whale research and ensure their  
5 future health.

6 Mystic Aquarium is a global leader in  
7 beluga whale research. With climate change  
8 happening at an increased rate in the Arctic, it  
9 is important that we continue research on Arctic  
10 marine mammals to help us better understand its  
11 effects.

12 It is important that beluga research  
13 in aquariums and in the Arctic continues. We  
14 must maintain collaboration between conservation  
15 researchers and those who hold traditional  
16 knowledge, such as those relationships Dr. Tracy  
17 Romano has worked hard to create and maintain to  
18 this day.

19 During my internship I have been  
20 inspired to continue marine mammal research at my  
21 university in Alaska and to contribute what I can  
22 to research and conservation of whales. So one

1 day I hope I will be a reliable resource in my  
2 community.

3 I encourage you to approve this permit  
4 to ensure the future of belugas for generations  
5 to come. Their importance is not only a  
6 necessary component in our ecosystem, but also to  
7 our cultural heritage and identity.

8 MS. SLOAN: Next will be Dr. Paul  
9 Boyle from American Humane.

10 MR. BOYLE: Good afternoon. I'm Dr.  
11 Paul Boyle, National Director of the Humane  
12 Certified Zoos and Aquariums Program at American  
13 Humane. I'm here to support Mystic Aquarium's  
14 beluga permit application.

15 I've worked in the zoo and aquarium  
16 community for 35 years. And formerly as the  
17 Executive Director of a New York Aquarium, I had  
18 beluga whales in my care which I chose to move to  
19 a larger facility because it was best for their  
20 long-term welfare. This experience is  
21 specifically why I strongly recommend moving the  
22 five beluga whales to Mystic which has the

1 largest beluga habitat in the United States.

2 American Humane is the first national  
3 humane organization founded in 1877 focused on  
4 animal welfare that's rooted in science. Today's  
5 aquariums and zoos play critical roles in  
6 conservation and educating people about the  
7 extraordinary species that share this planet with  
8 us.

9 American Humane launched the Humane  
10 Certified Program in 2015 as the first, third-  
11 party certification dedicated solely to the  
12 welfare of animals in zoos and aquariums. Mystic  
13 was one of the inaugural institutions to be  
14 assessed by our independent auditors using  
15 rigorous welfare measures in a certification  
16 process that is the leader in animal welfare  
17 assessment world wide. Mystic also is the only  
18 aquarium to hold a USDA scientific research  
19 license.

20 Their proposal is compelling. Mystic  
21 has conducted high-quality research on belugas  
22 for over 40 years, making it a global center of

1 excellence in beluga biology, ecology, and  
2 diverse other scientific subjects that are  
3 increasingly vital to beluga sustainability in  
4 the wild.

5           Mystic publishes its scientific  
6 findings in the peer-reviewed literature and then  
7 translates the science into engaging stories for  
8 the public, infusing hundreds of thousands of  
9 visitors, teachers, and school children in the  
10 fascinating science of whales in a rapidly-  
11 changing world.

12           The scientific promise of the Mystic  
13 proposal was most evident to me in its hosting  
14 the 2019 Second International Workshop on Beluga  
15 Whale Conservation and Research. This was the  
16 most impressive workshop that I have attended in  
17 35 years as a scientist and conservationist which  
18 was so because Mystic succeeded in bringing  
19 together all beluga whale stakeholders,  
20 scientists from across the U.S., Canada, and  
21 other countries, U.S. and Canadian regulators,  
22 and Inuit tribal leaders with all of them

1 together focused on beluga population  
2 sustainability. It was compelling evidence of  
3 Mystic's leadership in forwarding science that  
4 today is informing the regulation of belugas in  
5 the wild and even it's positively influencing  
6 AMMPA authorized tribal hunting practices.

7 We're all familiar with the hope for  
8 science results to inform conservation in the  
9 field and in the case of Mystic's proposal that  
10 outcome is already happening. The NOAA website  
11 reports that NOAA Fisheries is committed to  
12 conserving beluga whales and protecting and  
13 rebuilding depleted and endangered populations.  
14 American Humane strongly urges NOAA Fisheries to  
15 approve Mystic's forward-thinking proposal for  
16 its convincing science, demonstrated  
17 collaboration, and intense focus on forwarding a  
18 safe future for beluga whales. And most  
19 importantly, American Humane believes the  
20 belugas' new home at Mystic will be comfortable  
21 and humane with excellent care and welfare.  
22 Thank you.



1 MS. SLOAN: The next speaker will be  
2 Kelly Jaakkola from AMMPA. Did I get that right,  
3 Kelly?

4 MS. JAAKKOLA: Yes, that's right. My  
5 name is Dr. Kelly Jaakkola. I'm an MIT-trained  
6 scientist who's conducted research with cetaceans  
7 for more than 20 years. As such, I want to be  
8 clear, that there is no doubt that research with  
9 cetaceans in marine mammal facilities has been  
10 crucial in helping scientists understand these  
11 animals. And, there is also no doubt that the  
12 knowledge gained from that research informs and  
13 positively impacts conservation efforts with wild  
14 cetaceans.

15 The vast majority of what we know  
16 about cetaceans' perception, physiology,  
17 cognition, healthcare, has been discovered by  
18 research conducted in marine mammal facilities.  
19 This includes basic information about these  
20 animals such as their echolocation and how that  
21 works, diving physiology, metabolism, gestation  
22 periods, hearing range, and so forth. And it

1 also includes applied information such as how to  
2 diagnose and treat their diseases. These kinds  
3 of advances are only possible by working up close  
4 with individual known animals over extended  
5 periods of time. That's the only way to set up a  
6 situation that's controlled and consistency that  
7 you need. It's the only way to know whether and  
8 how the data vary over individuals' time of day,  
9 whether an animal recently ate, and so forth.

10 This research for marine mammal  
11 facilities directly informs conservation efforts  
12 by developing health assessment techniques that  
13 can then be used to assess wild mammals. This  
14 includes things like how to detect hormones and  
15 immune components, not just in their blood, but  
16 also less invasive samples like their saliva,  
17 breath, and feces.

18 Figuring out the logistics of  
19 collecting biological samples and information  
20 non-invasively such as using drones for photos  
21 and breath collection, developing a way to  
22 passively test an animal's hearing by measuring

1 its brain waves or developing a respiratory flow  
2 meter to be able to analyze an animal's lung  
3 function.

4 This research also provides baseline  
5 information that tells us what typical healthy  
6 ranges are on all of these assessments which is  
7 what allows us to interpret the data from the  
8 wild animals. So because of this, biologists  
9 working on the conservation of these animals in  
10 the wild will not need to guess about the health  
11 and conditions of animals and populations. They  
12 can use photos and samples collected from drones  
13 to determine the body condition and health status  
14 of free-swimming animals. They can also triage  
15 stranded animals to immediately know if that  
16 animal has respiratory problems or a hearing  
17 problem which is going to affect how they treat  
18 that animal. Which brings me to this particular  
19 research permit.

20 Mystic Aquarium is already doing this  
21 type of research with their belugas. They've got  
22 a state-of-the-art, beautiful facility and a

1 highly qualified team of scientists, marine  
2 mammal experts, and veterinarians working there  
3 with their animals. But to do this kind of  
4 research most effectively, you need more than  
5 just a few animals. Animals vary, just like  
6 people vary, so if you want to know what a  
7 representative range is, whether that's of  
8 hearing or body condition or concentration of  
9 particular hormones, you have to have a big  
10 enough sample size to give you that  
11 representation. The five animals in question  
12 were all born in human care and are all currently  
13 living in an over-crowded facility.

14 So whether you're looking at what's  
15 best in terms of research or conservation or  
16 individual animal welfare, all three point to  
17 approving this program. And I hope that's what  
18 you will do. Thank you.

19 MS. SLOAN: Next I'd like to invite  
20 Greg Marshall. He's here representing himself.

21 MR. MARSHALL: Good afternoon. I'm  
22 Dr. Greg Marshall. I am the inventor of

1 Crittercam. I'll be talking about some of my  
2 experience with Mystic developing the capability  
3 of Crittercam for use with wild free-ranging  
4 animals, beluga whales in particular.

5 Crittercam, if you don't know, is an  
6 imaging data logging instrument developed to  
7 study wild, free-ranging animals. Deployed with  
8 the animal, video and environmental data we  
9 collect from the animal's point of view provides  
10 important information and insights into the  
11 animal's behavior and ecology in places we simply  
12 cannot be.

13 This facilitates new understanding of  
14 factors influencing many aspects of animal  
15 biology over spatial and time frames that are  
16 relevant to the animals themselves.

17 In my life history, so in the course  
18 of my career, mostly with National Geographic  
19 Society, I've worked with more than 80 species in  
20 remote corners of the world. These studies  
21 revealed many new insights into how animals  
22 function and survive in places we cannot

1 routinely access. Such information is critical  
2 to management and conservation efforts since we  
3 can't effectively protect something we don't  
4 understand.

5 My research collaborators and I have  
6 published more than 60 research papers, peer-  
7 reviewed papers on this work, most recent of  
8 which is the galley proofs that I got last week.

9 The fundamental premise of this work  
10 is that free-ranging animals, wild, free-ranging  
11 animals, behaving normally in their natural  
12 environment, can teach us important things about  
13 what they need to survive and thrive. Our  
14 challenge is to see those things and to ensure to  
15 the very best of our ability that what we are,  
16 what we observe, and what we document, in fact,  
17 represents normal, natural behavior. This is  
18 extremely challenging since much of what we  
19 record in Crittercam's onboard video have never  
20 been seen before.

21 So how do we try to ensure that the  
22 animals are, in fact, behaving normally while

1 carrying our instruments? Well, we've employed a  
2 number of conservative strategies. We designed  
3 Crittercam systems to be small, streamlined, and  
4 intrusive as possible. We developed the most  
5 benign and adaptive deployment techniques  
6 possible and critically and of course, most  
7 relevant to today's discussion, whenever possible  
8 we test any of our novel ideas, novel concepts,  
9 in systems under tightly-controlled conditions.  
10 Of course, this is where my relationship with  
11 Mystic Aquarium comes into play. Having access  
12 to animals under human care is incredibly  
13 valuable for evaluating the efficiency of any  
14 potential new animal borne instrument.

15 Under closely-controlled conditions  
16 and working with professionals, care for, and in  
17 my experience with Mystic Aquarium care about the  
18 animals in their care, we're able to work with  
19 the most qualified and considered experts to  
20 design, test, and improve field equipment before  
21 it's ever deployed in the wild.

22 This takes work and partners who share

1 a commitment to a meaningful research that is  
2 safely, properly, and effectively pursued. My  
3 experience with the Sea Research Foundation has  
4 been such a partner.

5           Needless to say, during the tests that  
6 we've done, I've been very impressed with the  
7 quality of the facilities at Mystic Aquarium and  
8 more importantly, the professionalism, the  
9 scientists, and staff and their obvious concern  
10 for the animals in their care was evident in  
11 every aspect of my experience there. Clean, well-  
12 managed facilities, meaningful and stimulating  
13 interaction with the animals, and importantly,  
14 for my specific interest, engaged in effective  
15 oversight of the controlled tests we conduct.

16           These are good people whose first and  
17 foremost interest is in the welfare of the  
18 animals they look out for. Whales born under  
19 human care and whose lives and welfare were  
20 almost certainly were connected to a human  
21 support system, I can't think of a better place  
22 to be or in better hands to be than at Mystic.



1 I'm very happy to support this permit application  
2 and hope you will as well. Thank you.

3 MS. SLOAN: I would like to invite  
4 Melanie Johnson from PETA.

5 MS. JOHNSON: I'm Melanie Johnson from  
6 PETA. As will be discussed in detail in the  
7 written comments submitted by PETA and a  
8 coalition of NGOs, the Marine Mammal Protection  
9 Act simply prohibits the importation proposed by  
10 Mystic Aquarium. The MMPA imposes a strict  
11 moratorium on the taking and importation of all  
12 marine mammals subject to a few narrow  
13 exemptions.

14 Individuals from a depleted population  
15 and their progeny receive additional protections.  
16 As an initial matter, all the mothers of the  
17 whales to be imported were captured from the  
18 depleted Sakhalin Bay, Nikolai Bay, Amur River  
19 population. The fathers were captured from the  
20 same population or the White Sea which is  
21 considered to be of moderate conservation concern  
22 by the international scientific community due to

1       insufficiency of data and concerns related to  
2       pollution, vessel traffic, and tourism  
3       activities.

4               As progeny of one depleted population  
5       and one of unknown conservation status with the  
6       burden on Mystic to show it is not depleted,  
7       greater restrictions apply to the whales Mystic  
8       seeks to import. Critically, the MMPA prohibits  
9       the importation of individuals from depleted  
10      populations for public display, even if that  
11      display is considered incidental to research.

12             In enacting the MMPA, Congress placed  
13      a clear prohibition on public display import  
14      permits for its depleted stocks of marine  
15      mammals. When NMFS issued its final rule  
16      designated the Sakhalin Bay, Nikolai Bay, Amur  
17      River beluga whales as depleted, it likewise  
18      declared that quote importation of beluga whales  
19      from this population or their progeny into the  
20      United States for the purpose of public display  
21      will now be prohibited end quote.

22             It is summarily clear that NMFS does

1 not have the authority to allow public display of  
2 depleted whales incidental to a scientific  
3 research permit. The MMPA explicitly authorizes  
4 the Agency to allow for public display of  
5 depleted marine mammals incidental to an  
6 enhancement permit. However, the MMPA does not  
7 authorize the Agency to allow public display of  
8 depleted marine mammals incidental to a  
9 scientific research permit.

10 The Supreme Court has made clear quote  
11 that when Congress includes particular language  
12 in one section of a statute, but omits it in  
13 another, let alone in the very next provision,  
14 the court presumes that Congress intended a  
15 difference in meaning, end quote.

16 Accordingly, the Agency cannot allow  
17 for public display of a depleted marine mammal  
18 incidental to a scientific research permit. Even  
19 if Congress had authorized NMFS to allow public  
20 display incidental to a research permit, full  
21 time public display is not incidental to  
22 research.

1           Mystic also fails to meet several of  
2           the threshold conditions to obtain a research  
3           permit. First, the research can be accomplished  
4           using non-depleted animals including with some of  
5           the 30 belugas currently in United States  
6           facilities with which Mystic admittedly  
7           collaborates. Mystic admits that it shows these  
8           belugas to be imported, not because of their  
9           heritage, but because they were all born in  
10          captivity and are trainable. In fact, they were  
11          all born and raised in captivity and all but one  
12          is a hybrid of two geographically and genetically  
13          separated populations. These inherent  
14          confounding variables undermine any purported  
15          justification for specifically using progeny of a  
16          depleted population to help that wild population.

17                 Mystic also asserts that the studies  
18                 are not feasible at other facilities that  
19                 currently hold belugas. Yet, it also has its  
20                 former collaboration with Georgia Aquarium and  
21                 asserts that if any of the whales needed to be  
22                 moved there for social, health, or welfare

1 reasons, the identical research would continue  
2 without exception. These positions are  
3 irreconcilable.

4 Second, this import would likely have  
5 a negative impact on the population or result in  
6 taking of additional marine mammals by increasing  
7 the demand for captive belugas. In short, the  
8 MMPA prohibits the import of cetaceans from a  
9 depleted population or their progeny for  
10 scientific research with incidental public  
11 display. And even if it were permitted, Mystic  
12 cannot meet its burden to satisfy the stringent  
13 threshold requirement.

14 I urge the Agency to adhere to the  
15 clear restrictions that Congress imposed and deny  
16 the permit application.

17 MS. SLOAN: The next speaker is Roslyn  
18 Gilhuly from Mystic Aquarium.

19 MS. GILHULY: Good afternoon. My name  
20 is Roslyn Gilhuly. I'm a member of Mystic  
21 Aquarium's Leadership Team. I'm the Senior Vice  
22 President of External Relations. I've been

1 employed by Mystic for over a decade. I'm also a  
2 native of Connecticut and have visited Mystic  
3 since my childhood.

4 Mystic has a long and storied history.  
5 Since 1973, we have hosted more than 20 million  
6 visitors, provided direct educational programs  
7 for over 2 million children and adults, published  
8 more than 150 scientific reports, and pioneered  
9 the current study of thousands of species of  
10 marine life.

11 I am proud to be part of this  
12 organization. Throughout my tenure, I have seen  
13 firsthand the world-class care provided to all  
14 animals at Mystic Aquarium and the deep and  
15 unwavering commitment at every level of the  
16 organization to both local and global action for  
17 protection of the ocean and its inhabitants.

18 Mystic Aquarium is a leader in the  
19 field of marine mammal research and conservation.  
20 Our team, led by Chief Scientist, Dr. Tracy  
21 Romano, has been at the forefront of whale  
22 conservation for more than 30 years. Mystic

1        Aquarium is the only facility in the United  
2        States that cares for beluga whales that holds a  
3        research license. It speaks to the  
4        organization's history as a research facility  
5        first and foremost.

6                    When not in the field, our team of  
7        researchers works in state-of-the-art  
8        laboratories at the University of Connecticut's  
9        Avery Point campus. Mystic Aquarium's  
10       application for a research permit to import five  
11       beluga whales, born in human care at MarineLand  
12       Canada is a critical piece of our efforts to  
13       inform policy and action for wild populations of  
14       belugas and other species. This research must  
15       take place at Mystic Aquarium and not at  
16       MarineLand in order to further the non-invasive  
17       data collection methods we have pioneered. At  
18       risk is the potential viability of samples  
19       collected offsite and transported. Timing and  
20       other factors can prevent the samples from making  
21       it to their destination, thereby damaging the  
22       very data needed to validate the research.

1           The five whales proposed for import  
2           were all born under human care, as you've heard  
3           before earlier today, and will thrive in Mystic's  
4           Arctic Coast habitat, the largest outdoor whale  
5           habitat in the United States. The Mystic habitat  
6           is designed and extensively equipped and  
7           certified for beluga research. It is a hub for  
8           beluga scientists and conservationists providing  
9           unique accessibility to study belugas in ways not  
10          possible in wild settings.

11           Mystic's ethical approach is the  
12          absolute best solution for individual animals  
13          that will otherwise live in a crowded pool or  
14          hypothetically be released in the future to a sea  
15          sanctuary that not only does not yet exist, but  
16          is unproven and risky.

17           At Mystic, the whales will benefit  
18          immediately and help advance knowledge for  
19          survival of the species and other cetaceans that  
20          are threatened or endangered. Mystic Aquarium's  
21          application for a research permit to import these  
22          five whales should be approved for the sake of



1 the individual animals involved and for the  
2 health of the species now and in the future.  
3 Thank you.

4 MS. SLOAN: I'd like to invite Steve  
5 Coan from Mystic Aquarium to come speak.

6 MR. COAN: Thank you. I want to share  
7 with you a letter from -- a joint letter from  
8 Senator Richard Blumenthal of Connecticut and  
9 Senator Christopher Murphy of Connecticut in  
10 support of Mystic Aquarium's application.

11 There are three points, two points  
12 that I want to stress that are made by the  
13 Senators. One is that this proposal to import  
14 beluga whales is good for the animals. So it  
15 does address the welfare of the individual  
16 animals involved. And secondly, it significantly  
17 advances conservation research for belugas and  
18 cetaceans.

19 This is addressed to Mr. Chris Oliver,  
20 the Assistant Administrator for Fisheries and I  
21 will read in part the letter in part, two  
22 paragraphs. We support importation of these

1 whales consistent with current law from the  
2 overcrowded MarineLand facility to be housed at  
3 Mystic Aquarium for the duration of the permit.  
4 Mystic Aquarium is a clear leader in beluga care  
5 and research whose findings directly benefit  
6 endangered populations such as those in Cook  
7 Inlet, Alaska, and the St. Lawrence estuary in  
8 Quebec. We believe the movement of these animals  
9 to Mystic Aquarium will assist in advancing the  
10 published research and management priorities for  
11 belugas.

12           The National Oceanic and Atmospheric  
13 Administration, NOAA's recovery plan for the Cook  
14 Inlet beluga whale identifies several knowledge  
15 gaps in our understanding of beluga biology that  
16 impede recovery and conservation. Mystic  
17 Aquarium is assisting with filling in those gaps  
18 by studying the belugas in their care for  
19 responses to environmental stress, developing and  
20 validating non-invasive methods to assess health,  
21 responses to anthropogenic sound, diving  
22 physiology, micro biome regulation and

1 disruption, reproductive behavior, and the  
2 feasibility of deploying cameras and telemetry  
3 devices on whales. The addition of these five  
4 animals will provide a larger sample size for the  
5 aquarium's scientists undertaking these eight  
6 crucial investigations.

7           Mystic Aquarium has a long track  
8 record of excellence in beluga research and care.  
9 The program operates in close collaboration with  
10 the University of Connecticut and other aquaria  
11 and is accredited by American Humane and the  
12 Association of Zoos and Aquariums. The beluga  
13 habitat at the aquarium was designed and recently  
14 improved for research and the animal husbandry  
15 staff train animals at Mystic Aquarium to  
16 voluntarily participate in non-invasive research.  
17 The belugas for which the aquarium is applying  
18 for a permit are all captive born, non-releasable  
19 animals living in overcrowded conditions at  
20 MarineLand.

21           There is slightly more to the letter.  
22 The letter has been entered into the record and

1 signed by Richard Blumenthal, United States  
2 Senator, and Christopher Murphy, United States  
3 Senator. Thank you.

4 MS. SLOAN: The next speaker will be  
5 Tom Mosey of Mystic Aquarium.

6 MR. MOSEY: Thank you very much. My  
7 name is Tom Mosey. I'm the CEO and President of  
8 Mini Melts, Inc., an ice cream company, and I  
9 also own a commercial real estate company in  
10 Dallas, Texas.

11 I've been a member of the Mystic  
12 Aquarium Board of Trustees for ten years. I'm  
13 currently the Vice Chairman. The reason I became  
14 involved with Mystic Aquarium was because what it  
15 provided to my family, my two young children at  
16 the time, to see what I've seen as an avid scuba  
17 diver for the last 30 years diving all over the  
18 world. And as we've heard testimony today, over  
19 800,000 people have had that ability to really  
20 come first hand to our incredible ocean planet.

21 I'm very proud to be part of this  
22 organization and I've seen firsthand the world-

1 class care that the animals at Mystic Aquarium  
2 are provided and the deep, unwavering commitment  
3 at every level to the local and global action for  
4 the protection of the ocean and its inhabitants.

5 I've traveled extensively throughout  
6 the world in my work and related to scuba diving  
7 and I've seen firsthand for myself the  
8 deterioration in our environment. A few years  
9 ago, I climbed Kilimanjaro, the glaciers that  
10 once covered pretty much covered the whole summit  
11 is practically gone. My family has traveled to  
12 the Antarctic and we saw firsthand the incredible  
13 melting that's going on there. The Arctic is  
14 thawing faster than ever before. And habitat  
15 loss for Arctic species is real and it's  
16 happening now.

17 Mystic Aquarium is the leader in the  
18 field of marine mammal research and conservation.  
19 Our team is led by Chief Scientist Dr. Tracy  
20 Romano, has been at the forefront of whale  
21 conservation for more than 30 years. Mystic  
22 Aquarium is the only aquarium, as we've already

1 heard a few times, in the United States to hold a  
2 research license. It speaks to the  
3 organization's history as a research facility  
4 first and foremost.

5           Mystic Aquarium's application for  
6 research permit to import five captive-born  
7 beluga whales from MarineLand Canada is a  
8 critical piece of our effort to inform policy and  
9 action for wild populations of belugas and other  
10 species of whales including the Northern right  
11 whale.

12           The five whales proposed for import  
13 were all born under human care at MarineLand  
14 Canada and will thrive in Mystic's Arctic Coast  
15 habitat, the largest outdoor whale habitat in the  
16 United States as we've heard. The Mystic habitat  
17 is designed and extensively equipped and  
18 certified for beluga research. It is a hub for  
19 beluga scientists and conservationists providing  
20 unique accessibility to study belugas in a way  
21 not possible in wild settings.

22           Mystic's ethical approach is the

1 absolute best solution for the individual animals  
2 that will otherwise live in crowded pools as  
3 we've heard or hypothetically released to sea  
4 sanctuaries that don't exist at the present.

5           Mystic's application for a research  
6 permit to these five whales should be approved  
7 for the sake of the individual animals in  
8 question and for the health of the species now  
9 and in the future. Thank you very much for your  
10 time.

11           MS. SLOAN: The next speaker will be  
12 Dan Ashe from the Association of Zoos and  
13 Aquariums.

14           MR. ASHE: Good afternoon. I am Dan  
15 Ashe, the President and CEO of the Association of  
16 Zoos and Aquariums and AZA supports Mystic's  
17 application to import these five beluga whales  
18 all of which have been born in human care and are  
19 currently living at MarineLand Park in Ontario,  
20 Canada.

21           AZA is a nonprofit membership  
22 organization. Membership status requires that an

1       aquarium or zoo meet our rigorous accreditation  
2       standards, the gold standard world wide for a  
3       zoological institution.

4               Mystic Aquarium is not simply a member  
5       of AZA, but it's a leader amongst the AZA  
6       community.

7               Prior to joining AZA in January of  
8       2017, I had a 22-year career at the United States  
9       Fish and Wildlife Service, the last 6 serving as  
10      the Senate-confirmed Director of the U.S. Fish  
11      and Wildlife Service. So I have a good sense of  
12      the decision that you're being asked to make in  
13      considering this application and I'm confident  
14      that this application is in the interest of the  
15      individual animals and the conservation and  
16      management of belugas in nature.

17              In my view, the application warrants  
18      approval for three principal reasons all of which  
19      you've heard today. It will facilitate bona fide  
20      and relevant scientific research furthering the  
21      understanding and conservation of beluga whales.  
22      It will improve the welfare and care of these



1 individual animals and it will engage and inspire  
2 the public to conserve beluga whales and other  
3 cetaceans.

4 Scientific research is the crux of the  
5 decision before you. We need to better  
6 understand these animals and it's expensive and  
7 difficult to study them in nature. Ex situ study  
8 plays an essential role in filling gaps and  
9 ensuring that in situ research is better focused,  
10 more effective, and safer for the animals being  
11 studied.

12 Mystic Aquarium and the Sea Research  
13 Foundation have a core team of five full-time  
14 scientists studying beluga whales within a larger  
15 world renowned marine science research program.  
16 The research is conducted to a state-of-the-art  
17 facility at the University of Connecticut Avery  
18 Point by these scientists holding faculty  
19 appointments with proven publications, records,  
20 and dedicated to non-invasive beluga research.

21 The importation will facilitate unique  
22 accessibility to study belugas in ways that are

1 not possible or practicable in wild settings.  
2 Approval of this importation will improve the  
3 care and welfare of these five beluga whales.  
4 They'll be moved from a well-managed, yet  
5 unaccredited facility, to an AZA accredited and  
6 exceptionally designed habitat. And they'll  
7 receive individual care and enrichment. Moving  
8 these animals will also reduce crowding at  
9 MarineLand further benefitting the remaining  
10 animals.

11 Preventing extinction of belugas and  
12 other cetaceans requires two things: greater  
13 understanding of their biology and ecology which  
14 has been discussed here, and a public that's  
15 informed, engaged, empathetic, and inspired to  
16 action. Mystic Aquarium has proven capacities to  
17 couple powerful scientific research with  
18 inspiring, impactful, public outreach and  
19 education. By approving this permit request  
20 you'll make a positive difference. Thank you.

21 MS. SLOAN: The next speaker will be  
22 Courtney Vail from OPS.

1                   MS. VAIL: Good afternoon. The modern  
2                   aquarium community including Mystic has done much  
3                   to respond to imperiled marine life including  
4                   serving on the front lines of strandings,  
5                   entanglements, and rescues. The value of  
6                   research to these endeavors is not in dispute.  
7                   The justification behind this permit is indeed  
8                   research for a depleted and endangered  
9                   populations of beluga whales while, of course,  
10                  benefitting from the public display of those  
11                  whales as well.

12                  Mystic knows the importance of  
13                  collecting data that understands and serves wild  
14                  beluga populations. This is commendable.  
15                  However, there's a fundamental issue that is lost  
16                  to the conversation I think all too often, to the  
17                  protection and sustainability of beluga  
18                  populations in the wild. That doesn't require  
19                  additional physiological or behavioral data and  
20                  that is the on-going acquisition from the wild to  
21                  public display. Belugas have been targeted for  
22                  decades for the global aquarium trade including

1 those wild-caught parents of the captive-born  
2 whales proposed for import and is a primary  
3 threat to this depleted population.

4           Russia exploited at least 237 beluga  
5 whales between 1990 and 2010 and it is this  
6 global market that resulted in the most recent  
7 combined capture of at least 100 orcas and  
8 belugas in the 2018 capture season. Of the  
9 belugas that did survive that capture, most were  
10 believed to have been returned over the last  
11 several months, but only after public pressure on  
12 the Russian Government, made it an imperative to  
13 do so.

14           Unfortunately, despite those releases,  
15 we understand that there is a capture ship  
16 waiting in bay to potentially descend upon that  
17 population again, the very same population that  
18 is the progeny of which are the subject of  
19 imports.

20           So this isn't just a Russia or a China  
21 problem, nor are the impacts of this permit  
22 isolated to North America. As long as Russian

1 belugas are moving around the globe, capture  
2 operators have a strong motivation to continue  
3 their operation, so this is all of our problem.  
4 Whether for research or public display, any trade  
5 in cetaceans does increase the demand for and  
6 encourages the capture of these species from the  
7 wild. I don't think that's really in dispute.  
8 Even with decades of breeding experience and  
9 relative success, the global-caught populations  
10 are not self-sustaining. This is not a  
11 hypothetical argument to suggest that this kind  
12 of action may result in additional takes from the  
13 wild.

14 As a collective community concerned  
15 with welfare and sustainability of cetaceans, we  
16 can no longer ignore the localized and intense  
17 pressure that continues to be exerted upon wild  
18 populations that are targeted for capture because  
19 the demand is global. Addressing this threat  
20 doesn't require additional scientific research,  
21 but it does require Mystic, the public display  
22 community, and NMFS to broaden their

1 perspectives, examine the trade links, and think  
2 more globally.

3 In closing, the international trade in  
4 belugas and other cetaceans is relevant to this  
5 permit application whether it's apparent or not.

6 I think many of us are seeking real action for  
7 depleted populations, not just for data  
8 collection and research that may not ever be  
9 directly applied where it counts. I wonder if  
10 the relative silence from the public display and  
11 aquarium community in regards to these ongoing  
12 and unsustainable captures is a reflection  
13 perhaps of a deep-seated concern that the supply  
14 chain will ultimately dry up if these captures  
15 are confronted. But from my perspective an  
16 aquarium's commitment to not source from the wild  
17 should be standing enough to confront the bad  
18 actors in the room, in this case, the bad actors  
19 in the international public display community.

20 If we are justifying all research and  
21 trade activities as necessary for conservation,  
22 then aquaria participating in trade are even more

1 obligated to keep up to addressing unsustainable,  
2 irresponsible, and often inhumane acquisition of  
3 belugas and other cetaceans from the wild. For  
4 your consideration, thank you.

5 MS. SLOAN: The next speaker is Dale  
6 Wolbrink from Mystic Aquarium.

7 MS. WOLBRINK: My name is Dale  
8 Wolbrink and I am here to urge you to approve the  
9 Sea Research Foundation's permit to import five  
10 beluga whales born in human care.

11 This testimony, whether in support or  
12 opposition, has one common theme, the well being  
13 of beluga whales today and into the future.

14 There is also consensus that research  
15 work outlined in the permit is important to  
16 species conservation, while conservation is a key  
17 is the point at which opinions diverge.

18 There is concern about this permit  
19 creating a precedent. For more than 40 years,  
20 scientific research has been the core of Sea  
21 Research Foundation's mission and Mystic  
22 Aquarium, the only beluga care facility in the

1 United States to hold a research permit. Sea  
2 Research Foundation's Mystic Aquarium meets a  
3 credible benchmark. The principal investigator  
4 on this permit is Chief Scientist Dr. Tracy  
5 Romano. She is the founder of the of the field  
6 of marine mammal neuro-immunology and is the  
7 leader in the field of marine mammal health. She  
8 is respected by scientists, indigenous  
9 communities, wildlife managers, and policy  
10 makers. Her record is cited by both colleagues  
11 and opposition. Dr. Romano's co-PIs are  
12 respected, up and coming conservation researchers  
13 that are also having a strong impact on cetacean  
14 studies today and will continue to do so for many  
15 years to come. This sets the bar very high.

16 Animal care at Mystic Aquarium is  
17 second to none. A staff of four veterinarians  
18 and animal care teams that specialize in beluga  
19 whales provide regular, preventative health care,  
20 focus on enrichment, and ensure integrated  
21 behavioral choice for every animal at Mystic  
22 Aquarium. This meets and exceeds care



1 expectations.

2           This permit should set a precedent.  
3 Let other applications be evaluated on the merits  
4 of which has been submitted by Sea Research  
5 Foundation's Mystic Aquarium.

6           While today's discussion is not about  
7 the value of zoos and aquariums, the value is  
8 meaningful to this discussion. The approval of  
9 the permits would result in what is termed  
10 incidental display. This does not diminish the  
11 fact that the research outlined in the permit is  
12 essential to hope to realize advancement and  
13 contribution research. Most importantly, Mystic  
14 Aquarium does not take this lightly. Every day,  
15 animal care professionals openly engage with  
16 students and families from the habitat to  
17 demonstrate animal care and the meaningful work  
18 that is being done in order to educate, inform,  
19 and inspire.

20           Some would argue that learning about  
21 places we haven't been can be done through  
22 photography or video, that it's a viable

1 replacement for an in-person education in  
2 conservation. In her paper, Learning to Care  
3 about Animal Conservation, Dr. Susan Crayton, a  
4 Whitmore Williams Professor of Psychology and a  
5 Ph.D. in Social Psychology from Yale University,  
6 cites the psychological research that shows that  
7 vivid and emotional experiences not only attract  
8 more attention, they are also better remembered.  
9 The multi-sensory, unstructured nature of the  
10 encounter provides experiences that a video  
11 cannot. People remember when the animals do  
12 something unexpected.

13 In addition to sights and sounds, even  
14 smells add to the multi-sensory richness of the  
15 experience. Dr. Crayton's studies are a powerful  
16 example of extensive research in this area. Her  
17 study goes on to say after all information is  
18 available in classrooms and on the internet,  
19 what's used can distinctively provide a direct  
20 experience of non-human animals. Such  
21 experiences have physiologically important  
22 characteristics. They are vivid and emotionally

1 rich and they are typically shared with others.

2 Her research concludes that by saying  
3 that youth can foster a culture of conservation,  
4 in fact, youth tend to show more environmental  
5 concerns and care than the average person. Zoos  
6 can help to prevent the disappearance of wild  
7 animals from our state and from our lives. Isn't  
8 that the goal of everyone in this room here  
9 today?

10 Again, I urge you to approve the  
11 research permit application. Thank you.

12 MS. SLOAN: The next speaker will be  
13 Grey Stafford, Ph.D. from Grand Canyon U.

14 MR. STAFFORD: Thank you for this  
15 opportunity to speak with you this afternoon. As  
16 was said, my name is Grey Stafford and I've been  
17 an animal trainer, zoo manager, and researcher  
18 for the past 30 years. Also as it was said I'm  
19 at Grand Canyon University on the faculty these  
20 days and I'm a past president of the  
21 International Marine Animal Trainers Association.

22 During my tenure on the Board of that

1 organization, I was thrilled to be able to be a  
2 part in the funding for the vaquita CPR project  
3 which, as many of you know, brought marine animal  
4 husbandry and veterinarian expertise and  
5 equipment to Mexico in very short order. It was  
6 a bold and an emergency attempt to help preserve  
7 the few remaining vaquita on the planet.

8 Also, as most of you know, ultimately  
9 that heroic effort was tragically stymied by our  
10 collective lack of basic knowledge in the social,  
11 ecological, behavioral, and physiological needs  
12 of this unique cetacean. Today, there are fewer  
13 than a dozen vaquita left.

14 So why talk about the zoo community's  
15 effort to save a small porpoise at a hearing to  
16 import beluga whales from Canada? The answer is  
17 simple. We might have changed the fate of that  
18 critically-endangered species had we had the same  
19 level of knowledge and experience the world seems  
20 to take for granted today about more commonly  
21 displaced species like bottlenose dolphins and  
22 killer whales. Important life history

1 information that is due to the passion and  
2 research done by professionals that regulated and  
3 accredited and certified marine mammal facilities  
4 like Mystic Aquarium.

5 Now the good news is unlike the  
6 vaquita, belugas still have some time, time for  
7 us to conduct the science necessary to understand  
8 what's happening to their polar habitat and what  
9 effect all this may have on their species' long-  
10 term survival. The cumulative impact of climate  
11 change as has been described today, beluga  
12 physiology and behavior must be vigorously  
13 investigated before the situation becomes a  
14 crisis as it did so quickly with the vaquita.

15 Already, countries are chomping at the  
16 bit to open up more sea lanes and natural  
17 resource extractions as thick sea ice disappears.  
18 These and other harmful effects on beluga ecology  
19 will require an improved ability to monitor and  
20 assess wild populations as has been stated.  
21 Ongoing necessary research, as well as the  
22 development of new methods and technologies that

1 must be validated, would not be possible without  
2 the participation of positive reinforcement  
3 training of cetaceans and the financial and human  
4 resources that support them.

5           As for the vaquita, we can only  
6 speculate what might have been had the scientific  
7 and zoological communities had the courage and  
8 political support to intervene 20 or even 10  
9 years ago when its population numbered in the  
10 hundreds or more. Sadly, the story for the  
11 vaquita today is a cautionary tale for everyone  
12 in this room and everyone concerned about this  
13 issue.

14           Which of the river dolphins or  
15 porpoises or other vulnerable cetaceans will we  
16 do to extinction next simply because we lack  
17 basic science about the behavior, ecology, and  
18 biology in a rapidly-changing world?

19           Now I get it. As a biologist, I know  
20 we have an annoying tendency to speak and make  
21 dispassionate decisions about species' needs and  
22 priorities at the population level. But it is

1 just as important for this Agency to consider the  
2 individual welfare of these five animals.

3 Reality is quite clear on this point. Other than  
4 their at-capacity home, recent political changes  
5 mean there are no facilities in Canada to take  
6 the animals. As such, NOAA has the question to  
7 answer, not if, but where will these animals be  
8 sent eventually? Where best to ensure their  
9 future welfare? And given the situation in  
10 Canada would we all not be more satisfied they  
11 come here to this country to live out their days  
12 in one of the world class beluga facilities,  
13 where they would always be under the welfare  
14 standards and oversight enforcement of NOAA  
15 Fisheries and USDA APHIS. Thank you.

16 MS. SLOAN: I'd like to invite William  
17 Kelleher from Mystic Aquarium.

18 MR. KELLEHER: I'm here to support the  
19 conservation of marine mammals. The proposed  
20 permit will advance this conservation mission. I  
21 support the issuance of the permit. The proposal  
22 has been developed from the starting point of the

1 requirements of the Marine Mammal Protection Act.  
2 It also implements the visions of the law.

3           The Marine Mammal Protection Act was  
4 enacted to reverse the dangers of depletion and  
5 extinction to remedy an adequate knowledge of  
6 ecology and factors affecting breeding. It  
7 promotes international arrangements for research  
8 and conservation. It recognizes the significance  
9 of whales and other species for their aesthetic,  
10 recreational, as well as economic values. It  
11 defines conservation and management as the  
12 collection and use of biological information to  
13 increase and maintain species and their  
14 populations. This means the law promotes all  
15 activities in modern, scientific programs such as  
16 research.

17           The research proposed in this permit  
18 is what the law defines as bona fide research,  
19 work that results in lively publications in a  
20 scientific journal and that is likely to  
21 contribute to the basic knowledge of marine  
22 mammal biology and that is likely to identify,



1 evaluate, or resolve conservation problems.

2           Mystic Aquarium is uniquely qualified  
3 to have developed this proposal and to carry it  
4 out. It is the only certified research facility  
5 in the United States. Mystic Aquarium is a  
6 center for global research in beluga whales with  
7 a core team of five full-time scientists studying  
8 belugas within a larger well renowned marine  
9 science research program. It operates state-of-  
10 the-art laboratories dedicated to beluga research  
11 and our scientists all hold faculty appointments  
12 with the University of Connecticut.

13           Its education programs operate all  
14 around the world and particularly within North  
15 American Native communities. The substance of  
16 the work proposed will expand the knowledge of  
17 the health of wild whales exposed to pollutants  
18 and other stressors, hearing, and potential  
19 effects of sound on wild populations, accurate  
20 measures of body condition and reproductive  
21 status of wild beluga populations, diving  
22 ability, and interference with this key behavior

1 that degrades the health of wild populations;  
2 bacterial infections and other diseases adversely  
3 impacting beluga populations, optimal conditions  
4 for reproduction in the wild, devices for  
5 measuring wild belugas remotely without  
6 disturbance.

7 The benefits of these advances are  
8 relevant to the active risks already faced in  
9 wild populations such as in the Cook Inlet,  
10 Alaska, the St. Lawrence estuary, and other  
11 depleted stock.

12 I urge NOAA to issue this permit for  
13 consistency with the Marine Mammal Protection  
14 Act, the benefits it will produce and to advance  
15 the international beluga conservation efforts  
16 starting with MarineLand Canada. MarineLand in  
17 Canada are embarking on a new era of conservation  
18 to marine mammal conservation. MarineLand is  
19 turning its success in captive breeding belugas  
20 for display into research and education missions  
21 under the guidance of an accredited animal care  
22 committee.

1           Canada has recently passed a new law  
2           that establishes conservation research as a basic  
3           requirement for future human care marine mammals.

4           MS. SLOAN: The next speaker will be  
5           Naomi Rose from Animal Welfare Institute.

6           MS. ROSE: Thank you for the  
7           opportunity to speak today. I'm Dr. Naomi Rose,  
8           marine mammal scientist with the Animal Welfare  
9           Institute.

10           AWI firmly opposes this proposed  
11           import of five belugas from Canada to Mystic  
12           Aquarium. We recognize the need for scientific  
13           research on belugas and other marine mammals as  
14           anthropogenic activities and impacts on the  
15           environment threaten their survival. We also  
16           recognize the quality of the research program at  
17           Mystic Aquarium. We do not argue that the  
18           applicant's research proposals overall are not  
19           bona fide. However, the laws in both Canada and  
20           the United States do not allow for this  
21           importation as others have explained.

22           The solution to this dilemma, the need

1 to conduct research on belugas versus not  
2 misusing research exemptions in the laws on both  
3 sides of the border is clear. The applicant's  
4 eight research proposals describe work that can  
5 be done MarineLand, eliminating the need for an  
6 import. In our opinion, this is the ideal  
7 outcome for the whales and the law.

8           Mystic Aquarium should invest the  
9 time, money, and staff effort needed to establish  
10 conditions at MarineLand to allow the research to  
11 be conducted there and to otherwise improve the  
12 well being of MarineLand's large beluga  
13 population.

14           We understand that there would be  
15 difficulties related to conducting some of the  
16 projects at MarineLand. But from what we read in  
17 the permit application, none of these  
18 difficulties pose insurmountable obstacles. It  
19 is not, in fact, infeasible to conduct the work  
20 at MarineLand. It's simply inconvenient to  
21 greater or lesser degrees which falls well short  
22 of the legal standard for allowing an import of a

1 depleted marine mammal for scientific research,  
2 let alone for research with incidental public  
3 display and breeding.

4 And if the research is done at  
5 MarineLand, the sample size would be far larger  
6 and would not only allow the research result to  
7 approach statistical significance, but to reach  
8 it.

9 Additionally, the conditions for the  
10 belugas at MarineLand which are infinitesimally  
11 subpar at the moment due to overcrowding, lack of  
12 shade, and to some extent husbandry practices,  
13 could be brought up to Mystic standards. The  
14 enclosures at MarineLand are similar in size to  
15 and are in fact deeper than Mystic's enclosures.  
16 They're simply too many animals in them.

17 However, now that breeding is banned  
18 in Canada for cetaceans, crowding will be less of  
19 a problem over time. The lack of shade can be  
20 easily corrected and husbandry practices can be  
21 improved.

22 Mystic makes several arguments in this

1 application to justify not pursuing the research  
2 at MarineLand. The only one that seems remotely  
3 valid in my point of view is the lack of certain  
4 infrastructure such as a specific type of freezer  
5 for maintaining samples. This seems easily  
6 rectified with an investment of funds.

7 The argument that the facility is  
8 privately owned and ownership could be  
9 transferred in my opinion is weak.

10 The concern about transferring samples  
11 in a timely way to the laboratory in Connecticut  
12 is speculative. Given that MarineLand has never  
13 provided samples under the previous owner means  
14 the logistics of transporting samples between the  
15 two facilities has never really been tested and  
16 it seems likely that as samples begin, regular  
17 movement for MarineLand to the Mystic Aquarium  
18 laboratory, the process would be expedited due to  
19 its routine nature.

20 Some of the obstacles preventing  
21 research in the past at MarineLand no longer  
22 exist, as they were largely a result of the

1 actions and positions of the previous owner. The  
2 current owners appear more receptive to  
3 collaboration and outside input. Certainly, the  
4 majority of the whales at MarineLand are  
5 available to training for research sampling and  
6 protocol as they do not perform and often have  
7 little interaction with trainers. So this is  
8 another reason why conducting the work at  
9 MarineLand would improve the welfare of whales  
10 there.

11 We believe that this is the first time  
12 anyone has attempted to import marine mammals  
13 with depleted populations or their progeny for  
14 research and given that it has never happened  
15 before, an obvious question is what happens to  
16 these whales or their progeny once research  
17 projects, as described, are completed? We have  
18 concerns that these animals may find themselves  
19 distributed into the U.S. population of captive  
20 belugas being held solely for public display  
21 somewhere and this would be unacceptable under  
22 the MMPA.

1                   So it makes sense to us that you  
2                   should bring the researchers to 50 plus belugas  
3                   than to bring 5 whales to the researchers. And  
4                   frankly, we believe that that is what the law  
5                   requires.

6                   Once again, I'd just like to emphasize  
7                   AWI is not opposing this research. We are simply  
8                   pointing out that it can be done in MarineLand.  
9                   Thank you.

10                  MS. SLOAN: Next, I would like to  
11                  invite Marc Himmelstein from NES.

12                  MR. HIMMELSTEIN: Thank you and thank  
13                  you to NOAA for holding this hearing. I think  
14                  it's fairly important.

15                  My name is Marc Himmelstein. And I'm  
16                  one of those very lucky people who had parents  
17                  who took me and my two brothers to zoos and  
18                  aquaria when we were young. And as a result, I  
19                  had a chance to become familiar with animals  
20                  which kind of being a lawyer doesn't mix  
21                  necessarily. But as I grew up, I became  
22                  interested in belugas and started looking at what



1 was going on with the population and I found that  
2 Mystic was one of those rare places in the world  
3 that really cared about their care and was  
4 interested in their scientific research.

5 To me, the petition which I support is  
6 about five whales. What can we do for those five  
7 whales and then extending that out? How can that  
8 benefit the world population of belugas? I think  
9 it's clear that what Mystic has proposed to do  
10 will enhance those five whales and the future of  
11 belugas in the future. Thank you.

12 MS. SLOAN: Next is Jason Reese, Board  
13 of Trustees, Mystic Aquarium.

14 MR. REESE: Good afternoon. My name  
15 is Jason Reese, Board of Trustees, Mystic  
16 Aquarium. You know, I know from my work running  
17 a number of congressional offices that when we  
18 were faced with a decision similar to what we're  
19 here considering today that we would always have  
20 the temptation to either try to make everybody  
21 happy or absent finding some sort of compromise  
22 simply reaffirm the status quo and move on and

1 say no.

2 I think you've heard today many of the  
3 numerous reasons why you should not give into  
4 that temptation in this case.

5 In that work, I also witnessed the  
6 beginnings of relatively troubling trends where  
7 numerous environmental groups are taking  
8 increasingly extreme stands in opposition to  
9 nearly everything on the premise that supporting  
10 any reasonable cause could give life to  
11 unreasonable ones. And in fact, in this case  
12 Mystic has heard from behind the scenes from many  
13 of the groups in opposition to it that they  
14 recognize the bona fide nature of the research,  
15 even the need to move from an inferior facility  
16 to a superior facility, and yet still they in  
17 public are not willing to offer their support in  
18 fear that it might give rise to less good actors  
19 with a precedent to do something like this in the  
20 future.

21 The application before you today  
22 represents over two years of specific work by

1 Mystic and its team to comply with every aspect  
2 of the law and regulations in this decision. But  
3 it also represents decades of work, becoming a  
4 leader in the beluga care and research world, and  
5 in fact, developing a reputation as the world's  
6 leader in beluga research as is evident from a  
7 number of the comments today around the  
8 convocation of international beluga research  
9 events and such.

10 In short, these are the good guys.  
11 They care. Their application is bone fide  
12 research, exactly what was envisioned under the  
13 MMPA and in fact, if this application can't be  
14 approved, I'm not sure I know which one can.

15 You know, I know the choice before you  
16 isn't an easy one that there is always the  
17 temptation to give into the volume of reflective  
18 response in opposition to a lot of things. But I  
19 would urge you to take this into account as you  
20 resist the temptation to reaffirm the status quo  
21 and simply say no.

22 In this case, most of the opposition

1 to Mystic in my opinion hasn't been about Mystic,  
2 what Mystic has done or hasn't done. Sadly, it's  
3 the same opposition you'd get if I were to make  
4 my personal application to study beluga whales in  
5 my back yard on occasional weekends. It doesn't  
6 really differentiate between good actors and bad  
7 actors, worthy aspirations, and sort of hair  
8 brained pipe dreams. And so the only way to get  
9 around that slippery slope argument is to -- is  
10 not to simply stick your head in the sand and say  
11 no to everything, but it's to use your  
12 discernment and your wisdom in looking over this  
13 application and using the regulations before you  
14 to make sure that it's appropriate.

15 And in saying yes, you don't just  
16 reaffirm the good work done by Mystic Aquarium  
17 and you don't just reaffirm the care that they  
18 have for the animals. But you also reaffirm the  
19 value of the MMPA regulations that you operate  
20 under. As well as you show everybody coming  
21 after us that if you put in the work, if you dot  
22 the i's and cross the t's, if you comply with

1 every aspect of the law, there is a process under  
2 which you can get to yes for the betterment of  
3 the species, for the betterment of research and  
4 human understanding, for the betterment of ocean  
5 health in the future, for the betterment of  
6 cetaceans and their good in the world. And I  
7 would urge you to take such a stance. Thank you.

8 MS. SLOAN: The next speaker I'd like  
9 to invite is Allison Tuttle from Mystic Aquarium.

10 MS. TUTTLE: Hello. My name is Dr.  
11 Allison Tuttle and I'm the Senior Vice President  
12 of Zoological Operations at Mystic Aquarium.

13 Research was a reason for opening the  
14 aquarium doors in 1973 and it is still a core  
15 pillar of our mission today, along with  
16 conservation and education. I've worked at  
17 Mystic Aquarium for 14 years.

18 While there may be philosophical  
19 differences on how it should be done, everyone at  
20 this hearing today can agree that it is critical  
21 to protect the future of our oceans and protect  
22 the future of cetaceans. The time to conduct

1 conservation research to protect Cook Inlet  
2 belugas and other populations around the world is  
3 now before their numbers dwindle dangerously  
4 close to extinction as has occurred with the  
5 vaquita.

6 Earlier this year, Mystic Aquarium  
7 convened over 100 of the greatest minds in beluga  
8 conservation with the goal of better informing  
9 conservation and management decisions of belugas.  
10 The recovery plan for Cook Inlet beluga whale has  
11 been in place since 2016 and identifies needed  
12 actions targeted at recovering the species.  
13 Through seven non-invasive research projects,  
14 Mystic Aquarium's research permit addresses ten  
15 of these critical actions. And as evidenced by  
16 our desire to collaborate with indigenous people,  
17 scientists, wildlife managers, policy makers, and  
18 beyond, Mystic Aquarium's vision is not myopic.

19 Mystic Aquarium is a research  
20 facility. We have a research license under USDA  
21 and an Institutional Animal Care and Use  
22 Committee which ensures our research is of the

1 utmost quality, is relevant, and non-invasive to  
2 our animals. With a team of leading research  
3 scientists, state-of-the-art habitat, and  
4 research laboratories, Mystic Aquarium is  
5 uniquely and ideally qualified to conduct this  
6 needed conservation research on belugas and this  
7 is work that would be difficult, if not  
8 impossible, to conduct in the wild.

9 A bona fide science addresses critical  
10 actions identified in the recovery plan and will  
11 provide information applicable to the biology and  
12 ecology of wild belugas.

13 Mystic Aquarium's outdoor habitat also  
14 provides the opportunity for the public to learn  
15 about research and conservation issues facing  
16 belugas in real time. There is no other place  
17 for this research to occur making incidental  
18 display necessary. This is similar to the  
19 current situation with the now rehabilitated Cook  
20 Inlet Beluga, Tyonek, currently held under a  
21 research permit on incidental public display at a  
22 facility in the U.S.

1                   With the support of Georgia Aquarium,  
2                   an organization with a track record of providing  
3                   support for critically important conservation  
4                   research on many species, the five aquarium  
5                   belugas identified for travel to Mystic Aquarium  
6                   that are currently living in a cohort of over 50  
7                   belugas will benefit from our world-renowned care  
8                   while taking part in critically-needed research  
9                   to protect their wild counterparts.

10                   Mystic Aquarium will work with  
11                   MarineLand such that the belugas remaining there  
12                   will over time participate in some level of  
13                   research to benefit wild populations. But we  
14                   cannot simply stand by and wait during this  
15                   period of evolution.

16                   Despite various ideological  
17                   differences that will be expressed, this permit  
18                   is about beluga conservation and that is truly a  
19                   value that everyone can share. I strongly urge  
20                   you to approve this permit. Thank you.

21                   MS. SLOAN: The next speaker I'd like  
22                   to invite up is Dr. Scott Willens, a member of



1 the public.

2 MR. WILLENS: Good afternoon. This  
3 testimony is to supplement the written testimony  
4 previously submitted. I do have to give the  
5 disclaimer that as an active duty Lieutenant  
6 Colonel in the Army these are not the opinions of  
7 the Army or the Department of Defense or of the  
8 U.S. Government and has to be fact-based  
9 testimony.

10 I'm a veterinarian of 23 years with a  
11 board certification in the American College of  
12 Veterinary Preventive Medicine which focuses  
13 quite a bit on environmental medicine and public  
14 health. I also have a Ph.D. in pharmacology. I  
15 have known Dr. Tuttle for 20 years and Dr. Romano  
16 for about 25 years and like the two of them and  
17 Drs. Richard, Thompson, and Flower, Mystic has  
18 played a pivotal role in my professional  
19 development as I served as a veterinary intern in  
20 aquatic animal medicine and research from 1998 to  
21 1999.

22 My career and success in veterinary

1 sciences and environmental medicine can be traced  
2 directly back to my roots there where I worked  
3 closely with beluga whales at the time of the  
4 construction of the facility. Both stateside and  
5 abroad, I have seen firsthand the need for  
6 critical conservation research and I am here to  
7 urge you approve the Mystic Aquarium's permit of  
8 the importation of five beluga whales born in  
9 human care to a significantly less crowded  
10 facility where animals are permitted to engage in  
11 all normal behaviors including breeding. Species  
12 conservation is the purpose and intent of the  
13 proposal. It has been designed and will be held  
14 accountable under the most powerful conservation  
15 laws in the country and the Marine Mammal  
16 Protection Act,

17           The research highlighted in the permit  
18 will be fulfilled by one of the most reputable  
19 research facilities in the field. In fact, the  
20 mission of Mystic, as we have heard today, is  
21 focused on research along with conservation and  
22 education of all ages.

1                   For over 40 years, Mystic has put  
2                   scientific research at the core and forefront of  
3                   its mission. There are only a few institutions  
4                   that engage in the study of marine mammal immune  
5                   systems and Mystic Aquarium is a leader among  
6                   them. Mystic is the only beluga care facility in  
7                   the United States that holds a research permit as  
8                   you've heard, and the scientists at Mystic have  
9                   published hundreds of peer-reviewed papers and  
10                  book chapters and articles. These studies have  
11                  been cited by scientific colleagues, wildlife  
12                  managers, policy makers, and government agencies  
13                  alike.

14                  The animal care at Mystic Aquarium is  
15                  exceptional as evidenced by USDA inspections with  
16                  no deficiencies and accreditation by the  
17                  organizations of American Humane, the Association  
18                  of Zoos and Aquariums, and the Alliance of Marine  
19                  Mammal Parks and Aquariums. The habitat was  
20                  designed for belugas to provide a spacious and  
21                  naturalistic environment in which belugas can  
22                  engage in natural behaviors and where they

1 receive optimal professional care.

2           The research and development that is  
3 being done at Mystic will allow us a fighting  
4 chance of reversing a devastating trend of  
5 cetacean population declines. The beluga whale,  
6 due to its size and temperament, is one of the  
7 few species of cetaceans that makes possible  
8 close study in controlled settings to produce new  
9 knowledge helpful for conserving wild whales.

10           Further, the knowledge of the overall  
11 health of each individual beluga, its health,  
12 behavior, morphometrics, diet, water quality, et  
13 cetera, allows researchers to ensure results are  
14 accurate, useful, and transferrable to endangered  
15 populations. Having the belugas in a controlled  
16 setting further validates the research performed.  
17 The studies are advancing knowledge of immune  
18 responses, health indicators, hearing and sound,  
19 diving physiology and more, contributing to at  
20 least ten of the actions listed as needed in the  
21 recovery plan for the endangered Cook Inlet  
22 beluga whale released in 2016. By increasing the

1 sample size of the whales in this controlled and  
2 optimal environment, Mystic Aquarium can bolster  
3 statistical significance and findings. All these  
4 factors are vital to the advancement of  
5 conservation efforts.

6 I once again urge you to approve  
7 Mystic Aquarium's permit application. Thank you.

8 MS. SLOAN: And I would like to say  
9 thank you for your service.

10 The next speaker is Jen Flower from  
11 Mystic Aquarium.

12 MS. FLOWER: Good afternoon. My name  
13 is Dr. Jen Flower and I'm the Chief Clinical  
14 Veterinarian at Mystic Aquarium. I have a  
15 doctorate in Veterinary Medicine, a Master of  
16 Science in Conservation Medicine, and I am board  
17 certified by the American College of Zoological  
18 Medicine. I have dedicated my career to the  
19 medical care, health, and welfare of aquatic  
20 species including beluga whales.

21 At Mystic Aquarium, we are dedicated  
22 and passionate about the care we provide to our

1 animals. Our personal commitment to and  
2 enthusiasm for the highest legal and professional  
3 standards of animal care are recognized by the  
4 USDA, the Association of Zoos and Aquariums, the  
5 International Marine Animal Trainers Association,  
6 the Alliance of Marine Mammal Parks and  
7 Aquariums, and American Humane.

8 Animal welfare is amongst our guiding  
9 principles at Mystic Aquarium. We are actively  
10 engaged in daily preventative medical for all of  
11 our resident animals from our smallest amphibians  
12 and fish, the endangered African penguin and  
13 green sea turtles, to the largest marine mammals  
14 including star sea lions and beluga whales.

15 Mystic Aquarium has a strong program  
16 of preventative medicine that ensures all animals  
17 including belugas are healthy and thriving. The  
18 aquarium employs a large team of knowledgeable  
19 trainers to provide for the daily husbandry care  
20 of the belugas and a team of four skilled and  
21 experienced veterinarians who respond to any  
22 medical concern immediately 24 hours a day, 365

1 days a year.

2           Mystic Aquarium has a state-of-the-art  
3 veterinary hospital as well as portable  
4 diagnostic equipment that can be brought to the  
5 habitat for animal side diagnostics to ensure  
6 immediate and accurate results that allow for the  
7 highest quality of medical care.

8           Our daily care includes integrated  
9 behavioral choice for every animal at Mystic  
10 Aquarium. Beluga whales actively engage in their  
11 own health care. They behaviorally provide blood  
12 samples, voluntarily lay out for veterinarians to  
13 perform ultrasounds, endoscopies, and radiographs  
14 and allow a collection of respiratory test  
15 samples, all accomplished by positive  
16 reinforcement training.

17           They swim freely in the largest  
18 outdoor habitat in the United States and they  
19 interact at will with the other beluga whales  
20 that call Mystic Aquarium home.

21           Currently, we do not have a formal  
22 breeding program for beluga whales, nor do we

1 plan on having one in the future. In fact,  
2 outside of our participation in the species  
3 survival plan for the endangered African penguin,  
4 we do not have any formal breeding programs at  
5 Mystic Aquarium.

6 To ensure optimal animal health and  
7 ensure the validity of the scientific work being  
8 done by beluga conservation researchers, we will  
9 continue to offer behavioral choice to all the  
10 animals under our care.

11 Mystic Aquarium is home to the world's  
12 leading marine mammal scientists, animal  
13 behaviorists, and veterinarians who provide  
14 continuous and compassionate care for belugas.  
15 As proposed in this permit application, a larger  
16 grouping of belugas in the Mystic habitat is  
17 vital to advancing scientific knowledge on key  
18 variables essential to the survival of this  
19 species.

20 In addition, this research is crucial  
21 for informing international marine mammal  
22 protection policies. Advancing conservation



1 research is essential to prevent ongoing declines  
2 in endangered beluga populations and I am  
3 confident that there is no better place for this  
4 critical research than Mystic Aquarium.

5           The animal care is not just a  
6 profession. It is our passion, our inspiration,  
7 and our priority. As professionals who have  
8 dedicated our lives to caring for animals, we  
9 strongly urge the approval of this permit  
10 application to ensure that all species and  
11 specifically beluga whales remain in our ocean  
12 planet for many years to come. Thank you.

13           MS. SLOAN: I'd like to invite Kaitlyn  
14 Mitchell from Animal Justice.

15           MS. MITCHELL: Good afternoon. Thank  
16 you very much for the opportunity to be here  
17 today. My name is Caitlyn Mitchell and I am a  
18 lawyer from Canada with the organization Animal  
19 Justice. Animal Justice is Canada's only  
20 national nonprofit animal law organization.

21           So as you've heard today a number of  
22 times, Canada recently passed a new law, that is

1 bill S-203, the Ending the Captivity of Whales  
2 and Dolphins Act. And that act or the bill I  
3 should say made very important changes to the  
4 criminal code, as well as the Fisheries Act aimed  
5 at phasing out the keeping of cetaceans in  
6 captivity in Canada. It did that by preventing  
7 facilities from acquiring new cetaceans and also  
8 by prohibiting breeding of cetaceans in  
9 captivity.

10 The relevant parliamentary and senate  
11 committees heard from scientific experts  
12 regarding the serious physical and psychological  
13 harm caused by keeping cetaceans in captivity as  
14 well as in particular the trauma that can be  
15 caused to them from transporting them one  
16 facility to another facility.

17 They also heard from tens of thousands  
18 of Canadians in support of the new law.

19 And by way of the example of the new  
20 law's popularity, it garners that significant  
21 public support that at one point it looked like  
22 the bill was actually going to die in the Senate

1 and so many Canadians wrote in in support of the  
2 new law that the Senate email server actually  
3 crashed for a time.

4 So the government was clear about its  
5 support for the new law and why it chose to  
6 support the new law and that was the fundamental  
7 need to respect biological and social needs of  
8 whales, dolphins, and porpoises and that means  
9 protecting them from forced captivity and also  
10 from breeding in captivity and performances for  
11 human entertainment.

12 In terms of specifics, bill S-203  
13 amended the Fisheries Act to make it illegal to  
14 capture wild cetaceans and put them into  
15 captivity and it also amended the criminal code  
16 making it an offense to own or keep a cetacean in  
17 captivity, to breed cetaceans in captivity, and  
18 also to have in your possession any reproductive  
19 materials of cetaceans.

20 It also amended the criminal code to  
21 make it an offense to arrange, receive money for  
22 or participate in events at which cetaceans are

1 made to perform for human entertainment.

2 Now MarineLand and Vancouver Aquarium  
3 are, of course, allowed to keep the whales and  
4 dolphins that they have currently in captivity.  
5 And I should say there are 62 cetaceans currently  
6 in captivity in Canada, 61 of those are housed at  
7 MarineLand which is, of course, the facility from  
8 which these 5 belugas would be transported.

9 Of particular importance for  
10 discussion today, bill S-203 was also intended to  
11 clamp down on the international trade of live  
12 cetaceans. It does that by prohibiting any  
13 imports or exports without a permit from the  
14 Minister of Fisheries and Oceans and those  
15 normally would be issued when it's for scientific  
16 research or in the best interest of the  
17 cetaceans. Now, of course, that standard has yet  
18 to be tested in some ways because this is a very  
19 new law. What we do know is that when the  
20 minister recently approved the escorted two  
21 whales to Spain, he said explicitly the part of  
22 the reason that he decided it was in their best

1 interest is because the facility was not going to  
2 allow those whales to breed.

3 MarineLand has not yet applied for the  
4 escort permit necessary in Canada. However, when  
5 contacted by members of the public concerned  
6 about the potential to export these five belugas,  
7 Jonathan Wilkinson, who is the previous Fisheries  
8 minister, as an aside we find out who the new  
9 ministers are in two days in Canada. We just had  
10 an election. But anyway, Mr. Wilkinson said  
11 basically that in the consideration of an escort  
12 permit, any proposal that would involve allowing  
13 belugas to be on public display and in particular  
14 to allow those cetaceans to breed would not be  
15 assessed favorably.

16 So there is good reason to believe  
17 based on his comments and the new law that if and  
18 when MarineLand does apply for the permit  
19 necessary to escort these whales they may not be  
20 approved. Thank you.

21 MS. SLOAN: So the next speaker is  
22 Sylvain De Guise from the University of

1 Connecticut.

2 MR. DE GUISE: Good afternoon. My  
3 name is Sylvain De Guise. I'm a Professor of  
4 Pathobiology and Veterinary Science at the  
5 University of Connecticut and I serve as Director  
6 of the Connecticut Sea Grant.

7 I've been doing research on marine  
8 mammals for over 30 years. Following veterinary  
9 school, I started my research career working on  
10 pathology and toxicology of beluga whales in the  
11 St. Lawrence River and pursued a Ph.D. in immuno-  
12 toxicology.

13 As far as this effort, I worked in  
14 collaboration with Mystic Aquarium to test new  
15 devices to safely capture belugas in the St.  
16 Lawrence. That's 25 years ago. After a post-doc  
17 at UC-Davis to deepen my understanding of marine  
18 mammal immunology, I took a position at the  
19 University of Connecticut, was appointed adjunct  
20 researcher at Mystic Aquarium. I now serve on  
21 the Mystic Aquarium Research Advisory Council.

22 I'm here today to testify in favor of

1 the proposed permit to receive five beluga whales  
2 for research and conservation purposes. As a  
3 responsible scientist, I do not take lightly my  
4 testimony here today. Fundamental and applied  
5 research is essential for species conservation,  
6 especially those species that live remotely, are  
7 difficult to access and observe, and those that  
8 are threatened or endangered populations. This  
9 is the case for belugas.

10 The research team at Mystic Aquarium,  
11 led by Dr. Tracy Romano, has been at the  
12 forefront of conservation, research in marine  
13 mammals and has made significant progress over  
14 the last few years towards a transition from  
15 fundamental to applied research using non-  
16 invasive sampling to assess healthcare matters in  
17 belugas that would be applicable to wild  
18 populations. The addition of five new belugas  
19 would increase the sample size to work with, add  
20 statistical power and scientific validity while  
21 allowing for better understanding of inter-  
22 individual differences. In short, it would allow

1 for better science and accelerated progress  
2 towards important conservation issues.

3 In addition to building their first  
4 class research group, Mystic Aquarium has and  
5 continues to be a strong collaborator and  
6 convener. My research group has benefitted from  
7 collaboration with Mystic Aquarium for over 25  
8 years ranging from testing new methods and  
9 devices to sharing samples and collaborative  
10 field and lab research. The Mystic Aquarium  
11 research group is well integrated with the  
12 academic community with laboratories at the  
13 nearby University of Connecticut Avery Point  
14 campus and collaborative projects such as NSF  
15 funded initiatives to support summer  
16 undergraduate research for students.

17 Mystic Aquarium recently convened an  
18 important international beluga symposium.

19 Overall, while I believe that all aquariums in  
20 the U.S. claim federal research responsibility,  
21 Mystic Aquarium is a credible and strong leader  
22 in the field.



1                   While the primary purpose of the  
2 permit to accept new belugas is conservation  
3 research, those animals will be displayed for the  
4 public to see. This is important for the public.  
5 How often do members of the public see belugas in  
6 their environment and at the same time are  
7 fortunate to learn firsthand what their  
8 challenges are?

9                   Conservation research is essential to  
10 understand and to address concern about stressors  
11 that affect some marine mammal populations.  
12 Conservation research is essential if we want to  
13 support Cook Inlet recovery plan, if we want to  
14 understand the decline of St. Lawrence beluga  
15 population, if we want to ensure that no beluga  
16 population becomes extinct.

17                   As a scientific community, we must  
18 encourage and support Mystic Aquarium's  
19 researchers for the development of non-invasive  
20 techniques. The work that we do in conservation  
21 research is key to ensuring that future  
22 generations of marine mammals in general and

1 belugas in particular, have the optimum  
2 environment.

3 As a scientist, professor, one who  
4 tracks with new generation of scientists,  
5 decision makers, and informed citizens, and as  
6 someone who passionately cares about marine  
7 mammals and their future, I urge you to approve  
8 the proposed permit for Mystic Aquarium to  
9 receive five belugas for research and  
10 conservation purposes. Thank you.

11 MS. SLOAN: The next speaker will be  
12 Tracy Romano of Mystic Aquarium.

13 MS. ROMANO: Good afternoon, everyone.  
14 I am Dr. Tracy Romano, Chief Scientist at Mystic  
15 Aquarium and the principal investigator on this  
16 permit.

17 This permit is critical for three  
18 major reasons. One, to ensure that our research,  
19 our conservation research continues; two, that  
20 it's expedited; and three, that we increase the  
21 scientific rigor of our studies.

22 I have been studying whales and

1 dolphins for approximately 30 years and have had  
2 the privilege of studying them under human care,  
3 as well as in the wild. From my experience,  
4 there are questions that you just can't answer  
5 from studying wild animals alone.

6 I have also had the privilege to  
7 conduct research in the Arctic since I was a  
8 graduate student. I have witnessed through the  
9 years, and even more so over the last five years,  
10 the many rapid changes in this part of the world.  
11 There are major issues being posed to the  
12 environment, belugas and other Arctic mammals,  
13 and the people that live there.

14 We are losing dolphins, whales, and  
15 porpoises at an alarming rate. We are currently  
16 witnessing the decline of the Cook Inlet beluga,  
17 the vanishing of the vaquita, and the rapid  
18 decline of the North Atlantic right whale.

19 Katie mentioned the recent report set  
20 out by the United Nations, up to one million  
21 plant and animal species are on the verge of  
22 extinction. We need to act now.

1           The research outlined in the permit  
2 application specifically contributes to research  
3 and education initiatives called for in the Cook  
4 Inlet beluga recovery plan with applications to  
5 other beluga populations that are on the decline.  
6 The research proposed on belugas can also be  
7 applied to other cetacean species.

8           A couple of examples of key research  
9 priorities include developing non-invasive  
10 techniques for assessing reproductive status,  
11 body condition, and health in wild animals.  
12 Reproductive research, not to be confused with  
13 breeding research which is not the goal of this  
14 permit will allow us to learn about beluga  
15 reproduction which is really the key to recovery  
16 and sustainability of wild populations.

17           Moreover, the genetics of these whales  
18 in studying immune systems, for example, can have  
19 meaningful impact on particular populations that  
20 are difficult or impossible to study.

21           Mystic Aquarium is setting the bar for  
22 the quality of research to be conducted under

1 this research permit. Nothing less than the  
2 standards we set forth should be considered in  
3 the future. Some have said that there is no need  
4 to import. However, for the research to be  
5 effective, it simply must be carried out at  
6 Mystic Aquarium. The studies that frame the core  
7 of our research call for in-depth animal care and  
8 husbandry to ensure voluntary and non-invasive  
9 participation by the whales in a controlled  
10 environment. As such, ample space is needed for  
11 this training and research, something MarineLand  
12 simply cannot provide given the current over-  
13 crowded situation.

14 Further, many of the important tests  
15 in our research are time sensitive and that they  
16 need to be analyzed immediately after sample  
17 collection to ensure the integrity of the data.  
18 Prior experience has proven that the process of  
19 shipping internationally is not reliable and  
20 compromises sample integrity.

21 I, as a scientist and a citizen, feel  
22 an urgency to do all we can now. We must act

1 immediately to ensure the health and viability of  
2 belugas and other dolphin and whale species for  
3 generations to come.

4 Thank you to NOAA for this opportunity  
5 and thank you all for being here today.

6 MS. SLOAN: Our last speaker of the  
7 day, unless there's anyone else who came in late  
8 which I don't think there were, is Georgia  
9 Hancock of Animal Welfare Institute.

10 MS. HANCOCK: Good afternoon. I am  
11 Georgia Hancock of the Animal Welfare Institute.  
12 On behalf of its members, supporters, and  
13 constituents, I would like to say that we are in  
14 full support of improving the living and welfare  
15 conditions of all of the animals at MarineLand.  
16 However, we do not believe the welfare of the  
17 whales to be imported or those left behind would  
18 be greatly improved by this transfer.

19 Additionally, there is a strong  
20 likelihood that the requirements of Canada's bill  
21 S-203 which is not on the floor are not satisfied  
22 by this permit application.

1 Bill S-203 allows for two derogations  
2 from the ban on the export of cetaceans from  
3 Canada including for the keeping the cetacean in  
4 captivity as it is in the best interest of the  
5 cetacean's welfare to do so.

6 While we fully recognize the over-  
7 crowded conditions that exist at MarineLand, the  
8 U.S. and Canadian Government should consider this  
9 factor in combination with others including the  
10 overcrowding that will occur if five belugas are  
11 imported to Mystic Aquarium and potentially  
12 Georgia Aquarium.

13 I understand there are approximately  
14 54 belugas at MarineLand that are currently  
15 divided into three main areas. While animal  
16 welfare advocates have been pointing out that  
17 MarineLand is overcrowded for years, it's only  
18 since S-203 passed that Canadian officials have  
19 also admitted that this is the case.

20 Mystic's main beluga enclosure, while  
21 larger than any of the largest tanks at  
22 MarineLand, would be very full, arguably, over

1 full if eight belugas were held there. It makes  
2 little sense to put MarineLand's belugas through  
3 the trauma and stress of transport, an  
4 acclimation to a new environment and social  
5 groups when the space provided would be at best  
6 only somewhat better than at MarineLand and  
7 that's before any calves are born.

8 From a welfare standpoint, the pluses  
9 of being moved don't outweigh the minuses which  
10 is not consistent with moving them in their best  
11 interest. At Georgia Aquarium, the beluga  
12 complex is entirely indoors whereas MarineLand is  
13 outdoors in a climate that is cool to cold for  
14 much of the year. A lack of shade is a problem  
15 at MarineLand, but one that would be easy to  
16 rectify. But lack of natural light and fresh air  
17 at Georgia Aquarium cannot be rectified and it's  
18 a significant step down for any whales moved  
19 there from a northern climate outdoor facility.

20 According to media quotes from Georgia  
21 Aquarium officials, the tank there is already at  
22 capacity with five belugas. Dennis Christen,



1 Senior Director of Zoological Operations, stated  
2 quote. A fivesome largest this beluga crew will  
3 go at Georgia Aquarium. It's a number that seems  
4 to be quite comfortable. End quote.

5 Adding any more belugas to Georgia  
6 Aquarium would therefore by the facility's own  
7 reckoning result in overcrowding. Additionally,  
8 given Georgia Aquarium's efforts to import 18  
9 wild caught belugas from Russia starting years  
10 ago, an effort that ended in a 2016 court ruling  
11 upholding NMFS' decision to deny the permit  
12 application we find this proposed import for  
13 scientific research entirely suspect.

14 Three of the whales proposed for  
15 import would be quote unquote all inside Georgia  
16 Aquarium and the application states that they may  
17 be transferred there under vaguely described  
18 circumstances. It's difficult not to see this  
19 application as a back door to requiring  
20 additional belugas for the North American Beluga  
21 Breeding Cooperative.

22 We do not think any potential

1 improvement in welfare or quality of life  
2 justifies this import. Thank you.

3 MS. SLOAN: So we're at time. I want  
4 to thank everybody for coming to the hearing and  
5 for those who are traveling I wish you safe  
6 travels home. If you have any follow-up  
7 questions, I have a card up there. You can email  
8 me and for those traveling locally I wish you  
9 safe travels as well. Thank you very much. This  
10 concludes our public hearing.

11 (Whereupon, the above-entitled matter  
12 went off the record at 3:06 p.m.)

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## A

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