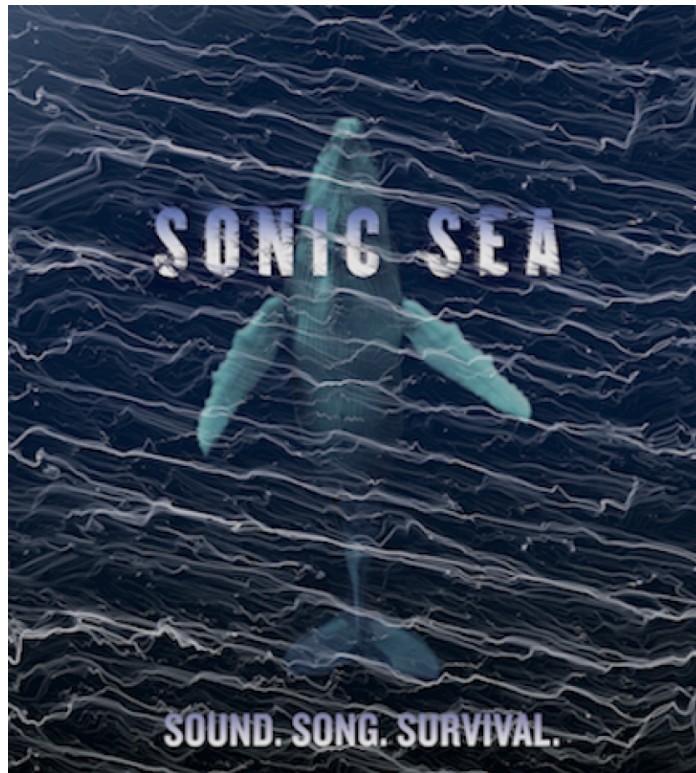




Present  
**SONIC SEA**



**A Film by the Natural Resources Defense Council (NRDC), Imaginary Forces (IF),  
International Fund for Animal Welfare (IFAW) and Diamond Docs**

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For press information, or to host a community screening, please contact  
Shaine Meulmester ([smeulmester@nrdc.org](mailto:smeulmester@nrdc.org))



SONIC SEA premiered on May 19th exclusively on Discovery Channel as part of  
Discovery Impact Series.



Sonic Sea Movie



@sonicseafilm



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**LOGLINE (25 words):**

*Sonic Sea* is a 60-minute documentary, narrated by Rachel McAdams, about the impact of industrial and military ocean noise on whales and other marine life.

**SHORT SYNOPSIS (104 words):**

*Sonic Sea* is a 60-minute documentary about the impact of industrial and military ocean noise on whales and other marine life. It tells the story of a former US Navy officer who solved a tragic mystery and changed forever the way we understand our impact on the ocean. The film is narrated by Rachel McAdams and features Sting, in addition to the renowned ocean experts Dr. Sylvia Earle, Dr. Paul Spong, Dr. Christopher Clark and Jean-Michel Cousteau. *Sonic Sea* was produced by the Natural Resources Defense Council (NRDC) and Imaginary Forces in association with the International Fund for Animal Welfare (IFAW) and Diamond Docs.

**LONG SYNOPSIS (225 words):**

*Sonic Sea* is a 60-minute documentary about the impact of industrial and military noise on whales and other marine life. It tells the story of Ken Balcomb, a former US Navy officer who solved a tragic mystery involving a mass stranding of whales in the Bahamas—and changed forever the way we understand our impact on the ocean.

In the darkness of the sea, whales depend on sound to mate, find food, migrate, raise their young and defend against predators. But over the last century, human activity has transformed the ocean's delicate acoustic habitat, challenging the ability of whales and other marine life to prosper, and ultimately to survive. *Sonic Sea* offers solutions and hope for a quieter ocean, and underscores that the ocean's destiny is inextricably bound with our own.

*Sonic Sea* is narrated by Rachel McAdams and features the musician, human rights and environmental activist, Sting, in addition to the renowned ocean experts Dr. Sylvia Earle, Dr. Paul Spong, Dr. Christopher Clark and Jean-Michel Cousteau. The film was produced by the Natural Resources Defense Council (NRDC) and Imaginary Forces in association with the International Fund for Animal Welfare (IFAW) and Diamond Docs. *Sonic Sea* was directed and produced by Michelle Dougherty and Daniel Hinerfeld, written by Mark Monroe (*The Cove*, *Racing Extinction*) and scored by the Grammy-winning composer Heitor Pereira (*Minions*, *It's Complicated*).

## DIRECTORS' STATEMENT

Jacques Cousteau famously said, “people protect what they love.” He invented the art of underwater filmmaking so millions of people would fall in love with the ocean. But how does one make a film about the ocean when its particular subject matter is invisible?

That was one of the main challenges we faced in making *Sonic Sea*, a film about the damage that industrial and military ocean noise is doing to whales and other marine life that depend on the ocean’s delicate acoustic habitat to survive and prosper.

Most people don’t realize that the ocean is primarily an acoustic habitat, not a visual one. Light only travels a few hundred feet (at best) in ocean water, but sounds can travel thousands of miles. Many creatures in the ocean, from great whales to small fish and invertebrates, evolved for millions of years to favor sound over light. They developed extraordinary acoustic abilities that enable them to “see” with sound. They conduct much of their business sonically: hunting, navigating, finding mates and caring for their young. Large whales literally sing to each other across entire ocean basins. Or they used to...before humans started making such terrible noise.

Modern tanker and container ships are four football fields long and put a deafening 190 decibels of sound energy into the water; 60,000 commercial ships churn constantly around the planet. The oil industry searches for fossil fuels beneath the ocean floor with air guns that create massive explosions in the water—explosions that can be heard more than 1,500 kilometers away. The Navy prepares for anti-submarine warfare with active sonar that blasts intense sound into the water and detects echoes off potential targets. And because sound moves five times faster and much farther in water than in air, all of this noise zooms around the globe, invading every corner of the ocean.

The impact on whales, fish and other marine life is profound. Whales strand and die on beaches after naval sonar drills. Whole populations of fish disappear after oil and gas air gun surveys. The most pernicious effects of ocean noise pollution, however, are not acute but chronic: the relentless interference with basic survival. For instance, up to 80 percent of the communication among North Atlantic right whales off Boston Harbor is interrupted by noise from heavy ships. These highly sophisticated mammals now face extinction, in part because they can no longer hear one another above our din.

Our challenge was to bring this complex world of ocean sound—the problems and potential solutions—to life in film. We found our dramatic story in Ken Balcomb, a former US Navy officer who solved a tragic mystery involving a mass

stranding of whales in the Bahamas—and changed forever the way we understand our impact on the ocean.

Our next hurdle was to depict sound visually as well as aurally. Working with brilliant artists at Imaginary Forces, we developed a visual vocabulary for sound. Cool colors and smooth lines for natural sounds, hot colors and jagged lines for human-made noise pollution. Gradually, a series of animations emerged that represented the complex web of sound in the ocean, both natural and anthropogenic. A massive batch of data generously provided by Google Oceans and SpaceQuest, Ltd., enabled artful illustrations to be grounded in fact.

We also wanted to infuse *Sonic Sea* with pristine, natural sounds: the calls of social orcas, the rapid pings that dolphins use to echolocate, the complex songs of humpbacks. For this, we turned to Cornell University's MacCaulay Library, the largest scientific collection of animal recordings in the world.

Finally, so that the film's music rivaled the beauty of those natural sounds, we partnered with Heitor Pereira, a Brazilian-born, Grammy-winning musician and composer who created musical voices that represent the sea itself as well as the invasive machines that are harming it. His score for *Sonic Sea* is haunting and transcendent. And gifted sound designers and mixers at Wildfire Sonic Magic created an intricate, layered and at times terrifying, soundscape and then delicately wove it with Heitor's music. The result is a singular sonic experience that plunges the audience through the waves and deep into an ocean flowing with sound.

Ocean noise imperils whales and other marine life around the world, and yet most people know nothing of it. We made *Sonic Sea* to change that. There is good reason for hope. Ocean noise can be solved. And once we stop generating ocean noise, it's gone.

The first step is to understand that it is there.

**Daniel Hinerfeld and Michelle Dougherty**  
**January 2016**

## FILM TEAM

### **Michelle Dougherty**

#### **Director, Imaginary Forces**

Michelle is an American designer and director. She was born in Mexico City, grew up in California, and is a graduate of Art Center College of Design in Pasadena. In her professional career, she has directed projects ranging from graphic design to commercial directing, including advertising, television and film title sequences, feature film marketing and experiential design. Michelle has created Emmy-nominated main title sequences and has directed global commercial advertising campaigns. Her projects have garnered awards as well as being featured at the Walker Art Center, the Hammer Museum and the Cooper-Hewitt Smithsonian Design Museum.

### **Daniel Hinerfeld**

#### **Director, Natural Resources Defense Council**

Daniel is an award-winning director and journalist. He directs and produces films and videos for NRDC, including *Acid Test* and *Stories from the Gulf*, which aired on Discovery Planet Green, and *Wild Things*, which aired on Pivot TV. Prior to his role at the NRDC, he was a senior editor, producer and reporter at National Public Radio (NPR), where he helped launch *The Tavis Smiley Show* and *Day to Day*. His journalism and commentary has appeared in many publications, including *Rolling Stone*, *The Washington Post* and the *Los Angeles Times*. Daniel also worked for nearly four years as a senior aide to a member of the Los Angeles City Council, where his focus was press relations and developing gun control legislation.

### **Mark Monroe**

#### **Writer, Diamond Docs**

Mark Monroe is an award-winning documentary filmmaker whose theatrical writing credits include: *Racing Extinction* (Sundance 2015), *Fed Up* (Sundance 2014), *The Summit* (Winner, Best Editing Sundance 2013), *Who is Dayani Cristal?* (Winner, Best Cinematography, Sundance 2013), *Sound City* (Sundance 2013), *The Cove* (Winner, Best Documentary 2010 Academy Awards & Best Documentary Script, W.G.A. 2010), *The Tillman Story*, *Chasing Ice* (Winner, Best Cinematography Sundance 2012), *Stolen Seas*, *Last Play at Shea*, *Once in a Lifetime: The Extraordinary Story of the New York Cosmos*, *Amazing Journey: The Story of The Who* and *Morning Light* (Disney Pictures). A journalism graduate from the University of Oklahoma, Mark began his career in television as a news writer for CNN in Atlanta. Before writing for film, he produced more than sixty hours of biography-style programming for TV.

**Heitor Pereira****Composer**

Heitor has composed original film scores for *Minions*, the *Despicable Me* series, *If I Stay*, *It's Complicated*, *The Smurfs 1 & 2* and *Curious George*, and he has been featured as a composer or instrumentalist on countless others. Heitor has received accolades for his work, including seven ASCAP awards. He has a history of collaborating with Brazil's leading artists and international names, including Simply Red, Jack Johnson, Elton John and Willie Nelson. In 2005, he won a Grammy for his collaboration with Sting and Chris Bottie.

## FILM EXPERTS

### **Kenneth C. Balcomb III**

#### **Executive Director and Senior Scientist, Center for Whale Research**

Ken earned a BA in Zoology from UC Davis in 1963 and was hired by the US Fish and Wildlife service to be a field biologist in a whale-marking program. He pursued graduate work at UC Santa Cruz with Dr. Ken Norris, a renowned marine mammal biologist. Ken served as an aviator and oceanographic specialist in the US Navy. He pioneered photo identification of cetaceans, made the first known observations of living Longman's beaked whales, and in the aftermath of a mass stranding of whales in the Bahamas in March 2000, helped prove that naval sonar kills whales.

### **Christopher W. Clark, Ph.D.**

#### **Johnson Senior Scientist, Bioacoustics Research Program, Cornell University**

Chris helped develop and apply advanced acoustic technology to record and analyze the sounds of wildlife around the globe. His work advances the understanding of animal communication and the health of wildlife populations. Chris has listened to and studied whales for over forty years, with a focus on endangered North Atlantic right whales.

### **Jean-Michel Cousteau**

#### **Explorer, Founder and President, Ocean Futures Society**

Explorer, editor, environmentalist and filmmaker, Jean-Michel has dedicated his life to communicating the critical bond between humans and the sea. The son of Jacques Cousteau, he began exploring the ocean as a young boy. He's produced over 80 films and received the Emmy and Peabody awards among others. Jean-Michel organized efforts to care for Keiko, the captive whale of *Free Willy* fame. And in 1999 he founded the Ocean Futures Society. Jean-Michel is an impassioned diplomat for the environment, traveling the world to meet with everyone from school children to global leaders, urging us all towards positive change.

### **Sylvia Earle, Ph.D.**

#### **Oceanographer, Author and National Geographic Explorer in Residence**

Sylvia has led more than 100 ocean expeditions and logged more than 7,000 hours underwater. Named a "Living Legend" by the Library of Congress, she earned a BS from Florida State University and a Ph.D. from Duke University. Sylvia helped develop early SCUBA gear, authored more than 190 publications, including *The World is Blue: How our Fate and the Ocean's are One*, and in 1990 was the first woman named chief scientist at the National Oceanic and Atmospheric Administration. Sylvia's goal is to "ignite public support

for the protection of Hope Spots—special places that are vital to the health of the ocean, the blue heart of the planet.”

**Leila Hatch, Ph.D.**

**Marine Ecologist, Office of National Marine Sanctuaries, NOAA**

Leila is a marine ecologist with the Gerry E. Studds Stellwagen Bank National Marine Sanctuary at the mouth of Massachusetts Bay. This area has experienced dramatic increases in shipping, and Hatch studies how low-frequency noise emitted by large ships and other vessels impacts marine mammals, which also rely on low-frequency signals for communication, foraging, navigating and caring for their young.

**Michael Jasny**

**Director, Marine Mammal Protection, Natural Resources Defense Council**

Michael is a leading expert in the law and policy of ocean noise pollution and has worked domestically and internationally through high-profile litigation, lobbying, science-based policy development and public advocacy to improve regulation of this emergent global problem. He works to secure protection for endangered marine mammal populations, opposing development projects that threaten marine mammals off the US and Canada, litigating with the US Navy over its use of high intensity sonar and improving management of fisheries, whale-watching and other sectors under the Marine Mammal Protection Act. Michael holds a bachelor's degree from Yale College and JD from Harvard Law School.

**Rachel McAdams**

**Narrator**

Rachel is an actress and environmental advocate. She has starred in films such as *Mean Girls*, *The Notebook*, *Wedding Crashers*, *Southpaw*, *Sherlock Holmes* and the HBO TV series *True Detective*.

**Kathy Metcalf**

**President and CEO, Chamber of Shipping of America**

Kathy graduated with highest honors from the US Merchant Marine Academy with a Bachelor of Science in Marine Transportation and Nautical Sciences. She spent five years as a deck officer aboard crude oil and product tankers. She earned a JD in 1988 from the Delaware Law School of Widener University.

**Katie Moore**

**Program Director, Animal Rescue, International Fund for Animal Welfare**

As IFAW's Program Director for Animal Rescue, Katie directs IFAW's animal rescue team and collaborates with partner organizations around the globe to save animals in crisis including disaster response, marine mammal rescue and research and wildlife rescue, rehabilitation and release. In Madagascar, Katie used techniques developed by IFAW's Marine Mammal Rescue and Research



team in an attempt to save more than one hundred melon headed whales—deep-water animals that had stranded themselves inside an estuary. She also provided guidance in gathering data to determine the cause of the incident.

**Bjørnar Nicolaisen**

**Coastal Fisherman, Former Secretary, Norwegian Fisherman Union**

Bjørnar is a Norwegian cod fisherman. When offshore oil exploration increased in the region, Bjørnar noticed a 60 percent decrease in fish populations. Concerned for his livelihood, Bjørnar became an outspoken voice against the use of “seismic shooting” as a tool for oil exploration.

**Molly Patterson**

**Research Assistant, OrcaLab**

Molly worked at OrcaLab as a research assistant. She joined other volunteers from around the world who visually and acoustically monitor the orcas 24 hours a day during the summer and fall months.

**George Prochnik**

**Author, *In Pursuit of Silence: Listening for Meaning in a World of Noise***

George taught English and American Literature at Hebrew University in Jerusalem. He now lives in New York City and is editor-at-large for *Cabinet* magazine. George’s writing spans essays, poetry and fiction. His most recent book is *The Impossible Exile*.

**Brandon Southall, Ph.D.**

**Senior Scientist, Southall Environmental Associates, Inc.**

Brandon grew up in landlocked East Texas but developed a passion for the oceans. He is the former director of The National Oceanic and Atmospheric Administration’s Ocean Acoustics Program, where he helped develop acoustic exposure criteria for marine mammals. He continues to study the behavioral responses of marine mammals to human produced sounds.

**Paul Spong, Ph.D.**

**Founder and Co-Director OrcaLab**

Originally from New Zealand, Paul is a neuroscientist and cetologist who has immersed himself in orca research since the 1960s. Early in his career he studied the captive orcas, Hyak and Skana, at the Vancouver Aquarium, where he grew to appreciate their intellect and exceptional use of sound. Paul later advocated to keep whales out of captivity, and in 1970 founded OrcaLab with the goal of studying marine mammals without interfering in their lives and habitat. He and his assistants share their research findings from remote Hanson Island in British Columbia, Canada via live streams on the Internet.

**Sting****Musician; Human Rights and Environmental Activist**

Sting (Gordon Sumner) is a musician, singer-songwriter, multi-instrumentalist and activist. He was the principal songwriter, lead singer and bassist for The Police. He wrote the music and lyrics for the Broadway musical, *The Last Ship*, inspired by his experiences growing up amidst the shipbuilding industry in the north of England. He founded the Rainforest Foundation Fund to help save the Brazilian rainforests and protect indigenous people and has supported human rights campaigns for decades.

**Joel Reynolds****Western Director and Senior Attorney, Natural Resources Defense Council**

Joel is a widely recognized environmental litigator who sued the US Navy over its use of sonar, fighting all the way to the US Supreme Court. He has led numerous successful campaigns, including those to protect the gray whale birthing lagoon and World Heritage Site at Laguna San Ignacio in Baja, California, to reduce ocean noise pollution, to protect the popular California State Park at San Onofre and, most recently, to stop the Pebble Mine in southwest Alaska. He has twice been selected California Lawyer of the Year in the environmental category.

## **FILM CREDITS**

Narrated by  
Rachel McAdams

Directed by  
Michelle Dougherty and Daniel Hinerfeld

Produced by  
Daniel Hinerfeld and Michelle Dougherty

Written by  
Mark Monroe

Featuring  
Sting

Edited by  
Christopher S. Johnson

Director of Photography  
Stacy Toyama

Score Composed and Produced by  
Heitor Pereira

Executive Producers  
Peter Frankfurt, Chip Houghton, Joel Reynolds

Co-Producers  
Francesca Bucci and Lisa Whiteman

Consulting Producers  
Michael Jasny, Tristan Bayer, Bronwyn Barkan

Associate Producers  
Shawna Moos, Patrick R. Ramage, Dunja Vitolic, Kashina Kessler

Natural Resources Defense Council (NRDC)  
Rhea Suh – President, Joel Reynolds – Western Director, Michael Jasny –  
Director Marine Mammal Protection, Lisa Benenson – Chief Communications  
Officer

International Fund for Animal Welfare (IFAW)  
Azzedine Downes – President, Patrick R. Ramage – Director Global Whale  
Program, Erica Martin – Vice President Communications, Shawna Moos –  
Director Communications

Special Thanks To  
The Faucett Family Foundation

## **FILM FESTIVALS**

### **World Premiere: Wild & Scenic Film Festival (2016)**

Jury Award & the John de Graaf Environmental Filmmaking Award

### **San Francisco International Ocean Film Festival (2016)**

Environment Award

### **Environmental Film Festival in the Nation's Capital (2016)**

### **Big Sky Film Festival (2016)**

### **San Francisco Green Film Festival (2016)**

### **Princeton Environmental Film Festival (2016)**

### **San Luis Obispo International Film Festival (2016)**