

## Voice of the Sea TV Episode Descriptions

Count	Episode	Name	Description
1	VOS1-01	<a href="#"><u>An Intro to Voice of the Sea</u></a>	In this special debut episode, we preview some of the stories we'll tell this season on Voice of the Sea, including fishponds, beaches, Tara expedition, aquaponics, oysters, algae, and volcanoes.
2	VOS1-02	<a href="#"><u>Restoring a Hawaiian Fishpond</u></a>	***+ We meet Kimokeo Kapahulehua and learn about the restoration of Maui's Ko'ie'ie Loko I'a.
3	VOS1-03	<a href="#"><u>Aquaponics and Wind Turbines</u></a>	* We meet Maui visionary Tony Liserre who shows us his home aquaponics system and unique wind turbine system.
4	VOS1-04	<a href="#"><u>Saving Hawaii's Beaches</u></a>	We meet coastal hazards specialist, Tara Owens, on Maui to learn about beach restoration programs and what we can do to save our beaches.
5	VOS1-05	<a href="#"><u>The Global Tara Oceans Expedition</u></a>	We tour the famous traveling science experiment ship called the Tara and meet its crewmembers.
6	VOS1-06	<a href="#"><u>Collecting Data Aboard the Tara Oceans Expedition</u></a>	We are back onboard the Tara to learn more about the research and crew of this ship.
7	VOS1-07	<a href="#"><u>Farming Oysters and Algae</u></a>	We tour the Pacific Aquaculture and Coastal Resources center at UH Hilo where they grow oysters and oyster food.
8	VOS1-08	<a href="#"><u>Tracking Lava Flows with the USGS</u></a>	We meet USGS geologists, Matt Patrick and Tristan McDonald, on the Big Island who show us what it is like to track an active lava flow, and then we head to the lab to learn how scientists, Julia Hammer, Thomas Shea, and Samantha Jacob recreate volcanic conditions.
9	VOS1-09	<a href="#"><u>Deep Sea Lab</u></a>	We learn about the creatures of the deep sea and how we study them with oceanographer Jeff Drazen.
10	VOS1-10	<a href="#"><u>Open House of the Sea</u></a>	We visit the University of Hawaii's SOEST Open House to learn about earthquakes, volcanoes, waves, and the sounds of the sea.
11	VOS1-11	<a href="#"><u>Farming Fish</u></a>	We check out the supersized aquaponics setup at Maui Aquaponics, where they grow tilapia and lettuce in a pest and fertilizer free environment. We then tour UH Sea Grant Hilo's sturgeonfish and other aquaculture projects.
12	VOS1-12	<a href="#"><u>Discovering Mokupapapa and ARMS</u></a>	We tour the Mokupapapa Discovery Center in Hilo and learn about Autonomous Reef Monitoring Structures (ARMS).
13	VOS1-13	<a href="#"><u>Upcoming Episode Special</u></a>	*+ In this special episode, we preview some of the upcoming stories on Voice of the Sea, including Palau's jellyfish lake, endangered animals, underwater photography, cone snails, navigation, traditional sailing, surf forecasting, tagging sharks, and more. (Note some of these stories are covered more in 2015 episodes.)
14	VOS1-14	<a href="#"><u>Preserving Palau</u></a>	In this episode we explore how a changing ocean is impacting this island nation.
15	VOS1-15	<a href="#"><u>Jellyfish Lake</u></a>	* We meet research assistant Gerda Ucharm, who takes us to the world famous Jellyfish Lake of Palau.
16	VOS1-16	<a href="#"><u>Navigation and Traditional Sailing</u></a>	We meet traditional navigator Sesario Sewralur and traditional sailor Tim Gilliom and learn about finding your way across the ocean using only your senses.
17	VOS1-17	<a href="#"><u>Palau's Endangered Animals</u></a>	We learn about the endangered sea mammal, the dugong, and the endangered and beautiful shorebirds of Palau.
18	VOS1-18	<a href="#"><u>Cancer and Cone Snails</u></a>	How the cone snails of Guam and corals of Palau are used in cancer research.
19	VOS1-19	<a href="#"><u>Fish Spawning Aggregations</u></a>	Researchers Terry Donaldson and Pat Colin talk about fish spawning aggregations - elusive and amazing events.
20	VOS2-01	<a href="#"><u>Upcoming Episode Highlights</u></a>	In this special episode we preview some upcoming Voice of the Sea stories. We'll be learning about life in American Samoa and what makes it unique. We'll meet people managing it's natural resources. Fom chiefs to ethnographers, who study the culture, we learn how Samoans are coping with the challenges their islands face.
21	VOS2-02	<a href="#"><u>Under the Waters of Palau</u></a>	* In this episode, we dive the world famous reefs of Palau, considered to be one of the best scuba destinations in the world. We meet world class underwater videographer Nick Martorano, who shares the secrets of filming underwater.

000000\* Indicates Episode is a National Telly Award Winner (+ indicates winner in multiple educational categories): \* Bronze, \*\* Silver, \*\*\* Gold (level est. during season 6)

22	VOS2-03	<a href="#"><u>Surf Forecasting</u></a>	In this episode, we meet legendary surf forecaster Pat Caldwell. Pat has been predicting ocean conditions in Hawaii for 30 years. Pat explains the most important factors in predicting waves. He'll explain rouge waves, tsunamis, and the dynamics of wave forecasting.
23	VOS2-04	<a href="#"><u>Shark and Tuna Tagging</u></a>	In this episode, we're on Coconut Island on Oahu to check out the latest in shark and tuna research. We'll investigate the types of high-tech tags used for tracking these large predators as they swim across the ocean.
24	VOS2-05	<a href="#"><u>Life in American Samoa</u></a>	* In this episode, we journey to American Samoa to meet researchers, scientists, village chiefs, and everyday citizens to see how they're coping with a changing ocean. We'll learn about the history, culture, natural resources, and challenges American Samoa faces from many perspectives.
25	VOS2-06	<a href="#"><u>Palau's International Coral Reef Research Center</u></a>	In this episode we tour Palau's International Coral Reef Research Center. Researcher Adelle Lukes shows us around the aquarium and mangrove exhibit, the extensive coral collection, fish measurement system, and research equipment they use to study sea grass.
26	VOS2-07	<a href="#"><u>Studying Samoan Culture</u></a>	* In this episode we talk to ethnographer Micah Van Der Ryn of the Samoan Studies Institute. Micah explains what it is to be an ethnographer as he catalogs the legends, history, and customs of everyday life in Samoa. We'll also see excerpts from his documentary about Muliava, also known as Rose Atoll.
27	VOS2-08	<a href="#"><u>Crown of Thorns Invades Samoa</u></a>	In this episode we visit the National Park in American Samoa with ecologist Tim Clark. We'll be doing some underwater surveying, looking for outbreaks of the crown of thorns starfish, which is devastating reefs across the Pacific. Tim and his team are also mapping fish habitat in the park, and he'll talk about the tools and technology they use in their dives.
28	VOS2-09	<a href="#"><u>Managing Rose Atoll</u></a>	In this episode, we learn about the pristine environment of Samoa's Rose Atoll with monument Manager Frank Pendleton. Frank explains his job as monument manager, working with scientists from across the Pacific to monitor the environmental health of Rose Atoll.
29	VOS2-10	<a href="#"><u>Fish Ears and Algae</u></a>	In this episode, we're in Guam looking at the bones in fish ears to determine their age. Then we're studying algae. We'll check out some samples researchers have gathered and we'll learn why algae is so hard to classify.
30	VOS2-11	<a href="#"><u>Navigating the Hōkūle'a</u></a>	* In this episode we meet navigator of the Hōkūle'a Ka'iulani Murphy. She shows us the fabled canoe, and explains her role onboard. We also learn from navigator-in-training Jason Patterson.
31	VOS2-13	<a href="#"><u>Food Webs of the Open Ocean</u></a>	In this episode, Jeff Drazen, lead scientist of the Kilo Moana research cruise, explains how research is revising our understanding of what deep sea animals feed on.
32	VOS2-14	<a href="#"><u>Science Journalists at Sea</u></a>	In this episode, students in the COSEE Journalist at Sea program go to sea on the Kilo Moana Research Vessel. They join the science expedition and report back on the important work being done there, as well as what life is like on a scientific research vessel.
33	VOS2-15	<a href="#"><u>Scientists at Sea</u></a>	* In this episode, we meet the researchers and crew onboard the Kilo Moana scientific research vessel. We'll get a sense of what it's like to go to sea on a research cruise and check out the jobs and equipment onboard.
34	VOS2-16	<a href="#"><u>Onboard the Falkor: Mapping the Northwest Hawaiian Islands</u></a>	In this episode, we're onboard the Falkor, a high tech research vessel that's just returned from mapping the bottom of the Northwestern Hawaiian Islands, revealing new information about the origins of Hawaii.
35	VOS2-17	<a href="#"><u>Onboard the Falkor: Whale Watching</u></a>	In this episode, we tour the Falkor, the high tech research vessel exploring Hawaii's waters. We'll meet some of the crew, learn about their jobs, and check out the research program studying the effect of the ship's sonar system on whale behavior.
36	VOS2-18	<a href="#"><u>Polynesian Voyaging Canoes</u></a>	In this episode, we're talking with voyaging canoe builders, navigators, and captains from Hawaii and Micronesia: Ka'iulani Murphy, Sesario Sewralur, and Tim Gilliom. These heroes share their stories and pass on knowledge to the next generation.
37	VOS2-19	<a href="#"><u>Voyaging Experts Talk Story</u></a>	In this episode, we go onboard three historic voyaging canoes—the Hōkūle'a, the Alingano Maisu, and the Mo'okiha o Pi'ilani. We'll learn about the equipment, materials, and crew members onboard to see what makes each canoe unique.
38	VOS3-01	<a href="#"><u>Macroalgae Attack!</u></a>	In this episode we're in Cook's Bay, on the island of Moorea in French Polynesia, checking out the reef study of PhD student Samantha Davis. Sammy is looking at the relationship between macroalgae and herbivores as macroalgae threatens to overwhelm the reef.
39	VOS3-02	<a href="#"><u>Sammy's Reef</u></a>	In this episode, we're back in Cook's Bay with graduate student Samantha Davis studying how Moorea's reefs recover from massive die-offs while other reefs around the world are not recovering. Perhaps the Moorea reefs will offer insights for maintaining reef health in Hawaii and beyond.
40	VOS3-03	<a href="#"><u>Stella's Sea Urchins</u></a>	In this episode, we meet researcher Stella Swanson's and learn about her sea urchin study in French Polynesia. Stella and her colleague snorkel the reefs of Temae, on the island of Moorea, gathering corals for analysis and setting up fish observation cameras.
41	VOS3-04	<a href="#"><u>Sea Urchin Disaster</u></a>	In this episode, we look at the dramatic decline in the sea urchin population along Moorea's eastern reefs. Researcher Stella Swanson takes us out in the field as we look for evidence of what caused an entire species to be wiped out in only months.
42	VOS3-05	<a href="#"><u>Corals in a Changing World</u></a>	In this episode, scientist Ruth Gates talks about why corals are dying at alarming rates across the world. She explains the effects that coral reefs have on the food chain as well as the role science can play in trying to save coral reefs.

43	VOS3-06	<a href="#"><u>Building Super Corals</u></a>	In this episode we're at the Gump Research Station, on the island of Moorea in French Polynesia, checking out the molecular lab. They're studying corals, fresh from the reef for long-term studies that will teach us about the future of the ocean. We'll learn about the research they're doing and get a tour of the science equipment.
44	VOS3-07	<a href="#"><u>How Fish help Corals Grow</u></a>	In this episode, scientist Andy Brooks shows off his research in the beautiful waters of French Polynesia. Andy and his colleagues have mapped changes in the reefs of Moorea for over 15 years and are studying the effects of fish waste on corals, with some important findings!
45	VOS3-08	<a href="#"><u>Coral Snail Infestation</u></a>	In this episode, we learn about competition on the reef and how large populations of snails are affecting coral growth in French Polynesia.
46	VOS3-09	<a href="#"><u>Our Tiny Worlds</u></a>	In this episode, we're creating tiny ocean replicas to better understand how climate change will affect coral reefs—and to see what reefs may look like in the next century.
47	VOS3-10	<a href="#"><u>Mutualism on the Reef</u></a>	In this episode, we're in French Polynesia, on the island of Moorea at the Gump Research Station. Scientists are discovering exciting new examples of mutualism on the reef.
48	VOS3-11	<a href="#"><u>Coral Research on Moorea</u></a>	In this episode, we learn about the importance of long-term marine research in a changing environment. Researchers from UC Santa Barbara have been studying the reefs in French Polynesia, on the island of Moorea, for over two decades. Their research has led to new understandings of life cycles and organism relationships on the reef.
49	VOS3-12	<a href="#"><u>Building Science Experiments</u></a>	In this episode, we're designing, building, and conducting underwater experiments to learn about macro algae, fish, and the reef's interdependencies.
50	VOS3-13	<a href="#"><u>Knowledge of the Past</u></a>	* In this episode, we meet with elders from the island of Moorea, in French Polynesia. We learn about the Te Pu 'Atiti'a Center and how it is helping to perpetuate local knowledge and traditions. The elders tell us about changes to the ocean in their lifetime, and how those changes have affected life in the water and on the land.
51	VOS3-14	<a href="#"><u>Amouli Village Meeting</u></a>	In this episode we're talking about village life in American Samoa. We talk with the mayor of Amouli Village about Samoan village traditions, and we attend a village meeting where climate change and fishing pressures are changing how locals manage their resources.
52	VOS3-15	<a href="#"><u>Mercury and the Food Web</u></a>	In this episode, we learn how scientists use isotope analysis to understand the way mercury moves through ocean food webs. This research has important implications for human consumption of sea food, and Dr. Brian Popp shares some of his most recent discoveries—including the role that sunlight plays in changing the way mercury is taken up in fish tissues.
53	VOS3-16	<a href="#"><u>Measuring Mercury in the Clean Room</u></a>	In this episode, we're invited inside the cleanest room in Hawaii to see how scientists study pollutants in the food web.
54	VOS3-17	<a href="#"><u>Suspended Particles in the Ocean</u></a>	In this episode, researcher Hillary Close takes us through the process of using chemical isotope analysis to uncover secrets of the ocean food web hidden in tiny, suspended particles.
55	VOS3-18	<a href="#"><u>Zooplankton in The Deep Sea</u></a>	In this episode, we take a look at zooplankton—tiny ocean animals—with researcher Cecilia Hannides and learn how she studies zooplankton samples.
56	VOS3-19	<a href="#"><u>Strange Fish of The Deep</u></a>	In this episode, researchers give us a peek at the strange, and sometimes very little fish, of the deep sea as we learn about the importance of these fishes to the overall ocean food web.
57	VOS4-01	<a href="#"><u>Mapping the Freshwater of Hawai'i</u></a>	* In this episode, we learn how scientists use chemical signatures to track the flow of freshwater underground and into the ocean as part of the 'Ike Wai project's work to map and model the aquifer system of underground, stored freshwater in Hawai'i.
58	VOS4-02	<a href="#"><u>Testing Freshwater</u></a>	In this episode, we're working with Hawai'i Sea Grant researchers and graduate students to examine the water quality of freshwater as it heads to the ocean. Freshwater travels in streams and underground, picking up pollution from our cesspools and agricultural run-off. We take a look at the water quality in streams and the shoreline of windward O'ahu.
59	VOS4-03	<a href="#"><u>Intertidal algae and invertebrates</u></a>	* In this episode, we're learning about different types of algae and invertebrates with researchers from the OPIHI project, who are working with teachers and students around the state of Hawai'i to monitor the health of the intertidal environment.
60	VOS4-04	<a href="#"><u>Translating Hawaiian Newspapers</u></a>	In this episode, we're learning about the translation of Hawaiian Language Newspapers from the 1800s and 1900s. We take a look at the University of Hawai'i Institute for Hawaiian Language Research and Translation with Dr. Puakea Nogelmeier and his team, who are working with the 'Ike Wai project to better understand historic and cultural importance of freshwater resources in Hawai'i.
61	VOS4-05	<a href="#"><u>Building on the Shore</u></a>	In this episode, we're learning about coastal erosion and how it affects homes built near the shore. We explore the coastline with Hawai'i Sea Grant Extension Agent, Ruby Pap, and County of Kauai planner, Ka'aina Hull, to see what happens when buildings are put too close to the ocean compared to buildings that are set-back, allowing natural beach action and sea-level rise to occur—without damaging properties.
62	VOS4-06	<a href="#"><u>Coastal Erosion on Maui</u></a>	* In this episode, we're looking at eroding beaches of West Maui, where large condos are being threatened by loss of sand and sea-level rise with Hawai'i Sea Grant Coastal Hazards Expert Tara Owens and Maui County planner, Jim Buika.
63	VOS4-07	<a href="#"><u>Contaminated Conservation Area</u></a>	In this episode, we're looking at the effect of sewage injection wells on the health of Maui's coral reefs. We're at Kahekili Beach Park with researchers, managers, and community activists to learn what members of the community can do to promote the health of our nearshore waters.
64	VOS4-08	<a href="#"><u>Fish No Take</u></a>	This week on Voice of the Sea, we're at Kahekili Beach Park on Maui. We take a look at some 2011 footage and compare it to 2017 as we learn about the management of algae-eating fishes with local fisherman and NOAA coral fellow, Luna Kekoa.



65	VOS4-09	<a href="#"><u>King Tides</u></a>	In this episode, we're talking about the exceptionally high king tides and citizen science with Senator Brian Schatz. King Tides were widely reported across the state this year, and UH's Dr. Mark Merrifield explains how sea level rise is increasing the amount of flooding associated with these high tides. We talk story with Matt Gonser and Maya Walton, to learn more about the Pacific Islands King Tides Project and how you can get involved.
66	VOS4-10	<a href="#"><u>Sea Level Rise and the Ala Wai Canal</u></a>	** In this episode, we head inland to take a look at how rising sea level will affect our infrastructure, aquifers, and fresh water supplies. Researchers from the University of Hawaii Sea Grant College Program and the School of Ocean and Earth Science and Technology are using King Tides as a window into future ocean conditions, which will have dramatic effects on our island life.
67	VOS4-11	<a href="#"><u>Hōkūle'a Returns</u></a>	In this episode, we're at the Mālama Honua celebration in Honolulu, welcoming home the Hōkūle'a. For three years, the historic polynesian voyaging canoe sailed around the world—using traditional navigation to unite indigenous cultures and inspire stewardship to care for our island Earth. In this historic episode, we celebrate with original Hōkūle'a builder and crew member John Kruse, navigator Ka'iulani Murphy, science specialist Anuschka Faucci, chief operations officer Heidi Guth, and other important crew members at the Mālama Honua celebration in Honolulu.
68	VOS4-12	<a href="#"><u>The Kiritimati to Hawai'i Connection</u></a>	In this episode we're investigating where Hawaii's fish come from with Dr. Brian Bowen's research team at the Hawai'i Institute of Marine Biology. Brian's team has just returned from a trip to Kiritimati—a remote, coral atoll 1,000 miles South of O'ahu. While at Kiritimati, Bowen's team gathered genetic samples from local fish to compare with Hawai'i fish. The relationships in DNA that they discover will tell us about the resiliency of our local fish populations, and reveal secrets of the historical migration of reef fish across Oceania.
69	VOS4-13	<a href="#"><u>Measuring Mercury In Ocean Fish</u></a>	In this episode, we're learning about mercury in the ocean food web with Dr. Brian Popp from the University of Hawai'i School of Ocean and Earth Science and Technology. We investigate the research vessel Kilo Moana and the labs of UH Mānoa where Brian studies mercury from the samples collected at sea.
70	VOS4-14	<a href="#"><u>Hōkūle'a Before and After</u></a>	In this episode, we're celebrating the success of the Hawaiian voyaging canoe Hōkūle'a and her unprecedented worldwide voyage. We'll hear about her adventures and talk to crew members about the journey—what they anticipated and what surprised them.
71	VOS4-15	<i>Cultural Experts and Traditional Knowledge</i>	In this episode, we're learning from cultural and traditional knowledge experts from Palau, Hawai'i, Tahiti, and American Samoa. Kapuna talk about the importance of studying the signs in nature.
72	VOS4-16	<i>Rising Seas</i>	In this episode, we meet with elders from the island of Moorea, in French Polynesia. They tell us about the changes to the ocean in their lifetime, and how those changes have affected life in the water and on the land.
73	VOS4-17	<i>Science Ships at Sea</i>	In this episode, we're on board two research ships—the University of Hawaii's Kilo Moana and the Schmidt Ocean Institute's Falkor.
74	VOS5-01	<a href="#"><u>Marine Debris</u></a>	In this episode, we're learning about marine debris—the problems and issues as well as what our island communities are doing to combat the problem. We'll visit the James Campbell National Wildlife Refuge, a grass-roots micro plastic clean-up effort on Kauai, and the Honolulu based Nets-to-Energy program. We talk with the NOAA Pacific Islands Marine Debris Regional Coordinator, Surfrider, Ocean Friendly Restaurants, Kōkua Hawai'i Foundation, and Mālama Learning Center about the efforts we can all take as individuals to help stop marine debris.
75	VOS5-02	<a href="#"><u>The Rise and Fall of Marine Invertebrates</u></a>	In this special episode, we're investigating the rise and fall of marine invertebrates. Populations of animals like snails, sea stars, and sea urchins are known to increase dramatically and die-off suddenly. Sometimes, the population explosion is harmful to the environment—like when the coral-eating, crown of thorns sea star takes over and destroys a reef. In other cases, a large population of animals like the sea urchin may die off unexpectedly—leaving the reef vulnerable and without one of its most important herbivores. We talk with researchers trying to uncover these mysteries of why populations grow and grow or die off suddenly.
76	VOS5-03	<a href="#"><u>Fish Origins Revealed in DNA</u></a>	In this episode, we're investigating the origins of Hawaiian reef fishes with Dr. Brian Bowen's lab at the Hawai'i Institute of Marine Biology. The Hawaiian islands are in the middle of the Pacific Ocean Basin and far away from other coral reefs—meaning that Hawaiian reef fishes originally arrived as larvae, traveling in currents from westward in Japan or southward from the Line Islands. Dr. Bowen and his researchers are using genetic tools to uncover the mystery of where Hawaii's reef fish came from.
77	VOS5-04	<a href="#"><u>Origins of Hawaiian Reef Fishes</u></a>	In this episode, we journey to the island of Okinawa and the Kiritimati atoll with Dr. Brian Bowen's lab at the Hawai'i Institute of Marine Biology—collecting DNA samples to better understand the origins and present-day connectivity of Hawaiian reef fishes. Migration of fish larvae between islands and across the Pacific greatly affects our local fish populations. Join Dr. Bowen and his team in the field and the laboratory as they work to uncover mysteries of reef fish migration across Oceania.
78	VOS5-05	<a href="#"><u>Visiting the Hawai'i Institute of Marine Biology</u></a>	* In this episode, we travel to the Hawai'i Institute of Marine Biology (HIMB) with students from the Kulia Marine Science Club. HIMB is a world leader in research to understand and conserve tropical marine ecosystems. In recent years, HIMB has also integrated itself into the community, working with local volunteers, schools, and members of the public. Education programs focus on providing rigorous and authentic research experiences for high school and college students as well as for younger students, school groups, and the public.
79	VOS5-06	<a href="#"><u>HIMB Technology</u></a>	In this episode we're learning about the technology that researchers at the Hawai'i Institute of Marine Biology use to study genetic relationships, conduct long term experiments, and remotely assess the health of coral reefs.
80	VOS5-07	<a href="#"><u>Human Assisted Corals</u></a>	In this episode, we're investigating how assisted evolution is increasing the resilience of corals in the Ruth Gates Lab at the Hawai'i Institute of Marine Biology, which is internationally famous for this cutting-edge research. We'll talk to the Gates Lab project manager, Genetics and Microscopy expert, Graduate Student Researchers, Lab assistants, and a high school intern — all playing a part in understanding and ensuring a future for coral reefs on our planet earth.

81	VOS5-08	<a href="#"><u>Climate From the Mountains to the Past</u></a>		In this episode, we profile some of the work done by the Pacific Islands Climate Adaptation Science Center — who partners with communities across the Pacific to enact solutions that help people adapt to their changing climates. We talk to researchers on Maui studying how climate affects the amount of water trapped by high elevation forests, which are critical to the freshwater supply for island communities and wildlife. Then we'll see how researchers are using the Hawaiian Newspaper Archives to study changes in weather patterns, and reveal previous El Nino events.
82	VOS5-09	<a href="#"><u>Adapting Culture to Climate Change</u></a>	*	In this episode, we're learning how scientists, cultural practitioners, and community members are working together to understand and adapt to the effects of climate change. We investigate the relationship between a changing environment and water quality in local fishponds as well as the relationship between changing ocean conditions and people's personal connection to place. We start off on the big island of Hawai'i at Honokea Loko I'a with UH Hilo graduate students and fishpond caretakers Cherie Kauahi and Kamala Anthony.
83	VOS5-10	<a href="#"><u>Are You Ocean Literate?</u></a>		In this special episode of Voice of the Sea, we take a look at what it means to be ocean literate. The ocean regulates our weather and climate. It supplies food, medicine, minerals, and energy resources. Our environment, economy, and society all depend on the processes of the ocean. The ocean literacy principles describe seven big ideas we should all understand about the ocean and aquatic environments.
84	VOS5-11	<a href="#"><u>Engineering Tsunami Resilience</u></a>		In this episode of Voice of the Sea, we investigate how engineers study and design buildings to withstand destructive forces, like tsunamis. We'll learn about the dangers to Hawai'i, the plan for vertical evacuation in Honolulu, and the new building code. We talk with distinguished professor, Dr. Ian Robertson, award-winning engineer Gary Chock, and Dean of the University of Hawaii's College of Engineering, Dr. Ron Riggs.
85	VOS5-12	<a href="#"><u>Designing Future Coastal Communities</u></a>	*	In this episode, we're at the University of Hawai'i at Mānoa's School of Architecture. We're looking at projects designed to help coastal O'ahu communities adapt to climate change and sea level rise. We talk to students, researchers and faculty about their focus on sustainability and community resilience.
86	VOS5-13	<a href="#"><u>Water Resources Research</u></a>	*	In this episode, we see fresh water from new perspectives as we take a look at some of the Water Resources Research Center's work to better understand the unique water and wastewater management problems that we face in the Pacific. We visit the Kako'o O'iwi lo'i in Kāne'ohe, talk with engineers about wastewater disposal and the problem of groundwater leaking into sewer pipes, and look deep underground at stores of freshwater within the Hawaiian islands.
87	VOS6-01	<a href="#"><u>Hidden Benefits of Farming Kalo</u></a>	*	In this episode, we're investigating the hidden benefits of farming kalo at Kako'o 'Ōiwi, a non profit lo'i in Kāne'ohe that is working to restore the wetland for food production, cultural revival, and water quality improvement. We talk to farmers and researchers from Kako'o 'Ōiwi, the Water Resources Research Center, the UH Economic Research Organization, and The Nature Conservancy of Hawai'i.
88	VOS6-02	<a href="#"><u>Conserving Fresh Water</u></a>		In this episode of Voice of the Sea, we're talking about the need to conserve fresh water in Hawai'i. We'll learn from experts about how to protect fresh water in our homes and in our communities. Micah Kāne and Tim Johns, at the Hawai'i Community Foundation talk about the freshwater initiative for the year 2030. Reggie Castanares at the Plumbers & Fitters Training Center shows the role of plumbing and fixtures in conserving water. Barry Usagawa at the Honolulu Board of Water Supply discusses the need to conserve fresh water amidst the increasing demands from our growing population and growing agriculture. And, at the Hui Kū Maoli Ola gardens with Rick Barboza to learn how native plants can be used to help conserve fresh water.
89	VOS6-03	<a href="#"><u>College of Tropical Agriculture and Human Resources</u></a>	*	In this episode, we're exploring some of the research conducted by CTAHR -UH's College of Tropical Agriculture and Human Resources. We'll learn about traditional farming practices and indigenous plants, as well as chemicals in the aquatic environment and their effects on food fishes. Environmental social scientist, Dr. Mehana Vaughan, welcomes us with an 'oli to the coastal community of Wanini (Anini), Kaua'i, and shares knowledge of this special place. Next, we learn about the science and importance of traditional farming practices and growing indigenous food crops like 'ulu and kō with Dr. Noa Lincoln at CTAHR's outdoor Magoon Research Facility in Mānoa Valley. Then, we take a look inside at CTAHR's Agricultural Science Building where Dr. Andre Seale discusses the research his group is doing on Tilapia fish—which have an amazing ability to live in both fresh and salt water by adjusting their internal physiology.
90	VOS6-04	<a href="#"><u>EXPORTS: On Board The Sally Ride</u></a>	***	We're in Seattle talking to scientists as they prepare to depart on the first leg of the EXPORTS research cruise to the northeastern Pacific ocean. EXPORTS is a revolutionary scientific undertaking by NASA and the National Science Foundation to understand the carbon cycle and the fate of carbon in the deep ocean in order to predict future climate conditions. Planning for the expedition has been going on for over a decade to coordinate 100s of scientists, satellites, remote underwater vehicles, and two research vessels. We talk to researchers about tracing carbon and the use of color and light in understanding the flow of carbon through the marine food web. We also learn a bit about what it's like to spend a month at sea.
91	VOS6-05	<a href="#"><u>EXPORTS 2: On Board The Roger Revelle</u></a>	*	In this episode of Voice of the Sea, we're learning more about EXPORTS — NASA and the National Science Foundations' epic research project to study the ocean's carbon cycle, so that information from satellites can make more accurate predictions of global climate change. We start off on board the Research Vessel Roger Revelle.
92	VOS6-06	<a href="#"><u>Native Forests</u></a>		We're in the watershed forests of O'ahu, Maui, and Hawai'i. We talk to hydrologists and ecological experts working to conserve and re-establish native plants and animals in these forests—in an effort to not only preserve the 'aina but also to recharge the underground aquifers that feed the islands with fresh water.
93	VOS6-07	<a href="#"><u>Water Reuse</u></a>	*	In this episode of Voice of the Sea, we're learning about the newest strategies in Hawai'i for recycling wastewater to help protect our fresh water supply and the environment. Recycling and Reusing our fresh water will not only help protect our fresh water supply for future generations, but also help to protect the environment by keeping fresh water in local streams and underground aquifers and preventing excess nutrients from going into the ocean and onto our reefs.
94	VOS6-08	<a href="#"><u>Wai Maoli</u></a>	**	In this episode, we're learning about Wai Maoli — Hawai'i's Fresh Water Initiative to ensure water abundance for future generations. We talk to experts across the state about water conservation, water recharge, and water reuse. We start off with Dana Okano from the Hawai'i Community Foundation to learn more about the Fresh Water Initiative and its importance for the people of Hawai'i.
95	VOS6-09	<a href="#"><u>Saving the Kiwikiu</u></a>	**	In this episode, we're in the upper forests of East Maui, in the Nakula Natural Area Reserve, working with the Maui Forest Bird Recovery Project to help to restore the Native Hawaiian forest as part of their mission to save nearly extinct birds, like the Kiwikiu, the Maui Parrotbill, whose population has plummeted to less than 300. We track birds, plant trees, and learn about the forest in preparation for the Kiwikiu release of November 2019, which will introduce these birds back into this mesic forest where they were once found.

96	VOS6-10	<a href="#">Hazard and Hurricane Preparedness</a>	**	In this episode, we're talking preparedness with the scientists who wrote the Hawai'i Handbook on how to prepare for Natural Hazards. We visit the Central Pacific Hurricane Center to learn about how meteorologists forecast weather and what they do during hurricanes and tropical storms. Then, we talk to the Department of Emergency Management about what you need to know to stay safe during disasters! We also learn how to strengthen your home to withstand storms and high winds. We take a look at some of the different protection options available—for both single and double wall homes.
97	VOS6-11	<a href="#">SOEST Open House</a>	*	In this special episode of Voice of the Sea, we join over 6,000 students and community members at SOEST open house — exploring the research, innovation, and education opportunities available at the School of Ocean and Earth Science and Technology at the University of Hawai'i at Mānoa. Every two years during SOEST Open House, faculty, students and staff share their research and love of science with students and the community. Exhibits include hands-on activities, interactive demonstrations, videos, laboratory tours, state-of-the art computer animation and high-tech equipment displays.
98	VOS6-12	<i>Opihi and Traditional Hawaiian Culture</i>		In this special online, expanded segment, we're learning about traditional, Hawaiian cultural practices. Pelika Andrade explains about the value placed on maintaining productive resources rather than eating specific foods using 'opihi, a Native Hawaiian Limpet (snail), as an example. She describes the need to find, "a balance and (have) a real conversation about what management, what conservation, what preservation, what pristine looks like in a global setting."
99	VOS7-01	<a href="#">Deep Sea Algae</a>	**	We're learning about algae that grows in deep sea environments, called mesophotic reefs. Beyond the reach of conventional scuba, mesophotic reefs receive just enough sunlight for algae to grow and photosynthesize. Deep sea corals, other invertebrates, and fishes also inhabit these remote environments.
100	VOS7-02	<a href="#">Coral Restoration Nursery</a>		In this episode of Voice of the Sea, we're learning about the science and application of coral restoration. Researchers, at the DAR Ānuenuē Fisheries Research Center and Coral Restoration Nursery, collect corals from construction sites, shipwrecks, and other opportunistic situations for study and research. Corals are brought to the facility, where they are rapidly grown and then out-planted back on the reef. University of Hawai'i Sea Grant researchers are also conducting experiments at the Ānuenuē facility to further understanding of the environmental conditions most useful for quickly growing corals and restoring local reefs after bleaching and other catastrophic events.
101	VOS7-03	<a href="#">Careers in Aquaculture</a>		In this episode, we revisit the University of Hawaii at Hilo Pacific Aquaculture and Coastal Resources Center. The center provides hand-on experience for students in aquaculture and aquaponics. The center is more than just a place of learning; it grows ornamental fish, food fish, shellfish, and limu for the community and other aquaculture facilities. We take a look at the hatchery, where they produce juvenile fish and oysters. And, we learn about microalgae being grown to feed the fish and shellfish. The center is an important training facility for students and has helped to grow aquaculture production across the state—including the Native Hawaiian Oyster, grown for food and to help clean water in places like Hilo Bay, Pearl Harbor, and the Ala Wai.
102	VOS7-04	<a href="#">Hanauma Bay</a>		We explore above and below the water at Hanauma Bay—one of the most unique marine protected areas in the world. We talk to the education staff to learn how Hawai'i residents, visitors, and school groups can learn about fishes, corals, limu and the bay itself, both in person and online! Then, we chat with researchers from the University of Hawai'i who are working to understand the ecology of the bay, how it is impacted by visitors, and how the coronavirus pandemic is providing Hanauma Bay with an unanticipated period of rest—and how they are going to continue their research.
103	VOS7-05	<a href="#">Cesspool Contamination Revealed by Invasive Algae</a>	*	We're learning how invasive algae are being used to detect cesspool contamination across Hawai'i. Cesspools are leaching excess nutrients into the environment, contaminating our water systems, and negatively affecting the growth of algae and coral reefs. Hawai'i has less than 30 years to replace over 80 thousand cesspools. Scientists are analyzing the Nitrogen levels in algae to see where along our coastlines the cesspools are leaking most. We'll learn how scientists are gathering this data and what can be done with technology and policy solutions to help improve the way we treat our wastewater in the future.
104	VOS7-06	<a href="#">Cesspool Issues Rising</a>	**	This time on Voice of the Sea, we're learning about the link between cesspools, ground water, and the ocean. Hawai'i has more than 88,000 cesspools, discharging over 50 million gallons of waste each day. And, many of the cesspools are concentrated in low-lying coastal zones—making these areas extremely vulnerable to leaking cesspools and damage from chemicals, disease, and excess nutrients. Working with communities to develop and implement wastewater treatment plans effective for the land characteristics and human use patterns is the next step. As we work toward better wastewater management, continuing to monitor water quality is also vital to informing ocean users and ensuring public health.
105	VOS7-07	<a href="#">EXPORTS 3: Tracing Carbon Flow to the Deep Sea</a>		In this episode of Voice of the Sea, we're analyzing data from the EXPORTS research project with researchers from the University of Hawai'i, the University of Miami, the Virginia Institute of Marine Science, Woods Hole Oceanographic Institution, and the University of California Santa Barbara. During the summer of 2018, researchers headed out to the northeastern Pacific Ocean on board the Research Vessels Roger Revelle and Sally Ride. Since returning from the expedition, EXPORTS scientists have been identifying organisms, analyzing samples, and working together to make mathematical models of carbon flow in the ocean. The goal is to use these models, in combination with satellite imagery, to make real-time observations and predictions of the global climate from space. All EXPORTS data will be made publicly available online.
106	VOS7-08	<a href="#">Saving the Kiwikiu: Part 2</a>	***	In this episode of Voice of the Sea, we're talking about the progress and plans to help save the kiwikiu — a critically endangered Maui forest bird that eats insects from the bark of Native Hawaiian trees, like Koa and O'hia. The Maui Forest Bird Recovery Project has led a decade-long effort, with multiple partners to regrow native forest, breed the kiwikiu in captivity, and re-establish a wild population of kiwikiu in the newly grown forest of Nakula, on the leeward slopes of Haleakalā. Experts are now reinvigorating their work to reduce threats facing the kiwikiu and ensure its future—including mosquito control plans that could save the kiwikiu as well as many species of native forest birds threatened by invasive species, disease, and climate change.
107	VOS7-09	<a href="#">Virtually Exploring the Abyssal Plains</a>	*	In this episode of Voice of the Sea, we're exploring the deep ocean floor with students and teachers as they go to sea aboard the research vessel Kilo Moana. Even in this time of coronavirus, scientists and students continue their exploration of the abyssal plains, collecting some amazing organisms, and learning about the deep sea food web with the remotely operated vehicle (ROV) Lu'ukai. Join researchers, ROV technicians, Hawai'i students and teachers in the EP'IK program, and undergraduates from across the continental U.S. as we explore the abyssal plains—virtually!



108	VOS7-10	<a href="#">Cesspool Solutions</a>	* In this episode, we're investigating new alternatives for small-scale wastewater treatment. We learn about microbes that help clean water, and microbes that used to track the source of pollution into the ocean. We talk to engineers working to develop low-cost solutions made from local materials. And, we learn about the installation of off-the-shelf solutions, like self-contained aerobic treatment units. We start off at the Hawai'i Institute of Marine Biology for the installation of the first incineration toilet in Hawai'i.
109	VOS8-01	<a href="#">Community-Based Subsistence Fishing Areas</a>	** In this episode, we're talking about the growing opportunities for communities to formally manage their natural resources and preserve local traditions. We talk with Luna Kekoa from the Hawai'i Division of Aquatic Resources about Community-Based Subsistence Fishing Areas and when this new designation is the right tool to use. Then, we visit with Hui Maka'ainana o Makana, which establish the first Community-Based Subsistence Fishing Area in Hawai'i in 2015. We talk with Pelika Andrade, Hawai'i Sea Grant extension agent and Hui Community Member and Hui leaders Presley Wann, Keli'i Alapa'i, and Emily Cadiz. Then, Luna shares some of the plans for community management across Hawai'i and gives tips for getting involved to take care of coastal resources in your place.
110	VOS8-02	<a href="#">EXPORTS 4: Colors of Phytoplankton</a>	In this episode of Voice of the Sea, we're traveling from space to the deep sea with EXPORTS—a NASA and National Science Foundation project that brings together scientists from around the world, to combine new technologies in at-sea research, satellites, and mathematical modeling. A critical part of EXPORTS involves understanding the relationship between phytoplankton at the ocean's surface and carbon transport to the deep sea. The EXPORTS team recently completed a series of studies in the North Pacific Ocean basin, and team members are now preparing to head to sea in the North Atlantic, where they will study seasonal phytoplankton blooms. Meanwhile, NASA's new PACE mission—to record ocean color in high-resolution from space—will greatly improve scientists ability to make remote observations. We talk with PACE engineer Gary Davis and scientist Jeremy Werdell from NASA's Goddard Space Flight Center. Then, we'll visit with EXPORTS researchers Sasha Kramer at the University of California Santa Barbara, Colleen Durkin at Moss Landing Marine Laboratories, James Fox at Oregon State University, and Shawnee Traylor at Woods Hole Oceanographic Institution.
111	VOS8-03	<a href="#">Sea Urchin Hatchery</a>	* In this episode of Voice of the Sea, we're outplanting sea urchins in Waikiki and talking about the importance of urchins in helping to control invasive algae with Wesley Dukes and Kimberly Fuller from the Hawai'i Division of Aquatic Resources. Then, we visit the sea urchin hatchery at the Anuenue Fisheries Research Center and talk with hatchery lead David Cohen and his team—Matthew Lewis, Patrick Gorong, Sean Louie, and Lani Musselman—to learn about the sea urchin hatchery and what makes it an innovative part of aquaculture in
112	VOS8-04	<a href="#">ALOHA Cabled Observatory</a>	In this episode, we're studying the ocean from the world's deepest research station, the Aloha Cabled Observatory—known as the ACO. Located 100 km north of O'ahu, Hawai'i (22 45'N, 158W) in the North Pacific, the ACO provides real-time observations from about 4,728 meters deep via a submarine fiber optic cable that comes ashore at Mākaha, on the West side of O'ahu. In addition to ocean sounds, the ACO records continuous observations of temperature, salinity, and ocean currents. We'll meet the scientists who drive the Remotely Operated Vehicle Lu'ukai to the observatory, study and analyze the data collected there, and repair, maintain, and enhance the capabilities of the ACO.
113	VOS8-05	<a href="#">Waimānalo Aquaponics</a>	** In this episode of Voice of the Sea, we're visiting the flourishing aquaponics community in Waimānalo. We'll check out some backyard aquaponics systems to see what people are growing and talk to business owner Travis Sato to learn about the size, costs, and equipment needed to get started. Agriculture professor Ted Radovich shows us the aquaponics systems at the Waimānalo Learning Center where University of Hawai'i (UH) researchers are working to improve aquaponics techniques and sharing their research with the community. We also catch up with UH public health researcher Jane Chung-Do, who is studying the societal impacts of aquaponics—from improved diet, to enhanced family and community connectedness. The guiding force behind the Waimānalo aquaculture movement is community leader, certified master gardener, and native Hawaiian cultural practitioner, Ilima Ho-Lastimosa.
114	VOS8-06	<a href="#">Honu Hospital</a>	* In this episode of Voice of the Sea, we're rehabilitating turtles with the Maui Ocean Center Marine Institute. We rescue a turtle, learn about the latest techniques in turtle care, and witness the release of recovered patient MA164. Then, we explore the Maui Ocean Center and talk-story with the center's cultural advisor and general manager.
115	VOS8-07	<a href="#">Kumuola Marine Science Education Center</a>	* In this episode of Voice of the Sea, we're on the East side of Hawai'i Island as part of our series on loko i'a (traditional Hawaiian fishponds). We visit the Kumuola Marine Science Education Center to learn about efforts to rehabilitate the Waiāhole and Kapalaho loko i'a —located within the 'ili kūpono of Honohononui, the ahupua'a of Waiākea, and the moku of Hilo. Kumuola is working with haumāna (students) as well as field and industry experts to maximize the health of the Native Hawaiian mullet, 'ama'ama, in their loko i'a. We talk-story about the community involved with Kumuola, the history of the loko i'a under their care (Waiāhole and Kapalaho), the work involved in rehabilitation, and the research that is aiding their process.
116	VOS9-01	<a href="#">Hilo Loko I'a</a>	* In this episode, we're on Hawai'i island in the district of Hilo, along the stretch of coastline known as Keaukaha—learning about loko i'a, traditional Hawaiian fishponds—and the partnerships that make the Loko I'a in the district of Hilo so successful! Journey with us as we meet the individuals who have taken on the cultural responsibility, kuleana, to steward these special places, build partnerships, and revitalize the productivity of loko i'a along Keaukaha. We visit with Kamala Anthony and Manoa Johansen, founders from the community organization Hui Ho'oleimaluō at Honokea Loko (along with Nāhōkū Kahana). Next, we head inland to an area known as Kaumaui, where we talk with educator, Sheri Frias, and students from Ka 'Umeke Kā'eo, who are working with Hui Ho'oleimaluō to rehabilitate the Kaumaui loko wai (fresh water ponds). Then, we head back oceanside to Hale o Lono Loko I'a, where we talk with the caretaker and communications officer, Luka Kanaka'ole, from the Edith Kanaka'ole Foundation.

117	VOS9-02	<a href="#">North Shore Coastal Erosion</a>	In this episode, we're on the North Shore of O'ahu witnessing the extreme erosion events that are threatening homes, roads, ocean access, ecosystems, and historic burial sites. We visit Rocky Point, Laniākea, and Mokulēi'a—three areas with recent beach erosion—to learn about solutions going forward. We talk with coastal geologists, city planners, and community leaders.
118	VOS9-03	<a href="#">North Shore Coastal Erosion: Planning for Solutions</a>	In this episode of Voice of the Sea, we're continuing our discussion about coastal erosion on O'ahu's North Shore—and the variety of proposed solutions to save the sand, homes, roads, and the coastal ecosystem. We start off at Sunset Beach with coastal geologist, Dolan Eversole, from the University of Hawai'i Sea Grant College Program. We take a look at the restoration of sand dunes using native vegetation and strategic fencing with Tim Tybuszewski from the North Shore Community Land Trust. We also talk about how the beach and nearshore waters have changed with long-time Sunset Beach resident, Buddy Shepard. And, we head over to Hale'iwa Beach Park with Kathleen Pahinui, Chair of the North Shore Neighborhood Board, to discuss how community input is integral to solving these issues of coastal erosion.
119	VOS9-04	<a href="#">Managing Cats &amp; Saving Native Wildlife on Maui</a>	In this episode of Voice of the Sea, we're on Maui, learning about efforts to manage the extreme number of feral cats—and how that will benefit both cats and the ecosystem! Cats in the wild have relatively harsh, short lives. And, they spread disease, posing health threats to birds, marine mammals, and humans. Cats also prey on native birds—from the nearshore wetlands to the high forests—killing critically endangered native species and disrupting the ecosystem. Across Maui Nui, experts are working to innovatively solve the problem of too many cats. We talk to Mayor Michael Victorino; Jay Penniman and Jenni Learned from the Maui Nui Seabird Recovery Project; Emily Drose from the Maui Humane Society; Darlene Rayhill from the Good Cat Network; and Kehau Kimokeo from the Division of Aquatic Resources—all working to restore the resilience of Maui's environment by reducing the number of feral cats, rebuilding native bird populations, and supporting the recovery of endangered marine mammals.
120	VOS9-05	<a href="#">Monk Seals and Toxoplasmosis</a>	In this episode of Voice of the Sea, we're looking at the connections between humans, cats, monk seals — and the disease toxoplasmosis. Monk seals have lived in Hawai'i for over three million years, but their population has been severely depleted by human influences and habitat loss. Death from toxoplasmosis—a disease caused by a parasite spread through cat feces—has added another challenge to the recovery of the Hawaiian monk seal population. We talk to Michelle Barbieri and Stacie Robinson from the NOAA Hawaiian Monk Seal Research Program, Angela Amlin, Hawaiian Monk Seal Recovery Coordinator for the National Marine Fisheries Service, and Steph Kendrick, Director of Community Engagement for the Hawaiian Humane Society—all working together to help solve the problem of free-roaming cats in Hawai'i.
121	VOS9-06	<a href="#">EXPORTS 5: The Atlantic</a>	* In this episode of voice of the Sea, we're researching the deep-ocean food web as part of EXPORTS—the international research project studying carbon flow from the atmosphere to the deep sea, with NASA and the National Science Foundation. EXPORTS scientists studying zooplankton have discovered that these tiny animals are hugely important to the ocean food web—and to the Earth's carbon flow. The initial 2018 EXPORTS research expedition took two ships, satellites, and remote vehicles to the Northern Pacific. In 2021, the EXPORTS team completed a heroic, three-ship, coordinated expedition to make similar studies in the Northern Atlantic. EXPORTS teams are now analyzing learning about how food webs change in response to ocean conditions—and what that means for our future ocean and climate. We visit the University of Hawai'i Mānoa School of Ocean and Earth Science and Technology's Stable Isotope Lab to check out some zooplankton and talk with graduate student Connor Shea, lab manager Natalie Wallsgrove, and principal investigator Brian Popp. We also catch up with principal investigator and EXPORTS collaborator, Amy Maas, from the Bermuda Institute of Ocean Sciences to learn how the results of her work are informing EXPORTS researchers here in Hawai'i—and across the world!
122	VOS9-07	<a href="#">Limu Love</a>	* In this episode, we're celebrating the Year of the Limu at the Hāna Limu Festival on Maui, where limu experts and limu lovers from across Hawai'i have gathered to share knowledge, observe local limu, and celebrate this culturally, and environmentally critical food resource. We talk-story with Uncle Wally Ito, Limu Hui Coordinator, Malia Heimuli and former Co-Director of (KUA) Kua'āina Ulu 'Āūamo, Miwa Tamanaha—to what we can do to sustain and perpetuate native limu in our nearshore waters. We start off talking to Hāna Limu Festival organizers Scott Crawford and Claudia Kalaola.
123	VOS10-01	<a href="#">Kaua'i Sea Farm</a>	In this episode of Voice of the Sea, we visit Kaua'i Sea Farm, a one-of-a-kind restorative aquaculture operation, located on the southwest side of Kaua'i—in the 20-acre, saltwater fishpond, Nomilo (Nōmilu) loko i'a, which is owned and cared for by the Pālama family. We learn about their clam and limu (edible algae) aquaculture and their research to grow sea cucumbers—filter feeders that not only help clean the pond but also taste delicious—and can help provide products for sale at local restaurants! We talk-story with production manager, Dave Anderson, aquaculture technician, Kalalena Lum Won, hatchery technician Tim Lechlitter, as well as Pālama family member and Kaua'i Sea Farm president, Lynn Taylor, and director of operations, Thayne Taylor.
124	VOS10-02	<a href="#">Beach Cleaning Machines</a>	In this episode of Voice of the Sea, we're investigating the effects of beach cleaning machines in Hawai'i. We talk to regional and national marine debris expert, Dr. Mary Donohue, about the sources and solutions to marine debris. We take a ride on a beach cleaning machine with David Francisco. And, we talk with Nate Serota, from Honolulu Parks and Recreation, about the tools, and volunteers, that help clean our local beaches. We talk with coastal land use specialist, Ruby Pap, to learn about research to study the effects of machine cleaning the beach. Then, we visit Dr. Rob Toonen's lab at the Hawai'i Institute of Marine Biology (HIMB), where Katherine Viehl and Van Wishingrad explain how cutting-edge environmental DNA (eDNA) technology is being used to identify beach organisms that are hidden, elusive, or too small to see.
125	VOS10-03	<a href="#">Living Artificial Reef</a>	In this episode of Voice of the Sea, we talk with researchers working on the Reefense R3D Project to develop a hybrid living and artificial reef—that dissipates wave energy and protects the shoreline, while also providing habitat for corals, fishes, and other marine life. We head to the Hawai'i Institute of Marine Biology to learn about the research and check out innovative technologies—from selective breeding of resilient corals to underwater hydrophones that attract marine life to the reef. We talk with R3D project director, Ben Jones, from the University of Hawai'i Applied Research Lab; Kira Hughes, Rob Toonen, Crawford Drury, and Joshua Madin from the Hawai'i Institute of Marine Biology; and Aaron Thode and Daniel Wangpraseurt from the University of California. San Diego.



126	VOS10-04	<a href="#">Shark Depredation in Guam</a>	<p>In this episode of Voice of the Sea, we're covering the the rising problem of shark depredation—when sharks eat fish off the line before fishers can secure their catch, which raises costs and stresses fisheries. Together, fishers and shark researchers are working to better understand shark behavior and develop strategies that lessen shark depredation. We head to the Hawai'i Institute of Marine Biology, where fishers from Guam and Saipan gathered for a week-long workshop with Shark Lab researchers—to gain hands-on experience in shark handling techniques and learn to use advanced tagging technology to map shark movements.</p>
127	VOS10-05	<a href="#">SMMILE For Marine Mammals!</a>	<p>In this episode of voice of the sea, we re learning about marine mammal research and traditional navigation practices as part of SMMILE—the Summer Marine Mammal Intensive Learning Experience for Hawai'i high school students entering their junior or senior year. We head to the Hawai'i Institute of Marine Biology (HIMB) with SMMILE program coordinators Kirby Parnell and Brijonnay Madrigal to learn about studies being conducted by the Marine Mammal Research Program (MMRP). Then, we visit the Kānehūnāmoku Voyaging Academy (KVA) and talk with SMMILE student alumni—about what they learned and about how the SMMILE program affected their career paths.</p>
128	VOS10-06	<a href="#">SOEST Open House 2023</a>	<p>In this episode of Voice of the Sea, we're at Discover UH Mānoa Days—checking out the 2023 School of Ocean and Earth, Science, and Technology Open House! With over 80 exhibits, activities, demonstrations, and tours, SOEST Open House is an amazing place to learn about the important research and exciting opportunities available for students—and the community. Join us as we explore deep sea robots, take pictures with the Mars rover, fish for knowledge, touch marine invertebrates, check out the prey items of pelagic fishes, scan for radioactivity, simulate a volcano, climb inside a whale and so much more!</p>
129	VOS11-01	<a href="#">Raising Pua, Raising Community</a>	<p>In this episode of Voice of the Sea, we're celebrating the revitalization of 'ama'ama (mullet) through efforts to raise pua 'ama (baby mullet) for stocking loko i'a—traditional Hawaiian Fishponds. We talk with Dana Hoppe at the Wai'anae High School Marine Science Learning Center, where students earn credits through hands-on training in aquaculture techniques and skills. We visit the Waikalua loko i'a in Kāne'ohe, with Herb Lee and Kai Fox, to learn about multi-trophic aquaculture and integrating modern aquaculture with traditional practices to grow a variety of organisms. We tour the Oceanic Institute in Waimānalo with Kupu intern and hatchery technician Alex at Totman-Rodrigues. And, we talk with Hui Mālama Loko I'a Coordinator, Brenda Asuncion, to learn about why these efforts to raise pua across the pae 'āina are so important to building and restoring community.</p>