



# Fifth International Marine Debris Conference

Waves of Change: Global lessons to inspire local action



**20-25 March 2011  
Honolulu, HI, USA**



**5th International  
Marine Debris Conference**  
20-25 March 2011  
[www.5imdc.org](http://www.5imdc.org)

Waikiki Beach Marriott  
Resort & Spa  
2552 Kalakaua Avenue  
Honolulu, Hawai'i 96815-3699



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## *Conference Welcome*

On behalf of the conference committee, it is our pleasure to welcome you all to Honolulu and the Fifth International Marine Debris Conference! From the beginning, this conference was envisioned as something a little different. We aimed for something more than simply a policy workshop, a science conference, or an intergovernmental session. As a global issue with a myriad of sources and impact, the problem of marine debris cannot be solved without broad support, engagement, and recognition that no single entity will be able to fix the problem alone.

This conference is laying the foundation for cooperation to occur at many different levels, across interests and sectors, and into the future with the creation of the Honolulu Strategy, which has been introduced to all of you through pre-conference emails. The Honolulu Strategy is a framework we hope you will employ as you plan and evaluate your marine debris action plans. You will learn more about it within the pages of this program, at the Monday morning plenary, and throughout the Conference, and we look forward to your ideas, input, and how you will use the Strategy to propel your actions to address marine debris in the future.

Your attendance at this conference allows you to take advantage of high public and media interest, hear about new and exciting research and activities, and benefit from the ongoing passion and dedication of those directly involved in the field. The conference was designed with a variety of tracks, themes, and session types—incorporating science, art, policy, and film—with all paths leading to the shared goal of moving forward, globally and locally, in combating the economic and environmental impacts of marine debris.

We look forward to making this conference a complete success and moving into the future with you.



Kris McElwee



David Osborn

## Conference Partners \$35,000+



NOAA Marine Debris Division  
NOAA Fisheries International Affairs

## Lead Conference Sponsor \$25,000+



NOAA Pacific Services Center  
NOAA Unmanned Aircraft Systems Program

## Conference Sponsor \$10,000+



NOAA Office of Response and Restoration  
NOAA Pacific Region  
NOAA Papahānaumokuākea Marine National Monument

## Exhibit Sponsor \$5,000+



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Oceanic Society Expeditions

## Conference Supporter \$1,000+

Kona Brewing Company  
Kuloko Arts of Hawai'i

Outrigger Enterprises Group  
Society of the Plastics Industry

Design Asylum, Inc.

# General Information

The 5IMDC is taking place within the Marriott Waikiki Beach Resort & Spa. All activities Sunday through Friday will take place in the following locations: Kealohilani Tower, 2nd floor (closer to the beach, hereafter referred to as “K Tower”) and Paoakalani Tower, 3rd floor (hereafter referred to as “P Tower”). (See Hotel Map page 4.)

- Please wear the name tag provided with your registration materials at all times for entrance to all sessions and events.
- Anyone requesting a special meal must obtain a ticket from the registration desk prior to 10:30 am each day.
- Guest tickets for events should be picked-up when you register.

## Conference Locations

- The **Leahi Ballroom**, where all plenary sessions and lunches will take place, is in K Tower.
- All salons, the **Exhibit Hall**, and other 5IMDC-related meeting space are in P Tower.
- A **Help Desk** is available in P Tower to answer conference-related questions.
- A **message board** is available outside the Exhibit Hall.
- The **Conference Office** is in the Kou Room in P Tower.
- If you would like use a meeting room for your own informal meeting, these may be booked, subject to availability, at the Help Desk.

## Speaker Presentation Upload Instructions

If you are giving an oral presentation, you must upload your PowerPoint presentation between 7:30am and 8:30am the day of your presentation at the Presentation Services Table located near Registration, outside the Leahi Ballroom in K Tower.

## Poster Instructions

- If you are presenting a poster, you are responsible for hanging your poster in your assigned location in the Exhibit Hall in P Tower. The Poster display schedule begins on page 34.
- Posters being displayed Monday to Wednesday morning must be hung by 9am on Monday morning. Posters being displayed Wednesday afternoon to Friday morning must be hung between 11am and 1:30pm on Wednesday.

## Photo Policy: Recording, Photographing, Interviewing

No attendee at the 5IMDC may record, film, tape, photograph, or interview during any presentation, poster display or exhibit without the express, advance approval of the 5IMDC Conference Committee.

For media, this approval is provided through the media accreditation.

## Photo and Video Release

Photographs and videography will be taken by the 5IMDC organizers. By registering for this conference, you agree to allow NOAA and UNEP to use your photo in any 5IMDC-related publication or website.

## Media Space

A limited amount of working space is available for accredited media. This space is in the Honolulu

Room, available Tuesday through Thursday, 8:00am – 8:00pm; Monday and Friday, 8:00am – 5:00pm.

## Bus Pick-up

For the Monday night reception and field trips requiring bus transportation, buses will pick up and drop off passengers at the Tour Entrance of the hotel.

## Business Center

Aloha Business Center, 2nd Floor, P Tower

Phone: 808-922-1500

Email: marriott@alohabusinesscenters.com

- Open 24 hours, self service
- Staffed: Monday through Friday from 8:00am to 5:00pm / Saturday and Sunday from 9:00am to 12:00pm
- Internet access with full service PCs and printing capability
- Copying, printing, scanning, faxing
- FedEx and UPS shipping
- Executive boardroom with video conferencing available



Image from Dominant Wave Theory | © Andy Hughes MA RCA 2007

## Internet Access

All internet access is wi-fi. Hotel guest internet pricing:

- 1 Hour: \$6.95 plus tax
- 3 Hours: \$10.95 plus tax
- Full Day: \$14.95 plus tax
- 4 Days: \$48.95 plus tax

## Parking

Self-parking is \$30/day. A limited number of parking validations is available to reduce this cost. Inquire at the Help Desk.

## Social Media

- Twitter hashtags: #5IMDC, #WavesOfChange and #EndMarineDebris
- 5IMDC Facebook site: Search for “5th International Marine Debris Conference” and like us!

## Environmental Awareness



Significant efforts have been made to reduce the impact of this conference on the environment. These include reducing the amount of printed material, choosing the most environmentally-friendly printing method when printing is necessary, sourcing of sustainable products such as those made from bamboo and 100% recycled polyethylene (plastic bottles), selection of environmentally responsible accommodations, and implementation of sustainable practices throughout the conference itself.

## Conference Evaluation

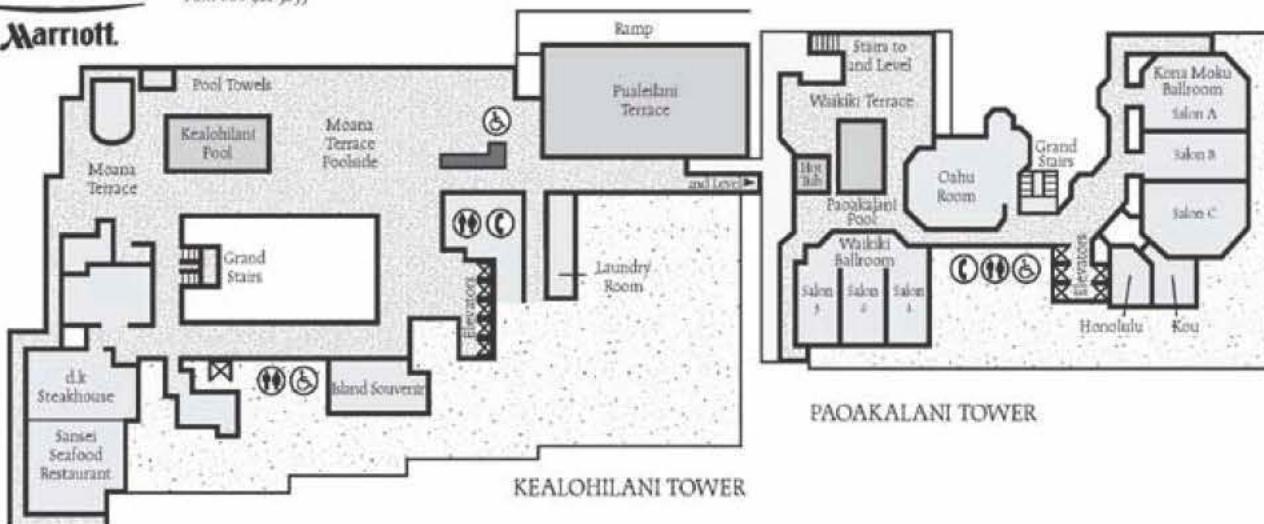
Don't forget to fill out the Conference Evaluation Form and turn it in at the Registration Desk.

# Hotel Site Map

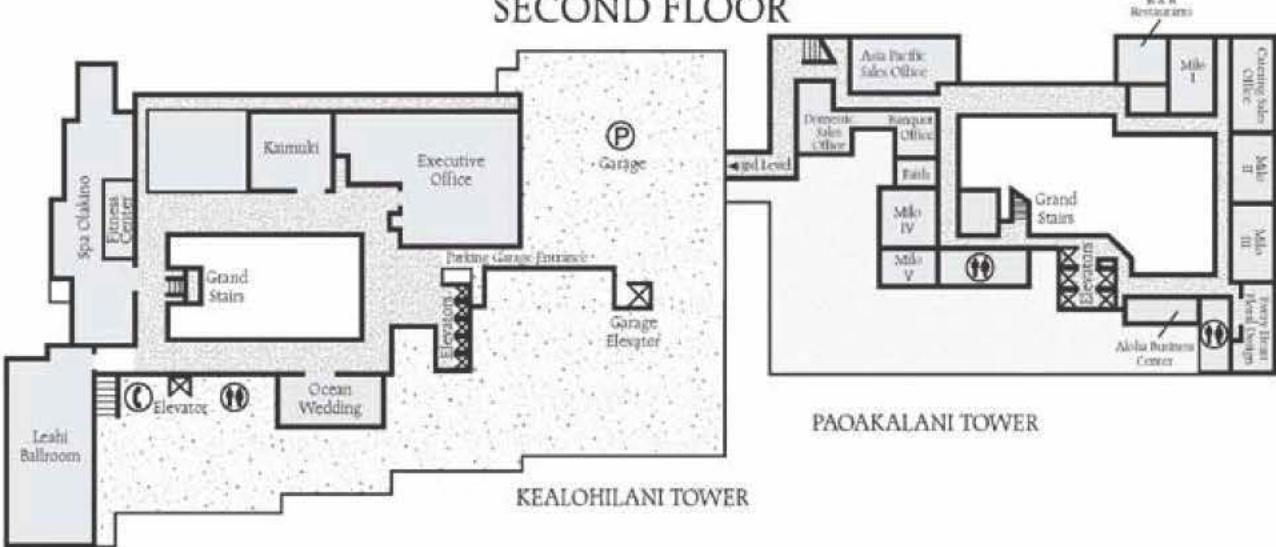


2552 Kalakaua Avenue  
Honolulu, Hawai'i 96815-3699  
Reservation: 1-800-367-5770  
Phone: 808-922-6611  
Fax: 808-921-5255

## THIRD FLOOR



## SECOND FLOOR



# Code of Conduct

All participants in the Fifth International Marine Debris Conference shall:

- Conduct themselves responsibly, objectively, lawfully, and in a nondiscriminatory manner;
- Ensure that presentations are restricted to and based on scientific principles and made in a respectful manner;
- Respect the rights, interests, and contributions of professional colleagues;
- Respect intellectual property and provide appropriate attribution for all intellectual property;
- Not knowingly make false or misleading statements that could be viewed as defamatory about a fellow participant or attendee organization; and
- Objectively and clearly communicate scientific methods, understanding, and knowledge in a professional manner.

# The Honolulu Strategy



NOAA PIFSC CRED

## What is the Honolulu Strategy?

The Honolulu Strategy sets forth a results-oriented framework of action with the overarching goal to reduce impacts of marine debris over the next 10 years. This goal will be achieved through the collective action of committed stakeholders at global, regional, country, local, and individual levels. The Honolulu Strategy is being developed through an iterative process working with debris managers and practitioners around the globe.

## How can I become involved with developing the Honolulu Strategy?

The Honolulu Strategy will not be complete without the input and insights of participants attending the 5IMDC. A number of opportunities are being provided during the conference to build support and provide comments on the Honolulu

Strategy: (1) a results chain workshop will be held the 1st day of the conference to enable participants to peer-review the draft results chains that served as the underpinning logical framework for the Honolulu Strategy, (2) presenters are being asked to include a final slide highlighting the recommended priority actions to include in the Honolulu Strategy, (3) participants are encouraged to submit priority actions on a *Strategy Comment Form*, and (4) teams of rapporteurs will be attending sessions and noting gaps and new ideas to inform and improve the Honolulu Strategy.

A draft Honolulu Strategy has been provided in your packet. Please review the Strategy as you listen to presentations and provide your inputs on the *Strategy Comment Form* provided in each session room. We cannot guarantee that all comments and inputs will be addressed or included verbatim; however, we will review all ideas and do our best to capture the inputs received. After the conference, the Honolulu Strategy working group will review inputs and finalize the Honolulu Strategy for widespread dissemination.

**DON'T FORGET to submit your input by turning in your completed Strategy Comment Form (available in each session room).**

# Agenda at a Glance

TIME	SUNDAY, MARCH 20	MONDAY, MARCH 21	TUESDAY, MARCH 22
6:30am			
7:00			
7:30	Morning Beverage 7:30-8:00am		
8:00		Morning Beverage 8:00-9:00am	Morning Beverage 8:00-8:30am
8:30			Plenary Speaker 8:30-9:15am
9:00			Concurrent Session 3 9:15-10:45am
9:30	Workshops 8:00am-12:00pm	Plenary Session Welcome 9:00-11:30am	Break 10:45-11:15am
10:00	Break 10:00-10:15am	Break 10:20-10:50am	Concurrent Session 4 11:15am-12:45pm
10:30		Lunch on own 11:30am-1:00pm	Plated Lunch 12:45-2:00pm
11:00		Exhibit and Poster Hall Open 8:00am-5:00pm	Concurrent Session 5 2:00-3:30pm
11:30		Concurrent Session 1 1:00-2:15pm	Break 3:30-4:00pm
12:00pm	Lunch on own 12:00-1:00pm	Concurrent Session 2 2:45-4:00pm	Concurrent Session 6 4:00-5:30pm
12:30			
1:00			
1:30			
2:00			
2:30	Workshops 1:00-5:00pm		
3:00	Break 3:00-3:15pm		
3:30			
4:00			
4:30			
5:00	Welcome reception at Marriott 5:00-7:00pm	Reception at Bishop Museum 4:00-9:00pm	Art and Wine Reception at M 6:00-8:00pm
5:30			
6:00			
6:30			
7:00			
7:30			
8:00			
8:30			
9:00			
9:30			
10:00			
10:30			

CH 22	WEDNESDAY, MARCH 23	THURSDAY, MARCH 24	FRIDAY, MARCH 25
Registration Open 8:00am-5:00pm	Field Trips 5:30am-1:00pm (varying lengths)	Morning Beverage 8:00-8:30am	Morning Beverage 8:00-8:30am
	Lunch on own 12:00-1:30pm	Plenary Speaker 8:30-9:15am	Concurrent Session 11 8:30-9:30am
	Workshops 1:30-5:30pm	Concurrent Session 7 9:15-10:45am	Concurrent Session 12 9:30-10:30am
	Break 3:15-3:30pm	Break 10:45-11:15am	Break 10:30-11:00am
Marriott		Concurrent Session 8 11:15am-12:45pm	Closing Ceremony + Plated Lunch 11:00am-2:00pm
		Exhibit and Poster Hall 8:00am-6:00pm	Exhibit and Poster Hall 8:00am-6:00pm
		Plated Lunch 12:45-2:00pm	
		Concurrent Session 9 2:00-3:30pm	
		Break 3:30-4:00pm	
		Concurrent Session 10 4:00-5:30pm	
			Breakdown of Exhibit and Poster Hall 2:30-6:00pm
	Marine Debris Movie Night at Marriott 7:00-10:30pm		"Catch the Drift" Finale Event at Outrigger Waikiki Hotel 6:00-9:00pm

# Oral Presentation Sessions

NOAA Marine Debris Program



## Session 1

- a. Stories of success: Place-based partnerships to prevent land-based sources of marine debris
- b. Stemming the tide of trash: Model education and outreach programs to prevent marine debris, 1/2
- c. Wildlife entanglement in marine debris: Assessment and response
- d. Innovative disposal options for difficult situations

## Session 2

- a. Reducing marine debris from shipping: The reality of regulation beyond the horizon
- b. Stemming the tide of trash: Model education and outreach programs to prevent marine debris, 2/2
- c. Addressing abandoned and derelict vessels
- d. Panel: Waste reduction and recycling for a zero-waste future

## Session 3

- a. Outreach and education techniques and approaches, 1/2
- b. Modeling marine debris movement and transport
- c. Designing meaningful protocols for monitoring marine debris, 1/3
- d. Panel: At-sea detection of marine debris: Capturing local knowledge and observations

## Session 4

- a. Outreach and education techniques and approaches, 2/2
- b. Risk analysis: Using predictions of the source and distribution of marine debris to assess their impacts
- c. Designing meaningful protocols for monitoring marine debris, 2/3
- d. Stories of success: Place-based partnerships to assess and remove marine debris

## Session 5

- a. In-water technology to detect derelict fishing gear in marine/estuarine ecosystems
- b. Panel: Plastic recovery for a trash-free ocean
- c. Results and synthesis of marine debris monitoring projects
- d. Microplastic in the environment: Causes and consequences, 1/2

## Session 6

- a. Managing marine debris in marine protected areas
- b. Preventing land-based sources of debris through solid waste management
- c. Designing meaningful protocols for monitoring marine debris, 3/3
- d. Microplastic in the environment: Causes and consequences, 2/2



Wolcott Henry, 2005 (Marine PhotoBank)

## Session 7

- a. Monitoring and reducing the impact of “ghost” fishing by derelict fishing traps
- b. Many hands make light work: Global and regional partnerships to prevent, mitigate and remove marine debris
- c. Environmental impacts of chemicals in marine plastics, 1/2
- d. Shoreline marine debris: Removal and disposal methods, 1/2
- e. Talking trash: Successes and challenges associated with policies to prevent plastic marine pollution

## Session 8

- a. Engaging fishermen to address derelict fishing gear
- b. Coastal cleanup programs - A solution to the problem or just to the symptom?
- c. Environmental impacts of chemicals in marine plastics, 2/2
- d. Panel: Building on maritime industry best practices to catalyze action

## Session 9

- a. Panel: Ocean filmmakers
- b. Citizen scientists and marine debris monitoring: Standardizing methods and establishing a database, 1/2
- c. Law, policy, and economic considerations for successful governance, 1/2
- d. Ocean voyages to study and quantify pelagic debris, 1/2

## Session 10

- a. The role of ocean filmmaking in educating the public about marine debris
- b. Citizen scientists and marine debris monitoring: Standardizing methods and establishing a database, 2/2
- c. Law, policy, and economic considerations for successful governance, 2/2
- d. Shoreline marine debris: Removal and disposal methods, 2/2
- e. Ocean voyages to study and quantify pelagic debris, 2/2

## Session 11

- a. Public/private partnerships for reducing and preventing marine debris through education and outreach, 1/2
- b. Diving for debris: Methods and approaches for human-powered in-water marine debris removal
- c. Using social marketing to cause a sea change on marine debris pollution
- d. Don’t fill our landfills: Alternative disposal methods for marine debris and derelict fishing gear

## Session 12

- a. Public/private partnerships for reducing and preventing marine debris through education and outreach, 2/2
- b. Assessing the dangers and removal of sea-dumped munitions and other hazardous debris
- c. Biological impacts of marine debris
- d. Aerial remote sensing of marine debris

# Poster Presentation Sessions

## Poster Session 1 (Monday AM – Wednesday AM)

- a. Stories of success: Place-based partnerships to prevent land-based sources of marine debris
- b. Wildlife entanglement in marine debris: Assessment and response
- c. Stemming the tide of trash: Model education and outreach programs to prevent marine debris
- d. Biological impacts of marine debris
- e. Outreach and education techniques and approaches
- f. Aerial remote sensing of marine debris
- g. Stories of success: Place-based partnerships to assess and remove marine debris
- h. In-water technology to detect derelict fishing gear in marine/estuarine ecosystems
- i. Law, policy, and economic considerations for successful governance
- j. Don't fill our landfills: Alternative disposal methods for marine debris and derelict fishing gear
- k. Many hands make light work: Global and regional partnerships to prevent, mitigate, and remove marine debris
- l. Engaging fishermen to address derelict fishing gear
- m. Preventing land-based sources of debris through solid waste management
- n. Managing marine debris in marine protected areas
- o. Addressing abandoned and derelict vessels
- p. Coastal cleanup programs - A solution to the problem or just to the symptom?
- q. Shoreline marine debris: Removal and disposal methods
- r. Using social marketing to cause a sea change on marine debris pollution

## Poster Session 2 (Wednesday PM – Friday AM)

- s. Monitoring and reducing the impact of "ghost" fishing by derelict fishing traps
- t. Designing meaningful protocols for monitoring marine debris
- u. Environmental impacts of chemicals in marine plastics
- v. Ocean voyages to study and quantify pelagic debris
- w. Risk analysis: Using predictions of the source and distribution of marine debris to assess their impacts
- x. Results and synthesis of marine debris monitoring projects
- y. Microplastic in the environment: Causes and consequences
- z. Citizen scientists and marine debris monitoring: Standardizing methods and establishing a database

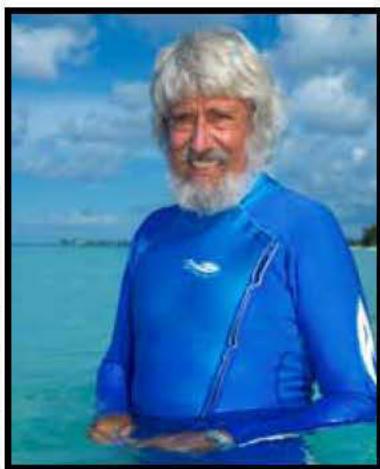
NOWPAP (Hirado, Japan)



# Plenary & Lunch Speakers

## Monday Plenary, 9:00am – 11:30am

Tom Ordway-Ocean Futures, KQED

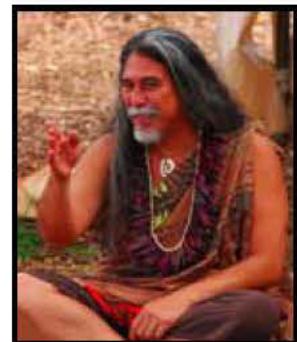


### Keynote Speaker: Jean-Michel Cousteau, Ocean Futures Society

Explorer. Environmentalist. Educator. Film Producer. For more than four decades, Jean-Michel Cousteau has dedicated himself and his vast experience to communicating to people of all nations and generations his love and concern for our water planet. Since first being “thrown overboard” by his father at the age of seven with newly invented SCUBA gear on his back, Jean-Michel has been exploring the ocean realm. The son of ocean explorer Jacques Cousteau, Jean-Michel has investigated the world’s oceans aboard Calypso and Alcyone for much of his life. Honoring his heritage, Jean-Michel founded Ocean Futures Society in 1999 to carry on this pioneering work.

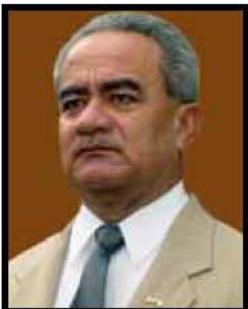
### Kalani Souza, Cultural Speaker

Kalani is a gifted storyteller, singer, songwriter, musician, director, producer, poet, philosopher, priest, political satirist, peacemaker, facilitator, mediator, educator, friend, human. A Hawaiian Practitioner and Cross-Cultural Facilitator, he has experience in promoting social justice through conflict resolution. His native roots allow him a unique perspective of the collision of two worlds: one steeped in traditional culture while the other a juggernaut of new morality and changing economic and political persuasion. He is a messenger of integration and collaboration in a world normally rife with exclusion, oppression, and hopelessness.



### U.S. Congressman Sam Farr, State of California

Representative Sam Farr, a fifth-generation Californian, represents the beautiful Central Coast and has championed ocean policy reform since he was elected to Congress in 1993. He has consistently fought for funding and development of ocean programs and has introduced countless pieces of ocean legislation, including the Oceans Conservation, Education, and National Strategy for the 21st Century Act, also known as “Oceans-21.” Many of this bill’s provisions were included in President Obama’s Executive Order that established a National Ocean Policy. This year, Rep. Farr is spearheading legislative efforts in the U.S. House of Representatives to reauthorize the Marine Debris Research, Prevention, and Reduction Act.



### **Governor Togiola T.A. Tulafono, American Samoa**

Governor Togiola T.A. Tulafono is a champion of the natural resources of American Samoa. He has been an active member of the U.S. Coral Reef Task Force since becoming Governor in 2003. In August 2010, the Governor signed the first plastic bag ban of any US state or territory. Prior to becoming Governor, he served as a district court judge, American Samoa Senator, and Lieutenant Governor of American Samoa for six years.

### **Monica Medina, Principal Deputy Under Secretary of Commerce for Oceans & Atmosphere, NOAA**

Monica Medina is the Principal Deputy Undersecretary for Oceans and Atmosphere of the National Oceanic and Atmospheric Administration. Ms. Medina also serves as the U.S. Commissioner to the International Whaling Commission. Prior to joining the Obama Administration, Ms. Medina served as a Senior Officer in the Pew Environment Group, where she provided advice and assistance on issues of marine law and policy. Ms. Medina previously was the Deputy Director of the U.S. Office of the International Fund for Animal Welfare (IFAW). From 1992 through 1999, Ms. Medina held a number of positions in the Clinton Administration and on Capitol Hill. She was General Counsel of NOAA from 1997 to 1999. Before joining NOAA, Ms. Medina was appointed by Janet Reno to serve as Deputy Associate Attorney General at the U.S. Department of Justice, with oversight of the Environment Division; earlier, she was a Senior Counsel to the U.S. Senate Committee on Environment and Public Works.



### **Achim Steiner, Executive Director, United Nations Environment Programme**

Acting on the nomination of Secretary-General Kofi Annan, the UN General Assembly in 2006 unanimously elected Achim Steiner as the Executive Director of UNEP for a four-year term. He became the fifth Executive Director in UNEP's history. At its 83rd plenary meeting in 2010, the UN General Assembly, on the proposal of the Secretary-General Ban Ki-moon, re-elected Mr. Achim Steiner as Executive Director of the United Nations Environment Programme for another four-year term. In 2009, the Secretary-General also appointed Mr. Steiner as Director General of the United Nations Office at Nairobi, which provides the administrative, conference, security, and logistics services to the UN family in Kenya, which hosts offices and projects of more than 60 UN agencies, funds, and programmes and over 5,000 staff. Before joining UNEP, Mr. Steiner served as Director General of the World Conservation Union (IUCN) from 2001 to 2006, and prior to that as Secretary General of the World Commission on Dams.



### **Commissioner Janez Potočnik, European Commission**

Dr. Janez Potočnik is the European Commissioner for Environment. Previously, Dr. Potočnik worked as a researcher at the Institute of Economic Research in Ljubljana. In July 1994, he was appointed Director of the Institute of Macroeconomic Analysis and Development of the Republic of Slovenia. In April 1998, the Government of the Republic of Slovenia appointed Dr. Potočnik Head of Negotiating Team for Accession of the Republic of Slovenia

to the European Union. From June to December 2000, he was also the acting director of the Government Office for European Affairs. In June 2001, he was appointed a Minister Counsellor at the Office of the Prime Minister. On January 24, 2002, the Government of the Republic of Slovenia appointed him for the Minister without portfolio responsible for European Affairs. Dr Potočnik became a Member of the European Commission on May 1, 2004. From 2004 until 2010 he was responsible for Science and Research. In 2010 he took over the second mandate as Member of the European Commission responsible for Environment.



### **David Osborn, Coordinator, Global Programme of Action, UNEP**

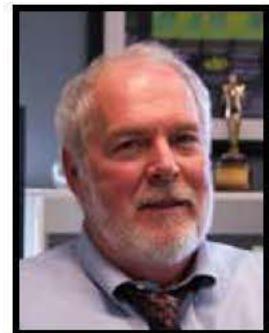
David Osborn is the Coordinator for the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA), the only intergovernmental programme addressing the link between watersheds and coastal ecosystems. A former Officer with the Royal Australian Navy and civil servant with the Australian Government's Department of the Environment and Heritage, David served with the UNEP GPA Coordination Office in The Hague from 2001 to 2005. In late 2005 he returned to Australia,

where he led the preparation of Australia's National Programme of Action for the Protection of the Marine Environment from Land-based Activities while Director, Coastal Policy, with the Department of the Environment and Water Resources. He also spent time as a Director with the Great Barrier Reef Marine Park Authority before rejoining UNEP in Nairobi as the GPA Coordinator in late 2008.

## **Tuesday Plenary, 8:30am – 9:15am**

### **David Kennedy, Assistant Administrator for Ocean Services and Coastal Zone Management, National Ocean Service, NOAA**

David M. Kennedy is the Assistant Administrator for NOAA's National Ocean Service. Mr. Kennedy recently served as the Commander for NOAA's response to the Deepwater Horizon MC 252 oil spill. Mr. Kennedy has more than 20 years of experience leading hazardous materials management and response efforts, including coordinating federal scientific response to more than 100 oil and chemical spill incidents. He also served as the science coordinator following the Exxon Valdez spill in Prince William Sound, Alaska, in 1989 and was a U.S. delegate to the International Maritime Organization's Conference on Oil Pollution Preparation and Response. Prior to being named Assistant Administrator, Mr. Kennedy served as Director of NOAA's Office of Ocean and Coastal Resource Management (OCRM). Mr. Kennedy also previously served as Director of NOAA's Office of Response and Restoration, where he directed a multi-disciplinary program, including the NOAA Marine Debris Program, to reduce risks to coastal and marine resources from environmental threats.



### **April Crow, Sustainability Director, Packaging, The Coca-Cola Company**

As Global Sustainable Packaging Manager for The Coca-Cola Company, April Crow is responsible for launching global initiatives related to sustainable packaging including strategy development and implementation. During her fifteen years at Coca-Cola she has held a variety of roles in Environment and Water Resources, Scientific & Regulatory Affairs, and Quality. Her educational background includes a Bachelor of Science Degree in Environmental Health

from the University of Georgia and a Master of Science Degree in Instructional Technology. She maintains an active role with several organizations including serving on the board of Keep Georgia Beautiful and the Georgia 4-H Foundation. She also serves on the Executive Committee of the Sustainable Packaging Coalition and was a participant of the Global CEO Forum Global Packaging Project.

## **Tuesday Commitments Luncheon, 12:45pm – 2:00pm**

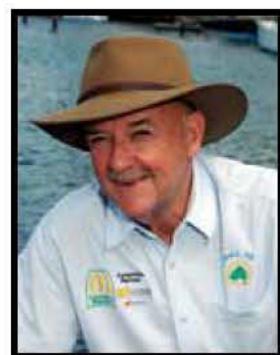


### **U.S. Senator Daniel K. Inouye, State of Hawai'i**

Senator Daniel Inouye, the most senior member of the U.S. Senate and the President Pro-Tempore, represents the beautiful state of Hawai'i. Senator Inouye has served in elected positions since 1954, was the first Congressman for the state of Hawai'i in 1959, and joined the U.S. Senate in 1962 where he is currently serving his eighth consecutive term. As a decorated World War II combat veteran and legislative leader, Senator Inouye has supported defense matters that strengthen national security and enhance the quality of life for military personnel and their families. A continued and tireless champion for our oceans, the Senator was an original leader on the Marine Debris Research, Prevention, and Reduction Act of 2006. This year, Senator Inouye continues his leadership role on legislative efforts to reauthorize the Marine Debris Research, Prevention, and Reduction Act.

### **Ian Kiernan, Chairman and Founder, Clean Up (Clean Up Australia and Clean Up the World)**

Ian Kiernan AO is the founder and Chairman of Clean Up – a community-based organisation which aims to inspire and work with communities to clean up, fix up, and conserve our environment. Founded on Mr. Kiernan's commitment to improving the state of the world's oceans by preventing pollution of oceans and waterways, this work continues today through Clean Up's global community based initiatives and Mr. Kiernan's advocacy for the protection of the marine environment.



## **Thursday Plenary, 8:30am – 9:15am**



### **Alison Lane, Senior Associate, URS Australia**

Dr. Alison Lane is a marine ecotoxicologist, with a background in marine pollution prevention. As head of the New Zealand delegation to meetings of the International Maritime Organization, Dr. Lane was heavily involved in leading the revisions to MARPOL Annex V, as well as amendments to MARPOL Annex I and development of IMO guidance on oil spill preparedness and response. Dr. Lane is currently based in Brisbane, where she works as a senior marine consultant with URS Australia.

## **Thursday Commitments Luncheon, 12:45pm – 2:00pm**

### **Daniella Russo, Social Advocate and Co-founder, Plastic Pollution Coalition**

Daniella Russo is the co-founder and Executive Director of Plastic Pollution Coalition. Ms. Russo is a social entrepreneur who believes that progressive societies are fueled by the power of informed and engaged people. Since 2006 she has worked on elevating the issue of plastic pollution to the forefront of social, political, and environmental discourse, and towards a world free of plastic pollution and its toxic impacts on people, animals, and the environment.



## **Friday Plenary and Lunch, 11:00am – 2:00pm**



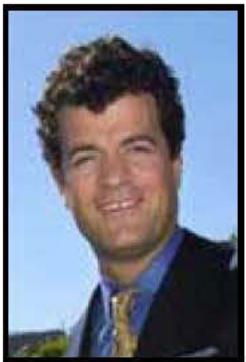
### **Mayor Peter B. Carlisle, City and County of Honolulu**

Peter B. Carlisle is serving in his first term as Mayor of the City and County of Honolulu. He was elected in September 2010 to serve as Honolulu's 13th mayor. Carlisle was born and raised in New Jersey and came to Honolulu in 1978 after receiving his law degree at UCLA. He began his career as a Deputy Prosecuting Attorney for the City and County of Honolulu shortly after his arrival. In 1989, Carlisle was employed as a partner at the law firm of Shim, Tam, Kirimitsu, Kitamura, & Chang. In 1996 Carlisle ran a successful campaign for Honolulu Prosecuting Attorney and was re-elected four times over the span of 14 years. Carlisle's administration as prosecutor is distinguished for its political independence and advocacy for common sense in the justice system. During Carlisle's administration, Honolulu experienced historically low crime rates which he credits to inter-agency cooperation and collaboration efforts. Carlisle met his wife Judy and raised his daughter Aspen and son Benson in Honolulu, Hawaii.

### **Holly Bamford, Deputy Assistant Administrator for Ocean Services and Coastal Zone Management, National Ocean Service, NOAA**

Dr. Holly A. Bamford was NOAA's first Director and Division Chief for the NOAA Marine Debris Program in the Office of Response and Restoration, from 2005 to 2010. In this role, Dr. Bamford oversaw millions of dollars in national, regional, and local grants in support of marine debris activities and research projects. She also served on a number of advisory committees and presented at several national and international meetings and academic institutions; she also addressed the public through national media outlets including CNN, ABC News World News with Charles Gibson, NewsHour with Jim Lehrer, Good Morning America, Rolling Stone Magazine, People Magazine, and The Wall Street Journal. In 2011, Dr. Bamford was selected as Deputy Assistant Administrator for NOAA's National Ocean Service. Dr. Bamford oversees, manages, and continuously strives for improvements in workforce management and ocean science, service, and stewardship for over 1,200 Federal employees within the organization.





## **Jared Blumenfeld, Administrator, Environmental Protection Agency Region 9**

Jared Blumenfeld was appointed by President Barack Obama and Administrator Lisa P. Jackson to serve as EPA Regional Administrator for the Pacific Southwest in November 2009. Region 9 is home to more than 48 million people in California, Arizona, Hawai'i, Nevada, the Pacific Islands, and 147 tribal nations. Mr. Blumenfeld has spent nearly two decades on the frontlines of protecting the environment both at home and internationally. Before becoming Regional Administrator, Mr. Blumenfeld was the Director of the San Francisco Department of the Environment, where he spent eight years as the primary environmental decision-maker for the city. He is

a founder of the Business Council on Climate Change, an organization that unites businesses around the challenge of climate change. Mr. Blumenfeld has worked for the Natural Resources Defense Council, the Sierra Club Legal Defense Fund, and the International Fund for Animal Welfare.

## **Amy Fraenkel, Director, UNEP Regional Office for North America**

Amy Fraenkel has more than 20 years of experience in environmental and maritime law and policy. She has worked in both the executive and legislative branches of the United States government, inter-governmental organizations, and the private sector. Her areas of expertise include climate change, ocean and coastal issues, endangered species, chemicals, trade and environment, and international law. Ms. Fraenkel joined UNEP's Regional Office for North America (UNEP RONA) from the U.S. Senate Committee on Commerce, Science, and Transportation, where she served as Senior Counsel of the Oceans, Atmosphere, Fisheries, and Coast Guard Subcommittee. Prior to joining the U.S. Senate, Ms. Fraenkel worked as a senior policy advisor in the Office of International Affairs within the U.S. Environmental Protection Agency (EPA) in Washington, D.C.



## **Special Guest: Jack Johnson**



Jack Johnson grew up surfing and playing guitar on the North Shore of O'ahu. He released his first album, *Brushfire Fairytales*, in 2001 and in the last ten years has released five more albums that have sold over 20 million copies worldwide. With his success, Mr. Johnson has always tried to take the spotlight and shine it on issues important to him. In 2003, he and his wife Kim founded the Kōkua Hawai'i Foundation and Kōkua Festival to support environmental education in Hawaii's schools and communities. Mr. Johnson, his Brushfire Records label, and his touring crew have been leaders in the greening of the music industry in all areas of tour production and album packaging. In 2008, Mr. Johnson donated 100%

of his tour profits to establish the Johnson Ohana Charitable Foundation, an endowment founded by Jack and Kim Johnson to support environmental, art and music education worldwide. One hundred percent of Mr. Johnson's current To The Sea tour will also be donated to charity. These tour profits, along with Mr. Johnson's personal charitable activities, have resulted in approximately \$25 million donated to charity since 2001.

# The Sixth Gyre: Art, Oceans, and Plastic Pollution

O‘ahu Room, Open 8am – 4pm, Monday – Thursday

## Artists:

- Pam Longobardi, USA
- Susan Middleton, USA
- David Liittschwager, USA
- Andrew Hughes, UK
- Dianna Cohen, USA
- Andrew McNaughton, Kenya
- Michelle Lougee, USA

The art selected for this exhibit was produced by professional artists who have devoted much of their study to both understanding and interpreting the social causes and ecological challenges of marine pollution. The collaborating artists are internationally recognized for their ability to utilize art to visually interpret the human impacts of consumption and how that impact extends to marine ecosystems. The pieces of art in this exhibit reflect that aptitude. It is hoped that this exhibit will inspire thought about the role art can play in interpreting conservation issues to the public, and how art may also inspire creative solutions from viewers.

## Organizers:

Pam Longobardi, Artist, Professor of Art, Georgia State University

Wayne Sentman, Field Education Manager, Oceanic Society, San Francisco, CA

## Sponsors:

- NOAA Marine Debris Division
- United Nations Environment Programme
- Ocean Conservancy
- Oceanic Society
- Georgia State University
- Surfrider Foundation Atlanta Chapter
- Scenic Treasures Safaris – Kenya
- Earth-Art by Amanda
- Flo Water LLC
- UniquEco Designs
- In The Bag



"Sappho's Mirror I"  
Found ocean plastic  
from South Point,  
Hawaii | Installation  
at Primo Piano  
LivinGallery | Lecce,  
Italy | 2010



"Shipwreck  
(Unintended  
Consequences),"  
2009 Found ocean  
plastic from South  
Point, Hawaii and  
Venice, Italy and wire  
mesh | Installation in  
'Panthalassa,' Artlife for  
the World, Venice, Italy

# Evening Events

## Welcome Reception

**Sunday, 5:00pm – 7:00pm**

Please join us at the welcome reception where you can enjoy food, one complimentary beverage, music, and speakers welcoming you to the Fifth International Marine Debris Conference. Cash bar available.

**Sponsors:** NOAA Marine Debris Division, UNEP, and Kona Brewing Company

**Location:** Pualeilani, Kealohilani Tower, 3rd Floor, Outside (area between “K Tower” and “P Tower”); In case of inclement weather: Leahi Ballroom

### Speakers:

#### **Kahi Kahakui, Cultural Speaker**

Kahi Kahakui founded the organization Kai Makana in 1999 with the mission of saving the ocean. Kai Makana takes an active role in educating and mobilizing the public to better understand and preserve marine life and the ocean environment. In addition to her paddling work, Ms. Kahakui is a Special Agent for the EPA.



#### **Roz Savage, Ocean Rower, Advocate, UN Climate Hero**

Roz Savage is a British ocean rower, author, motivational speaker, and environmental campaigner. She has rowed solo across the Atlantic Ocean and is attempting to become the first woman to row solo across the Pacific. In 2008 she became the first woman to row solo from California to Hawai‘i. In 2009 she continued her Pacific bid by rowing from Hawai‘i to Kiribati. The third and final stage of her Pacific row takes place in Spring 2011, when she will attempt to row from Kiribati to Australia. Ms. Savage is a United Nations Climate Hero, a trained presenter for the Climate Project, and an Athlete Ambassador for 350.org. She is supported by the Dot Eco campaign and the Blue Planet Foundation. Her Pacific row is a project of the Blue Frontier Campaign, and she is an Ambassador for the BLUE Project.

## Hawaiian Luau on the Great Lawn of the Bishop Museum

**Monday, 5:00pm – 9:00pm**

Enjoy traditional Hawaiian food and entertainment under the stars. Beer donated by Kona Brewing Co., wine, and soft drinks included. The Bishop Museum’s Hawaiian Hall, which holds the largest collection of Hawaiian cultural artifacts, will be open for viewing.

**Sponsors:** Western Pacific Regional Fishery Management Council, the Bishop Museum, and Kona Brewing Company

**Location:** Bishop Museum (Buses will leave from the Marriott Tour Entrance at 4:15pm, 4:30pm, and 5:00pm; buses will leave the museum to return to the Marriott every half hour from 7:00pm to 9:00pm.)

**Speaker:****Tim Johns, President and CEO, Bishop Museum**

Timothy E. Johns, Tim, has been President and Chief Executive Officer of the Bishop Museum, Hawaii's State Museum of Natural and Cultural History, since October 2007. Mr. Johns served as Chief Operating Officer of the Estate of Samuel Mills Damon from 2000 to October 2007. He was Chairperson of the State Department of Land and Natural Resources. He has been Director of Hawaiian Electric Company Inc., a subsidiary of Hawaiian Electric Industries Inc. since 2005 and Child and Family Service since 2004. He serves as Director of Grove Farm Company Inc. and Parker Ranch Inc. He serves as Co-chair of The Trust for Public Land Hawai'i Advisory Board. He serves as a Director of Hawai'i Medical Service Association Inc. and Turning Points for Families. Mr. Johns serves as an at-large member of the State Board of Land and Natural Resources and is Chair of the Federal Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve Advisory Council. Active in a broad range of local organizations, Tim's community involvements include the YMCA of Honolulu, the Hawai'i Nature Center, the Rotary Club of Honolulu, Helping Hands Hawai'i and the Diamond Head Theater.

**Marine Debris Art Showcase****Tuesday, 6:00pm – 8:00pm**

Who says fine art can't be trashy? Sip wine, mingle with international artists, and explore their unique portrayals of marine debris in various art media. Learn firsthand how the unlikely muse of marine debris came to play a central role in their work, and how their talents allow them to educate and raise awareness in unconventional ways. Organic wine will be provided by Parducci Wines, Frey Vineyards, and Stellar Organics Wine. Additionally, appetizers will be served and door prizes will be given away to several lucky attendees. These showcased artists are part of the Sixth Gyre: Art, Oceans, and Plastic Pollution on display in the Aloha Room during the Fifth International Marine Debris Conference.

**Sponsor:** Ocean Conservancy**Location:** Leahi Ballroom**Speakers:****Amelia Montjoy, Vice President, Resource Development and Operations, Ocean Conservancy**

Amelia Montjoy is the Vice President of Resource Development and Operations for Ocean Conservancy. Though she was always an ardent conservationist, it was snorkeling on Australia's Great Barrier Reef that solidified Amelia Montjoy's commitment to the health of our planet's ocean. Ms. Montjoy joined Ocean Conservancy after serving in various capacities with Southern Poverty Law Center, World Wildlife Fund, the National Trust for Historic Preservation, and as Vice President for Development at American Farmland Trust. At Ocean Conservancy she works with a talented development team to generate the funding that is essential for the organization to continue its efforts to protect our ocean and the wildlife that live there. Ms. Montjoy also oversees the human resources and operations functions of the organization and serves on the six-member Executive Team.



### **Ellik Adler, Coordinator, COBSEA - Coordinating Body on the Seas of East Asia, UNEP**

Ellik Adler is the Coordinator of COBSEA (Coordinating Body for the Seas of South Asia). Before moving to Bangkok for this position, he was in UNEP headquarters in Nairobi where he served more than eight years as the global Coordinator of the Regional Seas Programme in UNEP/DEPI. He has a Ph.D. in marine environmental studies, and prior to joining UNEP in 2000, he acted for more than 12 years as the Director of the Marine and Coastal Environment Division in the Ministry of Environment in Israel.

### **Wayne Sentman, Field Education Manager, Oceanic Society**

Wayne is the field education manager and naturalist for the Oceanic Society and co-organizer of the 5IMDC Marine Debris Exhibit, The Sixth Gyre: Art, Oceans, and Plastic Pollution and will introduce the artists. Mr. Sentman has participated in NOAA-funded marine debris retrieval programs on Midway Atoll and currently is collaborating with a group of international artists to help combine the power of field education with the inspiration of art.

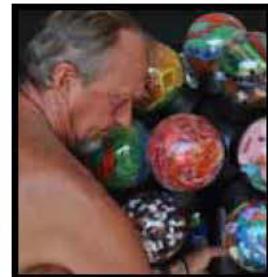


### **Pam Longobardi, Professor and artist**

Ms. Longobardi is a Professor of Art at Georgia State University, where in 2005 she received the Outstanding Faculty Achievement Award. Currently living in Atlanta, Georgia, she has created the Drifters Project, [www.driftwebs.com](http://www.driftwebs.com), an ongoing project of photography, installation, and environmental intervention focusing on oceans and plastic pollution. Ms. Longobardi is also a co-organizer of the 5IMDC Marine Debris Exhibit, The Sixth Gyre: Art, Oceans, and Plastic Pollution.

### **Andrew McNaughton, Artist**

Andrew McNaughton lives in Watamu, Kenya. He attended the Berkshire College of Art studying production design. All Mr. McNaughton's creations are fabricated from found materials from the coastal Malindi area of Kenya. This found material is mostly collected from beaches of, and river inlets emptying into, the Indian Ocean. Creating pieces from his workshop in Watamu, Mr. McNaughton mentors several local carpenters who are dedicated to each of his pieces. Those with aptitude he encourages to create their own work, some of which have been exhibited in Nairobi.



### **Susan Middleton, Photographer and author**

Susan Middleton is a photographer and author specializing in the portraiture of rare and endangered animals, plants, sites, and cultures for the past 30 years. In collaboration with photographer David Liittschwager she has produced two books for National Geographic, Archipelago and Remains of a Rainbow. Her most recent book is Evidence of Evolution (Abrams). In 2009 Middleton was awarded a Guggenheim Fellowship.

**Showcased artists:** Pam Longobardi, Susan Middleton, David Liittschwager, Andrew McNaughton, Michelle Lougee, Susan Scott

## **5IMDC Movie Night**

**Wednesday, 7:00pm – 10:15pm**

After a day of field trips and workshops, join us for a relaxing evening of short videos. This event is an opportunity for filmmakers, non-profit organizations, scientists, and students to highlight their marine debris-related videos. Snacks and beverages will be provided.

**Sponsors:** UNEP, NOAA, and Kona Brewing Company

**Location:** Leahi Ballroom

### **Agenda:**

7:00-7:15	Welcome and Introduction
7:15-7:30	Hawai‘i Student Video Winner: Aqua Hazard
7:30-7:45	Hawai‘i Student Video Winner: Green School Initiatives
7:45-8:00	Inside the Plastic Vortex/Mario Aguilera
8:00-8:15	Plastic Future: the Midway Story/Clare Fieseler
8:15-8:30	Plastics at SEA: North Atlantic Expedition 2010/Scott Elliott
8:30-8:45	Plastic State of Mind/Ben Zolno
8:45-9:00	The Young Man and the Ghost Net/Riki Gunn
9:00-9:15	Entanglement of Steller Sea Lions in Marine Debris: Identifying causes and finding solutions/Kimberly Raum-Suryan
9:15-9:30	Millicoma Kids Care PSA/Helen Farr
9:30-9:45	Trashing Your Livelihood/Diane Scoboria
9:45-10:00	Two Hands/Edmund Coccagna
10:00-10:15	Gift from the Sea/Kanyarat Kosavisutte

## **Catch the Drift! 5IMDC Finale Event**

**Friday, 6:00pm – 9:00pm**



The Outrigger Reef on the Beach and Kuloko Arts of Hawai‘i are proud to support the Fifth International Marine Debris Conference by hosting “Catch the Drift,” an evening of entertainment, art, and educational displays on Friday,

March 25, 2011, to help bring awareness to the threat posed by marine debris in our world’s oceans. This special event, which is open to the public, will take place from 6 to 9pm in the Ocean Tower lobby at the Outrigger Reef on the Beach.

**Sponsor:** Outrigger Enterprises Group and Kuloko Arts of Hawai‘i with support from Patagonia

**Location:** Outrigger Reef on the Beach Hotel, 2169 Kalia Road, Honolulu, HI 96815-1989

# Schedule of Sessions and Panels

**Monday, March 21, 2011**

MONDAY, MARCH 21	1:00-1:15pm	1:15-1:30pm	1:30-1:45pm	1:45-2:00pm	2:00-2:15pm
1.a. Stories of success: Place-based partnerships to prevent land-based sources of marine debris Chair: M. Memon Salon 1	1.a. 1. Proactive collaboration to storm debris - Tropical cyclone debris case study P. MURPHY	1.a.2. Sleeping with the enemy! - Can an environmental NGO and the plastics industry work together to prevent marine litter? S. KINSEY	1.a.3. Harnessing resources for a clean and healthy planet: A look at what industry is doing to end marine debris A. MONTJOY	1.a.4. Preventing debris at the water's edge: working with marinas and boaters S. SHINGLEDECKER	1.a.5. Protecting the marine ecosystem and human health in the Gulf of Guinea from uncontrolled disposal of plastics and other municipal wastes K. CHANON
1.b. Stemming the tide of trash: Model education and outreach programs to prevent marine debris 1/2 Chair: S. Sikich Salon 2	1.b.1. Measures implemented to reduce marine debris from New Zealand fishing vessels A. LANE	1.b.2. Development and distribution of marine debris education kit for fishermen in Korea J. LEE	1.b.3. Plastic free Hawaii: Moving toward freedom from plastic...one community at a time N. MCKINNEY	1.b.4. Anthropogenic marine debris in the SE Pacific: Citizens discover the problem on their beaches M. THIEL	1.b.5. Engaging communities and volunteers in ongoing partnerships to reduce marine debris in the Great Lakes Region J. CROSS
Session #1	The session will focus on measuring the rates of marine animal entanglement and detecting changes in the rates of marine animal entanglement as they relate to efforts to remove marine debris from the environment. It will bring together responders from the marine animal health and stranding network with marine debris prevention, removal, and detection experts. The session will provide opportunities to share experiences, tools, methods, and strategies for responding to marine animal entanglement.				
1. c. Wildlife entanglement in marine debris: Assessment and response Chairs: M. Williams, D. Schofield Salon 3	1.c.1. Derelict fishing gear impacts on the marine fauna of Puget Sound and the Northwest Straits T. GOOD	1.c.2. Northern Fur Seal entanglement on the Pribilof Islands P. ZAVADIL	1.c.3. Steller sea lion ( <i>Eumetopias jubatus</i> ) entanglement in marine debris and ingestion of fishing gear in Alaska and British Columbia: identifying causes and finding solutions L. JEMISON	1.c.4. Lose the loop: Reducing Steller sea lion ( <i>Eumetopias jubatus</i> ) entanglements in marine debris K. RAUM-SURYAN	1.c.5. Marine debris entanglements of birds: Global patterns, impacts, and solutions T. GOOD
1.d. Innovative disposal options for difficult situations Chair: C. Lapone Salon C	1.d.1 Waste conversion technology B. BOONE	1.d.2. Hawaii's successful approach to marine debris disposal C. MORISHIGE	1.d.3 Waste management practices on Pacific Islands and opportunities for marine debris reduction P. GILMAN	1.d.4. Hydrothermal carbonization of marine debris: A novel waste management technique N. BERGE	1.d.5. Garbage management on fishing boats - Lessons from the New Zealand industry A. LANE
This session presents innovative and cutting edge technologies for debris management, including mobile treatment of waste through gasification, pyrolysis, and plasma vitrification. In many locations, landfill disposal is not feasible and so alternatives must be explored. In other cases, landfill disposal is undesirable. When energy can be produced from the debris or the debris may be recycled, there are synergistic benefits to its collection and waste management. This session will present the available information on the cost of facility construction and operation as well as waste throughput costs. Special issues related to derelict vessel deconstruction and disposal will be included. This session will educate the audience on new technologies that address concerns about the difficulty of collection and disposal in unique situations.					

MONDAY, MARCH 21	2:45-3:00pm	3:00-3:15pm	3:15-3:30pm	3:30-3:45pm	3:45-4:00pm
<p>This session will examine the development of international and national regulation aimed at preventing garbage pollution from ships, and explore the feasibility of making regulation effective in an environment that relies on voluntary compliance. It is clear from both the international and individual state experiences that regulations to prevent garbage from vessels of all sizes may not be a comprehensive solution to the problem. While regulation is essential, enforcement is extremely difficult when vessels are routinely out of site of enforcement agencies, and in the case of smaller vessels are not even required to keep records of garbage management practices on board. This session will investigate the role of regulation, and consider how this may be enforced and what is needed to ensure voluntary compliance in the case that enforcement is not a realistic option.</p>					
2.a. Reducing marine debris from shipping: The reality of regulation beyond the horizon Chair: A. Lane Salon 1	2.a.1. Reducing marine debris from shipping: The reality of regulation beyond the horizon -Recent developments & prospects for solutions S. RAAYMAKERS	2.a.2. Protecting the Caribbean Sea from marine-based pollution: Lessons from the MARPOL Annex V Special Area Designation C. CORBIN	2.a.3. MARPOL Annex V - Achieving consensus to change international law P. MUDROCH	2.a.4. Open Oceans and Marine Debris: Reforms to the Lax Enforcement of MARPOL Annex V A. RAKESTRAW	
2.b. Stemming the tide of trash: Model education and outreach programs to prevent marine debris 2/2 Chair: S. Sikich Salon 2	2.b.1. Marine debris education in a non-formal education setting K. WILLIAMS	2.b.2. Algalita Marine Research Foundation's Ship-2-Shore Education Program: Connecting classrooms with plastic marine debris research H. GRAY	2.b.3. Ocean garbage patches beware: We have the technology and are inspiring people to clean you up R. MILLER	2.b.4. Curbing plastic bag pollution: grassroots and viral efforts to bag the bag S. SIKICH	2.b.5. Plastic reduction and litter prevention campaigns: A three-step approach S. FRAZER
Session #2	<p>This session was formed from submitted abstracts that focus on abandoned and derelict vessels. Vessels are a distinct form of marine debris that often demand innovative and alternative approaches to response and removal.</p>			<p>2.c. Addressing abandoned and derelict vessels Chairs: M. Wright, N. Parry Salon C</p> <p>2.d. Panel: Waste reduction strategies for a zero-waste future Moderator: B. Dom Salon C</p>	
	2.c.1. Derelict vessels as marine debris- Environmental and administrative considerations D. HELTON	2.c.2. Marine debris and abandoned vessels: Identification, reduction and prevention through community-based education and action A. VON HARTEN	2.c.3. Removal of the F/V Ocean Clipper on St. Paul Island E. AMMANN	2.c.4. Delivering disaster recovery through increased responsiveness, efficiency and effectiveness by a state agency N. BEWARD	2.c.5. Removing abandoned and derelict vessels after a major natural disaster D. BEAUCHENE
<p>Waste reduction is integral to reducing and preventing land-based sources of marine debris. Panelists will describe current methodologies for obtaining the goal of waste reduction and/or zero waste and efforts to recycle and reuse plastic packaging materials. The panel will identify and discuss best practices to minimize waste in urban and coastal areas, thus reducing the sources of marine debris. The panel discussion will focus on identifying the common elements of successful actions that can be replicated throughout the world.</p> <ol style="list-style-type: none"> <li>1. Saskia Van Gendt, Resource Conversation Specialist, US Environmental Protection Agency</li> <li>2. Dr. Mushtaq Ahmed Memon, Programme Officer, UNEP Division of Technology, Industry &amp; Economics</li> <li>3. Peter Jones, Advisor to the Mayor of London on Waste, Chairman Waste 2Tricity, Director Ecotateral</li> </ol>					

# Tuesday, March 22, 2011

TUESDAY, MARCH 22		9:15-9:30am	9:30-9:45am	9:45-10:00am	10:00-10:15am	10:15-10:30am	10:30-10:45am
3.a. Outreach and education techniques and approaches 1/2 Chair: E. Guillaud-Cox Salon 1	3.a.1. MARE 410 Marine Debris in the Pacific: Teaching undergraduates at the University of Hawaii-Hilo K. McDERMID	3.a.2. Engaging urban communities to reduce litter and marine debris A. GREENE	3.a.3. Marine Debris Awareness Student Art Project S. FAZER	3.a.4 Visualizing marine debris: Using drifter buoys and debris tracking data to visualize marine debris movement and distribution M. MCBRIDE	This session includes approaches to outreach and education through artwork, classroom activities, and community involvement. This session includes stories of successful formal and informal education for many audiences. The goal of this session is to present outreach options for a variety of audiences and locations.		
3.b. Modeling marine debris movement and transport Chair: N. Maximenko Salon 2	3.b.1. Numerical simulation of plastic pellets dispersal in coastal systems as a tool for the identification of potential sources A. MANZANO	3.b.2. Global Ocean Alert System focusing on the world's river mouth outflows as a source of marine debris D. WOODRING	3.b.3. Plastic debris pathways and areas of accumulation in statistical Lagrangian model based on drifter trajectories N. MAXIMENTKO	3.b.4. Storm influenced marine debris movement into Prince William Sound, Alaska C. PALLISTER	This session was formed by combining abstracts that focus on marine debris movement and transport in aquatic environments. Presentations will cover a variety of topics but are linked in the common discussion of fate and transport of different types of marine debris. As this session contains information useful to the Risk Analysis session, it will be scheduled directly before that session.	3.b.5. Influences of weather and tidal patterns on beach debris accumulation S. WILSON	3.b.6. Numerical modeling with application to tracking marine debris J. POTEMRA
3.c. Designing meaningful protocols for monitoring marine debris 1/3 Chair: E. Adler Salon 3	3.c. 1. What makes a good marine debris monitoring program? C. RIBIC	3.c. 2. A first UK marine litter assessment of northern European waters T. MAES	3.c.3. NOAA protocols for marine debris monitoring and assessment along shorelines and in coastal surface waters C. ARTHUR	3.c.4. Characterization of individual marine debris items by mass J. JAMBECK	This session is focused towards researchers who are developing scientific monitoring programs to assess the distribution, amount, types, and impacts of marine debris. Environments considered include shorelines, wetlands, watersheds, surface waters, the water column, and the benthos. An emphasis will be placed on statistical rigor, determination of environmental covariates that may affect debris movement and breakdown, development of standard procedures and sampling schemes, and methods of reporting results to appropriate audiences. Further, this session will emphasize the need to first determine the question that will guide the monitoring program.	3.c.5. A standard protocol for monitoring marine debris using seabird stomach contents: the Fulmar EcoQO approach from the North Sea J. VAN FRANEKER	3.c.6. Plastic ingestion by North Pacific seabirds: Progress review and future directions D. HYRENBACH
Session #3	3.d. Panel: At-sea detection of marine debris: Capturing local ecological knowledge and observations Moderator: K. Souza Salon C				Fields from climate change to fishery management have taken advantage of observational knowledge held by lay experts, local or indigenous community members with intimate knowledge of and experience with natural resources. The vast expanses of the ocean pose an observing challenge to academic and government researchers, and access to those who hold this knowledge is sometimes difficult. Mining the experiences of those who spend much of their time at sea is a valuable way to gain knowledge. This experiential knowledge, while not collected using the scientific method, may illustrate trends only now being detected by science, cover a timeline longer than any research project, and lead to new and better management actions. Panelists may describe the frequency of marine debris sightings and encounters (e.g., propeller entanglements, fouling of active fishing gear), debris types encountered, geographic and temporal distribution of debris encounters, and insights into debris behavior and movement. This discussion is a way to capture observational knowledge based on panelists' experiences and observations as well as actions panelists feel could make a difference in the problem.	1. Capt Robert Lamb, Matson's Manager of Marine Operations for Hawaii 2. LT Kelley Sage, NOAA Commissioned Officer Corps 3. CDR Derek Trinque, Commanding officer of the USS O'Kane, US Navy 4. US Coast Guard (invited) 5. Pacific Voyaging Society (invited) 6. Longline fishing industry (invited)	

	TUESDAY, MARCH 22	11:15-11:30am	11:30-11:45am	11:45am-12:00pm	12:00-12:15pm	12:15-12:30pm	12:30-12:45pm
4. Outreach and education techniques and approaches 2/2	Chair: M. Thiele Salon 1	This session includes approaches to outreach and education through artwork, classroom activities, and community involvement. This session includes stories of successful formal and informal education for many audiences. The goal of this session is to present outreach options for a variety of audiences and locations.	4.a.1. Expanding the reach of a one-day event: California Coastal Cleanup Day's year-round impact E. SCHWARTZ	4.a.2. Scaling it up: Advancing the environmental literacy of citizens through local, regional and global education and outreach efforts. D. FIGUEROA	4.a.3. Raising awareness: The ripple effect of acting local and thinking global A. HOWE	4.a.4. Marine debris can save the world K. WILLIAMS	4.a.5. From cleanups to the classroom to community events: Marine debris education in San Diego A. GLASSCO
4.b. Risk analysis: Using predictions of the source and distribution of marine debris to assess their impacts	Chairs: D. Hardesty, C. Wilcox Salon 2	Understanding the impact of marine debris is fundamental for making appropriate management responses to the problem. A risk analysis perspective on the problem provides a useful and cost-effective approach – combining the likelihood that species interact with debris with a prediction or assumption about the likely impact of the interactions yields an expectation of the magnitude of the biodiversity risk posed by marine debris. This session will include the following topics: applying novel approaches to predict sources of marine debris, identifying the distribution and fate of marine debris (for more depth on this topic, please see the session entitled, "Modeling marine debris movement and transport"), and performing risk analysis for marine debris impacts. This session will examine different approaches to estimating the sea distribution of debris and evaluate how marine debris estimates might be combined with predictions of impacts on marine biota in an effort to develop large scale risk analyses for particular species or taxonomic groups.	4.b.1. Understanding the types, sources, and at-sea distribution of marine debris in Australian Waters B. HARDESTY	4.b.2. Impact of ingested marine debris on sea turtles of eastern Australia: Life history stage susceptibility, pathological implications and plastic bag preference. K. TOWNSEND	4.b.3. Evidence for increasing plastic ingestion in Northern Fulmars in the Pacific H. NEVINS	4.b.4. Habitat associations of seabirds and marine debris in the North East Pacific at multiple spatial scales A. TITIMUS	4.b.5. Plastic ingestion by North Pacific seabirds: Towards a hierarchical risk assessment D. HYRENBACH
4.c. Designing meaningful protocols for monitoring marine debris	Chair: C. Ribic Salon 3	This session is focused towards researchers who are developing scientific monitoring programs to assess the distribution, amount, types, and impacts of marine debris. Environments considered include shorelines, wetlands, watersheds, surface waters, the water column, and the benthos. An emphasis will be placed on statistical rigor, determination of environmental covariates that may affect debris movement and breakdown, development of standard procedures and sampling schemes, and methods of reporting results to appropriate audiences. Further, this session will emphasize the need to first determine the question that will guide the monitoring program.	4.c.1. Eyeballs, nets, and digital scanners: The influence of methodology in assessing plastic debris in the North Pacific Central Gyre M. GOLDSTEIN	4.c.2. Ocean Voyages Institute/ Project Kaiser reports on four development projects of marine debris collection equipment M. CROWLEY	4.c.3. Application of balloon aerial photography to measure total marine litter weight across a beach and the quantification of heavy metals carried by plastic litter E. NAKASHIMA	4.c.4. EPA shoreline and pelagic marine debris monitoring methods K. WEILER	4.c.5. Monitoring marine litter within the Marine Strategy Framework Directive (MSFD): Scientific and technical basis F. GAL GANI
4.d. Stories of success: Place-based partnerships to assess and remove marine debris	Chair: N. Barnea Salon C	Marine debris efforts often involve collaborations among many different organizations and disciplines. As the NOAA Marine Debris Program states, "Marine debris is everyone's problem." This session is dedicated to exploring case studies that tell an interesting, holistic marine debris "story." Regional successes and challenges will be highlighted in this session as will projects that utilize partnerships among varied stakeholders. The focus of this session is the assessment and removal of marine debris.	4.d.1. The Oregon partnership to address lost crab pots: Project overview N. BARNEA	4.d.2. Lessons learned from developing a derelict fishing gear program in Puget Sound: Behind the scenes stories G. BROADHURST	4.d.3. The Gulf of Carpentaria, Northern Australia R. GUNN	4.d.4. The Gulf of Mexico Marine Debris Project: Survey and mapping of marine debris after Hurricanes Katrina and Rita. N. BARNEA	4.d.6. Beach management model A. Community-based technique to prevent sandy beach susceptibility to marine litter along the Nigerian coastline F. ASUQUO

# Tuesday, March 22, 2011

	TUESDAY, MARCH 22	2:00-2:15pm	2:15-2:30pm	2:30-2:45pm	2:45-3:00pm	3:00-3:15pm	3:15-3:30pm
<b>5.a In-water technology to detect derelict fishing gear in marine/stuarine ecosystems</b> Chair: P. Murphy Salon 1	Derelict fishing gear is a continual problem in most marine and estuarine ecosystems. Derelict gear can have serious impacts to habitats and potentially significant losses of natural resources from ghost fishing. This session will focus on technological capabilities to detect derelict fishing gear in marine and estuarine waters. The ability to spatially map and quantify derelict gear will help determine the severity of the problem and is valuable to establish targeted areas for gear removal.	5.a.1. Quantifying the relationship between fishing effort and derelict fish traps (DFT) using autonomous underwater vehicles (AUV) in the U.S. Caribbean R. CLARK	5.a.2. Towed-diver derelict trap survey's in Florida Keys National Marine Sanctuary A. UHRIN	5.a.3. Utilizing high resolution side scan sonar to detect derelict fishing gear (nets, pot/traps) in Washington State's Salish Sea K. ANTONELIS	5.a.4. Detecting derelict fishing gear in the Volkswagen Bank National Marine Sanctuary using the HabCam habitat mapping camera system A. YORK	5.a.5. Sonars, robots and seeing through the dark: Using integrated technology to find and remove marine debris from a variety of locations R. MILLER	5.a.6. Detection, identification and diving: Lessons learned in planning and execution of a derelict crab pot detection project in SE Alaska P. MURPHY
<b>5.b. Panel: Plastic recovery for a trash-free ocean</b> Moderator: K. Weiler Salon 2	The problem of marine debris can be tackled at various points throughout the supply chain to help ensure that products are properly stewarded and do not end up in the ocean. This panel will investigate the need for and benefits of product design improvements, supply chain logistics (i.e. utilization of sustainable packaging of products, source reduction), and highlight international plastic producer and stakeholder efforts to reduce litter, increase plastic recovery, renewable energy production, and greenhouse gas mitigation.	1. Jean-Pierre De Grevé, Deputy Executive Director, PlasticsEurope 2. John Kieser, Environmental Manager – Coastal Provinces, Plastics Federation of South Africa 3. Keith Christman, Managing Director, Plastic Markets, American Chemistry Council 4. Margaret E. Morris, Director, Environmental Affairs & Community Affairs, Covanta Energy Corporation 5. Melissa Hockstad, Vice President, Science, Technology & Regulatory Affairs, SPI: The Plastics Industry Trade Association					
<b>Session #5</b>	This session was formed from submitted abstracts that report the results of marine debris monitoring surveys. This is important information, but distinct from other sessions that focus on best practices and methods for monitoring debris on beaches and in water. Presentations in this session will focus on reporting results from monitoring surveys. Discussion of these results is encouraged, and could include (but is not limited to) a discussion of the major types of debris, spatial variation, oceanographic and environmental parameters, and temporal trends in debris concentrations.	5.c. Results and synthesis of marine debris monitoring projects Chair: T. Maes Salon 3	5.c.1. Midway Island as a sentinel site for Pacific Region marine debris C. RIBIC	5.c.2. Coastal cleanup and marine debris trends analysis in Puerto Rico (2002-2010) A. TRUJILLO	5.c.3. Characterization of beach litter in Cijin and its implications on solid waste management T. LIU	5.c.4. Monitoring marine debris in Trinidad P. WRIGHT	5.c.5. Trends in marine debris along the coast of the continental United States 1996-2007 C. RIBIC
	Plastic debris is common in most marine habitats. In addition to conspicuous items of debris such as packaging, rope, and netting, fragments and pieces of microplastic have also accumulated in the marine environment from the poles to the equator. These fragments appear to have formed from the breakdown of larger items of debris and from the direct release of small pieces used in a range of cleaning processes and the release of pre-production pellets and powders. This session will examine the scale of the problem in terms of its spatial extent and will also consider temporal trends in the abundance of microplastic debris. Approaches to quantify microplastic debris will be examined together with assessments of the potential environmental consequences, both physical and toxicological, for marine life. The session will also consider potential solutions together with directions for future research and policy.  1/2 Chairs: M. Browne, R. Thompson Salon C	5.d. Microplastic: From domestic sinks to global sinks M. BROWNE	5.d.1. Bio-plastics and their interaction with the environment K. POLICH	5.d.3. Plastic marine debris in the Atlantic Ocean and Caribbean Sea: Abundance, distribution, characteristics, and trends K. LAW	5.d.4. Spatial and temporal distribution of microplastics in the Puget Sound, USA J. BAKER	5.d.5. A summary of neustonic plastic density and abundance in the North Pacific Gyre, 1999-2009 G. LATTIN	5.d.6. Abundance, distribution, and ecology of plastic microdebris in the North Pacific Central Gyre M. GOLDSTEIN

TUESDAY, MARCH 22		4:00–4:15pm	4:15–4:30pm	4:30–4:45pm	4:45–5:00pm	5:00–5:15pm	5:15–5:30pm
6.a. Managing marine debris in marine protected areas Chair: S. Godwin Salon 1	6.a.1. Design-based surveys of lost fishing gear and other marine debris in the Florida Keys M. CHIAPPONE	6.a.2. The removal and disposal of a derelict vessel from a remote marine protected area in Hawaii S. GODWIN	6.a.3. Indigenous protected areas: Challenges and triumphs S. MORRISON	6.a.4. Dealing with marine debris in MPAs at Europe's extremities D. JOHNSON	6.a.5. Hazardous marine debris in Marine National Monuments L. WOODWARD		
	<p>This session is devoted to experiences in assessment and management for marine protected areas on a variety of aspects concerning debris, such as survey and removal, transport of non-native organisms, and effects on protected species. Protected areas in the marine environment can have challenges concerning the assessment and management of marine debris. Marine sanctuaries can pose difficulties to activities associated with marine debris management due to factors such as remoteness or inaccessibility of habitats and the presence of protected species. The session will discuss the challenges of dealing with baseline assessment in unique habitats and steps taken to achieve debris removal and threat abatement for protected species.</p>						
6.b. Preventing land-based sources of debris through solid waste management Chair: M. Memon Salon 2	6.b.1. Waste management in small island states - Spreading the success of innovative ideas, integrated systems and practical community action for large-scale change S. JUDD	6.b.2. Avoiding unintended consequences - Controlling land-based sources of marine debris while enhancing terrestrial waste management, and recycling policy, law, and practice L. MONROE	6.b.3. Synthesizing human development with coastal zone management: The Niger Delta experience E. ANDREW-ESSIEN	6.b.4. Global partnership on waste management M. MEMON	6.b.5. Waste Management and Recycling in the Galapagos Islands I. LARREA		
	<p>As much as 80 percent of marine debris stems from land-based activities. Absent or poorly implemented solid waste management frameworks, coupled with careless consumer behaviour, are at the heart of the marine debris problem. This session will identify how solid waste management frameworks can be improved to reduce the waste reaching our shores and making its way to coastal waters and the open ocean. It will highlight success stories in solid waste management at various levels and seek to identify the critical or determining features of those successes.</p>						
6.c. Designing meaningful protocols for monitoring marine debris 3/3 Chair: F. Galgani Salon 3	6.c.1. A global harmonized methodology for monitoring marine litter: The UNEP/IOC guidelines E. ADLER	6.c.2. Marine debris monitoring and assessment in China W. ZHANG	6.c.3. Tridimensional sampling method to estimate abundance of plastic pellets in sandy beaches M. FISNER	6.c.4. Creating a citizen-science monitoring program to quantify microplastic marine debris J. PASCHAL	6.c.5. Rapid assessment of beach litter pollution in the beaches of Busan, Korea: Application of Litter Pollution Index J. LEE	6.c.6. Using a rapid survey approach to identify morphodynamic factors that promote the accumulation of micro- and meso-debris on sedimentary shoreline in Southwest England N. BIBER	
	<p>This session is focused towards researchers who are developing scientific monitoring programs to assess the distribution, amount, types, and impacts of marine debris. Environments considered include shorelines, wetlands, watersheds, surface waters, the water column, and the benthos. An emphasis will be placed on statistical rigor, determination of environmental covariates that may affect debris movement and breakdown, development of standard procedures and sampling schemes, and methods of reporting results to appropriate audiences. Further, this session will emphasize the need to first determine the question that will guide the monitoring program.</p>						
6.d. Microplastic in the environment: Causes and consequences 2/2 Chairs: M. Browne, R. Thompson Salon C	6.d.1. Characterization of the microbial community structures associated with ocean polymers C. STAM	6.d.2. Biological communities in concentrated debris regions: Who shares the ocean surface with plastic in the Eastern Pacific and North Atlantic? S. MORET-FERGUSON	6.d.3. Reshape and relocate: Seabirds as transformers and transporters of microplastics J. VAN FRANEKER	6.d.4. GESAMP initiative on microplastic particles as a vector for persistent, bio-accumulating and toxic compounds P. KERSHAW	6.d.5. How concerned should we be about the accumulation of microplastics in the environment? R. THOMPSON		
	<p>Plastic debris is common in most marine habitats. In addition to conspicuous items of debris such as packaging, rope, and netting, fragments and pieces of microplastic have also accumulated in the marine environment from the poles to the equator. These fragments appear to have formed from the breakdown of larger items of debris and from the direct release of small pieces used in a range of cleaning processes and the release of pre-production pellets and powders. This session will examine the scale of the problem in terms of its spatial extent and will also consider temporal trends in the abundance of microplastic debris. Approaches to quantify microplastic debris will be examined together with assessments of the potential environmental consequences, both physical and toxicological, for marine life. The session will also consider potential solutions together with directions for future research and policy.</p>						

# Thursday, March 24, 2011



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THURSDAY, MARCH 24	9:15-9:30am	9:30-9:45am	9:45-10:00am	10:00-10:15am	10:15-10:30am	10:30-10:45am	
7.a. Monitoring and reducing the impact of 'ghost' fishing by derelict fishing traps Chair: K. Havens Salon 1	Lost or abandoned (derelict) commercial fishing traps can present safety, nuisance, and environmental impacts in estuarine and marine waters. Various shellfish and finfish species that are entrapped and die in derelict traps can act as an attractant resulting in a self-baiting effect and a continual impact. Derelict fishing traps can damage sensitive habitats and can continue to capture both target and by-catch species. This session will examine various programs that are addressing derelict trap loss and subsequent by-catch issues and will explore options to minimize the overall adverse impact of lost traps.	7.a.1. Derelict crab pots in the Chesapeake Bay, USA K. HAVENS	7.a.2. Quantifying the impacts of derelict Blue Crab Traps in Chesapeake Bay S. GIORDANO	7.a.3. Survey and impact assessment of derelict crab pots in the Southeast Alaska, commercial Dungeness crab fisheries J. MASELKO	7.a.4. Investigating the "ghost-fishing" capacity of derelict lobster traps M. SMITH	7.a.5. Derelict spiny lobster traps in Florida Keys National Marine Sanctuary: Tradeoffs between habitat impacts and ghost fishing T. MATTHEWS	7.a.6. Derelict Trap Hoists in Chesapeake Bay: Integrating a Spatially Explicit Model with Waterman Ingenuity to Clean-up Derelict Traps W. SLACUM
7.b. Many hands make light work: Global and regional partnerships to prevent, mitigate and remove marine debris Chair: D. Russo Salon 2	Marine debris is a global challenge which cannot be resolved without sustained cooperation at regional and global scales. This session will address the role of regional and global partnerships in promoting and supporting innovative mechanisms to prevent, mitigate, and remove marine debris. It will identify global actors and highlight specific regional examples of cooperation. It will explore new partnerships to accelerate regional and global initiatives.	7.b.1. Partnering for a regional strategy: West Coast efforts to comprehensively address marine debris E. SCHWARTZ	7.b.2. Hawaii Marine Debris Action Plan: An archipelago-wide approach focused on results K. MCILWEE	7.b.3. Regional action on marine litter in the North-East Atlantic D. JOHNSON	7.b.4. A NETwork of partners R. GUNN	7.b.5. The role of an MPA network in marine debris reduction in the wider Caribbean Region E. DOYLE	7.b.6. Regional cooperation in dealing with marine litter: NOWPAP experience A. TKALIN
7.c. Environmental impacts of chemicals in marine plastics 1/2 Chairs: H. Takada, H. Karapanagioti Salon 3	In this session, scientists will provide an overview of the latest researches on chemicals in marine plastics and their potential biological effects. The fields include uptake of plastics by marine organisms, characterization of chemicals in the marine plastics, sorption and desorption processes of the chemicals from the plastics, and adverse effects of the plastic-derived chemicals on marine biota. The session will facilitate the studies and activities to reduce the plastic inputs from terrestrial environments and abundance of plastics and chemical risk in the ocean.	7.c.1. Chemicals in marine plastics: Global distributions and potential risk to marine ecosystem. H. TAKADA	7.c.2. Surface properties of beached plastic pellets and the effect of salinity on their sorptive properties for phenanthrene and 1-naphthol K. FOTOP OULOU	7.c.3. Partitioning and bioavailability of persistent organic pollutants in marine plastic debris U. GHOSH	7.c.4. The role of plastic production pellets in the accumulation and transport of trace metals in the marine environment L. HOLMES	7.c.5. Understanding the occurrence of floating and beached plastics and the interaction between plastic pellets and organic micropollutants in the Mediterranean Sea H. KARAPANAGIOTI	7.c.6. Environmental and health impacts of marine debris: plastic and chemical contaminants in juvenile yellowtail jacks ( <i>Seriola lalandi</i> ) from the North Pacific gyre M. GASSEL
7.d. Shoreline marine debris: Removal and disposal methods 1/2 Chairs: M. Ferguson, M. Sudovsky Salon C	This session will explore the various methods and tools for removal and disposal of marine debris from shoreline environments including utilization of different mechanisms, special equipment and training needs, hazards associated with removing debris, solutions for disposal of collected debris as well as special considerations for removal in remote areas. The goal is to share different methods of removing marine debris from shoreline environments as well as discuss ways to improve and expand current removal methodologies. Along with the explanation of methodologies and topics mentioned above, specific case studies can be utilized to provide examples of both successful and flawed approaches.	7.d.1. Aerial surveys and derelict fishing gear removal along Main Hawaiian Island nearshore environments: A case study M. FERGUSON	7.d.2. Seven years "net" progress a.k.a Picking up the pieces on Hawai'i Island M. LAMSON	7.d.3. Using volunteer and professional crews to clean remote northern Gulf of Alaska beaches C. PALLISTER	7.d.4. Removal and disposal methods used in Alaskan marine debris cleanups D. GAUDET		
7.e. Talking trash: Successes and challenges associated with policies to prevent plastic marine pollution Chair: K. James Leahi Ballroom	Plastic pollution, the largest component of marine debris, is a global problem that threatens marine life, ocean environments, and local economies. In response to the looming global crisis, there have been a wide range of policies implemented to reduce plastic pollution. This session will focus on case studies of local, state, and national policy and regulatory approaches that have been pursued to curb plastic pollution (especially concerning plastic bag legislation), and will provide conference attendees with the lessons learned. This session will inform stakeholders about the last decade of successes and challenges in stemming the plastic pollution in our waterways, and shed light on regulatory and legislative efforts that can serve as a model for national and international ocean pollution issues.	7.e.1. The Lay of the Land: single-use plastic pollution policy and legislative approaches in California, the USA and beyond L. TAMMINEN	7.e.2. Working to End Plastic Bag Pollution in California K. JAMES	7.e.3. Plastics, Litter, and the Precautionary Principle: Carrots and Sticks in San Francisco R. HALEY	7.e.4. Surfrider Foundation Law & Policy Advocating for Local Change: Municipal Ordinances Addressing Marine Debris A. HOWE		

THURSDAY, MARCH 24	11:15-11:30am	11:30-11:45am	11:45am-12:00pm	12:00-12:15pm	12:15-12:30pm	12:30-12:45pm
8.a. Engaging fishermen to address derelict fishing gear Chair S. Morison Salon 1	Providing fishermen with the means to get involved in derelict fishing gear removal (potentially recovering their own lost gear) and working with them to identify ways to prevent gear loss are key avenues to reducing the overall amount of derelict fishing gear. These topics will be explored in this session, which is targeted to those people trying to reduce the amount of derelict fishing gear by engaging fishermen in removal and prevention activities.	8.a.1. Engaging fishing communities through the Fishing for Energy partnership E. DUGGAN	8.a.2. Measuring the cost of marine debris to Hawaii's longline fishery J. HOSPITAL	8.a.3. Fishermen-led derelict gear recovery in California K. GILARDI	8.a.4. Mobilizing fishermen to recover derelict lobster gear - Overcoming misgivings and mistrust L. LUDWIG	8.a.5. Rule changes and partnerships with commercial fishermen increase impact of derelict crab trap clean ups in Florida E. STAUGLER K. HAVEENS
8.b. Coastal cleanup programs - A solution to the problem or just to the symptom? Chairs: R. Alkalay, G. Pasternak Salon 2	Routine coastal cleanups and enforcement actions can create a visible improvement in coastal cleanliness. But is there a significant change in public awareness of the need to reduce plastic usage and waste production? Are we really dealing with the problem, or just the consequences? This session will address the following question: is keeping the coast clean solving the problem of littering, or do we need to start at the source?	8.b.1. "Clean Coasts" Program - A leverage for a long-time change R. ALKALAY	8.b.2. Waitanata Harbour Clean-Up Trust video presentation H. SMITH	8.b.3. Marine debris pollution along the coasts of Korea: Results from a nationwide monitoring and clean-up campaign S. HONG	8.b.4. How addressing symptoms nationwide monitoring and clean-up can lead to a solution to the problem R. GUNN S. HONG	8.b.5. Laying a path to solve the marine litter problem Y. OHKURA
8.c. Environmental impacts of chemicals in marine plastics 2/2 Chairs: H. Takada, H. Karapanagioti Salon 3	In this session, scientists will provide an overview of the latest researches on chemicals in marine plastics and their potential biological effects. The fields include uptake of plastics by marine organisms, characterization of chemicals in the marine plastics, sorption and desorption processes of the chemicals from the plastics, and adverse effects of the plastic-derived chemicals on marine biota. The session will facilitate the studies and activities to reduce the plastic inputs from terrestrial environments and abundance of plastics and chemical risk in the ocean.	8.c.1. Microbial biofouling of plastic marine debris G. PROSKUROWSKI	8.c.2. Adsorption of POPs to different types of plastic pellets deployed in San Diego Bay, California C. ROCHMAN	8.c.3. Quantifying phthalates and bisphenol A in marine organisms S. ALI	8.c.4. Chemicals in marine plastics and potential risks for a seabird like the Northern Fulmar ( <i>Fulmarus glacialis</i> ) J. VAN FRANEKER	8.c.5. Effects of plastic debris ingestion on PCBs in seabirds R. YAMASHITA J. LAVERS
8.d. Panel: Building on maritime industry best practices to catalyze action Moderator: T. O'Halloran Salon C	Preventing marine debris from ocean based sources requires the commitment and efforts of the companies operating in the marine environment. This includes the corporate culture, policies, protocols, and practices to ensure that company activities at sea do not generate marine debris. This panel will bring together representatives from shipping and cruise industries that have been proactive in preventing marine debris to present case studies on their programs. The panelists will share these best practices and lessons learned in order to inspire and inform other companies in undertaking their own efforts.	1. Kathy Metcalf, Director, Maritime Affairs, Chamber of Shipping of America 2. Lisa M. Swanson, Director Environmental Affairs, Matson Navigation Company 3. Cruise ship industry association representative (TBC) 4. Cruise ship company (TBC)				

# Thursday, March 24, 2011

	THURSDAY, MARCH 24	2:00-2:15pm	2:15-2:30pm	2:30-2:45pm	2:45-3:00pm	3:00-3:15pm	3:15-3:30pm
9.a. Panel: Secrets of Success: Using film to increase public awareness	Chair: J. Schmidt Salon 1	Several notable ocean advocates are currently using film and media to increase the public's attention to the threats of marine debris. This panel will explore the trends behind successful films and media campaigns and engage in an insightful and candid dialogue about what drives some films to produce tangible results and create positive social change. What are the secrets of success? Influential and inspirational environmentalists and filmmakers comment on their individual campaigns centering on plastics and marine debris. They will showcase clips from their respective advocacy films and provide personal insight on what it takes to create an effective cross-media campaign.	1. Sarah Sikich, "The Majestic Bag", a nature mockumentary released by Heal the Bay, a local CA nonprofit. 2. Danielle Russo, speaking on behalf of "Big It!" Plastic Pollution Coalition Co-founder 3. Claire Aguilar (PLASTIC BAG/FUTUREBESTATES, ITVS) "Plastic Bag," an 18-minute film narrated by Werner Herzog	9.b.3. Bringing together the marine debris community using "ships of opportunity" and a Federal marine debris information clearinghouse C. ARTHUR	9.b.4. A mobile application for marine debris data collection and mapping J. JAMBRECK	9.b.5. Technology in the tropics: reinforcing community based science G. HEATHCOTE	9.b.6. Citizen scientists and marine debris monitoring worldwide: Materials, methods, and protocols C. MOORE
9.b. Citizen scientists and marine debris monitoring: Standardizing methods and establishing a database	Chair: J. Paschal Salon 2	This session will be geared toward both marine scientists and the lay ocean enthusiast and will address the significance of standardizing and simplifying debris monitoring and analysis methods to allow for volunteer citizen scientists to participate in data collection, leading to the development of a long term database. The focus will be on ways to design methodology and sampling equipment in such a manner that they are accessible and safe for wide user base, while still producing data that is valuable to governments and the scientific community. The conversation will be open to all aspects of marine debris monitoring (near-shore monitoring, benthic sampling, monitoring of beach debris, pelagic sampling, etc.). The session will allow for the scientific community to share on what data they desire, give input on how to obtain it, and to share how citizen scientists can be most helpful to marine debris research efforts.	9.b.1. Volunteer beach cleanup data collection: Sources of error and responses to the challenge A. GLASSCO	9.b.2. Engaging ocean-going sailors to observe and record marine debris data in the North Pacific Gyre J. CALLAHAN			
9.c. Law, policy, and economic considerations for successful governance	Chair: J. Bollock Salon 3	This session includes discussions of law, policy, and economic instruments to address marine debris. The goal of this session is to learn from case studies that lay out the components necessary for successful governance, as defined as fewer marine debris impacts to the marine environment.	9.c.1. Economics + marine debris: A review of economic instruments K. REGISTER	9.c.2. You can't put a price on that: A market-based solution to marine debris collection A. SCHROEDER	9.c.3. Open source legislative database and Global Map Project D. RUSSO	9.c.4. Using the Clean Water Act to Address Land-Based Sources of Marine Debris H. SLAY	9.c.5. Marine debris emergency response and preparedness: Lessons from the September 29, 2009 tsunami in American Samoa K. MCELWEE
9.d. Ocean voyages to study and quantify pelagic debris	Chair: N. Mallos Salon C	This session will place a focus on the many ocean voyages that have documented marine debris across the global oceans. This includes voyages specifically meant to study and quantify pelagic debris, as well as research and other vessels that opportunistically study debris on "ships of opportunity." This session seeks to provide a framework for potentially disparate observations from all across the globe, and bring together researchers and marine debris observers to discuss the best way to utilize these voyages to study and quantify the marine debris problem.	9.d.1. Forty years of at-sea marine debris data collection P. JOYCE	9.d.2. SUPER HI-CAT: Survey of underwater plastic and ecosystem response between Hawaii and California T. CLEMENTE	9.d.3. Quantifying concurrent distributions of marine debris and oceanic birds in the North Pacific Ocean using visual surveys D. HYRENBACH	9.d.4. The Lone Ranger Mission: Testing The latest advances of marine debris monitoring techniques, new methodologies, and environmental sensing technologies A. NEAL	

THURSDAY, MARCH 24	4:00-4:15pm	4:15-4:30pm	4:30-4:45pm	4:45-5:00pm	5:00-5:15pm	5:15-5:30pm
10.a. The role of ocean filmmaking in educating the public about marine debris Chair: J. Schmidt Salon 1	Utilizing modern-day filmmaking tools and messaging opportunities, how can films influence public attitudes toward conservation and protection of our ocean resources and especially highlight the issue of marine debris? This session will highlight and discuss the role of film in marine debris education and outreach campaigns to influence behavior change.	10.a.1. PLASTIC OCEANS - A unique documentary that will challenge our addiction to plastic L. BEWICK	10.a.2. Filmmaking in the North Atlantic gyre Into the vortex of research and education S. ELLIOTT	10.a.3. Highlighting marine debris clean up success through educational film making M. STUBELIARS		
10.b. Citizen scientists and marine debris monitoring: Standardizing methods and establishing a database 2/2 Chair: J. Paschal Salon 2	This session will be geared toward both marine scientists and the lay ocean enthusiast and will address the significance of standardizing and simplifying debris monitoring and analysis methods to allow for volunteer citizen scientists to participate in data collection, leading to the development of a long term database. The focus will be on ways to design methodology and sampling equipment in such a manner that they are accessible and safe for a wide user-base, while still producing data that is valuable to governments and the scientific community. The conversation will be open to all aspects of marine debris monitoring (near-shore monitoring, benthic sampling, monitoring of beach debris, pelagic sampling, etc.). The session will allow for the scientific community to share on what data they desire, give input on how to obtain it, and to share how citizen scientists can be most helpful to marine debris research efforts.	10.b.1. Australian Marine Debris Project - The value of community data in a national database H. TAYLOR	10.b.2. Prince William Sound Alaska marine debris monitoring program C. PALLISTER	10.b.3. Marine debris in Central California: assessing beach litter type and abundance in the Monterey Bay, CA C. ROSEVELT	10.b.4. The Clean Coast Index - 5 Years of data collection along 65 beaches in the Mediterranean and the Red Sea G. PASTERNAK	10.b.5. 25 years of global trash: 8.7 million people, 144 million pounds of trash, 291,000 miles of coastline L. VIANA
10.c. Law, policy, and economic considerations for successful governance 2/2 Chairs: S. Werner, C. Rouan Salon 3	This session includes discussions of law, policy, and economic instruments to address marine debris. The goal of this session is to learn from case studies that lay out the components necessary for successful governance, as defined as fewer marine debris impacts to the marine environment.	10.c.1. Derelict fishing gear: Addressing the management vacuum M. HOLT	10.c.2. Regional fisheries management organizations and derelict fishing gear: Current efforts and future needs E. ENGLISH	10.c.3. Strengthening the global governance and regulatory framework to combat abandoned, lost or otherwise discarded fishing gear (ALDFG) B. KUIMLANGAN	10.c.4. Which governance for plastic-free seas and oceans ? A view from Europe C. ROUAM	10.c.5. Policies and implementation of the integrated marine litter management in Republic of Korea H. NOH
10.d. Shoreline marine debris: Removal and disposal methods 2/2 Chairs: M. Ferguson, M. Sudrovsky Salon C	This session will explore the various methods and tools for removal and disposal of marine debris from shoreline environments as well as discuss ways to improve and expand current removal methodologies. Along with the explanation of methodologies and topics mentioned above, specific case studies can be utilized to provide examples of both successful and flawed approaches.	10.d.1. From nurdles to nets: Marine debris removal and research methods S. FRAZER	10.d.2. Cleaning Kanapou, Kaho'olawe: The challenges of marine debris removal from a remote Hawaiian island that was once a military bombing range C. KING	10.d.3. The challenges of marine debris removal and disposal on St. Paul Island P. ZAVADIL	10.d.4. Reducing waste generated at cleanups: Ideas from California Coastal Cleanup Day A. GLASSCO	
10.e. Ocean voyages to study and quantify pelagic debris 2/2 Chair: G. Hanke Leahi Ballroom	This session will place a focus on the many ocean voyages that have documented marine debris across the global oceans. This includes voyages specifically meant to study and quantify pelagic debris, as well as research and other vessels that opportunistically study debris on "ships of opportunity." This session seeks to provide a framework for potentially disparate observations from all across the globe, and bring together researchers and marine debris observers to discuss the best way to utilize these voyages to study and quantify the marine debris problem.	10.e.1. Characterization of pre-production resin pellets from the Subtropical Convergence Zone of the North Pacific Gyre A. NEAL	10.e.2. The Ocean Gyre Expedition - A global perspective on plastic beach debris B. ROBERTSON	10.e.3. Lessons learned from ten North Pacific Subtropical Gyre voyages aboard Oceanogap Research Vessel Alugita to detect, quantify and remove plastic debris and ghost nets C. MOORE	10.e.4. Ocean Voyages Institute/Project Kaien: Study and monitoring of ocean trash in the North Pacific Gyre—A three-year overview M. CROWLEY	

# Friday, March 25, 2011



FRIDAY, MARCH 25	8:30-8:45am	8:45-9:00am	9:00-9:15am	9:15-9:30am
11.a. Public/private partnerships for reducing and preventing marine debris through education and outreach 1/2 Chairs: K. Christman, S. Sheavly Salon 1				<p>Education and outreach programs, effective laws and policies, a sound waste management infrastructure, and a system of fair and vigilant enforcement of waste management laws are the essential building blocks for successful marine debris prevention initiatives. The most successful programs take integrated approaches to changing the behaviors and practices of civil society, as well as those of industry and government. This session will examine a number of public/private partnerships and similar programs already in place as a means of identifying best practices. It will highlight innovative strategies being developed within the private sector and through partnerships to make sure that material innovations and product design breakthroughs are helping to reduce environmental impacts. The session will also explore how partnerships with local governments and reclaimers to increase the amount and types of materials can help to create secure, financial business opportunities and make recycling a cost-effective solution. And, finally, the session will explore the impacts of how consumer education is essential, and how local management of solid waste can help or hinder progress. This session will focus on collaborative success stories and opportunities for improvement and innovative educational and technological activities that can be implemented nationally and disseminated on a global scale.</p>
11.b. Diving for debris: Methods and approaches for human-powered in-water marine debris removal 1/2 Chairs: M. Manuel, K. Koyanagi Salon 2			<p>11.a.1. The power of partnerships A. CROW</p> <p>11.a.2. Private sector efforts to create effective, collaborative partnerships to reduce litter A. CARLSON</p>	<p>11.a.3. Marine debris solutions through public private partnerships: Industry, government &amp; NGO partners collaboratively provide recycling opportunities in public spaces C. FLOWERS</p> <p>11.a.4. PlasticEurope's proposed way forward J. JOHANSSON</p>
Session #11			<p>This session will explore the use of different diving methodologies for marine debris removal including safety precautions, specific trainings, and debris handling techniques. Potential topics to be covered include scuba diving, hookah, snorkeling operations, and more. Presenters may also explain safety practices and precautions taken for particular operations. Discussions may include the need for specific trainings such as small boat operations, debris handling methods, and proper rescue certifications (e.g., CPR, First Aid, Oxygen Administration). Specific case studies can be utilized to provide examples of both successful and flawed approaches.</p>	<p>11.b.1. In-water surveys and removal of marine debris following a tsunami in American Samoa M. MANUEL</p> <p>11.b.2. Volunteer scuba divers and underwater marine debris removal, assessment, and data collection: Challenges and opportunities A. BUDZIAK</p> <p>11.b.3. Dive methodologies used in California to recover lost fishing gear J. RENZULLO</p> <p>11.b.4. Derelict fishing gear removal in the Papahānaumokuākea Marine National Monument K. KOYANAGI</p>
			<p>11.c.1. Cigarettes, fishing nets, and Facebook: The utility of social media in ocean conservation H. GRIDLEY</p> <p>11.c.2. Litter and recycling in America: A look at recent studies and trends, with recommendations for action R. WALLACE</p> <p>11.c.3. Social marketing and the California Thank You Ocean campaign S. MARQUIS</p> <p>11.c.4. Using social activation strategy to promote change D. RUSSO</p>	<p>This session will explore how a comprehensive social marketing campaign can address the challenges faced in reducing or eliminating marine debris and thus negating its effects on wildlife. It will discuss how to create a campaign centered on changing individual and industry behaviour when it comes to trash disposal and reducing or eliminating marine debris.</p> <p>This session will highlight successful alternative marine debris waste management scenarios including waste-to-energy and recycling, while exploring the more innovative (uncommon for marine debris yet proven for other materials) practices of gasification and pyrolysis. While describing successful projects, logistics of collection and costs will be incorporated into talks. For innovative technologies, cost of facility construction and operation (and waste throughput costs) will be presented. This session is for people currently conducting marine debris and derelict gear cleanups who desire an alternative disposal option from landfills; the session is also for people planning logistics for cleanups who want to use alternative disposal options.</p>
			<p>11.d.1. GhostNet gear: Turning trash into treasure J. GOLDBERG</p> <p>11.d.2. Assessment of the viability of using marine debris as a feedstock in advanced gasification solutions for disposal and energy production G. GRADMAN</p> <p>11.d.3. Developing a 21st century waste to energy facility in American Samoa M. NICHOLLS</p> <p>11.d.4. Marine debris to energy: Integrated marine debris and derelict fishing gear assessment, collection and management J. KENNEDY</p>	

FRIDAY, MARCH 25		9:30-9:45am	9:45-10:00am	10:00-10:15am	10:15-10:30am
		<p>Education and outreach programs, effective laws and policies, a sound waste management infrastructure, and a system of fair and vigilant enforcement of waste management laws are the essential building blocks for successful marine debris prevention initiatives. The most successful programs take integrated approaches to changing the behaviors and practices of civil society, as well as those of industry and government. This session will examine a number of public/private partnerships and similar programs already in place as a means of identifying best practices. It will highlight innovative strategies being developed within the private sector and through partnerships to make sure that material innovations and product design breakthroughs are helping to reduce environmental impacts. The session will also explore how partnerships with local governments and reclaimers to increase the amount and types of materials can help to create secure, financial business opportunities and make recycling a cost-effective solution. And, finally, the session will explore the impacts of how consumer education is essential, and how local management of solid waste can help or hinder progress. This session will focus on collaborative success stories and opportunities for improvement and innovative educational and technological activities that can be implemented nationally and disseminated on a global scale.</p>			
12.a. Public/private partnerships for reducing and preventing marine debris through education and outreach 2/2	Chairs: K. Christman, S. Sheavly Salon 1	<p>12.a.1. CPIA –Working with Canada's plastic industry to support successful education programs and industry innovations related to plastics C. CIRKO</p> <p>12.a.2. Supply and contamination issues affecting plastics recycling in North America G. FISHBECK</p>	<p>12.a.3. The Fishing for Energy partnership: removing the barrier of derelict gear disposal M. PICO</p>	<p>12.a.4. Mainstreaming marine litter management in Caribbean SIDS through government and civil society partnerships C. CORBIN</p>	
12.b. Assessing the dangers and removal of sea-dumped munitions and other hazardous debris Chairs: P. Walker, F. Longinotto Salon 2	Session #12	<p>The topic considered here is the hazard posed by toxic underwater munitions and other hazardous marine debris materials, including efforts to prioritize risks among sites by developing a comprehensive database, bringing these threats to light in a series of meetings and international dialogues, and, finally, examining ultimate clean-up strategies. Key points include the need for international agreement to tackle the issue, the need for a coordinated global database, awareness to raise political will, policy alternatives, dangers to human health and the environment, and the need for new technology to mitigate impacts of hazardous debris. Though some research has been conducted into the broader environmental consequences on the marine habitat, for example on coral and fish stocks, it has not yet been coordinated or reported globally and databases are still dismally patchy. In other words, the situation, which has received very limited attention to date, could be a serious sleeper ready to cause severe damage in the future if disregarded now.</p>	<p>12.b.1. Research effort to document military munitions disposal sites worldwide R. STAUBER</p>	<p>12.b.2. Ordnance Reef coral impact assessment and mitigation of remotely operated underwater munitions recovery system demonstration project R. O'CONNOR</p>	<p>12.b.3. Assessing the dangers and removal of sea-dumped munitions and other marine hazardous debris P. WALKER</p>
12.c. Biological impacts of marine debris Chair: D. Johnson Salon 3		<p>This session was formed from submitted abstracts that discuss the interaction of marine debris with the biological aspects of marine ecosystems. The focus of this session is to better understand the interactions of debris with marine species and to elucidate the broader impacts of debris on marine communities. Presentations will cover a host of different topics but are linked by the common focus on specific biological impacts that marine debris has on aquatic ecosystems.</p>	<p>12.c.1. Marine debris: More than a low grade fever for marine mammals and sea turtles V. CORNISH</p>	<p>12.c.2. Microbial comparison of epi-biont communities on Sargassum and plastic debris vs. surrounding water in the North Atlantic gyre L. AMARAL-ZETTLER</p>	<p>12.c.3. Plastic ingestion and cephalopod prey selection in Pacific Northern Fulmars (<i>Fulmarus glacialis</i>) collected in Monterey Bay, California in 2003 and 2007: Are plastic and prey correlated? E. DONNELLY</p>
12.d. Aerial remote sensing of marine debris Chair: W. Pichel Salon C		<p>This session will focus on the remote sensing of marine debris, particularly at-sea but also on beaches. The goal of debris remote sensing is locating areas where marine debris is likely to be found, detection prior to removal, debris census/mapping, or technology development. This session addresses technology and procedures for remote sensing of marine debris using in-air platforms such as satellites, aircraft, and Unmanned Aerial Systems. Remote sensing instruments include visible, infrared, LiDAR, sonar, and radar – single channel, multi-channel, or hyper-spectral. Session presentations will provide information on such topics as: (1) a survey of the state-of-the-art technology for the remote sensing of marine debris, (2) results of past marine debris surveys, (3) problems yet to be solved before operational marine debris detection and removal is feasible and cost-effective, and (4) successes and challenges in the use of various pertinent technologies. It is expected that the presentations and resulting discussion in this session will clarify the road ahead in regard to development of technology and procedures for operational detection and removal of marine debris at sea.</p>	<p>12.d.1. Large scale monitoring of surface floating marine litter by high resolution imagery G. HANKE</p>	<p>12.d.2. SCUD - Ocean surface current product in aid to pelagic marine debris studies J. HAFNER</p>	<p>12.d.3. Aerial marine debris coastal survey method and standardization T. VEENSTRA</p>
					<p>12.d.4. Remote sensing for marine debris detection – GhostNet project experience in the North Pacific Subtropical Convergence Zone W. PICHEL</p>

# Schedule of Posters

## Monday AM - Wednesday AM

- a. **Stories of success: Place-based partnerships to prevent land-based sources of marine debris**
  - 1. Improving coordination and communication for rapid response to marine debris reported on beaches and reefs around Oahu, Hawaii | R. SELBACH
  - 2. Success story of limiting land-based sources of debris | M. MAMUN
- b. **Wildlife entanglement in marine debris: Assessment and response**
  - 3. An innovative use of a “capture cage” to disentangle California sea lions, *Zalophus californianus*, in Oregon | K. RAUM-SURYAN
- c. **Stemming the tide of trash: Model education and outreach programs to prevent marine debris**
  - 4. Marine debris and service learning | K. WILLIAMS
  - 5. Bringing marine debris education inland through community recreation centers | A. HAMILTON
  - 6. Google Earth tours: An engaging and effective tool for intermediate students to investigate and communicate marine debris issues | S. KELLY
  - 7. Nearshore seafloor mapping as a tool for developing curriculum based marine debris classroom programs | J. MECHLING
- d. **Biological impacts of marine debris**
  - 8. Plastic ingestion by planktivorous fishes in the North Pacific Central Gyre | C. BOERGER
  - 9. Assessing impacts of benthic marine debris on coral communities in the inner Gulf of Thailand | T. YEEMIN
  - 10. Incidence, mass, and variety of plastics ingested by Laysan and Black-footed Albatrosses recovered as by-catch in the North Pacific Ocean | H. GRAY
  - 11. Plastic ingestion by Black-footed and Laysan Albatross at Kure Atoll, Hawai'i | A. TITMUS
  - 12. Biodegradable cull panels decrease lethality of lost and abandoned blue crab traps | D. STANHOPE
- e. **Outreach and education techniques and approaches**
  - 13. EPA addresses and prevents marine debris through education, monitoring, and research tools | A. GREENE
  - 14. Balloon releases: Biohazard and preventable problem | K. REGISTER
  - 15. Engaging Virgin Islanders in addressing the problem of marine debris | M. TAYLOR
  - 16. Scuba Dogs Society battles the trash fish in Puerto Rico | A. MARTI
  - 17. Southeast Atlantic Marine Debris Initiative (SEA-MDI) | J. JAMBECK
- f. **Aerial remote sensing of marine debris**
  - 18. Unmanned aircraft use for marine debris survey | T. VEENSTRA
- g. **Stories of success: Place-based partnerships to assess and remove marine debris**
  - 19. Collaborative removal: Highlighting challenges of city-sourced marine debris through local, grass-roots solutions | C. HOWITT
  - 20. Success and challenges of marine debris monitoring in Tainan | Y. TAI
- h. **In-water technology to detect derelict fishing gear in marine/estuarine ecosystems**
  - 21. Automated identification of derelict fishing gear in the Stellwagen Bank National Marine Sanctuary from HabCam optical imagery | B. COWIE-HASKELL

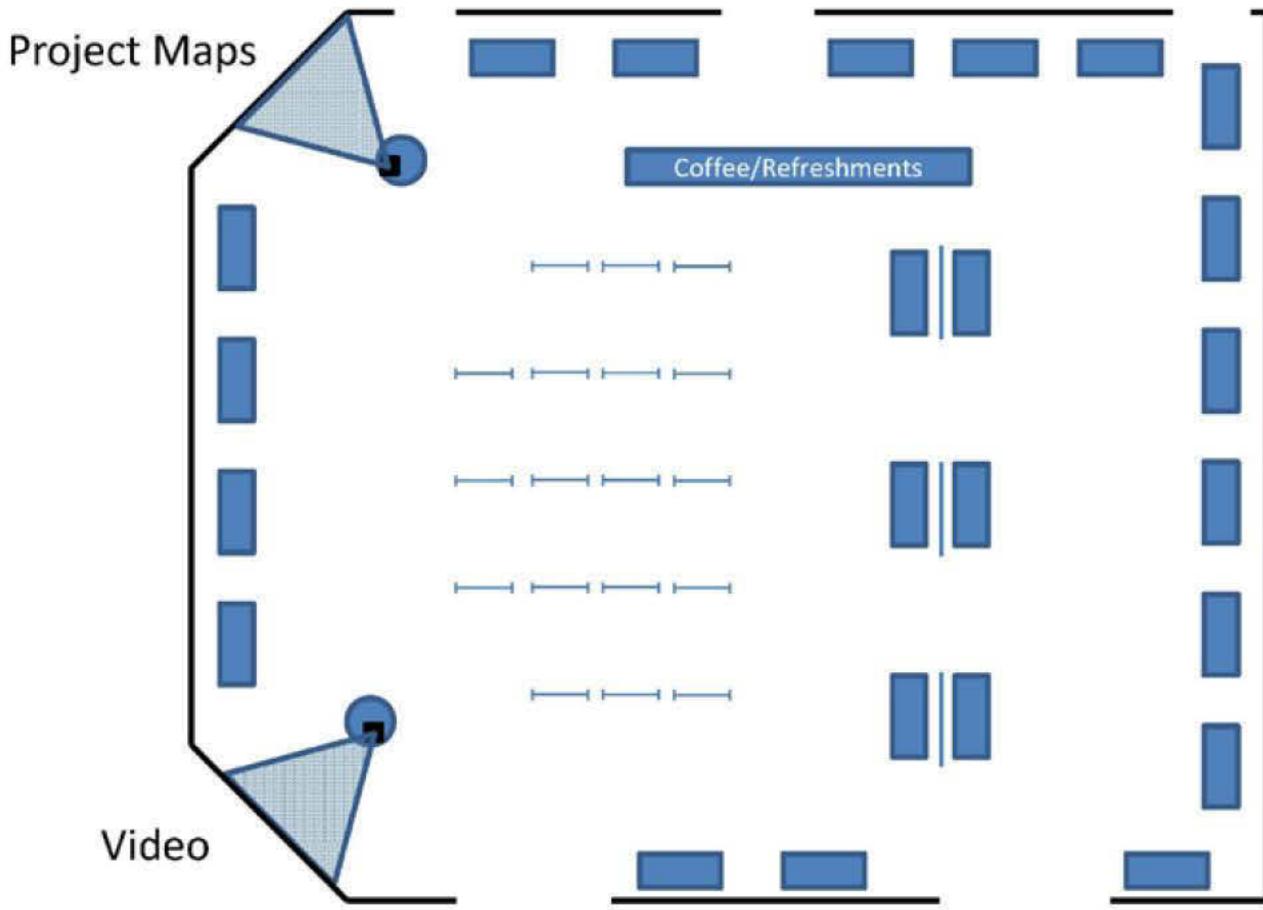
- 22. Distribution and abundance of derelict spiny lobster traps and trap-generated debris in Florida Keys National Marine Sanctuary | A. UHRIN
- i. **Law, policy, and economic considerations for successful governance**
- 23. A total systems analysis of the Great Pacific Garbage Patch | C. ORNELL
- 24. Derelict trap retrieval and trap debris removal programs in Florida | K. MILLER
- j. **Don't fill our landfills: Alternative disposal methods for marine debris and derelict fishing gear**
- 25. Marine biodegradable material testing | B. KETTL
- k. **Many hands make light work: Global and regional partnerships to prevent, mitigate and remove marine debris**
- 26. An international assessment: The effectiveness of governmental and nongovernmental efforts in the prevention, mitigation and removal of marine debris | G. KLEBER
- l. **Engaging fishermen to address derelict fishing gear**
- 27. Ghost nets: A wicked problem | K. VIDLER
- m. **Preventing land-based sources of debris through solid waste management**
- 28. Plastics recycling in relation to the marine debris problem: A review | R. COPE
- 29. Municipal solid waste management in coastal towns of Gujarat State, India | S. SHAH
- n. **Managing marine debris in marine protected areas**
- 30. Derelict fishing gear removal from the Northwestern Hawaiian Islands | R. REARDON
- o. **Addressing abandoned and derelict vessels**
- 31. State-level responses to abandoned and derelict vessels in the USA | N. PARRY
- p. **Coastal cleanup programs - A solution to the problem or just to the symptom?**
- 32. Okinawa, Ryukyu Islands cleanup 20 year report & update on regional marine litter initiatives (work in progress) | E. HEINRICH-SANCHEZ
- q. **Shoreline marine debris: Removal and disposal methods**
- 33. Gore Point marine debris cleanup and monitoring project | E. PALLISTER
- 34. Exclusive beach cleanup applications for small islands | Z. OTSUKA
- 35. Removal and disposal methods of marine debris in Japan | W. TAKAHASHI
- r. **Using social marketing to cause a sea change on marine debris pollution**
- 36. Pacific Ocean cleanup | M. PERCY

## Wednesday PM - Friday AM

- s. **Monitoring and reducing the impact of “ghost” fishing by derelict fishing traps**
- 37. Abrasion stress to benthic coral reef organisms from lost fishing gear and other marine debris in the Florida Keys | M. CHIAPPONE
- t. **Designing meaningful protocols for monitoring marine debris**
- 38. Use of disposable lighters as an indicator item to monitor marine debris | S. FUJIEDA
- 40. Characterization of tracer chemicals to describe marine debris ingested by Hawaiian seabirds | F. NILSEN
- 41. Four easy-to-ship and easy-to-use aluminium neuston trawls designed and fabricated by Algalita Marine Research Foundation for use on different vessels of opportunity. Results of field tests and preliminary intercalibration efforts | C. MOORE
- u. **Environmental impacts of chemicals in marine plastics**
- 42. Polychlorinated biphenyls (PCBs) in plastic pellets from Santos, Brazil | M. FISNER
- 43. Examining the relationship between plastic marine debris and toxic substances | R. ENGLER
- 44. New ocean contamination generated from marine debris plastics | K. SAIDO
- 45. Organic pollutants in microplastics from two beaches of the Portuguese coast | J. FRIAS

46. Understanding the kinetics involved in the sorption and desorption of contaminants from plastic resins | B. APPLEGATE
  47. Macro and micro plastic debris adsorb and transport endocrine disrupters in the ocean | L. RIOS MENDOZA
- v. **Ocean voyages to study and quantify pelagic debris**
48. An investigation of plastic marine debris across the North Atlantic Subtropical Gyre | G. LATTIN
  49. Long-term quantitative monitoring of plastic debris in the Pacific Ocean during repeated undergraduate research cruises | P. JOYCE
  50. A characterization of marine debris in the Northeast Pacific deep ocean | S. VON THUN
- w. **Risk analysis: Using predictions of the source and distribution of marine debris to assess their impacts**
51. A hazard assessment of coastal pollution on endangered leatherback sea turtles (*Dermochelys coriacea*) | C. PINCETICH
  52. What's eating Kaho'olawe's marine debris? "Sharkastics" are providing many clues, and it's not fantastic news... | C. KING
  53. To eat or not to eat? The roles of choice and vision in ingestion of marine debris by sea turtles | Q. SCHUYLER
- x. **Results and synthesis of marine debris monitoring projects**
54. International Coastal Cleanup Thailand | S. PRAISANKUL
  55. Temporal and spatial distribution of marine debris on select beaches in the Gulf of Alaska | J. MASELKO
  56. Assessment of solid waste pollution on Slovenian coastline | A. PALATINUS
  57. Anthropogenic debris on the beaches in the Rio de Janeiro/SE Brazil | J. BAPTISTA-NETO
  58. Trends in beach debris on Hawai'i 2000-2007 | C. RIBIC
  59. Impact of marine litter in the northern part of Gulf of Mannar, Southeast coast of India | M. SUBRAMANIAN
  60. Analysis of solid wastes in the estuary of Santos and São Vicente, Santos, SP, Brazil | D. MARCHESANI
  61. Floating marine debris in Guanabara Bay – Rio de Janeiro/SE Brazil | J. BAPTISTA-NETO
  62. Study on composition and amount of marine litter in coral reef areas | P. SURASWADI
  63. Composition of marine debris in Nigerian coastal waters | N. OGUGUAH
- y. **Microplastic in the environment: Causes and consequences**
64. Welcome to the beach of the future: The physical properties of plastic sediment | H. CARSON
  - 64.a. Ingestion and incorporation of microplastic particles by common cockles (*Cerastoderma edule*) in an intertidal mudflat | N. BIBER
- z. **Citizen scientists and marine debris monitoring: Standardizing methods and establishing a database**
65. Marine debris information clearinghouse – A tool for collaboration and coordination | P. MURPHY

# Exhibit Hall



## Exhibitors *All Exhibits must be taken down on Friday, 2:30pm – 6pm.*

- American Chemistry Council
- Bishop Museum
- B.E.A.C.H.
- CrowderGulf
- I.M. Systems Group
- Kōkua Hawai‘i Foundation
- Matson Navigation
- NOAA Marine Debris Division
- NOAA Office of Response and Restoration
- NOAA Pacific Region
- NOAA Pacific Services Center
- NOAA Papahānaumokuākea Marine National Monument
- NOAA Unmanned Aircraft Systems Program
- Ocean Conservancy
- Safe Planet
- United Nations Environment Programme
- University of Hawai‘i Sea Grant College Program
- U.S. Environmental Protection Agency
- U.S. Fish and Wildlife Service
- Western Pacific Regional Fishery Management Council

## Video/Art Projector

One projector in the exhibit hall will be dedicated to displaying visual media on marine debris. Each morning, a rotating selection of digital images of marine debris will be shown. These images are provided by people throughout the marine debris community, ranging from artists to removal experts. In the afternoons, the projector will display a loop of marine debris videos from groups and individuals around the world. Note: These videos are different from those that will be shown at the 5IMDC Movie Night event.

# Global Marine Debris Projects Map

**Ever wonder how cool it would be to see a map of all the projects from around the world that are helping to tackle marine debris?**

**We did, too!**

**Visit the Exhibit Hall between sessions to add your project(s) to a global map.** The idea is to showcase how marine debris is a global problem that is being addressed all over the world.

We ask that you give a few details about the type of project (research, cleanup, or outreach), your name and email, and the GPS coordinates (approximate is all right). There is a computer dedicated to collecting this information. A map of all entered locations will be projected on one wall.

It takes only a few minutes to get your project on the map...Literally!

## Marine Debris Awareness Week Proclamation



In recognition of the global problem of marine debris as well as the 5th International Marine Debris Conference, Governor Neil Abercrombie and Lt. Governor Brian Schatz of the State of Hawai'i have proclaimed the week of March 20-26, 2011 as "Marine Debris Awareness Week."

The Proclamation will be on display at the NOAA Marine Debris Division's booth in the Exhibit Hall.

# Workshops

**SUNDAY, March 20**

## **Addressing the causes of DFG in the Asian Pacific Region**

**8:00am – 5:00pm**

### **Salon 1**

This workshop will explore the underlying causes and contributors to derelict fishing gear in the Asian Pacific region, with an ultimate goal to develop the foundation for an action plan that can be implemented by local fisheries and other management authorities. Invited experts will discuss the potential causes of gear loss/abandonment in the region and develop an action plan that addresses these causes, cognizant of the special needs of the region's developing nations and SIDS. Discussions will include impacts of DFG on local marine ecosystems, underlying socioeconomic reasons for loss and abandonment of gear, local resources to address DFG potential management options to reduce DFG, and outreach/education tools. The goal of workshop conveners is to establish and maintain a network of interested participants that will work to implement the Action Plan to reduce DFG within the region.

*Instructor/Organizer:* Elizabethann English, NOAA Fisheries Office of International Affairs

## **Results chains: A tool for creating effective marine debris strategies**

**8:00am – 5:00pm**

### **Salon 2**

Results chains offer managers and conservation professionals a logical and useful way to clarify why certain actions are chosen to address threats facing the natural environment, what results are predicted to occur following such action, and how such results will be measured through time. Participants in this workshop will learn how to design a results chain so that it tests assumptions held regarding how strategies lead to reduced marine debris impacts and how to identify a set of measures to track progress and gauge strategy effectiveness. The morning will feature presentations, hands-on development and review of results chains, and case study review of how results chains are being used in the real world as a planning tool to address marine debris. In the afternoon, participants will conduct an interactive peer review of the results chains used as the framework for the development of the draft *Honolulu Strategy: A global strategy for the prevention, reduction, and management of marine debris*.

*Instructor/Organizer:* John Parks, Marine Management Solutions LLC

*Co-Instructor/Organizer:* Kitty Courtney, Tetra Tech, Inc.

## **Hydrodynamics of marine debris**

**8:00am – 5:00pm**

### **Salon 3**

This workshop addresses the motion of marine debris in water, with the goal to formulate the steps necessary to quantify the major sources and sinks of marine debris, as well as the pathways between them, to ultimately determine the basin-scale and global inventory of marine debris by closing the associated mass budgets. The workshop will bring together modelers and observational scientists to integrate the two approaches of study of marine debris hydrodynamics.

*Instructor/Organizer:* Nikolai Maximenko, International Pacific Research Center, School of Ocean and Earth Science and Technology, University of Hawaii

*Co-Instructor/Organizer:* Kara Lavender Law, Sea Education Association

## **Methods for measuring the impacts of derelict fishing gear and its removal**

**8:00am – 12:00pm**

### **Salon C**

While it is generally accepted that derelict fishing gear is an entanglement or entrapment risk to marine wildlife, that it has the potential to alter marine habitats, and that its removal from the marine environment is therefore of benefit to ocean resources and habitats, science-based methods for measuring its impacts and the biological benefits of removal vary among programs and/or are underutilized. The goal of this proposed workshop is to provide a forum for comparing and contrasting currently utilized and past methodologies for measuring derelict fishing gear impacts and ecological benefits of removal across programs. The outcome of this workshop will be a *Recommended Methods* white paper that is prescriptive, yet general and cross-cutting enough to be useful for any derelict fishing gear removal program operating anywhere in the world.

*Instructor/Organizer:* Kirsten Gilardi, California Lost Fishing Gear Recovery Project – SeaDoc Society – UC Davis Wildlife Health Center

*Co-Instructor/Organizer:* Jennifer Renzullo, SeaDoc Society – UC Davis Wildlife Health Center

## **Washed Ashore: Plastics, sea life, and environmental art**

**1:00pm – 5:00pm**

### **Salon C**

Learn about the process of making large-scale educational art out of marine debris! Environmental artist and educator Angela Haseltine Pozzi will take participants through the story of one community's direct engagement with marine debris. This workshop will be a combination of oral presentation and hands-on participation. A presentation will be made about the community project, the consequences to the community and beyond, and the vision of using art as a medium to engage in the ever-growing conversation about marine debris. The hands-on component of the workshop will include fabricating fish scales or bird feathers out of marine debris. Participants will get to drill, stitch, and assemble elements of one of the large-scale sculptures! No prior artistic experience is needed; Ms. Pozzi provides all instruction and supplies.

*Instructor/Organizer:* Angela Haseltine Pozzi, Washed Ashore project

*Co-Instructor/Organizer:* Kyle Brown, Artula Institute, Washed Ashore project

## **The importance of adequate port reception facilities (for ship-generated wastes) in reducing marine debris**

**1:00pm – 5:00pm**

### **Kaimuki Ballroom**

MARPOL regulations require all IMO Member States to provide port waste reception facilities (PRFs) at their ports for ship-generated wastes, including Annex V wastes, which may be discharged under certain conditions and may contribute to MD. This workshop will introduce participants to the Global Integrated Shipping Information System, and provide an overview of the tools available for reporting inadequacies and of the work of UNEP, IMO, and the International Organization

for Standardization (ISO) in developing standards for garbage management aboard ship and at PRFs. Participants will also engage in a roundtable discussion on Best Management Practices for ships and operators of PRFs aimed at Reducing, Reusing, and Recycling ships' wastes with the goal of moving toward zero discharge of wastes from ships and eliminating marine debris.

*Instructor/Organizer:* Capt. David A. Condino, USMM, CIV – US Coast Guard, Office of Port and Facility Activities, CG-5442, Safety Branch

*Co-Instructor/Organizer:* LCDR Kevin Lynn, USCG HQ

## **WEDNESDAY, March 23**

### **Learning shoreline assessment protocols for marine debris**

**8:00am – 12:00pm**

#### **Salon 3**

A wide number of marine debris shoreline assessments exist around the world, but information gathered is seldom comparable due to differing objectives and methodologies. The NOAA Marine Debris Division has reviewed several of these methodologies on marine litter and is working to develop a statistically robust and holistic analysis which addresses all types and locations of debris in an area and which can be standardized to use across the globe. Once established, these shoreline methodologies will be paired with surface water trawls, pelagic sampling, underwater/benthic assessments, and sediment analyses to determine the overall density of marine debris in a given region or area. This four-hour combined workshop and field trip gives participants an opportunity to learn and conduct one of these shoreline density assessments and see Hawaii's debris firsthand. Participants will be able to provide comments on the developed methodology and discuss how it can be implemented in their own country or region.

*Instructor/Organizer:* Sarah Opfer, NOAA Marine Debris Division/I.M. Systems Group, Inc.

*Co-Instructor/Organizer:* Courtney Arthur, NOAA Marine Debris Division/I.M. Systems Group, Inc.

### **Keep the Sea Free of Debris: Developing effective outreach for land-based marine debris**

**1:30pm – 5:30pm**

#### **Salon 1**

Marine debris is a complex, multi-faceted issue. While all aspects are important, when it comes to the global community, land-based litter is one of the more prominent and prevalent topics. Much of current media coverage, however, has been misleading, exaggerated, or based on hearsay. Ensuring that public opinion is based upon accurate, science-based information is increasingly important because resulting attitudes can determine what issues are significant and thus must be addressed. The workshop will focus on informal outreach to general audiences (i.e., the general public) and, if time allows, one or two specific audiences. Examples of broad-reach outreach tools, such as web-based marine debris visualizations and interactive elements, will be presented and demonstrated. Participant feedback and impressions among the group will be encouraged. Additionally, participants will help to formulate several internationally relevant key messages on land-based marine debris and prevention in order to help standardize and unify messaging on marine debris worldwide.

*Instructor/Organizer:* Carey Morishige, NOAA Marine Debris Division/I.M. Systems Group, Inc.

*Co-Instructor/Organizer:* Leon Geschwind, TBG on contract at NOAA Pacific Services Center

*Co-Instructor/Organizer:* Rhonda Suka, Hawaii Institute of Marine Biology Fellow with NOAA

## **Marine debris education: Classroom and outreach lessons to teach students about marine debris**

**1:30pm -5:30pm**

### **Salon 2**

Marine debris is an environmental problem of global importance, enlisting the concern and action of scientists and policy makers, as well as the general public around the world. This workshop will introduce a three-lesson kit created by the Center for Microbial Oceanography: Research and Education (C-MORE) to help educators teach about marine debris. The main themes of the kit are the biological impacts of marine debris, geographical distribution of marine debris, and ways society creates marine debris. Participants will go through the kit, critically examine data, and take part in activities that explore the causes, geographical distribution, and biological impacts of marine debris as students using the kit would. Participants in the workshop will learn ways to teach about marine debris as well as discuss ways to create their own marine debris kit from the online resources.

*Instructor/Organizer:* Jim Foley, The Center for Microbial Oceanography: Research and Education

## **Fine art, ecotourism, and science education – Partnering to increase marine debris awareness within communities**

**1:30pm – 3:30pm**

### **Salon 3**

Art, technology, and ecotourism can provide real-time (firsthand) experiences allowing those involved a personalized view of the ecological consequences of marine pollution, its potential impacts on them, and their role in the problem. This personalized and informed experience, when reinforced by modern technologies, can dramatically inspire and alter behaviors in communities that experience it. This workshop will feature presentations followed by discussion around key questions. The panel will consist of four members: two professional artists, a biologist, and a professional marine educator. Workshop participants will have one hour of the session to ask questions of the panel participants about how to successfully draw together multiple organizations, agencies, and established artists to successfully achieve education and outreach goals related to marine debris and ocean conservation awareness.

*Instructor/Organizer:* Pam Longobardi, Georgia State University

*Co-Instructor/Organizer:* Wayne Sentman, Oceanic Society, Master's Candidate Harvard University Extension School

## **Hawaii's youth: Bridging ancient Hawaiian stewardship practices and present-day technology for a sustainable ocean**

**1:30pm – 4:00pm**

### **Leahi Ballroom**

This workshop will be presented using film and student presenters. Film will include interviews of a canoe navigator, a present-day Hawaiian medicine man who uses original plants brought by canoe, an astronomer who studies on Mauna Kea and a present-day fisherman currently practicing ancient ways. They will discuss via film the impact of marine debris on these ancient practices, how modern ways of fishing, farming, navigating, and astronomy advances have contributed to the problem of marine debris. The students will share ideas for bridging ancient Hawaiian ocean stewardship

practices, present-day problems and modern technology for solutions, plus their findings on collected marine debris. This project is dedicated to the children of the world from the children of Hawaii with aloha.

*Instructor/Organizer:* Teresa Espaniola, www.gARTbage.org, environmental art educator, creator of the art project “The Outrigger Canoe, A Cultural Bridge.”

*Co-Instructor/Organizer:* PuaLilia Keohuloa, Co-Creator of the educational art project “The Outrigger Canoe, A Cultural Bridge.”

## A new twist to the Monofilament Recovery & Recycling Program: Personal-sized bins

**3:30pm – 5:30pm**

### **Salon 3**

The Monofilament Recovery & Recycling Program (MRRP) is a Florida statewide effort to educate the public on the problems caused by discarded fishing line. The purpose of this workshop is to review the Florida program, discuss a pilot program to expand the MRRP to other regions in the U.S., and discuss similar efforts worldwide. It will be followed by an interactive discussion where participants will be encouraged to provide suggestions and recommendations on implementation of monofilament collection in a variety of locations and cultures. Finally, there will be a hands-on demonstration on construction of the mini-bins; participants will get to make their own personal-sized recycling bins and will be provided with take-away resources to help them expand the program in their community.

*Instructor/Organizer:* Michael Bailey, NOAA Fisheries

*Co-instructor/Organizer:* Kim Bassos-Hull, Sarasota Dolphin Research Program, Mote Marine Laboratory

## Local Hawai‘i Student Participation



NOAA Marine Debris Program

### Kōkua Hawai‘i Foundation Student Workshop & Activities

**Wednesday, March 23, 12:00pm – 5:30pm**

**Leahi Ballroom/Salon C**

The Kōkua Hawai‘i Foundation is coordinating and sponsoring a student workshop and associated activities the afternoon of Wednesday, March 23. Forty Student Ambassadors, grades 4 through 12, from schools across the island of O‘ahu will be participating in this event. Students will engage in team-building activities, hear from guest presenters from various organizations involved in marine debris, tour the conference Exhibit Hall, and participate in hands-on activities.

# Field Trips

All field trips will depart from the Marriott Tour Entrance at the start times listed below. Tickets must be purchased by 12:00pm on Tuesday at the Registration Desk. All field trips cost \$40.

NOAA Marine Debris Program



## Pier 38 tour: Fresh fish auction, marine debris port reception bin, and “talk story” with Hawaii’s longline fishermen

5:30am – 9:30am

**Location:** Pier 38

**Description:** Bright and early, participants will learn about and experience the Honolulu Fish Auction (<http://www.hawaii-seafood.org/auction/>) – the only one of its kind between Tokyo, Japan and Maine, USA! Participants will also learn about Hawaii’s port reception facility (<http://marinedebris.noaa.gov/projects/hiportrecep.html>) and program and “talk story” (informally discuss) with Hawaii’s longline fishermen who frequent the North Pacific Subtropical Convergence Zone, an area of marine debris concentration and high biological productivity. Participants will also learn about impacts of marine debris to the fishing industry and may have the opportunity to tour a longline fishing vessel.

**Partners:** Western Pacific Regional Fishery Management Council, Hawai‘i Longline Association, United Fishing Agency, Pacific Ocean Producers Fishing and Marine

### Things to bring:

- Closed-toe shoes highly recommended
- Jacket (it’s a bit cold at the fish auction)
- \$ for breakfast (purchase on own)

## Hanauma Bay tour and snorkel

7:15am – 1:00pm

**Location:** Hanauma Bay Nature Preserve; in addition to the registration cost, \$7.50 will be collected for entrance to the Preserve when you arrive.

**Description:** Participants will be treated to an educational presentation about the Hanauma Bay Nature Preserve, get to tour their education center, and snorkel in one of Oahu’s most pristine ecosystems. Please note that Hanauma Bay is an entirely non-smoking nature preserve (includes beach area). All participants are welcome to snorkel and explore the bay on their own.

*Guided snorkel:* A guided snorkel tour is available; maximum participant number is 16. <http://www.honolulu.gov/parks/facility/hanaumabay/index1.htm>

**Partners:** Hanauma Bay Nature Preserve, University of Hawai‘i Sea Grant College Program



NOAA Marine Debris Program

**Things to bring:**

- Sunscreen
- Sun protection
- Water, snacks
- Swimming clothes
- Snorkeling gear (If you want to snorkel, you MUST bring your own snorkel gear; it may be rented in Waikiki.)

Keep in mind that the park will be unusually crowded due to it being Spring Break; thus, all concession stands (food and snorkel) will be extremely crowded. Anticipate long lines and waits for all concessions.



**Hawai'i Nets to Energy Program tour**

**8:00am – 1:00pm**

**Location:** Campbell Industrial Park

**Description:** Participants will be taken first on a tour of the Schnitzer Steel Hawaii Corporation facility where derelict nets and line are chopped into small pieces. They will then follow the process on to the City and County of Honolulu's H-Power waste-to-energy facility run by Covanta Energy. Here they will see how the derelict nets are used to create electricity. <http://marinedebris.noaa.gov/projects/netstoenergy.html>

**Partners:** Schnitzer Steel Hawaii Corporation, Covanta Energy

**Things to bring:**

- Covered-toe shoes!!
- Signed waiver(s) (provided ahead of time)
- Long pants

- Sun protection
- Water
- Keep in mind that these facilities process scrap metal (Schnitzer) and municipal solid waste (Covanta) – plan and dress accordingly.

**Pearl Harbor tour**

**8:00am – 12:30pm**

**Location:** Pearl Harbor

**Description:** Participants will be treated to a tour of U.S. Navy ships and facilities (exact vessels to be determined) and learn about the Navy's involvement in and support of marine debris efforts in the Pacific. *Tickets cannot be purchased during the conference.*

**Partner:** United States Navy

**Things to Bring:**

- REQUIRED - For safety reasons, covered shoes with low heel, pants or long shorts (no dresses or skirts) are required.
- REQUIRED - Picture identification

- Avoid carrying large bags for safety and ease of movement in tight quarters.
- Cameras are allowed; however, specific areas may not allow photography.
- Guests should be able to walk on ladders and over gridded deckplates.

## Explore the Waikiki Aquarium

9:30am – 12:30pm

**Location:** Waikiki Aquarium; walk to site

**Description:** Participants will be able to browse and tour the exhibits at the Waikiki Aquarium, founded in 1904, and third oldest public aquarium in the U.S. Known for its exquisite sunlit displays of living corals and colorful reef fish, the Waikiki Aquarium's exhibits, programs, and research focus on the marine life of Hawai‘i and the tropical Pacific. The field trip will start with a special presentation by Aquarium staff. <http://www.waquarium.org/>

**Partner:** Waikiki Aquarium



Steven Siegel (Marine PhotoBank)

# Media Roundtable

## Tuesday, 22 March

The media roundtable, entitled *The Litter Debate: Surfing for Solutions to Marine Litter*, will provide an opportunity for members of the media from around the world (on-site and via phone) to hear from UNEP and NOAA marine debris specialists, as well as from industry representatives and other experts about the current state of marine debris activities, the goals of the 5IMDC and potential next steps for addressing this global issue. The presentations will be followed by a Q and A period.

The roundtable will be chaired by Elisabeth Guilbaud-Cox, UNEP Head of Communications, and speakers will include:

- Kris McElwee, NOAA
- David Osborn, UNEP
- David de Rothschild via Skype
- April Crow, Coca Cola, and
- Steve Russell, Vice President of Plastics, American Chemistry Council

Fabiano Prado Barreto



## Associated Event

### Seeking Global and Regional Solutions to Marine Debris Problem

**Wednesday, March 23, 8:30am –1:30pm**

**Salon C**

**Host:** The Scientific and Technical Advisory Panel of the Global Environment Facility (STAP-GEF)

This half-day side workshop will focus on a number of critical issues related to global and regional responses to marine debris in the coastal and open ocean areas or areas beyond national jurisdiction (ABNJ). The event will bring together representatives of intergovernmental organizations, small island states, scientists, policymakers from multilateral environmental agreements, civil society, and the business community. Cross-sectoral dialogue will contribute to the development of the Honolulu Strategy: A Global Strategy for the Prevention, Reduction, and Management of Marine Debris. The event would serve, *inter alia*, to help explore a specific role of the GEF in supporting global efforts aimed at addressing marine debris problem. All 5IMDC participants are welcome to attend.

# Acknowledgments/Committees

## Steering Committee

Frank Chopin, Food and Agriculture Organization, Italy  
Christopher Corbin, UNEP, Caribbean Environment Programme (CEP), Jamaica  
April Crow, The Coca Cola Company, US  
Mary Donohue, University of Hawaii Sea Grant College Program, US  
Amy Fraenkel, UNEP Regional Office for North America (RONA), US  
Ljubomir Jeftic, Consultant, Croatia  
David Johnson, OSPAR Commission, UK  
Wang Juying, National Marine Environmental Monitoring Center, China  
Ilse Kiessling, Department of the Environment, Water, Heritage and the Arts, Australia  
Holly Koehler, Department of State, US  
Alison Lane, URS Australia, Australia  
Christa Licher, Ministry of Housing, Spatial Planning and the Environment, Netherlands  
Alistair McIlgorm, Australia National Marine Science Centre, Australia  
Sarah Morison, NOAA Marine Debris Division, US  
David Osborn, UNEP Division of Environmental Policy Implementation (DEPI), Kenya  
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Eben Schwartz, California Coastal Commission, US  
Seba Sheavly, Sheavly Consultants, US  
Vikki Spruill, Ocean Conservancy, US  
Hideshige Takada, Tokyo University of Agriculture and Technology, Japan  
Richard Thompson, University of Plymouth, UK

## Planning Committee

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David Osborn, UNEP DEPI, Kenya  
Amy Fraenkel, UNEP RONA, US  
Sarah Morison, NOAA, US  
Heidi Savelli, UNEP DEPI, Kenya  
Monika Thiele, UNEP RONA, US  
Arwen Edsall, NOAA, US (secretariat)

## Media and Outreach Group

Tess Cieux, UNEP CEP, Jamaica  
Dove Coggeshall, Ocean Conservancy, US  
Bryan Coll, UNEP, Kenya  
Andrea DiPaola, UNEP RONA, US  
Megan Forbes, NOAA, US  
Elisabeth Guilbaud-Cox, UNEP RONA, US  
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Dave Willett, Ocean Conservancy, US  
Rebecca Wynne, NOAA, US

## Honolulu Strategy Rapporteurs

### Leads

Ellik Adler, UNEP COBSEA, Thailand  
Christopher Corbin, UNEP CEP, Jamaica  
Elizabethann English, NOAA, US  
Erika "Riki" Gunn, GhostNets Australia, Australia  
David Johnson, OSPAR Commission, UK  
Jenny Miller-Garmendia, Project AWARE Foundation, US  
Seba Sheavly, Sheavly Consultants, US  
Alexander Tkalin, UNEP NOWPAP, Japan  
Katherine Weiler, Environmental Protection Agency, US

### Assistants

Ania Budziak, Project AWARE Foundation, US  
Ashley Carlson, American Chemistry Council, US  
Arwen Edsall, NOAA, US  
Christine Flowers, Keep California Beautiful, US  
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Ferdinand Goetz, University of Hawaii Hilo, US  
Georg Hanke, European Commission Joint Research Centre, Italy  
Sherry Lippiatt, NOAA, US  
Peter Murphy, NOAA, US  
Andrea Neal, Blue Ocean Sciences, US  
Katie Register, Clean Virginia Waterways/ Longwood University, US  
Stefanie Werner, Federal Environment Agency, Germany

### Volunteers

Twani Alexander	Heidi Hirsh
Jessica Aschettino	Gina McGuire
Michelle Benedict	Pamela Michael
Marjorie Bonar	Bill Myers
Molly Borsom	Katie Nichols
Robert Chuck	Barbara Nowak
Morgan de Partee	Tara Rapalli
Kerry Foltz	Lori Sakurai
Aurora Gallardo	Johnmy Sequeira
Louise Giuseffi	Judith Tarpley
Ben Haffner	Reiki Young
Angela Hansen	

# Notes

# Co-Hosts



## National Oceanic and Atmospheric Administration US Department of Commerce

From daily weather forecasts, severe storm warnings, and climate monitoring to fisheries management, coastal restoration, and supporting marine commerce, NOAA's products and services support economic vitality and affect more than one-third of America's gross domestic product. NOAA's dedicated scientists use cutting-edge research and high-tech instrumentation to provide citizens, planners, emergency managers, and other decision makers with reliable information they need when they need it. [www.noaa.gov](http://www.noaa.gov)



United Nations Environment Programme

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