

Alaska Marine Policy Forum

Summary from Wednesday, May 24, 2017

Host: Molly McCammon

Notes by Holly Kent

The Alaska Marine Policy Forum is a bimonthly teleconference for Alaskans to network and share information about marine policy, budgets, and legislation at state, national, and international levels, sponsored by Alaska Sea Grant and the Alaska Ocean Observing System. Contact Sue.Keller@alaska.edu to be added to the list serve to receive a reminder and agenda for the next call, and summary notes following each call.

Alex Schenk, Sen. Sullivan's office

- The senator's office is still collecting co-sponsors for his marine debris bill; there are 10 to date. The house version of the bill will be introduced in the house next week by Representatives Young and Bonamici.
- The senator is looking forward to Capitol Hill Ocean Week in D.C., June 13-15. He will be hosting a marine debris hearing on June 13.
- Alex reiterated that the President's budget is just a starting point and that Congress is ultimately tasked with passing the budget and will make the final decision. The senator sent a letter to the budget committee last week outlining their concerns.
- When work is done with the marine debris bill their office will move on to the Magnuson-Stevens reauthorization.
- The senator's office welcomes letters of support for programs due to be impacted by the President's budget.

Ephraim Froehlich, Sen. Lisa Murkowski's office

Charlotte Regula-Whitefield, Sea Grant Knauss Marine Policy Fellow

- Ephraim reiterated Alex's comments on the budget and said that the senator is happy to see level funding for the IOOS Program, but very concerned about the impact to:
 - National Estuarine Research Reserves
 - Sea Grant
 - NOAA's Arctic Research Program
 - National Weather Service
 - Fisheries and management
 - Pacific Coast Salmon Recovery Fund
 - Marine Mammal Commission

The senator is sending out an updated letter to the budget committee regarding these priorities, and they would be happy to receive letters of support for these areas from groups like the North Pacific Research Board. They have already received letters of support for the Marine Mammal Commission with 50 high level signatures.

- Senator Murkowski attended an Ocean Caucus event on May 23 sponsored by the Baltimore Aquarium highlighting ocean acidification. The event was well attended with more than 70 attendees.
- The upcoming Ocean Week is a good time for folks to document their concerns regarding the President's budget and pass on to the senator.

- Charlotte has been working on aquaculture as a means of closing the trade deficit and is looking for additional input from Alaskans. Her contact information is;
Charlotte Regula-Whitefield, Ph.D.
National Sea Grant Knauss Fellow
Office of United States Senator Lisa Murkowski
522 Hart Office Building, Washington, DC 20510
Direct phone: 202-224-6139
Charlotte_Regula-Whitefield@murkowski.senate.gov
cmregulawhitefield@alaska.edu
- Senator Murkowski will be attending a Department of Homeland Security budget hearing on May 25 with Secretaries Kelly (USDHS) and Acosta (USDOL) and will be focusing on the H2B visa issue impacting the fish processing industry. She will be pressing Secretary Kelly for a fix to the problem.
- The Vessel Incidental Discharge Act just passed out of the committee last week with big changes. Senator Cantwell is now in discussion with industry representatives and regulatory agencies in Washington state regarding some of these changes in the language of the act. Erik Elam of Senator Sullivan's office has the lead on this issue.

Barbara Blake, Lt Governor Mallott's office

- The state has received an increase in the number and size of mariculture permits this year which may indicate that the Governor's Alaska Mariculture Task Force has had an impact.
- Danielle Meeker is the Alaska Sea Grant fellow who will start this August for one year and will work on a number of issues to include climate change, fisheries, and marine resources.
- The Transboundary Citizen's Advisory Workgroup will meet on May 25 in Juneau. The Lt. Governor will be meeting with Canadian fisheries officials on June 25 in Canada to discuss climate change, treaties, and transboundary issues.
- The Governor reversed last year's Administrative Order on the Commercial Fisheries Entry Commission, and introduced legislation last week to make changes to salaries and make the positions non-exempt.
- Barbara helped prepare the salmon disaster budget request to the Department of Commerce, and it has been sent to the Senate Appropriations Committee.
- The National Ocean Council is still in a holding pattern, although Director Deerin Babb-Brott had his contract extended for a year. The state is still looking toward some kind of regional ocean planning effort, and starting to think about what it might look like for the state.

Molly McCammon, Alaska Ocean Observing System

- Molly reported that she has heard that some federal agency people have been directed to start implementing the President's budget that calls for the elimination of their program. If the budget has not been approved by the deadline of October 1, then Congress passes a continuing resolution until it does. Ephraim said any budgetary Continuing Resolution must be based on a prior year budget passed by Congress. Therefore, programs CANNOT be eliminated or phased out UNTIL Congress has passed a new budget. There seems to be some mixed interpretations of this, and Ephraim will check in to the issue further.

Presentation on Marine Debris: Microplastics by Amy V. Uhrin, Chief Scientist at NOAA Marine Debris Division. PowerPoint slides are attached as a PDF.

Next Alaska Marine Policy call: July 26, 2017, 1 pm Alaska time

Upcoming Events

June 5-13 [North Pacific Fishery Management Council meeting, Juneau](#)

June 13-15 [Capitol Hill Ocean Week](#)

Microplastics

Amy V. Uhrin

Chief Scientist

NOAA Marine Debris Program

Alaska Marine Policy Forum

May 24, 2017



Outline

- NOAA Marine Debris Program (MDP)
- What are microplastics
- What we know about microplastics
- What we don't know about microplastics

NOAA Marine Debris Program



NOAA Marine Debris Program

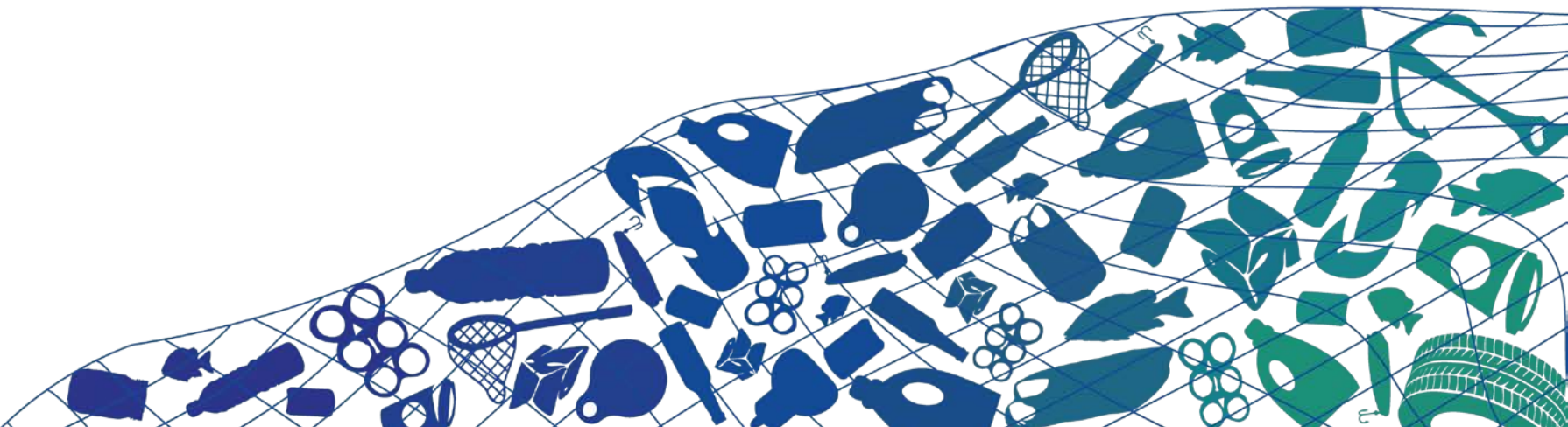
- Established in **2006** by Congress; reauthorized **2012**; Save Our Seas Bill **2017**
- **Vision:** the global ocean and its coasts free from the impacts of marine debris
- **Mission:** to investigate and prevent the adverse impacts of marine debris
- **5 Program Pillars**
Research, Removal, Prevention, Emergency Response, and Regional Coordination



Regional Coordination



What Are Microplastics





Plastics

- Synthetic polymers with carbon-carbon links that bacteria cannot break (i.e., **non-biodegradable**)
- Chemical additives, some toxic
 - reinforcing fibers
 - fillers
 - coupling agents
 - colorants
 - stabilizers
 - lubricants
 - flame retardants
 - plasticizers

Resin type	Common applications
Polyethylene	Plastic bags, storage containers
Polypropylene	Rope, bottle caps, gear, strapping
Polystyrene (expanded)	Cool boxes, floats, cups
Polystyrene	Utensils, containers
Polyvinyl chloride	Film, pipe, containers
Polyamide or Nylon	Fishing nets, rope
Poly(ethylene terephthalate)	Bottles, strapping
Polyester resin + glass fibre	Textiles, boats
Cellulose Acetate	Cigarette filters





Plastics

- Annually, an estimated **8 million metric tons** of mismanaged plastic waste enters the ocean



Microplastics

- Plastics **smaller than 5mm** in size
- Types
 - **Primary:** microbeads, preproduction pellets
 - **Secondary:** degradation of larger plastic items
 - **Microfibers:** shedding of fabric, clothing, lines



Microplastics

- Reported from
 - ocean, estuaries
 - sea ice
 - marine sediments
 - submarine canyons
 - biota
 - rivers, lakes
 - beach sand
- An estimated **5 trillion** particles worldwide floating on ocean surface



What We Know About Microplastics





- MicroP contamination of marine biota is widespread and pervasive
- In most cases, microF is most conspicuous
- 1000s of microF shed from clothing in a single wash
- Significant amounts of microP enter environment via WWTPs



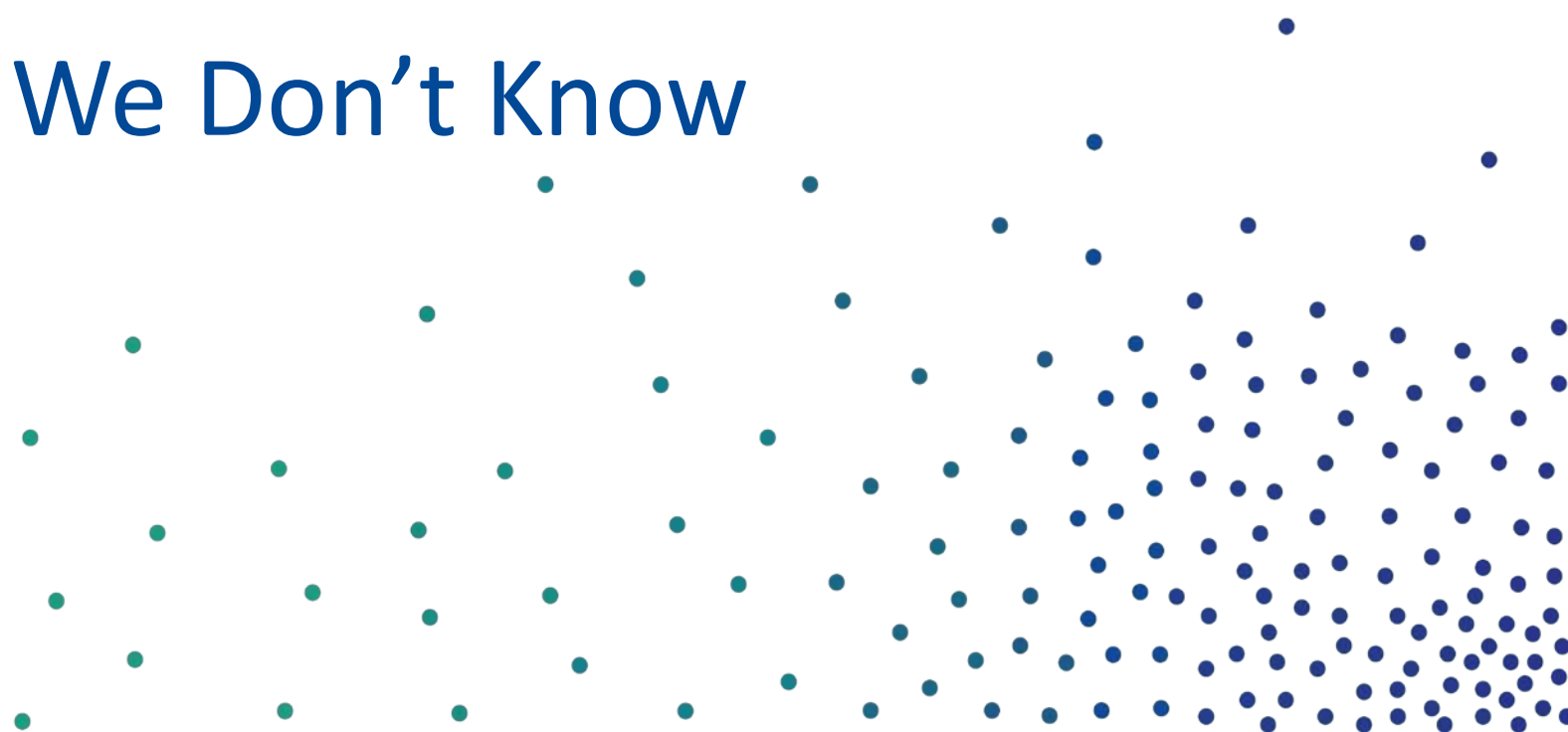
Photo: USM Fisheries Oceanography and Ecology Lab



- MicroP adsorb persistent organic pollutants already present in water
- Ingestion
 - damage to GI tract
 - blockage
 - reduced food consumption
 - reduced reprod success
 - translocation to tissue
 - physiological stress
- Trophic transfer
- Seafood sold in markets contains microP

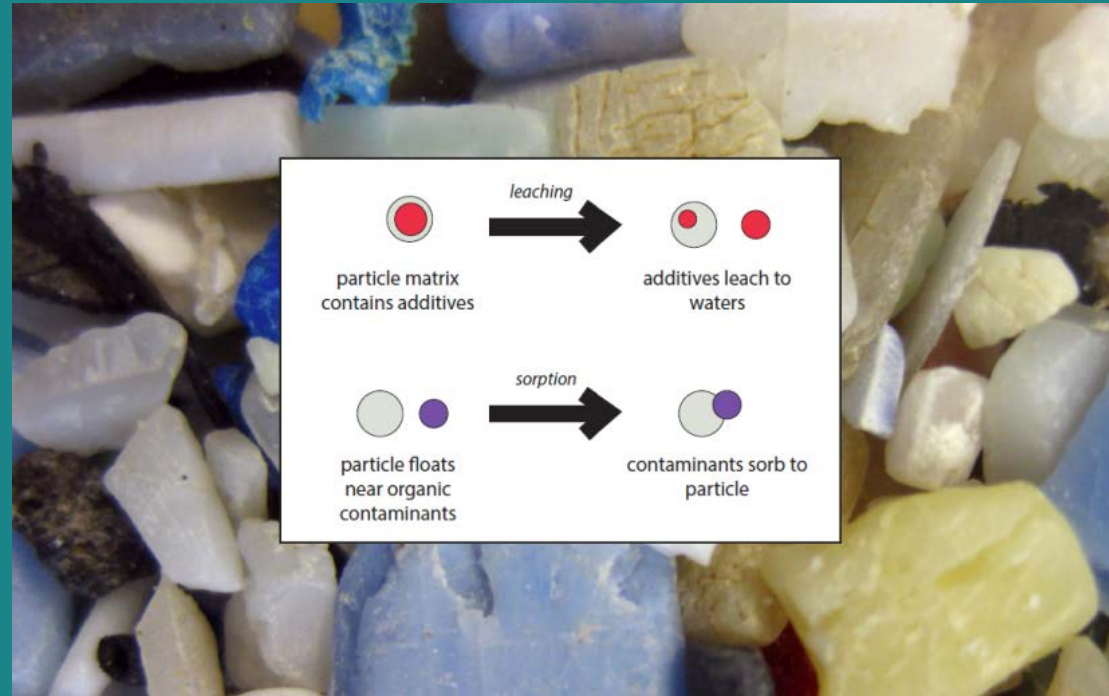


What We Don't Know



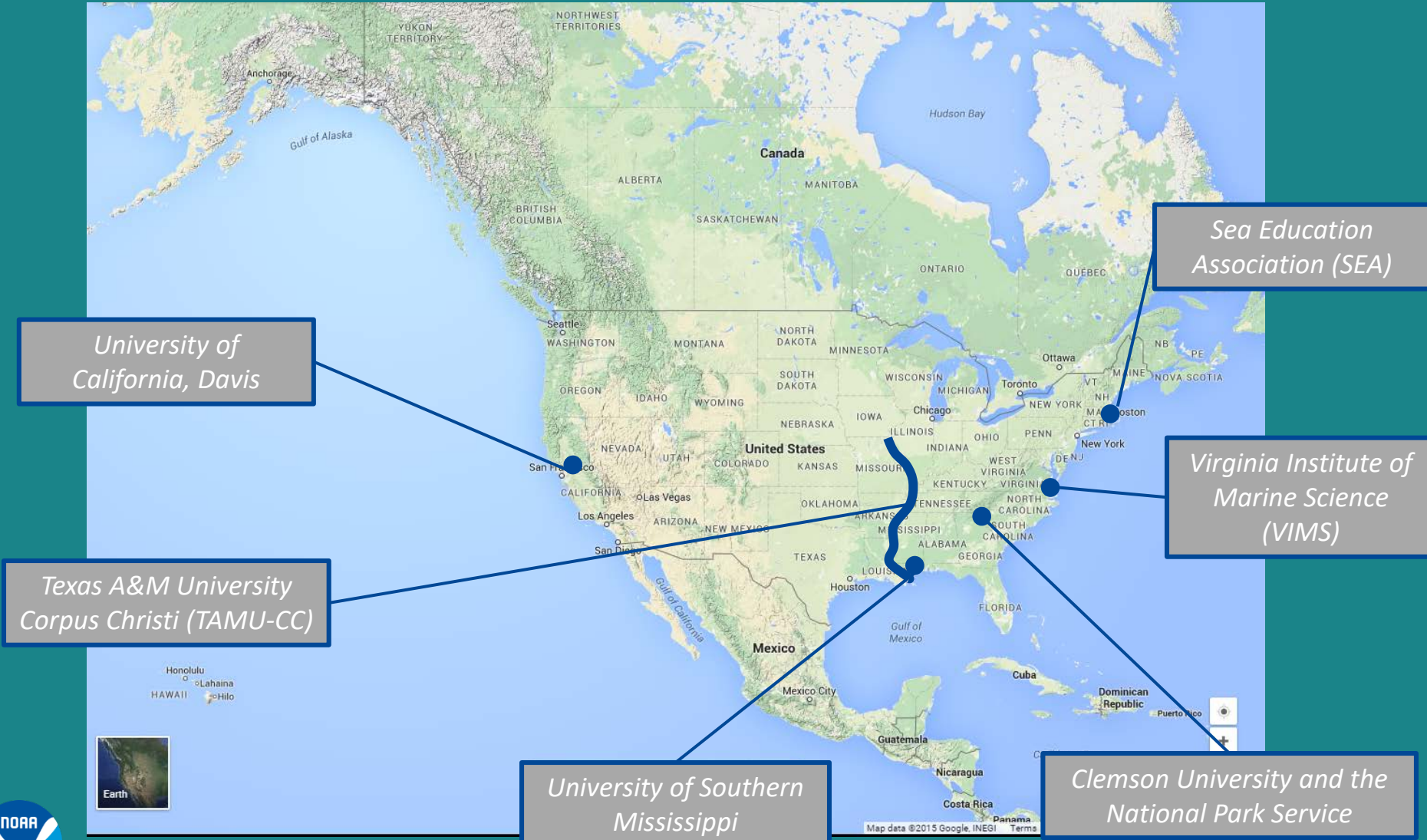
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- Dynamics of degradation & fragmentation
- Size class frequency
- Distribution & abundance
- Leaching rates/conditions
- Source of exposure
- Residence time in gut
- Bioaccumulation
- Biomagnification
- Population-level impacts
- Human health risk



MDP Funded Research Projects

<https://marinedebris.noaa.gov/current-efforts/research>



The Sixth International Marine Debris Conference (6IMDC)

Date: March 12-16, 2018

Location: San Diego, CA, USA

Opportunities to Participate:

- **Call for Technical Sessions:**

- Topic Area: Microplastics & Microfibers
- Deadline: Friday, June 2, 2017

- **Call for Paper/Abstracts/Posters opens: July 17, 2017**

Learn more at internationalmarinedebrisconference.org

Ideas? Questions? info@6IMDC.org

