

THE WAHAKIYAKUM COUNTY MARINE RESOURCES COMMITTEE SUMMIT: NOVEMBER 7-9, 2013.

Reporter: Katie Krueger (Quileute Tribe Representative, North Pacific Coast Marine Resources Committee).

Every year the MRC Summits get better and better. This is no reflection on the past efforts. It is a reflection on us – as we get smarter, have a better idea of what we are about, understand how we can work together, and build partnerships. So the Summit in Cathlamet was truly a summit of our summits. We owe a lot to Carrie Backman and her team, but also a vote of thanks to Casey Dennehy and the Surfrider Foundation for helping us to get a really fine suite of speakers. Being either from or part of small governments on a remote coast of Washington, it helps us so much when these large organizations lend their expertise and connections, as well as their time. If you missed this meeting because of schedule conflicts, it is my intent to capture some of its essence in this article and to guide you to more with web links. Because you missed a good one!

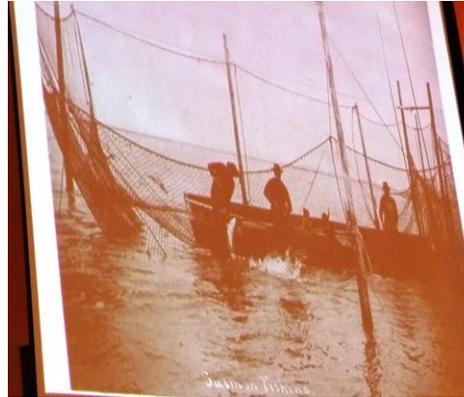
The meeting opened on Thursday with discussions related to meeting protocol chaired by Kelly Rupp and Bev Arnold (from Lead to Results marketing firm), and Eric Delvin (The Nature Conservancy), culminating in the importance of Robert’s Rules of Order. We need to be mindful that we are statutory, public entities. RRO is very complex but the rudiments can be learned from several online sources as well as books for beginners. Thanks to Mark Swartout (recently retired Natural Resources Program Manager from Thurston County and Washington Coast Sustainable Salmon Partnership Chair) and Frank Wolfe (Pacific County Commissioner), both experienced in local government, for their guidance in the panel closing this session.

Afterwards, a gathering at Tsuga Art Gallery enabled “strangers” from the different MRCs and other attendees to interact and learn about each other in a way that presentations alone cannot accomplish.



Day 2 began with topics more familiar to us: each attending MRC presented a summary of its activities. For a great picture of the historic Victorian architecture Pioneer Church where we met, the agenda, and more, go to the Surfrider Foundation's website: <http://surfriderwashingtoncoast.blogspot.com/2013/11/2013-coastal-marine-resource-committee.html>. Links on that website will show you the agenda. There are now active links on presentations, as well. So I will be brief.

Some issues were local. Wahkiakum County is dealing with Oregon's pressure to curtail gillnet fishing. This seems a local concern but it sparked presentations on novel ways to revise fishing practices or even ideas to restore old ones. To the right, a picture of pound nets, so effective they were regulated off in 1935 (presentation by Wild Fish Conservancy's Jamie Glasgow).



Doug Kess (Chair of Washington Coast Marine Advisory Council –the WCMAC) made us all aware of legislation in Washington DC regarding the role of the Army Corps of Engineers in marine spatial planning. Tom Kollash and Eric Delvin (both of The Nature Conservancy) and Rich Osborne (WCSSP, WCMAC, NPC MRC, and NPC Lead Entity) presented the projects that comprise the Washington Coast Restoration Initiative being submitted in 2014 to the legislature.



It was amazing, how many broad issues we have in common. All of us are concerned about public education—marine science in the school systems, and for adults, heightening awareness of the issues that took up most of the agenda—climate change and its impacts on our shorelines and fisheries. Many MRCs are dealing with marine debris, a chronic problem made worse by the tsunami in Japan. And all of us want to assure a healthy economy with a sustainable fishery. What made this year's agenda special, in this writer's opinion, was the focus on *solutions* to problems or alleviation of fears, on matters many view as insurmountable: rising ocean acidification, or plastics in the Pacific gyre.

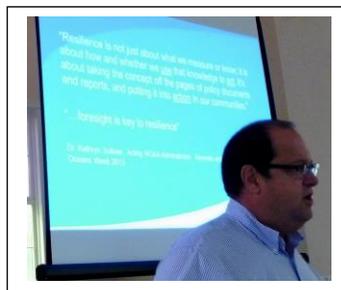
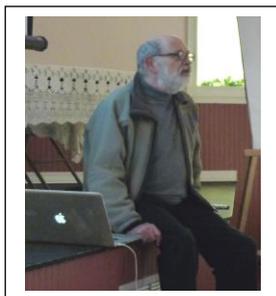
If you work at all with ocean fisheries you will want to check out Mike Burner's presentation on the Pacific Fisheries Management Council. Mike is PFMC's Salmon Staff Officer. Some of us have been active in our respective county's Shoreline Management Plan (SMP) Update but there were still new aspects to learn. The state does not yet require counties to include climate change into their plans, but Clallam got a grant from EPA to do just that. Cathy Lear will be glad to share with other counties what Clallam learned. A fresh look at

marine spatial planning jurisdiction indicated that even where federal jurisdiction abuts the coastline, counties have jurisdiction out three miles as well, as far as state waters go. Some of us were concerned about aquaculture impacts on native coastal species. The state has a number of safeguards included in Aquaculture SMP Guidance.

Jennifer Hennessey, Kim Van Zwalenburg, Cedar Bouta (Ecology), and Cathy Lear (Clallam Habitat Biologist and also on WCSSP Board, NPC LEG and NPC MRC).



We had a series of related talks on ocean acidification by Eric Swenden (journalist from the California fishing industry and communications and outreach director of the Global Ocean Health Program), Mike Rust (Aquaculture Science Coordinator for the National Oceanic and Atmospheric Administration and specializing in seaweed agronomy), and Brad Warren (director of the Global Ocean Health Program and a former member of Washington’s 28-member Blue Ribbon Panel on Ocean Acidification). (Pure water is 7.0, H₂O. For marine animals we are accustomed to eating or for the things these critters eat, the ocean is ideally basic, even in the 8s. When it gets below 7.4, the species that need calcium carbonate in their structure have difficulty in forming the requisite hard parts; the water is “too acid” for this, even though true acidity is for numbers below 7.0.) After rather grim presentations on increases in ocean pH locally (horizontally) or vertically (can range from 7.4 to 8.1), the negative impact of these lower pHs on various marine species, and the geologic record on mass extinctions often driven by significant CO₂ increases (over 450 ppm may be dangerous for life as we know it), we then switched to the positive. Many types of organisms do a better job of sequestering carbon than rainforest trees, notably algae and mangroves. Research on how to capitalize on this information has been underway by Dr. Mike Rust and others at NOAA and around the world. The shallow coastal seas around continents provide a “necklace of seaweed growth” working their sequestration magic. See, in addition to their PPTs, these websites: <http://www.productiveoceans.org>; and <http://www.sustainablefish.org/global-programs/global-ocean-health>.



L to R:
Swenden
Warren
Rust

[FYI, The pH scale is logarithmic, so the apparent change in acidity between numbers is 10-fold, not 1. See <http://www.elmhurst.edu/~chm/vchembook/184ph.html> for a simple explanation and pictures.]

It turns out the Pacific Plastic Gyre is not a giant plastic island, but comprised of fine plastics so dispersed that if one goes out to the location, one cannot even see it. It looks like open water. Dr. Angel White’s PPT gave us the straight scoop on this popular myth. Some of those dramatic pictures of debris that make the plastics look like a serious land mass come from beaches and follow discharge paths after major storms. I don’t want to

appropriate her work product by copying a slide but really encourage all of you readers to see her authoritative and detailed presentation on this subject. In addition to discussing why the descriptions of the gyre(s) of “plastic islands” are a myth (and including photographs of it), she also discusses where plastic is accumulating on the sea floor and what common plastic materials are the biggest contributors to the problem. Several journal articles and websites are provided in the presentation, as well. Dr. White is a microbiologist at Oregon State University. The pictures below are from

<http://thinkprogress.org/climate/2011/01/10/207318/dr-angel-white-it%E2%80%99s-mid-course-correction-time-for-the-plastics-in-the-ocean-issue/>



The meeting closed with a superb presentation on hatchery science (and reform) by hatchery expert biologists Andy Appleby and Steve Smith. I confess that despite working with our hatchery biologists at Quileute off and on for over 10 years in various tangential ways, I never understood the way hatchery influence on natural fisheries was calculated. This presentation gave clear formulas for it and rationales for these formulas; and I encourage everyone who needs to understand this subject to go to those online presentations. They also guide you to <http://www.hatcheryreform.us>. (Andy Appleby joined D.J. Warren Associates in Philomath, Oregon, after a 32-year career with the Washington Department of Fish and Wildlife. He had been the WDFW hatchery reform coordinator for the State of Washington and led hatchery evaluations and reform and has overseen the development of over 170 hatchery and genetic management plans. Steve Smith is on HSRG for Washington, currently.)

