Northwest Straits INITIATIVE
partners in marine conservation

2017 Marine Resources Committee Conference – Session Descriptions

Friday, November 3

Northwest Straits 101

The Northwest Straits Marine Conservation Initiative is unique in structure, combining grassroots energy and governmental support, and brings together a wide range of expertise and perspectives. This session fills in the important details about how and why the Initiative "works", the rationale behind the organizational structure, and how the Northwest Straits Commission and Foundation complement each other in supporting the MRCs and the goals of the Initiative. For new MRC members and conference guests, this is a great opportunity to hear about the organizational history, and for those who have engaged over the years, come and be inspired!

Ocean acidification: species impacts and local effects in Puget Sound

The lowering of the pH in ocean waters (ocean acidification) resulting from increases in atmospheric carbon dioxide CO2 is well documented in the eastern pacific region including the waters of Puget Sound. Recent research has provided a better understanding of the potential impacts of ocean acidification on Puget Sound marine life as well as an understanding of how pH can vary on a local scale and across different marine habitats. This session provides an overview of the chemistry and mechanisms that are driving ocean acidification, the potential impacts on some ecologically-important species, and potential mitigation effects from different marine habitats.

On the cutting edge of kelp: working to understand this critical habitat feature

The Salish Sea supports 26 species of kelp that serve as both primary producers and physical habitat for species ranging from zooplankton to rockfish and salmon. Since 1989, conspicuous declines in canopy forming kelps have been noted. Despite nearly 20 years of observation, questions remain around the contributing factors to kelp loss in the Salish Sea, resulting ecosystem impacts, and recovery options. In this session, we will discuss some of the key drivers of kelp declines, remote sensing (satellite) techniques for tracking kelp distribution and kelp propagation approaches being tested for kelp restoration.

Effective communication with county officials

All seven Marine Resource Committees in the Northwest Straits region play an important role of linking elected officials to marine resource issues and local citizens engaged in addressing those issues. The frequency and protocols for communicating between MRCs and elected official differs between the seven counties and when and how to communicate

information and issues is sometimes unclear. Furthermore, both county officials and MRCs may be uncertain about what they expect or need from each other. This session will address these issues using several short presentations by elected officials followed by a facilitated Q&A panel discussion. The desired result being that MRC members will gain knowledge about how and why communicating with elected officials Is important and will learn techniques to make them more comfortable when communicating with their elected officials. Some of discussion will also be relevant to other elected officials (cities, ports, etc.) as well as agency staff and department heads.

Saturday, November 4

Prehistory and history of forage fish in the southern Salish Sea

The archaeological record of the Salish Sea gives us a window into past environmental conditions, as well as our dynamic relationship with the fish that inhabit these waters. Keystone species, including Pacific herring and many and varied kinds of rockfish, are preserved in coastal archaeological sites dating back thousands of years. We will explore this record and the picture it paints of the past, as well as future research directions that include ancient DNA analysis of herring populations in the south Salish Sea.

Innovative tools for citizen science data collection and communication

Mobile and web-based applications have quickly become tools of the trade for citizen scientists, with smartphones replacing the data sheets and GPS units of the past. All Marine Resources Committees regularly collect scientific data about their local marine environment, and much of this work is done through citizen science projects, such as bull kelp surveys and forage fish spawning surveys. In this session we'll showcase several of those tools with a goal of informing MRC members and empowering MRC them to consider how they can effectively use them to collect and share data. Featured tools include MyCoast, Survey123 and SoundIQ.

The Evolution of Marine Renewable Energy in the Pacific Northwest

Marine renewable energy consists of a wide array of technologies that convert the energy of our oceans into carbon free power for our homes and businesses. From underwater turbines to offshore wind and underwater supercomputers, the feasibility of these renewable energy options in the Pacific Northwest ebbs and flows like the tides they depend upon. In this session, experts from a variety of backgrounds will help us understand the past, present and future of marine renewable energy in our region. Along

with discussing the pros and cons of these engineering marvels, the environmental interactions, market forces and policy perspectives will be presented.

Impacts and challenges from vessel traffic in the Salish Sea
Step on deck with a maritime industry expert for a primer on the many environmental and operational standards being implemented in Puget Sound. Attendees will also learn the outcome of a recent vessel slow-down trial in Canadian waters of Haro Strait, aimed at reducing the impacts of human-induced underwater noise on killer whales. We guarantee you'll walk away with new and interesting information from this session!

Considering climate change in nearshore restoration projects
As the effects of climate change and sea level rise on our shorelines become more evident, restoration efforts need to consider and plan for the uncertainty that will come with these changes. This session will discuss addressing the impacts to habitats through restoration planning and design, guidelines for consideration of sea level rise, and an overview of outreach and education leading to restoration.

The Sea King: Jacques Cousteau's Ocean Exploration and Marine Conservation
In this session, Brad Matsen author of ***Jacques Cousteau: The Sea King*** will present the remarkable story of the life and accomplishments of Cousteau. Jacques Cousteau invented the aqualung and revealed the ocean and the underworld to a mass audience for the first time. Brad's Cousteau biography speaks to the people, the science, and the lure of the sea that shaped Cousteau's life and changed the way people view the ocean today.

Ignite! Stories of MRCs in Action
Ignite is a lively and fast-paced style of presentation where speakers have five minutes to speak about a concept, accompanied by 20 slides. Each slide is displayed for 15 seconds and then automatically advanced, and are meant to "ignite" the audience on a subject, i.e. to generate awareness and to stimulate thought and action. In this session, MRC's will "ignite" the audience with their recent accomplishments. With a variety of projects featured, participants will hear some of the most compelling stories from our entire seven-county region.