



**SAN JUAN COUNTY  
MARINE RESOURCES COMMITTEE &  
CITIZEN'S SALMON ADVISORY GROUP**

**Wednesday, June 6, 2018  
8:30 AM-10:30 AM  
Call in number: to be sent.**

**Legislative Hearing Room  
55 Second Street - Friday Harbor, WA**

**Agenda**

8:30 AM	<b>Convene Meeting</b> <i>Terry Turner, Chair</i>
8:35 AM	<b>Approval of Minutes</b> <i>All</i>
8:40 AM	<b>Eel Grass Wasting Disease</b> <i>Prof. Drew Harvell</i>
9:10 AM	<b>Ocean Acidification</b> <i>Ken Carrasco</i>
9:20 AM	<b>MRC updates and Sub-Committee updates</b> <i>Frances Robertson</i> <i>MRC Grant update</i> <i>SRKW – Flag study – Volunteer opportunities</i> <i>Orcas Landing</i> <i>Volunteer opportunities – beach cleanups</i> <i>Meeting locations and times proposal</i>
9:40 AM	<b>Plastic Free Salish Sea Campaign Ideas</b> <i>Karin Roemers-Kleven</i> <i>Subcommittee formation</i>
9:50 AM	<b>Discussion on MSA Plan Review</b> <i>Jacklyn Fowler</i> <i>Subcommittee formation</i>
10:00 AM	<b>Vote for Chair and Vice Chair Positions</b>
10:05 AM	<b>Citizen Input</b>
10:10 AM	<b>Adjourn MRC Meeting</b>
10:10 AM	<b>Citizen's Salmon Advisory Group</b> <b>Convene meeting</b> <i>Byron Rot</i> <i>Brief review from Byron over what to expect for July meeting</i>
10:30 AM	<b>Adjourn CAG meeting.</b>

**Upcoming Meetings/Events**

Date	Event	Location	Time
7/11/2018	MRC Monthly Meeting	TBD	8:30-10:30
8/1/2018	MRC Monthly Meeting	TBD	TBD
9/5/2018	MRC Monthly Meeting	TBD	TBD



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## Attendance

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MRC: Frances Robertson, Kendra Smith, Terry Turner, Ken Carrasco, Christina Koons, Phil Green, Laura Jo Severson, Karin Roemers-Kleven, Ivan Reiff, Jeff Friedman, Jacklyn Fowler, Byron Rot, Marta Green, Jamie Stephens,

Public: Jeff Dyer, Taylor Shedd, Deborah Giles, Liz, Lindsay, Sally Thomsen, Drew Harvell, Sandy White, Mike Ramsey

MRC via phone: Lovel Pratt, Megan Dethier, Public via Phone: Debra Lekanoff, Lisa Wilson,

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## Minutes

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Minutes approved, seconded by Laura Jo Severson.

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## Presentations

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### Professor Drew Harvell, Cornell University: Eelgrass Wasting Disease

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- Presented on the health of essential marine habitat and specifically on key new projects being undertaken in the San Juans. These projects are funded through the Sea Doc Society, SeaGrant, and the PSEMP Disease Ecology Working Group.
  - Work on eelgrass wasting disease in the San Juans began prior to 2015. Since then diagnostic methods have been developed, lab experiments investigating the influence of temperature, light and CO<sub>2</sub> have been conducted and ecological surveys have occurred. But the question of what to do to decrease EGWD is a scientific frontier area of research.
  - An initial challenge is to reliably diagnose EGWD. To do this disease surveys have been conducted in the intertidal habitat and more recently subtidal surveys have been incorporated. These surveys involve 3 replicate transects, and 40 blades per transect. Because of the influence of seasonality it matters when the surveys are conducted. In 2015 the prevalence of EGWD peaked in July –this was a very warm year and 80% of blades had some sign of wasting disease. Another observation was that the size of lesions on blades varied by site. So how do we know how bad EGWD really is and is it causing declines in eelgrass beds? At some sites, e.g. the Beach Haven Site a measure of the number of shoots per meter square indicates that there has been a drastic decline at this site (and others). Only one site (a shallow bay) shows a positive density).
  - The picture for 2017 is also not looking good. Analyses of data suggest a correlation with temperature. For example, sheltered embayments with warmer waters tend to have higher levels of EGWD. But because there are a variety of conditions driving sites are different locations the team is also investigating other causations of the disease. For example, are local herbivores acting as vectors of the disease? is the disease water borne or contact driven? Is there a susceptible eelgrass genotype that could cause a bed to decline really rapidly?
  - Interestingly, when oysters are present levels of PCO<sub>2</sub> are lower because the oysters are filtering out the protozoan. More investigations into whether the presence of oysters helps control EGWD are needed.
  - The general conclusion was that EGWD is contributing to the decline of eelgrass in the San Juan Islands.
  - It is known that fresh water effects the pathogen –i.e. the pathogen does not like low salinity water.
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- It may be possible to cull affected eelgrass beds, and it may be possible to co-culture eelgrass with bivalves.
  - How do we improve habitat in the San Juan Islands?
  - Identify healthy beds and increase/protect those –e.g. 4<sup>th</sup> July Beach and Waldron have some of the most healthy eelgrass beds in the County.
  - We can attempt to recover declining beds, such as those in False Bay,
  - Assess the causes of extirpated beds,
  - To reduce the threat of EGWD to transplants we can consider careful site selection, fresh water sprays, culling plants displaying lesions, etc.
  - Trying things on a small scale on small plots is a really good idea, particularly because we still do not really understand the causes of the declines.

Questions:

*Ken: what is the effect of invasive species? A: We don't know, there is no data available for this yet.*

*Phil: Are the oysters native oysters or the Japanese oysters? A: Initial tests have been conducted with Crassostrea (Pacific Oyster) but interested in using the Olympia oyster too.*

*Jeff: What is the life cycle of eelgrass? A (SandyW): the only detailed work on this was done in the 1920s. At this time it was documented that it was a 2 year process from seed dispersal to growing into a flowering shoot. Not a lot has been done on this since then. Sandy did a project with Terry Turner to plant rhizome eelgrass in an Olpalco trench. There was regrowth but it took ~ 5 years. In areas where the shoots were planted they seem to be persisting. However, once plants have been extirpated from an area it takes a long time and is hard for the plants to grow back. For example there was a huge eelgrass from Westcott Bay in 2003, it is now 2018 and there is still no regrowth. Drew H suggests that it is well worth investigating how to grow eelgrass back.*

Final comments: Terry noted that this was an important topic for the MRC and welcomed Prof. Harvell back to continue the conservation with MRC. Byron also noted that the Conservation District is working with Dr. White on a proposal.

Christina asked what are the methods of protection? What could the MRC be doing in terms of providing recommendations to the County.

Debra L. asked what can we be doing better without knowing what is causing it? How do we develop regulatory policy to deal with it? Debra was particularly interested to see how we are engaging with other groups, including the Tribes. She strongly suggested that we reach out to these groups and engage with the Tribes!

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- **Ken Carrasco, Ocean Acidification**
  - Began with an introduction into his professional background and how he became interested in issues related to global warming and ocean acidification.
  - 10-12 years ago becoming apparent that larval survival was an issue. During upwelling events the water becomes more acidic causing larval die off.
  - Ocean acidification is occurring in part because CO<sub>2</sub> is rapidly increasing due to fossil fuels. It is soluble in sea water, 27% of CO<sub>2</sub> is absorbed into the oceans leading them to become more acidic –decreasing the oceans' PH levels.
  - Does volcanic eruption in Hawaii affect ocean acidification?
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- Calcium carbonate – for crab, barnacles, oysters, clams all species that build hard exoskeletons or shells.
  - Aragonite is reduced, so reducing Omega aragonite which leads the softening of these exoskeletons and shells.
  - Nutrient influx increases ocean acidification (due to runoff and pesticide use), decrease in aragonite also due to anthropogenic nutrients.
  - The effect of ocean acidification on Dungeness crab can be linked back to Chinook and coho also as these salmonid species predate on the larval stages of these crab.
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**MRC Operations Updates:** *Frances Robertson,*

**MRC Grant Updates:** The grant was submitted on the 22 May, the grant was written for essentially 3 main projects –a continuation of the MRCs SRKW efforts (including both an education and outreach component and a habitat restoration component –this may be better suited under monitoring), a new project called Plastic Free Salish Sea being spearheaded by Karin RK, and a review and revision of the Marine Stewardship Plan being spearheaded by Jacklyn F. and Terry T.

- The grant is currently under review at the Commission, one of these projects will be presented to the next commission meeting in June and the final decision and establishment of scope of work etc will be worked out during the remainder of July with Commission staff.
- Frances recommended that in order to avoid this rushed submission in the future, and also to gain greater input from the committee on the grant application that the MRC discuss what they would like to see included in the next grant application during the January retreat. This will allow for lead in and discussion and agreement on the final grant application.

**SRKW Whale Flag project update:** Flags are on order and expected by the end of June. The Pre-study surveys were being finalized for distribution by June 8<sup>th</sup>. Frances has asked for volunteers to help with dockside and marina efforts on San Juan, Orcas and Lopez through June. The educational insert for the Be Whale Wise leaflets is also being finalized and will be off to the printers shortly. These inserts include instructions on what to do if you see the flag, what to do if you have a flag and also information on the Whale and Salmon Sanctuary Voluntary no-boat zone on the West Side of San Juan Island. Frances also highlighted that Lovel has suggested the MRC write a letter of recommendation to the Council to support the zone as well as the MRCs SRKW recovery efforts.

**Orcas Landing Project update:** Frances showed the final enhanced sketch for the ecology sign. This sign is moving into the painting stage. We will be required to include the MRC, County, NW Straits Commission, Puget Sound Partnership and The EPA logos on the sign. For the second panel Patti Gobin and Larry Eifert (The artist) are working together to create a sign that represents the history and importance of the San Juans to the Tribes. Larry will provide an updated sketch.

**Volunteer opportunities: Please get in touch with Frances if you are able to help with these efforts.**

Weekends in June – help with Whale Warning Flag outreach and pre-study surveys

August 9<sup>th</sup> – Beach cleanups on San Juan and Lopez with Conservation District Youth Conservation Crews.

Date for Orcas still to be determined.

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**Plastic Free Salish Sea – Karin Roemers-Kleven**

- Karin began by asking 'what can we out of the plastic cycle that are so dependent on?'
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- She introduced the Last Straw campaign, developed by Friends of the San Juans and the County – Karin and the MRC will partner with them in this effort.
  - How can we create larger outreach in our community and beyond? Already one big food rep has been telling clients in the County that there is a ban on straws! We can start with plastic straws and continue onto the plastic bag issue.
  - First start with a voluntary reduction of use of bags, but then continue to look at other plastics that we can keep removing.
  - Karin solicited MRC members to join the PFSS Sub Committee. Highlighting the need to good social networks and marketing skills.
  - Frances highlighted the interest of the NW Straits Commission in this project and that the Governor has a key interest in this too.
  - Terry volunteered for beach clean-up efforts,
  - Byron suggested reaching out to Carl, particularly given his expertise in videography,
  - Kendra suggested reaching out to Elise – former MRC member who was initially interested in this subject.
  - Laura Jo suggested reaching out to high-school students, and provided Jenny Wilson's name as the best contact at the high school.
  - Jamie Stephens suggested tapping into the Lopez Solid Waste, and working with the junior class, Dave Sather (sp?) name was provided as a good contact.

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**Marine Stewardship Area Plan Review efforts – Jacklyn Fowler**

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- Jacklyn asks for an update from the last two meetings as she has not been present.
  - Terry suggested that this was too a big undertaking for a single member and asked the membership to support the efforts and form a subcommittee. He volunteered himself.
  - Positive steps going forward regarding the plan should be first a review of the plan and then the MRC should figure out how the plan is best publicized, particularly in relation to the maps. Terry highlighted his idea of introducing the map layers onto various marine navigation platforms. He'd been in discussions with the County GIS group and they had suggested the NOAA charting system. Other platform suggestions included Active Captain, Boating USA by Navionics.
  - Need to focus on the geographic components of the MSA Plan.
  - Terry also suggested that we should be assessing the effectiveness of some of the initial items in the MSA Plan.
  - Megan – volunteered for sub committee
  - Kendra – will have support of County Staff, coordination with other related plans
  - Phil – will peripherally be able to provide advice (placed in the hot seat by Ken).
  - Byron – also indicated interest in being involved.

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**Votes for Chair and Vice-Chair Positions**

Terry set out by jovially firing Ken and pardoning himself before moving on with the nominations. Karin Roemers-Kleven nominated for Chair, Laura Jo S. seconded. All were in favor and Karin formally voted in as the new Chair.

Christina Koons nominated for Vice-Chair, all were in favor and Christina was formally voted in as the new Vice Chair.

Terry passed the Gavel over to Karin, Karin went on to thank everyone for the nomination and the votes and she is excited to step up into the position with high passion.



Question/Citizen Input – None

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Adjourn MRC Meeting – Meeting adjourned 10:16

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**Salmon Recovery Citizens Advisory Group – Byron Rot**

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Byron explained to the group that in this grant round the Lead Entity has a surplus of \$573,331 in allocated funds. He is proposing to trade this allocation to the North Olympic Lead Entity. We would expect to see this allocation returned to us in two years' time. Byron is asking the CAG to consider this and vote on this.

Phil: IS there any guarantee that this funding would be available in 2 years?

Kendra: If this is the assumption is it in writing?

Byron: Not exactly, but this is an allocation and thus is being reallocated to another Lead Entity that are able to use it now. We don't have a project for it right now and are encouraging North Olympic LE who have a shovel ready project ready to go.

Jacklyn: Will we get feedback and status updates for this other project?

Christina: How does the Biennium work?

Byron: This year is our large year for funding, but next year will be a smaller year. Federal funding is likely to stay the same but State funding may change. Projects tend to be set up to take advantage of biennium funding.

Christina: Asked about Private Foundation donations.

Byron: No mechanism as yet for this but across Puget Sound people are interested.

Mike: The State does allow private funds but needs a mechanism.

Kendra: highlighted the need to build the pipeline for future projects so that we can allocate and expand our resources.

Jamie: Have taken private money so wonders about this mechanism, But locally thinks that we could go after a project if we had e.g. ¾ of the funding.

Jacklyn: Is there time to put forward other proposals/job positions to make some of these things happen?

Byron: We can't add things this year, but..

Terry: 2 part question – can we expand type of project that will help in getting more projects, e.g. eelgrass related projects. With regard to shoreline restoration how are we holding our own against new shoreline restoration?

Marta: The LIO have submitted 22 projects to the Puget Sound Partnership for local projects for the next 4 years for near term action items. Also looking at projects related to freshwater restoration, oil spill prevention, shoreline restoration and status of shoreline armoring.

Byron: Notes that we have to vote on this reallocation of funding/trade with the North Olympic Lead Entity. This would keep the funds local instead of letting them go regional.

Christina: Why is the armoring project being submitted for different grant types and not for the salmon recovery project?

Byron, Kendra, Mike – all highlight the suitability of the grant and fitting projects into grant funding rounds.

Phil moves to transfer, Ken seconds, all in favor except Jacklyn who abstained, motion passed.

Jacklyn: Would like more information/understanding on these funding streams and how they work.

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Byron: This is why Suzanna Stoike from the PSP came to present at the April MRC meeting. Byron offered to provide a local perspective also.

CAG will vote on salmon recovery projects at the July MRC meeting. All to be considered except the Fisherman's Bay project was pulled due to there not being enough stakeholder buy in.

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**Adjourn CAG Meeting – Meeting adjourned**

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**Upcoming Meetings/Events**

Date	Event	Location	Time
7/2/2018	Boat Noise Sub Committee meeting	Public Works meeting room	9-11
7/11/2018	MRC Monthly Meeting	Legislative Hearing Room	TBD
8/1/2018	MRC Monthly Meeting	TBD	

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