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Meetings & Events

Nov 6 – Election Day. Ballots due
Nov 7 – Keystone XL Pipeline.
Final EIS comments due.
NOV 12 –"The Memory of Fish"
Port Townsend, 6:30 QUUF
NOV 13 – Excom meeting in
Sequim, 2 – 4, Location TBD
NOV 16 – Rally for the Orcas
2 to 5 PM at Capitol in Olympia
Nov 30 – NOG Excom Ballots due
Dec 11 – Excom meeting in Port
Hadlock, 2 – 4, Library
Dec 7 –"What Lies Upstream"
Meier Hall 7 PM, Port Angeles



Time for Our EXCOM Election

Nov - Dec 2018

There are four open positions on the Executive Committee that need to be filled starting January 2019. We have three candidates interested in filling these positions. Our bylaws require that we hold a formal election. The candidates are listed below followed by a ballot that should be **returned by November 30th**.

Candidates

Norm Baker (Sequim) Per Norm: "I am one of the original founding members of the North Olympic Group. It has been a genuine pleasure to serve on the Executive Committee and I wish to be reelected. I believe we must act locally and think globally to solve serious environmental problems. Research is currently underway around the world to use biomass sustainably for renewable energy - but that is only the tip of the iceberg. One of the most significant environmental solutions to many of the problems facing modern mankind is biochar. Biochar is nothing more than charcoal made from woody waste at specific temperatures. When incorporated into the soil, biochar has three significant advantages. It has the capacity to restore depleted agricultural soils, once again making them fertile and able to produce nutritious crops. Since biochar and charcoal have a half-life of 1400 years in soil, they are a significant contributor to carbon sequestration and valuable additions to fighting global warming and ocean acidification. Our municipal waste stream (and our environment) can be cleaned of pollutants and much of the waste used to make biochar... and then used to sequester carbon. These three advantages all operate synergistically. In recent years I have dedicated much of my time to developing clean efficient biochar kilns, documenting the benefits of adding biochar to organic gardening, and using biochar to recycle human urine and manure back into our soils in an organic garden in a way that meets federally mandated organic growing standards. I am working with several people and other organizations (USBI, Ethos, NWBI, Nutriculture PNW, SOG, etc.) across the nation... conducting continuing research... I believe the North Olympic Group of the Sierra Club is one of the most dedicated and more effective environmental organizations I have ever participated in."

Genie Mixson (Sequim): "I would like to be elected to one of SC North Olympic Group's (NOG) open EXCOM positions. Although I have been a member of the Sierra Club for many years, I have only really been **active** since 2011, when I retired. Before then, I was able to convince myself that I didn't have time to take on an active role. I was more an environmental sympathizer than an activist. That has changed!

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Group Executive Committee

We are governed by seven volunteers, with help from our conservation committees and interested members.

To contact Excom members or for more information email them at

northolympicgroupsc@gmail.com

Meetings are generally held on the second Thursday of each month alternating between Sequim and Port Townsend.

All Sierra Club members are welcome to attend.



Officers:

Chair: Janet Marx Vice Chair: Darlene Schanfald Secretary: Bill Volmut Treasurer: Genie Mixson

Executive Committee:

Norm Baker Cherri Mann Janet Marx Genie Mixson Krestine Reed Darlene Schanfald Bill Volmut

<u>Newsletter Editors</u> – Janet Marx and Genie Mixson

Janetmarx_76@msn.com

Complaints, suggestions, and opinions are always welcome

I have been in Sequim since 2015, and joined our NOG almost immediately. Our group is active in numerous conservation issues. I have been working behind the scenes for almost 3 years, serving as treasurer since 2016, and co-editor of our newsletter for just over 2 years. I enjoy working with the local Sierra Club, and hope that you will vote for me to continue on the executive committee."

Darlene Schanfald (Sequim) is a co-founder of the NOG and has served on its Executive Committee since the Group's inception. She is currently the vice chair. In addition, she serves as NOG's Clallam County Political Chair and Conservation Chair. She also leads the (Sewage) Sludge Free WA project under WA State Chapter's Water and Salmon Committee, leads the anti-spraying of Clallam County's roadside vegetation, and has led an environmental coalition for 20 years to see that Port Angeles Rayonier Mill and more recently the Port Angeles Harbor hazardous wastes are removed.

There are four positions on the Executive Committee (Excom) coming up for election. The Excom is responsible for administrative decisions, planning NOG activities and deciding on conservation activities. The term of office is two years.

Cut out and mail ballot to: PO Box 714 Carlsborg, WA 98324 or email ballot approval and/or write-in to: northolympicgroupsc@gmail.com

Deadline for mailing vote is November 30th Vote for up to four candidates:

Norm Baker

Genie Mixson

Darlene Schanfald

Write-In

Without your help, we will not continue to grow, keep on top of issues, and sponsor events.



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Update on the Former Nippon Biomass Boiler in Port Angeles

By Bob Sextro

Over the past several years NOG has reported on the permitting, operation and emissions of the biomass boiler at the former Nippon paper mill in Port Angeles (PA). Nippon ran the mill from 1988 until it was sold in 2017. A Biomass cogeneration (heat and electricity) unit was introduced only a couple of years before the plant was sold to McKinley Paper who shut it down with plans to restart at a later date. That restart timeline has now been reported in the Peninsula Daily News *to be approximately* September 2019. It will include the use of the biomass boiler. The biomass boiler emits Ultra Fine Particles (UFPs) which pose a health concern to those inhaling them. Because of their size, UFPs are considered to be respirable particles which have the ability to penetrate tissue in the lungs

The information we have gotten directly from the Olympic Region Clean Air Agency (ORCAA), is that McKinley will be submitting their request to renew the Air Operating Permit (AOP) and that the draft of the AOP will be available for public review and comment sometime in early to mid 2019.

In 2013, NOG representatives met with our local state legislators and ORCAA to get funding for a specialized air quality study on ultra-fine particulates (UFPs-particle diameters less than 0.1 micrometer) that may be produced by the biomass boiler when operating. Data collection by scientists from both University of Washington (UW) and ORCAA began with air monitors located at the 5th Street fire station in PA in 2014 and was completed in the summer of 2015. The results of this special testing for UFPs have just recently been published by ORCAA. Also measured and reported were the concentrations of particulate matter less than 2.5 micrometers (PM2.5) and combustion gases such as carbon monoxide (CO) and sulfur dioxide (SO2).

The report indicates that both PM2.5 and UFP concentrations detected were higher in the winter months (such as January and February) than in the summer months (such as May and June), and that neither the UFP or the PM2.5 concentrations were higher during periods of boiler operation versus periods of in-operation. In a previously published study from 2016 by ORCAA and UW scientists using these same data indicated that the increase in winter particulate concentrations was due solely to the emissions from residential heating using wood burning stoves and fireplaces.

The current report further indicates the winter winds in PA blow most frequently from the south and southwest. However, since the boiler is located northwest of the fire station, the monitors would rarely detect boiler emissions in the winter. When combined with the overwhelming woodstove emissions, the report concludes it would have been nearly impossible to determine any wintertime airborne particulate impacts from Nippon's operation. In contrast, summer winds are most frequently northwesterly and westerly providing a much higher probability of detecting Nippon's emissions during these months.

During the study Nippon's boiler experienced some periods of in-operation intermingled with continuous operational periods. The data analysis also included a look at UFP concentrations when compared to CO values during these periods and with northwesterly winds. Ambient CO concentrations increased by about 20 parts per billion during periods of boiler operation (when compared to periods of boiler in-operation) thereby indicating the monitors were detecting the emission plume from the boiler. However, the UFP concentrations did not change during periods of boiler operation to in-operation. The report concludes that if the Nippon biomass boiler emits significant UFPs it was not detected at the downwind monitoring point at the fire station.

Off-Channel Reservoir. On Monday, Oct. 22nd and Tuesday, Oct. 23rd, the Sequim City Council and Clallam County Commissioners passed resolutions to support the Dungeness Flow Restoration and Aquifer Recharge Off-Channel Reservoir. This is done as a step towards obtaining grant funding.



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Mark Your Calendar!

The Sierra Club and Peninsula College faculty are cosponsoring the documentary, *What Lies Upstream.* This will take place Friday, December 7th at 7 PM in Meier Hall.

You will want to see this important film and participate in a discussion afterwards with guest speakers.

What Lies Upstream premiered on PBS's Independent Lens series on April 16, as a prelude to Earth Day, 2018. Produced by investigative journalist Cullen Hoback, the documentary tells incredible stories of how a vast array of toxic chemicals got into the drinking water of thousands of people in West Virginia and moved on into the Ohio River; how the drinking water in Flint, Michigan became contaminated with lead, and how the disposal of sewage wastes on agricultural land is introducing thousands of chemicals into our water supply through run-off.

What Lies Upstream shines a light into the swamp of factors that the Sierra Club is facing daily in its work – how money, regulatory failures, bureaucratic malpractice, and industry promotion of "fake science," shape outcomes that harm the environment and threaten human health.

For more information about the film and to view the trailer, go to: <u>http://www.rocoeducational.com/what_lies_upstream</u>

What is the Sound Alliance Group?

On Sept. 28th The Department of Defense released their Final Growler EIS proposing huge increases: 36 more jets, increased operations at Ault Field, four times more flights at Outlying field in Coupeville (from 6100 to 24,000) and increased geographic noise and pollution over regions of the Pacific Northwest that have not been previously impacted.

The Sound Alliance Group has been working to curb their activities. In this, the North Olympic Group is a member and supporter. The Group's message is clear and simple **"No New Jets. No new Flights."**

We support their statement of purpose: "For decades, NW Washington State communities have been willing partners with the Military in protecting our national security. Now our communities are collateral damage of the Growler jet program because of the incredible noise, pollution, and economic impacts. The latest proposal by the Department of Defense dramatically increases the number of Growler jets and flights – putting us all at risk. It's time we stand up for our community."

For a sample of their dedication and energy view the video of their October 3rd "Sound Off" rally in Coupeville: <u>https://vimeo.com/293288844</u>

For more information about the group, how to become an individual member and their current action items visit: <u>https://sounddefensealliance.org/</u>



With extraordinary perseverance all things are attainable



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Rainscaping

By Amanda Mixson

Take a serious look at your yard. What changes can you make next year to lower your garden's impact? Low-impact landscaping is particularly important in the Pacific Northwest due to needs for sustainability and especially the <u>salmon crisis</u>. Attacking a big problem head-on can be difficult, but there are steps we can take at home to make a difference.

Rain scaping is a <u>low-impact practice</u> that involves some planning and a few months of hard work, but the results will astound you. Elements of rain scaping include: green roofs, rain barrels & cisterns, downspout cutaways, bio-swales, rain gardens, and permeable pavement.

Rain barrels capture water and store it for later use. Another option is a cistern, which is much larger and can store most of winter's rain for summer droughts. Be sure to check with your city to see if they're allowed.

Downspout cutaways divert uncollected water away from the house and guide it toward a bio-swale, rain garden, or both.

You might see bio-swales (vegetated open channels) used as ditches to guide water to storm drains, but you can add one to your yard to direct water to a rain garden.

Rain gardens are power-houses in polluted runoff reduction. Design your yard to direct water to this sunken area where it can pool and absorb slowly into the ground. The plants are not only beautiful, they act as active filters.

Pervious pavement reduces runoff by allowing more ground space for water to be absorbed. Because it is pervious, this special type of pavement or pavers allows rain to penetrate the ground beneath. Gravel and other solutions work well in your driveways, patios, and paths. If there are a lot of roads in need of maintenance in your area, consider petitioning the community to repave with permeable asphalt.



Photo by Marion Brenner

Sierra Club Recognizes Work of Science Activists on Sewage Wastes

The Sierra Club's Wastewater Residuals (sewage wastes) Core Team nominated Dr. David Lewis and Dr. Caroline Snyder to be joint recipients of the Sierra Club Distinguished Service Award. At Sierra Club's National Award Ceremony held in Colorado last September, Lewis and Snyder received this recognition for their selfless collaboration advancing protection of the natural environment and human health. Their work revealed the dangers of current practices in treating and disposing of sewage wastes.

Working together over the past three decades and in collaboration with the Sierra Club, microbiologist David Lewis PhD and Professor Emeritus at Rochester Institute of Technology Caroline Snyder PhD exposed corporate corruption of science, proposed legislation needed to support and protect researchers who work for the public interest, and revealed the pitfalls of USEPA's unregulated application of sewage wastes on public and private lands.



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THE KEYSTONE XL PIPELINE BATTLE CONTIUES

The current administration is doing everything they can to get the Keystone XL Pipeline built as quickly as possible. August 15th of this year a federal judge ordered the State Department to conduct a new review of the pipeline's impacts. On September 14th, less than 30 days later, the State Department issued an environmental assessment claiming that major environmental damage from a leak is unlikely and could quickly be mitigated. The developer of the Keystone XL oil pipeline is gearing up to start construction next year.

We can still push back to stop this dangerous and dirty mega-project but we only have until November 8th to flood the State Department with public comments to show that KXL is still a terrible idea. Use the following link to make public comment:

Tell the State Department that the KXL pipeline is still a disaster for the climate!

Oil Leak Pulled Out of Cold Case File

This isn't really new News or even fake News, just quiet news. (Secret news?)

Taylor Energy has had a constant oil leak from one of their Gulf of Mexico rigs since 2004 when it was severely damaged by Hurricane Ivan. Originally reported as leaking 12 barrels per day, it is now estimated to be leaking 700 barrels per day. That is over 2.5 million barrels per year!



It took a long time for this news to break! Well, in a country like ours, there are a lot of distractions, and the news media has had 7 election cycles to report on it.

This is day-3 of a story that is just breaking, so please follow it as the petroleum industry continues to push for more access to off-shore drilling. Taylor Energy is hoping that the Trump administration will let them walk away from this. To read more, click <u>here</u>.

Important News!

The NOG Newsletter will be taking a break after the end of the year. Watch for us in the spring.



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Industrial Aquaculture: Food or Folly? Losing the Wild?

The Aquaculture forum that was held in Sequim on October 13th featured four leading experts. Topics ranged from finfish, to shellfish, to shrimp. Highlights of the presentations follow.



Kurt Beardslee captured Atlantic salmon that escaped from the August 2017 Cypress Island collapse of Cooke Aquaculture pens that released 260,000 penned Atlantic salmon into the wild. The tissue samples from all the salmon showed Piscine Reovirus (PRV), a highly contagious and debilitating salmonid disease that can spread to the wild salmon. The day before our forum, Beardslee was informed that after a decade of his organization's litigation, NOAA Fisheries and EPA agreed to prepare a biological opinion on harm caused by Atlantic salmon net pens to endangered listed salmon and steelhead.



Laura Hendricks revealed the contents of a little-known Army Corps draft report of a cumulative impacts analysis. It concluded that shellfish aquaculture would cause significant cumulative effects to eelgrass and forage fish habitat, and their proposed action (NWP2017) was "inconsistent with State requirements under the SMA to protect eelgrass and forage fish spawning habitat." She pointed out new peer reviewed 2018 science studies proved PVC and HDPE, the standard aquaculture gear also used in Washington State, is not only toxic, but results in microplastics in the aquaculture growing areas studied. Her coalition and the WFC filed a legal action against the WA Department of Fish and Wildlife demanding the agency end

exemptions for industrial aquaculture Hydraulic Project Approvals (HPA).



Alfredo Quarto reminded us that shrimp is the number one seafood product eaten in the U.S. 90% are imported while only 10% are caught or farmed in the U.S. He showed us how vital mangrove trees are to small working farmers and fishers around the globe for their daily nutrition and livelihoods. But when those trees are removed, as over 2 million acres of them have been, for massive industrialized shrimp farming, the socio-economic-cultural lives of those traditional and indigenous communities are ruined. Read more at: <u>https://mangroveactionproject.org/</u>



Anne Mosness has been tracking the federal NOAA Department of Commerce push to raise penned salmon in offshore waters, beyond jurisdictions and regulations of states. A bill is pending in the US Senate: Senate Bill 3138 to establish a regulatory system for marine aquaculture in the United States exclusive economic zone, and for other purposes. This Act may be cited as the "Advancing the Quality and Understanding of American Aquaculture Act" or the "AQUAA Act". <u>https://www.congress.gov/bill/115th-congress/senate-bill/3138/text?r=6</u>

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WA State Shoreline Management Programs (SMPs), overseen by the Department of Ecology, must include aquaculture. This means that the pressure is on our coasts – open waters and shorelines – to be lined with floating fish pens and multi-acre shellfish industrial farms that have stripped the beaches of their natural life to accommodate this industry.

You can read more about their work at these sites: http://wildfishconservancy.org/

http://coalitiontoprotectpugetsoundhabitat.org/

Upgrading Wastewater Systems, a \$160 Million Task in South Dakota

Fixing the aging, often overworked systems that treat municipal wastewater in South Dakota would cost nearly \$160 million, a cost borne mostly by state residents whose drinking water could be at stake.

The U.S. Environmental Protection Agency estimates that \$271 billion in deficiencies need repair at treatment plants across the country. Half of the nation's roughly 22,000 wastewater facilities need repair or replacement, the agency said. Iowa, Minnesota and Nebraska all need more than \$2 billion in system upgrades. Montana needs \$363 million in upgrades while North Dakota needs \$219 million and Wyoming needs \$91 million. To read more:

https://www.sdnewswatch.org/stories/upgrading-wastewater-systems-a-160-million-task-in-s-d/



Only humans make waste that nature can't digest.

The Port of Port Angeles Environmental Accomplishments

Colleen McAleer recently asked the Port staff to summarize the Port's environmental accomplishments. They produced this page of good news for their website. https://www.portofpa.com/94/Environmental



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The Reader's Corner

courtesy of Darlene Schanfald

The World in a Grain

by Vince Beiser. Riverhead Books, 2018.

Our most important commodity, a dwindling resource, and the scars it is leaving behind.

You may never look at a beach, a dune, or a mountain the same way again after you read this important book.

Using sand for building islands and structures in Dubai in order for the rich to avoid paying taxes is shocking! The mining, theft and use of sand is mind boggling. Removing sand from beaches has exposed structures resulting in wave action undercutting the built environment. Suctioning sand, along with the sea life in tow, opens one's eyes to the destruction of marine systems and another element, changing weather patterns. The raping of sand is only for the temporary, because these structures will not hold up over time. What then?

From the book jacket:

The gripping story of the most important overlooked commodity in the world--sand--and the crucial role it plays in our lives.

"After water and air, sand is the natural resource that we consume more than any other--even more than oil. Every concrete building and paved road on Earth, every computer screen and silicon chip, is made from sand. From Egypt's pyramids to the Hubble telescope, from the world's tallest skyscraper to the sidewalk below it, from Chartres' stained-glass windows to your iPhone, sand shelters us, empowers us, engages us, and inspires us. It's the ingredient that makes possible our cities, our science, our lives--and our future."

And, incredibly, we're running out of it.

The World in a Grain is the compelling true story of the hugely important and diminishing natural resource that grows more essential every day, and of the people who mine it, sell it, build with it--and sometimes, even kill for it. It's also a provocative examination of the serious human and environmental costs incurred by our dependence on sand, which has received little public attention. Not all sand is created equal: Some of the easiest sand to get to is the least useful. Award-winning journalist Vince Beiser delves deep into this world, taking readers on a journey across the globe, from the United States to remote corners of India, China, and Dubai to explain why sand is so crucial to modern life. Along the way, readers encounter world-changing innovators, island-building entrepreneurs, desert fighters, and murderous sand pirates. The result is an entertaining and eye-opening work, one that is both unexpected and involving, rippling with fascinating detail and filled with surprising characters.