North Olympic Climate Change Preparedness Plan

Hear the best current science regarding future local climate change effects and adaptation.

Saturday, January 16, 1:00 pm
Dungeness River Center

The presentation includes data from the University of Washington’s Climate Impact Group, NOAA, NASA, the National Climate Assessment, Adaptation International, SeaGrant WA as well as localized research.

Presenting this information will be Dr. Ian Miller Coastal Hazards Specialist, Washington Sea Grant Oceanography Instructor, Peninsula College and Cindy Jayne, Project Manager of North Olympic Peninsula Resource Conservation & Development.

Sponsored by North Olympic Group Sierra Club and Olympic Peninsula Audubon Society

Meetings & Events
Jan. 6 – Pleasant Harbor Hearing (Page 3)
Jan. 14 – Excom meeting in Sequim, 2 – 4; Trinity Methodist Church Library room.
Jan. 15 – TLAC meeting (Page 5)
Jan. 16 – Climate Preparedness Plan
Jan. 22 – Comments due re: Tesoro Savage DEIS (Page 7)
Jan. 28 – Comments due re: Port Angeles Navy Pier EA (Page 8)
Feb. 11 – Excom meeting in Sequim, 1 – 3; location to be determined, visit website (above) for information
Feb. 19 – “The Breach” movie

Join Magic of Cinema and the Sierra Club NOG Friday, Feb.19 at 7pm in the Peninsula College Maier Performance Hall for a screening of The Breach.

The Breach is the story of filmmaker and fishing guide Mark Titus’s journey to discover why the populations of native salmon--the most sustainable wild food left on the planet--have plummeted in the Pacific Northwest.
A discussion with director Mark Titus and producer John M. Comerford will follow the film.

Democracy must be something more than two wolves and a sheep voting on what to have for dinner.
James Bovard
**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.**

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**Officers:**

Chair: Robert Sextro  
Vice Chair: Peter Guerrero  
Secretary: Bill Volmut  
Treasurer: Monica Fletcher

**Executive Committee:**

Norm Baker  
Peter Guerrero  
Janet Marx  
Darlene Schanfald  
Robert Sextro  
Bill Volmut

Newsletter Editor – Janet Marx  
Janetmarx_76@msn.com

Complaints, suggestions, opinions are always welcome

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**Celebration!!**

Washington State did it – we’ve collected enough signatures to send I-735 to the Legislature for action. Washington could be the 17th state to support a constitutional amendment clarifying that corporations are not people and that money is not a form of free speech.

The Secretary of State recommends that petition campaigns submit at least 320,000 signatures to offset duplicate and invalid signatures.

WAmend and its partner Fix Democracy First for I-735 submitted more than 325,000 signatures. The vast majority of the signatures collected for I-735 (over 280,000 of the 325,000+ submitted, to be precise) were gathered by volunteer petitioners, which is pretty much unheard of in this day and age.

Special thanks to Andrea Radich (Clallam County) and Dianne Diamond (Jefferson County) for organizing, encouraging and prodding local volunteers.

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**MONSANTO BEING SUED!!**

Agrochemical giant Monsanto will be investigated by a tribunal of environmentalists, activists, and scientists in The Hague, Netherlands, next year, against charges of "ecocide".

Calling themselves the Monsanto Tribunal, the crowd-funded group will evaluate allegations made against Monsanto with regards to damage caused to the environment and human health. Regardless of the outcome, they won’t be able to sentence or charge the agriculture giant. Still, they claim the trial is more than just a symbolic act, with the larger goal of establishing ‘ecocide’ as a crime for the first time.

The trial is scheduled for next year on World Food Day, October 16, 2016. It will be held not at the International Court of Justice, but at the the International People’s Court, which operates outside the mechanisms of government and formal institutions like the United Nations. Its authority comes from the voices of the victims, as well as that of civil society, both national and international.
IMPORTANT NOTICE REGARDING PLEASANT HARBOR MASTER PLANNED RESORT

On December 9th Jefferson County released the Final Supplemental Environmental Impact Statement (FSEIS) for the Marina and Golf Resort. The document is available for review at http://www.co.jefferson.wa.us/commdevelopment/Brinnon_MPR.htm

The Planning Commission Public Hearing is January 6, 2016 at the Brinnon School House Gym at 6:30 pm.

The following is a letter from The Brinnon Group, a group concerned with protection of Hood Canal and the Brinnon community.

Friends,

Please attend the Jefferson County Planning Commission Meeting. This meeting is for the Planning Commission to hear responses to the Final Determination of Non Significance regarding a proposed resort and golf course on Black Point. The developer presenting this proposal is Garth Mann of Statesman Corporation, a Canadian company.

Based on the testimony of you and others, the Planning Commission will make a recommendation to the county commissioners about whether to approve the proposal and what conditions, if any, Statesman must complete if the development proposal is approved. You can discuss why you feel the FSEIS is inadequate in addressing the impacts the project will have or general project concerns.

If the Planning Commission recommends non-approval of the resort proposal, the County Commissioners could then vote not to approve it. Even if you have given written or spoken testimony in the past, this meeting could be the most important yet. The Planning Commission has not read previous testimony, and, we hear, is unaware of opposition to the proposal.

You can speak and/or hand in written comments. Your written comments must have your name and address on them. You may be allowed three minutes to speak. Your written comments can be as long and as detailed as you wish. Be sure to hand in your written statement for the official record.

If you are unable to attend, please send comments with your full name and mailing address to: pcommissiondesk@co.jefferson.wa.us

Attached is testimony from the Brinnon Group, which may help you prepare your own testimony. If you want more information on FSEIS, the current proposal, let us know.


Thank you for your concern about our local community.

Regards,
The Brinnon Group

http://www.brinnongroup.org
Representative Derek Kilmer and a group of conservation, timber and local government stakeholders have formed a partnership called the Olympic Peninsula Collaborative. The Group’s stated goal is to bring together stakeholders from the environmental community, the timber industry, and representatives from federal and local government around shared goals of increasing timber harvest from the Olympic National Forest while benefitting the environmental quality of our forests and watersheds.

The following is a report from NOG member, Josey Paul, who was at the first meeting.

FORKS — A skeptical group from the Forks logging community was largely unimpressed with the first open-house presentation by the Olympic Peninsula Collaborative, which was hosted Dec. 4 at the Olympic Natural Resources Center by U.S. Rep. Derek Kilmer, D-Gig Harbor.

Third-generation Port Angeles logger Jim Bower captured that skepticism when he told the panel of timber-industry leaders and representatives of various environmental groups that it lacked the expertise to make any proposals, although the crowd of about 90 people was otherwise polite. Actually, the collaborative has a lot of expertise, but skepticism abounds on all sides.

The collaborative follows in the path of several others around the state and nation. This collaborative is designed to bring environmentalists and timber companies together to increase logging in the Olympic National Forest, while tweaking logging practices to better comport with forest ecology. Participants include: American Forest Resource Council, American Whitewater, Cosmo Specialty Fibers, Interfor, Merrill & Ring, the Mountaineers, Murphy Company, Olympic Park Associates, Olympic Forest Coalition, Olympic Peninsula Audubon Society, Pew Charitable Trusts, Sierra Pacific Industries, Washington Wild and the Wild Olympics Campaign.

Environmental and industry forestry experts have laid out small test sales to pioneer logging that can be supported by both sides. But it’s an unproven venture that draws mixed reviews. One timber industry executive scoffed at the small sales, saying they lack the regulatory freedom and scale to generate meaningful profits. Other industry leaders hope the early test sales will crack open the Northwest Logging Plan and lead to increased logging in our national forests.

Environmentalists have their own mixed feelings. Some feel that joining the collaborative was necessary to block or forestall Congressional efforts to open the Northwest Forest Plan to large-scale logging. Others fear that the collaborative itself is the threat to the Northwest Forest Plan. Some say the collaborative sets an unfortunate precedent as, basically, a tradeoff with industry designed to win support for the Wild Olympics Wilderness and Wild & Scenic Rivers Act, a bill stalled in Congress that would preserve some 126,000 acres of the Olympic National Forest and give 19 rivers Wild and Scenic River designations. Others say the environmental gains are worth the tradeoff.
FOREST BRIEFS

OLYMPIC PENINSULA COLLABORATIVE  (continued)

So it’s a back and forth. And nobody really knows at this point. Thinning protected Late Successional Reserve stands, which were to never see a chainsaw again, may allow those over-stemmed stands to blossom more quickly into healthy, old-growth stands. Others fear thinning will do unnecessary damage, pointing to the harm past Forest Service thinning projects have caused.

Four more presentations are tentatively scheduled around the peninsula in 2016 in Mason County, Grays Harbor County, Jefferson County and Clallam County.

CLALLAM COUNTY TRUST LANDS ADVISORY COMMITTEE

Clallam County Commissioners have established an Ad Hoc Committee to study re-conveyance of trust lands, currently managed by DNR, back to the County. A report is due from the Trust Lands Advisory Committee (TLAC) by December 31, 2016.

According to the membership information currently available on the County website, the committee is limited to 16 members of whom only two members represent environmental interests (Olympic Forest Coalition and USFS member of Forest Service Employees for Environmental Ethics). The majority of the members are timber interests and public entities that benefit from timber harvesting.

Notes from the first meeting:
The Committee’s first meeting was December 12th. This meeting involved primarily officer elections, organizational details and agenda discussions. Four additional groups have applied for committee membership: North Olympic Group of Sierra Club, Olympic Peninsula Audubon Society, City of Port Angeles and Olympic Medical Center. A request will be sent to the County Commissioners to extend the membership count to 20 in order to accommodate these four groups.

Future meetings will be held on the third Friday of each month at noon in the commissioners’ room. The January meeting should be very interesting as the focus will be on gaining an understanding of DNR Trust Lands especially as concerns Clallam County. These meetings are open to the public and include an opportunity for public comment. For additional information visit http://www.clallam.net/bocc/trustlands.html.

Follow-up Note: At their December 22nd meeting the County Commissioners agreed to the request for a 20 member Committee.

Forest, jungles, trees, plants…. 
produce the oxygen we breathe.

They are the lungs of the earth 
if we destroy them, we destroy ourselves.
My introduction to solar power came at a young age. Growing up in the sunny environs of southern California I spent too much time poolside and at the beach without the benefit of Coppertone or a tee shirt until I understood why I kept getting sunburned. Later on came the wicked pleasures burning leaves and paper by focusing sunlight through a piece of glass. It got even better with a bonafide magnifying glass. We didn't call it “passive solar” when we walked into someone's glassed in porch but we knew it could get uncomfortably warm even on the coldest days.

I never thought much of it but the sun was always at work during the day and it finally caught mine and the world's attention when the boys in the lab figured out how to turn sunlight into electricity. The modern solar cell which was created in Bell Laboratories in 1954 was the culmination of more than a century of research and development beginning with Edmond Becquerel's crude construct of a solar cell and discovery of the “photovoltaic effect”. Although many theories about this effect attempted to explain the phenomena it wasn't until Albert Einstein was able to demonstrate to the world the relationship between the energy of a wavelength of light and it's ability to induce the flow of electrons in certain materials. He won the Nobel Prize in 1922 for his photovoltaic theory which had nothing to do with nuclear energy. Whether he recognized the far reaching implications and benefit to mankind is uncertain but his work inspired others to continue the materials research which eventually produced a whopping 6% energy efficiency.

In the ensuing 61 years PV efficiency has risen to as high as 22% and with the advent of “thin-film” technology we can expect many structural architectural components to become part of a “stand alone” energy grid capable of supplying a majority of if not all of a building's energy needs. Beyond that lies the consideration of commercial grade industrial power generation. The application of concentrated solar holds great promise to power our most energy intensive requirements. These devices work much the same as when we held that magnifying lens and focused the sun's energy on a specific target. Solar towers erected above an array of large concentration mirrors are capable of generating 20 Megawatts of clean energy. Several of these types of plants have been shown to develop 150 MW of electricity. Concentrated solar power is almost twice as efficient as Photovoltaic cells and when combined as in High Concentrator PV (HCPV) they have achieved efficiencies as high as 42%!

Yes it's expensive to design and build but it pays for itself fairly quickly in time and after that all the energy produced is free. Now imagine a Corporation trying to regulate or market sunshine and sell it as a commodity. Keep that in mind when someone asks you “Why Solar?”. 

The use of solar energy has not been opened up because the oil industry does not own the sun.
- Ralph Nader
Oil Terminals in Washington
Proposed and Operating

Washington State - Proposed Flood of Oil

Activists, including the Sierra club, are engaged in a fight against expanding fossil fuel infrastructure in Washington State. According to the Sightline Institute new and expanded rail and shipping terminals could unleash as much greenhouse gas pollution as five Keystone pipelines. Other consequences include:

- **SAFETY:** including oil spills and train derailments - Many communities through which these oil trains pass remain skeptical that government and corporate efforts to improve the safety of the railroad cars will not make much of a difference.
- **PROPPING UP CANADIAN TAR SANDS:** In the absence of new pipelines, Northwest rail terminals would be the sole driver of new growth in Canadian tar sands oil.
- **INCREASED OIL EXTRACTION AND CLIMATE POLLUTION:** These projects could unlock as much as 382,000 barrels per day of new tar sands production. The resulting greenhouse gas pollution from the extra extraction could be as much as 106 million metric tons per year of carbon dioxide.
- **FEEDING THE BAKKEN BEAST:** The terminals could also lead to more oil drilling in the Bakken formation, as much as 114,000 barrels per day beyond what would be produced without the terminals. The resulting greenhouse gas pollution from this extra production could be as much as 30 million tons per year of carbon dioxide.

Current projects include:

**Anacortes**  Shell Refinery Expansion – preparing Draft Environmental Impact Statement (DEIS).

**Hoquiam**  Westway and Emperium Expansions – both have published DEIS, comment period closed.

**Grays Harbor**  Grays Harbor Rail Terminal – Scoping closed in November, DEIS being developed.

**Longview**  Riverside Oil Refinery – cleared initial review in April, current status unknown

**Vancouver**  Tesoro-Savage crude oil terminal -- the largest of these proposals would result in 360,000 barrels of explosive crude oil rolling through Washington communities and neighboring states every single day. After offloading, the oil would be shipped out to sea via huge oil tankers on the Columbia River. Any oil spills on the Columbia or on our coast would be disastrous for the environment, our economy, and local communities. The project is opposed by the City of Vancouver, Portland, firefighters, health professionals, longshore union workers among others. Tens of thousands have spoken out against it. And yet Big Oil is still trying to build the largest crude oil terminal in North America! **There’s still time to stop Big Oil in its tracks. The DEIS is published, comments are due January 22, 2016**

*Add your voice to reject this massive crude oil terminal on the Columbia.*

*Submit* a comment online [https://ts.efsec.wa.gov/](https://ts.efsec.wa.gov/) or by mail to State of Washington, Energy Facility Site Evaluation Council, Box 43172, Olympia, WA, 98504

For more information and help with comments: [http://gorgefriends.org/article.php?id=1039](http://gorgefriends.org/article.php?id=1039)
NAVY ELECTRONIC WARFARE RANGE - CRITICAL ACTION ITEM

Thanks to all of you who have sent letters or signed a petition (UnderSecretary Robert Bonnie: Don’t move warfare range to protected lands) protesting use of Forest Service land for the EWR. In addition to Robert Bonnie and Chief Tidwell, the petition is being forwarded to Christy Goldfuss. As Director of the White House Council on Environmental Quality, Goldfuss holds a powerful position. Because she worked for the National Park Service for many years, she will certainly understand the need to protect Olympic National Park from military abuse.

When Godfuss’s office was contacted her assistant said they hadn’t heard about the issue. (!!!!) A summary of the crisis was promptly emailed to her. Because personal emails and letters carry MUCH more weight than petitions, it is important that each one of us take a few minutes to dash off an email letter or fax to Christy Goldfuss. Letters can be very short --- a few lines will suffice--- but we need thousands!

Email chair@ceq.eop.gov - Christy Goldfuss, Council on Environmental Quality, 722 Jackson Place NW Washington DC 20503 - FAX: (202) 456-6546

Important: Please send your letter within the next week and send a copy to Robert Bonnie’s staff-person, Leslie Jones, Executive Assistant to Robert Bonnie. leslie.jones@osec.usda.gov - Leslie Jones, 1400 Independence Ave NW, Jamie L. Whitten Bldg. Suite 240 E Washington DC 20250 FAX (202) 720-0632

Bonnie needs to know that the people’s outcry is NOT diminishing!

NAVY PIER AND SUPPORT FACILITIES IN PORT ANGELES HARBOR

There will be a public meeting held on January 12 from 6-8 PM in the Elks Naval Lodge, located at 131 E. First Street in Port Angeles. Navy officials will present information and answer questions regarding the Draft Environmental Assessment. Only written comments will be accepted. It appears this will be the only public event planned for Peninsula residents to attend. Even though the meeting is designed to limit citizen input, it is important to show up and demonstrate citizen concern regarding the proposed project.

The Navy is accepting comments through January 28, 2016 for:

Transit Protection System Pier and Support Facilities at Coast Guard Station Port Angeles, Draft EA

Submit written comments to:
Commanding Officer, NAVFAC NW
Attn: NEPA PM
1101 Tautog Circle,
Silverdale, WA 98315-1101

Or email comments to: NWNEPA@navy.mil
Biochar and Global Warming

Norman T. Baker

Did you ever get a surprise that really surprised you?

Recently, in Chimacum, WA, friends and I presented a biochar workshop with two lectures and a demonstration making biochar. Heather Graham, the manager of the Chimacum Grange did an excellent job organizing the workshop. Contributions and questions from the group made the workshop a resounding success. Biochar will be very important in our future for three things - improving our soils, mitigating climate change and sourcing renewable energy. When we addressed global warming and the role of biochar, Francesco Tortorici volunteered information about the Virgin Earth Challenge (VEC) where Sir Richard Branson has offered a $25 million dollar prize he and his wife created for an environmentally sustainable and economically viable way to remove greenhouse gases from the atmosphere (1). Francesco’s contribution was a surprise!

A prize winner has not been determined yet. There are six judges, each of whom is an internationally known environmentalist and climate mitigation activist. The rules for this contest are quite simple and specifically target carbon sequestration. The purpose is to encourage development of a commercially viable new technology, process or method to remove anthropogenic greenhouse gases from the atmosphere to improve the stability of the Earth’s climate (2). The VEC is brilliantly aimed at using market forces to economically and commercially sequester carbon. This is a very interesting two-edged sword. On the one hand the environmental imperative of sequestering CO2 to fight global warming is paramount and nearly everyone now recognizes that. On the other hand, many authors (3,4) lay the blame for the USA inaction on carbon sequestration directly on market forces. They claim American climate inaction is based on suspicions about big government and political leadership resisting action. Fossil fuel corporations have also tried to discount the need for climate action. The problem is that energy markets do not account for the social and environmental costs of fossil fuels. All people worldwide dump CO2 into the atmosphere without having to pay for its environmental cost. This is the core problem that has prevented market forces from resolving global warming. Governments have failed the people on this issue by not providing for the common good. Governments have provided for the common good many times in the past and now it is time once again. Many people now believe carbon pricing might be the foremost climate change priority. I believe biochar is beginning to fulfill the carbon pricing role since market forces are now establishing its value at $200 - $600/cu. yd. for soil application. Perhaps emissions trading in combination with a market price on biochar plus governmental leadership will jumpstart an international cooperation.

Since 2007, the VEC judges have narrowed over 10,000 submissions down to 2,600 serious submissions. Those were narrowed down to 11 finalists in five broad areas - Biochar, Bio-energy with Carbon Capture and Storage, Direct Air Capture, Enhanced Silicate Weathering, and Land Management/Ecosystem Sequestration. Of the 11 finalists, 4 are directly involved in making and using biochar and 2 more are indirectly involved using biochar. The remaining finalists are all using strictly technological solutions that capture CO2 from the atmosphere directly where it is absorbed and captured and used. Unfortunately, realistic measures that deliver negative emissions are very limited. The best options consist of biomass and biochar sequestration, soil sequestration, biomass energy with carbon capture and storage, ocean fertilization and lime soda scrubbing. All of them have serious constraints that probably will not take effect for 20 years.

(Continued on Page 10)
Biochar and Global Warming (continued)

Converting biomass to biochar could contribute to negative emissions. Biochar is very slowly mineralized to carbon. Gases produced during pyrolysis could be used for heat or power. And biochar applied to the soil, in certain circumstances, reduces emissions of nitrous oxide, enhances plant growth, stabilizes soil organic matter and reduces greenhouse gas emissions (both NO2 and CH4), and has reduced fertilizer and irrigation requirements. Scientists are currently involved in complex life cycle assessments of biochar in the soil. However, the few quite conservative studies conducted to date estimate we could sequester at least 7% to as much as 50% of annual anthropogenic CO2 emissions (5). Biochar is no silver bullet but will be one very significant part of a solution to global warming. Now that we have the United Nations, Frame Work Convention on Climate Change, perhaps we can start making real progress.

Thank you, Francesco, Ken and Heather!


November 19th King County Superior Court Judge Hollis R. Hill issued a groundbreaking ruling in the unprecedented case of eight youth petitioners who requested that the Washington Department of Ecology write a carbon emissions rule that protects the atmosphere for their generation and those to come. The court confirmed what the Washington youths, and youths across the nation, have been arguing in courts of law, that “the state has a constitutional obligation to protect the public’s interest in natural resources held in trust for the common benefit of the people.”

This case is one of several similar state and international cases, all supported by Our Children’s Trust, seeking the legal right to a healthy atmosphere and stable climate. Cases brought by youth to protect the atmosphere are pending before trial judges in North Carolina, Pennsylvania, and Colorado, and before appellate courts in Massachusetts and Oregon. Significantly, similar legal issues are being considered in a federal lawsuit brought in August 2015 against the federal government by 21 young people from across the U.S. and Dr. James Hansen as guardian for all future generations, in the U.S. District Court for the District of Oregon.

For additional information: http://www.commondreams.org/newswire/2015/11/20/advance-paris-climate-talks-washington-court-recognizes-constitutional-and