40 pieces of public comments submitted to the Agriculture, Forests, Fisheries, Rural Communities, and Tribes Work Group

From: Don Sampson
Sent: Thursday, September 21, 2017
Subject: State of Oregon - Tribal Consultation Policy Senate Bill 770

Please find attached Oregon States Tribal Consultation Policy via Senate Bill 770 and associated administrative rule. It is important a government to government consultation occurs between the 9 Oregon Tribes and the State regarding the Clean Energy Jobs legislation. Tribes are sovereign governments and not stakeholders. Any legislation will have a direct impact on their sovereign rights and authorities. Also find attached the Umatilla Tribes Policy on government to government consultation. Please feel free to contact me with any questions regarding these policies. Also the Legislative Commission on Indian Services works directly with the 9 Oregon Tribes. Thank you, Don Sampson – ATNI Climate Change Project Director

The Confederated Tribes of the Umatilla Indian Reservation

Consultation: Government to Government (or otherwise)

WHAT IS CONSULTATION?

CONSULTATION. Deliberation of persons on some subject. State District Court of Third Judicial Dist. in and for Powell County, 85 Mont. 215, 278 P. 122, 125. A conference between the counsel engaged in a case to discuss its questions or arrange the method of conducting it. In French Law. The opinion of counsel upon a point of law submitted to them. Black's Law Dictionary, DeLuxe Fourth Edition. West Publishing Co., (1951).

CONSULTATION \,kan(t)-sel-'ta-shen\ n **1:** COUNCIL, CONFERENCE; *specif*: a deliberation between physicians on a case or its treatment **2:** the act of consulting or conferring. Webster's New Collegiate Dictionary, G & C MERRIAM COMPANY, (1979).

Consultation is the formal process of negotiation, cooperation and policy-level decision-making between the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) and the United States federal government. As such, consultation is the bilateral decision-making process of two sovereigns: the Confederated Tribes of the Umatilla Indian Reservation and the United States Government.

It is critical to understand that consultation is not just a process or a means to an end. Rather, consultation is the process that ultimately leads up to and includes a **decision**. ***The most important component of consultation is the ultimate decision***. Consultation then is the formal effort between two sovereigns of making policy level decisions.

It is equally important to understand what consultation is not. Consultation is not notifying a Tribal government that an action will occur, requesting written comments on that prospective action, and then proceeding with the action. In this scenario the decision is not affected. This is not consultation.

WHAT ARE THE OBJECTIVES OF CONSULTATION?

a. Assure that CTUIR Board of Trustees understands the technical and legal issues necessary to make an informed policy decision.

b. Improved policy-level decision making of both CTUIR and federal government.

c. Bi-lateral decision making among sovereigns (co-management).

d. Protection of CTUIR lifestyle, culture, religion, economy.

e. Compliance with Tribal laws.

f. Compliance with federal Indian law; federal statutes; federal policy.

g. Develop and achieve mutual decisions.

h. Improve the integrity and longevity of decisions.

HOW DOES CONSULTATION WORK?

Consultation works through the same procedures and steps that are common-place for most federal agencies: technical meetings and policy meetings. From a practical standpoint, consultation requires an ability to differentiate between technical and policy issues; this allows for proper technical level staff consultation and then policy-level consultation for those issues that remain unresolved or for those issues that are clearly only resolvable at the policy level. Consultation is the process of coming to common understanding of the technical and legal issues that affect or are affected by a decision. Consultation is using this common understanding to make a decision.

Consultation does not portend to mandate a certain decision; most Tribal governments are much more willing to address cooperatively a decision that on the surface is distasteful than if they had not been thoroughly consulted with prior to facing that distasteful decision.

Meaningful consultation requires that federal agencies and Tribes understand respective roles and have a basic understanding of the legal underpinnings of the government-to-government relationship, including the responsibility of the federal government under the Trust doctrine. In addition, federal agencies will benefit from some understanding of tribal culture, perspectives, world view, and aboriginal rights. Tribal governments must understand the policy decision-making authority of the federal agency. Tribal governments must understand the non-tribal politics of the federal agency decision that consultation will affect.

Tribal governments must also understand the federal and state laws within which the agency must operate. In these examples, it is critical to note that a Tribal government cannot understand the politics of the federal agency decision without personal communications. Similarly, the federal agency cannot understand the Tribe's world view unless agency staff meet with the Tribe to discuss that world view. The lesson here is that consultation has a foundation of communication. Without communication, consultation is thwarted and a mutual decision is impossible.

Thus in a hypothetical example, consultation works like this:

1. Federal agency contacts Tribal government to advise of an impending project proposal or to conduct an activity that may or may not impact a tribal resource or issue.[1]

2. CTUIR responds back that this issue is important and that it would like to initiate consultation. CTUIR requests federal agency technical experts meet with CTUIR technical representatives (or CTUIR requests a policy level meeting).

3. Consultation has been initiated. Technical staffs meet. Technical and legal issues are discussed; the result is that CTUIR staff understand the proposal and federal agency staff understand at technical level why this proposed activity is of concern. This allows respective technical staff to brief respective policy entities and to provide informed opinions and recommendations.

4. CTUIR staff brief the proper Tribal policy entity. Consultation steps are defined, written down and then transmitted to federal agency.[2] Agreement is reached upon this consultation process.

5. Additional meetings are held, if necessary, leading up to the decision.

6. Federal agency and CTUIR formulate a decision. Ultimately and optimistically this decision is consistent with federal laws and tribal laws and policies. This means the decision is consistent with applicable natural and cultural resource laws and policies, with the Doctrine of Trust Responsibility and with federal Indian law. For the CTUIR specifically, it means the decision protects the resources to which the CTUIR has specific aboriginal and treaty reserved rights, protects the unique culture and world view and enables continued practice of the Tribal religion.

Most important is that leading up to the decision, the Tribal Government and the federal government have communicated. Mutual understanding and trust have been developed. Without mutual understanding and mutual trust a mutual decision is nearly unthinkable. History is replete with examples of such failures. In any event, the CTUIR perspective regarding the decision to formally consult or not to consult is that those entities required by law or policy to consult with Tribes is obviously to consult, or at the minimum, ask the CTUIR. The consequences of consulting when not required is preferred to the consequences of misjudging and not consulting when required.

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[1] It is crucial to note here that the federal agency contacted the CTUIR because of an impending ***decision*** that the federal agency will have to make in the near future. Remember, it is that ***decision*** that consultation is focused upon. Also note that, depending upon the issue, the CTUIR could have contacted the federal agency to initiate consultation.

[2] These steps are usually no more complicated than additional technical level meetings, later policy level meetings, potential mutual measures to obtain additional information, and finally a policy level meeting to make the ultimate decision.

RELATIONSHIP OF STATE AGENCIES WITH INDIAN TRIBES

182.162 Definitions for ORS 182.162 to 182.l68. As used in ORS 182.162 to 182.168

(1) "State agency" has the meaning given that term in Oregon ORS 358.635.

(2) "Tribe" means a federally recognized Indian tribe in Oregon [2001 c. 177 §]

Note: 182.162 to 182.168 were enacted into law by the Legislative Assembly but were not added to or made a part of ORS chapter 182 or any series therein by legislative action. See preface Oregon Revised Statutes for further explanation.

182.64 State agencies to develop and implement policy on relationship with tribes; cooperation with tribes. (1) A state agency shall develop and implement a policy that:

(a) Identifies individuals in the state agency who are responsible for developing and implementing programs of the state agency that affect tribes.

(b) Establishes a process to identify the programs of the state agency that affect tribes.

(c) Promotes communication between the state agency and tribes.

(d) Promotes positive government-to-government relations between the state and tribes.

(e) Establishes a method for notifying employees of the state agency of the provisions of ORS 182.162 to 182.168 and the policy the state agency adopts under this section.

(2) In the process of identifying and developing the programs of the state agency that affect tribes, a state agency shall include representatives designated by the tribes.

(3) A state agency shall make a reasonable effort to cooperate with tribes in the development and implementation of programs of the state agency that affect tribes, including the use of agreements authorized by ORS 190.110 [2001c.177 §2]

Note: See note under 182.162

182.166 Training of state agency managers and employees who communicate with tribes; annual meetings of representative of agencies and tribes; annual reports by state agencies. (1) at least once a year, the Oregon Department of Administrative Services, in consultation with the Commission on Indian Services, shall provide training to state agency managers and employees who have regular communication with tribes on the legal status of tribes, the legal rights of members of tribes and issues of concern to tribes.

(2) Once a year, the Governor shall convene a meeting at which representatives of state agencies and tribes may work together to achieve mutual goals.

(3) No later than December 15 of every year, a state agency shall submit a report to the Governor and the Commission on Indian Services on the activities of the state agency under ORS 182.162 to 182.168. The report shall include:

(a) The policy the state agency adopted under ORS 182.164.

(b) The names of the individuals in the state agency who are responsible for developing and implementing programs of the state agency that affect tribes.

(c) The process the state agency established to identify the programs of the state agency that affect tribes.

(d) The effort of the state agency to promote communication between the state agency and the tribes and government-to-government relations between the state and tribes.

(e) A description of the training required subsection (1) of this section.

(f) The method the state agency established for notifying employees of the state agency of the provisions of ORS 182.162 to 182.168 and the policy the state agency adopts under ORS 182.164. [2001 c. 177 §3]

Note: See note under 182.162.

182.168 No right of action created by ORS 182.162 to 182.168. Nothing in ORS 182.162 to 182.168 creates a right of action against a state agency or a right of review of an action of a state agency. [2001c. 177 §4]

Note: See note under 182.162

` **182.170** [1959 c.501 §7; repealed by 1959 c.501 §10]
182.180 [1959 c.501 §8; repealed by 1959 c.501 §10]
182.190 [1959 c.501 §9; repealed by 1959 c.501 §10]
182.200 [1959 c.501 §10. Repealed by 1959 c.601 §10]

Dear Chairmen Dembrow and Helm,

Thank you for the opportunity to participate in today's session of the Oregon Work Group on Agriculture, Forest, Fisheries, Rural Communities and Tribes.

The Working Group on Seafood and Energy is a trade association representing leaders in seafood production, coastal communities and tribes who depend on both healthy fisheries and affordable, reliable energy supplies. We are very pleased to see Oregon's legislature step up to develop a strong and effective policy that has potential to achieve these priorities

Our comments are offered to reflect the concerns and aspirations of people who have a lot at stake. Most of our members have a direct interest in protecting fishery resources from multiple impacts of unchecked carbon emissions. These impacts are real and present threats today. Seafood generates tens of billions of dollars in economic activity in Oregon and Washington and it is one of the pillars of the Northwest's culture. The rich fishery resources that underpin all of this are at risk.

In 2015, overheated waters killed half the returning adult sockeye salmon returning to the Columbia River. That same year, high carbon dioxide levels in seawater and a persistent "blob" of unusually warm water off the West Coast led to a coastwide shutdown of Dungeness crab fisheries driven by domoic acid from a massive toxic algae bloom. The algae thrive, and grow more toxic, in warm, CO2-rich water. This bloom also shut down razor clam harvest that draws hundreds of thousands of visitors to the Pacific Northwest coast every year.

Ocean acidification is a major concern to our members. Starting in the mid-2000s, seawater acidified by carbon emissions began killing young oysters and other shellfish within their first few days of life in hatcheries in both Oregon and Washington. Only by buffering seawater in the spawning tanks have hatcheries been able to protect the 'seed" supply for shellfish farms up and down the coast. The rest of the ocean offers no such protection.

Many of our members are also people who burn fuel for a living. They operate diesel powered vessels and generators, and they run energy-intensive fish plants. Many of them live and work in rural communities that cannot practically execute solutions that fit better in wealthy, high-density cities, but they still want to be part of the solution. They need a carbon solution that they can live with. That means a policy that doesn't drive fuel prices through the roof or disrupt reliable energy supplies. It also means they are looking for a policy that helps them afford to make the investments necessary for them to reduce fuel consumption and emissions.

All of our members share an abiding interest in making sure that any carbon pricing system is effective and well managed. If the money is squandered, it does nothing to reduce the risk to seafood supplies, jobs and communities from uncontrolled carbon emissions.

Our members also know that we must deal with the consequences that can no longer be avoided. For that reason, they view adaptation and resilience as necessary investments along with emissions reduction.

We offer the following initial recommendations below.

1. **Allocate a portion of all carbon revenues (suggested: 25%) for adaptation and resilience to carbon impacts, remediation of carbon pollution, and related research needs**. This should include both marine and terrestrial environment. To maximize carbon reductions, we recommend crafting the policy to reward projects that offer verifiable and long-lasting carbon sequestration benefits in soil, water, or durable goods. This can be done by assigning additional "ranking points" to adaptation and resilience projects that sequester carbon.

   RATIONALE: Fisheries face many urgent and increasing risks caused by carbon emissions. Therefore our members have an interest in seeing every dollar of carbon revenue deliver the maximum possible reduction in emissions, even as they recognize the need to deal with the unavoidable consequences that are already occurring.

2. **Where labor standards guide investment of carbon proceeds, use a local wage standard (e.g. average wages by county).**
   RATIONALE: That rural communities and enterprises that lack the wealth and resources of major metropolitan areas would otherwise risk losing access to the economic and environmental benefits of this policy. Much of Oregon's fishing industry is situated in communities that cannot compete with Portland wages. If costs are artificially inflated, fewer emissions-reducing projects will be undertaken; many good projects may not occur at all.

3. **Cap direct bill assistance at a maximum of 15% of discretionary investments, preferably less.** Instead, we support this bill's intention to provide assistance for low-income people by focusing a portion of carbon revenue on investments to help them "become the solution," by funding new energy-saving projects in their homes, vehicles etc.
   RATIONALE: This drives lasting reduction in energy bills, while also reducing emissions. Bill assistance delivers only a bandage, not a solution. Wherever possible, assistance designed to ease the inequitable effects of a carbon price should also drive emissions reductions.

4. **Maximize emissions benefits in transportation investments by setting guidelines for use of Highway Fund Climate Investments** Account: Suggestions:
   —Reserve at least 85% of funding for projects that measurably reduce emissions and/or increase capacity to do so.

—Reward extra points to projects that measurably increase resilience to and indirect impacts of carbon emissions and climate change on water supplies, fisheries, forests, soils, estuaries, floodplains.

Rationale: Transportation is the largest source of GHG emissions in Oregon, accounting for more than 1/3 of total emissions, and the sector's emissions are growing—driving 60% of the 2015 increase in Oregon's total emissions (OGWC 2017).

5. **Climate Investments Grant Program (within Highway Fund)**
   a. **provisions for impacted and distressed communities: Consider making investments roughly proportionate to pollution reduction. The principle: invest to solve the problem where it occurs—not where it does not.** Then address socioeconomic objectives as an overlay "to the extent feasible."

      RATIONALE: reducing emissions is (or should be) job 1. Provisions in this measure risk concentrating a lot (up to 90%) of the money where it might not deliver.

      Currently SB 1070 reserves at least 50% of funds for projects in "impacted communities," and at least 40% for "economically distressed areas," with an "emphasis placed on projects or programs that support job creation or job education and training opportunities." Further, these places "may be, but need not be, considered mutually exclusive."
      RISK: Potentially up to 90% of all money goes to "impacted" and "distressed' communities.
      —Can these places possibly generate enough emission reductions to justify taking that much of the money?
      —What about the rest of the state?
      —What if most emissions come from other places? Should up to 90% of the funds go to these specially designated places instead, leaving as little as 10% for everywhere else?

      DEFINITIONS:
      "IMPACTED:" Not yet determined. Env Quality Commission is tasked to "consult with the Environmental Justice Task Force, the Oregon Health Authority, other state agencies, local agencies and local officials in adopting by rule a methodology for designating impacted communities"
      "ECONOMICALLY DISTRESSED": designated by OR Business Development Department.

   b) **Clarify explicitly that energy efficiency and emissions reduction would be eligible for grant funds under this bill in order to reduce emissions from highways, improve freight mobility, and reduce congestion.** This should

include mobile and stationary equipment that directly or indirectly supports these objectives in multiple ways, thus improving the environmental and transportation performance of the Oregon highway system. For example, this would include:
— freight mobility improvements that contribute to emissions reduction and freight mobility over highways by monitoring and managing truck fleets to minimize congestion, idling time, and unnecessary emissions that result from undetected maintenance issues.
—Fuel efficiency improvements in vessels, trucks, tractors, etc, that produce or handle goods shipped over highways;
—Clean fueling, battery swap stations, and EV charging stations in manufacturing plants, cold storage and ice facilities, etc.
—Fuel efficiency improvements at freight distribution and consolidation facilities that support more efficient over-the-road shipping.

RATIONALE: Two Reasons:
First, transportation (by land, air and sea) constitutes the largest single source of Oregon's carbon emissions. That makes transportation the top target for emission reductions.
Second, much of the work of reducing these emissions must occur off the highway roadbeds, but within the highway system's functional tributaries, distributaries, and its staging and holding areas. Improvements in these peripheral components of the highway system can reduce emissions and congestion from Oregon highways in the same way that floodplains reduce flooding in a river and function as part of the larger river system.

c) **Ensure that funding criteria are technology-neutral, at least in rural areas and resource-dependent communities and industries.**
RATIONALE: This ensures eligibility for any approach that delivers verifiable emissions reductions (or structurally increases capacity for low-carbon economy).

Currently section 36 of SB 1070 emphasizes electrification of transportation as "necessary to reduce petroleum use, achieve optimum levels of energy efficiency and carbon reduction, and meet federal and state air quality standards…." That's true enough, but it produces a geographic inequity: Electrification today appears to be more practical in urban areas than rural ones. Primary resource industries like fishing, farming and logging do not yet have practical options to "go electric."

This policy should meet people where they are (not where we might wish they were). This means it should help them afford to reduce emissions with the means that are actually available to them. A technology-neutral performance standard for emission reductions will achieve that, enabling fuel efficiency

improvements instead of electrification where appropriate. This may also make it possible to earn greater support and participation from rural and resource-dependent communities.

6. **Allocate a portion of all carbon revenues (suggested: 25%) for adaptation and resilience to carbon impacts, remediation of carbon pollution, and related research needs, (including both marine and terrestrial environments**). Give additional ranking points to proposals that offer verifiable and long-lasting carbon sequestration benefits in soil, water, or durable goods.

   RATIONALE: This approach recognizes the need to deal with the unavoidable consequences of carbon emissions, while also using adaptation and resilience projects to further draw down carbon concentrations.

7. **Add representation to the Greenhouse Gas Cap and Investment Oversight Committee. as follows:**

   — One member who represents Oregon coastal communities and fisheries (e.g. communities that depend on commercial fishing/processing, aquaculture, and recreational fishing and coastal/marine ecotourism).
   — One member with expertise in science of ocean acidification, marine ecosystem response to carbon emissions, or adaptation and remediation strategies to reduce harm.
   —One member from tribal governments to ensure that tribal authorities, rights and interests are recognized.
   —One member from a primary production and/or manufacturing industry that depends on reliable and affordable energy and transportation systems.

   RATIONALE: These additions help to ensure support and participation from people who are important to the political, economic, and environmental success of this policy. Many of them are uncertain about the benefits to their communities, and having a role in oversight can help to ensure that they get a fair shake.

8. **Fund projects to improve fuel efficiency in both vehicles and commercial marine vessels. Specifically:**

   —Facilitate investment by using simple, cheap "input and output" measures to confirm emission reductions in transport (instead of mandating costly "verified" technologies). For example, fuel purchase records, fuel flow meters, and biannual emission tests can prove emission reductions in vessels and trucks.

   RATIONALE: Transportation is the state's largest source of carbon emissions. Cost-effective and practical guidelines are needed to enable investments to reduce emissions from vehicles, marine vessels, tractors, and other mobile fuel-burning equipment.

Thanks again for the opportunity to participate in this process. Feel free to contact us if you have any questions or if we can assist in any way.

Sincerely,

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From: Fergus Mclean <willamettedams@q.com>
Sent: Thursday, September 28, 2017 10:36 AM
To: Hernandez Isabel
Subject: SB 1070 testimony regarding Stringency

Comments for the Clean Energy Jobs Work Group on Agriculture, Forests, Fisheries, Rural Communities and Tribes following up on the September 21 hearing:

Summary: *Oregon's vast forest carbon storage capacity is like that of no other state, and exceeds all of the state's fossil fuel-based emissions combined. The 8% limitation on the use of carbon offsets proposed under SB 1070 will unnecessarily limit the potential market for carbon offsets from Oregon's forests. Emphasis on the generation of forest carbon credits of the highest quality, or* ***stringency****, can best capture the huge carbon value of Oregon's forests for all the people of Oregon, particularly our forest communities. That may best be done through the creation of a forest carbon research and extension institution in the Elliott State Forest.*

Colin McConnaha of ODE explained how higher percentages of permitted offsets can be accepted in the California carbon offset market depending on the *stringency* of those offsets- that is, the scientific verifiability and reliability of those offsets.

Emphasis on the quality, or *stringency*, of Oregon's forest carbon credits can create a market opportunity which increases the value of the abundant potential carbon credits from our forests and permits the capture of that enhanced value for rural timber communities in particular and for the state's economy as a whole, and should be factored in to SB 1070.

As possibly the world's largest forest carbon storehouse- and with some of the world's finest forest carbon scientists- Oregon can rightfully become the global leader in offering high quality, high value forest carbon offsets by investing in forest carbon research which can advance the relatively undeveloped science of fundamental forest carbon processes and turn this knowledge into a driver of a revitalised forest-based economy- but only if the percentage of forest carbon credits eligible for compliance is raised- to perhaps as high as 30% or even higher. The Elliott State Forest can make an excellent base for such a research institution.

By setting aside half of the Elliott Forest as a carbon reserve, a one-time sale of carbon credits could offset 1/6 of one year of Oregon's entire carbon footprint and generate enough revenue to completely buy the Elliott out of the Common School Fund and convert it to a premier forest carbon research and demonstration facility.

Sale of the Elliott's annual carbon production alone is capable of funding the ongoing operation of such a research facility, while both research and commercial timber harvest are conducted on the other half of the Elliott's 82,000 acres, creating more value for the state. Another key

function of such an Elliott Forest project could be providing outreach services to facilitate access for Oregon's small woodlot owners to global carbon credit markets.

Another benefit beyond the value derived from selling carbon credits from the Elliott which makes the creation of forest carbon reserves a great investment for the state is the fact that carbon credits are leases, not sales. At the end of the 100-year reserve lease period Oregon will retain enormously valuable 100-year older stands of prime timber- in addition to having accomplished restoration of the ecological resilience of a globally significant, rare mature coast range rainforest hosting threatened salmon, murrelets, bald eagles and other old growth-dependent wildlife species.

Allowing a generous allotment of the highest quality forest carbon credits for meeting pollution abatement compliance under SB 1070 is key to capturing the value of Oregon's vast forest carbon for the benefit of all Oregonians- particularly residents of our forest communities.

October 6, 2017

Public Comment to the Clean Energy Jobs Work Group on Agriculture, Forests, Fisheries, Rural Communities, and Tribes

To: Representative Helm and Members of the Workgroup
Re: Senate Bill 1070, Clean Energy Jobs Bill

Dear Representative Helm and Members of the Workgroup,

We are submitting comments on potential cap-and invest policies on behalf of the Oregon Organic Coalition (OOC). The OOC is an organic trade support group, with members and supporters from across Oregon's organic sector—from farmers to processors, wholesalers and retailers, organic policy advocates and consumers—representing Oregon's diverse, economically vibrant, organic trade.

We are encouraged to see Oregon legislators take up the urgent issue of Greenhouse Gas (GHG) reduction strategies. Oregon agriculture is directly vulnerable to the impacts of climate change, with reports that state water supplies will become increasingly limited, threatening a fundamental resource for the agriculture industry. Also predicted, as a result of climate change, are greater pressure from weeds and pests, increased animal diseases, reduced winter chill hours, and an increased number of extreme weather events.

As this Work Group reviews and makes recommendations on specific components of a cap-and-invest program for Oregon, we encourage you to consider perspectives that reflect the diversity and innovation of Oregon's organic agricultural community. Organic agriculture in Oregon is strong and growing. Oregon is 6th in the nation in total organic acres and 4th in the nation with organic farmgate sales, valued at $269 million, a 14% increase over 2014, with continued growth predicted. According to Organic certifier, Oregon Tilth, we are also witnessing a recent trend of transition to organic production practices by non-organic growers seeking new opportunities. Oregon's organic sector is hiring employees, adding acreage, and increasing revenue. The economic value that organic agriculture and production brings to Oregon cannot be overstated; the positive environmental impacts of organic agricultural practices, are additionally compelling.

Several recent studies indicate the important roles that organic farming and ranching practices play in addressing climate change. One study, directed by The National Soil Project at Northeastern University,

shows soils from organic farms had 26% more potential for long-term carbon storage and 13% more soil organic matter than soils from non- organic farms. The results were based on 659 organic soil samples from 39 states. These were contrasted with samples from more than 700 non-organic farms in 48 states. This important study provides significant evidence that organic agricultural practices build healthy soils and can be part of the solution in the fight against global warming. Organic agriculture is part of a toolkit of climate solutions. It can help reduce GHG emissions, enhance a powerful resource for sequestering carbon, and provide many additional environmental and human health benefits.

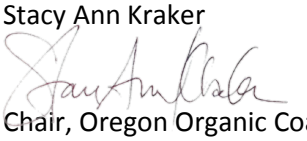
We ask that this Work Group develop policies that reflect the tremendous impact that Oregon's organic agricultural sector has on building healthy, economically viable, communities in the state, and the important role of organic agriculture as a whole in impacting climate change mitigation through carbon sequestration. Specifically, we are asking for:

1. Designated economic credit for organic farming;
2. Credit for specific farming management practices proven to mitigate climate change and enhance carbon sequestration;
3. Expansion of funding for programs to support organic research and education, considering the proven carbon benefits of organic farming.

Thank you for your consideration of our request to specifically evaluate and include the benefits and practices of organic farmers in any cap-and-invest policies.

We wish these comments to be submitted as testimony for public hearing.

Stacy Ann Kraker



Chair, Oregon Organic Coalition

A bill to create jobs while reducing Oregon's carbon footprint from 60 million tons a year to 50 million tons by 2025 is percolating in Salem in preparation for the 2018 legislative session. It's called the Clean Energy Jobs bill, also known as SB 1070, a cap-and-trade system similar to California's.

Surprising new Forest Service monitoring data showing that Oregon's forests, overall, absorb 36 million tons of CO2 annually has come as a wake-up call to policy makers about the incredible amount of carbon absorbed by Oregon's tremendous forests. Our strategies to reduce atmospheric CO2 must address forest management policy.

The new realization about the influence of our forests on our state's carbon footprint provides an opportunity for former forest policy adversaries to find a common pathway forward out of the tiresome stalemate over timber management practices which has come to sound like the fabled argument between the blind men over the proper way to describe an elephant.

We've seen precious little agreement over forest policy since Bill Clinton sweet talked industry and agency folks into sitting down at the negotiating table with scientists and environmentalists to hammer out the North West Forest Plan 25 years ago. Management decisions play out in the courts, to nobody's satisfaction.

A focus on the workings of the forest carbon cycle- along with the promise of a significant new source of income from the sale of carbon credits- supports a new, unifying frame of reference for understanding forest processes which can harmonize chronically polarized viewpoints and forge a new consensus over forest policy- and it can start with the Giesy Plan for the Elliott State Forest.

Wayne Giesy is an industry old-timer who first proposed his simple strategy for a cease fire in the timber wars 30 years ago. The Giesy Plan, first, protects the streams and waterways; it then divides the remaining forest equally between protected reserves and areas devoted to industrial management. The Giesy Plan served as the template for John Kitzhaber's Oregon Plan as well as for timber legislation from both Defazio and Wyden. An updated version of the Giesy Plan applied to the Elliott State Forest is gaining traction in Salem and shares surprising similarities with ecologically based, carbon-oriented proposals for Elliott management policy.

After setting aside the agreed-upon 20% of the Elliott land base for riparian reserves for coho salmon, under a carbon-oriented, modified Giesy Plan the remaining Elliott timberland could be divided into not two, but three 22,000-acre pieces: one for industrial-style logging and another for expanded older timber reserves surrounding the nests of spotted owls and marbled murrelets, as Giesy suggested. An additional third sector should be dedicated to building a world-class forest carbon research institution to push the frontiers of understanding of the workings of forest carbon cycles, including production of the highest quality (and highest value) carbon credits. This institute would manage the forest's carbon reserves, monitor ecological and economic effects of all management activities, conduct public education and outreach, and carry out the kind of wide-ranging adaptive management investigations into different approaches to timber harvest promised but never carried through under the North West Forest Plan. Research would include study of job creation possible from non-timber products available when a forest is managed as a functional ecosystem rather than a single-purpose lumber factory. It could combine work in those new markets with carbon reserve creation and monitoring work, and integrate both with a wildland forest fire training academy to create a

new kind of forest workers' career path. We can call the new institution the Elliott State Educational and Experimental Forest.

Such varied income streams create a strong financial picture. Revenue from intensive logging will satisfy the returns needed for the Common School Fund while the sale of Elliott carbon credits, if provided for with proper foresight in SB 1070, can finance the building of a world class Oregon forest carbon research institution and, over time, complete the buyout of the forest from the Common School Fund.

New opportunities and risks in our ever-changing, mighty forests of the west challenge us to rise to the occasion and come together in the pursuit of a deeper understanding of the cycles of life in the forest represented by the mysterious processes of carbon flux. An Elliott State Educational and Experimental Forest authorized in the Clean Energy Jobs bill takes Oregon's forest stewardship to a new level.

A longer, referenced version of this essay is available on these websites: http://oregon2.sierraclub.org/many-rivers http://world.350.org/eugene/

Comments to SB 1070

Angus Duncan

President, Bonneville Environmental Foundation

Chair, Oregon Global Warming Commission)

October 26, 2017

Introductory Comments

Oregon has been at the forefront of American jurisdictions and private parties in recognizing the challenge of climate change and acting to reduce the greenhouse gas (GHG) emissions for which its citizens are responsible.

In 1991 the State committed to holding emissions at or below 1990 levels; without, lamentably, including implementation measures.

In 2003 Governor Kulongoski joined his peers in California and Washington to organize the Governors' West Coast Climate Change Initiative, pledging the three states to collaborate in setting and meeting emissions reduction goals. To implement this commitment in Oregon, our Governor empaneled a Governor's Advisory Group on Global Warming, which handed him back a thick report of recommended measures and proposed State reduction goals. The Governor adopted most of these recommendations, including the goal. Lamentably, again, implementation measures were absent.

In 2007 the Legislature adopted the Advisory Group's recommended emissions reduction goals, but aspirationally and again without measures to directly reduce emissions. However, the Legislature did act indirectly by adopting a Renewable Portfolio Standard (RPS) for Oregon utilities of a certain size: that by 2025 at least 25% of their loads would be served by *new*[1] renewable generating resources. In 2009 Oregon adopted a Clean Fuel Standard (CFS) for vehicle fuels that required a 10% reduction in overall greenhouse gas emissions from vehicles by 2020. Negotiated agreements in 2010 and 2016 are leading to significant reductions in coal-generated power servicing Oregon electric loads. Oregon's enduring commitment to energy efficiency investments, led by the work of the Energy Trust, of many consumer-owned

[1] The new resources would be added to Oregon's existing base of renewable hydroelectricity, resulting in net renewable generation levels significantly higher than 25%.

utilities, and of local government transportation and land use policies, all are among the contributions that have consistently reduced overall Oregon emissions from 1999 to 2015[2].

All this said, Oregon is not on track to meet its GHG emissions reduction goals: not in 2020, 2035 or 2050. Not even close. Additional enforceable measures – investments, incentives and regulatory instruments – along with leveraging favorable global technology trends, will be needed to have any chance of achieving what we set out to do. Above all there needs to be an Oregon-economy wide signal of our resolve, one that acts to complement the needed programmatic measures like an RPS and a CFS, and one that incents and collects reductions from more than just a few large emissions sources. This was recognized in the original 2004 Governor's Advisory Group Report, which called for "a special interim task force to examine the feasibility of, and develop a design for, a load-based (GHG) allowance standard."[3]

A follow-on Governor's task force did execute this task and delivered its favorable report, but in the teeth of the 2008 recession and at the accession of Barack Obama to the Presidency. Both of these events discouraged further state-level action on a carbon cap in Oregon at the time. Obama and a hostile Congress failed to agree upon a durable national strategy for curbing GHG emissions. Now, under President Trump, Oregon – and the country – are paying for our failure to act locally, despite over a decade of consideration and multiple well considered determinations that an economy wide cap was necessary to reach our carbon goals, and would benefit Oregon's economy.

SB 1070 gives Oregon the opportunity to remedy that failure of the last fifteen years to adopt an enforceable economy-wide carbon cap.

Comments on SB 1070 Draft

My comments[4] fall into two categories: (1) how can the carbon cap tool be most effective at reducing atmospheric carbon; and, (2) for what purposes should revenues be allocated, and how must those purposes be prioritized?

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[2] . . . when, due to lower gasoline prices and resulting increases in vehicle size and miles traveled, transportation emissions began to rise and pull overall emissions up as well.

[3] See "GEN-2, attached.

[4] Note: my affiliations notwithstanding, these comments are individual, do not represent the views of either BEF or the OGWC, and have not been viewed or approved by either entity.

For simplification, when I use “carbon” it should be understood to refer to carbon dioxide and to other generally listed greenhouse gases (including substances, such as black carbon, that may be subsequently included).

The most important two observations I can make are: (1) the measure must result in an effective, fair, flexible, durable, transparent and predictable carbon reduction tool capable of capturing the necessary carbon reductions; and, (2) that revenues generated in the process of complying with the carbon cap are used to further drive carbon emissions down, and to cushion the near-term costs of transitioning to a low-carbon economy and energy system. Where both these latter outcomes can be served with the same allocation of revenues (e.g., investing in energy efficiency), those uses should have the highest priority. ***Having considered multiple examples of carbon laws and regulations, it is my view that SB 1070 contains the necessary components to achieve these important objectives.***

I. Carbon Cap Effectiveness

A. Allowance Allocation

SB 1070 sets reasonable parameters for regulatory decision-making about allowance allocation. These comments are meant to anticipate issues that should inform and condition implementation of the legislation, and to assure sufficient flexibility to support an efficient working carbon cap process.

As a general statement, the allocation of allowances: (a) should progressively reduce allowable carbon; (b) should be (and perceived to be) fair, flexible, durable, transparent and predictable; (c) may be used to cushion program impacts when needed to ease transitions; and (d) should complement and reinforce existing, targeted carbon reduction programs.

In practice these principles have some natural tension with each other. A “predictable” allocation may not also be a “flexible” one, so allocations outside the auction should generally be fixed for a period of years, then adjusted at specified intervals based on pre-agreed criteria. Such a process needs to reserve short-term flexibility to account for our regional wet and dry hydroelectric seasons. Predictability is achieved by specifying the adjustment mechanisms, the allowable amounts, and the circumstances within which they apply, in advance.

In addition to the hydro year adjustment, the allocation to electric utilities should track and reinforce the emissions reductions already anticipated under SB 1547 to ensure additionality and avoid an allowance windfall. The normal variability in electric utility dispatch from different resources with different carbon profiles must be accommodated in the short term (perhaps with a rolling average requirement), while taking precautions against utility gaming of such variability (e.g., redispatch from coal units to non-Oregon loads rather than actual carbon profile reductions).

A shift in load from one sector to another (e.g., Electric Vehicles (EV's) displacing internal combustion vehicles, moving this load from gasoline to electricity) could be supported by a proportional shift in the allocation of allowances to the electric utilities. Other such anticipatory adjustment mechanisms can be imagined, and provided for in advance to improve predictability. The five year review of utility allowance allocations called for in Section 10 (2) should serve for any such fine tuning needed over time.

1. Auction of Allowances; Adjustment Mechanisms: Agree that allocation by auction is a fair and equitable method that will avoid the need for many direct allocation adjustments, subject to recognition that varying ability of different entities and populations to carry auction costs may still require direct adjustment intervention. Thus SB 1070 appropriately makes provision for free allowances to energy-intensive, trade-exposed businesses, and consignment allocation to regulated utilities. The State and its administering agencies will need to be prepared for a process of defining, identifying and allocating to these parties in a transparent and equitable process.

2. Consignment Allocation to Utilities: Agree with the consignment mechanism, which has been pioneered with success in California's AB 32 cap. See below for prioritizing use of revenues.

3. Emissions-based Allocation; Baseline: Allowable emissions under the cap can be allocated most fairly, in Oregon, against an emissions-based baseline. Shifting loads can be accommodated by shifting the emissions allowances associated with those loads.

Electric utilities in Oregon have dramatically different resource bases, as well as in-year variability of resource mixes. These are partly a matter of history and partly of past resource choices made. In neither case should present or future customers of the utilities be unduly rewarded or penalized in

consequence of those histories, as would be the case if allowance allocation (allowed emissions) were based on loads. For example, it's unlikely customers of either Portland General Electric (PGE) or PacifiCorp (PAC) chose their homes or businesses based on which utility would serve them, and still less of what the utility's resource portfolio then consisted. A load-based-only allowance system would unfairly favor PGE customers over PAC customers.

An emissions-based allowance system with a base year of 2005 would give to PAC more allowances than it would to PGE, since PAC then had a more carbon-intensive resource portfolio. At the same time, a proportional annual emissions reduction calculation requires more annual absolute reductions from PAC and its customers if overall State emissions reduction goals are to be reached. Allocation can be proportional to the carbon intensity of each portfolio at the base year (or an average of multiple years around the base year, to avoid individual year distorting effects). Both utilities should be expected to arrive at a comparable carbon intensity in 2050. Utilities substantially or wholly served with zero-carbon hydroelectricity would, at least initially, get few free allowances, unless for the purpose of adding load for electrification, since their obligations to reduce carbon content would be negligible or non-existent. Such an arrangement would be both equitable and effective.

B. Interaction with other State carbon regulation and programs: The carbon cap should not be expected by itself to result in sufficient emissions reductions across all emitters to achieve State reduction targets, as California's experience has demonstrated. A cap is likely to be most effective when the regulated entity can see clearly the cost of emitting, that cost is at a meaningful and not trivial level, and the entity is positioned to respond to that signal (e.g., manufacturing, utilities, fleets and other large point sources of GHG's). Even in these instances, emissions reduction options may involve longer-term or lumpy choices that may not easily respond to real-time price signals. Regulated entities may more readily respond to other, more targeted and visible signals. Thus, moving electric utilities out of fossil-based resources and into renewables may be more efficiently accomplished with a Renewable Portfolio Standard, and Integrated Resource Planning that takes into account forward compliance with the carbon cap.

Many small non-point emissions sources (e.g., homes, small businesses,

personal and most commercial vehicles) will not be directly regulated. For many of these the pass-through carbon cap price signal is severely attenuated – a carbon price of $10/ton translated roughly to a 1¢/gallon signal at the pump – and will require different, more direct incentives and rules if greater carbon efficiencies are desired and needed (e.g., choosing an electric vehicle over a less carbon-efficient internal combustion vehicle).

For purposes of compliance with the carbon cap, emitters will realize the avoided costs of purchasing allowances whether the reductions are directly in response to the cap or are the outcomes of other public or private decision drivers. The cap is ancillary to other, targeted programmatic measures, ensuring that emissions reductions not captured by other programmatic measures are nonetheless captured.

C. Point of Regulation: Generally agree with DEQ's analysis for point of regulation as far upstream as is practicable, with the caveat that the more distant the point of regulation is from the ultimate decisionmaker (e.g., deciding between an EV and an ICE vehicle), and the more attenuated the price signal, the more important are the ancillary incentives and rules described in "B" above.

D. Cost containment/flexibility, allowance price stability/predictability: SB 1070 includes many of the tools identified elsewhere for cost management and compliance flexibility (reserves, multi-year compliance periods, banking, free allowances to energy-intensive, trade-exposed industries). I would also emphasize the importance of market liquidity in cost management, and the consequent importance of linkage with California or other capped carbon markets to increase such liquidity. Oregon is a small state with a limited number of entities likely to be directly subject to the cap. If Oregon acted in isolation from other states it would likely experience limited liquidity, more difficult price discovery and higher clearing prices. Linkage is the most direct way to address and neutralize this market effect.

E. Energy-Intensive Trade-Exposed Industries: Agree with extending free allowances to such entities, strictly defined and subject to regular reconsideration as broader US and global economic circumstances evolve. Such reconsideration might take place with the scheduled broader periodic review of allowance policies (e.g., every five years), or Oregon might opt for a rolling (five year) allocation to avoid cliff effects.

F. Compliance Periods: SB 1070 proposes annual emissions allowances but three-year compliance periods. Legislators should consider longer periods during which allowances may be banked if these result from Covered Entities taking actions that front-load emissions reductions. Otherwise, some "lumpy" actions that might bring earlier emissions reductions could be disadvantaged or penalized by their scale and schedule, and so discouraged. A Covered Entity should have the flexibility to either not buy (or sell) unneeded allowances, or acquire and retain them to strategically manage compliance costs.

G. Market Integrity: SB 1070 intends to allow other market participants than just Covered Entities. Especially if linkage does not take place, or is delayed, having additional participants (e.g., non-covered entities) will improve market liquidity. Allowing non-Covered Entities to participate may also raise the risks of market irregularities, underscoring the need for full transparency in auction events and for the State to preserve the capability to step in with reserved allowances and other tools to offset and penalize any bad behavior.

H. Scope: Generally agree with the definition of Covered Entity/Source, and with the proposition that initially a Covered Entity is any Source that is responsible for emitting $\geq$ 25,000 tons of CO2e annually.

I. Woodlot Offsets and Forest Carbon: SB 1070 properly limits the allowed share of compliance that can be met with offsets, and properly constrains potential offset projects to those that can establish their additionality and other customary requirements (S10(3)(b). Forest carbon acquisition is frequently proposed for offset treatment, and we would generally support this inclusion for small woodlot owners, reemphasizing the importance of the *additionality* of carbon acquisition above and beyond a contemporaneous base period for these owners. We would further encourage the State to enable aggregation of such woodlot properties for offset purposes, recognizing that different woodlots will be at different stages of maturity, different woodlot owners will have different financial and cash flow circumstances, and owners should have the flexibility to harvest in sequence so long as the aggregated forest holdings are acquiring the specified net carbon (with appropriate reserves to

account for unanticipated losses, e.g., from fire).

II. Use of Revenues

The two priority uses of revenues generated from the carbon cap should be:

a. applied to or invested in activities that further reduce carbon emissions or increase carbon capture and sequestration; and
b. redressing the disproportionate adverse effects of higher energy and other costs on needy or vulnerable participants where these are attributable to the carbon cap.

Where both these outcomes can be served with the same allocation of revenues (e.g., investing in energy efficiency), those uses should have the highest priority.

For example, investments in higher carbon efficient transit to extend service to low-income neighborhoods might be in this highest category. Incentives to acquire more carbon-efficient vehicles, appliances, industrial equipment and other carbon-reducing outcomes might also. Incentives to extend small woodlot forest harvest rotation periods might as well, depending on the economic circumstances of the owners.

Without this overriding purpose, the carbon cap will appear to some, and be mis-characterized by others, as a backdoor revenue measure dressed up in carbon clothes.

My comments on revenues will leave to others the secondary criteria for their allocation and for the organization of stakeholder groups that may be established to advise on criteria and distribution channels. So long as the primary screen for these is carbon reduction and cushioning those who need and merit a cushion during the decarbonizing process, the secondary stages are more important for integrity of process than for targeting funding.

To: Work Group on Agriculture, Forests, Fisheries, Rural Communities, and Tribes
From: Bob Rees, Association of Northwest Steelheaders
Bob Van Dyk, Wild Salmon Center
Brad Warren, Working Group on Seafood and Energy
Chandra Ferrari, Trout Unlimited
Liz Hamilton, Northwest Sportfishing Industry Association
Re: Clean Energy Jobs Legislation and Need for Natural Resource Investments
Date: November 2, 2017

Oregon's natural resources, including our fisheries, face daunting pressures as a result of climate change. Substantial investments are needed to protect and sustain our natural resources in the face of these pressures. Oregon has a variety of programs and agencies that can lead the effort to ensure resilience in the face of climate change, but significant increases in resources are needed as well as increased coordination among agencies for a common and comprehensive plan for climate adaption for fish and wildlife resources.

The Challenge of Climate Change:
Climate change threatens disastrous consequences for both people and the environment. No longer is climate change a potential threat in a distant future, in fact "Oregon's climate has already warmed considerably, and the cause is most likely rising greenhouse gases."[1] We must take steps to both limit our emissions while at the same time providing for the resilience of our natural resources. Though Oregon is only a small part of global emissions, the solution to global warming will only be found if every state and country, large and small, takes step to reduce emission of greenhouse gases. We must do our part.

While reducing emissions, we must also work to adapt to the changes that climate change will cause to our state. Adaptation and resilience require investment in natural resources. Below we note some of the projected effects of climate change on our fisheries and freshwater resources, but the projected affects on Oregon's natural resources and communities extend far beyond the those noted here.[2]

Effects on Fisheries and Water Resources:
The *Third Oregon Climate Assessment Report of January 2017* contains alarming information on the projected effects of climate change on our fisheries. Work by the Columbia River Basin Tribes underline these concerns.[3] Fish habitat in Oregon is expected to change significantly, and for the worse.

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[1] Dalton, M.M., et. al. (2017) The Third Oregon Climate Assessment Report, Oregon Climate Change Research Institute, College of Earth, Ocean and Atmospheric Sciences, Oregon State University, Corvallis, OR.

[2] For example, more frequent large fires and a longer fire season are predicted, as well as disease and insect outbreaks.

[3] Sampson, D. (2015) Columbia River Basin Tribes Climate Change Capacity Assessment, Institute for Tribal Government, Hatfield School of Government, Portland State University, OR.

Freshwater Effects:

- Warmer temperatures will mean less snowpack and less water for fish, especially in the summer.
- Earlier snowmelt will change streamflow timing that salmon have evolved to use.
- Higher winter streamflows increase the risk of scouring of the streambeds where salmon spawn.
- Increased temperatures will create more lethal conditions for salmon, steelhead, and bull trout, which are coldwater fish.
- Shorter intervals between more frequent extreme water conditions, such as the severe 2015 drought that was followed in 2017 by flood events, will further stress salmon runs.

Marine and Coastal Effects:

- Loss of estuarine habitat due to sea level rise.
- Warmer oceans that provide less food for salmon and more predators.
- Broad potential disruptions in the food chain due to ocean acidification (OA) and hypoxia (low oxygen levels).
- Crab, mussel and clam harvests disrupted by increasing toxic algae blooms linked to warm, high-CO2 water.
- Acidification forces costly adaptive maneuvers to protect young oysters from acidified seawater.
- Overheated river waters kill returning adult salmon.

These changes will affect far more than fisheries of course, as communities face related challenges like increased flooding and water shortages.

<u>Adaptation and the Clean Energy Jobs Bill</u>:

1) We support dedication of 30% of all revenues generated (after constitutionally allocated funds are deducted) to the purpose of implementing climate change adaptation and resiliency actions that ensure sustainability for our renewable natural resources. These funds should be directed toward existing agencies and programs to the extent possible. Agencies like Fish and Wildlife, Water Resources, Forestry, Agriculture, and the Watershed Enhancement Board already have relevant plans and mechanisms that could be amended, enhanced, and funded by these resources. For example, the Integrated Water Resources Strategy identifies a variety of actions necessary to strengthen the resiliency of ecosystems to the impacts of climate change that require enhanced funding to be fully and effectively implemented.
2) We support allowing use of allowances to achieve 8% of required emission reductions. Offsets provide a powerful tool to harness private capital for projects that "draw down" carbon and safely store it in productive natural environments. Offsets today help to finance important forest conservation projects that sequester carbon while enhancing climate-resilience of fish habitat. Offsets protocols now exist for carbon-sequestering coastal marine and estuarine habitats, providing a

tool to simultaneously achieve multiple benefits: restoring salmon populations, strengthening local climate resilience, and improving local flood control.

3) Of the funds allocated to the State Highway Fund, a portion should be prioritized to address climate resilience along with transportation needs. For example, projects that address fish passage impediments, storm proofing roads, or relocating roads out of floodplains could both improve transportation and improve the resilience of our natural resources.

Specific Adaptation Strategies:

Many things could be done to buffer our fisheries against the effects of climate change.

Coastal/ocean Strategies

- inventory and protect land for inland migration of intertidal and wetland habitats on open coast and estuaries
- protect and restore eelgrass beds to mitigate ocean acidification (OA)
- protect and restore tidal marshes as carbon sinks (also for flood storage capacity)
- protect ocean areas that may add resilience to ecosystem (OA refugia, areas of high diversity, etc.)
- Tidegate replacement

Inland Strategies

- Protect cold water sources (land purchases or easements)
- Invest in winter water storage solutions
- Invest in water conservation technologies (provide real water savings)
- Secure instream water rights
- Provide further protections to riparian corridors, for both rainfall retention and shade.
- Invest in riparian planting to shade streams
- Increase effort in invasive species mgmt. (prevention, control, eradication)
- Install climate resilient passage (culverts/low head dams etc), with consideration for larger projected floods
- Screen diversions
- Encourage watershed restoration strategies such as beaver reintroduction to protect and naturally increase water storage

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September 2017 update from the Forest Carbon Task Force:
http://www.keeporegoncool.org/sites/default/files/meeting-supporting-files/September%202017%20Oregon%20Forest%20Carbon%20Picture_revised.pdf

2011 US Fish & Wildlife report on carbon stored in the Elliott:
http://archive.ecotrust.org/forests/Carbon_Analysis_of_Elliott_State_Forest.pdf

Background article by Fergus Mclean on this topic available on either the 350 Eugene or the Many Rivers Sierra Club websites.

Suggested SB 1070 modifications to include forests in Oregon's carbon strategy:
Section 7(1)
Add a representative of Global Warming Commission Forest Carbon Task Force to Environmental Quality Commission Advisory Committee.

Section 9(10)d
Certify the Elliott State (Educational and Experimental) Forest as a *"General Market Participant"* eligible to trade offsets in the carbon trading market.

Section 10(3)a
Qualify offset projects from the Elliott as described under Section 21 to participate in the carbon trading market.
Section 10(3)c
Exclude forest carbon offsets from the 8% limitation on their use in compliance, according to the *stringency* of those offsets.

(New) Section 21:
Establish the Elliott State Educational and Experimental Forest under the management of the Global Warming Commission Forest Carbon Task Force, eligible to sell forest carbon credits into the carbon trading market from carbon reserves established of the ESEEF.

Divide the forest into four equal 20,000+ acre parts, to be used for riparian reserves, purely commercial timber production, and expanded owl/murrelet large timber reserves, with the remaining one fourth of the forest to be devoted to conducting experimental commercial management practices designed to optimize both carbon production and ecological function, and to ongoing research designed to make carbon markets accessible for the sale of carbon credits from private timberland.

Establish the institutional capacity to thoroughly monitor the economic, carbon-related and ecological effects of all management practices on the forest on an ongoing basis, report their findings annually to the legislature, and to share this information with the general public, especially schoolchildren.

The Register-Guard

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GUEST VIEWPOINT

Make the Elliott a forest carbon research hub

BY FERGUS MCLEAN
For The Register-Guard

The Clean Energy Jobs bill, which will create jobs while reducing Oregon's carbon footprint from 60 million tons a year to 50 million tons by 2025, is percolating in Salem in preparation for the 2018 legislative session.

Work on the bill — Senate Bill 1070 — comes as new survey data reveal that Oregon's forests absorb 36 million tons of carbon dioxide annually, more than half the state's entire previously known carbon footprint. This new recognition of the workings of our forest carbon cycle has come as a wake-up call to policy-makers.

It's difficult to exaggerate the possible economic importance for Oregon of the amount of carbon we now know our forests sequester. A crude valuation of 36 million tons per year, based on the California price for carbon offsets, would mean Oregon's forests absorb half a billion dollars' worth of carbon every year.

How can Oregon monetize this huge value? We have the experts, but they need support to lead us through the shift to a carbon-friendly forest policy.

The Giesy Plan for the Elliott State Forest promises one way that former adversaries can join forces to create a forest research institution in the Elliott and maximize forest revenue through a deeper understanding of the effects of management practices on the forest carbon cycle. Authorization of an Elliott Forest-based research institution can be included in SB 1070 — but that train leaves the station in mid-November, when the draft legislation goes to the Office of Legislative Counsel.

Wayne Giesy is an industry old-timer who first proposed his simple forest management strategy in the 1980s. It has found its way into timber plans authored by Gov. John Kitzhaber, Rep. Peter Defazio and Sen. Ron Wyden. An updated Giesy Plan for the Elliott State Forest is gaining traction in Salem, and shares surprising similarities with ecologically based, carbon-oriented proposals for Elliott management policy.

The classic Giesy Plan formula first protects streams and waterways, then divides the remaining forest equally between protected reserves and areas devoted to industrial management.

A carbon-oriented Giesy Plan, after setting aside 20 percent of the Elliott for riparian reserves for coho salmon, would divide the remaining Elliott land into not two, but three 22,000-acre pieces: one for industrial-style logging and a second for expanded older timber reserves surrounding the nests of spotted owls and marbled murrelets, as Giesy suggested.

The third sector should be dedicated to the study of forest management through the creation of a world-class forest carbon research institution to push the frontiers of understanding of the workings of forest carbon cycles, including production of the highest quality (and highest value) carbon credits, building on Oregon's overwhelming leadership in forest carbon production. This institute would manage the forest's carbon reserves, monitor ecological and economic effects of all management activities, and conduct public education and outreach.

Researchers would investigate job creation opportunities that arise when a forest is managed as a functional ecosystem rather than a single-purpose lumber factory, combine those with creating and monitoring a carbon reserve, and integrate both with a wildland forest fire training academy to create a new kind of forest workers' career path.

We can call the new institution the Elliott State Educational and Experimental Forest.

Income from logging could cover the annual obligation to the Common School Fund, while the sale of Elliott carbon credits can finance the building of a world-class Oregon forest carbon research institution and, over time, complete the $120 million buyout of the forest from the Common School Fund.

By authorizing the trading of Elliott Forest carbon credits in the language of SB 1070, lawmakers can launch a brand-new economic paradigm for Oregon's forests.

Fergus Mclean of Dexter, a retired forester, is a member of the Southwest Willamette Forestry Collaborative. A longer version of this essay can be found at http://oregon2.sierraclub.org/many-rivers and http://world.350.org/eugene.

Representative Helm and Beth,

I am planning to participate in the CEJ Agriculture, Forests, Fisheries, Rural Communities and Tribes Work Group meeting on Thursday November 2nd remotely and may provide some input by phone during the discussion and/or Public Comment portion of the meeting, but am submitting comments in writing as well.

Here is my input on each of the Policy Questions to be discussed:

Percentage of compliance obligation that can be met with offsets?
SB 1070: 8% cap, allows lower percentage in certain areas.
Proposal:
I recommend keeping the offset limit at 8%, as it currently stands in 1070. Here is some background, provided by The Climate Trust, about why keeping the offset limit at 8% is important:
"Certainty in significant, long-term demand for offsets will mobilize private capital into land-based GHG reduction projects. A reduced offset limit sends a signal of uncertainty to private investors, limiting interest in financing agricultural and forestry GHG reduction. The offset market can motivate agricultural and forestry GHG reductions at a faster pace and greater scale than auction fund reinvestment because it sends a long-term price signal that can be depended upon, makes payments for verified reductions rather than anticipated reductions, and focuses on the most cost-effective reduction opportunities. (For more information about this, see The Climate Trust's brief How the offset market mobilizes investment in emission reductions today, in which they discuss why the offset market leverages more private finance than the programs they have seen from California's Greenhouse Gas Reduction Fund.) Reinvestment of auction revenue is essential (especially for very small or difficult to quantify projects), but the strong demand for offsets created by an 8% limit is key to leverage private finance to achieve the emission reductions we need from agriculture and forestry."

Restrictions on offset project location?
SB 1070: Be located in the United States or a country with which EQC has entered an agreement for administering a carbon pollution market
Proposal:
It seems like there is value in limiting projects to Oregon so that Oregonians can benefit from offset funding, but I am not fully aware of the consequences of limiting the program this way.

Should aggregation be allowed?
SB 1070: Not addressed
Proposal:
Yes. So that small farms and forest owners can participate.

Principles that govern protocol development?
SB 1070: Not addressed
Proposal:

Include agricultural practices proven to mitigate climate change through carbon (or equivalent GHG) capture or sequestration, which are applicable to Oregon and farming practices currently implemented in Oregon.

Role of ODA and ODF in protocol development?
SB 1070: Not addressed
Proposal:
ODA could facilitate the process of receiving stakeholder input in order to develop protocols. If ODA is in this role, small and organic farms need to be fully engaged in the process.

Other comments:
Offsets may not be the most efficient way to engage Oregon agriculture in mitigating climate change through this policy.
It may be more effective to provide funding from reinvestment revenue for GHG mitigation by the agriculture sector. Consider establishing an additional Fund, similar to California's Healthy Soils Program, which would provide grant or other funding to the agriculture sector for projects which mitigate greenhouse gas emissions. These grant funds could leverage existing state or federal grants. For example, ODA could seek a federal grant through existing programs and use the state funding (Cap and Invest reinvestment revenue) as matching funds, to distribute funding to farms in Oregon.

Thank you for your consideration of these comments.

Megan Kemple
Oregon Climate and Agriculture Network

Claire Coates
Lewis and Clark Montessori Charter School

Representative Ken Helm
Work Group on Agriculture, Forests, Fisheries, Rural Communities, and Tribes
rep.kenhelm@oregonlegislature.gov

November 9th, 2017

Dear Representative Helm,

My name is Claire Coates, and I am a seventh grader at Lewis and Clark Montessori Charter School. I would like to bring to your attention how global warming, and climate change is currently affecting pacific northwest salmon.

According to a 2016 NOAA study, several observations of behavioral shifts in salmon, that are likely due to climate change, have been made in the past half century. The Chinook salmon from the Hanford Reach of the Columbia River, spawn date has shifted one week later since 1950. Salmon from 67 rivers on both sides of the Atlantic have moved smolt timing roughly 2.5 days earlier. Unusual catches of Atlantic Salmon show that range shifts in the North Atlantic have reached as far as Svalbard. In the early summer of 2015, unusually high temperatures hit the lower main stem of the Columbia River. Of all the redfish lake sockeye salmon detected passing Bonneville Dam, only 4% survived to Lower Granite Dam, and none survived after temperatures got to 20 degrees celsius. For Sacramento, the winter-run Chinook salmon survival in 2014-15, was the lowest ever seen, and is thought to have been caused by the California drought, which was caused by global warming. Judging by how quickly the population of salmon is declining, there's a good chance that by 2020 there will be no salmon left in Oregon.

A possible solution to this problem is using taxes obtained from the carbon cap and reinvesting them into technologies that may be able to save the salmon. In your clean energy jobs bill, please consider putting in a section that will help restore streams and habitat for Salmon.

I appreciate all that you are doing for Oregon, concerning the clean energy jobs bill.

Sincerely,
Claire Coates

APPENDIX A: Proposed Edits/Specific Questions relative to SB 1070:

NOTE: THIS SECTION BUILDS ON AMENDMENTS SUGGFESTED BY SNW AND OTHERS, BELOW. PROPOSED FISH/WATER ADDITIONS ARE IN *bold italics*

Preamble Section:

Page 2, line 16, Insert the following –
"Whereas, greenhouse gas reductions from emissions sources and sinks can help address climate change and its impacts to human communities and ecosystems; and

Whereas, the state has a vested interest in protecting human communities, ***ecological communities***, Oregon's economy and natural and working lands from the unavoidable impacts of climate change and ocean acidification; and"

Rationale: Clarifies that atmospheric greenhouse gases can be reduced through increased sequestration as well as avoided emissions;

P. 2, Line 26, Insert the following-

"Whereas, global climate change has a disproportionate effect on fish populations and aquatic communities which typically require specific water quantity and quality conditions and are therefore particularly vulnerable to warmer temperatures, modified precipitation patterns, diminished snowpack, ocean acidification and other effects of climate change."

Section 1: Greenhouse Gas Definitions:

Page 3, Line 21 – Add the following definitions:
"Greenhouse gas reduction" includes the removal of carbon dioxide from the atmosphere through carbon sequestration as well as reduced or avoided emissions of greenhouse gases. (source: California AB 1608)
"Working lands" means lands used for farming, grazing, or the production of forest products.
"Natural lands" means lands consisting of forests, grasslands, deserts, freshwater and riparian systems, wetlands, coastal and estuarine areas, watersheds, wildlands, or wildlife habitat, or lands used for recreational purposes such as parks, urban and community forests, trails, greenbelts, and other similar open-space land. For purposes of this paragraph, "parks" includes, but is not limited to, areas that provide public green space.

Rationale: Provides additional language to further clarify that atmospheric greenhouse gases can be reduced through sequestration as well as avoided emissions; provides definitions of natural lands and working lands consistent with California laws.

Greenhouse Gas Cap and Investment Program
Section 6: Statement of Purpose:

Page 4, Lines 1-3 – Modify to read: "and to promote adaptation and resilience of this state's **natural and working lands**, ***ecological and*** **human** communities and economy in the face of climate change **and ocean acidification**."

Rationale: Strengthens the purpose statement, to include adaptation of natural and working lands in addition to communities and our economy and recognizes that increased greenhouse gases in the atmosphere result in both climate change and ocean acidification. The bill's purpose should be to promote adaptation to all three critical elements and both impacts.

Sections 7 and 8: Rules Adoption and Implementation Oversight

Page 4, (1) – The Environmental Quality Commission should be directed to do additional research to inform rulemaking. In addition to the leakage study Section 10 (2), an analysis of the differential impacts to rural and low-income Oregonians should be done to guide rulemaking.

Page 4, Line 15-17 – Include **the Department of Forestry and the Department of Agriculture,** ***Oregon Department of Fish and Wildlife*** to the list of agencies to be consulted by the Environmental Quality Commission in developing rules

Page 4, Line 44, Add (H) – **One member who represents a land conservation organization,** ***One member who represents commercial and/or recreational fishing interests.***

Rationale: Inclusion of these agencies and organizations can provide important input to rulemaking and program oversight relative to impacts to and the role of natural and working lands and the design of any new offset protocols.

Page 5, line E, Add- How fish and wildlife and ecological communities have benefited from the expenditure of auction proceeds.

Carbon Pollution Market
Section 10:

Page 8, Line 31 – Modify (D) to read, "…to covered entities ~~*that include, but are not limited to covered entities*~~ that are part of an emission-intensive, trade-exposed industry;

Rationale: Targets allowances to the entities most exposed to leakage.

Page 8, Line 36 – Strike ~~*three*~~ and replace with **multi-**.

Rationale: Adds flexibility in the legislation to allow the state to set/modify rules as needed through time.

Page 9,

Line 16 Insert **and** immediately after the semicolon (";"):
Line 18 (ii) – Strike out the semicolon (";") and insert in its place the following:
"any other greenhouse gas emissions reduction that otherwise would occur."
Lines 19 and 20 (iii) – Delete.

Rationale: The proposed changes to the language on additionality is intended to better align SB 1070 with the language of California's AB 32 and of the other jurisdictions in the Western Climate Initiative.

Section 14:

Page 12, Line 21 - 24 – We support prioritizing investment of auction proceeds in impacted communities as defined in Section 9 (12). However, we would like a better understanding of the geographic extent of the impacted communities to help evaluate whether the proposed percentages make sense. Further, it might make sense to state that spending funds in impacted communities is a priority of the program in the bill and establish percentages during rulemaking to avoid unintended consequences and allow for efficient adaptive management.

Rationale: This change would facilitate adaptive management of the program to achieve the best outcomes for Oregon.

Page 12, Line 35 & 36 – Modify 4 (c) to read

To the maximum extent feasible and practical give funding preferences to projects that will result in

(A) the greatest greenhouse gas emission reductions**; and**

(B) ***improve the climate resiliency of watersheds and ecological communities*** **including but not limited to reducing risks resulting from climate change and ocean acidification, improving the resilience of natural and working lands and** ***removing structural barriers to fish passage.***

Rationale: Better reflects the dual purpose of the legislation as stated. *Should give preference to projects that will address a barrier on the ODFW Fish Passage Prioritization List.*

Section 16:

Page 13, Line 29 – 33 – As stated in comments above, we support prioritizing investment of auction proceeds in impacted communities as defined in Section 9 (12). However, we would like a better understanding of the geographic extent of the impacted communities to help evaluate whether the proposed percentages make sense. Further, it might make more sense to state that spending funds in impacted communities is a priority of the program in the bill and establish percentages during rulemaking to avoid unintended consequences and allow for efficient adaptive management.

Rationale: This change would facilitate adaptive management of the program to achieve the best outcomes for Oregon.

Page 14, Line 29 – Modify (1) by adding the following statement to the end of second sentence

"including, but may not be limited to, renewable energy, carbon sequestration in natural and working lands, weatherization, energy efficiency, climate resilience and water conservation."

Rationale: Ties the Oregon Climate Investment Fund to the purposes of the legislation and clarifies the kinds of projects that would achieve the purposes.

Page 14, Line 20 – Insert a new:

(3)(d)(I): "Natural resources and carbon sequestration."
Rationale: Adds an important area of expertise to the grant committee.
Page 14, Line 39 – Insert a new (5)(h): "Enhance the resilience of natural and working lands"

Rationale: Adds an important outcome/criterion to the grant evaluation program.

Section 20:

Page 16, Line 39 – Insert a new:
(2)(g): "Natural resources management."
Rationale: Adds an important area of expertise to the grant committee and ties the Just Transition Fund to the purposes of the legislation.

Section 25:

Page 20, Lines 28 & 30 – Correct from ~~*(3) to (4)*~~ to **(5) and (6)**

Dear Beth and Beth

The City of Portland strongly supports the Clean Energy Jobs legislation and per the invitation for public comments by Rep. Helm and Sen. Dembrow would like to suggest the two refining amendments below to SB 1070 for consideration:

First, the City agrees with Metro's work group comments that the transportation-dedicated funds should be allocated out through Metropolitan Planning Organizations (MPOs);

Second, consider providing a funding opportunity for transit outside of the highway trust fund allocation (which includes restrictions that would preclude many types of transit investments). Transit is one of the most effective carbon reduction investments that can be made and should not be excluded from the program.

Thank you for your consideration.

Best regards,
Dan

Daniel Eisenbeis
Interim State Government Relations Manager
City of Portland | Office of Government Relations
503.823.3011 (o) | 503.823.6556 (c) | dan.eisenbeis@portlandoregon.gov

Yes, please support the Clean Jobs Bill SB1070.
Please let me know when there is more definitive info available about what, where, and when clean jobs might be available.
Thank you for your work, Ann

Dear Isabel Hernandez:

As a grandmother I am very concerned about the quality of the air we are all breathing. I want my government to work toward protecting the quality of the air which has been deteriorating over the years.

This senate bill is a first step toward that. In addition I am dismayed by the changing weather and the damage it brings to people and homes. Not to mention the horrific year we have had with wild fires which consumed such a large portion of our State.

Please do all you can to pass Senate Bill 1070. It is one of my highest priorities.

Thank you,
Dorothy Stern-kucha

Public Comment regarding Clean Energy Jobs Work Group

I understand that Oregon is a small state and climate change is a global issue but we should join Hawaii, California and Massachusetts in leading the way toward 100% Renewable energy. We have always been a leader in environmental awareness and today it is more important than ever to move away from a fossil fuel based economy to preserve our air and water for our children. The following is a excerpt from an article published by the Environmental and Energy Study Institute. http://www.eesi.org/papers/view/fact-sheet-jobs-in-renewable-energy-and-energy-efficiency-2017

Employment in the renewable energy and energy efficiency sectors in both the United States and abroad continued to experience growth through 2016. According to the U.S. Department of Energy (DOE), renewable energy employment alone (excluding efficiency) grew by nearly 18 percent between Q2 2015 and Q1 2016. The agency reports that **3,384,834 Americans were directly employed by the clean energy industry** (which includes the energy efficiency, smart grid, and energy storage industries; electric power generation from renewables; renewable fuels production; and the electric, hybrid, and hydrogen-based vehicle industries) in Q1 2016. Among the leading U.S. employment sectors were energy-efficient appliances, buildings, solar, wind, and bioenergy. The International Renewable Energy Agency (IRENA) estimated there were **8,079,000 direct and indirect jobs in renewable energy worldwide**, with China, Brazil, the United States, and India among the leaders.

By comparison, DOE estimated that **2,989,844 Americans were directly employed by the fossil fuel industry** (which includes fuels and electric power generation from coal, natural gas, and petroleum; and the manufacturing of gasoline and diesel-powered vehicles and their component parts) in Q1 2016. More specifically, natural gas and advanced gas technologies provided 398,235 jobs, coal provided 160,119, and petroleum provided 515,518, while gas and diesel vehicles supported 1,915,972 jobs.

Thank You, Ginger Gouveia

Dear Rep Hernandez,

I am writing to express my support of the legislation expressed in the Resolution on Clean Energy Jobs and want to let you know I want you to move forward positively to get things going in our state to create clean energy jobs and develop renewable energy sources while moving away from fossil fuel based energy use.

Randall Koch, Neskowin

RANDALL KOCH

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Neskowin, Oregon 97149
541-921-7216
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ECOLOGICAL
THOUGHT, ART AND
ACTION

Comments by 350 Salem OR

Nov. 14, 2017

Jointly to the Senate Committee on Environment and Natural Resources and
the House Committee on Energy and Environment

Lead author: Dr. Philip Carver, retired Sr. Policy Analyst, Oregon Department of Energy

Introduction

350 Salem appreciates the opportunity to comment on SB 1070. It appreciates the open and transparent process of all four SB 1070 workgroups. It also appreciates the hard work of legislators and staff.

350 Salem is the local affiliate of 350.org, an international climate action organization. We work on issues from the local to international scale to protect a stable, healthy climate. We are in regular email contact with over 400 people in the Salem area.

Structural Clarifications and Changes

Section 11 (1) (a) of SB 1070 states: "The department may auction allowances from future annual allowance budgets separately from allowances from current and previous annual allowance budgets."

This language should be clarified to prohibit covered entities from using these allowances before the year for which they are budgeted. Otherwise these entities could, in effect, borrow allowances from future periods, busting the emission cap for the current year.

350 Salem is concerned that petroleum and natural gas marketers and electricity service suppliers to the retail customers of electric companies might subdivide into smaller entities to fall under the 25,000 MT jurisdictional threshold. To protect against this possibility the Environmental Quality Commission should have authority to regulate these types of entities regardless of the level of emissions associated with their sales.

In addition the EQC should be empowered to address this issue by regulating deliveries upstream. 350 Salem recommends adding "transport" to “import, sells or distributes" in the definition of "source" in Section 9 (21). Depending on circumstances, upstream regulation might work better than regulating small distributors.

Section 8 (4) states: "Notwithstanding ORS 171.072, members of the committee who are members of the Legislative Assembly are *not entitled to mileage or a per diem* and serve as volunteers on the committee. Other members of the committee *are not entitled to* compensation or *reimbursement for expenses* and serve as volunteers on the committee." (emphasis added). Not allowing mileage or per diem for legislators or reimbursement of expenses for volunteers is likely to limit participation to wealthy individuals or persons supported by companies or other organizations. 350 Salem recommends allowing for these payments. In addition 350 Salem recommends amending the bill to explicitly allow for reimbursement of child care expenses for legislators and volunteers to attend meetings. These changes would enable broader participation in advisory committees at very modest cost.

Distribution of Free Allowances

350 Salem recommends the bill be amended to clarify several elements of distributing free allowance. The bill should state that not all industrial firms are necessarily emission-intensive trade-exposed (EITE). The bill should direct the EQC to use production, value added or some metric other than historic emissions to distribute free allowances wherever possible. Otherwise, the EQC would not have a fair method to distribute free allowance to new covered entities. The EQC should use assessments of economic emission reductions at projected allowance prices to guide free allowance distribution. While all these elements are allowed or implicit in the current bill, it would be safer for the bill to state them explicitly.

Linkage to the WCI

350 Salem strongly supports linking to the Western Climate Initiative (WCI). If the ability to link is not clear in the current bill, clarifying language should be added. Linkage will provide major cost control and stability for allowance prices. It will likely eliminate monopsony power,

as noted by Jamie Woods, since monopsony occurs when there are so few buyers they can depress the auction price.

Transportation Investments

The bill should be amended to dedicate a fixed portion of State Highway Fund from auction revenues to seismic upgrades to Oregon highways and bridges. A Cascadia Subduction Earthquake is virtually guaranteed in the next 150 years. While these investments are unlikely to reduce or sequester emissions, they are, unlike roadway expansions, unlikely to increase long-run emissions by encouraging longer commutes within and between cities. For example, Interstate 205 was designed to be a quick bypass route around Portland for I-5 traffic. Commuting patterns have shifted over the years so that I-205 is generally as congested as I-5. Rather than reducing carbon dioxide emission by reducing congestion, I-205 has increased commute distances, increasing emissions.

Similarly, the bill should direct the Oregon Department of Transportation (ODOT) to use this Fund to create a plan for relocating US 101 and other coastal highways after the Cascadia Subduction Earthquake. The new routes should be constructed well above projected levels of ocean storm surges from sea level rise and increased storm intensity later this century and the next due to climate change. ODOT should accumulate funds to pay for these moves at a rate to largely pay for relocations by 2100.

The bill should also instruct ODOT to size any new culverts to handle long-term projected flooding and begin a program to upgrade existing culverts. Unlike the other investment funds and programs, there will be adequate funds for ODOT to fund adaptation measures. Even after funding substantial roadway adaption measures, there will be sufficient funds available to fund any reasonable roadway measures that would reduce emissions.

350 Salem supports the 1000 Friends comment in October:

> *Similarly, investment in transit, walkable neighborhoods, safe bicycle infrastructure, and affordable and diverse housing in places served by these reduces greenhouse*

> *gas emissions while providing housing and transportation opportunities to vulnerable communities.*

While investments in bike paths in roadways can be paid from auction revenues from roadway fuels, the other investments listed above cannot. The bill should be amended to fund these other investments from the DEQ Climate Investment Grants Program. Displacing automobile travel with bicycle use can substantially reduce carbon dioxide emissions. Off-street bicycle paths should be specifically targeted. Off-road paths are much safer than on-road paths. Studies indicate safety considerations strongly affect the level of bike riding.

Rural Oregon

350 Salem supports the recommendation by Megan Kemple of 350 Eugene:

> *The bill could be enhanced by allowing incentives for the adoption of practices that mitigate climate change by the agricultural community, especially those that sequester carbon in the soil and conserve energy. These incentives may be particularly important for smaller farm operations.*

These funds should come from the Climate Investment Grant Program.

350 Salem also supports the current limit for use of offsets by covered entities of eight percent. Biological sequestration can never have the permanency of leaving fossil carbon in geological formations. Also, it is almost impossible to fully assure that any offset is additional. Still, reducing the current dangerous level of carbon dioxide in the air requires increased biological sequestration in addition to reduced emissions. The eight percent offsets limit allows Oregon to demonstrate effective use of biological sequestration while maintaining the integrity of the cap on net greenhouse emissions. If Oregon participates in the WCI allowance market, the amount of offsets allowed in the bill will have almost no effect on the WCI allowance price.

The bill should be amended to restrict offsets to North and Central America where Oregon journalists and non-profit groups can afford to visit actual operations. This huge region has a full range of vegetative and climatic conditions.

Only four percent should be allowed outside of Oregon. The remaining four percent should be restricted to Oregon. This limitation would not significantly reduce experience in a wide range of offset projects but would focus a substantial part of that experience in Oregon. Oregon projects are inherently easier to monitor and assess.

350 Salem supports the current bill provisions that allow the EQC to reduce the eight percent limit in areas with poor air quality. It does not support allowing covered entities to sell the unused portion of their eight percent limit to other entities. An eight percent limit on each entity still allows adequate experience with offsets.

350 Salem does not support the use of non-roadway auction funds for adaptation to likely climate changes. The needs for these funds to ameliorate cost impacts to fuel and electricity users, for displaced workers and for low cost emission reductions and sequestration are much greater than projected revenues.

Electric Utility Auction Revenues

350 Salem recommends amending the bill to dedicate a fixed portion of electric company auction revenues to co-funding smart electric vehicle charging stations, especially at workplaces. This portion should be in the range of five to 10 percent of electricity auction revenues. EVs are a critical measure for large reductions in transportation emissions. Also, smart EV chargers can ultimately provide capacity benefits to the electric grid.

In particular, workplace charging can provide a new market for low-cost peak solar generation from 10 am to 2 pm. The large volume of solar photovoltaic (PV) generation in California has already depressed mid-day wholesale power prices in spring and summer. Stabilizing mid-day prices will help the economics of PV projects. Current technology can provide smart workplace charging stations. Building and maintaining these stations should be co-funded by electric companies from anticipated net revenues from electricity sales to EVs. EV users are willing to pay a fair rate to charge their vehicles. Co-funding would leave non-participating electric retail customers whole.

These funds should also be used to co-fund charging stations at apartments. Use of these funds for EV charging should be added to the list of uses of these funds recommended by the Climate

Investments Sub-workgroup of the Environmental Justice Workgroup for Section 13 on November 1.

350 Salem recommends two other changes to this list. Subsection (a)(2) should be clarified so that the 50 employee limit applies only to business customers and not to schools, public entities and non-profit entities. The current language does not make this clear.

Finally, (a)(3) should be amended to allow electricity intensive customers who are trade exposed and who are covered entities to be eligible for these funds. Covered entities are required to retire allowances to cover their gas use. The bill allows the EQC to allocate free gas allowances to these entities. But under the basic structure of the bill, the EQC cannot allocate free electricity allowances to them. All retail customers have their electricity emissions regulated upstream. Without some electric auction revenues going to trade-exposed/electric-intensive firms, industrial production could move out of Oregon. If so, Oregon would see job losses but worldwide emissions would not be reduced (i.e. leakage would occur).

Otherwise 350 Salem OR supports the list of uses for electric auction funds recommended by Climate Investments Sub-workgroup of the Environmental Justice Workgroup for Section 13.

My wife and I are strong supporters of objectives of SB1070. The time to act on these, and other, measures to control green house gases is NOW. Please support these efforts.

Craig and Reisha
Bryan-

3615 Rocky Creek Ave., Depoe Bay. OR

Comments on the Clean Energy Jobs Bill

Submitted 11/14/2017

Jane Stackhouse, constituent from Portland, Oregon 97212

Allowances:

Rather than offer free allowances to specific industries in the bill, I recommend the bill state that allowances may be allocated for free. We have seen an overall increase in CO2 this year and we see the effects of climate change be magnified. EQC needs the flexibility to quickly adjust the available allowances.

Free allowances should only be allowed to be sold if the funds from the sale go to the Just Transition Fund.

'Sources subject to the cap must submit compliance instruments to DEQ every three years equal to their compliance obligation. A penalty for noncompliance is assessed at the rate of four allowances for every one allowance that a source fails to submit.' It seems to me that this should be annually rather than every three years.

Offsets:

The concern about offset comes from reports of abuse in other jurisdictions. Therefore I recommend we state that the offsets may be issued only for projects in the Linked States and Provinces with priority for Oregon funds to go to Oregon offsets.

The strict review of offsets must be included in the bill. Offsets must be monitored and demonstrate reduction in GHG.

- Maximum of 8% of total cap during the time the offset is approved.
- Not otherwise be required by law;
- Result in GHG emissions reductions or eliminations that:
    - Are real, permanent, quantifiable, verifiable and enforceable;
    - Are in addition to GHG emission reductions or eliminations otherwise required by law; and
    - Would not have otherwise occurred if not for the offset project.

Linkage: The bill should contain the basic provisions that allow linkage with California, Quebec, and Ontario. Hopefully the number of linked markets will grow. The ability to buy and sell allowances between states will provide more stability for industry.

If we were not pursuing linkage I would suggest that the covered regulated entities definition should be changed to be lower than the 25,000 tons of CO2e per year. (Perhaps 2,500 tons).

Social Justice:

One of the strengths of this bill is the effort to help 'impacted communities' and 'economically distressed areas' by mandating a percent of the proceeds be used to assist these populations.

I would be happy if the percent of funds to be dedicated were even higher.

Point of Regulation:

The point of regulation should be at the earliest entry of the fossil fuel or electricity generated by fossil fuel into the State. The first jurisdictional deliverer (FJD) seems to cover this as long as the markets that sell directly to large industries are included. These market providers must not be allowed to form new smaller markets to bypass regulation of entities the emit 25,000 tons or more of CO2 per year.

I wonder if it is possible to include provisions that any pipelines, transport (road, rail, water) and storage facilities must be responsible for any emissions released intentionally or accidentally within the state. If we are forced to accept pipelines, trucks, trains, and barges going through Oregon there must be a way to require the sellers or buyers to pay for pollution caused by routine emissions during transport or spillage.

Transportation:

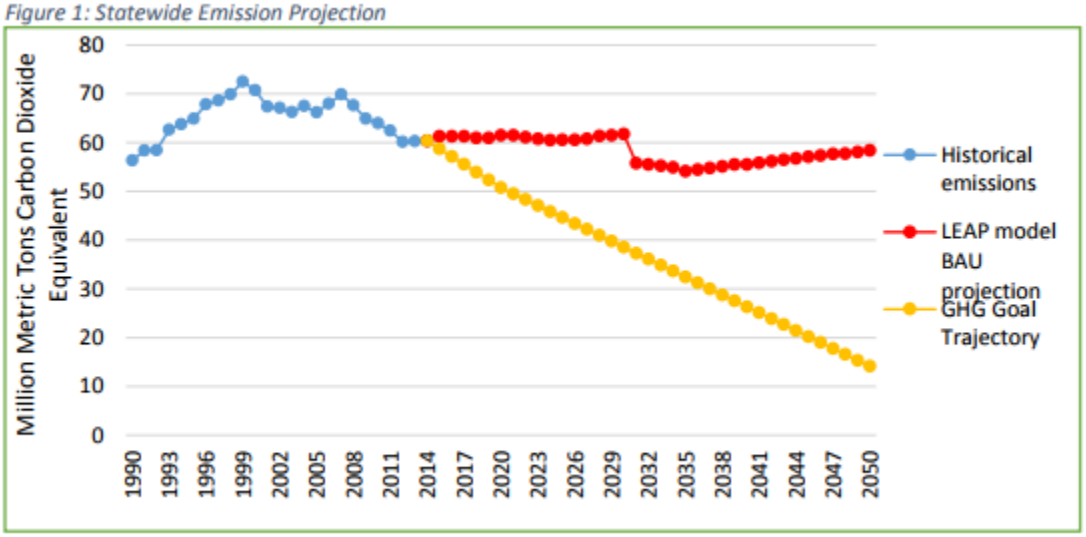
Because the Oregon Constitution requires funds from transportation go to the Highway Department they will have an influx of new money. The bill must stand firm with the mandate that *'all funds must be used to reduce greenhouse gas emissions and to promote climate change adaptation and resilience by Oregon's communities and economy*'.

The Oregon Department of Transportation may be challenged to identify uses for the funds. Building more highways does not reduce greenhouse gas emissions as they tends to increase use of cars. I do not think the bill should be so specific to recommend specific projects and I would like to suggest projects such as sidewalks, bicycle lanes, and maintenance of rest areas that could include solar panels to generate power and electric vehicle charging stations. I would also suggest exploration of new roads with photo-voltaic pavers to generate power.

Closing Note: As the various parties debate this bill, each from their own perspective, we must keep the science in mind and the fact that we are not on target for 2020 or 2050 goals.

We need to follow the 'yellow brick road'. The Clean Energy Jobs bill must be strong.

Figure 1: Statewide Emission Projection



http://www.keeporegoncool.org/sites/default/files/ogwc-standard-documents/OGWC%202017%20Biennial%20Report%20to%20the%20Legislature_final.pdf

Mckenzee Manlupig
Lewis and Clark Montessori Charter School
macmmanlupig@lcmcs.org

Representative Ken Helm
Workgroup on Agriculture, Fisheries, Forests, Rural Communities and Tribal Issues
rep.kenhelm@oregonlegislature.gov

November 14, 2017

Dear Representative Helm,

Hello, my name is Mckenzee Manlupig. I'm a student from a small k-8 school in Damascus called, Lewis and Clark Montessori Charter School. I would like to address, The Clean Energy Jobs Bill and how we could improve schools, within Oregon. As a young mind with dreams, I would like to see the world, experience diverse cultures and appreciate the nature and wildlife. If we keep treating this world this grimly, I will never get to experience, how orangutans interact in the wild or see the leaves of Japan change from green to yellow in autumn. This bill is so important to help our world so I, and so many other minds, have a chance to experience and possibly change our planet. In Oregon, there is this act called, the Alternative Energy Solar Project. This project allows people, from the middle class, to have solar panels installed onto their houses for as little as zero dollars down. This could save thousands of dollars on electricity that could be used on other resources helpful for the families. "Alternative Energy Solar Project predicts that it could save individual families up to $2,400 a year, which they hope could then be spent on other essential bills." said the Green Energy Tribune. If we can do this in homes, we can do it in schools too. Instead of a diesel generator running our schools, as an alternative, schools could be run on an environmentally healthy, cheaper, way. My school has a backup diesel generator and we run it, around two to three times a month, wasting

unnecessary, hurtful energy. It would be healthier for the students, staff and the world if we had solar panels alternatively. Also, this could significantly increase the business for solar panel producers, technicians, engineers. There is approximately 1,250 eligible school in 197 school districts in the state. This would not only boost our use of clean energy but produce thousands of jobs and create opportunities for new entrepreneurs. This is an important issue for our state, our businesses, and our students. We should be setting an example for the next generation. I appreciate your consideration as well as all the work you do for our state.

Sincerely,

Mckenzee Manlupig,

November 16th, 2017

To: Representative Ken Helm, Chair
Workgroup on Agriculture, Forests, Fisheries, Rural Communities and Tribes

Re: **Proposed forestry amendments to SB 1070**

Dear Representative Helm and other members of the Workgroup:

At the November 2nd, 2017 Workgroup meeting Senator Dembrow and Representative Helm signaled their willingness to consider amendments to SB 1070 to improve its ability to reduce greenhouse gas emissions in Oregon and reverse ongoing threats to the resiliency of forests, farmland and rural communities as climate change unfolds. The attached suggested amendments are relatively minor in length and complexity but will have a huge impact by helping to incentivize climate smart practices and phase out harmful ones and enroll big emitters (forestland owners whose practices emit 25k+ CO2 each year) as covered entities regulated by the cap-and-invest market on par with other sources. Right now, as you know, these GHG polluters are left untouched by the proposed legislation. The Sustainable Energy and Economy Network (SEEN) and its partners believe that there are three key facts that underscore the imperative to act:

1. the fact that timber harvesting remains Oregon's largest source of greenhouse gas emissions, a fact first established by the Oregon Global Warming Commission in a 2008 report and now confirmed by estimates of timber harvest related emissions (CO2 removals minus about 25% for long lived wood products) from a new (2016) data set;
2. the fact that the vast swaths of industrial tree plantations that dominate most of the state and private forestland base pose major hazards as climate change unfolds – the science is well established that these plantations are far more vulnerable to drought, disease, wildfire, floods, landslides, low summertime streamflow, thermal pollution, fish kills, regeneration failures and other climate change-induced impacts than natural late successional forests and riparian vegetation, and;
3. climate smart forestry practices that result in continuous increases in carbon density and improved resilience to climate change represent a quadruple win solution for the climate, forests, workers, and the economy of forest dependent communities.

Many thanks for all you are doing to enact meaningful climate legislation in 2018 and for your time and consideration of these proposed amendments. And as always, we stand ready to provide any of the detailed technical data and research that makes the case for these SB 1070 modifications.

Sincerely,

John Talberth, Senior Economist
Sustainable Energy and Economy Network
Portland, Oregon

Folding the Timber Industry into Oregon's Climate Agenda
Proposed amendments to SB 1070

Summary of amendments:

- ✓ Expands covered entities to include forestland owners whose logging practices generate 25,000 metric tons CO2-e or more on an annual basis.
- ✓ Directs the Environmental Quality Commission to adopt a method for calculating timber harvest related emissions that takes into account loss of carbon storage, loss of sequestration capacity, emissions associated with decay of logging residuals, and emissions associated with chemical pesticides and fertilizers.
- ✓ Reduces emissions associated with clearcutting and conventional logging practices on the same timetable as other covered entities (20% by 2025; 45% by 2035; 80% by 2050).
- ✓ Establishes the date of enactment as the baseline year.
- ✓ Exempts timber harvest emissions associated with climate-smart practices from the cap.
- ✓ Refines existing Oregon Global Warming Commission duties to track and evaluate climate smart practices that increase carbon storage back to historic levels and reduce emissions associated with logging and wildfire.
- ✓ Requires registration and reporting of timber harvest-related emissions.
- ✓ Ensures accountability of offset projects through public review mechanisms.

Section by section proposed amendments:
(amendments to the 11/17 SB 1070 version in **bold**, ~~strikeouts~~ are proposed removals)

STATEWIDE GREENHOUSE GAS EMISSIONS LIMITS

Section 4(1)(a) is amended to read:

"(a) The total annual emissions of greenhouse gases in this state **except for timber harvest related emissions, which are calculated in accordance with rules adopted under section 22 of this 2018 Act;** and"

Section 4(2)(a), (b), and (c) are amended to read:

"(a) A statewide greenhouse gas emissions goal for the year 2025 to limit greenhouse gas emissions to levels that are at least 20 percent below 1990 levels **except at least 20 percent below present levels for covered entities engaged in timber harvesting;**
(b) A statewide greenhouse gas emissions goal for the year 2035 to limit greenhouse gas emissions to levels that are at least 45 percent below 1990 levels **except at least 45 percent below present levels for covered entities engaged in timber harvesting;**
(c) A statewide greenhouse gas emissions goal for the year 2050 to limit greenhouse gas emissions to levels that are at least 80 percent below 1990 levels **except at least 80 percent below present levels for covered entities engaged in timber harvesting;**"

GREENHOUSE GAS CAP AND INVESTMENT PROGRAM

Section 10(3)(d) is amended to read:

"**(C) Develop public review mechanisms that enable any person aggrieved by a proposed offset project to comment on, administratively challenge, and if necessary seek judicial remedies to prevent harm or prevent violations of standards established by this subsection.**

(D) The relevant court, in issuing any final order in any action brought pursuant to this subsection, may award costs of litigation (including reasonable attorney and expert witness fees) to any prevailing or substantially prevailing party, whenever the court determines such award is appropriate."

GREENHOUSE GAS EMISSIONS REGISTRATION AND REPORTING

Section 22(1) is amended to read:

"**(c) Any landowner who authorizes or engages in timber harvesting on their lands using practices other than the alternative, climate smart practices specified by the Oregon Global Warming Commission pursuant to ORS 468A.250(1)(i), as amended by Section 31 of this 2018 Act.**"

Section 22(6) is added to read:

"**(6) For the purposes of determining greenhouse gas emissions associated with timber harvesting, the commission shall adopt by rule emissions factors per thousand board feet harvested that take into account removal of stored carbon minus the share of said carbon stored in long lived wood products regardless of where end use wood products are consumed, foregone sequestration, decay of logging residuals and use of chemical pesticides and fertilizers.**"

Sections 22(6) and 22(7) are renumbered to Sections 22(7) and 22(8).

GREENHOUSE GAS CAP AND INVESTMENT PROGRAM DEVELOPMENT FEE

Section 25(1) is amended to read:

"**(d) Any landowner who authorizes or engages in timber harvesting on their lands using practices other than the alternative practices specified by the Oregon Global Warming Commission pursuant to ORS 468A.250(1)(i), as amended by Section 31 of this 2018 Act.**"

CONFORMING AMENDMENTS, OPERATIVE JANUARY 1ST, 2019

Section 31(1)(f) is amended to read:

"(f) Greenhouse gases emitted by various ~~sectors of the state economy~~ **economic activities in the state** including but not limited to ~~industrial, transportation and utility sectors~~; **industrial activities, transportation, farming, land use conversion, generation of electricity and heat and timber harvesting**;"

Section 31(1)(i) is amended to read:

"(i) The carbon sequestration **and storage** potential of Oregon's forests, alternative, **climate smart** methods of forest management that **can increase carbon storage back to historic levels** and reduce the loss of **carbon storage and** carbon sequestration **to logging** ~~and wildfire~~, changes in the mortality and distribution of tree and other plant species and the extent to which carbon is stored in tree-based building materials;"

Hello-

As a volunteer at the Hatfield Marine Science Center in Newport Oregon, I'm learning more and more about the harmful effects of global warming on our environment. That is why I am writing to urge rapid forward movement on the 1017 Cap and Invest Bill.

Our oceans are experiencing more hypoxia, ph level is decreasing endangering shellfish, coniferous forests are in danger as droughts decease appropriate habitatat for Douglas fir and promote increased present of wild fires.The list of concerns goes on and on which makes it especially disappointing to hear that Oregon is behind in our long range goal to decrease carbon emissions by 10% in 2020. We need to follow the model that California, Quebec and Ontario are setting and become the next state to responsibly work towards a cleaner, more sustainable environment through Cap and Invest. It's especially imperative in light of the regressive policies being enacted in Washington.

Time is of the essence. Let's move forward on bill 1017.

Sincerely,
Jacqueline Brandt

BLUE PLANET ENERGY LAW

November 17, 2017

The Honorable Michael Dembrow
Chair, Senate Environment and
Natural Resources Committee

The Honorable Ken Helm Chair,
House Energy and Environment
Committee

State Capitol Building, Room 453
900 Court Street, NE Salem, OR
97301

Dear Representative Helm and Senator Dembrow:

Thank you for the opportunity to provide additional comments on the proposed Oregon Clean Energy Jobs Bill, SB 1070, and the potential for an Oregon cap-and-invest program. In addition to our prior comments during the work group process, Blue Planet Energy Law, LLC recommends the following changes to the text of SB 1070. These changes are made in consultation with stakeholders in the independent power producer industry, electricity service suppliers, and others, but do not reflect the position of any specific entity other than Blue Planet Energy Law. We ask that these comments be added to the record for each of the four Clean Energy Jobs Work Groups.

1. ***Modify Section 6(1) to clarify that the primary purpose of the Act is to measurably reduce greenhouse gas emissions, with the supporting goals to promote adaptation and resilience by this state's communities and economy in the face of climate***. This change is necessary to make it clear that the overarching goal of the program is reduction of greenhouse gas emissions.

> The Legislative Assembly finds and declares that the purposes of sections 6 to 20 of this 2017 Act are ***(a)*** to reduce greenhouse gas emissions consistent with the statewide greenhouse gas emissions levels established under section 4 of this 2017 Act ***and, where consistent with Section (a) hereto, (b)*** to promote adaptation and resilience by this state's communities and economy in the face of climate change.

2. Modify Section 8(1)(c) to include within the Greenhouse Gas Cap and Investment Program Oversight Committee one member with experience in carbon markets and one member representing the interests of the largest in-state emitters. This change is necessary to provide allow membership for constituencies that have significant interests in committee work and can contribute necessary information to the committee.

(c) The Governor shall appoint:

(A) One member who represents the office of the Governor;

(B) One member who represents impacted communities;

(C) One member who represents the interests of labor organizations;

(D) One member who represents environmental organizations;

(E) One member who represents covered entities;

(F) One member with expertise in climate science; and

(G) One member who represents the interests of business sectors impacted by climate change.

(H) One member who represents the largest in-state emitters.

(I) One member with experience in carbon markets.

3. ***Modify Section 9 by adding a new definition of Affiliated Source.*** This change (along with the proposed change to Section 10(1) below is necessary to prevent artificial segmentation of industrial loads below the 25,000 MTCe threshold.

"Affiliated Source" means a means any Source sharing a common ownership in excess of 50 percent.

4. ***Modify Section 10(1)(a) to clarify that all in-state and out-of-state electric generation will be subject to the program whether or not the individual generation facility is below the 25,000 MTCe threshold, and that Affiliate Sources will be treated as a single source for determination of the 25,000 MTCe threshold***. These changes are necessary to maintain consistency with other regional power markets and prevent artificial segmentation of industrial loads or generation facilities below the 25,000 MTCe threshold.

10(1)(a) Identify sources subject to the carbon pollution market. In adopting rules under this subsection, the commission may not require a source ***other than (1) a source as defined under Section 9(21)(b)*** to be subject to the carbon pollution market unless or until the annual verified greenhouse gas emissions reported under ORS 468A.050 or 468A.280 attributable to that source ***and any Affiliate Source*** meet or exceed 25,000 metric tons of carbon dioxide or carbon dioxide equivalent.

5. ***Modify Section 10(1)(d) to delete the obligation that any allowances distributed through directly be distributed "at no cost."*** This change is necessary to allow the regulator the flexibility to distribute allowances at a discounted cost if deemed appropriate.

> (d) Establish a market for allowances and criteria for the distribution of allowances either directly [~~at no cost~~] or through an auction administered by the Department of Environ-mental Quality pursuant to section 11 of this 2017 Act.

6. ***Modify Section 10(1)(d)(B) to delete the obligation that any allowances distributed to electric companies or gas companies be done "at no cost."*** This change is necessary to allow the regulator the flexibility to distribute allowances free or a at a discounted cost if deemed appropriate.

> (B) Shall distribute to electric companies and natural gas utilities, directly [~~and free of charge~~], allowances to be consigned to the state for auction under section 11 of this 2017 Act;

7. Modify Section 10(1)(d) to add a new Subsection D authorizing the Department of Environmental Quality to distribute allowances to independent power producers (B) to delete the obligation that any allowances distributed to electric companies or gas companies be done "at no cost." This change is necessary to allow the regulator the flexibility to distribute allowances free or a at a discounted cost to power producers if deemed appropriate, including to independent power producers that have already paid to mitigate some or all of their carbon emissions pursuant to ORS Section 469.503.

> ***(d) May distribute to Independent power producers, directly, allowances to be consigned to the state for auction under section 11 of this 2017 Act;***

8. Modify Section 10(1)(d)(g)(2) to reflect provide the Commission flexibility provide allowances at a reduced cost to prevent leakage, rather than requiring they be free of charge.

> (~~D~~*E*) [~~Shall~~] *May*, in order to address leakage and as determined necessary by the commission pursuant to subsection (2) of this section, distribute allowances directly and free of charge ***or at a reduced cost*** to covered entities that include, but are not limited to, covered entities that are part of an emissions-intensive, trade-exposed industry;

9. Modify Section 10(2) to reflect provide the Commission flexibility provide allowances at a reduced cost to prevent leakage, rather than requiring they be free of charge.

> The commission shall hire or contract with a third party organization to provide data and analysis identifying leakage risk from specific covered entities including, but not limited to, covered entities that are part of an emissions-intensive, trade-exposed industry. The commission shall use the data and analysis provided by a third party organization under this section to determine the number of allowances to be distributed directly and free of charge ***or at a reduced cost*** under subsection (1)(d) of this section. No less than once every five years, the commission shall:

10. Modify Section 10(2)(b) to reflect provide the Commission flexibility provide allowances at a reduced cost to prevent leakage, rather than requiring they be free of charge.

> (b) Adjust the number of allowances distributed directly and free of charge ***or at a reduced cost*** under subsection (1)(d) of this section as necessary to reflect the updated data and analysis

11. Modify Section 10(3)(c) to (1) allow groups of covered entities to aggregate their allotment of offset credits, and (2) to specify that limitations on use of offsets is appropriate in air non-containment areas. The first change is will allow entities to more efficiently utilize offsets to reduce compliance costs and produce real & verifiable greenhouse gas reduction without going beyond the overall proposed eight percent cap. The second change is necessary to ensure that limitations on use of offsets can occur in areas that are not meeting express air quality standards. The existing language in draft SB 1070 is overly broad, and could be interpreted to limit use of offsets in *all* circumstances. For example, under the existing language, a source located within a rural Oregon community with few households would almost by definition be located in an impacted community.

> (c) Standards adopted under this subsection must require that offset credits constitute a quantity that may be no more than eight percent of the total quantity of compliance instruments submitted by a covered entity ***(or group of covered entities aggregreting their offset credit limits)*** to meet the entity's compliance obligation ***(or group of covered entities)*** for a compliance period. Standards adopted under this subsection may place additional restrictions on the number of offset credits that may be used by a covered entity that is an air contamination source as defined in ORS 468A.005 if the building, premises or other property in, at or on which the air contamination source is located, or the facility, equipment or

other property by which greenhouse gas emissions are caused or from which the greenhouse gas emissions come, is geographically located in an impacted community ***that is within an Air Quality Non-Attainment Area and a population density in excess of 20 people per square mile.***

12. Modify Section 13(1)(b) and 13(1)(c) to allow for bill assistance to all distribution customers of utilities whether or not they purchase power from the utility or from a competitive electricity service supplier. This provision is necessary to allow for continued development of a competitive retail power market as required by ORS Chapter 757 and the Direct Access requirements set forth therein.

(b) Bill assistance for energy intensive ***commercial and*** industrial ***distribution*** customers ***whether or not such customers purchase power or gas from the utility or third party*****,** that, at the time the bill assistance is received, are not covered entities receiving allowances distributed directly and free of charge ***or at a reduced cost*** to address leakage as allowed under section 10 of this 2017 Act;

(c) Nonvolumetric, on-bill climate credits applied annually or semiannually to residential customers or small business ***distribution*** customers with 50 employees or less; or.

13. Modify Section 13(2)(b) specify that the priory for use of proceeds by utilities from allocation of allowances shall be to reduce leakage and maximize greenhouse gas reductions, and to the extent possible benefit low income residential customers.

(b) Develop rules that prioritize uses of the proceeds that ***reduce leakage, maximize greenhouse gas reductions and to the extent possible*** benefit low-income residential customers.

14. Modify Section 16(2)(a) to specify that least fifty percent of the moneys from the cap and invest program must be distributed to fund projects that are identified as expected to result in the largest reduction in greenhouse gas emissions within the first three years of funding of the grant.

(2)(a) Moneys must be distributed through the grant program developed under this section such that, of the moneys deposited in or credited to the Oregon Climate Investments Fund each biennium:

(A) At least fifty percent of the moneys must be distributed to fund projects that are identified as expected to result in the largest reduction in greenhouse gas emissions within the first three years of funding of the grant,

(B) At least 50 percent of the ***remaining*** moneys are distributed to projects or programs that are geographically located in impacted communities; and

~~(B)~~ ***(C)*** At least 40 percent of the ***remaining*** moneys are distributed to projects or programs that are geographically located in economically distressed areas, with an emphasis placed on projects or programs that support job creation and job education and training opportunities. (b) Impacted communities and ~~economically distressed areas may be, but need not be,~~ considered mutually exclusive for purposes of this subsection. (c) The commission shall consult with the Environmental Justice Task Force, the Oregon Health Authority, other state agencies, local agencies and local officials in adopting by rule a methodology for designating impacted communities for purposes of this subsection.

Thank you again for the opportunity to participate in this process. We look forward to continuing to work with you, and the Oregon legislature, to move this legislation forward and help Oregon reduce its greenhouse gas emissions and grow the economy.

Sincerely,

_____

Carl Fink
Blue Planet Energy Law
Suite 200, 628 SW Chestnut Street
Portland, OR 97219
971.266.8940
CMFink@Blueplanetlaw.com

Senator Dembrow and Representative Helm,

Thank you for your commitment to passing comprehensive climate legislation for Oregon and for all your hard work over the last year, culminating in the recent work group sessions. You have modeled an open, transparent, and engaging process and crafted legislation that can achieve the dual aims of reducing GHG emissions while growing our economy.

In encouraging advancement of such legislation we have relied on individual volunteer members of 350PDX's state legislation team, with their individual stories and perspectives, unified by their support for the concepts of capping and pricing emissions, with a strong commitment to equity and justice. One might say that we have relied on the wisdom of the crowd known as the state legislation team of 350PDX.

We also deeply respect the wisdom of our partner organizations, notably those in the Coalition of Communities of Color (CCC), and we commend to you the DeCARBON principles and priorities developed by the CCC.

We know that as you undertake your final deliberations, you are incorporating and integrating a complex array of input, and we encourage you to give special consideration to these principles and priorities: transparent, equitable and accountable decision-making; basing the emissions cap on best available science; limiting free allowances; reinvestment for most-impacted communities; limiting and ensuring strong oversight of offsets; and avoiding a cap on the price of allowances.

Thank you,

Rand Schenck and Rick Brown
Co-leads, State Legislation Team, 350PDX

po box 12065
portland, or 97212
503-331-0374
www.bark-out.org

November 22 2017

To: Representative Ken Helm, Chair, Work Group on Agriculture, Forests, Fisheries, Rural Communities, Tribes, members of the Work Group & Senator Michael Dembrow

Re: SB 1070

No greenhouse gas management policy can be considered comprehensive if it neglects to account for the immense carbon emissions generated by the timber industry and the long-term reduction in carbon sequestration and storage associated with the destruction of ecosystems through industrial logging. As you work to establish the state's policies regarding carbon emissions reduction, we urge you to mandate the strongest possible accountability from the timber industry.

For each tree that is commercially logged, approximately **only 15% of its carbon is stored in wood products**, and the remainder is released into the atmosphere immediately, rather than via the slow decay of natural mortality. In a recent report by the Center for Sustainable Economy, the GEOS Institute and Oregon Wild titled "Clearcutting our Carbon Accounts", the authors highlight that logging has recently been found to be the highest source of greenhouse gas emissions in Oregon**.**

The climate impact of industrial logging cannot be understated. **Even in a forest fire 70-80% of carbon remains in its organic form to be reincorporated into soils and vegetation.**

Please scrutinize any mechanisms recommended to utilize forest lands as carbon offsets and the **"carbon debt" created by clearcutting and thinning forests**. Harvesting trees transfers most of the carbon to the atmosphere leaving a "carbon debt" that takes the growing young forest *centuries* to repay. Any legislation with goals set for the next 10-50 years cannot allow for industrial logging to continue business as usual.

Under this Federal administration's targeting of public lands for more intensive resource extraction, it is imperative that state and private lands be held to the highest standard of ecologically sound management that aims to build and protect ecosystems and our regional climate resiliency.

As the Oregon Global Warming Commission evolves the rules and procedures for accounting of the state's carbon emissions, please keep in mind that industry is not a reliable source of information regarding the negative impacts of commercial and industrial activities. Community, environmental, and scientific perspectives must have consistent and meaningful input in the development of the Commissions goals and mechanisms. The influence of industry on the Commission must be transparent and metered.

Undoubtedly, many of your constituents are concerned with the blank check to emit under which the timber industry currently operates. Nearly 5,000 of Bark's membership resides in Sen. Dembrow's district and are engaged with our year-round work to call attention to the the climate consequences of industrial forestry.

We hope you will work to elevate the importance of regulating the timber industry's carbon emissions in any state-wide policy which aims to address climate change, especially those policies which could help the state maximize the reduction of carbon emissions in the next 10-35 years.

Respectfully,

Rob Sadowsky, Executive Director

Courtney Rae, Community Organizer

Joseph Patrick Quinn
Volunteer Conservation Chair,
Umpqua Watersheds, Inc.
P.O. Box 101
Roseburg, OR, 97470
541 672 7065
uw@umpqua-watersheds.org

Representative Helm
Chair Workgroup on Agriculture,
Forests, Fisheries, Rural Communities and Tribes
November 23, 2017
Dear Representative Helm:

Please accept these brief comments on **S.B.** 1070 from Umpqua Watersheds, Inc. (UW), a 501 c 3 non-profit environmental conservation, restoration, education organization, with offices in Roseburg.

As you must know, many, far too many of Oregon's watersheds have been, and continue to be, ecologically degraded. Numerous rivers and their tributaries run muddied in the winter, while receding to a trickle through the rainless summer months, their waters thereby too often failing to meet the minimum standards required by the Clean Water Act. Imperiled native species, ESA listed or not, struggle just to survive in these once cold rivers, let alone return to their natural abundance. At the same time invasive, warm water fish, like Small Mouth Bass, continue to spread in the Coquille, Umpqua and other Oregon waterways, rivers that were once the domain of iconic Salmon runs. Biodiversity widely declines as simplification steadily increases. Across our forested landscapes, the connectivity so critical to species survival is repeatedly interrupted, effectively destroyed. Wind-driven wild fires race through tightly packed, monoculture fiber farm plantations, threatening what remains of our primary, native forests. Increasingly toxic aerially applied herbicides are broadcast across these same watersheds, sometimes in witches brew combinations, delivering unknown synergistic impacts. An ever-growing spiderweb of forest roads, too many long-unmaintained, drives increasing hydrologic harm ever deeper into the Oregon Coast and Cascade Ranges, while providing a convenient avenue for the spread of invasive forbes, sylvan disease and ever-increasing human ignition of those same wildfires.

The long history of mass conversion of primary old growth/mature forest to plantation stands, on millions of Oregon acres, public and private, continued up to the final adoption of the Northwest Forest Plan. Short rotation, clear cut extraction, with little to no green tree retention, minimal riparian

protections, no consideration for carbon absorption and sequestration, disregard for biodiversity, destruction of connectivity etc. continues down to this very day on the privately owned, interspersed industrial sections within the infamous and most unfortunate O&C “checkerboard” of alternating ownerships. Adding ecological insult to environmental injury, the BLM has begun a return to the imposition of its own large canopy openings, euphemistically named “regeneration harvests,” following a hiatus of some twenty or so years. Too often, these public land versions of the clear cut, are sited directly adjacent, or in close proximity, to the many intervening and even larger (up to 120 acres each) private land clear cuts, and/or young tightly packed monoculture fiber farm plantations.

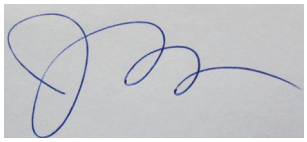
Clearly, the cumulative impacts from historic and current logging are numerous. None should be seen as quickly passing, soon to recover. Science has belied that claim. A recent study out of OSU (Perry-Jones 2017), based firmly on 40 to 60 years of hard USFS paired stream data, has reasonably concluded that all of this mass conversion of primary native forest to plantations has resulted in what appears to be a chronic low summer flow condition in too many of our rivers and streams. The implications of this worsening condition for imperiled species are dire. This flow depletion is no less worrisome for we human beings, threatening as it does all of the uses our societies have for abundant clean water.

Looming over, and magnifying, all of these troubling, even existential degraded conditions, are the palpable and onrushing perils of anthropocentrically induced climate change. The “carbon sink” contribution made, by remaining in tact public forests, towards mitigating this threat, is constantly undone, especially in Western Oregon, by the continued wide proliferation of large clear cuts on private industrial timberlands. This, at the same time that the BLM proposes and implements large openings of its own for these already, badly damaged natural systems.

Representative Helm, it is long past the time, when elected government in Oregon remembered its responsibility to the citizens it is sworn to protect, gathered its courage and declared that, indeed, the emperor has no clothes! Big Timber has had both an overt and covert hold on state and local governments for far too long. Allowing it to persist in the further diminishment, and even the outright destruction, of our common environmental heritage must be seen as a betrayal of that sacred trust between government and the governed. It is no exaggeration to say openly and loudly, that these environmental threats are existential.

Therefore, the Board of Directors of Umpqua Watersheds, on behalf of its active and deeply concerned membership, lends its strong support to an environmentally sound version of S.B. 1070, sharing the valid concerns of its brothers and sisters at SEEN, CSE, BARK and so many others within the Oregon Conservation Community. The time to act is now.

Sincerely,



Joseph Patrick Quinn
Conservation Chair,
Umpqua Watersheds, Inc.

I am in favor of the passage of SB 1070 and of the amendments proposed to include timber harvesting into the regulations. Logging and tree plantations have massive climate impacts on both public and private lands. It is absolutely essential to an effective climate agenda to include regulation of these endeavors and I believe that the proposed amendments from the November 2nd, 2017 workgroup meeting are a good step in the direction of abating disastrous CO_2 emissions.
Thank you for your time and consideration.
Regards,
Alice Shapiro
Portland, OR

Gentlepeople if we are to adequately address the climate disruption we are faced with today we must include in our plans and legislation the management of our forests. The trees we grow in Oregon will be an important contribution to drawing down the CO2 that so plagues us. We must sustain the positive impact that our forests contribute and work toward growing them substantially.
The time to act is now, so let's pass this legislation (SB1070) and become one of the leaders in solving this dire situation we are in.
Thank you. Sincerely
Bill Kucha
Depoe Bay, Or.

TO: Isabel.Hernandez@oregonlegislature.gov

Oregon Wild supports legislation to meaningfully address climate change, and we appreciate the legislatures work on this matter. We strongly urge the legislature to include forestry in the proposed Climate Cap-and-Invest Bill that is being discussed in the Oregon legislature.

The Forest Carbon Task Force of the Oregon Global Warming Commission has done its research and made clear that forests are a huge part of Oregon's carbon cycle, that logging is a huge contributor to gross GHG emissions in the state, and that growing forests can capture and store a lot of carbon if they are allowed to grow. It's clear that forests can be both part of the problem and part of the solution to global warming, so forests should definitely be included in both the "cap" and the "invest" sides of the Climate Bill.

Considering managed forests in the context of climate change, requires attention to the "opportunity costs" of logging because it kills trees that could otherwise continue to grow and sequester carbon. Even thought forests across Oregon might still be sequestering net carbon each year, they are not doing nearly as much as they could if they were growing more than currently and being logged less than currently. Ideally, the climate bill will create incentives for forest conservation and disincentives for forest harvest that kills trees and accelerates transfer of forest carbon to the atmosphere.

We think it would be a big mistake to exclude logging from the cap while allowing offsets from the forestry sector. This would reward forest activities that are good for the climate, but fail to sanction forest activities that are bad for the climate. This would lead to leakage (e.g., more logging in forests outside of the off-set projects), and a reversal of progress on climate goals.

We urge that the Climate Bill address all landowners whose forestry activities (not just "harvest") emit more than 25k gross tonnes of CO2e/year.

The language proposed by John Talberth of Sustainable Energy and Economy Network are a good place to start the conversation about how to incorporate forests into the bill.

Sincerely,

Doug Heiken, Oregon Wild
PO Box 11648, Eugene OR 97440
dh@oregonwild.org, 541.344.0675

Dear Isabel Hernandez,

Please support amendments that include logging on private and public land when you address carbon bill recommendations for Oregon.
The science behind keeping our trees is relevant to our future.

Thank you
L. Stovall

Thank you for accepting comments on SB 1070

To the Workgroup on Agriculture, Forestry, Fisheries, Rural Communities and Tribes:

We are aware that logging and tree farms on private and public lands are serious contributors to climate change. Addressing their impacts is essential to an effective climate agenda. The proposed amendments of 16 Nov 2017 are a good step in the right direction. Please insure that forest practices will increase carbon density and be more resilient to the hazards caused by climate change.

Maxine Centala
Concerned Citizens for Clean Air
PO Box 375
Seal Rock, OR 97376

Dear Ms Hernandez,

I have recently been informed that it is being proposed that carbon emissions from logging and commercial tree plantations, on public and private land, be included as part of the Clean Energy Jobs bill - SB 1070. I strongly support this proposal, since it has been established that timber industry emissions constitute a large percentage of Oregon's total carbon emissions profile. I hope that this proposal will be incorporated into the bill, and into the final legislation.

Thank you,

Nancy Harrison
1900 SW Sunset Blvd.,
Portland OR 97239

Dear Isabel Hernandez:

I have learned of amendments proposed for SB 1070 that would address the impacts of logging and tree plantations on public and private lands in Oregon. I am writing in support of the proposed amendments to help address climate concerns.

You may know of A.O. Wilson's recommendation that 50% of Earth be restored/left in a natural state to give the planet a chance at healing. That is the goal, and any way we can move toward it is of the utmost importance.

Thank you for your attention,
Susan Haywood

Hi Isabel,

Half of Oregon land is forest land, and the current illegal over-harvesting is having major impact on CO2 emissions. I strongly support John Talberth's proposed amendments to the proposed legislation. Addressing the massive climate impacts of logging and tree plantations on both public and private lands is absolutely essential to an effective climate agenda and that the proposed amendments are a good step in the right direction.

Thanks,
Tom

Tom Bender
Sustainable Architecture and Economics
38755 Reed Rd.
Nehalem OR 97131
503-368-6294
cell 503-440-9525
tbender@nehalemtel.net
www.tombender.org

Hello Ms. Hernandez,

I have been following the development of the Cap and Invest/ Oregon Clean Energy Jobs Bill over the past years with great interest. Nothing is more important to our children's future than a livable climate.

Addressing the massive climate impacts of logging and tree plantations on both public and private lands is absolutely essential to an effective climate agenda

.

The amendments (
Folding the Timber Industry into Oregon's Climate Agenda Proposed amendments to SB 1070
)
proposed by John Talberth of the Center for a Sustainable Economy are logical, timely and very much needed to provide clean good jobs in Oregon rural areas.

Most sincerely,
Emily Herbert
2120 NE Halsey #29
Portland, OR 97232

Our lives begin to end the day we become silent about things that matter. Martin Luther King Jr.

Confederated Tribes *of the*
Umatilla Indian Reservation

Board of Trustees

46411 Timíne Way • Pendleton, OR 97801
www.ctuir.org • email: info@ctuir.org
Phone 541-276-3165 • Fax: 541-276-3095

December 7, 2017

Senator Michael Dembrow
900 Court St. NE, S-407
Salem, Oregon 97301

Representative Ken Helm
900 Court St. NE, H-490
Salem, Oregon 97301

Dear Senator Dembrow and Representative Helm:

The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) appreciates your effort on the SB 1070 Cap and Invest initiative. The CTUIR is deeply concerned about climate change and we have undertaken numerous projects to minimize our carbon emissions including solar, wind and bio-fuel.

We understand it is late in the process, however we would like to ensure that the legislation specifically identifies tribes as participants in the certain aspects of the bill's implementation, rather than relying upon an uncertain regulatory process to address tribal participation. Further, we hope to become more involved in the legislative hearings, drafting and passage of any bill intended to address climate change, an issue that is dramatically affecting us all.

The CTUIR has extensive experience in implementing legislation that was not specifically contemplated to include tribal governments. We have discovered in other legislative and regulatory processes that if tribes are not specifically acknowledged in legislation as parties, ensuring tribal inclusion in regulations is extremely difficult if not impossible. The proposed legislation, SB 1070, only mentions tribes once and only in reference to parties to be consulted in the development of regulations. The CTUIR would like tribes to be expressly included in Sections 9(12) and 16(2)(c).

Further, Section 16 identifies the components of the Climate Investment Grant Program. Section 16(6) identifies specific elements of the grant program. Specific language in Section 16(6) to call out tribes as potential recipients of grants would go a long way to avoid any uncertainty as to whether tribes are eligible to receive those grants. Language such as a new subsection 16(6)(d) could be added to the indicate that grants may be awarded to tribal governments, associations or programs. We feel this has the potential to avoid significant confusion and argument during implementation of the law.

As noted, we look forward to working closely with you, other legislators, state agencies and all other parties in developing this legislation and seeing it through to implementation. We recognize the final bill may be very different but request that the concepts outlined above be adopted in the appropriate sections. Climate Change threatens all nations and must be addressed immediately.

Respectfully,

Gary Burke

Gary Burke, Chairman
Board of Trustees

Ostephe Charles

Lewis & Clark Montessori Charter School

Macocharles@lcmcs.org

December 11, 2017

Representative Ken Helm

rep.kenhelm@state.or.us

Dear Senator Lee beyer,

As a proud Oregon citizen, I am pleased to provide you with an opinion on the bill that you are working hard on. Although this bill has not officially been presented, I agree it is in the best interest of all Oregonians. The Clean Energy Jobs Bill (Bill 1070), which is currently being discussed, has the goal of providing jobs relating to clean energy. I think that people on Native American reservations should benefit from this too, and that your committee needs to pay special attention to their voices when drafting it.

If you didn't know, Oregon is one of the leading states in clean energy. By approving the clean energy jobs bill, there would be many new and sustainable jobs that could open up. I think that it's important to consider all populations in Oregon, and how especially the underrepresented can benefit from it. According to the US department of indian affairs," Many Indian reservations are well positioned to provide access to a stable source of competitively priced energy. For example, of the 326 American Indian reservations, more than 150 have the resource capacity needed to sustain a 1 to 25 megawatt renewable and/or natural gas power generation facility."A great way to create secondary jobs and proceed to circulate money locally is by utilizing the power generated from renewable resources for new industries on reservations.

By doing this you open up many different clean energy ways you could go by such as wind turbines and water energy. Which are both very easy and plentiful in the use of making energy. It is very important to consider all populations of people in Oregon, and I was glad to know that you have a work group partly dedicated to the fair representation of Native Americans.

Thank you for your time and thank you for hearing my opinions. I really appreciate what you and your coworkers are doing.

Sincerely,

Ostephe Charles

GEOS INSTITUTE

December 11, 2017

Rep. Ken Helm, Chair, Work Group on Agriculture, Forests, Fisheries, Rural Communities, Tribes, members of the Work Group & Sen. Michael Dembrow (sent via email)

Re: Geos Institute comments on SB 1070

Thank you for your leadership on SB 1070. As a forest scientist and member of the Oregon Global Warming Commission's Task Force on Forest Carbon, I would like to comment on SB 1070 to bolster the scientific underpinnings of the bill that, if adopted, would make Oregon a leader in addressing climate change.

While the views herein are my own, the draft findings of the Task Force show that with improvements to forestry, Oregon can become a national leader in meeting emissions reduction targets as summarized:

- Using forest inventory data from the Pacific Northwest Research Station and forest carbon modeling, **annual emissions from industrial forestry** represent ~ **38% of Oregon's total emissions (~24 million metric tonnes CO2e/year)**, the largest single emissions source of all reporting sectors in the state. This estimate builds on a 2015 report submitted to the governor by the Center for Sustainable Economy and Geos Institute[1].
- Natural mortality and logging are the main emissions from forests with most mortality on a portion of federal lands (e.g., West Cascades).
- Although smoke plumes produced by large wildfires are impressive, wildfires overall are not a major long-lived (100 yr+ in the atmosphere vs. black carbon emissions with only 2 week shelf life) emissions source, representing ~5% of total emissions (some years <1%[2]). Fire-related emissions also decreased between 2001-05 vs. 2011-14 (two time periods for which we have data) but were highest on private lands. This is likely due to plantations that burn more intensely due to packing of s mall trees and accumulating logging slash over industrial landscapes[3].
- Surviving and dead trees should not be logged after fire, as they

[1]http://www.forestlegacies.org/press-room/1265-oregon-forestry-is-clearcutting-our-climate-future

[2]Hicke, J.A., et al. 2013. Carbon stocks of trees killed by bark beetles and wildfire in the western United States. Environ. Res. Lett. 8, 035032, doi:10.1088/1748-9326/8/3/035032.

[3]Odion, D.C., et al. 2004. Fire severity patterns and forest management in the Klamath National Forest, northwest California, USA. Conservation Biology 18:927-936. Bradley, C.M., et al. 2016. Does increased forest protection correspond to higher fire severity in frequent-fire forests of the western United States? Ecosphere 7:1-13.

continue to store carbon, emissions from logging would increase, and they serve critically important ecosystem functions. The largest percentage of long-lived emissions released into the atmosphere due to fire consistently comes from high fire severity hotspots in the forest litter and duff, not the standing dead or downed logs.

- Oregon's older coastal forests are among the most carbon dense ecosystems on the planet[4]. Older forests store 3-7 times more carbon than plantations[5].
- Although sequestration is currently outpacing emissions from logging (due presumably to sustained yield forestry), gross forests carbon growth rates have been slowing down on private non-industrial forests, federal, and state forests.
- The Northwest Forest Plan shifted federal forests from an emissions source in the 1980s to a large carbon sink today[6]. Reduced logging levels on federal lands have accumulated carbon stored in mature forests and are now a climate asset for the state.

In closing, adding industrial forestry to the cap and invest framework of SB 1070 is essential. SB 1070 could be improved by encouraging landowners to adopt forestry practices that: (1) extend timber harvest rotations at least 50 years (net increase in carbon is ~15%[7]); and (2) protect older forests as sinks. Supporting forest conservation measures of the Northwest Forest Plan would optimize the federal lands sink. Current state logging practices emit forest carbon that took decades to centuries to accumulate (i.e., slow in). Logging returns carbon to the atmosphere quickly through slash, transport and manufacture of wood products, and soil carbon losses (i.e., fast out; Dr. Bev Law, Oregon State University). Allowing forests to accumulate carbon would have an immediate positive effect on carbon stored in vegetation and soils, atmospheric CO_2 absorption, clean water, and biodiversity that are increasingly important in a changing climate[8]. Thus, Oregon has a unique opportunity to adopt climate-saving practices that play a vital role in mitigating and preparing for climate change.

Sincerely,

Dominick A. DellaSala, Ph. D.
Chief Scientist
Member of Oregon's Global Warming Commissions Task Force on Carbon

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[4]Krankina, O., et al. 2014. High biomass forests of the Pacific Northwest: who manages them and how much is protected? Environmental Management. 54:112-121.

[5]Law, et al. 2001. Carbon storage and fluxes in ponderosa pine forests at different developmental stages. Global Change Biology 7:755-777. Hudiburg, T., et al. 2009. Carbon dynamics of Oregon and Northern California forests and potential land-based carbon storage. Ecological Applications 19:163-180.

[6]Krankina, O.N., et al. 2012. Carbon balance on federal forest lands of western Oregon and Washington. Forest Ecology and Management 286:171-182.

[7]Hudiburg, T., et al. 2009. Ibid.

[8]Brandt, P., et al. 2014. Multifunctionality and biodiversity: Ecosystem services in temperate rainforests of the Pacific Northwest, USA. Biological Conservation 169: 362–371.

Jessica Gunther
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Lewis and Clark Montessori Charter School

Representative Ken Helm
Work Group on Agriculture, Forests, Fisheries, Rural Communities, and Tribal Issues
rep.Kenhelm@state.or.us

Dear Members of the Oregon Legislature,

My name is Jessica Gunther, and I'm a 7th grader at Lewis and Clark Montessori School. I was wondering if you could possibly add something in the Clean Energy Jobs Bill, to benefit my home: Oregon.

The impact of climate change on Oregon's rivers and lakes are affecting us in many ways. For one, the Salmon in the Columbia River are declining drastically due to stress in the water. According to the Third Oregon Climate Assessment Report, "Stream temperatures that are lethal to fish (generally greater than 68°F, although this varies among populations) can occur with declining snowpack and warmer summers." To help this problem, I would ask that maybe you build more salmon hatcheries; this would protect the population of the fish that the Pacific Northwest treasures.

I hope that you keep my proposal in mind, and maybe put it as an addition to the bill. Thank you so much for your time, and I wish you the best of luck.

Sincerely,
Jessica Gunther

Representative Helm (Rep.KenHelm@oregonlegislature.gov), Representative Haas (Sen.MarkHass@state.or.us), Representative Nosse (Rep.RobNosse@oregonlegislature.gov), rep.barbarasmithwarner@oregonlegislature.gov, and SB 1070 Workgroups via Beth Reiley (Beth.Reiley@oregonlegislature.gov) and Beth Patrino (Beth.Patrino@oregonlegislature.gov)

12/21/2017

Re: Clean Energy Jobs bill, Senate Bill 1070

Greetings Representatives Helm, Haas, and Nosse, and Smith Warner,

Please consider these comments as small business input on SB 1070 (2017). BESThq LLC is a collaborative business community supporting small business through relationship, empowerment and inclusion. As an Oregon Benefit Company, BESThq supports an equitable economy powered by clean energy and supports policies enabling Oregon's present and future generations to live in a healthy environment. BESThq and partners highlight certain aspects of SB 1070 in addition to some proposed bill language. The Voices committee is an advocacy arm of the hundred plus firms of BESThq LLC, which draws from the many diverse business of the community.

Of the businesses we represent, though we have been following the work groups we have found it difficult to perceive where small business fits and provide input, and because it has been unclear where small business "fits" we offer this input to all to consider at this earlier stage.

Small business is a significant part of Oregon's economy according to the Oregon Secretary of State[1] and the Oregon Employment Department. Approximately 90,400 Portland General Electric and 74,000 Pacific Power small nonresidential ratepayers are by far the second most numerous classes of ratepayers in Oregon's investor-owned utility territories.[2] Therefore, understanding possible impacts on small business in Oregon is important. We note and appreciate that the existing bill language does articulate the role of women and minority owned businesses in various provisions. Due to our concern of the potential difficulty in measuring this we refer to "COBID certified businesses", yet not with the intent to exclude businesses that are not certified. SB 1070 will impact ratepayers risking possible rate increases and/or changes in conditions of service. Additional risk is how utility state consigned auction proceeds are distributed and expended if small business is not proportionally represented in decision-making.

Representation on committees: The legislation presents opportunities for small business to avoid or mitigate negative impacts. The various rules advisory and project funding committees envisioned in the measure should include groups representative of small business. These representatives would be members of the bill's various rule advisory and project funding committees to ensure the voice of small business is represented in significant decisions and actions that will directly affect small business.

Measurables: Oregon has tools ready to measure impact of this bill on small business.

- Metrics measuring participation of COBID certified firms and Oregon benefit companies in any SB 1070 related project should be a part of this legislation.

[1] Small businesses are critical to Oregon's economy. More than half our workforce is employed in jobs created by small businesses. http://sos.oregon.gov/business/Documents/2016-small-business-annual-report.pdf

[2] UE 294 I PGE I Exhibit 1402 / Cody p 1 http://edocs.puc.state.or.us/efdocs/HTB/ue294htb9539.pdf ; Pacificorp DBA Pacific Power UE 263 Request for General Rate Revision http://edocs.puc.state.or.us/efdocs/HAR/ue263har83528.pdf, Table A-1

- Bill language should include reference to the existing statutory mechanism of ORS 183.336.[3] A fiscal impact statement could include measurement of participation of COBID firms, Oregon benefit companies, and North American Industry Classification System ("NAICS") codes.[4]
- Including NAICS codes either needed or utilized in related projects could be included in RFP reporting.
- Legislative sponsors could call on the lead agency to consult with Employment Department to identify metrics to best assist analyze economic impact.

Thank you for considering these comments and engaging with us on this very important work.
Signed,

BESThq LLC Voices Committee, including the following:

Diane Henkels, Henkels Law LLC, Committee Co-Chair, Constituent of Rob Nosse
Sydney Schilling, BESThq LLC, Constituent of Ken Helm
Ron White, BESThq LLC, Constituent of Ken Helm
Mary Anne Harmer, H Collaborative LLC, Constituent of Mark Haas
Michelle Halle, Barlow Strategies LLC, Constituent of Barbara Smith Warner

[3] See Statute at: https://www.oregonlegislature.gov/bills_laws/ors/ors183.html

[4] One example of statement of fiscal impact on small business is in the AR 603 Community solar docket: http://edocs.puc.state.or.us/efdocs/HCB/ar603hcb112914.pdf and contrast this with the numbers in the Oregon information in this report: http://www.thesolarfoundation.org/wp-content/uploads/2017/02/National-Solar-Jobs-Census-2016-Appendix-A.pdf

Senate Bill 1070 (2017) Text:

https://olis.leg.state.or.us/liz/2017R1/Downloads/MeasureDocument/SB1070/Introduced

Makes all provisions related to carbon pollution market and distribution of auction proceeds operative January 1, 2021. Authorizes Environmental Quality Commission, Public Utility Commission, Department of Transportation and Oregon Business Development Department to adopt rules prior to operative date.

Whereas climate change and ocean acidification caused by greenhouse gas emissions threaten to have significant detrimental effects on public health and the economic vitality,

Whereas any climate policy should address leakage to ensure a level playing field between in- state and out-of-state companies to prevent jobs from leaving this state;

Section 7:
Add "**Department of State**" (to include the Office of Small Business Assistance)
Add to 7(e): One member appointed by the [Commission on … Small Business?], or add to "Five members appointed by the Governor who reflect the geographic, demographic, and **economic** diversity of the state

Section 8: Revise G and divide into two:
(G) One member who represents the interests of industrial and large businesses as defined in ORS impacted by climate change
(H) One member who represents the interests of small [and COBID certified] businesses.

Revise Subsection 5(a): Include **(E) How [COBID certified] businesses are benefitted by/impacted by expenditure of auction proceeds.**

Review Subsections 11 & 12 for small business:
(11) "High road agreement" means an agreement among multiple stakeholders that specifies goals for a project or program that are related to the quality and accessibility of economic opportunities provided by that project or program, and that includes:
(a) Strategies for advancing the specified goals based on metrics that may include but are not limited to:
(A) Requirements for wages and benefits; (B) Workforce and business diversity;
(C) Training and career development; and (D) Environmental benefits;
(b) A mechanism for implementing the agreement; and
(c) A process for evaluating the progress of a project or program toward achieving the goals specified in the agreement.
(12) "Impacted communities" includes, but is not limited to, the following communities most at risk of being disproportionately impacted by climate change:
(a) Communities with a high percentage of people of color, low-income households, immigrants or refugees relative to other communities;
(b) Linguistically isolated communities;
(c) Communities with high exposures to pollution or toxics relative to other communities; and
(d) Rural communities with unemployment rates that are above this state's mean state- wide unemployment rate.

Review Subsection
(18) "Project labor agreement" means a collective bargaining agreement with one or more labor organizations that establishes the terms and conditions of employment for a specific construction project and that, at a minimum:
(a) Binds all contractors and subcontractors on the construction project through the inclusion of appropriate specifications in all relevant solicitation provisions and contract documents;
(b) Allows all contractors and subcontractors to compete for contracts and subcontracts without regard to whether they are parties to any other collective bargaining agreement;
(c) Contains guarantees against strikes, lockouts and similar job disruptions; and

(d) Sets forth effective, prompt and mutually binding procedures for resolving labor dis- putes that arise during the term of the project labor agreement.

Section 13:
(c) Nonvolumetric, on-bill climate credits applied annually or semiannually to residential customers or small business customers with 50 employees or less; or
(d) Other weatherization and energy efficiency programs.
(2) The Public Utility Commission shall adopt rules necessary to implement this section. In adopting rules under this section, the commission shall:
(a) Consult with the advisory committee established under section 7 of this 2017 Act; and
(b) Develop rules that prioritize uses of the proceeds that benefit low-income residential customers.

Section 14: Insert in subsection 4(b): **COBID certified businesses**

Section 16: Insert in subsection 2(c):
(c) The commission shall consult with the Environmental Justice Task Force, the Oregon Health Authority, **the Secretary of State (Office of Small Business Assistance)**, other state agencies,

Section 17: Distinguish small and large businesses and provide both in Climate Investments in Impacted Communities Advisory Committee:
(f) One member must represent the interests of large business.
(g) One member must represent the interests of small business [as defined by .]

Section 20: Just Transition Grant Program of the Oregon Business Development Department
(2)…Governor determines necessary and that represent the demographic and geographic **and economic** diversity in this state.
Insert **(g) At least one representative of small business.**

Section 32: Insert:
"…The report also may discuss measures the state may adopt to mitigate the impacts of global warming on the environment, the economy and the residents of Oregon and to prepare for those impacts…"**The Commission shall consult with the Secretary of State Corporate Division and the Employment Department regarding data indicating impacts on the economy and measures that may be adopted to mitigate the impacts."**

Section 38:
Insert (2) "(c): Rulemaking undertaken pursuant to (2)(b) of this Section shall comply with ORS 186.833, follow a stated methodology stated in the reporting, and include explicit reference to government and private sector reports of relevant information on which conclusion regarding small business impacts are based."