

8 November 2018

TO: Oregon Board of Forestry
FROM: Ernie Niemi, President
SUBJECT: THE RIGHT BUSINESS CASE FOR THE HCP

ODF staff recommend proceeding with development of the habitat conservation plan (HCP). The recommendation draws on a “Business Case Analysis” that shows using the HCP to increase timber harvest on state lands over the next 50 years, would generate cumulative net revenues (present value) exceeding \$250 million.

The Board should pursue the HCP, but not to enable increased logging. The “Business Case Analysis” is simplistic and biased. It fails to account for the mounting evidence that shows logging imposes costs on society that far exceed the value of the logs: by at least 40-to-1 and, perhaps, by more than 80-to-1. It would be imprudent for Board members to fixate on the prospect of harvest revenues and ignore the likelihood that those harmed will demand compensation that wipes the harvest revenues—and more—off the books. Even if they can repulse demands for compensation, it would be irresponsible for Board members, as stewards of Oregon’s public resources, to impose huge costs on society—\$10 billion to \$20 billion—for such little gain.

Recommendation #1: The Board should abandon all efforts to increase logging in Oregon.

Recommendation #2: The Board should proceed with its investigation of the HCP for the right reasons:

- Help manage inevitable reductions in timber harvest
- Help conserve the value of species adversely affected by climate change
- Mitigate threats to water supplies
- Provide a foundation for a carbon-based revenue stream

Recommendation #3: The Board should tell the State Forester to prepare no more analyses that ignore the social costs of logging and the economic benefits of unlogged trees.

My supporting materials provide the basis for adopting these recommendations.

The challenge before the Board is this:

The IPCC, supported by a vast body of scientific research, tells us we all are on a new *Titanic*, speeding toward catastrophic collisions that can’t be avoided unless CO₂ emissions fall dramatically.

Logging in western Oregon emits enough CO₂ to attract litigation. Timber is Oregon’s coal.

The “HCP Business Case Analysis,” promises the Board \$250 million in new revenues from increased logging on state lands. This is a false promise.

The new logging-related emissions would generate social costs of \$10-\$20 billion. Those harmed likely would litigate, seeking compensation. Efforts to increase logging will create risks of large net costs to society and Oregon taxpayers.

I. IPCC: Cut Emissions Now or Face High Risks of Catastrophe

The recent report from the Intergovernmental Panel on Climate Change makes it clear: the risks are high if humans fail to take quick, dramatic actions to reduce greenhouse-gas emissions.

II. Without Cuts in Emissions, Climate Change Soon Will Impose High Costs on Oregon's Households

Currently available research findings indicate that, with a business-as-usual approach, climate change soon will impose costs averaging \$15,000 per year on Oregon's households.

III. Timber Is Oregon's Coal

Oregon's timber industry generates 30-35 million tons of CO₂ emissions each year (30-35 MtCO₂/yr). This amount matches the emissions from the world's 2nd largest coal-fired generator, the Belchatow Plant in Poland. Attorneys are preparing litigation to close Belchatow and comparable sources of CO₂ emissions. It would be prudent for the Board to anticipate that it will face litigation if it attempts to increase logging on state lands.

IV. The Social Costs of Logging on State Lands Far Exceed the Value of the Logs

The economic motivation for suing the Board is strong. Currently available research indicates the damage resulting from logging-related CO₂ emissions exceeds the value of the logs produced by at least 40-to-1 and, perhaps, by more than 80-to-1.

V. The Simplistic and Biased HCP Business Case Analysis Points the Board Toward Imprudent Action

The "HCP Business Case Analysis" describes a world that does not exist, and it ignores the very real financial risks that will accompany logging on state lands. These risks threaten catastrophic financial consequences for Oregon taxpayers. It would be imprudent for the Board to use this analysis to justify actions that point toward increased logging. Contrary to statements by ODF staff, the analysis does not provide the Board with enough information to determine that increased logging will be in the best interest of the state.

It also would be imprudent for the Board to tolerate from ODF staff yet another economic study that fails to account for the social costs of logging. The failure here parallels the failure to account for the social costs of logging – and the social benefits of unlogged trees – in the assessment submitted to the Board in 2016 regarding the economic costs and benefits of streambank protections. The Board should refuse to accept the "HCP Business Case Analysis."

VI. There Is a Good Business Case for Proceeding with the HCP

Within the context of the IPCC's warning, the HCP offers the Board a tool for reducing financial and economic risks to Oregonians:

1. Help manage the inevitable reduction in timber harvest
2. Help conserve value of species adversely affected by climate change
3. Mitigate threats to water supplies
4. Provide a foundation for a carbon-based revenue stream

Supporting Materials: The Right Business Case for the HCP

Submittal to Oregon Board of Forestry
Ernie Niemi

8 November 2018

I. The IPCC Warned Last Month: Cut Emissions Now or Face High Risks of Catastrophe

Climate models project robust differences in regional climate characteristics between present-day and global warming of 1.5°C, and between 1.5°C and 2°C. These differences include increases in:

- Mean temperature
- Hot extremes
- Heavy precipitation
- Drought

Climate-related risks to health, livelihoods, food security, water supply, human security, and economic growth are projected to increase with global warming of 1.5°C and increase further with 2°C.

For global warming from 1.5°C to 2°C, risks across energy, food, and water sectors could overlap spatially and temporally, creating new and exacerbating current hazards, exposures, and vulnerabilities that could affect increasing numbers of people and regions

Limiting global warming to 1.5°C could reduce the number of people exposed to climate-related risks and susceptible to poverty by up to several hundred million by 2050.

Limiting warming to 1.5°C, compared with 2°C, is projected to result in smaller net reductions in yields of maize, rice, wheat, and potentially other cereal crops.



**Research Published Last Week Indicates
Emissions Must Fall by **Additional 25%****

Intergovernmental Panel on Climate Change. 2018. [Global Warming of 1.5°C](#).
Resplandy, L., and others. 2018. ["Quantification of Ocean Heat Uptake from Changes in Atmospheric O₂ and CO₂ Composition."](#)

II. Climate Change Will Impose High Costs on Oregon's Households

Potential Costs that Changes in Climate Will Impose on Oregon's Households in the Near Future

1. Increased food prices	
2. Lost income from economic slowdown	
3. Non-federal costs from increased wildfires	
4. Increased exposure to wildfire smoke	
5. Increased human deaths from heat	
6. Decreased salmon populations	
7. Reduced federal services	
Total cost per household per year	\$15,000
8. Costs yet to be measured	???

Niemi, Ernie. 2018. [Paying for Oregon's Future: Costs Climate Change Will Impose on Oregon's Households](#)

III. Timber Is Oregon's Coal

Belchatow Power Station:

2nd largest coal plant in the world

Emissions = ~35 MtCO₂/yr



Oregon's Timber Industry:

Oregon's largest CO₂ emissions

Emissions = ~34 MtCO₂/yr



Emissions from Coal and Timber Must Drop, Soon, To Reduce Risk of Catastrophe

Jakubowski, Milosz. 2018. Personal communication; Law, Beverly, et al. 2018. "[Land Use Strategies to Mitigate Climate Change in Carbon Dense Temperate Forests](#)," Talberth, John. 2018. [Oregon Forest Carbon Policy: Scientific and Technical Brief](#)

IV. The Costs to Society from Most, Perhaps All, Logging on State Lands Far Exceed the Value of the Logs

Bureau of Land Management (2016):

Social cost of CO ₂ emissions	vs.	Stumpage price of logs
4	– to –	1

Ricke et al. (2018) estimate of costs:

Social cost of CO ₂ emissions	vs.	Stumpage price of logs
40-80	– to –	1

Costs yet to be measured:

Social cost of CO ₂ emissions	vs.	Stumpage price of logs
40+-80+	– to –	1

Bureau of Land Management. 2016. [Proposed Resource Management Plan/Final Environmental Impact Statement: Western Oregon](#);
Niemi, Ernie. 2014. "Carbon Value Far Exceeds Timber Value for Federal Forests in Western Oregon"

VI. The HCP Business Case Analysis Is Simplistic, Biased, Imprudent

1. Predicts increase in timber revenues = \$250 million
2. Assumes reduction in regulatory and legal risk

But... but...

Board should anticipate logging will increase, not decrease, risks

The analysis **ignores** risks associated with the social costs of logging:

- CO₂ emissions = >>\$10 –20 billion
- Harm to water = \$???
- Harm from landslides, etc. = \$???
- Harm to fish and wildlife = \$???
- Harm to recreation = \$???
- Harm to cultural/spiritual values = \$???
- Harm from logging + climate change = \$???

Board should anticipate logging will increase, not decrease, costs:

- Costs to compensate those harmed by logging
- Legal and administrative costs
- Costs to correct damage to water, fish, etc.

VII. DEVELOP THE HCP FOR THE RIGHT REASONS, IN THE RIGHT WAY

Develop the HCP as a tool to reduce financial and economic risks to Oregonians:

1. Help manage the inevitable **reduction** in timber harvest
2. Help conserve value of species adversely affected by climate change
3. Mitigate threats to water supplies
4. Provide a foundation for a carbon-based revenue stream

Fully account for the social costs of logging and the social benefits of unlogged trees

1. Stop denying the current reality:
 - Emissions, from all sources, must fall dramatically. Soon.
 - Emissions cause great harm for Oregonians, and others.
 - Most logging can't be justified on moral grounds: the harm from logging-related emissions far exceeds the value of the logs.
 - Most logging can't be justified on economic-efficiency grounds: the harm from logging-related emissions far exceeds the value of the logs.
 - Oregon's logging-related emissions are too big to ignore. They will become a target for those seeking to avoid catastrophic risks for life as we know it.
2. Embrace this reality as both:
 - *A limitation* (the social costs of logging State lands are very large and growing)
 - *An opportunity* (sequestering and storing carbon on State Lands has great value that will grow over time)
3. Reach outside the DoF to initiate genuine collaboration with Oregonians who have the necessary skills and commitment to help the Board chart a realistic course forward.