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Dear Homeland Security:

Please accept the following comments from Oregon Natural Resources Council concerning the proposed DHS NEPA procedures. ONRC is a statewide non-profit organization with approximately 7,000 members who support our mission to protect and restore Oregon's wild lands, wildlife, and waters as an enduring legacy.

ONRC is opposed to secrecy in any agency's NEPA compliance. The core value in NEPA is full-disclosure and open-decision-making. Any effort to limit public disclosure would be incompatible with the very purpose of NEPA. Unless and until Congress acts to specifically change NEPA, DHS must follow the letter and spirit of NEPA and provide an open public process for all decisions that may affect the environment.

DHS has proposed a range of justifications for withholding information from the public. DHS is asserting a presumption that if any reason exists to withhold information from the public, the DHS will err on the side of withholding rather than disclosure. We oppose this presumption. In order for the public and decision makers to participate in government decisions likely to have a significant effect on the environment, the risks and plans must be publicly explained and the public must be provided the opportunity to comment. At the heart of NEPA is public oversight. NEPA was designed to facilitate an interactive process whereby citizens can comment by providing insights and criticisms to the officials about their proposals and influence the outcome of the project.

The blanket exemptions proposed by DHS are likely to be abused and would likely suppress vast amounts of pertinent environmental information. We are concerned that information that DHS would like to withhold for reasons other than national security can be easily categorized under one of these exceptions. We are very concerned that there is no external monitoring entity that would ensure this rule is not abused. An independent, neutral, external body should be assigned to review all "sensitive" and "classified" documents to determine whether withholdings are warranted.

NEPA is designed to complement FOIA and the text of NEPA specifically includes provisions that encourage reviewers to utilize FOIA to enable them to comment intelligently on NEPA documents: Agencies shall "Make environmental impact

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100% recycled post-consumer waste • Chlorine-free process

statements, the comments received, and any underlying documents available to the public pursuant to the provisions of [FOIA]." 40 CFR 1506.6(f). We are aware that the Bush administration has already established a policy to use more FOIA exemptions. This NEPA policy would compound the crippling FOIA policy with more secrecy in the NEPA process.

DHS should unequivocally disallow categorical exclusions where extraordinary circumstances exist.

DHS should require documentation and public disclosure of the application of categorical exclusions for all excluded categories.

Several of the specific categorical exclusions are unjustified, as they are not activities "which do not individually or cumulatively have a significant effect on the human environment." 40 C.F.R. § 1508.4. The following should be removed from the list altogether

CX B13 would exclude tree harvesting from review. However, this practice could have a significant impact on the environment since it does not account for endangered species, critical habitat, or ecological balance. Additionally the allowance of "commercial thinning" is inappropriate for a categorical exclusion, and commercial considerations could unduly color the ecological evaluation.

"Tree harvesting" causes numerous adverse ecological effects including: (1) removal of large trees that are disease and fire resistant (Frost 1999); (2) increased levels of fine fuels and short term fire hazard (Weatherspoon 1996, Huff et al. 1995, Wilson & Dell 1971, Fahnestock 1968); (3) increased mortality of residual trees due to pathogens and mechanical damage to boles and roots (Filip 1994, Hagle & Schmitz 1993); (4) damage to soil integrity through increased erosion, compaction, and loss of litter layer (Harvey et al. 1994, Meurisse & Geist 1994); (5) creation of sediment that may eventually be delivered to streams and harm fish (Grant & Wolff 1991, Beschta 1978); (6) retention of insufficient densities of large trees and woody debris to sustain viable populations of cavity-nesting and woody debris dependent species (DellaSala et al. 1996); and (7) reduced habitat quality for sensitive species associated with cool, moist microsites or closed canopy forests (FEMAT 1993, Thomas et al. 1993). In short, tree harvesting may individually or cumulatively cause significant effects and requires an EA or an EIS.

CX B14 would also allow the harvest of dead or dying trees, and could suffer from the same problems as B13. Dead an dying trees are in fact an extremely valuable and under-appreciated natural asset in our forests. Dead trees provide habitat for a wide range of species who nest, den roost, forage, perch, in and on dead trees. Since dead and dying trees are frequently targeted for removal, our forest ecosystems now have far less dead wood habitat than they are supposed to. Any further removal of this unique habitat value may have a significant impact on the human environment.

Dead wood also provides other ecological values such as erosion control, sediment storage, nutrient storage and release, water storage and release, it creates favorable conditions for the germination and early growth of seedlings aiding in forest recovery after disturbance.

In a dynamic ecosystem life may be fleeting but the snags and logs that survive disturbance provide very critical temporal links from one stand to the next. Under natural conditions, a forest hands down a large legacy of living and dead material from one stand to another even after an intense disturbance. See Jerry Franklin et al 2000. Threads of Continuity. Conservation Biology in Practice 1(1) pp9-16. See also: William F. Laudenslayer, Jr., Patrick J. Shea, Bradley E. Valentine, C. Phillip Weatherspoon, and Thomas E. Lisle *Technical Coordinators.* Proceedings of the Symposium on the Ecology and Management of Dead Wood in Western Forests. PSW-GTR-181. http://www.fs.fed.us/psw/publications/documents/gtr-181/

Harvest of large trees, whether they are alive or dead, removes large material that is normally handed down from one stand to the next. The loss of this material has serious adverse consequences for wildlife, hydrology, soil, etc. These legacies are often described as "lifeboats" that allow species to persist in post-disturbance forests and/or return more rapidly to post-disturbance forests. Given cumulative loss of habitat and ecological functions over the last century, how many lifeboats can we take off the ship when threatened and endangered species and sensitive species are at stake? The NEPA analysis must account for all the values provided by snags and down wood and the effect of removing these legacy structures.

Bats, martens, woodpeckers, bears, amphibians, invertebrates, and many other species are dependant upon snags and down wood. Snags and down wood also serve several crucial ecosystem functions related to site productivity, nutrient storage & cycling, hydrology, geomorphology, disturbance, and habitat (terrestrial, riparian and aquatic). Current direction for protecting and providing snags and down wood tend sot be focused on a small subset of the full spectrum of values provided and does not ensure the continued operation of these ecosystem functions or meet the complete lifecycle needs of the many species associated with this unique and valuable habitat component. Please consider all the many values of snags and down wood presented in Rose, C.L., Marcot, B.G., Mellen, T.K., Ohmann, J.L., Waddell, K.L., Lindely, D.L., and B. Schrieber. 2001. Decaying Wood in Pacific Northwest Forests: Concepts and Tools for Habitat Management, Chapter 24 ***in Wildlife-Habitat Relationships in Oregon and Washington*** (Johnson, D. H. and T. A. O'Neil. OSU Press. 2001) http://www.nwhi.org/nhi/whrow/chapter24cwb.pdf We strongly recommend that you download and read this document.

Removal of dead trees is also controversial in the sense of NEPA significance. Scientists are currently debating the optimal number of dead trees to retain in forest landscapes. These are all issues that deserve consideration in an EA or EIS.

CX D3 applies to repair and maintenance, and includes "pest control activities."

However, there is no limit on the types of pest control activities that may be taken, and such unrestricted allowance could have substantial effects on endangered species, ground water toxicity levels, and public health. DHS must realize that "pests" are sometimes beneficial organisms that help regulate a ecosystem by naturally thinning vegetation. See the attached material on beneficial insects.

DHS failed to consider the beneficial effects of insects and disease, for example: the value of mistletoe brooms as wildlife structures; the value of root rot in creating pockets of down woody debris, enhancing biodiversity, and creating gaps with complex canopy architecture; the value of bark beetles as food sources for diverse wildlife and as vectors of sapwood decay fungi rendering the tree more suitable for wildlife habitation.

> The massive insect epidemics that have plagued Pacific Northwest forests in recent years are mostly a reflection of poor forest health conditions, overcrowding, overuse of chemicals, fire suppression and introduction of monocultures or non-native species, a new report concludes.
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> Beyond that, these insect attacks are actually nature's mechanism to help restore forest health on a long-term basis and in many cases should be allowed to run their course, according to Oregon State University scientists in a new study published this week in the journal Conservation Biology In Practice.
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> Native insects work to thin trees, control crowding, reduce stress and lessen competition for water and nutrients, the researchers found. Some levels of insect herbivory, or plant-eating, may even be good for trees and forests, and in the long run produce as much or more tree growth.
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> "There is now evidence that in many cases forests are more healthy after an insect outbreak," said Tim Schowalter, an OSU professor of entomology. "The traditional view still is that forest insects are destructive, but we need a revolution in this way of thinking. The fact is we will never resolve our problems with catastrophic fires or insect epidemics until we restore forest health, and in this battle insects may well be our ally, not our enemy."
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> Historically, Schowalter said, destructive forest insects such as the mountain pine beetle or tussock moth were native to Pacific Northwest forests and served an essential role in keeping them healthy. When trees became too crowded the insects would eliminate weaker trees and reduce competition. But since the beetles' reproductive pheromones only carried effectively about 15-20 feet, naturally open stands of mature pines were protected against widespread outbreaks.
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> In these same forests today, fire suppression has allowed shade-tolerant, fire-intolerant species to crowd the understory, create an entire forest stressed for water and nutrients, and beetles can skip from one weak tree to another across entire stands. But the solution in cases such as this, Schowalter said, is to address

the fundamental issue of overcrowding through forest thinning, controlled fire and insect attack, allowing the pine beetles to actually help in the long-term process of restoring forest health.

It now appears that insects, which are the most abundant and diverse animals on Earth, are anything but destructive pests. Rather, they are major architects of the plant world in both structure and function, and in natural balance help to maintain healthy and productive forest ecosystems.

According to the new report, insects can influence their environment in five key ways:

· Insects aid decomposition, stimulate the breakdown of organic materials, enhance soil fertility and plant growth, burrow in soils and increase its porosity and water-holding capacity.

· Insects are herbivores that eat plants, influencing where they can grow. Sometimes they kill trees and other plants to reduce competition, and many times feed on trees without killing them in ways that actually improve the health and long-term growth of trees and forests.

· Insects are a key food source for vertebrates and other animals, and play a major role in the food chain.

· Insect are dispersal agents to carry seeds, fungal spores, and even other invertebrates from one place to another.

· Insects are pollinators, and in this role also help control the movement of plant species.

Through this multiplicity of roles, forest insects can help to control plant succession, dictate which plants will be allowed to grow or thrive in particular areas, and generally invigorate plant communities, the report said. Studies suggest herbivory levels as high as 40-50 percent make little or no difference to plant growth and survival, and this type of moderate herbivory clearly should not be "fought" with costly controls. Wood production in western U.S. pine forests reached or exceeded pre-attack levels 10-15 years following mountain pine beetle outbreaks, research has shown, and the more an individual Douglas-fir tree is defoliated by the tussock moth, the more it compensates afterwards with increased growth, given sufficient resources. The herbivory may alleviate drought stress by reducing a tree's demand for water, and also encourage more competitive interactions between plant species that ultimately work to the benefit of the tree.

Insects may be so important to soil fertility that they may be a better barometer of forest ecosystem health than the larger trees or animals which live there, researchers say. In natural forest communities there are more than 200 species of

arthropods and more than 200,000 individuals in a square meter of soil, and the numbers of these arthropods can tell more than chemical tests about soil concerns such as compaction and nutrient cycling. A study by another OSU researcher showed residual impacts on soil invertebrate populations from a site that had been clearcut and slash burned 40 years earlier.

In their natural role, insects are usually helpful to the forest and rarely cause large epidemics.

"When you have a highly destructive insect epidemic, what that really should be telling us is not that we have an insect problem, but that we have a forest health problem," Schowalter said. "It's monocultures and fire suppression that cause insects to become nuisances. The pests that plague us are all too often of our own making."

As these systems become more fully understood, Schowalter said, it should be possible to work with insects, rather than against them, to produce new solutions to maximize the yield of forest commodities while achieving conservation goals and healthier ecosystems.

"It's really simple on one level," Schowalter said. "We have to pay more than lip service to the balance of nature."

http://www.sciencedaily.com/releases/2001/10/011030230203.htm

See also:

- Insect Ecology - An Ecosystem Approach Edited by Timothy D. Schowalter Academic Press. 2000. and Schowalter, TD and J. Withgott. 2001.
- Rethinking insects: What would an ecosystem approach look like? Conservation Biology In Practice 2(4): 11-16.
- Waldbruaer, Gilbert. 2003. What Good are Bugs? Insects in the Web of Life. Harvard University Press. Cambridge, MA. 316 pp.

Another interesting example, though anecdotal, is from Yellowstone National Park where researchers noted after the 3,400 hectare 1994 Robinson fire that beetle-killed lodgepole pine (self-thinned to lower density) experienced significantly lower fire severity compared to adjacent burned areas.
http://www.fs.fed.us/projects/documents/Omi_pollet_2002_thinning_effects.htm

CX D5 excludes dredging activities from review. However, dredging can have an extremely detrimental effect on marine and riparian habitats, effecting endangered species, critical habitat, water flow, flooding, waste management, and a host of other environmental concerns.

CX E5 would exclude resource management activities to "enhance" native plants and animals. While the DHS should certainly take measures to mitigate its effect on the

environment, management activities have historically disrupted ecological balances and caused further environmental problems. Any attempt to significantly alter the natural environment, whether through destruction or "enhancement," should be subject to NEPA review so the public, including independent biologists, can analyze the proposed activity for its ecological soundness.

Restoration and enhancement of native ecosystems is laudable but can have significant effects. Often restoration requires some short-term adverse effect in order to gain long-term beneficial effects. NEPA analysis is necessary to balance these competing effects in different time frames. For example, one common restoration activity is to remove or replace culverts where roads cross streams. This work can help fish move both upstream and down stream and accommodate flood flows and pass gravel and wood debris that helps maintain a dynamic stream ecosystem. Sediment generated by efforts to remove or replace culverts can have serious adverse effects, but those effects will generally be off-set by the benefits of better fish passage and or better accommodation of high flows, but NEPA analysis is needed to ensure that the short-term effects are avoided, minimized, and mitigated to the extent possible.

Another example, thinning to help restore dense young tree plantations causes some insolation, weeds, and soil disturbance from logging. Those adverse effects can hopefully be off-set by enhanced understory diversity and increased growth of conifers brought about directly by the canopy reduction. However, extensive road construction or road reconstruction to facilitate such logging will not be justified by a small restoration thinning effort. And ground-based logging that allows heavy equipment off of roads may cause significant soil disturbance that will not be offset by any intended benefits to the vegetation.

Additionally, due to the dramatic impact this rule will have on DHS implementation of NEPA, we urge you to hold public hearings on this rulemaking around the country and extend the public comment period by ninety days.

Sincerely,

Doug Heiken

Doug Heiken
Litigation & Policy Coordinator