



SISKIYOU PROJECT

Protecting the Siskiyou Wild Rivers region for future generations

December 31, 2009

Edward W. Shepard, State Director
United States Department of Interior
Oregon/Washington Bureau of Land Management
PO Box 2965
Portland, OR 97208
orvegtreatments@blm.gov

Regarding: Draft Environmental Impact Statement Vegetation Treatments Using Herbicides on
BLM [Bureau of Land Management] Lands in Oregon

Dear Mr. Shepard:

The Siskiyou Project recommends you choose Alternative 1-No Herbicide Use. Complex mixtures of pesticides commonly occur in fish habitats. Studies have shown that over 90% of waterways affected by urban or agricultural land uses contain two or more pesticides (Northwest Fisheries Science Center 2009). New information (as per NEPA) published since the Biological Opinion Issued by the NMFS on June 26, 2007 for the PEIS indicates that “[s]ingle-chemical risk assessments are likely to underestimate the impacts of these insecticides on salmon in river systems where mixtures occur. Moreover, mixtures of pesticides that have been commonly reported in salmon habitats may pose a more important challenge for species recovery than previously anticipated” (Laetz et al. 2009: 348). Although Laetz et al. (2009) did not test the herbicides proposed for use by BLM, the fact remains that pesticides found to be not lethal singly may become lethal when mixed (Laetz 2009:348) and with toxicity that greatly exceeds what would be expected from merely additive effects (i.e. synergistic effects). The DEIS:196 acknowledges the potential for synergistic effects: “[t]here is some uncertainty in this evaluation because herbicides in tank mixes may not interact in an additive manner; this may overestimate risk if the interaction is antagonistic, or it may underestimate risk if the interaction is synergistic. In addition, other products may also be included in tank mixes and may contribute to the potential risk.” Published studies (e.g., Laetz et al. 2009) now indicate that synergistic effects lethal to coho salmon have been demonstrated. The DEIS fails to report that significant synergistic effects from various mixtures of pesticides is likely already affecting coho salmon in western Oregon since these chemicals are commonly found in surface waters of large river basins such as the Willamette (Laetz et al. 2009:349). This is important because BLM has failed to report pesticide detection frequency in Western Oregon streams where the potential exists for proposed BLM herbicides to mix with those pesticides already present in streams inhabited by federally listed coho salmon. Watersheds with agricultural uses are

particularly vulnerable for synergistic effects because agricultural practices make use of a myriad of pesticides including those tested by Laetz et al. 2009. At a minimum and prior to any decisions, the BLM must make a good faith effort to acquire pesticide detection data from the following watersheds with intermingled BLM and private lands: Bear Creek, Applegate River, Little Butte Creek, Illinois River, Cow Creek, and any other streams where commercial pesticide use is suspected. Merely reporting toxic effects from mixing the proposed herbicides fails to consider or analyze the effects of BLM herbicides with those already present in western Oregon streams. Based on recent research (Laetz et al 2009), such mixtures are likely to have synergistic and potentially lethal effects to federally listed coho salmon.

The DEIS has failed to factor in the cost of monitoring pesticide detections in streams draining areas where the herbicides will be applied. BLM must pay for this surface water monitoring because they are proposing to use these pesticides. Due to synergistic effects, all likely pesticides need to be monitored. The BLM must coordinate with other agencies with water sampling expertise and authority (Oregon DEQ and USGS) to provide the NMFS baseline pesticide detections from streams draining watersheds where these herbicides will likely be used. Bear Creek with intermingled BLM and private land is the western Oregon stream most likely to have high numbers of pesticides that would affect coho salmon synergistically.

The DEIS is defective because it fails to provide baseline conditions of potentially affected streams (existing detections of pesticides).

The DEIS is defective because it implies that the BLM herbicides will be applied to areas where synergistic and lethal effects to coho salmon are not occurring and cannot occur.

The DEIS is defective because it appears to assume that regardless of baseline conditions (i.e. pesticide detections in surface water), it is safe to add an additional 18 chemicals to the stream environment.

The DEIS is defective because it fails to disclose the increasing frequency of pesticide detections over time for watersheds affected by the DEIS. For example the DEIS fails to disclose that Alternative 1(no herbicides) would result in the least number of pesticide detections in streams whereas, alternative 5 could have up to 18 additional pesticide detections.

The DEIS fails to disclose that all people place water quality above the BLM's fear mongering about adverse effects of invasive plants because people drink water. No one on the planet perceive herbicide control of invasive plants as being more important than water quality. If given the choice between no herbicide detections in streams (Alternative 1) or an increase of up to 18 herbicide detections in streams (Alternative 5), 100% would choose Alternative 1.

Finally, the June 26, 2007 Biological Opinion (DEIS:11) cannot be used for herbicide proposals/decisions in this DEIS because of new scientific information about unexpected synergistic (lethal) effects to coho salmon from pesticide combinations.

Citations:

Laetz, C.A. , D.H. Baldwin, T.K. Collier, V.Hebert, J.D. Stark, and N.L. Scholz. 2009. The Synergistic Toxicity of Pesticide Mixtures: Implications for Risk Assessment and the Conservation of Endangered Pacific Salmon. Environmental Health Perspectives 117(3)348-353. March. Accessed 12/31/2009 at <http://ehp.niehs.nih.gov/members/2008/0800096/0800096.pdf>

Northwest Fisheries Science Center. 2009. Pesticide Mixtures: Deadly Synergy in Salmon. Accessed 12/31/2009 at http://www.nwfsc.noaa.gov/features/pesticide_mixtures/pesticide_mixtures.cfm

Sincerely



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Enc: Laetz, C.A. , D.H. Baldwin, T.K. Collier, V.Hebert, J.D. Stark, and N.L. Scholz. 2009. The Synergistic Toxicity of Pesticide Mixtures: Implications for Risk Assessment and the Conservation of Endangered Pacific Salmon. Environmental Health Perspectives 117(3)348-353.