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Title:

Comments: I am deeply concerned about the widespread use of herbicides discussed in the vegetation plan. The 148 page Vegetation Plan that supports the Foothills Environmental Assessment calls for herbicide applications on over 65,000 acres. Some limited applications of insecticide may be necessary to effectively treat insect pests like the hemlock woolly adelgid or the emerald ash borer. However, the sheer amount of forest that will be treated with herbicides, which are chemicals that kill plants, under the Foothills plan is disturbing and shocking. Herbicide use at this scale could harm populations of non-target plant species like wildflowers, some of which are already rare and have protected status at the state and federal level. In addition, people and animals that consume plants sprayed with herbicide may be affected by the chemicals. People collect blackberries and other fruits on the forest along roadsides. how will they know whether herbicide has been applied to the fruit? Of course you could put up a sign, but bears and birds cannot read.

The Forest Service (FS) references the US EPA as its guide for what chemicals are safe to use and how to use them. However, the fact that our EPA has not banned a chemical does not make it OK for our forests. And furthermore, the FS is required to do an independent assessment of the safety of pesticides rather than relying on EPA and FIFRA registration alone. (Ref. USFS website page on Pesticide Management and Coordination). Knowledge of the impacts of chemicals on our ecosystem grows, and new knowledge must be considered. For example, the significant chronic risk of the widely used herbicide Atrazine on amphibians, fish, mammals, birds and terrestrial plant species was finally recognized and reported by the EPA in 2016. The herbicide glyphosate, long considered safe, has recently been linked with cancer. This illustrates how important it is for the FS to recognize and use current science in its decision-making and before implementation. However, although the FS states that it uses "best available science" in its plans and risk assessments, the most current science that it references is the 2011 risk assessment methodology developed for the FS by Syracuse Environmental Research Associates. With the pace of research, knowledge and legal judgments concerning pesticides and herbicides, even a layman knows that 2011 science in this area is not necessarily the best available science. Another aspect of the forest that the FS has not considered in its Foothills planning is the underground network of fungus and microbes that permeates the forest floor that was discovered only 15 years ago. Research in the years since is beginning to unravel the importance of mycorrhizal networks in forest survival, growth and defense. We do not know the potential damage to these network from the types of logging and chemical application the FS plans in the 157,000 acres of Foothills Landscape. The Forest Service managers have goals and targets they are required to achieve. Please consider the many interconnections, like the mycorrhizae and trees, that are not completely understood and that may be adversely affected by logging and herbicides.

Many thanks for reading my comments and considering them as you manage our forests. You are just the managers. The forest belongs to all Americans. Please remember that as you make long-term decisions about our federal lands and the plants and animals on those lands.