Opinion: The Register Guard

Forest herbicides threaten McKenzie River water quality

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At an April 3 meeting, Lane County Commissioner Jay Bozievich asserted there has “never been a detect of herbicides or pesticides in EWEB’s water.” But herbicides and pesticides have been detected in the McKenzie River, even at the Eugene Water & Electric Board’s treatment plant intake and in filtered water.

In a 2017 document, EWEB identified industrial forestry activities that may adversely impact downstream water quality in the McKenzie watershed. The report notes that “water quality data from EWEB/USGS monitoring efforts in creeks and mainstem locations with significant industrial forestry activity upstream resulted in at least one pesticide detection in 50 percent of the 42 water samples collected.”

Starting in 2002, EWEB and the U.S. Geological Survey monitored for pesticides in the McKenzie Basin using conventional grab sampling methods — dipping a cup into the water and seeing what can be detected from a particular place at a particular time.

Sampling continued approximately twice a year through 2010. In 2012, the USGS and EWEB issued a report showing that herbicides used in forestry were among the most frequently detected compounds, and at the highest concentrations, although not in excess of any government standards.

Of 15 compounds detected in more than 10 percent of the samples, seven were herbicides used in forestry: hexazinone, 2-4D, atrazine, glyphosate, sulfometuron methyl, imazapyr and triclopyr. AMPA, a metabolite that glyphosate breaks down into, was found in 30.9 percent of samples.

In 2007 and 2010, EWEB and the USGS placed passive water samplers at the drinking water plant intake and two sites in the McKenzie Basin. Developed by the USGS, this technology collects samples over a month or longer to get a time-integrated average of water contaminants. It also mimics the respiratory exposure of organisms for a more detailed picture of exposure.

Passive sampling is considered more effective than grab sampling, and, the USGS stated, “many more compounds were consistently detected by passive samplers.” While legacy pesticides and agricultural chemicals were targeted, with one sample exceeding water quality criteria, curiously, the only forestry herbicide tested for in 2007 was atrazine.

In 2010, the samplers detected many organochlorine pesticides after filtration, such as dacthal, chlorpyrifos, heptachlor epoxide, trans-chlordane, dis-chlordane, endosulfan, DDT, DDD and trans-permethrin. Again, however, no current forestry herbicides were tested for — not even atrazine.

USGS and EWEB’s report states, “a large number of compounds were detected, and the data suggest that runoff from forested, agricultural, and residential areas, as well as atmospheric deposition, may be important sources of low-level contamination in both raw source water and finished drinking water in the McKenzie River Basin.”

Studies indicate the toxic synergistic effects of multiple chemicals can be far greater when they are combined.

The toxic synergistic effects of more than two dozen chemicals are potentially a far greater threat, but most pesticides are not tested in combination. Eighty percent of ratepayers surveyed by EWEB support maintaining the McKenzie watershed’s environmental benefits, and EWEB emphasizes that healthy watersheds and riparian forests result in lower water rates and greater economic and ecological stability.

EWEB has also attempted to time its testing to follow pesticide spraying by the timber industry, but the industry has not cooperated by informing EWEB when sprays occur. EWEB technicians acknowledge that if the timber industry had been transparent about the spray schedule, they are sure testing results would have been different — probably even higher.

And what about Lane County residents who get their water from other agencies or private wells? The same forestry practices threaten their water supplies, yet they have far fewer protections.

Only 20 percent of the McKenzie sub-basin is classified as industrial forest — which are more likely to be managed with herbicides, especially as applied by aerial spraying — yet chemicals used in forestry are still in the water. Other watersheds contain far more industrial forest and are likely to have higher levels of pesticides in rivers and reservoirs.

Perhaps forestry corporations should pay for regular passive water sampling tests in all Lane County watersheds so the public can have the most accurate picture of the threats to their water. Perhaps county politicians should stop misleading the public about the nature of the threat. And perhaps timber companies should stop threatening one of the finest watersheds in the country by continuing to spray poisonous chemicals over our riparian forests.

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