



August 6, 2026

Alexandra Hart, Chair
North Coast Regional Water Quality Control Board

Comments on:

- *Proposed Order R1-2026-0035: General Waste Discharge Requirements for Commercial Lily Bulb Operations in the Smith River Plain (Proposed Lily Bulb Order) and*
- *Resolution R1-2026-0036 certifying an accompanying Final Environmental Impact Report*

Dear Chair Hart and North Coast Regional Water Quality Control Board,

Thank you for traveling to Del Norte County, and for the work and expertise that Water Board staff have brought to the task of creating this lily order. I am not here so much to provide a legal analysis of this order—for that I will refer you to, and append here, comments by the Environmental Law Foundation and the Environmental Protection Information Center. I want to discuss history, causation, and impacts both environmental and cultural in a way that humanizes our discussions today and allows you to reject this order in favor of one that phases out entirely the use of synthetic pesticides on the Smith River Plain.

Pesticide impacts along the lower Smith River have been occurring since at least the 1960s; this Water Board has been aware of the problem for nearly fifty years. Yet still this order fails to meet the legal requirements of the Clean Water Act and the Endangered Species Act. The timeline for meeting groundwater benchmarks can extend to twenty years; if they are not met then another process kicks in. The protected species of the Smith River do not have another twenty or even ten years to somehow survive pesticide contamination. If this process goes the way of so many other Water Board regulatory efforts in this district—say for example the Elk River in Humboldt County, where for

more than three decades the Water Board has allowed the severe and illegal degradation of salmonid habitat—then this Smith River Order will simply have been a plan for extinction.

The Order cites the 2025 study of filter strips by Cal Poly Humboldt Chemistry professor Matthew Hurst. Hurst found that “filter strips were ineffective at reducing dissolved copper in field runoff. ...” Yet the Order concludes, “The results of the study, in general, highlight the need for further research on effective mitigation strategies. ...”

Yet Hurst made clear that there are no effective mitigation strategies for stopping the flow of pesticides from the seasonal wetlands of the lily fields into surface streams. Clearly the only means of disrupting and eventually halting pesticide contamination of the Smith River estuary is to stop using pesticides altogether.

The Order also would require most stream buffers to run only in 10- to 25-foot widths, with a few buffers extending to 50 feet, including in wetland areas. These are ineffectual buffers that will do nothing to stop the flow of contaminants from wetlands into streams. And yet the Order will allow lily farmers to forego providing buffers altogether if the growers provide “restoration and protection of native riparian vegetation at another location within the same sub-watershed (HUC-12) with similar or greater ecological value and function.” The idea of somehow creating new habitat instead of protecting existing habitat is ludicrous and would result a clear violation of the state and federal Endangered Species Acts, the Clean Water Act, and other statutes.

There are many additional and serious problems with this order, but I want to pivot and speak for a moment to the obligation that we humans have to protect each other and the environment, something that this Order does not do. I began working on this issue back in 2001, when I witnessed a lily grower’s tractor spraying chlorothalonil into the teeth of a 30-mile-per-hour wind that was blowing directly into the adjacent Smith River Elementary School, which was in session. The US EPA classifies chlorothalonil as a “likely human carcinogen” and a reproductive toxin whose toxicity is most readily taken up by humans through inhalation. In 2001 Smith River lily farmers applied more than seven thousand pounds of chlorothalonil on their crops. Today, lily growers still apply thousands of pounds of chlorothalonil each year, along with an additional 200,000 pounds of highly toxic pesticides. Spraying this chemical into such a stiff wind is illegal and I think speaks to the indifference shown by lily growers to meet their legal and moral obligations to protect

people and wildlife from these deadly chemicals. It also speaks to the inadvisability of allowing the self-monitoring by lily growers, that is allowed by this order.

At the time that I witnessed this poisoning of school children, our daughter was just two years old, yet by then she was well familiar with the Smith River. Her first trek into the backcountry occurred when she was four months old. Over the twenty-seven years of our daughter's life our family has climbed the highest peaks of the Smith River watershed and have swum its deepest emerald pools. We have owned and managed riverside properties. We have hiked along Mill Creek, Buck Creek, and Stony Creek, the Middle Fork, the North Fork, the South Fork, the Siskiyou Fork, in all months of the year. We have borne witness to the miracle of spawning salmon and steelhead. We have been charged by bears, narrowly missed stepping on rattlesnakes, and watched mountain lions bound across the paths in front of us. When our daughter was two years old our family hiked high into the South Fork Smith River canyon, following the river miles from any road or even a trail. It was there, on a hot summer's day, that she suddenly spiked a fever. We remained in the shade and cooled her with clothing soaked in the clean, chill waters of the river. After a short while a small clutch of creatures approached us in the river. As they swam nearer we could see they were otters, five of them. They bobbed and frolicked in the water for more than an hour, just a few feet from us, as if to guard us from any further peril until the day cooled and we could hike our daughter out of there. These were challenges we met with resolve and, in hindsight, with gratitude. They helped us to grow, to see up close how the life of this precious planet truly works and how we fit in. It allowed our daughter to grow up with the essential confidence of her own two feet, to meet challenges with an intellect nurtured by the land itself. And it gave us all a deep and abiding understanding of and appreciation for how uniquely precious is the Smith River watershed, and how important it is that we all—everyone in this room, everyone who loves life itself—protect every bit of it, from the headwaters to the sea.

But we never, ever took our daughter to the Smith River estuary or the farmland around it. We opted against subjecting her to a toxic sacrifice zone where we would have no good answer, no effective human response to inundation by agricultural poisons. This understanding was further solidified in 2016, when Siskiyou Land Conservancy conducted a comprehensive health assessment in the town of Smith River that demonstrated the perils of living near lily production. You can find this health assessment

on our website SiskiyouLand.org. A large percentage of respondents reported experiencing severe health impacts shortly after moving to Smith River, including skin rashes, chronic coughs, headaches, infections, ear problems, eye problems, heart disease, neurological disorders, and cancer. When this board last visited Del Norte County, on October 8 last year, several residents gave testimony about the severe health impacts their families are experiencing in Smith River, many of which are suffered by children. Among these residents was Kyla Castagnaro, who has seen her health “rapidly collapse” since moving to Smith River. The dust from the lily fields coats everything, said Kyla, cars, porches, children’s toys. It leaves a sticky brown film. When she hoses it down it foams up and leaves an oily residue. Kyla gave you a lot of detail about her own medical trauma. But her most acute suffering was over the severity of the sudden health issues that have wracked her son. When he plays outside he breaks out in painful rashes that cover his body. His eyes glaze over and he becomes feverish and completely dysregulated. On heavy spray days he’s not even himself, she said. He’s unreachable. Kyla has seen this happen not just to her son but to other children in her neighborhood. Given economic disparities in Del Norte County, few Smith River residents have the option of moving. If you won’t stop the poisoning of aquatic wildlife—a failure that is baked into this lily order—perhaps you can find it in your heart to halt the poisoning of children. Your first action should be to request that local and state health authorities follow up with formal evaluations of toxic exposure and consequent health impacts in communities along the lower Smith River. Next would be this Board’s redirecting staff to draw up an order that will result in the phasing out altogether of synthetic pesticide use on the Smith River Plain.

In the current moment the members of this Water Board, individually and together, have a unique and distinctive opportunity, and obligation, to break with a tradition of the state’s failure to protect people and wildlife from pesticides, and instead stand up and be counted as individuals of authority and conscience who will no longer abide these practices. You must refuse to certify any agricultural permit for Easter lily growing on the Smith River Plain—or production of any crop there—unless it proscribes any further use of synthetic pesticides. This is your calling in a critical moment of global ecological crisis, and in this moment of overlapping crises in the lower Smith River. Your legacy awaits you in this very moment. What will you do?