

# Fire retardant use brings environmental worries

By Matt Weiser, Water Deeply

Chemical fire retardants are considered a vital wildland firefighting tool, helping to slow the spread of flames while ground crews move into position. But as their use increases, the harmful side effects of these chemicals are coming under increasing scrutiny.

The chemicals, usually dropped from low-flying aircraft, largely consist of ammonia compounds, which are known toxins to fish and other aquatic life. Studies have shown retardants can kill fish, alter soil chemistry, feed harmful algae blooms and even encourage the spread of invasive plants. Yet there is little regulation of their use, and no safer alternatives on the market.

In California, state firefighting crews have applied 15.3 million gallons of chemical fire retardants so far this year, according to data provided by CalFire, the state's wildland firefighting agency. That's a new record, and double the amount used just three years ago.

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