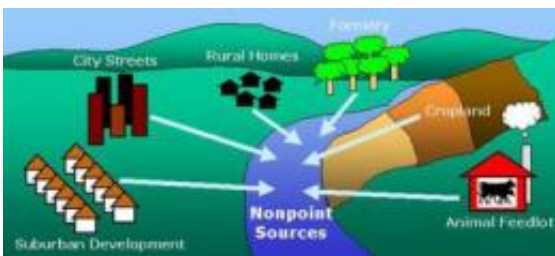


# Homes pollute: Linked to 50 percent more water pollution than previously believed

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Polluted runoff originates from several sources, and has been linked to fish kills and a loss of aquatic species diversity. A new study suggests current runoff models may underestimate pollution contributed by homes by up to 50 percent. Credit: National Oceanic and Atmospheric Administration

They say there's no place like home. But scientists are reporting some unsettling news about homes in the residential areas of California. The typical house there — and probably elsewhere in the country — is an alarming and probably underestimated source of water pollution, according to a new study reported today at the 238th National Meeting of the American Chemical Society.

In the study, Lorence Oki, Darren Haver and colleagues explain that runoff results from rainfall and watering of lawns and gardens, which winds up in municipal storm drains. The runoff washes fertilizers, pesticides and other contaminants into storm drains, and they eventually appear in rivers, lakes and other bodies of water.

"Results from our sampling and monitoring study revealed high detection frequencies of pollutants such as pesticides and pathogen indicators at all sites," Oki says of their study of eight residential areas in Sacramento and Orange Counties in California.

Preliminary results of the study suggest that current models may underestimate the amount of pollution contributed by homes by up to 50 percent. That's because past estimates focused on rain-based runoff during the wet season. "Use of pesticides, however, increases noticeably during the dry season due to gardening, and our data contains greater resolution than previous studies," Oki says.

Pollutants detected in outdoor runoff included ant-control pesticide products. Previous surveys have shown that the majority of [pesticides](#) purchased by homeowners are used to control ants. To encourage pollutant reduction, the researchers initiated community outreach programs centered on improving both irrigation control and pest management.

Source: American Chemical Society ([news](#) : [web](#))

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