## New Online USGS Pesticide Mapper—Predicting Pesticides in Streams and Rivers: Where is Water-Quality at Risk?

A new interactive <u>mapping tool</u> provides predicted concentrations for 108 pesticides in streams and rivers across the Nation and identifies which streams are most likely to exceed water-quality guidelines for human health or aquatic life.

Citizens and water managers can create maps showing where pesticides are likely to occur in local streams and rivers and evaluate the likelihood of concentrations exceeding water-quality guidelines.

The online mapping tool is based on a USGS statistical model — referred to as <u>Watershed Regression for Pesticides</u> (or "WARP") — which provides key statistics for thousands of streams, including the probability that a pesticide may exceed a waterquality benchmark and the reliability of each prediction.

The model used by the mapping tool is based on data from USGS monitoring of pesticides in streams across the Nation since 1992 as part of the <u>National Water-Quality Assessment</u> (NAWQA) Program. Since 1991, NAWQA has been a primary source of nationally consistent data and information on the quality of the Nation's streams and groundwater. Objective and nationally-consistent water-quality data and models provide answers to where, when, and why the Nation's water quality is degraded and what can be done to improve it for human and ecosystem needs.

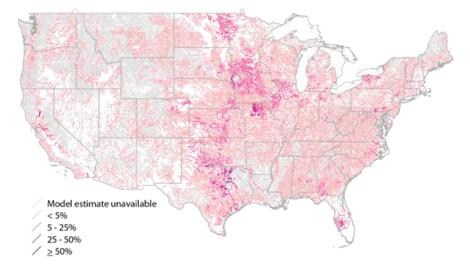
Additional USGS information on pesticides:

Pesticides in Streams and Rivers: Occurrence and Trends during 1992-2011

## Annual Pesticide Use Maps, 1992-2012

Please contact Wes Stone (<u>wwstone@usgs.gov</u>) for additional information regarding the online mapper or the WARP model.

Probability Chlorpyrifos Exceeds 4-day Moving Average Acute Fish Aquatic Life Benchmark



Chlorpyrifos is an insecticide used commonly on cotton, corn, citrus, and almond crops.

For 2012, streams in the Midwest, central Texas, southwest Florida, and the Central Valley in California were predicted to have chlorpyrifos levels with a greater likelihood of exceeding the acute fish aquatic life benchmark. Use the <a href="mailto:online mapper">online mapper</a> to view the spatial variability of over 100 pesticides.