

# CEAP RELEVANT RESEARCH WATERSHED STUDY

<p><b>Name of Project</b> Sources, Transport, and Fate of Agricultural Chemicals (ACT)</p>	<p><b>Location (State, River, HUC)</b> Washington- Yakima River Basin  California- Lower Merced River and Mustang Creek Basins Nebraska- Maple Creek Basin Indiana- Sugar Creek Basin Maryland- Morgan Creek Basin Iowa- South Fork of the Iowa River Basin Mississippi- Bogue Phalia Watershed</p>
<p><b>Principal Investigator (Name, contact info)</b> Paul Capel, U.S. Geological Survey (612) 625-3082, <a href="mailto:capel@usgs.gov">capel@usgs.gov</a></p>	<p><b>Website</b> <a href="#">overall study--</a> <a href="http://pubs.usgs.gov/fs/2004/3098/">http://pubs.usgs.gov/fs/2004/3098/</a> <a href="#">for more information on individual studies.</a> <a href="#">see</a> <a href="http://pubs.usgs.gov/fs/fs08003/">http://pubs.usgs.gov/fs/fs08003/</a> <a href="http://pubs.usgs.gov/fs/fs08103/">http://pubs.usgs.gov/fs/fs08103/</a> <a href="http://pubs.usgs.gov/fs/fs08203/">http://pubs.usgs.gov/fs/fs08203/</a> <a href="http://pubs.usgs.gov/fs/fs08303/">http://pubs.usgs.gov/fs/fs08303/</a> <a href="http://pubs.usgs.gov/fs/fs08403/">http://pubs.usgs.gov/fs/fs08403/</a></p>
<p><b>Purpose of Project (Goals and Objectives)</b> Assess sources, transport, and fate of chemicals applied to crops in selected agricultural basins across the nation.</p>	
<p><b>Description of Project (Landscape, Models, Practices)</b> The basins in the studies represent a range of agricultural settings—with varying crop types and agricultural practices related to tillage, irrigation, artificial drainage, and chemical use—as well as a range of landscapes with different geology, soils, topography, climate, and hydrology. Consistent methodology and analysis allow comparisons among the different basins. Information from these studies will help with decision-making related to chemical use, conservation, and other farming practices that are used to reduce runoff of agricultural chemicals and sediment from fields. This information also will benefit the U.S. Environmental Protection Agency, the Department of Agriculture, local and regional water managers, and agricultural chemical manufacturers who are involved in managing chemical use and pesticide registration. The project includes: developing annual mass budgets for water and chemicals; determining rates of transport and residence times of water and chemicals; identifying important transformation and transfer process of selected chemicals; using tools and quantitative methods to help interpret the field observations and to extrapolate findings to similar unmonitored watersheds; and interpreting scientific findings in ways that would be useful to managing the water and water quality impacts</p>	