

A Preview of What's In This Issue

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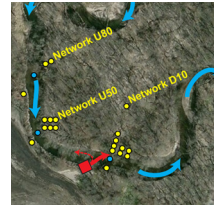
Understanding Pathways of Unconventional Oil and Gas Produced Water Spills in the Environment

A new study measures the transport of chemicals associated with unconventional oil and gas produced waters downstream from a pipeline leak in North Dakota.



Recovery of Stream and Adjacent Groundwater After Wastewater Treatment Facility Closure

The hydrology and chemistry of a wastewater-impacted stream and adjacent groundwater responded rapidly (had fewer chemicals at lower concentrations) following wastewater treatment facility shutdown. However, the adjacent shallow groundwater remained a continuing source of contaminants to the stream following shutdown.



Study Reveals Processes that Control Uranium Bioavailability in a Freshwater Snail—Relevance to Aquatic Biota in the Grand Canyon Area

Scientists refined a model that identifies key biogeochemical processes controlling dissolved uranium bioavailability to a freshwater snail. This information is important for understanding and predicting the ecological risk posed by uranium mining to freshwater ecosystems.



New Study Measures Crop Bactericide, Nitrapyrin, in Iowa Streams

First-ever reconnaissance study measures the off-field transport of nitrapyrin—a bactericide—to adjacent streams. This study is the first step in understanding the transport, occurrence, and potential effects of nitrapyrin or similar compounds on nitrogen processing in aquatic systems.



USGS Study Identifies Factors Related to Cyanobacterial Harmful Algal Blooms

U.S. Geological Survey (USGS) scientists identified water-quality and environmental factors related to cyanobacterial harmful algal blooms at beaches in Ohio. This information was collected as part of a plan to develop site-specific predictive models for microcystin concentrations.



Is White Sucker Tumor Prevalence in some Wisconsin Rivers Related to Environmental Contaminant Exposures or Other Factors?

The incidence of particular skin and liver tumors on white suckers collected from some Wisconsin rivers corresponded to the degree of urban development within the watershed.



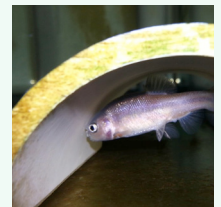
Swine Manure Application as a Source of Hepatitis E Virus and other Livestock-Related Pathogens

The presence of indicator bacteria, hepatitis E virus, and numerous bacterial pathogen genes increased following runoff events in streams draining adjacent land surfaces where swine manure was recently applied.



Human Contraceptive Gestodene Affects Fish Reproductive Behavior

Laboratory exposure of adult fathead minnows to the human contraceptive progestin, gestodene, at environmentally relevant concentrations induced rapid and negative effects on reproductive health and suggests that wild fish may be similarly affected.



Damage Assessment and Restoration Tracking System (DARTS)

A new, web-based interactive tool has been developed to increase access to the Department of Interior Natural Resource Damage Assessment and Restoration (NRDAR) Program information.



Organic Contaminant Levels and the Reproductive Success of Ospreys in Chesapeake Bay

Changes in the regulation and use of some organic chemicals have caused environmental concentrations to stabilize or decline during the past 35 years coincident with a rebound in the osprey (*Pandion haliaetus*) population of the Chesapeake Bay.



Low Levels of Contaminants Found in Great Lakes Tree Swallow Eggs

Tree swallow eggs at most study sites in the Great Lakes basin were minimally exposed to legacy organic contaminants and brominated flame retardants.



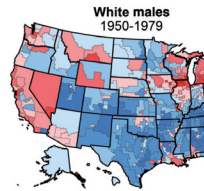
New Study Shows High Potential for Groundwater to be Corrosive in One-Half of U.S. States

A recent U.S. Geological Survey (USGS) assessment of more than 20,000 wells nationwide indicates that groundwater in 25 States and the District of Columbia has a high potential for being naturally corrosive.



Elevated Bladder Cancer in Northern New England—Drinking Water and Arsenic

Study finds bladder cancer risk was associated with water intake among participants with a history of private domestic well use. The trend was significant for participants who used shallow dug wells exclusively.



USGS Online Mapper Provides a Decadal Look at Groundwater Quality

A new online interactive mapping tool provides summaries of decadal-scale changes in groundwater chemistry across the Nation.



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