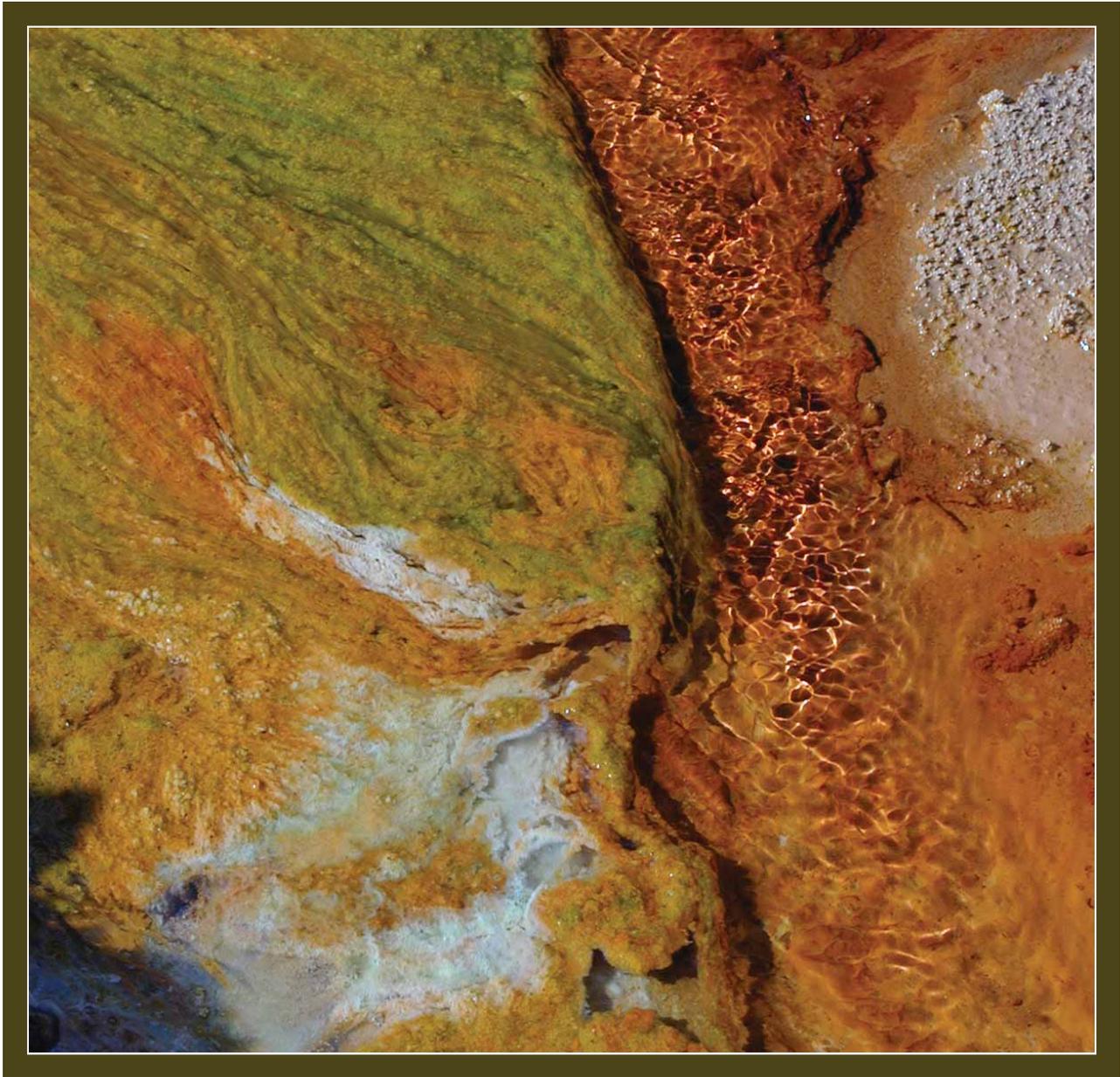


Southwest HYDROLOGY

The Resource for Semi-Arid Hydrology

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A bimonthly trade magazine for hydrologists, water managers, and other professionals working with water issues.



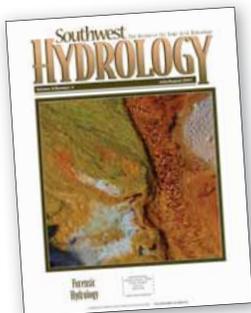
From the Publisher

Forensic: "relating to or dealing with the application of scientific knowledge to legal problems" (Merriam-Webster Online). In this sense, "forensic hydrology" typically refers to investigations of water contamination and the need to identify the causes. In fact, forensic investigations are not limited to water quality concerns, and more loosely defined can include any investigation of a water's history. Southwest Hydrology's approach is to look at the hydrologic tools available to determine the history of an event—such as water contamination, recharge, or groundwater capture—that matters to some entity, for example, a manufacturer, well owner, or municipality. This issue's authors also touch upon ways to make forensic investigations successful in and out of the courtroom.

Don't miss Southwest Hydrology's first Regional Water Symposium, Aug. 29-Sept. 1, in Tucson at the Westin La Paloma Resort and Spa. We have a great program with many distinguished speakers, with whom we will have a lively debate about growth, water supply, and quality of life. Visit www.watersymposium.org for details about the program, optional workshops and field trips, becoming a sponsor or exhibitor, student volunteer options, or to register or reserve your room at the resort (\$109 single/double; \$83 for government employees, based on availability). Register today—early registration rates end July 13.

Thanks to the many contributors to this issue, and as always, to our advertisers. We hope to see you all at the symposium!

Betsy Woodhouse, Publisher



Some water immediately elicits questions: Where did it come from? How did it get this way? Forensic hydrology is the art and science of reconstructing a water's history. Photo by Howard Grahn.

Southwest Hydrology

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Forensic Hydrology

What is the source of perchlorate in a groundwater basin? Who released gasoline into an aquifer? What makes one river's water so saline? Where does the water that supplies a riparian area originate? Forensic hydrology applies to both groundwater and surface water, and to water quality and quantity issues. A number of hydrologic "tools" are available to help provide answers. Isotopic analyses offer insight to a variety of investigations, as described in several articles. Standard geochemical analyses, microbial source tracking, aerial photos, and other methods can contribute valuable information, too. The key is to match the right tool or combination of tools to the situation to avoid ambiguous results. And, should you find yourself invited to a courthouse, insights from our authors could help you prepare.

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30 MST in the MRG: Identifying Sources of Fecal Coliform

Betsy Woodhouse

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Publishing **Southwest Hydrology** furthers SAHRA's mission of promoting sustainable management of water resources in semi-arid regions.



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