

Ground Water

...A Call to Action



Key Message

Our ground water resources are in serious need of attention. Abundant, high-quality, low-cost ground water resources are fundamental to the long-term growth and vitality of our nation, yet this most important resource is often overlooked, if not neglected. Attention to the protection and management of ground water has consistently lagged behind that given to surface waters. Historic and current water resource laws and policies deal primarily with the protection and management of our more visible lakes, rivers, and wetlands.

why this urgent call to action?

We are at a ground water crossroads that necessitates ingenuity and proaction in order to minimize potentially detrimental and costly consequences. Each of us shares responsibility for securing the availability, integrity, and ecological balance of our nation's water resources—for the long haul. It is way past time for us to recognize the significance of ground water to our national welfare—our public health, quality of life, and economic well-being.

These ground water protection disparities and deficiencies can be partly attributed to the hidden nature of ground water. However, there is also a lack of appreciation of the fact that ground water is a key drinking water source nationwide, a critical resource for many sectors of our economy, and an integral part of the water cycle, providing base flow to the majority of surface waters. Furthermore, many of us are not aware that the quality and quantity of our nation's ground water is now significantly threatened.

To reverse this trend, we must take swift and decisive action to ensure that ground water is meaningfully integrated into federal and state water resource conservation, management, and

protection agendas. We must adopt new paradigms in water policy and science that demonstrate the interactive relationships among components of watersheds and ecosystems, and the essential role ground water plays in those systems. We must ensure that these new paradigms are based on solid scientific principles that allow us to better understand the role of ground water in maintaining watersheds so that we can make wise water-policy, land-use, and water-use decisions accordingly.



A karst area of the White River National Forest, Colorado, showing the interface of ground water with surface water.

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“Groundwater and surface water are not separate categories of water any more than liquid water and ice are truly separate. The designations “groundwater” and “surface water” merely describe the physical location of the water in the hydrologic cycle. Indeed, ground- and surface water form a continuum.”

ROBERT GLENNON,
WATER FOLLIES

• Fresh water is less than one-half of a percent of all the water on earth, and ground water makes up about 97 percent of available fresh water. It is about 60 times as plentiful as fresh water found in lakes and streams (USGS, 2006).

Recommended Actions



To Congress:

- Take legislative action, including:
 - Appropriating the funding necessary to ensure the development and implementation of a national ground water protection strategy.
 - Clearly defining ground water's coverage under the Clean Water Act and Safe Drinking Water Act §1429.
 - Requiring explicit coordination between Clean Water Act and Safe Drinking Water Act programs.
 - Directing that USEPA support state efforts to protect and manage ground water.

To USEPA:

- Include more attention to ground water in the national water strategy, giving it scientifically appropriate weight with surface water with respect to programmatic emphasis, funding, research support, and public visibility.
- Utilize existing federal laws as the statutory basis and funding authority for protecting and conserving ground water as a component of watersheds and ecosystems, including the reestablishment of an active ground water protection program.

To Governors and State Legislatures:

- Support and authorize statewide ground water protection and conservation laws, regulations, and regulatory agencies and programs that recognize ground water as a critical component of state economies, watersheds, and public health protection.

- There are no market-generated prices for ground water, or even estimates for market prices if water were traded. In fact, ground water is remarkably undervalued, largely because we have no consistent process for determining its total economic value. Typically, more value is placed on the extraction, treatment, and delivery of the ground water “product” than on the total value of the resource itself. How do we determine appropriate ground water protection strategies and establish priorities if we have no valuation basis for making these decisions?

*Fern Hammock Spring, Marion County, Florida.
A spring is our window to an aquifer. It is an opening in the earth from which ground water flows to the surface, forming a natural pool of water. Florida's springs are formed because of the porous limestone (or “karst”) topography.*



Photo: Tom Scott FGS/FDEP

This summary sheet is taken from the Ground Water Protection Council's (GWPC's) *Ground Water Report to the Nation: A Call to Action*. Contact GWPC to obtain the full report.