

# Ground Water & Source Water Protection



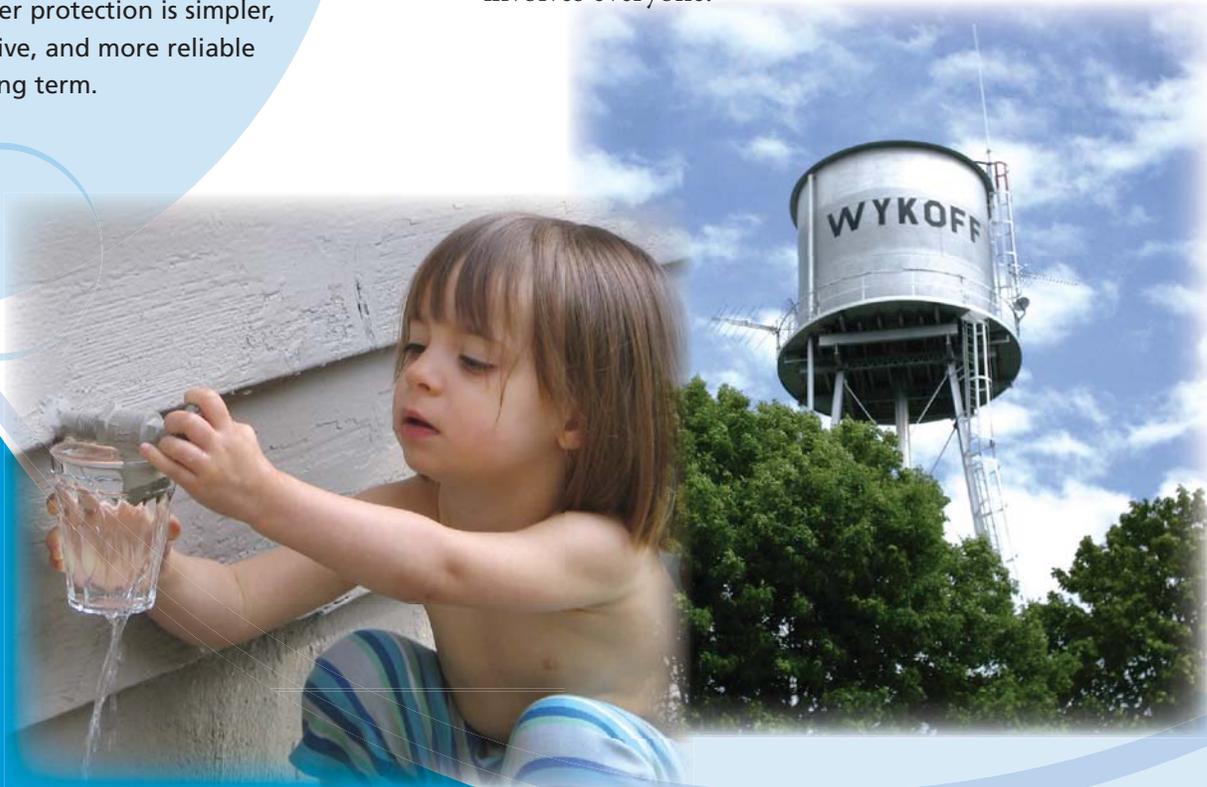
## Key Message

### why source water protection matters to ground water...

Without diligent attention to managing potential sources of contamination, our drinking water will come at a higher cost over time. This cost includes the increasing need for water treatment, monitoring, remediation, finding alternate water supplies, providing bottled water, consultants, staff time, and litigation. Source water protection is simpler, less expensive, and more reliable over the long term.

Access to clean, safe drinking water is the essential ingredient to a healthy and viable community. Severe human health, ecological, and economic consequences follow from losses of current and future drinking water sources—losses that can be prevented. The potential for contamination of drinking water, coupled with the high cost of treating water and locating and developing alternate water sources, makes it imperative that federal, state, and local entities adopt and implement effective strategies for long-term protection of drinking water sources.

Congress and USEPA have taken the first step in developing such strategies by requiring assessments of all public water systems—termed Source Water Assessment and Protection. To be most effective, assessments and strategies must be based on an understanding of the factors that affect water quality and quantity, including how surface water interacts with ground water, how water quality factors into water availability, and how the management of potential sources of water contamination involves everyone.



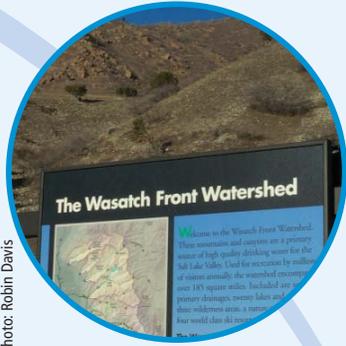


Photo: Robin Davis

• Ground water protection and drinking water protection overlap to a considerable extent. Protection of any drinking water source must be carried out in the context of the land area that influences the water supply, whether it is the area upstream of a surface water intake or a wellhead protection area. For ground water supplies, an understanding of ground water hydrology within a delineated watershed or aquifer system provides the basis for evaluating the vulnerability and sustainability of that source water and the means for determining how it can be protected and preserved.



This summary sheet is taken from the "Source Water Protection" chapter of the Ground Water Protection Council's (GWPC) *Ground Water Report to the Nation: A Call to Action*. Contact GWPC for the full Report.

## Recommended Actions



### To USEPA:

- Incorporate source water protection considerations into other programs at the federal level (e.g., hazardous waste, underground injection control (UIC), Clean Water Act) and allow for flexibility so that state programs can do the same.
- Sustain a federal-level Source Water Protection program.
- Provide additional financial support and incentives for state and local Source Water Protection programs.
- Integrate ground water value into Source Water Protection programs.

### To State Agencies:

- Establish and sustain a statewide Source Water Protection program that coordinates the activities of all agencies responsible for natural resources and environmental protection programs so that they proactively address potential source water impacts. This includes periodically evaluating the effectiveness of current source water protection efforts. (See *Elements of an Effective State Source Water Protection Program*, a joint Ground Water Protection Council (GWPC) and Association of State Drinking Water Administrators (ASDWA) document, October 2006.)

### To Local Governments:

- Create, or participate in creating, a municipal watershed or regional-level comprehensive Source Water Protection Plan that includes:
  - Strategies for managing threats and protecting resources.
  - A combination of voluntary and regulatory strategies.
  - A long-term vision, short-term strategies, and measurable goals.
  - A strategy for how to fund the activities in the plan.
- Coordinate land-use planning with source water protection plans, incorporate source water protection as an element of the local comprehensive plan, and integrate source water areas into land-use planning and zoning regulations.

• While public water system operators have primary responsibility for delivering safe drinking water, they do not control the many potentially harmful land-use activities and decisions that take place beyond their operational jurisdiction—often the source areas of the water they collect from water intakes or wells. This responsibility lies primarily with community decision makers, such as planning and zoning boards, municipal administrators, health departments, public works departments, and the general public.