

## APA Planning Advisory Service Reports

- A Guide To Wellhead Protection, No. 457/458 (August 1995)
- Nonpoint Source Pollution: A Handbook for Local Governments, No. 476 (Dec. 1997)
- Green Infrastructure: A Landscape Approach, No. 571 (January 2013)
- Planning and Drought, No. 574 (2013)



## Mapping & Data for Land Use Planning

- **National Association of Counties:** Issue brief with case studies, Using GIS Tools to Link Land Use Decisions to Water Resource Protection. [cdm16658.contentdm.oclc.org/cdm/ref/collection/p267501ccp2/id/2013](http://cdm16658.contentdm.oclc.org/cdm/ref/collection/p267501ccp2/id/2013)
- **USGS Water Resources Maps and Data:** Comprehensive national database of water resource maps and data (GIS) available for download. [water.usgs.gov/maps.html](http://water.usgs.gov/maps.html)
- **General Resources:** EPA Ground Water and Drinking Water: <https://www.epa.gov/ground-water-and-drinking-water>
- **Case Studies:** [Town of Capital Heights Green Streets Master Plan](#)
- **DWMAPS (Drinking Water Mapping Application to Protect Source Waters):** Mapping application for potential sources of contamination to drinking water.
- **EPA WATERS:** EPA mapping application providing access to numerous GIS water datasets [water.epa.gov/scitech/datait/tools/waters/services/mapping\\_services.cfm](http://water.epa.gov/scitech/datait/tools/waters/services/mapping_services.cfm). EPA WATERS in Google Earth: [water.epa.gov/scitech/datait/tools/waters/tools/waters\\_kmz.cfm](http://water.epa.gov/scitech/datait/tools/waters/tools/waters_kmz.cfm).
- **EPA BASINS (Better Assessment Science Integrating Point & Non-point Sources):** GIS-based environmental analysis system that assists in watershed management and TMDL development. [water.epa.gov/scitech/datait/models/basins/index.cfm](http://water.epa.gov/scitech/datait/models/basins/index.cfm)

## Who we are

The SOURCE WATER COLLABORATIVE is a coalition of 27 national organizations united to protect the lakes, rivers and aquifers supplying America's drinking water. [www.sourcewatercollaborative.org/about](http://www.sourcewatercollaborative.org/about)

# Advice Worth Drinking

YOUR WATER. YOUR DECISION.

How today's land-use decisions  
can protect tomorrow's water supply

## A PLANNER'S GUIDE



MAY 2017

# Putting drinking water into the planning process

Every day, land use decisions affect future drinking water supplies – either intentionally or inadvertently. You can integrate source water protection into your regular planning activities, from visioning to zoning, to provide sustainable sources of drinking water. This guide reviews options localities are using to protect drinking water.

## STRATEGIC POINT OF INTERVENTION

## A SAMPLING OF OPTIONS TO PROTECT YOUR DRINKING WATER SUPPLY

### LONG RANGE VISIONING

Goal-setting exercises  
(> 20-year outlook)

- Include ground and surface water experts and water utilities in visioning exercises.
- Include Source Water Assessments and water budget data in all build-out or alternative scenario analysis.
- Link source water protection objectives to other long-range goals, such as land conservation, forest management, habitat protection, compact development, stormwater and watershed management, water/waste water utility planning, and nonpoint source pollution reduction.

### PLAN MAKING

(a) Comprehensive (master or general) plans,  
(b) Sub-area plans (neighborhood plans, corridor plans, downtown plans, etc.),  
(c) Functional plans (stormwater plans, waste water management, water plans, open space plans, etc.)

- Include a critical and sensitive areas element with a strong source water component in the comprehensive plan (using up-to-date data about point and nonpoint threats).
- Include maps and narrative describing the physical properties of aquifer and wellhead protection areas (ground water contour, cones of depression, surface water contributors) as well as surface water resources important for current and future drinking water sources. Contact your water utility to get information on your Source Water Protection Area.
- Preserve natural features and land-use elements that protect surface and ground water.
- Develop stormwater management plans that keep pollutants out of drinking water sources.
- Consider including source water impacts in open space planning.

\* [SEE CASE STUDIES ON INSERT](#)

### REGULATIONS/INCENTIVES

Carrots and sticks to implement plans (zoning ordinances, subdivision regulations, urban area boundaries, transfer of development rights, other incentives)

- Adopt ordinances and regulations such as wellhead protection overlay zones, riparian buffers, stormwater management ordinances, underground storage tank safety regulations, land-use controls in flood plains, and nitrate loading regulations.
- Encourage compact settlement patterns by allowing increased density and in-fill around existing urban areas, allowing or requiring cluster development, and adopting programs for transfer of development rights.
- Use non-regulatory tools to spur smart growth such as permit streamlining, tax incentives, developer incentives, density bonuses, technical assistance, and the use of public-private partnerships for implementing best stormwater management practices.

\* [SEE CASE STUDIES ON INSERT](#)

### DEVELOPMENT PROJECT REVIEW

Review and approval of all aspects of the built environment being proposed (residential subdivisions, mixed use developments, commercial and industrial developments, transportation facilities, utilities, etc.)

- Require applicants for development projects to submit appropriate information on drinking water sources as part of their initial application submission.
- Refer submitted plans to source water experts as part of the plan review process and include these experts in technical review committees.
- Require source water protection measures to be incorporated into plans by private developers as a condition of approval.
- Promote Low Impact Development practices that minimize impervious surfaces and runoff, and increase on-site recharge.

### PUBLIC INVESTMENT

Capital projects undertaken by towns, cities, counties, states, and the federal government

- Make sure that public investments in a capital improvements program adopted by a town, city, or county do not include measures that threaten source water supplies.
- Be sure that the design and location of public investments such as roads, transit, buildings, and other public structures and facilities are sensitive to source water issues.
- Pass bond issues to acquire fee and less-than-fee interest in land conservation and green infrastructure impacting drinking water. Green infrastructure can lower the cost of treating drinking water for your community (learn more at [www.wri.org/publication/natural-infrastructure](http://www.wri.org/publication/natural-infrastructure)).
- Use land acquisition, stormwater retrofits, and other restoration projects to protect source water. Water suppliers, land trusts, and others can help you implement these measures.