



## Water Supply System Information and Maps in Community Comprehensive Plans – Addressing Security Concerns

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**Background** – Water suppliers, wastewater utilities, state and local governments, law enforcement, and citizens share the responsibility for community water supply security. This guide provides options to help communities ensure the security of information about their municipal water supply intakes, groundwater recharge areas, and water distribution systems. In the absence of such policies and procedures, communities may disclose this sensitive information unintentionally as they prepare or update their comprehensive plans.

Section 66.1001, *Wis. Stats.*, requires that beginning in 2010, local government programs and actions that affect land use must be guided by, and consistent with, a locally adopted comprehensive plan. The law requires these plans to contain nine elements, one of which is a “Utilities and Community Facilities” element. This element is defined as:

*A compilation of objectives, policies, goals, maps, and programs to guide the future development of utilities and community facilities in the local governmental unit such as sanitary sewer service, storm water management, water supply, solid waste disposal, on-site wastewater treatment technologies, recycling facilities, parks, telecommunications facilities, power-generating plants and transmission lines, cemeteries, health care facilities, child care facilities, and other public facilities, such as police, fire and rescue facilities, libraries, schools, and other governmental facilities. The element shall describe the location, use, and capacity of existing public utilities and community facilities that serve the local governmental unit, shall include an approximate timetable that forecasts the need in the local governmental unit to expand or rehabilitate existing utilities and facilities or to create new utilities and facilities, and shall assess future needs for government services in the local governmental unit that are related to such utilities and facilities (s. 66.1001(2)(d), *Wis. Stats.*).*

This definition specifically identifies water supply facilities among those facilities that communities must address in the “Utilities and Community Facilities” element. According to the law, communities must describe the location, use, and capacity of existing water supply systems and provide an assessment and timetable for new water supply facilities or needed improvements to existing facilities.

Since communities distribute their comprehensive plans widely, the issue of making information available in a manner that minimizes risk to the security of community water supplies has been raised. Under the law, copies of a community’s comprehensive plan must be shared with adjacent communities, the Wisconsin Land Council, regional planning commissions, public libraries, and other jurisdictions in and around the planning area (s. 66.1001(4), *Wis. Stats.*). In addition, a community may choose to make its comprehensive plan available to others, including providing an electronic version via the Internet.

Information on the location of water supply infrastructure has typically been made publicly available both within and outside of planning processes. Since many local governments receive state and federal funds for water utility systems, they must comply with associated mandates to provide information to the public. In addition, Wisconsin’s public records law (ss. 19.31 and 19.35, *Wis. Stats.*) declares that the policy of the state shall be in favor of the public’s right to inspect such records. In recent years, information and maps have increasingly been made available in both hard copy and electronic formats. Communities can respect the open records laws while still taking steps to provide security for sensitive infrastructure information.

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## Procedural Options to Secure Information –

Communities should develop procedures in order to generalize or otherwise protect the presentation of sensitive information. Procedures should be applied not only to sensitive water supply system information but also to all sensitive infrastructure information developed as part of a comprehensive plan. Sensitive information includes the location of recharge areas for groundwater and surface water intakes, monitoring well heads, and the facilities that are part of water supply distribution systems. Communities need to determine how to provide an adequate level of detailed information to parties that justify a need for it, while protecting the security of the water supply system.

*The issues of terrorism and the security and control of information made publicly available should be considered for all sensitive infrastructure discussed in a comprehensive plan. In addition to water supply recharge, intake, and distribution systems, this includes many other aspects of community infrastructure discussed in the “Utilities and Community Facilities” element of a plan.*

Some options for protecting sensitive information include:

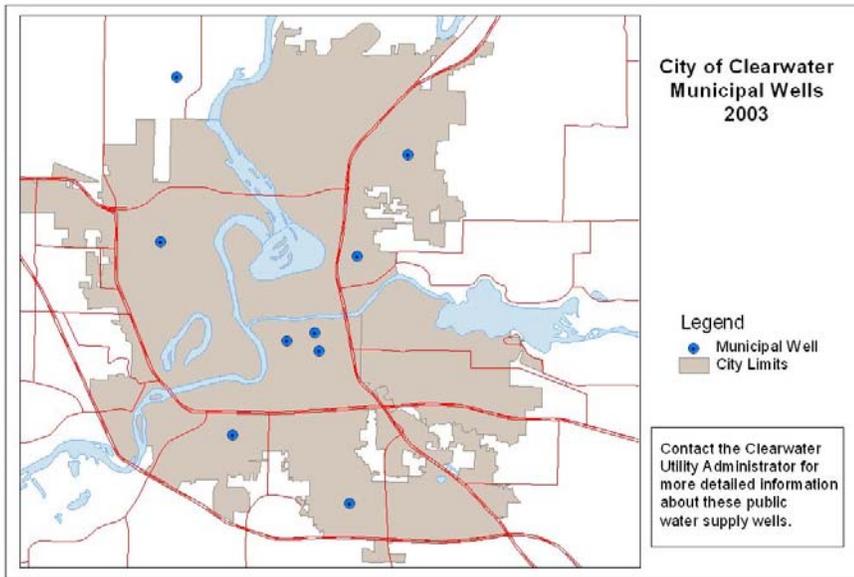
- Minimizing or removing sensitive information made readily available to the public via electronic files, web sites, or Geographic Information Systems (GIS).
- Developing procedures to provide detailed information to those who legitimately need it to complete a comprehensive plan or for other purposes.
- Omitting the specific locations of utility wells, reservoirs, water towers, pumping stations, and water main pipes from published comprehensive plan maps and graphics.
- Using generalized location markers for water supply objects on publicly available electronic and paper maps.
- Filling in the entire area served by the public water supply distribution system with gray shading or gridlines on published electronic and paper maps.

One or more of these procedures could be combined with a process for responding to public requests for information of a sensitive nature, either within or outside of the comprehensive planning process. A community could, for example, keep detailed, sensitive information within their jurisdiction, rather than portraying it in its published comprehensive plan and then could ask public requesters to provide information about themselves and the reason(s) for needing the information prior to releasing it. The Wisconsin Department of Natural Resources (DNR) Bureau of Drinking Water and Groundwater has implemented a process for responding to public requests for sensitive information about water supply systems. Communities could follow a similar process. For more information on this process, please contact Don Swailes (608 266-7093; don.swailes@dnr.state.wi.us) or Mark Nelson (608 267-4230; mark.nelson@dnr.state.wi.us).



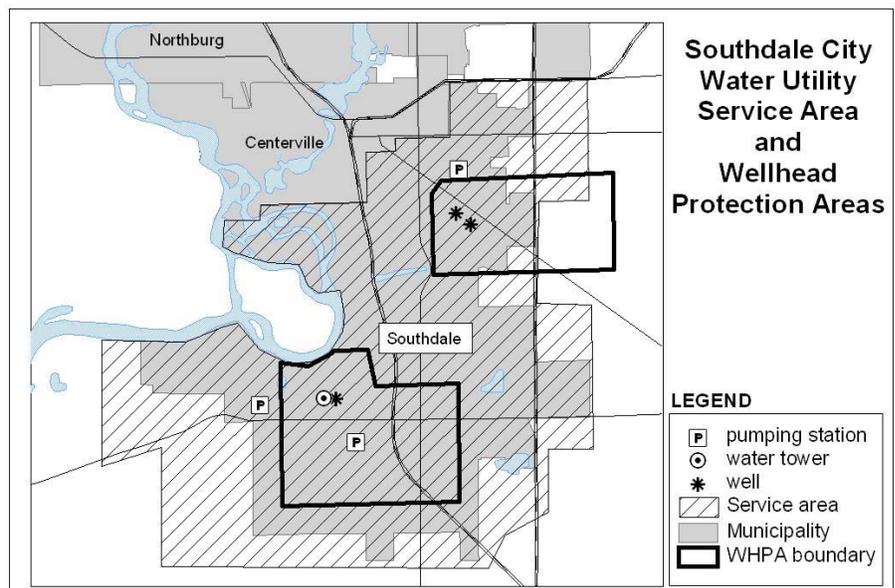
Grants are available to improve the security of water supplies in large public water systems. For information on how to apply, go to EPA's Water Infrastructure Security web site: <http://www.epa.gov/safewater/security/>.

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*Communities have several options for protecting sensitive infrastructure information included in their plans.*

Plan maps can depict generalized locations for water supply infrastructure.



Plan maps can delineate service areas with gray shading or grid lines.

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## **Source Water Protection and other DNR Drinking and Groundwater Programs –**

Both state and federal government agencies regulate the quality of drinking water in water supply systems. In addition, high capacity wells must be permitted by the state and state-licensed well drillers install all private wells.

The Wisconsin DNR oversees the 1986 federally mandated wellhead protection program, which is designed to protect community water supply wells from contamination. Wellhead protection plans are required for all municipal wells installed after May 1, 1992. For wells installed prior to that date, communities are encouraged to develop a wellhead protection plan. The idea is to delineate the area contributing water to wells, locate the existing and potential sources of contamination within that recharge area, and implement a plan to properly manage these sources to reduce the threat of contamination.

The 1996 amendments to the federal Safe Drinking Water Act gave the Wisconsin DNR the ability to assist local municipal water utilities in order to ensure that safe drinking water is delivered to communities. This assistance includes technical and managerial training, low interest loans, etc. The amendments also require the state to complete “source water assessments” for all public water supplies. The Wisconsin DNR anticipates completing the assessments by December 2004. The source water assessments include a delineation of the land area that contributes water to a municipal well or surface water system intake, locations of potential contamination sources within the source water areas, and a determination of each system’s susceptibility to contamination. The assessments can provide communities engaged in comprehensive planning with information on how to protect their surface or groundwater supplies.

Communities developing comprehensive plans will receive the source water assessment completed by the Wisconsin DNR. The assessments will provide most of the information needed for a “wellhead protection plan” or a “source water protection plan.” Wellhead protection and source water protection plans for municipal water supplies should be incorporated into the community’s comprehensive plan. These plans could include establishing a groundwater or surface water monitoring program, surveillance of wellheads, or limits on development on or near the source water areas in order to protect them. Presentation of this information in electronic and paper formats should follow procedures adopted by the community.

For additional information about the Wisconsin DNR’s Drinking Water and Groundwater Program, see:  
<http://www.dnr.state.wi.us/org/water/dwg/gw/whp.htm>.

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