COMMUNITY WATER SYSTEM COLLABORATION
PILOT PROJECT IN GEORGIA

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Abstract. Recent major disasters in the Nation and around the world have focused attention on the need for emergency planning and preparedness at National, State, and local levels, particularly with regard to drinking water and fire suppression. Accurate information on water systems is essential to emergency planners and responders to safeguard the drinking water supply and to understand the ability of the systems to suppress fires. The Federal Homeland Security community has recognized the importance of having comprehensive information describing a community water system (CWS) (Fig. 1): source water; point of withdrawal (wells and intakes); and potable water-treatment plants, pumping stations, storage facilities, raw water conveyances, water mains, distribution systems, and interconnections with other CWS. The locations of these structures need to be associated with both design and actual rates (million gallons per day) of water withdrawal, delivery, and release, and the population served through the distribution systems. Currently, pilot studies are being considered in Georgia, Colorado, and Pennsylvania to (1) develop flexible guidelines that will streamline the effort for implementation after learning from the experiences in three significantly different States; (2) assess the cost and timing of implementing the project nationwide; and (3) develop and test a database to store and display the information in a format useful to appropriate users under appropriate security. The three States were selected for pilot studies because these States (1) have a large number of CWS; (2) use both ground- and surface-water sources throughout the State; (3) have different hydro-climatic regions; (4) have different regulatory environments and approaches for water management; and (5) are in different U.S. Environmental Protection Agency (USEPA) Regions.

In Georgia, the CWS pilot project will focus on improving location and construction information stored in the USEPA Safe Drinking Water Data Information System (SDWIS) and in the U.S. Geological Survey National Water Information System. This effort includes identifying which database has the most accurate CWS source locations, replacing State-interpreted SDWIS codes with nationally consistent codes, and assuring that well construction and other detailed information is complete and accurate. The overall goal of the pilot project is for the Georgia Environmental Protection Division to develop a detailed CWS database of critical water infrastructure for Georgia that is more accurate and can be accessed in a secure way by emergency responders.
Figure 1. Schematic of a community water system.