Gillette Regional Water Supply Project

Gillette has begun a major project to provide an adequate, high-quality water supply for the area’s growing population and the future. The project will be designed to help the city and water districts in the surrounding area. This article summarizes both the planning and construction level projects that the city and state have undertaken.

Planing Projects
Regional Study

In 2008 the City of Gillette requested a comprehensive regional planning study from the Water Development Commission for the city and surrounding areas. The growth in Gillette in the previous ten years put additional pressure on the water resources that Gillette and its neighbors depend on. In 2007 alone, the City Planning Office approved over 900 new residential building permits.

This regional planning study was conducted to identify the impacts growth is having on available water resources, and to evaluate existing water resources in the area to determine the best course of action for addressing present and future needs. This included evaluating the potential for Gillette to serve as the water purveyor for a regional system.

Concurrent with this study Gillette contracted directly for additional work to be performed on extensions from the main pipeline that will be needed to supply rural water districts around the city. These extensions will convey water to locations convenient for connection by interested districts. This regional planning study was conducted to identify the impacts growth is having on available water resources, and to evaluate existing water resources in the area to determine the best course of action for addressing present and future needs. This included evaluating the potential for Gillette to serve as the water purveyor for a regional system.

Community Extensions

As the Gillette Regional Pipeline Project has progressed a number of rural subdivisions have expressed interest in becoming part of the regional project. In 2011 the following rural water districts applied to the Water Development Office for the planning studies needed to bring their...
River Basin Planning and Basin Groundwater Studies

River basin plans have been completed for all seven of the major river basins in Wyoming, and the Wyoming Framework Water Plan was completed in 2007. Completion of the Framework Plan completed the first phase of Wyoming’s river basin planning process. Groundwater was discussed in all of the initial basin plans and in the framework water plan but the focus of these first plans was on surface water.

Groundwater resources are important to Wyoming, with many municipalities and rural domestic water users depending on groundwater for their water. Because of this importance, it was determined that there should be more detailed groundwater studies complete as part of the river basin planning process. It was decided that the best way to fully address this important resource was to work with research-based agencies to pull together all information on groundwater resources and aquifers within the specific river basins of the state and to prepare well-documented reports. Meetings were held with the U.S. Geological Survey (USGS) and the Wyoming State Geological Survey (WSGS). From the discussions, a plan was implemented to establish agreements and budgets for each of the river basins in a series of projects to be led by the WSGS. The WSGS would work with the USGS and the University of Wyoming, Water Resources Data System (WRDS) to complete the project studies and produce the reports. Through this association the basin groundwater studies are well underway.

Tasks to be accomplished in the studies include: identifying basin aquifers and their extent; describing aquifer properties; defining water quantities and water quality, mapping recharge area and the rate of recharge; estimating safe yield and identifying future water use opportunities.

The Green River Basin Groundwater Study has been completed and is available online at http://waterplan.state.wy.us/plan/green/green-plan.html. The Wind/Bighorn Basin study is in final draft form and can be found at http://waterplan.state.wy.us/plan/bighorn/bighorn-plan.html.

Additionally, work is underway on the Platte River Basin groundwater study and the Bear River Basin groundwater study. The Platte River Basin study will be completed in 2012 and the Bear River Study should be completed in 2013. Funding for the Snake/Salt River Basin groundwater study has been approved and the agreement is being developed.

News from the Water Resources Data System

The Water Library, located in Wyoming Hall on the University of Wyoming campus and housed with the Water Resources Data System (WRDS), is a comprehensive collection of over 20,000 documents on the State’s water resources. Publications represented in the collection include items from the Wyoming Water Development Commission, State Engineer’s Office, US Geological Survey, Bureau of Reclamation, Bureau of Land Management and University of Wyoming. The library covers drought, global climate change, the Wyoming water planning program, Wyoming environmental impact statements and a small selection of the collection.