

Fort Union Formation Aquifer Monitoring Plan and Preliminary Aquifer Management Plan

Gillette Area Water Master Plan Gillette, Wyoming

PREPARED FOR AND FUNDED BY Wyoming Water Development Commission Herschler Building, 4th Floor-West 122 W. 25th Street Cheyenne, Wyoming 82002

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Section 1.0 - EXECUTIVE SUMMARY

The adoption of the Gillette Area Water Master Plan by the City of Gillette and Campbell County with financial assistance from the Wyoming Water Development Commission marks a responsible approach to efficient utilization of water, financial, and human resources. The Master Plan-Phase I Report, submitted to the Wyoming Water Development Commission by HKM Associates in 1993, recommends that the State Engineer and the Wyoming Water Development Commission cooperate with local government and water users to establish disciplined ground water management policies specific to the area and implement a ground water monitoring program.

Ground water from the Fort Union Formation in the vicinity of Gillette is the dominant fresh water source used for human consumption in the Gillette area. The city of Gillette and all other water users in the vicinity of Gillette depend solely on ground water for their entire water needs. The Fort Union Formation Aquifer Monitoring Plan implemented by the Wyoming State Engineer's Office under this program provides a regional monitoring network of ground water level observation wells. A large share of the funding appropriated for this program was allocated to the drilling, completion, and outfitting of eight (8) new Fort Union aquifer water level observation wells at selected sites during the summer of 1994. To date, the State Engineer monitors 28 Fort Union

wells (including the eight new wells) which measure water levels in a network centered around Gillette. Data collected from the observation well network will be utilized to determine the focus and extent of future ground water development from the Fort Union Formation Aquifer.

Under the Preliminary Fort Union Aquifer Management Plan, recommendations concerning future ground water management goals and strategies will be discussed and reviewed by the Fort Union Formation Aquifer Advisory Committee which currently consists of the Gillette City Engineer, the Campbell County Engineer, the Ground Water Administrator of the State Engineer's Office, and the Gillette Project Coordinator of the Wyoming Water Development Expansion of the membership within the Advisory Commission. Committee to incorporate representatives of all water user groups (coal mining companies, coal-bed methane producers, oil & gas producers, light/heavy industry, and rural domestic/stock watering users) is anticipated. Once the expanded advisory group is in place, the strategy for achieving the ground water management goals horizontal/vertical well spacing, well construction site selection, etc.) submitted Committee as recommendations to the State Engineer for inclusion in the rules and regulations associated with the aquifer management plan for the Fort Union Formation Aquifer. The monitoring plan and analysis of data collected under that program will be used in evaluating whether or not additional management practices are warranted. Public input to this process will also be solicited. As additional demands are placed on the Fort Union Formation aquifer, changes and modifications to the management plan may be needed.