

SECTION 2

2 Background

The Master Plan, completed in August 2009, identified 42 special districts that could potentially connect to the proposed Regional System. At that time, the regional system service extensions required to connect the potential participants to the City of Gillette (City) water system were conceptually identified. The service extensions infrastructure requirements and estimated construction costs were not detailed in the Master Plan, so this study effort was initiated by the City to develop the facilities needed and associated implementation costs for the potential participant service extensions. In addition, the potential participants and service extensions were refined resulting in some minor modifications to the Master Plan concepts.

These potential participant systems were inventoried to determine their existing infrastructure and water demands. Each of the independent systems are examined in this study to determine the infrastructure required to extend service from the City's water system via a network of shared delivery systems extending from the core of the City's water system. The Regional System Potential Participant Connections study does not include infrastructure related to the Madison parallel pipeline and assumes that it will be implemented as recommended in the Master Plan.

Stetson Engineering, Inc. was subcontracted by HDR during the Master Plan to inventory the existing rural water systems in the region, develop a GIS database of that information, identify the capabilities and concerns of the existing water systems and identify potential participants that might be interested in connecting to a Regional System. The collected data was used in this Study to establish the service requirements for each potential participant. At the request of the City, six special districts have been added to the list of potential participants considered in the study: Rozet, Wessex Improvement & Service District, Graceland Improvement & Service District, and Mohan Subdivision, Buckskin Meadows Subdivision, and Heritage Village Water and Sewer District. Two previously identified participants, Town of Pine Haven and Town of Moorcroft, which are in Crook County are not included in this study as directed by the City. The existing infrastructure and proposed improvements necessary to provide the type of service defined for each potential participant is summarized in this study. The type of service proposed to be provided to each potential participant's water system was based its needs and availability of water supply from the Regional System.

Future requirements have been anticipated for the service connections to the potential participants, based on the assumption that all potential participants will eventually connect to the Regional System. These requirements include type of service provided, delivery point including range of flows and available pressures, and infrastructure facilities required for connection to the Regional System. The future requirements and type of service for each potential participant is summarized in this study.

Each of the potential participants was grouped into shared delivery system extensions based on their relative location in the Regional System and proximity to one of the service extension systems established. For each of these connections, planning level cost estimates were established.

A service area was defined for the Regional System as part of the Master Plan, with probable and possible study boundaries. Potential participants in the probable study boundary are likely to be included in the Regional System service area. Potential participants in the possible study boundary are considered to be eligible to be included in the Regional System service area. Figure 1 shows Gillette's current planning district and study boundaries, as defined in the Master Plan, with the locations of the potential participants indicated. Table 1 summarizes the potential participants, with their associated connection lines, used for this study.

2.1 Special District System Exceptions

A few of the ISDs considered in the Master Plan for inclusion in the Regional System have not been included in the Study for various reasons, such as their status as current or near-term consecutive systems or being considered industrial districts. A few of the potential participants are part of a larger ISD, but are included in the Study. The following sections describe these public water system exceptions.

2.1.1 Existing Consecutive Systems

Four existing consecutive systems currently receiving water from the City of Gillette's water distribution system were on the original Master Plan list of systems to be considered as potential Regional System participants. The consecutive systems include: East View Manufactured Home Community, Foothills Mobile Home Park, Highview Mobile Home Park, and Westview Manufactured Home Community. These systems are not considered as potential Regional System participants since they are already connected to the City of Gillette's water distribution system. These consecutive systems purchase water from the City of Gillette and redistribute it to their users. None of the four existing consecutive systems have their own pump stations,

tanks or wells, relying on the City's infrastructure to deliver sufficient water supply to their systems.

2.1.2 Near-Term Consecutive Systems

Interstate Industrial Park, Fox Park Subdivision, Westridge Water Users Association and Heritage Village Water and Sewer District have been annexed into the city recently and will be converted to consecutive systems in the near future. Their water systems are currently connected or will be connected to the City of Gillette's water distribution system and valved off. Westridge Water Users Association and Heritage Village Water and Sewer District are currently connected and Fox Park Subdivision and Interstate Industrial Park will be connected soon. When the current debt from constructing their water systems is paid or when their water supply fails (wells stop producing), the City will open the service isolation valve on their connections to supply water and take over operations of their distribution systems. These four participants are documented in this study, but no construction costs have been developed for connecting to the Regional System since the connection exists or will be made soon. Only a small amount of infrastructure will be needed to connect these participants, as they are located near City of Gillette's waterlines. Fox Park Subdivision, Westridge Water Users, and Heritage Village Water and Sewer District already have individual customer water meters.

2.1.3 Western Fuels-Wyoming, Inc.

Western Fuels-Wyoming, Inc., which was inventoried in the Master Plan, is a privately owned system that provides water to a coal mine. They disinfect their water using sodium hypochlorite and have collected water quality data that is available. This system appears to be in good condition and field survey information was not collected since the system serves a coal mine. In addition, it was decided that this particular system is not to be included as a potential participant since it is an industrial system and located too far away from the Regional System.

2.1.4 South Douglas Highway Improvement & Service District

South Douglas Highway Improvement & Service District is a special district that operates a number of sewer systems for five residential and industrial developments. Developments with water systems are owned and operated by each of the individual areas which include; Antelope Valley, Stroup Trailer Park, Hitching Post Trailer Court, Mohan Subdivision, Winland Industrial Park, and Southern Drive Industrial Park. Antelope Valley, Stroup Trailer Park, and Hitching Post Trailer Court were included in the original master plan system inventory and are included in this study as potential participants. Mohan Subdivision has individual wells that provide water to

residential homes and has been identified as a potential participant that may be converted to a distribution system supplied by the regional system. Since Mohan Subdivision currently is supplied by private wells with no water storage or pump stations, a system inventory was not conducted. Winland Industrial Park and Southern Drive Industrial Park are both currently connected to City's water distribution system as consecutive systems. Therefore these two developments are not included in the Regional System study as potential participants.

TABLE 1

LIST OF CONNECTION LINES AND POTENTIAL PARTICIPANTS

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|--|
| Ward Creek Line |
| Rozet Ranchettes |
| Ward Creek Landowners Association |
| Rozet |
| Wessex Improvement & Service District |
| Meadow Springs Line |
| Cedar Hills Water Association |
| Freedom Hills Subdivision |
| American Road Water and Sewer District |
| Meadow Springs Improvement & Service District |
| Nickelson Farms Line |
| Nickelson Farms Water Company |
| Rodeo Flats Water Distribution |
| Central Campbell County Line |
| Central Campbell County Improvement & Service District |
| Antelope Valley Line |
| Antelope Valley – South Douglas Highway Improvement & Service District |
| Antelope Valley Business Park Improvement & Service District |
| Crestview Line |
| Crestview Estates Subdivision |
| Hitching Post Trailer Court – South Douglas Highway Improvement & Service District |
| Countryside Line |
| Countryside Water Users, Inc. |
| Wrangler Estates Line |
| Buckskin Meadows Subdivision |
| Wrangler Estates |
| Airport Line |
| Lakeview Mobile Home Park |
| Means Water and Sewer District |
| Hoy Mobile Home Park |
| Section 4 Water System, Inc. |
| Campbell County Airport |

TABLE 1 (CONTINUED)
LIST OF CONNECTION LINES AND POTENTIAL PARTICIPANTS

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|---|
| <i>Fox Ridge Line</i> |
| Fox Ridge |
| Eight Mile Line |
| Force Road Joint Powers Board |
| South Fork Estates |
| Rafter D Homeowners Association |
| Stone Gate Estates |
| Overbrook Subdivision |
| Bennor Subdivision |
| Cook Road Water District |
| Eight Mile Subdivision |
| Green Valley Line |
| RAG Coal West Inc./Rawhide School |
| Glory Hole Homeowners Association |
| Green Valley Estates Improvement & Service District |
| Ridgeway Line |
| Ridgeway Community Well Association |
| Direct Connections |
| Lemaster Enterprises |
| Antelope Mobile Home Park |
| Peoples Improvement & Service District |
| Stroup Trailer Court – South Douglas Highway Improvement & Service District |
| Southside Well Improvement & Service District |
| Mohan Subdivision – South Douglas Highway Improvement & Service District |
| Interstate Industrial Park |
| Fox Park Subdivision |
| Westridge Water Users Association |
| Heritage Village Water and Sewer District |