

CHAPTER 2

LAND USE PLANNING

2.1 INTRODUCTION

This chapter summarizes:

- 1) A review of Gillette's land use planning to determine a project service area
- 2) A review of the population data and population projections for that service area
- 3) A review of city water consumption data to arrive at a low-flow, average, and high-flow per capita consumption rates
- 4) Assumed Fire flow rates for Gillette
- 5) Water source demand projections

2.2 LAND PLANNING REVIEW

A preliminary review of the planning area work done in the 2004 City of Gillette Water Master Plan Report by Wester-Wetstein & Associates (Wester) indicates two planning boundaries exist for the area surrounding Gillette: 1) the Urban Service Area (USA) that immediately surrounds the City of Gillette, and 2) the Planning District Boundary (PDB) established by Wester for the 2004 Master Plan.¹ The USA and PDB generally share the same east and west boundaries, but the PDB generally extends one more section north and one more section south of the USA north/south boundaries, and the southeast corner has been expanded to include the Sleepy Hollow, Crestview, and Antelope Valley subdivisions. The USA covers approximately 25 square miles, while the PDB encompasses approximately 56 square miles (35,840 Acres), of which approximately 13,000 Acres is undeveloped. The Gillette Comprehensive Plan² reports the following twenty year land needs:

The PDB is shown on Figure 2-1.

Figure 2-1

Planning District Boundary

TABLE 2-1
Land Needs

Land Use	Land Required (Acres)
Residential	1,846
Commercial	282-341
Industrial	710-734
Total	2,838-2,921

A review of the boundaries for the PDB setup in the Wester study shows that they include the probable developable areas immediately adjacent to the current city limits as well as the existing, well-developed Sleepy Hollow, Antelope Valley and Crestview subdivisions which currently lie outside the city limits. Due to a combination of factors, including proximity to city limits, existing water source quality concerns, and the possibility of regionalization of water systems, these developments were included in the planning area.

Generally, the population estimates contained herein were made independent of land use. Gillette's growth is not practically limited by the land available for use by a major physical barrier (i.e. mountain range, major river or other waterway, or severe elevation difference) or a political barrier (i.e. the city limits of an adjoining community or a state line). The information in the Wester study shows that the majority of the land lying outside then-current city limits is zoned as agricultural. Presumably this land would be re-zoned at the time of development or annexation for residential uses.