Ground-Water Resource Development in the Lolo-Bitterroot Ground-Water Characterization Area, Mineral, Missoula, and Ravalli Counties, Montana

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Introduction

These maps are based on data from the Montana Ground-Water Information Center (MGWIC) database (http://mbmggwic.mtech.edu/) and display how ground-water use has been developed in the Lolo-Bitterroot Ground-Water Characterization Area.

Explanation

The study area is defined by the Lolo-Bitterroot Ground-Water Characterization Area (WGCA), which includes all of Mineral, Missoula, and Ravalli Counties. The area is divided into 1,136 PLSS sections, each containing 36 acres. The maps present the distribution of wells as of January 1, 2005. While the number of PLSS sections with at least one well is increasing, the total number of wells is decreasing at a much greater rate (note the separate scales in Figure 1). Throughout the map series, some PLSS sections that have small numbers of wells in non-valley locations result from incorrectly located wells in the PLSS database at the beginning of each stated year. Figure 1 (below) shows the progression graphically through 1960, 1970, 1980, 1990, 2000, and 2005. Wells visited during the Lolo-Bitterroot Ground-Water Characterization Study provided an additional perspective (Barnett et al., 2002). Maps A through E illustrate the number of water-well records per Public Land Survey System (PLSS) section: 11 - 30, 31 - 50, 51 - 80, 81 - 160, more than 160 per section. The maps show a drop in 2005 for a larger view of sections with more than 50 wells.

Acknowledgments

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