

2.0 DESCRIPTION OF CURRENT CONDITIONS

This chapter presents the existing environmental conditions in the PRB study area, with the exception of water resources, air quality, and social and economic conditions, which are presented in individual baseline (Task 1) reports. The baseline information summarized in this chapter was obtained from published and unpublished information; interviews with local, state, and federal agencies; and the compilation of past and present actions in the Wyoming PRB, as presented in the Task 2 Report for the PRB Coal Review (ENSR 2005a).

The end of year 2003 existing disturbance acreages presented in this report were based on the database compiled for the Task 2 report and, where resource-specific data were required, the associated Geographical Information System (GIS) information. The existing disturbance acreages generated through GIS vary from the disturbance acreages in the Task 2 database due to the following variables. The information in the database was compiled based on information obtained from the data sources identified above and the applied assumptions defined in the Task 2 report. As a result, the database specifies a discrete disturbance acreage for each of the development activities (e.g., coal mines, individual oil and gas wells, etc.) identified for the study. Conversely, the GIS analysis accounted for the spatial relationship of the various development activities, thereby avoiding double counting of disturbance acreages where mapped disturbance areas overlap. In addition, the application of the new versus existing well disturbance acreage assumptions varied, as follows. For the database, the number of new wells developed in 2003 versus existing wells at the end of 2003 was quantified, and the appropriate acreage assumptions were applied. The observed ratio in the database between new and existing wells could be determined at the subwatershed level; however, the breakdown could not be applied to the resource-specific information within each subwatershed due to the lack of actual discrete locations for new versus existing wells in the GIS map layers. As a result, for GIS calculations purposes, the existing well acreage was applied to all (existing and new) wells in the GIS layer. Also, slight variations between the GIS study area boundary and GIS resource-specific layers resulted in some under counting of disturbance acreages. Where disturbance acreages are presented in this report, the appropriate source is noted.