Aquifer Model Maps



Aquifer Model Extent

Certain areas within the Aquifer extent were not included in the model because insufficient groundwater information was available in those areas. The map above shows the aquifer extent with areas (in pink) that are excluded from the groundwater flow model. The Aquifer was divided in the model (see map below) into areas called "subregions" in order to calculate the Aquifer water budget. The USGS MODFLOW computer model was adapted to simulate groundwater flow in the Aquifer.



Aquifer Flow Model

The maps on this page and the following page graphically represent the information used to construct a computer model for the Aquifer. The scale of the model and the level of detail were selected for analysis of aquiferwide water supply. The MODFLOW-2000 computer model was adapted to simulate groundwater flow in the Aquifer.



The groundwater level - the top of the water table - is highest near Lake Pend Oreille and drops almost 800 feet to the low point at Long Lake (see map above). The flow of groundwater follows this drop in elevation from east to west. Aquifer thickness is deepest (over 800 feet) in the northwest part of the northern Rathdrum Prairie (see map below), and it is 400 to 600 feet thick at the Washington-Idaho border.



Flow Model Input Data