

Map Explanation

This map displays the depth to consolidated bedrock within the Arlington Basin, which in essence, is a map of aquifer thickness. Bedrock in this area is typically crystalline igneous rock and was penetrated by most well boreholes in the basin. The data used to construct the map included lithologic and geophysical borehole logs. Depth to bedrock was identified at each borehole location, plotted on the map, and hand contoured.

The borehole data indicate that aquifer thickness ranges from a few feet to over 300 feet. The aquifer is an elongate, alluvial-filled channel trending northeast to southwest between major bedrock outcrops to the north and south.

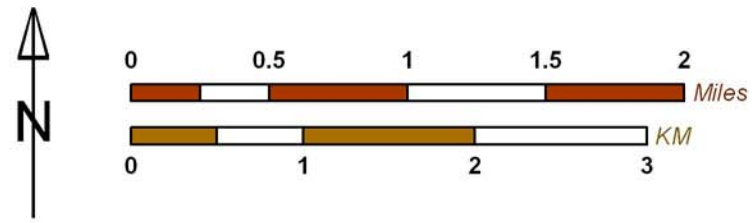
The bedrock contours and the well data were used to create a three-dimensional raster of the bedrock surface using a Kriging interpolation method. This raster surface provided aquifer geometry input for a MODFLOW groundwater flow model of the Arlington Basin.

- Depth to Bedrock at Well Boreholes**
- 250 ● Wells drilled to igneous bedrock at the specified depth (ft-bgs)
 - 25 ♦ Wells drilled to the specified depth without reaching igneous bedrock (ft-bgs)
- Interpolated Depth to Bedrock**
- > 300 ft-bgs
 - 100
 - 0
- Contours and Raster Surface**
- Geology**
- Recent Fill Material
 - Quaternary Alluvium & Unconsolidated Sediments
 - Tertiary to Quaternary Consolidated Sedimentary Bedrock
 - Cretaceous Igneous Bedrock
 - Mesozoic & Paleozoic Metamorphic Bedrock
- Other Features**
- Groundwater Flow Model Domain
 - Rivers and Streams
 - Groundwater Divide



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WESTERN MUNICIPAL WATER DISTRICT

Feasibility Study for the
 Expansion of the Arlington Desalter
 Task 1

Depth to Bedrock
 Arlington Basin

Figure 2