**Section 671.APPENDIX F Hydrogeologic Mapping**

In many unconfined unconsolidated aquifers and unconfined bedrock aquifers, the fixed radius calculated with any of the previous methods can be supplemented with geologic mapping. A fixed radius could be modified to an irregular shape where impermeable barrier boundary is encountered within 1,000 feet and beyond the minimum setback.

Hydrogeologic mapping may also include mapping of groundwater levels in order to identify groundwater drainage divides.

Hydrogeologic mapping is unconfined karst or unconfined fractured bedrock areas may be the primary means of delineating the lateral radius of influence. It is extremely difficult to define the actual recharge area of a well in a fractured bedrock setting.