Well Systems



Well System Capacity

- Well system capacity needs to be large enough to supply daily water need in 10 to 12 hours. Some designers assume 5 to 8 hours to supply daily need.
- Maximum pump size needs to be slightly smaller than maximum well yield capability.
- Can a well system be constructed to meet water need for location?



Websites for Water Well Decisions

 Two tools from DNR-Division of Geology and Land Survey - One identifies monitoring wells and levels of recharge, the other allows you to locate wells in a given area that were drilled after 1987 (with minimal information) and look at depth of well, depth of pump, what types of materials were drilled through and at what depth, and gallons per minute.



Monitoring Wells Info

- Monitoring well website: <u>http://dnr.mo.gov/env/wrc/groundwater</u> /education/gwwhymonitor.htm -This page provides a variety of information but at the lower part of the page you need to go to the link:
- Interactive map to groundwater observation well information and real time data is at
- <u>http://dnr.mo.gov/env/wrc/groundwater/gwnetwork.htm</u>



Well Information Management System (WIMS)

- A database of all wells that have been built since 1987 found at http://dnr.mo.gov/geology/geosrv/wellhd/
- 1. Under the section Online Services click on the Well Information Management Systems link (<u>http://dnr.mo.gov/mowells</u>)
- 2. Go to next page and click on search the well Information Management System (WIMS)
- 3. Put in what information you do have (the more info you have the narrower the search) names of people and addresses need to be exactly as when the well was registered
- 4. Click on the word SEARCH and to get results of wells in that area.



Well Water Delivery

- If well can supply peak water need, pump in well supplies water to operation.
- If well can deliver daily need but not meet peak demand, then an intermediate water storage system needs to be designed and installed.
- If well system can not provide daily need, reevaluate operation's goals or find additional water supply capability.



Intermediate Storage





Questions?

