

FACTS

COMPARISON OF WELL TYPES

| Well Types | | | | |
|----------------------|--|---|--|--|
| | Drilled Wells | Large-Diameter Wells Dug / Bored | | Well Points (Sand Points) |
| Description | -drilled with rotary or cable-tool water well drill -shallow or deep | -dug by backhoe or by hand -shallow (usually) | -constructed with boring machine -shallow or deep | -driven or jetted with water - shallow |
| | -small-diameter casing. (10 to 20 cm (4 to 8 in.) (usually metal) | -large-diameter casing, 60 to 120 cm (24 to 48 in.) (usually concrete) | | -small-diameter casing, 2 ½ to 5 cm. (1 to 2 in.) |
| Advantages | -can reach deeper aquifers - can drill into bedrock | -easy to construct -inexpensive initial cost | -more controlled hole than dug well | -generally simple and inexpensive to install |
| | -less subject to contamination, especially if deep -easier to seal -more constant temperature | -large casing provides storage -may be used in poor-yielding aquifer | | |
| Disadvantages | -vulnerable to deep aquifer contaminants -poorer natural water quality from some deep aquifers may occur, e.g., from salt -casing below surface (access pit may flood) | -if shallow, water shortages are possible in dry periods -easy to seal properly, but requires large volumes of material -vulnerable to near-surface contamination -water temperature may change seasonally | | -limited to permeable materials -shallow water table -limited yield and possible shortages in dry periods -vulnerable to near-surface contamination |