

Dug wells, drilled wells and cisterns.

## Dug wells

- Pros and cons
- Pros:
  - Less expensive 5-7k to dig
    - o Hook up costs are lower 3-6K depending on jet pump or submersible.
    - o Offers a suitable water source when drilling isn't an option.
    - o Typically good water quality

Cons :

Rain Dependant

Easily susceptible to Bacteria, nitrates and septic systems.

Limited depth, well is what it is.

- Treatment:
  - o UV light necessary.
  - o Typically Low PH.
  - o Cost 2k for treatment.

## Drilled Wells

What is a drilled well? A drilled well is a deep narrow bore hole drilled down through the earth by a massive rotary drill on a well drilling rig.

- Construction of drilled wells and where your water source comes from. Avg depth in NS is around 200ft. :
- Pros and cons
- Pros:
  - o Access to more water.
  - o No bacteria, nitrates, and septic issues to worry about typically
  - o Reduced chance of going dry
  - o Ability to frack or drill deeper.

Cons:

- Most expensive option – 200ft well is 11k to drill, 6K hook up , total around 20k.
- Can be a gamble.
- Higher chance of poor quality water
- Test your water annually.

- Cost for 200 ft well is 11k

### Cisterns

- Whether you have drilled or dug well, cistern is a great solution.
- Different sizes.
- I use Roth potable water tanks. Describe tank.
- Fill it up and it stays full
- Different ways to install cisterns:
  - o Dug wells with submersibles feeding the cistern and separate pump feeding house.
  - o Individual install and swapping between dug well and cistern.
  - o Drilled wells that go dry feeding into cistern
  - o Rain gutters
  - o Pre and post treatment, leaf eaters and

Cost anywhere from 6 – 12k depending on setup and lay of the land.



Figure 1: Rain collection



Figure 2: Installing a cistern

Installation of cistern

