

# What You Need to Know About Having a Well Drilled

**Becky Schuerman**  
Extension Associate,  
Lancaster County

Those residences that are not served by a public water system need a source of water for both consumption and daily needs. A private well, most often, fulfills these needs. While the cost of drilling a well is not a huge expense in the overall purchase or building of a home, it is a necessary expense to provide the residence with a useable water supply and it adds value to the property.

## Reviewing Your Water Needs

Whether or not you have an existing residence or are building a new home, making a list of water needs is an important initial step. Questions that need to be considered and shared with the licensed water well contractor you hire are:

- How many people will be living in the household?
- Beyond the normal daily water usage needs, what seasonal uses do you foresee, e.g. lawn and/or garden irrigation, washing cars, filling a swimming pool, creating an ice rink, etc.?
- Possible geothermal demands?

- Emergency needs such as fire protection or possible water storage in case of emergency?
- Where should the well be drilled, e.g. in the middle of the front yard, further away from a septic system, etc.?

Typically, private household wells are designed to pump 10 or less gallons/minute. This is usually plenty for most home situations, but having a list of what all will place a demand on the well is important knowledge to have.

## Hiring a Contractor

To accomplish this, the next important step is to hire a Nebraska licensed Water Well Contractor. Never be afraid to ask the following questions, such as:

- Are they licensed in the State of Nebraska to drill wells and install pumps? This is a requirement in the State of Nebraska.
- Are they adequately insured and bonded? Currently, Nebraska licensed water well contractors must maintain a minimum of \$100,000 public liability and property damage insurance.
- Will they supply you a detailed explanation of the work/conditions of the bid/job contract?

Details include, but are not limited to:

- ▶ Estimated depth of the well;
- ▶ Bore hole diameter;
- ▶ What type and size of well casing will be used;
- ▶ What type and length of well screen will be used;
- ▶ Approximately how long will the well be developed and test pumped;
- ▶ Will they provide you with a copy of the well log, well registration and any other documents from installed water equipment?

- Will they take care of registration requirements for the well with the Department of Natural Resources?
- Can they provide you with multiple references of past jobs they have done? If so, what is the overall reputation of the contractor being considered?

Don't hesitate to get multiple quotes when looking to hire a licensed water well contractor, it is really no different than shopping around for a home builder or a new car. Make sure you are comparing each contractor along the same criteria, this is where your list of water needs and getting a detailed bid comes into play. A qualified, licensed water well contractor should:

- be able to tell you if quality

water is fairly easy to come by or is scarce in your area;

- be familiar with the geology and the static water level/water table in your area;
- be familiar with how deep nearby domestic wells are drilled and well yields; and
- know if there are any contaminants of concern in your area.

Remember, the cheapest bid is not always the best one and that references can be immensely helpful.

## To Build a House or Drill a Well First, That is the Question

If you are building new, it is wise to drill your well first so you don't have a home built and find out later you aren't able to provide a good water supply. Once the well is drilled, you can then move forward with the placement of your onsite wastewater system and the building of your home. This is not to say you shouldn't have an initial plan of where your well, onsite wastewater system and home will be placed, but know plans may have to be changed up a bit to accommodate the location of a good water supply, proper construction and setback requirements.



## WATER WELL RESOURCES

For a list of currently-licensed Water Well Standards Contractors by county, consult the Water Well Standards and Contractors' Licensing Program website: <http://deq.ne.gov/NDEQProg.nsf/OnWeb/WWS>.

For University of Nebraska Extension NebGuide publications on private well ownership, wellhead protection for private drinking water wells, water quality testing and other water related topics, consult the UNL Water website: <https://water.unl.edu/article/drinking-water/nebguides>.

# Almost Time for Fall Lawn Seeding

**Sarah Browning**  
Extension Educator,  
Lancaster County

The best time to seed cool season grasses, such as Kentucky bluegrass and tall fescue, is between August 15th and September 15th, so its time to start your site preparation.

Getting your seeding done as early as possible is really important, because each week of delay in seeding translates into 2-4 additional weeks required for the grass to mature. It is critical to seed tall fescue no later than mid-September. Tall fescue seedlings take a longer time to develop cold hardiness, so to avoid winter damage, get your seeding done early.

Fall is, in fact, the best time of year for seeding lawns due to a combination of factors. First, there's less weed pressure than in spring, and late summer weather is less problematic during the soil preparation phase. Plus, the extended period of cool weather, usually with good rainfall, that occurs from September through late November is ideal for growth of cool-season turfgrasses.

## Getting Started

**Total Renovation** - If you need to renovate the entire lawn, start by killing the remaining grass and weeds with glyphosate (RoundUp), then wait for 10-14 days for the herbicide to take effect. Next, mow the dead

vegetation as short as your mower will allow and move on to soil preparation.

**Overseeding** - If you just need to fill in thinned areas, and still have more than 50 percent

seed can make contact with it. Watering the lawn area a day or two beforehand will make aeration easier and allow the machine to take deeper cores.

**Fertilization** - Nebraska



Aeration is the best way to prepare grass for overseeding.

good turf, then overseeding is the answer. Skip the RoundUp, but mow the existing grass fairly short, 2.5-3 inches tall, to make soil preparation easier.

**Soil Preparation** - Prepare the seedbed through aeration, making at least three passes over the lawn. You need to produce lots of bare soil, so the

soils are rarely low in phosphorus, but turfgrass seedlings do benefit from a starter fertilizer high in phosphorus at seeding. Once the area is prepared, apply a starter fertilizer totaling 1-1.5 lbs Phosphorus/1,000 sq.ft.

Phosphorus is the second number in the fertilizer ratio. For example, a 16-22-8 product

contains 22% phosphorus. At 22% phosphorus, you would need to apply approximately 4.5 lbs. of product per 1,000 sq.ft. to supply 1 lb. phosphorus/1,000 sq. ft.

## Spreading Seed

After preparing the area, use a drop spreader to apply the seed. Rotary spreaders are great for fertilizing, but not so great for seeding. Seed is too light to spread uniformly with a rotary spreader so purchase, rent or borrow a drop seeder. Divide the seed in half; apply the first half as you walk North to South, and the second half going East to West. This helps ensure even distribution.

Afterwards, rake the seed slightly to ensure good seed/soil contact. The full seeding rate for turf-type tall fescue is 6-8 lbs./1,000 sq.ft., and 2-3 lbs. for Kentucky bluegrass. When seeding into an existing lawn, the seeding rate can be cut in half.

## Watering & Mowing

Irrigate the seeded area two to four times a day during the first two weeks, depending on temperatures. Keep the top 1/2-1 inch of soil moist as the seedlings germinate. Taper off your watering schedule as the seedlings develop. As they approach mowing height, reduce the number of irrigations to two to three per week, but water more deeply with each application to encourage deep root

development.

Begin mowing as soon as possible. Mowing encourages tiller development, and helps new plantings thicken up quicker. It also keeps weeds under control while the new seedlings become established. Just be sure to sharpen your mower blade.

## Dormant Seeding

If fall turfgrass seeding isn't possible for you, then consider dormant seeding. With this method, the area is prepared in late fall, late September through November, but the seed is not distributed until after the growing season has ended. The goal is to prepare the site and put the seed in place, but keep it dormant until conditions are right for germination next spring. Plan to spread the seed anytime from mid- to late-November through March.

## FOR MORE INFORMATION

For more information on lawn seeding, check out the following publications.

- Improving Turf in Fall, UNL Turfgrass info, <https://go.unl.edu/fallseeding>
- Establishing Lawns From Seed, UNL Turfgrass info, <http://go.unl.edu/lawnseeding>
- Overseeding Turf, Backyard Farmer Video, <http://go.unl.edu/overseedturfgrass>
- Lawn Renovation Overview, Backyard Farmer Video, <http://go.unl.edu/lawnrenovation>