How To Test Soil Drainage

- Properly draining soil is important when determining whether a site is appropriate for planting trees and/or climate-appropriate plants.
- Use the following as a guide to determine if the soil will drain properly.

Let’s get started

1. Dig a hole in the identified area.
   • One-foot wide and deep.
2. Fill the hole with water and let it completely drain.
3. Fill the hole with water again and note the starting time.
   • How long does it take for the water to completely disappear (5 minutes, 30 minutes, 1 hour)?
   • If draining slowly, how much water drains each 30 minutes (1/2 inch every 30 minutes, etc.)?

Soil Test Results

How long did it take for the water to drain?

0 – 4 minutes: Fast-draining soil
   • This area is fine for trees/plants.

5 – 15 minutes: Good draining soil
   • This is an ideal area for trees/plants.

16 – 60 minutes
   • If soil is draining at least 1 inch per hour, the area is fine for some trees/plants.
   • This is not a good area for trees/plants that need well-drained soil

More than 6 hours
   • This is not a good area for most trees, and some native plants.
   • Choose trees and plants that normally grow along streams.