




SOIL TESTING PROGRAM

Why Test Soil?

Whether you are growing forage for livestock, maintaining an orchard or landscape or growing a vegetable garden, soil testing will help you to:

- Apply the correct amount of fertilizer for the plants you are growing.
- Prevent surface and ground water from being contaminated by excess fertilizers.
- Ensure that soil nutrients and other conditions (such as soil pH) affecting plant growth are present in the right amounts.



King CD offers free soil testing for landowners in the District. Each landowner is eligible for five free samples.*

FREE TESTING



King Conservation District has a free soil testing program for anyone living within the District boundaries. (*This includes all of incorporated and unincorporated King County, except for cities that are not members of the King Conservation District: Enumclaw, Federal Way, Milton, Pacific and Skykomish).

Each landowner is eligible for five free samples. Soil samples will be sent to a certified lab to test for pH (soil and buffered), nitrate, phosphate, extractable cations (potassium, magnesium, calcium, sodium), organic matter and cation exchange capacity. King CD will send out a packet with your results and information on interpreting your soil test report. Results are generally available within three weeks. We do not currently pay for testing of heavy metals or contaminants; please contact the office for questions on where to send those samples.

How to Take a Sample

Avoid sampling when soils are saturated (winter and early spring) or within a few weeks after applying lime, fertilizer, compost or aged manure. You will need:

- A shovel or hand trowel
- A clean plastic container, such as a bucket
- Sampling bags (Ziploc bags will work)

1. Designate the area for your first sample (each landowner is eligible for five free samples). The areas should be grouped by what is growing there. If you have a garden of mixed vegetables, that could be one sample. If you have a pasture and a garden, take separate samples of each. If one crop area has varied characteristics, such as topography, soil moisture, soil type (sandy, clay, muck) or one area grows poorly, designate separate sample areas for each unique area.

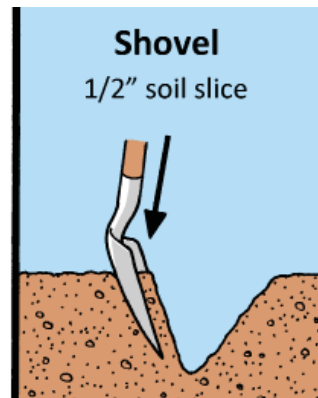
2. For each sample, take 10 to 15 sub-samples across the whole sample area. Be sure to get even coverage of the entire area. Take randomly located but evenly distributed sub-samples. A zig-zag pattern works for larger sample areas. Take thin slices of soils with a shovel or trowel; the sampling depth will range between three and twelve inches of soil, depending on the crop and time of year. (See the table below for instructions.) Place the sub-samples in your clean container/bucket.

3. Thoroughly mix the 15 sub-samples and scoop out **TWO to THREE CUPS** of the soil into a Ziploc bag.



4. Label the bag with your

- Name
- Address
- Phone
- Date the sample was taken
- Five letters and/or numbers that will help you remember where the sample came from (such as PSTR1, GRDN1).
- What you plan to plant or what is currently growing in the area (e.g., mixed pasture grass, mixed veggies, berries, landscape).



Take thin slices of soil approximately 1/2 inch. It is easiest to take a slice if you first remove a v-shaped hole, as shown above.

5. If you are taking more than one sample, repeat steps 2-5 for each area.

6. Mail or deliver the samples immediately. Soil nutrient levels continue to change even after a sample is taken, due to microbiological activity. Therefore, it is critical that this activity be stopped as soon as possible after sampling (within 12 hours). If you will not be mailing the samples for a few days, either place them in a freezer or dry in the oven. Dry in a low temperature oven (100° F) in a glass or aluminum pan, stirring occasionally until no moisture remains.

7. Mail or deliver samples to:

King Conservation District
 Attn: Soil Sampling
 1107 SW Grady Way, Suite 130
 Renton, WA 98057

Results are generally available within three weeks.

Guidelines for Sampling Depth		
	Type of Crop	Sampling Depth
For samples taken in September and October	All samples	12"
For samples taken any other time of year	Established lawn & pasture	4"
	New lawn & pasture	6"
	Gardens	6"
	Trees & shrubs	8"
	Commercial crops	8"