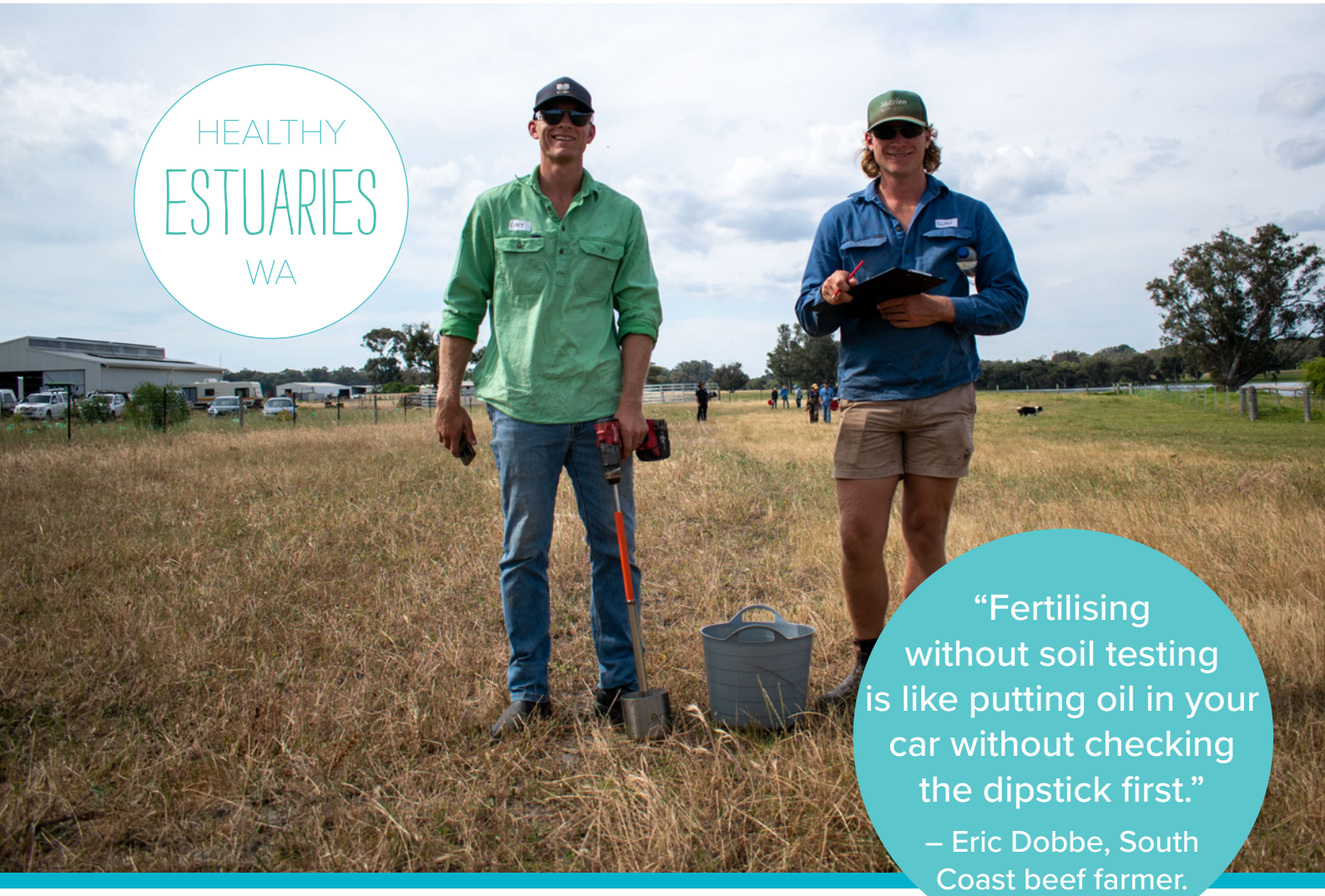
GOVERNMENT OF WESTERN AUSTRALIA
Department of **Water and Environmental Regulation**
Department of **Primary Industries and Regional Development**
Soil Wise



"Fertilising without soil testing is like putting oil in your car without checking the dipstick first."

– Eric Dobbe, South Coast beef farmer.

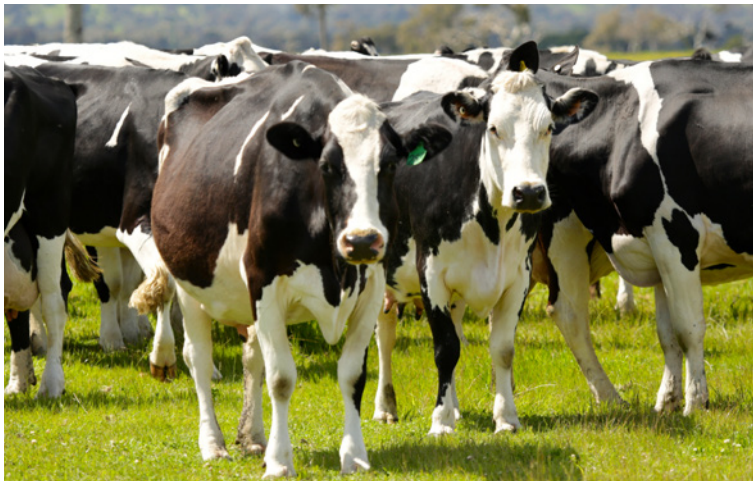
Why soil test your farm?

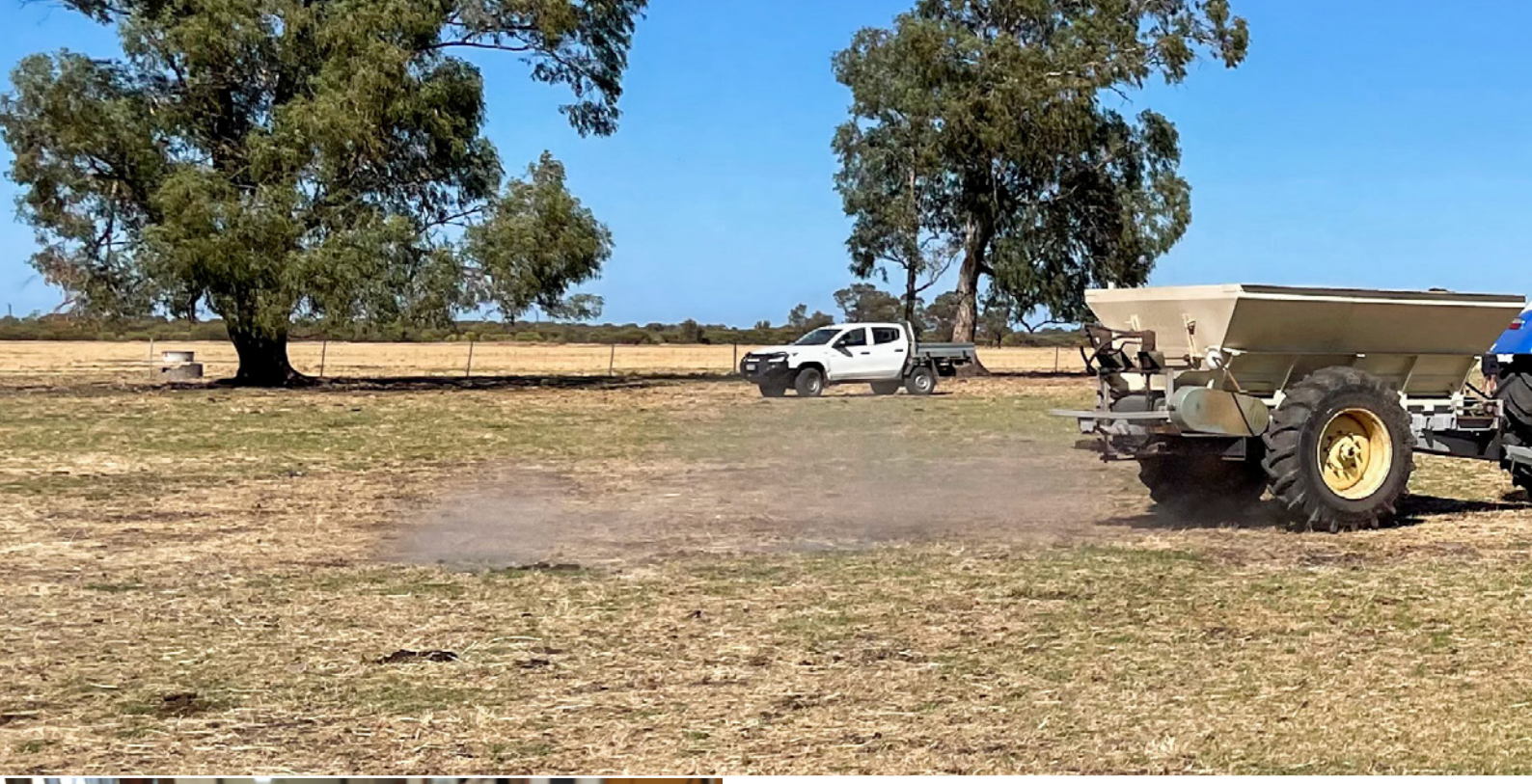
Soil is one of the most important assets on your farm! Soil testing is the only way to accurately establish the nutrient status and pH of your soil, allowing you to make informed decisions to improve production and protect the environment.

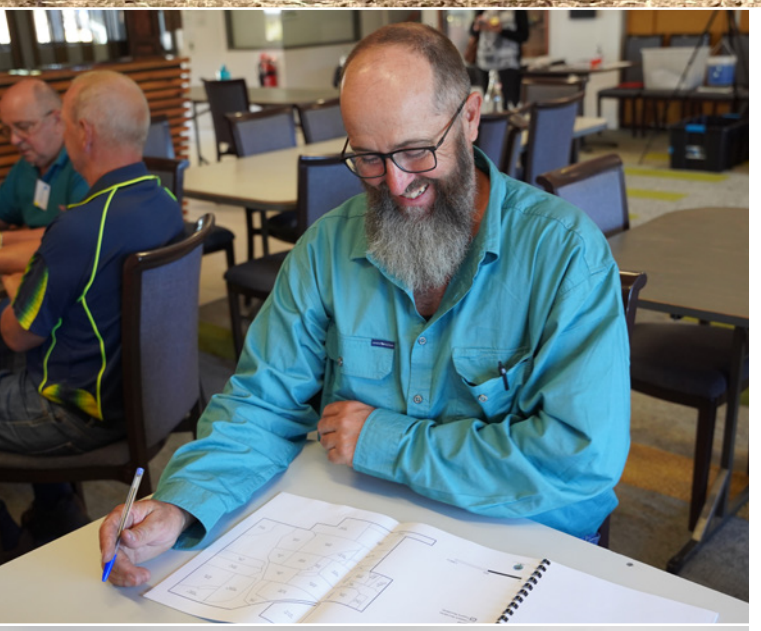
Since the 1900s, farmers have continuously applied phosphorus fertiliser to address historic deficiencies in south-west Western Australia's soils. As a result, most grazing farms in the region now have more than enough phosphorus for pasture production. However, when too much fertiliser is applied to paddocks, phosphorus runs off into rivers, lakes and streams. This is a loss of farmers' fertiliser investment and can trigger excessive algal growth in waterways, leading to harmful algal blooms. These blooms not only make the water unsightly and smelly but also deplete oxygen levels, harming fish and other aquatic life.

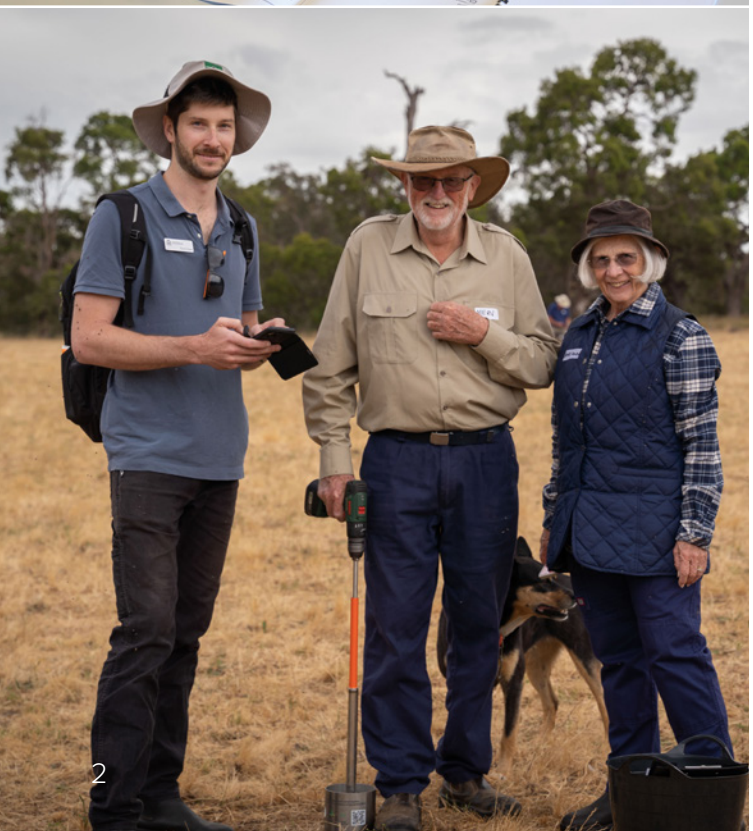
Soil testing your farm and tailoring your fertiliser program can help you:

- target problem areas of your farm
- prioritise your fertiliser and liming budget to have the biggest impact
- protect the land for future generations.









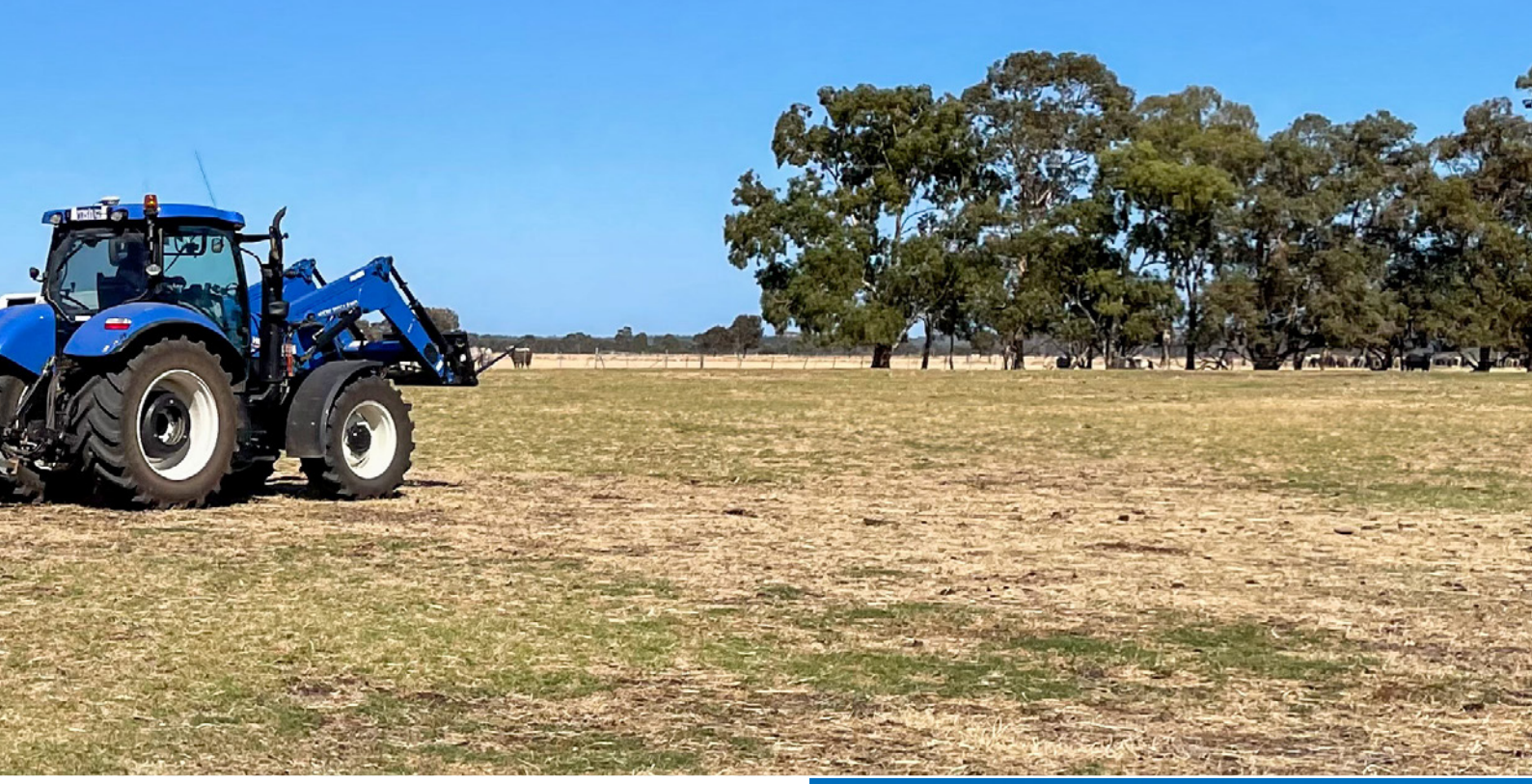
Benefits of soil testing

Soil testing is an essential tool for modern agriculture as it empowers farmers to make informed choices, use resources efficiently and promote sustainable and productive farming practices.

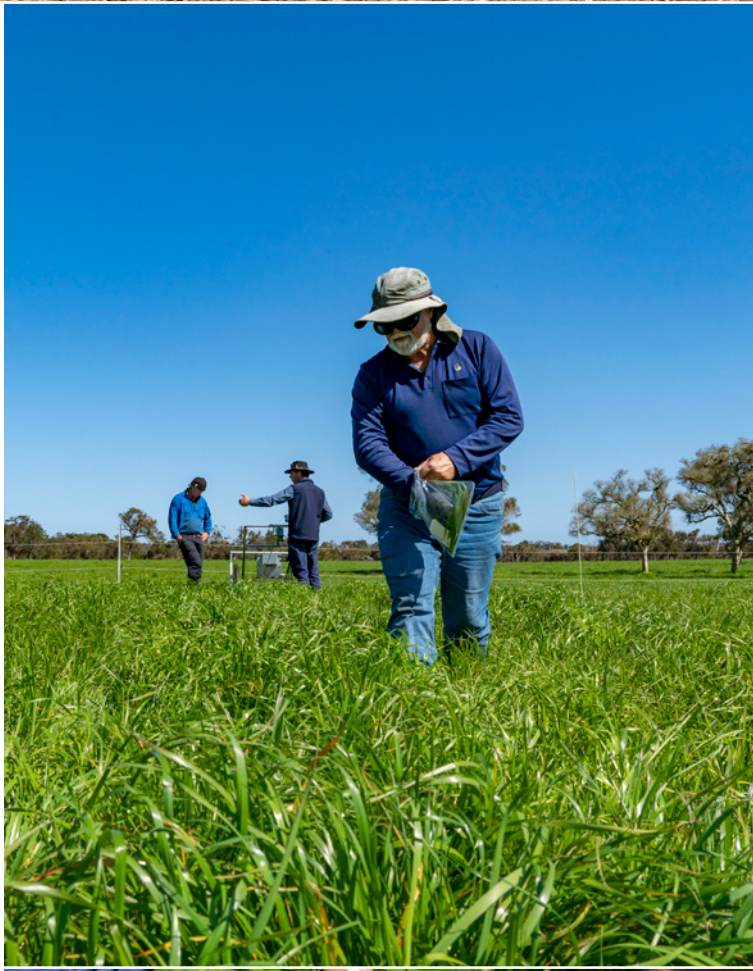
1. **Nutrient management:** Soil testing helps to determine the plant-available nutrient content of your soil, including levels of essential macro elements like phosphorus, sulfur and potassium. This information allows you to decide on the right type and rate of fertilisers, reducing costs and minimising overuse or underuse of nutrients.

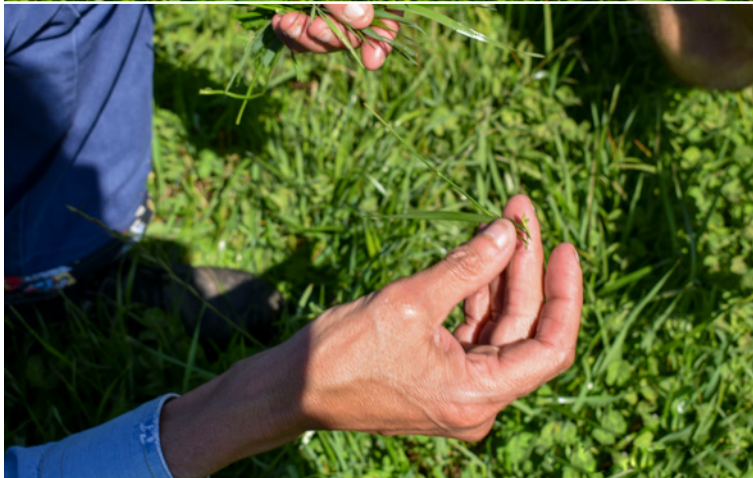
2. **Cost efficiency:** Soil testing helps you to save money by avoiding unnecessary fertiliser and nutrient application. This reduces input costs and maximises the return on investment.

3. **Environmental sustainability:** Precise nutrient management reduces the risk of nutrient runoff and pollution, which can otherwise harm the environment and water quality. Soil testing enables sustainable and responsible farming practices, protecting the land for future generations.



4. **pH adjustment:** Soil tests can determine the soil's pH level. If your pH is too low (acidic), you can develop a plan to adjust your pH with a liming program. Ideal pH levels improve nutrient availability to plants and protect pasture against aluminium toxicity.
5. **Improved soil health:** Soil testing provides insights into soil organic matter content, which is crucial for soil health and structure. It can guide the implementation of practices like cover cropping and organic matter additions to enhance soil quality.
6. **Improved pasture and crop production:** Soil testing allows you to make sure that your pasture and crops are getting the nutrients they need. This results in improved pasture quality, higher tolerance to disease and pest damage, and increased growth.
7. **Long-term soil management:** Regular soil testing allows farmers to track changes in soil conditions over time. This information can inform long-term soil management strategies, helping maintain soil fertility and sustainability.





How to soil test your farm

Step 1: Gather your tools.

Step 2: Choose testing sites and collect soil samples.

Step 3: Send samples to an accredited laboratory.

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Step 4: Use results to inform your fertiliser decisions.

Step 1: Gather your tools.

Equipment to take soil samples includes pogo sticks or augers. These are available for purchase at agricultural supply stores and may be available to loan from your local catchment group.

Step 2: Choose testing sites and collect soil samples.

Visit estuaries.dwer.wa.gov.au/soilresources for resources on how to select soil testing sites and how to take accurate samples. Be sure to contact your chosen laboratory before collecting your samples to find out how they need samples to be submitted.

Step 3: Send samples to an accredited laboratory.

Samples should be sent to an accredited laboratory for analysis. Your laboratory will provide you with results that you can refer to and discuss with your agronomist.

Step 4: Use results to inform your fertiliser decisions.

Use the results to inform your fertiliser and liming decisions. For pasture in south-west WA's high rainfall zone, input your soil test results into our free nutrient calculator to determine the right fertiliser types and rates. You can find a link to the calculator at estuaries.dwer.wa.gov.au/soilresources.

Need help?

Subsidised soil testing programs may be available in your area – contact your local catchment group to see whether you are eligible. Catchment groups may also have information about soil testing equipment and relevant workshops in your area.

#WAestuaries

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Supported by

Australian Government | National Landcare Program

HEALTHY ESTUARIES WA

Soil Wise is funded by the National Landcare Program Smart Farms Small Grants – an Australian Government initiative. It is supported by Healthy Estuaries WA – a State Government Initiative.