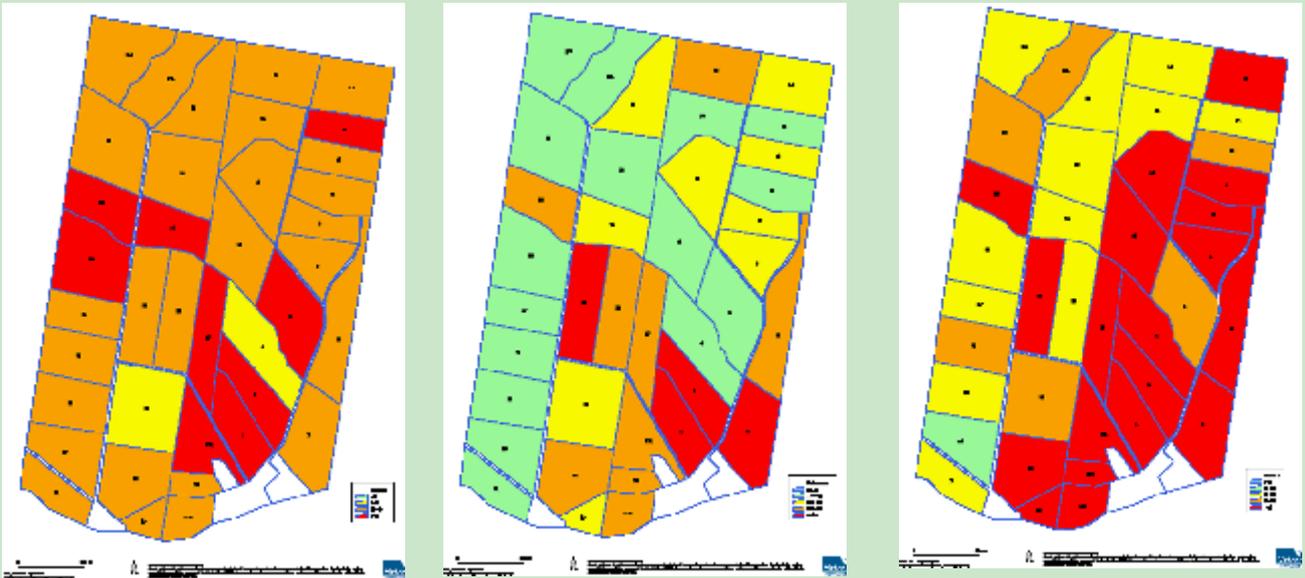




Nutrient Mapping

Fact Sheet No. 4
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Nutrient levels and fertility characteristics can vary across many areas of the farm. High levels may represent an unnecessary financial cost and can have detrimental environmental impacts on waterways and pest weeds. Nutrient maps allow a rapid, visual assessment of the nutrient levels across the entire farm and can assist the decisions by understanding these levels, their influences and trends.

A nutrient map is generally a paddock map that has soil test results overlaid to allow a visual assessment of the farm nutrient levels. Sulphur, potassium and phosphorus and pH levels are generally mapped, although any trace elements and minerals could be included. Nitrogen levels are considered to be too volatile for this type of mapping. The above maps use a colour coding system to show levels at a glance. More soil tests will allow a more accurate assessment and the ideal scenario is to test every paddock although this is not necessary.

The map allows paddocks of similar nutrient levels to be grouped together. This can be of value by categorizing them into different zones and prescriptive fertiliser blends or treatments (such as liming) can be produced accordingly. Additionally environmentally sensitive areas can be identified for special consideration to reduce run off risk.

**HEYTESBURY SOIL AND WATER
DAIRY ACTION PROGRAM**



Nutrient Mapping

Included in the farm routine:

Soil tests are essential to the farm and do many. Soil health will be the greatest factors affecting grass growth. Often times the nutrient levels are enormously high but grass growth is poor. This is due to the poor soil chemistry and ecology. Overlaying this data onto a nutrient map allows at a glance assessment of soil condition and generally if one factor is too high or low other parameters so will others.

Save Big \$\$\$\$:

Many farmers assessed in the Dairy Action Program have shown nutrient levels (particular phosphorus) to be incredibly high. Across the Heytesbury this represents an over investment of hundreds of millions of dollars

Factors affecting:

Factors to be considered when evaluating nutrient levels

- Landscape characteristics
- Soil types
- Herd size
- Cropping and paddock rotation
- Effluent spreading
- Hay and silage making
- Bought in feed stocks
- Track and underpass drainage,
- Wet or dry areas
- Proximity to dairy shed
- Day, night, fallow or out paddock
- Fertilising and liming history
- Accuracy of paddock map

Key Messages:

- Soil test every paddock of the entire farm regularly (2-5 yearly) and map the nutrients to allow visual comparison of nutrient levels.
- Understand the impacts of farm routines on the nutrient levels and cycle those routines as much as possible.
- Accurately know paddock sizes to ensure appropriate fertilizing levels (less guessing)

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