

Healthy Rivers Wai Ora Plan Change 1 Waikato and Waipa River Catchment

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AgVice

Overseer (v6.3.1) for equine property's – what did we find? 3 scenarios.

- **Scenario 1.**
- 2 ha property with 10 thorough bred race horses and 1 pony. Tried also to house horses but could only house the 1 cow. Overseer analysis failed
- **Scenario 2.**
- Used a medium size property (8 ha). Also tried to work around using housing to mimic stalls. Overseer analysis failed.
- **Scenario 3.**
- Large block, stud farm, got a result, but question integrity of figure, at 19.5 SU per ha (from overseer) with N loss of 17

What we think are the issues

- Using sheep energy algorithms does not work for horses
- No data for feed energy values for horses
 - If take down clover content to manage N input, crashes as not enough feed in system to service energy demand
 - No data available on nutrient content of many alternative fertilisers
 - Overseer “tries” to grow too much grass to compensate for the reality of high energy feed, also very high clover fixation
- No fertiliser data for the type of fertilisers used e.g. Agrisea
- No energy data (ME) for concentrate feed, but do have MJ (Research to fill this gap)
- ? Urine patch pattern and deposition assumptions (unlike cattle or sheep)
- Bought in feed – no proxy to match the energy density of the bought in feed (15.5 MJ/kg vs maize silage 13.5ME)