Equine Management Plan

Introduction

This Property Management Plan (Plan) is provided in support of an application in relation to xxxxx (Property) to:

- Keep three (3) horses for private use
- Provide agistment for 1 horse or 2 ponies

The property has historically run horses. The property was purchased with 11 existing stables/covered yards on site.

The proposed stocking rate exceeds the rates recommended by Department of Agriculture (DOA) and Water & Rivers Commission (WRC). This Plan has therefore been drafted with regard to the advice from xxxxx (independent agronomist) and addresses and incorporates the requirements/recommendations in the following publications:

- Shire of Murray 'Keeping of Horses in Rural Residential Areas'
- Department of Agriculture – Stocking Rate Guidelines for Rural Small Holdings
- Water & Rivers Commission – Environmental Guidelines for Horse Facilities & Activities (WRCEG) and
- Horse SA – Horses, Land & Water Management Guidelines ('HorseSA')

1. Site Plan

The attached site plan indicates all pasture paddocks, the proposed stable block, day yards and other general farming infrastructure.

Paddock Sizes:

Paddock Name	Soil Type	Irrigated (sqm)	Dryland (sqm)
Front paddocks	B4	4046	1748
Grassed Arena	B4	1776	
Middle dryland area	B4		1204
Middle Paddock	B4/B2	1577	
Back Paddock	B2	4461	1418

An existing bore is located at the front of the property. This provides drinking water for the horses and irrigation water.

2. Specific Criteria

The Number and Type of Stock

Application is made for 4 x 500kg light horses, or 3 x 500kg light horses and 2 x 250kg ponies.

Soil Type and Stocking Rates

A base soil analysis has been undertaken – copy attached.

The property has two soil types identified.

- The northern end is classified as B4 or Land Unit SR3 'Rapidly drained pale sands'. The recommended dry stocking rate is 6 DSE/ha and the irrigated stocking rate is 20 DSE/ha.
- The southern end is classified as B2 or Land Unit SR5 'Semi wet soils'. The recommended dry stocking rate is 2 DSE/ha and the irrigated stocking rate is 10 DSE/ha.

The recommended maximum number of horses is therefore:

B4 Irrigated 0.66ha @ 20 DSE = 13.2
+ B4 Dryland 0.29 ha @ 6 DSE = 1.8
+ B2 Irrigated 0.45ha @ 10 DSE = 5.2
+ B2 Dryland 0.14ha @ 2 DSE = 0.3
20.5 or 2 horses

Stabling Practices

A high input system of stabling practices will be applied.

Horses will be stabled overnight, approximately 5pm through until 7am (14 hours per day) as standard practice. Horses may be stabled for longer periods when there is inclement weather, paddocks or laneways/firebreaks are too wet or under veterinary instruction.

All horses on the property will receive their total nutritional requirements from supplementary feeding, with hay available during the day and night.

The stables are constructed with a limestone hardstand topped with a thick, absorbent layer of sawdust. The wash down area will drain to a sump. This water will be used for reticulation on gardens and the front paddocks.

When paddocks require resting, horses will be allowed access to fenced firebreaks or the round yard to allow them free exercise and movement without any negative impacts on pasture cover.

Collection, Storage and Disposal of Manure including Fly Management and Odour Control

Manure will be collected daily from stables, laneways/firebreaks and off paddocks.

Manure will be stored and removed off site via enclosed skip bins.

Nutrient Management Soil Ameliorants & Fertiliser Application

The Table at Section 3.5 in the WRCEG identifies the waste from a single 450kg light horse typically produces approximately 62kg of Nitrogen and 5.5kg of Phosphorus per annum.

Table 5 at Section 3.5.2 identifies the maximum Nitrogen and Phosphorus application rate to protect water. Given the sandy composition of the soil (and allowing for drainage to water with high eutrophication risk) the 1.6 hectare available for pasture/yard area, the maximum annual load is 224kg of Nitrogen and 16kg Phosphorus.

It is proposed that all manure be collected year round will be disposed of off-site to minimise the risk of leaching and run off.

As per property was purchased in a rundown state with little pasture cover, some fertiliser is required to rebuild soil fertility in order to support good pasture growth and high ground cover levels. The soil has been tested and fertiliser recommendations will be followed to improve the soil nutrient balance. Where fertilisers are applied, they will be done in split applications over the irrigation period to reduce the likelihood of nutrient leaching. Slow release/mineral based fertilisers will be used.

Over the next 2 to 5 years the addition of clay to B2 soils is proposed. The claying of light sandy soils will improve soil stability, nutrient retention and water holding capacity as recommended in the Department of Agriculture – Stocking Rates Guidelines for Rural Small Holdings, page 17.
https://www.agric.wa.gov.au/water-repellence/claying-ameliorate-soil-water-repellence

Pasture Management

Pastures will be managed in accordance with Agricultural Department recommended practice – https://www.agric.wa.gov.au/crops/pastures/pasture-management

- Paddocks will be seeded with summer active perennials such as Kikuyu, Rhodes grass and couch (Irwin Hunter Northern Perennial Mix)
- In autumn paddocks may be oversown with winter active pasture species such as ryegrasses and clovers.

Pastures will be grazed to maintain 100% ground cover at all times and to maintain a minimum pasture height of 5cm. Excessively tall pastures will be slashed to maintain palatability and encourage more leaf growth for more even grazing.

Stock will be rotated around the paddocks to maximise pasture cover and minimise soil erosion. Annual inspection and advice will be sought from an experienced Agricultural Consultant.

Protection of Trees

Trees in pastured areas will be protected from ring barking by placing galvanised wire tree guards around their trucks. Fodder shrubs will be planted to provide alternative grazing sources that horses can browse in preference to protected trees.

Dust Control

The property has mature tree belts on 3 sides of the property. These shelter belts will be protected from ringbarking by horses and will provide a break from easterly winds. Additional planting of native bushes and fodder shrubs to these shelter belts in proposed.

Tree selection will be in consultation with an experienced horticulturalist and experienced horse keepers.

Dust control measures contained in Section 3.7 of WRCEG & Paddock Management Section of SAHorse will be adopted, namely:

- Maintain minimum pasture height
- Paddock rotation
- Rotation of feeding areas and water troughs
- Coverage of bare areas
- Minimising reticulation

Weed Control

An initial assessment of the Property indicated:

- Very low level infestation of Dock, Flat Weed and Cape Weed

Eradication and control will be achieved by a mixture of chemical spray (selective broadleaf weed herbicide), 'spot' treatment and/or hand pulling techniques.

A best practice weed management strategy will be implemented with the assistance of a Rural Consultant and with reference to SAHorse, Paddock Management Section 7 'Weed Identification and Control'.

Water Availability and Use and Irrigation

An existing bore is located on the property. A water licence for the bore is attached.

Information available from NSW Department of Primary Industries (NSWDPI) estimates water consumption per horse to be in the range of 40-50 litres per day. At the upper end, requirement for 4 horses is therefore approximately 73 kilolitres (2h x 50litres x 365).

Paddock stock watering will be via water troughs fitted with float valves.

All main paddock areas are under irrigation and in the pasture establishment phase, (approximately one third of the one hectare available for pasture) will be irrigated. Based on assumption (e) in Appendix D (page 32) of WRCEG this will require approximately 8,250 kilolitres.

Inundation and Flood Management

Should the property become inundated or flooded due to extreme weather events, all horses will remain in the stables for 24 hours per day until water has receded and/or paddocks are dried out. Should this be for more than a few days, then alternative spelling will be sourced to ensure both horse welfare and pasture management criteria can be met.

Horses will not be grazed on wet paddocks to ensure that pasture ground cover is maintained and soil structure is not damaged.

Fire Management

Grass in 'resting' paddocks and dryland areas will be kept short to minimise fire hazard.

Firebreaks will be maintained on all boundaries. Horses will be allowed access to firebreaks as a day time grazing option when paddocks are unavailable for grazing to help keep firebreaks clear during the lead up to summer.

Additional Comment

The applicants are committed to adopting best practice guidelines for hose keeping. In addition to the issues discussed above, the applicants will follow the additional WRC Environmental Guidelines for Horse Facilities & Activities including;

- 3.8 Horse Mortalities
- 3.9 Chemical Storage
- 3.10 Control of Rodents