

# HORSES, LAND AND WATER

## Action Planner for Horse Properties

**A tool to assist horsekeepers assess and improve environmental management**

to accompany the

***HORSES, LAND AND WATER***  
***Management Guidelines***

- Whole of property management
- Paddock management
- Management for intensive horsekeeping





[www.horseslandandwater.com](http://www.horseslandandwater.com)

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Horse SA members

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## Introduction

A catchment is an area of land that catches rainfall, and directs it to a creek, river, dam or gutter, which eventually flows out to an ocean or lake.

Water is the link throughout the catchment. As well as rivers, creeks, lakes, dams and reservoirs, a catchment also includes groundwater, stormwater, waste water, and related infrastructure (including sewerage pipes and treatment systems).

It is important to maintain a healthy catchment to ensure watercourses:

- can support aquatic life such as fish, frogs and insects;
- are available for recreational use; and
- ◆ can supply safe drinking water for communities.

Everybody lives and works in a catchment, so we all have a responsibility to look after the environment within our local catchment.

All properties need to be well managed to prevent pollutants (including sediments from soils, nutrients from manure and fertilisers and chemicals from pesticides or veterinary products) from damaging the surrounding environment and/or entering watercourses or groundwater.

The way that you manage activities on your horsekeeping property can have a direct impact on the surrounding environment and the quality of the water that runs off your property, which in turn has an impact on your catchment's health. These include activities such as:

- pasture composition and groundcover maintenance;
- weed control;
- manure management;
- storage and application of veterinary products and chemicals; and
- horse access to and across watercourses.

A property that practices sound environmental management will have quality pastures, low incidence of weeds, habitats for native birds and animals and well-maintained watercourses. Sound environmental management not only translates into healthy land but also provides an environment that will have positive impacts on the health of the horses that live on such a property.

It is important to understand how activities on your horsekeeping property can be managed to prevent pollution in your catchment and promote horse health. Once issues are identified you can then begin working towards managing activities on your property to reduce or prevent pollutants harming the surrounding environment and catchment.

This Action Planner is designed to assist you to recognise any improvements in management practices that will promote catchment health on your property.

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## How to use the Action Planner

This Action Planner is designed to be used in conjunction with Horse SA's *Management Guidelines* publication, which consists of a series of chapters for each of the 30 topics in the Action Planner.

The Planner has been developed to assist horse property managers to assess and continually improve their environmental management relating to:

- whole of property management (activities or issues that affect the environment and need to be managed across the entire property),
- paddock management (activities or issues that are specific to paddocks and grazing areas), and
- intensive horsekeeping (activities or issues that are specific to areas of intensive horsekeeping such as stables, yards etc.).

**Step 1** Work through each section of the audit tool and for each topic and **select the statement that best reflects the current management practice** on your horsekeeping property:

- Ideal
- Nearly there
- Just beginning
- Haven't thought about it

**Step 2** At the end of this process, record your results on the table in the '**Summary of results of the checklist**'.

**Step 3** The topics that you rated the lowest, starting with "haven't thought about it", should be your highest priority for making improvements in the near future.

**Step 4** Once you've identified your highest priority areas, the next step is to develop Action Plans to assist you in better managing and controlling these areas. Look at the corresponding topics in the *Management Guidelines* to help you develop the plans for your property. An Action Plan template is included at the back of this publication.

Step 4a – Choose the **short term improvement action(s)** which:

- can be planned and conducted within one year;
- helps your property comply with (regulatory) requirements not to cause environmental damage or harm to immediate assets such as soil, nearby water bodies, air and native vegetation;
- is financially feasible to implement in the short term; and
- fits in with family/ enterprise time commitments.

Step 4b – Choose the **long term improvement action(s)** which:

- needs to be planned and conducted over a longer time period (e.g. more than one year);
- needs additional resources currently not available in your budget; and
- enhances the overall aesthetics of your property.

# Whole of property management

## 1 Property Management Plan

A Property Management Plan (PMP) looks at your personal goals, the natural resources (i.e. soil, water and biodiversity) on the property and the specific requirements of your enterprise.

Through developing a PMP, all three areas can be maintained in a sustainable manner. Plans will also help identify resources and costs to help with future improvements.

A well-designed PMP has management and improvement aspects that are built into your daily routine and annual planning. It collects information relating to the overall health and productivity of your property and warns of early problems.

Many horse property managers are probably already doing quite a number of the things you would include in a property plan, but have not yet formalised these in writing.

★ **A Property Management Plan for the management of natural resources is in place, actively used and reviewed (updated) annually.**

- Ideal                      A Property Management Plan for the management of natural resources is in place, actively used and reviewed (updated) annually.
- Nearly there              A Property Management Plan exists, but needs updating.
- Just beginning            No Property Management Plan exists, but I do know how to write one.
- Haven't thought about it    I don't have a Property Management Plan and am not sure where to start.

Ideas for changes to management practices:

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## 2 Horsekeeping systems

Can be included in a Property Management Plan – see Page 6.

The more horses kept on the property, the higher the input (time, money and facilities) that will be required to keep the horses healthy and protect the land from environmental damage.

Other factors influencing your decisions include the land capability on the property and the core business of your horsekeeping enterprise (e.g. showjumping, racing).

**★ The number of horses on the property and the management system used has been determined by the land capability and the needs of the horse property manager.**

- |   |   |
|---|---|
| <input type="checkbox"/> Ideal                    | The number of horses on the property and the management system used has been determined by land capability and the needs of the horse property manager. |
| <input type="checkbox"/> Nearly there             | Some consideration was given to the land capability when determining the number of horses on the property and management system used.                   |
| <input type="checkbox"/> Just beginning           | I am finding out my property's land capability to help me determine the number of horses to keep and management system to use.                          |
| <input type="checkbox"/> Haven't thought about it | No consideration was given to the land capability when determining the number of horses on the property or management system used.                      |

Ideas for changes to management practices:

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### 3 Development and related approvals

In many Council areas, you may need development approval to keep horses – this means that you will need to apply to your Council to keep horses if you move on to a property, erect or extend stables, or want to conduct a horse-related enterprise.

Approvals will also be required if you wish to construct dams, instal bores or remove native vegetation. Permits are required for stock crossings or any other water-affecting activity.

★ **Approvals and permits are in place for horsekeeping and property improvements.**

- Ideal Approvals and permits are in place for horsekeeping and property improvements.
- Nearly there I am applying for relevant approvals and permits as required.
- Just beginning I am investigating the relevant approvals or permits may be required but are not currently in place.
- Haven't thought about it I don't know what approvals or permits are required for my property.

Ideas for changes to management practices:

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## 4 Siting of stables, yards, trails and intensive work areas

Keeping and working your horses may be your life, your favourite pastime and your passion. It may not, however, be what your neighbour enjoys.

There are many factors to consider when choosing a site for new horse facilities, or upgrading and managing existing ones. This includes ways to manage odour (especially from urine), rodents, noise, dust (including loading horses on/off floats), stormwater runoff and water conservation.

★ **Horse facilities are sited and managed with consideration given to convenience and potential environmental impacts, and through open communication with neighbours.**

- |   |  |
|---|--|
| <input type="checkbox"/> Ideal                    | Horse facilities are sited and managed with consideration given to convenience and potential environmental impacts, and through open communication with neighbours.    |
| <input type="checkbox"/> Nearly there             | Horse facilities are not ideally sited but are managed with consideration given to convenience and potential environmental impacts and neighbours have been consulted. |
| <input type="checkbox"/> Just beginning           | Some consideration is given to convenience, potential environmental impacts and neighbours, when siting and managing horse facilities.                                 |
| <input type="checkbox"/> Haven't thought about it | I haven't thought about convenience, potential environmental impacts or neighbours when siting or managing horse facilities.   |

Ideas for changes to management practices:

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**5 Fire prevention planning**

Can be included in a Property Management Plan – see Page 6.

The threat of fire is high for many stable yards, with storage of hay, bedding and electrical faults being potential causes. This threat is heightened when living in a bushfire risk area, such as the areas surrounding many of our towns and cities.

Careful planning is the basis of good fire prevention and a plan of action is needed for the whole property. A fire prevention plan developed with the assistance of your local fire authority should outline the work required to help safeguard your property and what actions should be taken on high fire risk days and if a fire threatens.

**★ A fire prevention program is documented and implemented throughout the year.**

- Ideal                    A fire prevention and emergency response program is documented and implemented throughout the year.
- Nearly there            A fire prevention and emergency response program is implemented but is not formally documented or reviewed
- Just beginning            There is a rough fire prevention and emergency response program ‘in my head’ but is not completely implemented or communicated to others.
- Haven’t thought about it    A fire prevention and emergency response program does not exist.

Ideas for changes to management practices:

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## 6 Emergency response planning

Can be included in a Property Management Plan – see Page 6.

Natural disasters such as flood, fire, strong winds, other weather events or an emergency disease outbreak may have potential to occur in your area.

It is important to have an emergency response plan in place to ensure you respond to any emergency situation in a safe and effective way that will minimise harm. This is the best way to protect family, horses and other livestock, property and assets. It is too late when the emergency starts.

**★ An emergency response plan is documented, communicated to relevant persons and reviewed annually.**

- |   |  |
|---|--|
| <input type="checkbox"/> Ideal                    | An emergency response plan is documented, communicated to relevant persons and reviewed annually.                  |
| <input type="checkbox"/> Nearly there             | An emergency response plan in place but is not formally documented or reviewed.                                    |
| <input type="checkbox"/> Just beginning           | There is a rough emergency response plan ‘in my head’ but is not completely implemented or communicated to others. |
| <input type="checkbox"/> Haven’t thought about it | An emergency response plan does not exist.   |

Ideas for changes to management practices:

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## **7 Habitat for native plants and animals**

Can be included in a Property Management Plan – see Page 6.

A holistic view to planning and preserving habitat for native animals, birds and fish should be incorporated into the Property Management Plan.

This includes the protection of any present remnant native vegetation (forest, woodlands, grasslands, wetlands and watercourses), feral animal control, and careful use of pesticides and chemicals.

Other factors to consider include planting local native species (with the right plants in the right location), leaving fallen hollow logs, incorporating wildlife corridors, protecting and renewing paddock trees, providing and keeping to marked trails for exercising horses and preservation of seasonal or permanent wetlands.

### **★ Existing habitats are protected and enhanced for native plants and animals**

- |   |   |
|---|---|
| <input type="checkbox"/> Ideal                    | Existing habitats are protected and enhanced for native plants and animals.                 |
| <input type="checkbox"/> Nearly there             | Existing habitats are known and horse access is restricted at times.                        |
| <input type="checkbox"/> Just beginning           | I can recognise the native vegetation on the property, but it is not protected from horses. |
| <input type="checkbox"/> Haven't thought about it | I haven't even thought about native vegetation or habitats for native plants and animals.   |

Ideas for changes to management practices:

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## 8 Storage and transport of veterinary products and chemicals

Can be included in a Property Management Plan – see Page 6.

Horse property managers should be aware of the relevant legislation, guidelines and label information linked to the storage and transport of chemicals.

Chemicals include many veterinary products, fertilisers, pesticides and fuel. An emergency response procedure should be in place for accidental spills and leakages to prevent materials from harming the environment.

### ★ **Veterinary products and chemicals (pesticides, fertilisers etc) are stored and transported according to labels, relevant legislation and recommended guidelines.**

- |   |   |
|---|---|
| <input type="checkbox"/> Ideal                    | Veterinary products and chemicals (pesticides, fertilisers etc) are stored and transported according to labels, relevant legislation and recommended guidelines.                          |
| <input type="checkbox"/> Nearly there             | Veterinary products and chemicals (pesticides, fertilisers etc) are sometimes stored and transported according to labels, relevant legislation and recommended guidelines.                |
| <input type="checkbox"/> Just beginning           | Care is taken when storing and transporting veterinary products, chemicals (pesticides, fertilisers etc), but labels and guidelines are not always referred to.                           |
| <input type="checkbox"/> Haven't thought about it | I generally don't read labels and am not aware of relevant legislation and relevant guidelines for storing and transporting veterinary products, chemicals (pesticides, fertilisers etc). |

Ideas for changes to management practices:

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## 9 Application and disposal of veterinary products and chemicals

Can be included in a Property Management Plan – see Page 6.

When chemicals are used, careful attention should be paid to preparation sites, calibration of equipment, cleaning up and disposal options for used containers to ensure the safety of the user and protection of the environment.

An emergency response procedure and equipment (e.g. spill kit) should be in place for accidental spills and leakages to prevent materials from harming the environment including contaminating runoff surfaces and local water resources. Chemicals include many veterinary products, fertilisers, pesticides and fuel.

★ **Veterinary products and chemicals (pesticides, fertilisers etc) are applied and disposed of according to labels, relevant legislation and recommended guidelines.**

- |   |   |
|---|---|
| <input type="checkbox"/> Ideal                    | Veterinary products and chemicals (pesticides, fertilisers etc) are applied and disposed of according to labels, relevant legislation and recommended guidelines.                             |
| <input type="checkbox"/> Nearly there             | Veterinary products and chemicals (pesticides, fertilisers etc) are sometimes applied and disposed of according to labels, relevant legislation and recommended guidelines.                   |
| <input type="checkbox"/> Just beginning           | Care is taken when applying and disposing of veterinary products, chemicals (pesticides, fertilisers etc), but labels and guidelines are not always referred to.                              |
| <input type="checkbox"/> Haven't thought about it | I generally don't read labels and am not aware of relevant legislation and relevant guidelines for applying and disposing of veterinary products and chemicals (pesticides, fertilisers etc). |

Ideas for changes to management practices:

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## 10 Preventing weeds entering or leaving the property

Can be included in a Property Management Plan – see Page 6.

Weeds need to be controlled on a property as they compete with both edible species in paddocks and with native vegetation in bushland areas.

One common aspect often overlooked in weed control is how weeds are imported and exported from the property. Weeds can be imported on to your property through hay and feed contaminated with weed seeds or through new horses that may have been grazing in weed-infested areas (weed seeds can pass through their digestive tract and enter your property through manure).

(Note – weed control is covered in the sections on pasture management.)

### ★ An active program to prevent weeds entering or leaving the property is in place.

- Ideal                                      An active program to prevent weeds entering or leaving the property is in place.
- Nearly there                                A program to prevent weeds entering or leaving the property is undertaken but not communicated to others entering the property.
- Just beginning                               I am aware that something needs to be done, but no program is in place.
- Haven't thought about it                I don't know how to prevent new weeds entering or leaving the property.

Ideas for changes to management practices:

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### 11 Pest animals

Can be included in a Property Management Plan – see Page 6.

The harmful effects of introduced animals such as rabbits, foxes, feral goats, starlings and sparrows cost many millions of dollars each year. These species cause immeasurable harm to the natural environment as well as to primary industry. It is important for horse property managers to identify pest animals and to work to reduce or eliminate them from their land.

**★ Pest animals are identified and a pest-specific control program is in place.**

- Ideal                              Pest animals are identified and controlled.
- Nearly there                      Pest animals are identified and are almost at manageable numbers.
- Just beginning                      Some effort is being made to control pest animals, but they are not controlled yet.
- Haven't thought about it              No effort has been made to identify or control pest animals.

Ideas for changes to management practices:

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## 12 Disposal of deceased horses

Can be included in a Property Management Plan – see Page 6.

Emotional and financial stress can be avoided by planning ahead for disposal of deceased horses.

Horses that have to be destroyed as a result of accident, illness or injury at short notice and planning for on- or off-property disposal should be considered at all stages of horse ownership.

### ★ A plan exists for the suitable disposal of deceased horses.

- |                          |                          |  |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | Ideal                    | A plan exists for the suitable disposal of deceased horses.  |
| <input type="checkbox"/> | Nearly there             | A plan exists 'in my head' for the suitable disposal of deceased horses but has not been documented. |
| <input type="checkbox"/> | Just beginning           | I have thought about the suitable disposal of deceased horses but don't have a plan.                 |
| <input type="checkbox"/> | Haven't thought about it | I haven't thought about how to dispose of deceased horses.   |

Ideas for changes to management practices:

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# Paddock management

## 1 Maintain groundcover

Can be included in a Property Management Plan – see Page 6.

One of the best ways to ensure a horse property is sustainable is to ensure that good quality pasture exists all year round.

Groundcover prevents erosion and acts as a filter strip for any water runoff. Groundcover of 70% or more where water erosion is a factor (i.e. high rainfall areas), or 50% where wind erosion is the major factor, is broadly accepted as achievable and provides acceptable environmental outcomes.

**★ All grazing areas have at least 70% (for soil susceptible to water erosion) or 50% (for soil susceptible to wind erosion) groundcover of at least 3 cm throughout the year.**

- |                          |                          |  |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | Ideal                    | All grazing areas have at least 70% (for soil susceptible to water erosion) or 50% (for soil susceptible to wind erosion) groundcover of at least 3cm throughout the year. |
| <input type="checkbox"/> | Nearly there             | Grazing areas have 70%/50% groundcover for most of the year in the majority of horse paddocks.   |
| <input type="checkbox"/> | Just beginning           | Grazing areas have less than 50% groundcover in most paddocks throughout the year  |
| <input type="checkbox"/> | Haven't thought about it | Grazing areas have little groundcover, and there are large areas of bare ground for most of the year.  |

Ideas for changes to management practices:

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## 2 Pasture Composition

Can be included in a Property Management Plan – see Page 6.

In areas where horses are kept, the best way to ensure the health of your horse and protect the soil from erosion is for your pasture's composition to consist of 70-80% pasture grass and 20-30% legume species suitable for your district.

There should be no proclaimed weed species and no more than 10% other weed species within the pasture. In areas of high rainfall, perennial grass species are encouraged.

**★ All grazing areas have quality pasture grasses and legumes with less than 10% weed species and no proclaimed pest plants.**

- |   |  |
|---|--|
| <input type="checkbox"/> Ideal                    | All grazing areas have quality pasture grasses and legumes with less than 10% weed species and no proclaimed plants. |
| <input type="checkbox"/> Nearly there             | All grazing areas have some quality grasses and legumes, but between 10-50% of the groundcover is weed species.      |
| <input type="checkbox"/> Just beginning           | All grazing areas have some pasture grasses that horses graze, but more than 50% is weeds.                           |
| <input type="checkbox"/> Haven't thought about it | All grazing areas have some plants but I don't know what is pasture and what are weeds.                              |

Ideas for changes to management practices:

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#### 4 Proclaimed (declared) pest plants

Can be included in a Property Management Plan – see Page 6.

In any area there are certain plant species that are proclaimed (declared) and by law you must have a program to rid your property of these.

Plants are generally proclaimed because they are poisonous to livestock or have the ability to reproduce and grow very quickly, greatly reducing the value of land. It is important for horse property managers to identify these pest species and to work to reduce or eliminate them.

**★ Proclaimed (declared) pest plants are identified and controlled.**

- Ideal                            Proclaimed pest plants are identified and controlled.
- Nearly there                    Proclaimed pest plants are identified and are almost under control.
- Just beginning                Some effort is being made to control proclaimed pest plants, but they are not controlled yet.
- Haven't thought about it    I don't know if there are any proclaimed pest plants on my property.

Ideas for changes to management practices:

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## 5 Seasonal wet areas, wet seeps and drainage lines

Can be included in a Property Management Plan – see Page 6.

To preserve pasture, prevent development of erosion areas, maintain soil health and to protect water quality, it is best to plan to remove or restrict horses from seasonal wet areas, wet seeps and drainage lines when the soil is soft due to being wet.

Skid marks and bare ground caused by hooves is evidence that grass roots are being torn up, with the increased potential for bare patches and erosion to develop.

Another indicator is “pugging” which is when hooves sink deep into the soil and leave holes, which damages grass roots, compacts the soil, pools water and reduces the subsequent grazing quality.

### ★ **Horse access is restricted from seasonal wet (waterlogged) areas, wet seeps (boggy areas) and drainage lines while the soil is wet and soft.**

- |                          |                          |   |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | Ideal                    | Horse access is restricted from seasonal wet (waterlogged) areas, wet seeps (boggy areas) and drainage lines while the soil is wet and soft.                        |
| <input type="checkbox"/> | Nearly there             | Horses have access to seasonal wet (waterlogged) areas, wet seeps and drainage lines while the soil is wet and soft, but a management program is being implemented. |
| <input type="checkbox"/> | Just beginning           | Seasonal wet (waterlogged) areas, wet seeps and drainage lines are identified, but horses are not restricted early enough or for long enough.                       |
| <input type="checkbox"/> | Haven't thought about it | Horses have access to seasonal wet (waterlogged) areas, wet seeps and drainage lines at all times.  |
| <input type="checkbox"/> | Not applicable           |   |

Ideas for changes to management practices:

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## 6 Steep slopes

Can be included in a Property Management Plan – see Page 6.

Many people purchase steep land with a view to keeping horses, without realising the additional management skills that may be required.

This includes more “down time” when the paddock may be unavailable due to wet conditions, poor soil stability and grazing recovery phases.

With increased steepness, tractors, slashers and mechanical spray equipment may not be able to access sites. Special care needs to be taken all year round so that horses do not rip up the grass root systems that stabilise the soil.

### ★ Horses are restricted from steep\*, erosion-prone slopes.

- |   |   |
|---|---|
| <input type="checkbox"/> Ideal                    | Horses are restricted from steep, erosion prone slopes  |
| <input type="checkbox"/> Nearly there             | Horses only have access to steep slopes when pasture cover and soil stability permits.  |
| <input type="checkbox"/> Just beginning           | Horses have access to steep slopes and planning is underway to control access where groundcover and soil stability is not sufficient. |
| <input type="checkbox"/> Haven't thought about it | Horses are not restricted from steep slopes, even when erosion or land slippage is evident.   |
| <input type="checkbox"/> Not applicable           |   |

\*A steep slope is defined as an incline of greater than 15% - 20% (or 15% in areas of greater than 1000 mm rainfall) i.e. incline is too great to safely drive a vehicle across the slope.

Ideas for changes to management practices:

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## 7 Management of manure

Manure can affect pasture composition in two ways: by directly increasing pasture growth through increasing nutrient availability; and by the rejection by horses of the pasture around areas where manure has been deposited.

The pasture around the manure grows rapidly due to increased nutrients and a lack of grazing. These areas then become tall and rank and are further avoided by horses. Paddocks can then develop a pattern of tall under-grazed areas and short over-grazed areas. These paddocks are often described as 'horse sick' and also diminish the filtering capacity of the paddock.

To prevent 'horse sick' pastures, manure in paddocks should be managed to prevent build up, minimise any nutrient impact on surface or underground water supplies and encourage even pasture growth.

**★ Action is regularly taken to prevent manure build up in paddocks.**

- |   |   |
|---|---|
| <input type="checkbox"/> Ideal                    | Action is regularly taken to prevent manure build up in paddocks.   |
| <input type="checkbox"/> Nearly there             | Action is occasionally taken to reduce manure build up in paddocks. |
| <input type="checkbox"/> Just beginning           | I am investigating how to prevent manure build up in paddocks.      |
| <input type="checkbox"/> Haven't thought about it | No action is taken to prevent manure build up in paddocks.          |

Ideas for changes to management practices:

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## 9 Management of horse feeding, watering and congregating areas

The groundcover in areas where horses congregate such as feeding points, troughs, shelters and gateways often wear down and become bare due to frequent access by horses.

These are potential points for erosion, soil compaction and pugging. It is important to manage these areas to prevent pasture loss and soil damage.

### ★ Horse feeding, watering and congregating areas are managed to prevent dust, mud and erosion.

- |                          |                          |  |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | Ideal                    | Horse feeding, watering and congregating areas are managed to prevent dust, mud and erosion.   |
| <input type="checkbox"/> | Nearly there             | Small areas of dust, mud or erosion exist seasonally around horse feeding, watering and congregating areas, but are being managed for improvement. |
| <input type="checkbox"/> | Just beginning           | Horse feeding, watering and congregating areas are bare, but an effort is being made to improve the sites.   |
| <input type="checkbox"/> | Haven't thought about it | Horse feeding, watering and congregating areas are continually in mud or dust with no plans to manage or improve the areas.                        |

Ideas for changes to management practices:

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## 10 Shade and shelter

Horse paddocks should provide horses with protection against sun, wind, rain and extremes of temperature.

Shade and shelter can be natural (e.g. trees) or artificially provided in the form of a paddock shelter. Horses tend to congregate in these areas and create bare patches that may become potential points for erosion, soil compaction and pugging.

In addition, consideration needs to be given to water runoff from paddock shelters during rain, which if not managed properly can lead to erosion with runoff carrying soil to nearby waterways. It is important to manage shade and shelter areas to prevent soil damage such as mud, dust and erosion.

### ★ Paddock shelter and shade areas are managed to prevent dust, mud and erosion.

- |   |  |
|---|--|
| <input type="checkbox"/> Ideal                    | Paddock shelter and shade areas are managed to prevent dust, mud and erosion.  |
| <input type="checkbox"/> Nearly there             | Paddock shelter and shade areas have some dust or mud around them, but the areas are being upgraded.                       |
| <input type="checkbox"/> Just beginning           | Paddock shelter and shade areas have dust or mud around them, and I am investigating what management options are suitable. |
| <input type="checkbox"/> Haven't thought about it | Paddock shelter and shade areas are surrounded by dust or mud.   |

Ideas for changes to management practices:

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## 11 Management of watercourses (including erosion gullies and dams)

Watercourses, which include creeks and dams, should be fenced or have natural barriers to restrict horse access (erosion gullies, which have similar bank concerns, are also considered in this category).

Horses walking in the water can disturb the stream-bed and cause damage to stream/gully banks and beds. Research has also shown that young animals, including foals on lactating mares, can affect water quality through the introduction of *Cryptosporidium* and *Giardia* via contamination from manure.

### ★ Watercourses are fenced to restrict horse access.

- |   |   |
|---|---|
| <input type="checkbox"/> Ideal                    | Watercourses are fenced to restrict horse access.                         |
| <input type="checkbox"/> Nearly there             | Most watercourses are fenced to restrict horse access.                    |
| <input type="checkbox"/> Just beginning           | Horses have access to watercourses and troughs.                           |
| <input type="checkbox"/> Haven't thought about it | Horses have full access to watercourses. This is their only water supply. |
| <input type="checkbox"/> Not applicable           |   |

Ideas for changes to management practices:

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# Intensive horsekeeping

(Includes small paddocks, laneways, stables, indoor and outdoor yards, holding pens, veterinary treatment areas, breeding sheds, feed sheds, tack rooms, quarantine areas, float parking areas, round-yards and riding arenas.)

## 1 Horse exercise areas and yards

Intensive areas, such as stable yards, arenas, and horse yards need to be well designed. This includes surfacing in a manner that prevents dust, mud and manages stormwater run off.

Regular maintenance, including filling in paw holes in yards, will prevent water pooling or creating undesirable drainage lines, which could lead to erosion and negatively impact on water quality.

★ **Intensive horse areas are managed to prevent dust, mud, manure build up and stormwater/watercourse pollution.**

- |   |  |
|---|--|
| <input type="checkbox"/> Ideal                    | Intensive horse areas are managed to prevent dust, mud, manure build up and stormwater/watercourse pollution.  |
| <input type="checkbox"/> Nearly there             | Intensive horse areas create some dust, mud, manure build up or stormwater/ watercourse pollution, but the areas are being upgraded.                       |
| <input type="checkbox"/> Just beginning           | Intensive horse areas create dust, mud, manure build up or stormwater/ watercourse pollution, and I am investigating what management options are suitable. |
| <input type="checkbox"/> Haven't thought about it | Intensive horse areas create dust, mud, manure build up or stormwater/ watercourse pollution.  |

Ideas for changes to management practices:

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## 2 Stable/yard waste storage

Poorly sited and designed manure and soiled bedding storage can lead to runoff entering watercourses, drains or groundwater systems. Odour may offend neighbours and be a source of complaints.

A well-designed manure bay prevents water runoff from entering or escaping until regular removal for disposal through sale, by a waste disposal company or provided for in a composting/gardening program for recycling the manure as a fertiliser.

Good siting of the facility includes locating away from a watercourse and ease of access from the stables and for vehicles or other mechanism of disposal. Some properties have arrangements with waste disposal companies to fill removable lidded bins that meet these requirements.

★ **Horse manure and soiled bedding is stored in a manner that prevents water runoff entering or escaping from the area.**

- |   |   |
|---|---|
| <input type="checkbox"/> Ideal                    | Horse manure and soiled bedding is stored in a manner that prevents water runoff from entering or escaping from the area.             |
| <input type="checkbox"/> Nearly there             | Horse manure and soiled bedding is stored in an area that water runoff can enter but cannot escape from and requires upgrading.       |
| <input type="checkbox"/> Just beginning           | Horse manure is currently stored in an area that runoff can enter and escape from but plans are in place to upgrade the storage area. |
| <input type="checkbox"/> Haven't thought about it | Little or no consideration is given to good practice in relation to storage of stable/yard waste.                                     |

Ideas for changes to management practices:

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### 3 Cleaning and disposal of waste in intensive horsekeeping areas

Stables, yards and small paddocks need to be regularly cleaned.

This has a number of purposes including prevention of nutrients entering watercourses during wet periods, as part of an internal parasite control program and to promote even pasture growth.

Stables and yarding have the extra potential problem of urine smell, which may not make neighbours and visitors happy! Urine is high in ammonia, which can also affect the respiratory system and eyes of horses.

★ **Intensive horsekeeping areas are regularly cleaned and wastes disposed of appropriately.**

- |   |  |
|---|--|
| <input type="checkbox"/> Ideal                    | Intensive horsekeeping areas are regularly cleaned and wastes disposed of appropriately.   |
| <input type="checkbox"/> Nearly there             | Intensive horsekeeping areas are regularly cleaned and wastes disposed of but some practices need to improve.                            |
| <input type="checkbox"/> Just beginning           | Intensive horsekeeping areas are cleaned when time permits but practices need to improve regarding cleaning and waste disposal routines. |
| <input type="checkbox"/> Haven't thought about it | Intensive horsekeeping areas are rarely cleaned with little thought as to how wastes are disposed of.                                    |

Ideas for changes to management practices:

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## 5 Cleaning out horse floats and trucks

Cleaning out horse trucks or floats should take into consideration the methods used and how the waste is disposed of. Manure left on footpaths, swept into drains or hosed down the street is not an acceptable practice.

Manure needs to be disposed of into a well-designed manure bay, or in another manner that will prevent run off entering stormwater drains and watercourses. This applies to manure and uneaten feed from floats and trucks cleaned out both at home and when away.

**★ Horse transport vehicles are cleaned out with waste collected and contained for disposal or recycling.**

- Ideal Horse transport vehicles are cleaned out with waste collected and contained for disposal or recycling.
- Nearly there Horse transport vehicles are usually cleaned with waste collected and contained for disposal where convenient.
- Just beginning I sometimes forget about collecting and containing waste when cleaning horse transport vehicles.
- Haven't thought about it I haven't thought about collecting or containing waste when cleaning horse transport vehicles.

Ideas for changes to management practices:

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## **6 Wash down areas**

Hosing off of horses or washing for showing, veterinary or other purposes is a stable procedure that can have an effect on the environment.

Water needs to be dispersed through grass that can act as a filter (e.g. kikuyu) or some councils may require wastewater to go into a sump, septic system or closed evaporation trenches.

Consideration can also be given to the products used. If options exist, choose those which are biodegradable.

### **★ Waste water from wash down areas does not enter watercourses or stormwater drains.**

- |   |   |
|---|---|
| <input type="checkbox"/> Ideal                    | Waste water from wash down areas does not enter watercourses or stormwater drains.  |
| <input type="checkbox"/> Nearly there             | Waste water from wash down areas generally does not enter watercourses or stormwater drains but some improvements are required. |
| <input type="checkbox"/> Just beginning           | Waste water from wash down areas sometimes enters watercourses or stormwater drains.  |
| <input type="checkbox"/> Haven't thought about it | I don't think about where the waste water goes when horses are washed down.   |

Ideas for changes to management practices:

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## Summary of results

### Instructions:

- 1 In the table opposite record the rating you selected for each topic.
- 2 The topics that you rated the lowest for, starting with 'haven't thought about it', should be your highest priority for making improvements in the near future.
- 3 Once you've identified your highest priority areas, the next step is to develop Action Plans to assist you in better managing and controlling these areas. An Action Plan template can be found in the next section to assist you in developing your Action Plans.
  - a Choose the short-term improvement action(s) based on the following criteria:
    - Can be planned and conducted within one year.
    - Helps your property comply with (regulatory) requirements not to cause environmental damage or harm to immediate assets such as soil, nearby water bodies, air, native vegetation.
    - Is financially feasible to implement in the short term.
    - Fits in with family/ enterprise time commitments.
  - b Choose the long-term improvement action(s) based on the following criteria:
    - Needs to be planned and conducted over a longer time period (e.g. more than one year).
    - Needs additional resources currently not available in your budget.
    - Enhances the overall aesthetics of your property.

# Action Planner for Horse Properties

A tool to assess and improve environmental management

## Summary of results

	Ideal	Nearly there	Just beginning	Haven't thought about it	Not applicable
<b>Whole of Property</b>					
1 Property Management Plan					
2 Horsekeeping systems					
3 Development and related approvals					
4 Siting of stables, yards and intensive work areas					
5 Fire prevention planning					
6 Emergency response planning					
7 Habitat for native plants and animals					
8 Storage and transport of veterinary products and chemicals					
9 Application and disposal of veterinary products and chemicals					
10 Preventing weeds entering or leaving the property					
11 Pest animals					
11 Disposal of deceased horses					
<b>Paddock Management</b>					
1 Maintain groundcover					
2 Pasture composition					
3 Weed identification and control					
4 Proclaimed pest plants					
5 Seasonal wet areas, wet seeps and drainage lines					
6 Steep slopes					
7 Management of manure					
8 Fence line tracking					
9 Management of horse feeding, watering and congregating areas					
10 Shade and shelter					
11 Management of watercourses (including erosion gullies and dams)					
12 Stock crossings					
<b>Intensive Horse Keeping</b>					
1 Horse exercise areas and yards					
2 Cleaning of intensive horsekeeping areas					
3 Stable/ yard waste storage					
4 Storage of feed					
5 Cleaning out horse floats and trucks					
6 Wash down areas					

## Environmental action planning

Now that you've identified the high priority areas for action for your property, the next step is to develop Action Plans to assist you in planning and implementing your actions. The following steps will assist you in developing your Action Plans.

### 1 Objective

Objectives are broad goals for environmental management on your property.

Start by setting objectives for each priority area.

*(Example – If your priority area is 'storage and transport of veterinary products and chemicals', your objective may be 'to improve chemical storage on property to minimise environmental impacts'.)*

### 2 Actions

Actions are what you plan to do to meet your objective.

It's important to be realistic when setting your actions. Use the SMART principle when developing your actions.

S – Specific

M – Measurable

A – Achievable

R – Realistic

T – Time-framed.

Set a date for completing each action/target and designate someone to be responsible for completing the task. By doing this you are ensuring that the job gets done.

*(Example – If your objective is 'to improve chemical storage on property to minimise environmental impacts' your actions may include:*

- 1 Plan and construct a dedicated chemical storage area by December 2006, responsibility of property manager.*
- 2 Establish record keeping and MSDS sheets for all chemicals stored by March 2007, responsibility of property manager.*
- 3 Develop chemical handling and storage procedure/s by July 2007, responsibility of property manager.)*

### 3 Monitoring and recording

Monitoring the success of your action will provide you with a track record of whether and how well you achieved your target.

Think about:

- What you will need to monitor.
- Where are you going to monitor.
- How are you going to monitor.
- When are you going to monitor.
- Who will be responsible for monitoring.
- What records you will need to keep.

*(Example – for above actions:*

- Every three months monitor chemical containers for leaks.*
- Register to be filled out for every use of chemical.*
- Any chemical spills to be recorded through an incident report form.)*

## Environmental action template

<b>Action Plan – Title</b>				
<b>Objective</b>				
<b>Actions</b>				
<b>When to do it</b>	<b>Action</b>	<b>Date</b>	<b>Responsibility</b>	<b>Completed?</b>
<b>Monitoring and recording</b>				

## Summary of best practices/benchmarks/guides

### Whole of property

- 1 A Property Management Plan for the management of natural resources is in place, actively used and reviewed (updated) annually.
- 2 The number of horses on the property and the management system used has been determined by the land capability and the needs of the horse property manager.
- 3 Approvals and permits are in place for horsekeeping and property improvements.
- 4 Horse facilities are sited and managed with consideration given to convenience and potential environmental impacts, and through open communication with neighbours.
- 5 A fire prevention program is documented and implemented throughout the year.
- 6 An emergency response plan is documented, communicated to relevant persons and reviewed annually.
- 7 Existing habitats are protected and enhanced for native plants and animals.
- 8 Veterinary products and chemicals (pesticides, fertilisers etc) are stored and transported according to labels, relevant legislation and recommended guidelines.
- 9 Veterinary products and chemicals (pesticides, fertilisers etc) are applied and disposed of according to labels, relevant legislation and recommended guidelines.
- 10 An active program to prevent weeds entering or leaving the property is in place.
- 11 Pest animals are identified and a pest specific control program is in place.
- 12 A plan exists for the suitable disposal of deceased horses.

### Paddock management

- 1 All grazing areas have at least 70% (for soil susceptible to water erosion) or 50% (for soil susceptible to wind erosion) ground cover throughout the year.
- 2 All grazing areas have quality pasture grasses and legumes with less than 10% weed species and no proclaimed plants.
- 3 An active pasture weed control program is in place that is regularly monitored and reviewed.
- 4 Proclaimed (declared) pest plants are identified and controlled.
- 5 Horse access is restricted from seasonal wet (waterlogged) areas, wet seeps (boggy areas) and drainage lines while the soil is wet and soft.
- 6 Horses are restricted from steep, erosion-prone slopes.
- 7 Action is regularly taken to prevent manure build up in paddocks.
- 8 No fence line tracking is evident.
- 9 Horse feeding, watering and congregating areas are managed to prevent dust, mud and erosion.
- 10 Paddock shelter and shade areas are managed to prevent dust, mud and erosion.
- 11 Watercourses are fenced to restrict horse access.
- 12 Stock crossings are selected and designed to prevent stream bed and bank erosion.

### Intensive horsekeeping

- 1 Intensive horse areas are managed to prevent dust, mud, manure build up and stormwater/watercourse pollution.
- 2 Horse manure and soiled bedding is stored in a manner that prevents water runoff entering or escaping from the area.
- 3 Intensive horsekeeping areas are regularly cleaned and wastes disposed of appropriately.
- 4 Feed is stored in dry, sealed containers and is not accessible to vermin.
- 5 Horse transport vehicles are cleaned out with waste collected and contained for disposal or recycling.
- 6 Waste water from wash down areas does not enter watercourses or stormwater drains.



## Notes

## Notes



**HORSES, LAND AND WATER**  
**Action Planner for Horse Properties**



[www.horseslandandwater.com](http://www.horseslandandwater.com)