

HorsesLandWater Peri-Urban Project

Land condition monitoring on horse keeping properties

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Soil erosion

The first step of monitoring soil erosion in horse paddocks is to identify the areas in your horse paddocks that are susceptible to erosion – those that contain large areas of bare soil and/or a small percentage of groundcover.

These areas are likely to occur close to paddock gates, and in and around horse feeding areas.

To monitor these areas, permanent markers will need to be installed in the ground at the outer reaches of the bare soil



Soil erosion marker installed at outer reaches of erosion.



Measuring tape extending from fence to outer erosion marker.

Fence Line tracking

For each length of tracking that is occurring along a fence line, measure the 5 widest points for each 100 m length.

Mark these points by placing a semi-permanent marker on the fence immediately adjacent to where each measurement has taken place so that these sites can be revisited for comparative assessment.

Revisit each of the monitoring sites every two months to determine whether the extent of fence line tracking is decreasing, increasing or remaining constant



Pasture composition

The first step of monitoring perennial grass and clover plants in pastures is the construction of a quadrat (a square sampling frame) within which sampling will take place.

To randomly sample the pasture composition of your paddocks, start from one corner of your paddock, take a few steps into your paddock then randomly throw (gently) your quadrat in front of you.

Record the number of each perennial grass and each clover plant within the quadrat along with the percentage of weed species. Repeat the procedure until you have reached the recommended number of sampling points.

Sampling of pasture composition in your paddocks should be conducted on a seasonal basis as there will be natural variations between seasons depending on weather conditions such as rainfall.



Good mix of clover and perennial grasses



Grass-dominant pasture



Clover-dominant pasture

Stream bank erosion

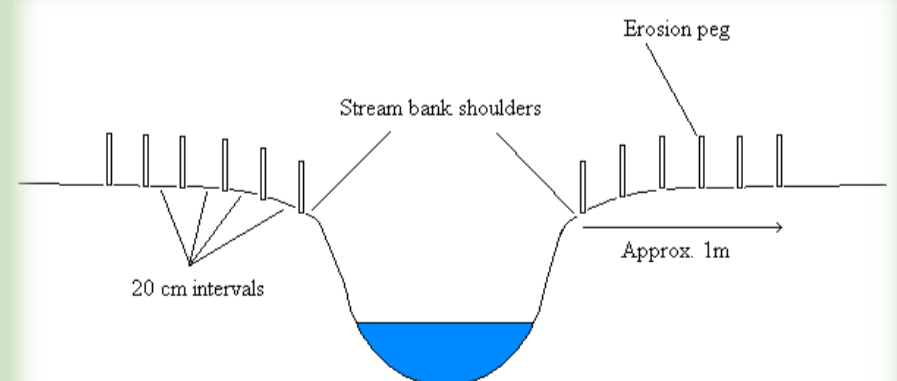
The first step of monitoring stream bank erosion in horse paddocks is the establishment of monitoring sites which will be revisited over time for comparative assessment of erosion levels.

Monitoring should begin once watercourses have been fenced off, preventing access by horses.

Install six monitoring pegs at 20 cm intervals from the shoulder of the bank with the first placed on the shoulder of the bank. The pegs may simply be wooden stakes or tent pegs that can be firmly located along the bank, progressing away from the shoulder of the bank.

Revisit the sites of the pegs on a monthly basis.

Where a peg (or more than one) has fallen over or fallen into the watercourse, erosion has taken place.



For details on monitoring procedures, visit

www.horseslandwater.com

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Funding for the Peri-Urban project has been provided through the National Landcare Programme – Natural Resource Innovation Grant



The HorsesLandWater Action Planner for Horse Properties is supported by:

