Rural living handbook
A guide for rural landholders
Rural Living Handbook - A guide for rural landholders

Disclaimer
This handbook is not a comprehensive guide to managing your land. It is intended to help you find good advice. No legal liability is accepted for the information presented in this booklet.

Acknowledgements
The content of this Rural Living Handbook is based on the Goulburn Mulwaree Rural Living Handbook and was originally compiled as a template for Councils throughout Sydney’s drinking water catchments. It is a collaborative project built on the work of Jack Miller, Landscape Planner, Goulburn Mulwaree Council and contributions by various government and community stakeholders. The Sydney Catchment Authority also made a significant contribution to the development and publication of the original handbook.

The work of the following organisations in the development of the original document is acknowledged
- Goulburn Mulwaree Council
- Office of Environment and Heritage
- NSW Office of Water
- Water NSW
- NSW Farmers Association
- Rural Fire Service
- NSW Department of Primary Industries
- TAFE NSW Illawarra
- WIRES
- Department of Lands
- Livestock Health and Pest Authority
- Farmsafe

Goulburn Mulwaree Council gratefully acknowledges the Upper Murrumbidgee Catchment Coordinating Committee (UMCCC) for allowing information from the publication 'Look after your natural assets' to be reproduced in this publication. ‘Look after your natural assets’ was produced by volunteers, funded by the ACT Government and the Murrumbidgee Catchment Management Board, and is copyright to the UMCCC and the Wamboin Landcare Committee.
An introduction to rural living

Getting away from it all is an Australian dream. In NSW, getting away from it all often involves buying a rural block. Rural blocks can be productive farmland, a bush block or a combination of both. For some, getting away from it all means finding a healthy environment to raise children, a place to retire away from the stress of town or to have larger animals. Others want to commune with nature or find a weekend escape.

The environment is under pressure from our collective lifestyles. All levels of government are pursuing sustainable development to protect our environment for the future. Local activities have a significant effect on water quality and catchment health. We have a responsibility to care for and maintain healthy rivers, streams and bushland.

As landholders, we also have a responsibility to manage all livestock properly to ensure they are healthy, in line with animal welfare standards and to ensure food security. Harmonious living alongside our neighbours also helps us to achieve our individual goals without affecting the pleasure of others.

The rural landscape is a productive farming and valuable natural resource area, and some of the legitimate activities carried out in the area may have unavoidable impacts.

Rural lands also help protect native vegetation which is home to wildlife, including many threatened species. These flora and fauna are not only important parts of the ecosystem, but provide amenity to landholders and visitors. Be aware that some rural activities might affect you, and the level of services such as waste collection or water supply here may not be the same as in built up areas. Various levels of government have management requirements and information available to help landowners and managers.

Different people will want to manage their land in different ways. Some will want to keep and enhance the existing bush. Others will want to run stock and cultivate crops. Whatever your goals as a landowner or manager, you need to be aware of your rights and responsibilities.

This handbook brings together some of the significant issues you will face as a rural landowner or land manager in our community. It also gives contact details of people, websites and organisations that provide support to rural landowners. As organisations change from time to time, useful internet searches are also listed at the end of each section.
Contents

An introduction to rural living ...................................... 1
Buying your rural property ............................................. 4
Rural living ..................................................................... 6
  Planning and managing your rural property ..................... 7
Natural resources ............................................................ 8
  Water ........................................................................ 8
  Soil .......................................................................... 12
  Native plants and animals ............................................. 15
  Cultural heritage ........................................................ 20
  Fire .......................................................................... 21
  Weeds ....................................................................... 22
  Pest animals .............................................................. 24
Property management ....................................................... 25
  Agricultural advice ...................................................... 25
  Stock ........................................................................ 25
  Fences ...................................................................... 30
  Local council rates ...................................................... 32
  Local Land Services rates ........................................... 32
  Absentee landholders .................................................. 33
  Chemicals .................................................................. 33
  Farm safety ............................................................... 36
  Mental health ............................................................ 37
  Safety on rural roads ..................................................... 37
  Developing your property .............................................. 38
  Improving your skills ................................................... 39
  Waste management ..................................................... 40
  Effluent management ................................................... 42
  Wood smoke and heating ............................................. 45
Biosecurity ..................................................................... 46
  Disease control .......................................................... 46
  Pest control ................................................................ 47
  Top five tips for small livestock farms ......................... 48
Buying your rural property

Before you decide to buy a rural property, take a few moments to answer the following questions. You should also get legal advice before buying any property.

- Do you know the history of the property? Request a property search from Local Land Services to ensure there are no outstanding rates, levies, known chemical residues or animal health issues on the property.
- What stock did the previous owner have?
- Did they sow pastures and use fertilisers?
- Are there any rubbish dumps on the property that you will need to remediate?
- Are there pest animals (e.g. rabbits, foxes) on the property?
- Is the activity you plan for the property suited to the landscape and capability of the land?
- Is there enough water to carry out the activity that you have in mind and is it of suitable quality for stock and plants?
- Are all required services provided to the property? If not, can they be provided economically? Or is it an area that will always have limited services? Services include phone, gas, water, sewer, internet and electricity.
- Do you know what the regulations and conditions are for building dams or that you may need approval for sinking bores? Do you know that digging near a watercourse may require a permit?
- Are you aware that in most instances you require approval to remove native vegetation? How might this affect your activities? Is there shade for stock?
- Does the zoning of the land allow your proposed use, or will you need to apply for a change of land use or any other permit?
- Are there good quality pastures? Are they dominated by native or introduced species?
- What weeds are on the property? Are any of them declared as noxious weeds?
- Do you understand the term General Biosecurity Duty?
- Is there soil erosion on the property that will be time consuming and expensive to fix?
- Is the soil fertile and the pH appropriate for growing pasture, crops and any other produce that you want to grow? Are there any salinity issues?
- Are the fences in good repair and suitable for confining stock and the grazing management of the property?
- Are there any derelict mine shafts on the property? If so, are they fenced to ensure your safety?
- If there is no existing dwelling and you want one, does the land have a building entitlement?
• Are there existing or proposed adjacent land uses that will affect your enjoyment of the property? For example, are there legitimate rural uses nearby such as agriculture, quarries, mines and forestry that produce dust, odours or noise?
• Do you know if there are any existing conservation agreements or covenants, Property Vegetation Plans (PVP) or conditions of consent over part of the property that require you to undertake specified management actions, or limits the land use on part of the property?
• Are you aware of your responsibilities surrounding the management of native vegetation, in particular the removal of trees or new cultivations?
• Are there any threatened species of flora and fauna known to live on the property?
• Will the amount of time and money required to control weeds, erosion and pest animals be excessive?

**Ask your local council or authority if there are:**
• Any development applications current for the nearby area
• Other developments that have been approved but not commenced.
• Any restrictions on developing certain desired land uses
• Have you examined the Section 149 planning certificate from Council closely and discussed any potential constraints with Council and your conveyancer or solicitor?
• Is the land prone to flood or bushfire? Will you need to undertake any management activities to minimise these impacts?
• Are there any rights-of-carriageway or other easements on the property which need to be maintained and/or which may allow neighbours access?
• Are there any covenants, management plans or agreements on the property that protect certain areas?
• Is there enough shade and water for stock?
• After considering all these questions, will the property provide the rural lifestyle that you are looking for?

**Note:** Nearly all the land in the Western Division of NSW is held under Western Land leases. Leases are granted for, and can only be used for, specific purposes. Most leases are used for grazing, cultivation, feedlot, farm tourism and agriculture but there are also leases for business and residence (mostly in town).

Leases are bought and sold like freehold property. There are currently no new leases therefore the only way your can obtain a lease in the Western region is to buy one that already exists. Conditions are attached to these leases to ensure the land is managed sustainably.

Please be aware that if you intend to subdivide land comprised in the lease you will need to first obtain approval.
Rural living

Local Land Services is the front line agency, tasked with management of animal health, noxious pest animal and insect control, travelling stock reserves, stock movement, stock identification, livestock disease management, impounding livestock on private rural land, and natural disaster relief.

Staff work in partnership with landholders and community groups to implement on ground projects that enhance and improve our natural resources.

Agricultural advisory services are also accessible to provide landholders with expert advice relating to cropping, livestock, mixed farming, pastures, horticulture, rangelands grazing and irrigation.

Rural landholders have responsibilities under the Local Lands Services Act 2013 and the Biosecurity Act 2015. It is your responsibility to:

- Lodge a Land and Stock Return by 31 July each year.
- Pay rates which are levied on rural land over a certain number of prescribed hectares - these rates help pay for activities such as pest animal control work, animal health management, exotic disease monitoring and management, and travelling stock reserve management.

Local Land Services rates are separate to council rates and fund services to:

- provide technical advice and tools to help control pest animals and declared pest insects
- maintain a system for permanent identification of stock – the Department of Primary Industries provides a national stock identification system
- report notifiable livestock diseases
- document stock movements
- control stock on roads
- manage the natural environment and catchment health
- provide agricultural advice
- provide veterinary assistance to livestock owners with holdings.
Planning and managing your rural property

Property plans can help you to achieve your rural living goals by setting up the basis for efficient and sustainable property management. This will help you to play a part in supporting a healthy landscape and prosperous region. Property plans take a whole-of-property approach and are useful for both farmers and rural residential landholders. There are a number of methods and documents that can help you to develop a property plan. A basic property plan guide is provided below to help get you started.

Property plan guide
What do you want to achieve on your property? What is your vision?
Obtain a good map of your property. Aerial photographs are very useful, as well as surveyor’s boundary plans, topographic and cadastral plans.
The map will need to be to a metric scale of a large enough size to clearly show the features of the property.
You will need to identify the following:
- soil types and soil characteristics (e.g. pH, salinity, erodibility, phosphorus and nitrogen content)
- slope
- areas of natural vegetation and vegetation type
- streams, gullies, drainage lines and dams
- flood liable land
- erosion and salinity prone areas
- water and shade areas for stock
- rock outcrops
- water supply
- climate, rainfall and seasonality
- landscape types and physical features
- current land uses.
Carry out a SWOT (strengths, weaknesses, opportunities and threats) analysis of the property’s capabilities as follows:
- What strengths does the property have that you can take advantage of (e.g. areas of high quality soils)?
- What weaknesses will need attention before they cause problems (e.g. existing weed infested areas)?
- What opportunities are there to develop your resources further (e.g. moving fence lines to improve management)?
- What threats exist that could affect the property (e.g. potential erosion areas)?
On an overlay of the map, illustrate the permanent features such as the property boundary, waterways, bushland, structures and land types (i.e. the most productive soils to the least) and contours.
Use this information as a base. On another layer, sketch where features are wanted, e.g. fences, productive paddocks, shelter-belts, woodlots, dams, troughs, lanes and gates. Rearranging fences according to land features can help you to use the land more efficiently.
Work out where planting needs to go to achieve maximum effectiveness for windbreaks, erosion control and repair, shelter, salinity reduction, and to provide habitat for native birds and animals.
Write notes about:
- proposed land use
- planning for houses, sheds, stockyards, windbreaks, dams, roads and fence alignments
- methods to control and prevent weeds and pest animals
- methods to sustain or improve water quality for stock and downstream users
- methods to control stormwater movement and prevent erosion
- reducing bushfire hazard, conserving soil, preserving trees
- treating and disposing of effluent and rural rubbish
- legal and planning requirements
- methods to improve stock or alternative water sources for stock
- methods and timing for proposed revegetation of disturbed areas.
Use the information in this handbook to help you understand issues and best practices in these areas. Use the map, your notes, and information in this handbook, to set goals and actions. Make a plan for how you can achieve these goals.
Prioritise your actions and then do them. Remember certain activities (e.g. tree planting) should be timed to take into account seasonal conditions.
Constantly monitor, improve and reshape your goals as necessary along the way.
Make sure you regularly monitor and maintain the areas where you have worked to address any issues quickly.

More information
To purchase or view aerial photographs of your property visit the NSW Land and Property Information website at www.lpi.nsw.gov.au. Free imagery (of lesser quality) can also be obtained through Google Earth (www.earth.google.com) or via the Department of Lands Spatial Information Exchange website (www.six.nsw.gov.au).
Natural resources

Water
Managing water is a vital part of successfully managing your property. You want to use water efficiently to minimise costs and maximise water quality to benefit you, your property, your stock and downstream users.

Water law
Water NSW manages surface and groundwater in NSW under the Water Act 1912 and the Water Management Act 2000. Section 52 of the Water Management Act 2000 defines basic domestic and stock rights including the Farm Dams Policy.

Streams and rivers
All landholders in NSW with property frontage to any river, estuary or lake have a basic right to take water for domestic use and to water stock. This basic right does not apply where the property frontage is Crown Land, or where there is a reserve between the property frontage and rivers or creeks (you may need a licence from Water NSW to extract water in these situations). For more information, visit www.water.nsw.gov.au.

Many activities can impact on water quality in nearby rivers and creeks, and on other water users. Many of the responsibilities discussed in this handbook come from the need to protect water quality.

Irrigation
Many agricultural practices require irrigation to be viable. You can contact Local Land Services for information about how to best irrigate.

You need a licence from Water NSW to draw any water from a stream or groundwater source for irrigation. This includes water in dams that has been pumped from a stream or groundwater source.

Riparian zones
The riparian zone is the area directly influenced by a river (the river bank), creek, watercourse or drainage line. The zone generally extends from the normal water level to the floodplain.

Healthy riparian vegetation – native trees, shrubs and groundcover along waterways – will make your creek banks more stable and help prevent erosion. The vegetation will also filter out nutrients from surrounding paddocks, and support and create habitat for native wildlife.

Native vegetation is declining along streams and river banks, leaving them vulnerable to erosion, weed infestation and poor water quality which can affect your property.
Where stock rely on streams and rivers to access water, disturbance to the soil and vegetation can be avoided by actions such as limiting stock access areas and pumping water to troughs. You need approval to clear native vegetation in riparian zones (contact your nearest Local Land Services office in the first instance).

In addition, clearing exotic trees within 20 metres of major streams and rivers may also require approval. Local Land Services are able to provide advice on permissions relating to the clearing of exotic or native vegetation on state and protected riparian land. Causes of riparian zone degradation include:

- recreational activities
- invasion and competition from pest species (e.g. rabbits) and weed species (e.g. willows and blackberries)
- land management practices such as grazing and cropping
- erosion channel realignment.

Effects of riparian zone degradation include:

- flow restriction
- weed invasion
- loss of topsoil
- reduced water quality
- reduced biodiversity, both aquatic and terrestrial flora and fauna
- reduced aesthetic value
- loss of windbreak and shelter
- unstable banks.

Some methods to control degradation and loss of riparian vegetation include:

- encouraging the growth of a 20 m native vegetation/buffer along the riparian zone
- minimising the number of tracks and trails leading to your riparian area
- minimising ground disturbance during weed control activities in the riparian zone
- minimising herbicide and pesticide use in the riparian zone - ensure that pesticides and herbicides are registered for use in these areas
- protecting riparian areas from stock by fencing and providing alternative water sources and shade areas
- revegetating degraded and eroded riparian areas with native vegetation.

**Farm dams**

Landholders use farm dams to provide water for stock and domestic purposes. If not properly managed, farm dams can impact on the water quality on your property and downstream.

Under the NSW Farm Dams Policy, landholders have a harvestable right. This allows landholders to capture 10 per cent of the rainfall runoff from their properties and use it for any purpose without needing a licence from Water NSW.

The amount you are entitled to, in megalitres or dam capacity, is calculated by a formula known as the Maximum Harvestable Rights Dam Capacity (MHRDC). This formula involves your property size, area specific rainfall and run-off calculations.

Any existing dams have to be factored into your overall entitlement. You can calculate your own specific MHRDC by visiting www.farmdamscalculator.dnr.nsw.gov.au.

For more information, visit Water NSW at www.water.nsw.gov.au/Water-Licensing. Further information can be gained by calling Water NSW on 1800 353 104.

**Farm dam licensing**

Dams that conform to previous legislation and were built before January 1999 do not need to be licensed. Building a new farm dam in excess of the MHRDC or located on a larger (3rd order or higher) stream need a license. Dams built on smaller (1st or 2nd order) streams only need a licence if the stream is perennial flowing or if the dams are in excess of the MHRDC.

Further information can be gained by calling Water NSW on 1800 353 104.

**Groundwater**

You need to get a licence before drilling a bore in NSW. Licences are issued by Water NSW, with conditions that specify how much water you can use and for what purpose.

Further information can be gained by visiting Water NSW website at: www.water.nsw.gov.au/water-management/groundwater or calling 1800 353 104.
Managing farm dams
All dams, new and existing, should be managed to maximise the benefits to stock safety and health and minimise the impacts on the environment. Some hints to improve dam health are listed below.

- Wherever possible, use fencing to limit stock to one or two locations at the dam. Better still, fence stock out of dams, and use troughs to water them. This prevents stock from fouling the water and minimises erosion to maximise water quality and the longevity of the dam.
- Prevent nutrients from entering the dam by leaving an unfertilised strip where water flows into the dam. This will help minimise the chances of blue-green algae.
- Avoid using fertilisers, herbicides and pesticides in runoff areas around dams and waterways.
- Encourage native plants to grow in the dam and along the water’s edge - reeds, sedges and rushes at the water’s edge and grasses and shrubs on the banks. Vegetation filters out sediments and nutrients.
- Encourage grass to grow on the spillway to prevent erosion.
- Don’t plant trees along the dam wall as their roots may weaken it.
- Plant shade trees, but plant them away from dams so stock do not rely on dam water to keep cool in summer.
- Dam spillways are crucial to the stability of dam walls and stock access to the spillway should be limited.

Reducing household water
Saving water in and around your home saves you money and helps the environment. There are many ways to use less water at home.

People who live in rural areas have developed water saving methods through necessity and experience. Some methods require a development application consent if you are building a new house or commercial venture.

You can use the following tips to use less water in existing houses:

- install dual flush toilets with a minimum four-star rating
- use water saving shower heads with a minimum three-star rating
- only use washing machines and dishwashers when full or if they can be adjusted for part loads
- buy water efficient washing machines and dishwashers with a high star rating - aim for four-stars or higher
- ensure that there are no leaks in your plumbing system and repair any dripping taps promptly
- install water efficient taps and tap aerators.

Outside water use
Outside water use for gardens, lawn and stock for an average rural residential block (e.g. two hectares) can be 125,000–250,000 litres per year.

Before you purchase stock, it is important to know how much water they will need, and to ensure you have appropriate water sources in place so your stock do not suffer from dehydration.

Stock requirements
Stock usually need the following amounts of water as a minimum:

- horse - 12,000 litres a year (19-38 litres per day)
- sheep - 1,230 litres a year (2-6 litres per day)
- beef cattle - 13,500 litres a year (35-80 litres per day)
- dog - 365 litres a year (1 litre per day)
- pig - 9,000 litres a year (9-18 litres per day)

These amounts may vary depending on factors such as the life stage of the animal (e.g. a lactating cow on grass may need up to 100 litres per day), the time of the year, the moisture in the pasture, water quality (e.g. animals drink more water if it is salty) and climate conditions (e.g. drought or hot windy conditions).

Stock must always have access to clean cool water.

Visit the NSW Department of Primary Industries, Water website for more details www.water.nsw.gov.au.
Garden requirements

Gardens can use a lot of water. There are many ways to conserve water in the garden, such as:

- mulch all garden areas to a depth of 75 millimetres
- if you have to water, water plants in the early morning or evening to reduce evaporation
- compost household and garden waste and use it to improve soil
- keep higher maintenance garden and lawn areas to a minimum
- consider allowing lawn to brown off in summer – this needs to be considered in association with your fire protection regime
- lawn kept at around five centimetres in height reduces evaporation as the blades shade each other. Cutting to no more than a third of the height also maintains healthy grass
- plant drought tolerant species - use local natives where possible
- when watering improve the drought resistance of your plants by encouraging deep roots - to do this, water less often, but for longer periods at slow rates
- install a drip irrigation system
- use grey water in the garden. Grey water is the wastewater from baths, showers, hand basins and washing machines’ final rinse. Do not use water from toilets or kitchen wastewater. Use grey water in an approved manner to avoid adverse health impacts - grey water should not be stored for more than 24 hours and should not be used on vegetables or where human contact is likely. Contact your local Council for guidelines on the use of grey water
- install a rainwater tank or grey water treatment system.

More information

For more information about water law, farm dams and licensing, visit the NSW Department of Primary Industries, Water website for more details www.water.nsw.gov.au

For more information on water saving visit the Save Water Alliance website at www.smartwatermark.org.

For information and advice on funding available to landholders for river restoration work and on seeking approval to clear riparian vegetation contact your nearest Local Land Services office.

You can calculate your own specific MHRDC by visiting www.water.nsw.gov.au/Water-licensing/Basic-water-rights/Harvesting-runoff/Harvesting-runoff or contacting your local water licensing officer on 1800 353 104.
Soil

Your soil is a valuable resource containing nutrients for your pastures, crops, and for the growth of native species. A healthy soil is one that balances the relationship between good soil fertility, good soil physical properties and good soil biology. Understanding each of these components is important for the health of your soil but also the health of our catchments.

Each of these components can influence one another with soil organic matter having a major role. Soil fertility can refer to the amount of available nutrients or the soil chemistry. It can also refer to things like soil pH and soil salinity. The physical nature of the soil, for example soil depth can have a huge influence on the water holding capacity of a soil.

Soil structure and texture also reflect the characteristics of the soil and its ability to be used for different agricultural uses. Soil biology can be important in the health of the soil and can also influence the soils physical and chemical nature.

Soil erosion caused by wind and water can be exacerbated by animals (overgrazing), vehicles and vegetation removal. Erosion strips valuable top soil from your property. It reduces the productivity of your land, and pollutes creeks and dams with muddy water that is full of nutrients.

The best protection against erosion is adequate ground cover vegetation. Native grasses can often provide the most durable protection for your soil.

In some part of the state introduced species are very much naturalised and hold soil together.

Carefully consider the need for cultivation and pasture improvement that can permanently kill areas of native grasses. Herbicides can be used to control weeds and maintain grass cover.

Erosion

Erosion results in topsoil and other matter being washed or blown from your property, meaning the loss of valuable nutrients and organic matter - your growing ‘medium’.

There are various forms of erosion including sheet, rill, gulley, stream bank, in-stream and wind erosion. The main forms of erosion on your property are likely to be hill slope, gulley and stream bank erosion.

Some soils are very susceptible to erosion. Factors such as slope, rainfall intensities, and natural groundcover can all influence natural erosion rates.

Over-stocking or over-cultivating paddocks also leads to erosion.

Contact your Local Land Services or council for more information. You can also prevent soil loss and erosion by controlling and slowing water runoff with devices such as contour banks, sediment traps, flumes, straw bales and mulches though the best option is to maintain good ground cover at all times.

It is important to obtain technical advice from the relevant authorities before constructing any works.

There may be erosion control structures already on your property. If so, these structures should be maintained and not disturbed to ensure their continuing operation.

Contact your nearest Local Land Services office for more assistance.

You can help to minimise erosion and retain topsoil on your property by using the following practices.

- Ground vegetation should provide at least 70 per cent ground cover at all times (50% in semi-arid areas). Ground cover should be as high as possible at all times, especially around riparian areas or steep slopes.
- Rotate your activities to rest the land and maintain continuous grass cover in grazing paddocks.
- Plant windbreaks and establish native plants along creeks and farm roads to help filter out sediment and nutrients.
- Protect and enhance existing native bushland. When choosing plants, consider species that are native to your area. It’s worth joining the local Landcare group.
- Cultivate and plant along contour lines, not up slopes. Don’t cultivate steeply sloping land. Where possible, leave a vegetated strip 10-30m wide alongside rivers and creeks which will help slow water runoff, reduce soil loss and maintain bank stability.
- Construct access roads along the contour on gentle slopes wherever possible and avoid wet areas. In semi-arid areas, ensure earthworks from roads, fencelines or other linear clearing do not concentrate sheet runoff flows. Minimise linear windrows of soil that divert flows.
- Find out about your land’s capabilities. There are eight classes defined by the Office of Environment and Heritage that outline the capability of the land to undertake particular activities. It is recommended that you don’t plough land that is in classes five to eight.
Soil acidity

Many of our soils are naturally acidic. The pH of the soil is a measure of its relative acidity or alkalinity. Some effects of soil acidity are:

• reduced agricultural viability and production rates
• increased production costs, i.e. need to add lime
• groundcover decline, increasing the likelihood of erosion and declining water quality
• reduced water use by vegetation contributing to salinity.

Some causes of soil acidity include the following:

• natural pH decline through leaching
• past and present land use
• removal of alkaline plant and animal produce and waste products
• nitrate leaching - lack of deep rooted grasses to catch nitrogen produced before it leaches
• continuous application of ammonium fertilisers.

It is important to get technical advice from the relevant authorities such as Local Land Services or the NSW Department of Primary Industries before treating your soil.

Dryland salinity

Dryland salinity occurs naturally when the ground is over watered or groundwater discharges or seeps to the surface bringing soil salts with it.

Salt can also be drawn to the surface by capillary action. When the water balance is disturbed by the removal of deep-rooted perennial vegetation, dryland salinity is accelerated.

Dryland salinity can cause vegetation loss and stream salinity and can be a precursor to soil erosion.

Over recent decades, there has been an increase in the area of land affected by salinity in regional NSW. Some properties are particularly prone due to natural factors such as rock/sediments containing high levels of salt; salt in rainfall and landform and hydrogeology characteristics.

Causes of dryland salinity in these areas include:

• removing deep-rooted perennial vegetation such as trees and shrubs and replacing it with shallow rooted pastures and crops – this raises the water table, which brings salt to the surface
• over-watering of gardens and paddocks
• blocking natural groundwater flow, e.g. by roads or dams.

Some effects of dryland salinity include:

• loss of desirable vegetation
• growth of salt-tolerant species
• reduced crop and pasture production - less stock/ha
• water logged soil
• soil erosion
• increased salt loads in rivers and streams
• reduced surface and groundwater quality
• declining soil structure
• damage to buildings, roads, septics and pipes.

It is important to get technical advice from the relevant authorities (Department Primary Industries, Local Land Services) when considering methods to manage dryland salinity.

Three basic strategies to manage acid soils:

1. Use deep-rooted perennial pastures to improve nitrogen recycling and slow the rate of acidification.
2. Use a soil ameliorant, such as lime or dolomite to raise pH. Some organics can also raise pH.
3. Use plants that are tolerant of acid soil conditions.
Sodicity
Sodic soils are soils that contain enough exchangeable sodium to adversely affect soil stability and plant growth. As a result, clay particles in the soil lose their tendency to stick together when wet.

This leads to unstable soils that may erode or become impermeable to both water and plant roots. Local landholders sometimes use the term ‘spewy’ to describe sodic soils.

Compared to salinity, sodicity is a more widespread form of land degradation. Sodicity affects nearly one third of all soils in Australia causing poor water infiltration, surface crusting, erosion and water logging.

Runoff from sodic soils carries clay particles into waterways causing environmental problems in rivers and wetlands. Sodic soil runoff is more likely to carry higher levels of nitrogen and phosphate contributing to algal blooms in waterways.

Applying gypsum to the affected soil can treat sodicity of topsoil. You may need large quantities of gypsum to have more than a short-term affect.

The best way to treat sodic subsoil is to stop the subsoil from being exposed by retaining good vegetation cover. It is important to get technical advice from the relevant authorities before treating your soil.

More information
For more information on soil management, visit the NSW Department of Primary Industries Soil Conservation Service website at www.scs.nsw.gov.au and the Local Land Services website www.lls.nsw.gov.au

The NSW Department of Primary Industries also conducts a workshop series called LANDSCAN (Landscape and Soil Test Interpretation for Sustainable Farm Management) which teaches you how to understand soil tests, landscape limitation, soil fertility, acidity, salinity, and to match livestock to landscape.

Details can be found at: www.dpi.nsw.gov.au/agriculture/profarm.

For more information on support available to landholders for erosion control work contact your nearest Local Land Services office on 1300 795 299.
Native plants and animals

Guide to native plants
Though the natural areas throughout the state have seen human impacts, much of the native plants can still be found.

By planting species that are local to your area, you can help to increase the amount of habitat available for native species as well as using species that already adapted to your local environment.

The following web link provides information of locally native (endemic) species that may be suitable for your property. Go to www.plantnet.rbgsyd.nsw.gov.au.

Plants for your property
The soils, rainfall, temperature and weather can vary remarkably across the entire region, and some species such are better suited to particular sites than others.

To find out which of these plants suit your specific location, it is best to find out what type of soil you have (start by talking to your neighbours or Local Land Services) and then talk to your local nursery.

Plants for effluent management areas
Planting lawn, trees and shrubs around an effluent disposal area will greatly increase the system's efficiency. Using scoria, pebbles, pine bark mulch and plastic underlay is definitely not recommended as they inhibit evaporation and air movement in the soil.

Take care to locate trees, so they do not shade the system. Place trees as far away from the system as necessary (at least two metres beyond the potential canopy) so roots do not interfere with pipes and trenches.

A variety of native species can be used for effluent disposal systems.

Weeds of National Significance
Weeds of National Significance (WONS) which are listed because of their invasiveness, impacts on primary production and the environment, potential for spread and socioeconomic impacts.

Invasive Native Scrub is a significant issue in the Western region for which appropriate grazing is extremely important in managing. This can be expensive to manage and control.

For more information about weeds, contact your local weeds control authority or read your Regional Strategic Weed Management Plan, which outlines regional priority weeds and their management.

Further information about weeds can be found on the NSW Department of Primary Industries website at www.dpi.nsw.gov.au.

Remnant native vegetation
Remnant native vegetation is the area’s remaining indigenous vegetation, including forests, woodlands and native grasslands.

Over the past 200 years a substantial amount of native vegetation has been cleared for agriculture. In some instances, this has resulted in problems such as soil erosion, loss of soil structure, weed invasion, salinity, reduced water quality, and loss of biodiversity. Native trees can enhance the value of your farm and increase productivity by providing shade and shelter for stock, windbreaks for crops and pasture, habitat for native wildlife and by stabilising soils to reduce erosion.

Thirty metre thick strips of native trees and shrubs can also improve the survival of lambs and ewes, provide protection against drying winds, moderate temperature extremes, prevent pollution of streams by nutrient runoff, provide effective barriers against windblown weed seeds such as serrated tussock and reduce erosion.

Remnant vegetation can protect an area from rising water tables and salinity, and provide a home for native animals, including threatened species. Native trees, shrubs and most native grasses are deep-rooted perennials that keep saline groundwater well below the surface. They provide a source of seed for revegetation and offer a landscape that is pleasing to many people.

Trees can enhance the value of your farm and increase productivity by providing shade and shelter for stock, windbreaks for crops and pasture, habitat for native wildlife and by stabilising soils to reduce erosion.

Your rural block may still be entirely forested or still have areas of remnant woodland or forest, isolated paddock trees and native grasslands. This vegetation should be left intact as it may be part of a vegetation community that is now extensively cleared, and be part of a corridor connecting two larger areas of native vegetation.

Re-establishing native vegetation helps to restore and link remnant patches of native vegetation on private and public lands, enhancing their value as wildlife corridors and biological reserves.
What can you do?

- fence the remnant areas with fauna friendly fencing to protect them from livestock grazing
- set aside a section or sections of your property for native plant regeneration.

When planning a re-planting program, always try to:

- use native seed that is sourced locally wherever possible
- use plants that have been grown locally to ensure they acclimatise to local conditions
- choose species that reflect the vegetation community or communities at the site
- plant during the season you are most likely to get reliable rainfall.

The main options for revegetation are encouraging natural regeneration; planting seedlings and direct seeding.

Join your local Landcare group, or if there isn’t one talk to your neighbours about forming one to tackle vegetation and soil management issues.

How good is that bush block?

As a rule of thumb, any patch of native vegetation is valuable. Across a rural residential development or farm, a minimum of 30 per cent cover of native vegetation will help productivity and maintain ecosystems.

Together with your neighbour’s bush and others nearby, there may also be a viable local core habitat area or ‘corridor’ of vegetation for native animals.

Most native plant diversity is in the groundcover layer. Spring is the best time to appreciate the diversity of native wildflowers that may be dormant for much of the year.

Remember to:

- Avoid fragmenting existing areas of native vegetation, including remnant grasslands - if you are building new fence lines, roads or services, build them around areas of native vegetation rather than through them.
- Ensure that plant species are correctly identified when spraying weeds (many native grasses such as Poa Tussock are easily confused with noxious weeds such as Serrated Tussock).

Looking after native vegetation

There is a range of ways that you can receive assistance to look after native vegetation and wildlife habitats on your property.

Inspections and advice are available through programs such as Land for Wildlife and the Wildlife Refuge programs.

Local Land Services and NSW Environmental Trust may provide incentive funding for protection and rehabilitation programs on your land.

If you have high quality remnant vegetation on your land, you can ensure its protection by reserving it through a Conservation Covenant.


Invasive Native Species (INS)

Before pastoral settlement, the germination of trees and shrubs following wet years was thinned by fire and other processes. Many areas now suffer from thickening and encroaching trees and shrubs, termed invasive native species (INS), as establishment of these plants is no longer suppressed.
This phenomenon affects land use in the central-west and western regions of NSW (and rangelands elsewhere). INS can have a serious adverse impact on habitats, landscape health, communities and farming operations. Managing INS is a major challenge. Control measures must be planned for long term follow-up to ensure success. As with any native vegetation management activities, INS control must be approved through processes under the Biodiversity Conservation Act 2016.

**Biodiversity Conservation Act 2016**

The Biodiversity Conservation Act 2016 and the Local Land Services Act 2013 provide the framework for land management in NSW.

This legislation balances the needs of farmers and the environment.

The new land management framework allows greater self-assessment for regular agricultural activities and also provides incentives for farmers to conserve their land.

Local Land Services can provide advice on clearing activities which require approval and those that do not.

Our staff can help you with farm planning, including the use of new farm planning codes for native vegetation management.

Larger clearing activities and clearing in association with a development may require additional approvals from the Department of Planning or your local council.

The clearing of native vegetation and habitat loss is a key threatening process for many endangered plants and animals. In all instances advice should be sought from Local Land Services.

Clearing without approval can result in substantial fines being issued. If you are unsure if your clearing is an allowable activity, contact your Local Land Services office.

**Environmental Planning and Assessment Act 1979 and regulations**

The objective of this legislation is to encourage proper management, development and conservation of the natural and built environment including on agricultural land, forests, waters and cities and towns.

It is intended to promote social and economic growth while maintaining community and the environment.

The Act requires developments in NSW take into consideration the potential impacts on the natural and built environment. Under the Act, vegetation that is cleared for a development (i.e. a new house site or road) is not permitted without first gaining consent from the appropriate authority. In most instances, the appropriate regulatory authority in regards to such developments would be your local council.

If you are planning to conduct clearing for a proposed development, it is recommended you gain consent from council for your development.

Developments in inappropriate or sensitive areas may not be permitted and illegal clearing may result in fines, revegetation of sites and removal or relocation of infrastructure.

For more information, talk to your local council's planning or environment staff.

**Native animals**

All native animals in NSW are protected. This means that it is illegal to trap, kill or harm them unless licensed otherwise. Although we would like to live in unison with native animals, sometimes they can pose a threat to our safety or activities. It is important to understand how to manage these situations on your property.

A few native animals can become a nuisance if not managed appropriately. For instance, swamp wallabies can often show a strong liking for garden plants. It is wise to fence off prized plants, such as roses and vegetables, in rural areas.

Brush-tail possums can sometimes become nuisances in roofs. In such cases, it is best to provide nest boxes for the possums away from the house, remove them from the roof and seal possible entrance holes. Possums are strongly territorial. Removing them from your property can result in death of the possum and injury to others. In any case, new possums may simply take their place.

Several species of venomous snake may live in your area. Most snake bites recorded in NSW happen to people who try to catch or kill them. Give snakes some space and they will generally leave the area.

The snake season usually lasts from about late October to early March. The following actions can reduce the chance of snake bite:

- remove loose sheets of tin and other cover from around the house
- keep frequently trafficked areas and those around buildings mown
- wear enclosed leather shoes when walking in long grass or near creeks or farm dams
- do not walk outside in thongs or bare feet on warm nights
- let snakes pass through and away from your house or paddock, but if they decide to take up residence call WIRES (NSW Wildlife Information and Rescue Service) on 1300 094 737 to have them relocated
- avoid taking dogs for walks near long grass or river sides in the warmer months when snakes are likely to be breeding.
Providing a fauna-friendly home

If you would like to encourage small birds and other wildlife, such as Sugar Gliders, around your home there are some ways to attract them.

• Leave large trees with hollows intact.
• Plant a variety of local native shrubs, especially dense or prickly ones. Use mainly white, pink or yellow flowering shrubs and keep red flowering shrubs in smaller numbers. Large numbers of red flowering shrubs can attract noisy mynah birds and larger honey-eaters that actively exclude other smaller birds from the area.
• Provide bird baths and other watering points.
• Build and maintain nest boxes where few hollow trees remain. Monitor the nest boxes to ensure they are not being taken up by pest species such as Indian mynahs and starlings.
• Leave fallen timber and hollow logs where fire is not a major threat.
• Keep a belt of native trees to connect bushland areas. These will provide habitat and stepping stones for small birds and mammals that can not travel larger distances.
• Do not remove Mistletoes - they are an excellent source of food and habitat for a range of animals and removing them can damage the tree.

It is not recommended to provide artificial feed for native birds and other animals.

If you would like to provide food for wildlife, talk to your local garden nursery about the type of plants you can grow that will provide seeds, fruit, nectar or that attract feed insects.

Your local Office of Environment and Heritage, Council or Landcare Group may have more information about creating habitats for wildlife.

Frogs are desirable animals to have living on your property. The following actions will encourage frogs to stay or colonise your property:

• Using ponds or pools as part of your garden landscaping. Note that some pond habitats may also attract snakes, so place them away from buildings or lawn areas.
• Placing large rocks or boulders around one end of a dam for shelter and over-wintering.
• Putting logs or other large section offcuts around the edge of a few dams with half in the water and half out.
• Planting some emergent vegetation like Eleocharis, Juncus or Carex species in clumps around a section of a dam’s margins (Bullrush, while suitable from a frog’s perspective may cause problems around the dam and is not suitable).
• Planting tussock-forming vegetation like Lomandra or Dianella species at a short distance from the dam for sheltering and foraging.
• Don’t plant Phragmites or bull rush in dams.

Fish and other aquatic animals can be a desirable addition to rural living. If you are going to stock farm dams with fish, you need to carefully consider the following:

• Only native fish from the catchment area are generally permitted to be released. Depending on numbers and site specifics, you may need a permit from the NSW Department of Primary Industries or Fisheries NSW.
• If your dam or pond is already infested with the introduced pest Plague Minnow Gambusia then it would be best to eradicate it. Contact Fisheries NSW for assistance.
• Yabbies from the local stream system might be another desirable addition. Suppliers or the Fisheries NSW can provide more information.
• Be aware that tortoises and platypus may be local residents and that yabbie traps are illegal in streams east of the Newell Highway, as they may drown these air-breathing animals. NSW Fisheries can provide more information about fishing in streams and rivers.
• Eels and aquatic insect life (e.g. dragonflies, back-swimmers) will colonise on their own if a healthy pond/dam or creek system is established and maintained.
• If there are none available on-site, consider adding round river stones that make it more attractive to aquatic life by creating riffles during flow periods and a variety of habitat values.

A pond, dam or creek full of life not only creates a healthy environment but may provide many peaceful hours for you and your family as you explore this fascinating environment and the animals seasonally attracted to it.

Contact WIRES on 1800 094 737 if you find sick or injured wildlife on your property and report sightings of threatened species to the NSW Office of Environment and Heritage or your local council.
**Benefits of biodiversity**

Biodiversity is all life on earth and the systems that interact with and support it. Supporting a range of species, habitats and therefore systems helps to maintain the ecosystem services of the landscape. This includes:

- maintaining soil stability and reducing erosion
- increasing water infiltration and maintaining water quality
- ensuring water, carbon, nutrients and oxygen is cycled through the landscape
- pollination of plants, and reducing pest animals and plants.

The best way to support biodiversity is to ensure that there are areas on your land that are set aside for native vegetation and animals, or used infrequently.

Reducing grazing pressure in remnant vegetation, maintaining native vegetation and leaving shrubs, dead wood and leaf litter in place will go some way to supporting biodiversity.

**Threatened Species Conservation Act 1995**

This Act aims to prevent the extinction and promote the recovery of threatened species, populations and ecological communities in NSW.

Under this Act, if you are considering land clearing, subdivisions or other actions that may impact threatened species, you may require Council approval, or approval from the Office of Environment and Heritage.

Threatened species may not be obvious to you on your property. If you are considering developing your property or land clearing, you may need to have a threatened species survey and an assessment of significance.

**More information**

For information on Landcare, funding available to protect and enhance remnant native vegetation and revegetation advice, contact your nearest Local Land Services office.

For more information about sustainable land management visit your nearest Local Land Services office or www.landmanagement.nsw.gov.au.

Information about threatened species can be found on the threatened species part of the Office of Environment and Heritage website at: www.threatenedspecies.environment.nsw.gov.au.

For further information on the Biodiversity Conservation Act 2016 and the regulations, including the routine agricultural management activities applicable to your area, contact your nearest Local Land Services office or go to www.environment.nsw.gov.au/vegetation/.
Cultural heritage

There are two types of historical sites that may be present on your property: Aboriginal and European. These sites may already be listed on local, State or National registers, or you may discover something new. In any case of identifying significant historical features, you have certain responsibilities under legislation for the protection of these areas.

Aboriginal cultural heritage

Aboriginal people are considered the custodians of Country. Cultural heritage not only encompasses objects but the broader landscape; the water, plants, animals and the land.

Areas of spiritual and social significance may be referred to in art, songs and stories while some are associated with ancestral remains.

Under the National Parks & Wildlife Act 1974 it is an offence to harm (destroy, deface, or damage) or desecrate an Aboriginal object or Aboriginal place, or in relation to an object, move the object from the land on which it has been situated.

It also clearly states in the National Parks and Wildlife Act (section 102) that identified sites need to be recorded within a reasonable amount of time. It is the land managers’ responsibility to ensure that cultural sites on any land tenure are recorded.

Local Land Services is committed to ensuring the protection of cultural heritage values within the region. Assistance can be provided to land owners and managers to identify and protect sites on a property.

Management recommendations may be proposed through cultural heritage surveys.

For further information regarding Aboriginal cultural heritage legislation contact the Office of the Environment and Heritage.

European cultural heritage

European cultural heritage artefacts can provide significant detail to the telling of the history of towns, cities and the surrounding areas.

Within the rural areas, European Cultural Heritage can include farmhouses, barns, agricultural equipment, property markers and mining sites.

Due to the wide cross section of potential artefacts and structures it is hard to know exactly where an item may be located on a property.

Within New South Wales, European Cultural Heritage is protected by the Heritage Act 1977. The Heritage Act states that during any works undertaken on a property, if a potential artefact is located, work is to cease and the NSW Office of the Environment and Heritage is to be contacted immediately.

At which point the Local Heritage Branch would assess the works and determine whether further approvals are required.

The Heritage Act also includes provisions for offences for harming archaeological artefacts as well as works without consent on State Heritage Items. Where an item is locally listed the Environmental Planning and Assessment Act 1979 NSW provides similar provisions.

More information

More information about the protecting heritage can be found at http://www.heritage.nsw.gov.au/.

The NSW Heritage Office and your local Council may be able to provide free advice for heritage property owners including access to potential funding and recommendations for preservation and restoration.

If you think you may have sites of importance on your property please contact your local Council, Local Land Services Cultural Heritage Officer or the NSW Office of the Environment and Heritage.

Aboriginal people are considered the custodians of Country. Cultural heritage not only encompasses objects but the broader landscape; the water, plants, animals and the land.
Fire

Fire is a part of the Australian landscape, and bushfire management in NSW is a cooperative effort by the whole community. Not only does bushfire pose a risk to personal safety and property, it can also have major impacts on biodiversity and water quality.

Cool burning at appropriate times can be beneficial for native plants and animals however effective bushfire management involves fire authorities, landowners, land managers and planning authorities, Council and the local community. The work you do to prepare your own property is a critical component of bushfire management.

Bushfire management involves a risk planning process. You will need to:

- understand your bushfire zoning and risk – talk to your local council
- identify the location of bushfire hazards (such as high fuel loads)
- identify the location of community assets (buildings and environmental)
- assess the hazard as a threat to identified community and environmental assets.

As well as consulting publications from the Rural Fire Service, you may also consider joining the local Rural Fire Brigade.

While most older farmhouses are built on cleared farmland there has been an increasing tendency to build on bush blocks, on land which is often too rugged for agricultural use.

Probably the most important issue for a house on a bush block is to create an asset protection zone that breaks the continuous canopy of trees.

This will probably mean removing some trees and reducing fuel loads of dry undergrowth and dead branches. This should be done with guidance from the local Rural Fire Service and Council.

Since 2002, legal standards have been in place for the safe construction of buildings in bushfire prone areas of NSW. The standards include:

- adequate setbacks from bushland
- inclusion of reduced fuel areas (asset protection zones)
- correct placement
- good access roads for fire fighters and residents.

Strategically planned asset protection zones and regular maintenance to remove fuel greatly enhances the ability of your home to be protected in an emergency.

Wherever possible, new houses and sheds should be located in existing cleared areas to reduce the amount of clearing required for construction.

If you have stock, you can use them to manage pasture near your home during late spring and early summer to reduce fuel levels. Check with the Rural Fire Service.

All land clearance in NSW that is for bushfire hazard reduction and not agricultural purpose will usually require a Bushfire Hazard Reduction Certificate.

This certificate is for activities such as burning, land clearing and slashing. The Rural Fire Service and your local council will also need to be notified.
The NSW Rural Fire Service website makes these suggestions for fire protection measures around your home.

- Clear leaf litter from gutters and install fire-rated gutter guards.
- Firmly fix the roofing so there is less chance for hot embers to enter roof space.
- Install screens or shutters and enclose areas under the floor, if possible.
- Ensure vents into the roof space are screened with fine wire mesh.
- Remove all flammable items from around the house (e.g. the wood pile and obvious flammable materials such as paper, boxes, crates, hanging baskets and wooden garden furniture).
- Direct the relief valves on LPG tanks away from the house.
- Buy a portable pump to use water from dams and swimming pools.
- Fit a gate valve to water tanks – a 38-millimetre Storz coupling will assist the Rural Fire Service.
- Consider reserving water supplies from tanks, dams or swimming pools as mains water will be in high demand during bushfire.
- You may need to install a dedicated fire fighting tank.
- Write the emergency 000 telephone number next to the telephone.
- Have a bushfire action plan and make sure you know it.

The following actions in your garden can also help to protect your property:

- Clear away ground fuels around the house (remove long, dry grass, dead leaves and branches, thick undergrowth) with appropriate certification and notification.
- Take a trip to the tip with general rubbish that could catch fire, and mulch and compost green waste.
- Prune low tree branches two metres from the ground and separate tree crowns.
- Prepare firebreaks (a well watered lawn can act as a firebreak).
- Ensure vegetation around the house does not provide a path for fire – plant or clear vegetation in clumps, rather than continuous rows.

The Rural Fire Service website has a range of information to help you prepare for a bushfire.

**More information**

The NSW Rural Fire Service has valuable information about managing properties in bushfire prone areas on its website at www.rfs.nsw.gov.au.
The NSW Department of Primary Industries has information on preparing for and responding to bushfires in rural areas on its website at www.dpi.nsw.gov.au.

**Weeds**

A weed is usually called a plant ‘in the wrong place at the wrong time’. Plants are weeds if they cause environmental harm, choke out native vegetation, or harm agricultural production or are toxic to stock. They often have a high level of seed production with easy dispersal and are highly competitive with a lack of natural controls.

Weeds can be a major problem to rural properties because of the impact they have on pastures, crop and stock, and can harm humans.

Weeds can be introduced and/or spread to your property in a variety of ways, including:

- seed brought for sowing, stock feed, on stock, machinery, water, wind and garden escapees
- deliberate introduction, e.g. willows planted for bank stabilisation

Weeds can establish and thrive through:

- land managers’ lack of awareness and inability to identify weeds
- poor land management, e.g. overgrazing
- herbicide resistance due to over-reliance on particular chemicals.

Under the *Biosecurity Act 2015*, Landholders have an obligation to control declared noxious weeds on their property. ‘Noxious weeds’ are those weeds that have been declared so and have a detrimental effect on the environment and production.

Your local weed control authority has the right to enter and inspect private properties and issue notices to carry out weed control work. Fines may also be applied.

The weed authority may be your local council or a regional body. You can apply to your local council to see if there are any outstanding weed notices on a property before buying. Local council’s employs weed inspectors and inspections by councils are available for a fee.
The aim of weed control is to remove the weed, deplete the weed seed reservoir, and prevent further replenishment of the seed store. You can control weed seed by stopping the weed from growing and removing vegetative plant parts including roots, stems, branches, stolons, tubers or other plant parts that may allow the plant to grow. Most weeds were introduced from other countries – some arrived by accident while others were brought for various reasons. The natural competition that kept the plants in control in their native countries are not present in Australia, and their spread has not been restricted by natural means. Herbicides are often an important part of an integrated plan to control weeds – not the sole control technique. An integrated approach to weed management may include strategic grazing, pasture improvement, herbicides, biological control agents, cultivation, slashing, mulching and hand pulling.

More information
Contact the weeds officer at your local council for advice on how to manage weeds. General information about managing weeds and a noxious weed list for the local area, can found at the NSW Department of Primary Industries website at www.dpi.nsw.gov.au. The NSW Department of Primary Industries also provides a pasture identification course which helps landholders identify pasture weeds. Your Regional Strategic Weed Management Plan also outlines specific regional priority weeds and their management. A useful site for information relating to the identification and control of weeds is www.weeds.org.au.

The effects of poor weed management are:
- loss of native species and their habitat
- reduced land productivity and water quality
- increased control costs as weeds spread
- soil degradation and erosion.
Pest animals

Pest animals and insects cause serious economic losses to agricultural production, unacceptable risk of exotic disease, threaten the survival of many native species, and cause environmental degradation including erosion.

Landholders (both public and private) have a legal obligation under the Local Land Services Act 2013 to eradicate declared pest animals on land they own, occupy or manage.

Pests such as wild dogs, rabbits, feral pigs, foxes, cats and feral goats can introduce disease and out-compete native animals for food and shelter, as well as injuring or killing livestock and damaging crops and pastures.

Local Land Services biosecurity officers provide advice and enable you to eradicate declared pest species from your property by providing poisoned baits, hiring equipment such as traps, and initiating education programs.

They also work with private and government stakeholders to develop vertebrate pest management plans and co-operative management programs.

Current species declared as pests in NSW include rabbits, feral pigs, wild dogs, foxes and a number of locust species.

You have a legal obligation to control these pests and Local Land Services can provide advice and/or help to control them.

Contact your nearest Local Land Services office if there is any evidence of wild dog attacks on stock on your property or to report evidence of any new pest species.

When conducting any pest animal control program such as baiting, it is important that you follow the manufacturers or government recommendations so that your control does not impact on native species on your farm.

Remember, baits that target rabbits can also attract kangaroos or possums and baits that target foxes can also attract native quolls and carnivorous birds.

Domestic dogs and cats

Domestic dogs and cats can also have negative effects on the environment and farming practices.

Dogs and cats kill and maim many native animals, while dogs may injure or kill livestock.

To reduce this risk, put a bell or mirror collar around your cat’s neck and keep it indoors especially at night, and keep dogs chained up or within a secure yard.

Depending upon where you live, there may be restrictions on the ownership or management of pets, especially where there are known threatened species residing on your property.

Your local council can provide more information.

You must register all dogs and cats through your local council. Unwanted animals should not be dumped in the bush, but should be taken to your local animal pound or your veterinarian.

Pets and other stock must be kept within your property boundaries.

Wandering animals can cause conflict with neighbours and you are liable for any damage or stock losses they may cause. In public areas, dogs and cats must be kept on a leash.

You are responsible for your animal at all times, even if it has escaped from your property. Bury dead animals promptly and away from watercourses so that they do not cause pollution.

More information

For more information and for fact sheets about the control of rabbits, feral pigs, wild dogs, locusts and foxes, visit the Local Land Services website or the public information site at www.feral.org.au.
Property management

Agricultural advice

Establishing and managing an agricultural enterprise, whether it is as a hobby or a primary source of income, can be a daunting and complex task.

There are many agricultural systems that are suitable for undertaking and with the right approach can be very rewarding in terms of both profitability and lifestyle.

Getting the right advice for your individual production system is vital.

There are many private and public sources of information, ranging from private agronomists and livestock consultants to Local Land Services agricultural advisory staff.

Local Land Services advisory staff can assist you with:

- managing your pastures for the best outcomes
- managing your stock including cattle, sheep, pigs, goats etc.,
- making the most out of your fruit, vegetable and viticulture enterprises.

Local Land Services recommends that you get in touch with your nearest land services officer, they will be able to give you up to date advice and point you in the best direction in terms of gathering the information you will need to be successful in your agricultural activities.

Stock

Stocking rates

Overstocking can be a quick route to destroying your pastures and bushland, and depleting the health of your own animals.

When starting out, seek advice from Local Land Services or NSW Department of Primary Industries and consider the whole environment on your block.

Always keep at least 70 per cent vegetation cover to avoid erosion and degradation. If feed is scarce then fence your trees so that stock don’t ringbark them.

You should make an effort to correctly identify appropriate stocking rates for your property. This takes into account the pasture or vegetation composition, type of production system, local climate, geography of your property and your property layout.

Toxic plants and weeds

There are many plants which can cause disease in animals, even some of the normal pasture species may be toxic in one part of their life cycle.

The diseases can have a wide range of clinical signs ranging from skin problems to death. It is beneficial to have a broad knowledge of these plants and your Local Land Services district veterinarian can help identify samples if you are unsure.
Total grazing pressure
The condition of rangeland vegetation is often a result of heavy grazing pressure from feral and native herbivores as well as domestic stock (termed total grazing pressure). Domestic animals can be readily controlled to ensure sustainable grazing management. However feral goats and kangaroos are often more difficult to control as their mobility is unrestricted by traditional fencing designs.
Establishing appropriate fencing and restricting access to watering points can aid in the control of grazing pressure from goats and kangaroos. The control of total grazing pressure, especially goat impact, is a critical first step to improving groundcover and implementing sustainable management practices on western rangelands.

Animal welfare
The RSPCA promotes ‘Five Freedoms of Animal Welfare’, as follows:
• freedom from hunger and thirst
• freedom from discomfort
• freedom from pain, injury or disease
• freedom to express normal behaviour
• freedom from fear and distress.
Owners can be prosecuted by the RSPCA if they don’t meet the needs of their animals.
It therefore makes sense to ensure that your livestock always have access to clean cool water and feed and shelter from wind, rain and hot sun.

Animal nutrition
Animals need a balanced diet to maintain health and a good level of production. The following section is an overview of the basics but if further information is required contact your district veterinarian or a nutritionist.
Energy provides the body’s ability to do work. It is mainly produced when carbohydrates (in plants and grains) are broken down. Fats and protein also provide some energy. It is needed for maintenance, growth and reproduction.
Too much energy in the food can lead to animals becoming overweight, which is not ideal especially if they are pregnant. Not enough energy can lead to starvation.
Protein is used for the building blocks of the body. It is most important for growth, reproduction and production of muscle tissue (meat), wool, milk and immunity.
Fibre/roughage is needed to aid digestion. No nutritional value is gained from the indigestible fibre but is still an essential component of the diet which keeps the gastrointestinal tract healthy.
Vitamins and minerals are required for various body functions and processes. Amounts required vary with the animal’s stage of production and if minimum levels are not met, this may result in decreased productions, reduced fertility and possibly metabolic problems and disease.
Pigs and poultry
There are many proprietary products developed to feed these species which eliminates much of the guess work. If you are going to design your own ration you must ensure that it is properly balanced. It is wise to contact a nutritionist or district veterinarian.

Ruminants
Ruminant animals are defined by the structure of their gastrointestinal system. They include animals such as cattle, sheep and alpacas and have a organ called a rumen, which allows the animal to process fibrous foods such as pasture.
A good quality pasture will provide all of the nutritional requirements of livestock.
However, not all pastures can be classified as good quality. Poor quality pasture will require some form of supplementation.
The trick with supplementation is to start early so livestock do not lose too much weight.
Try to match the supplement to the deficiency occurring. The supplement could be an energy supplement (e.g. grain or roughage), a protein supplement (e.g. protein meals, protein/oil seeds like lupins or cottonseed), vitamin/mineral supplements (e.g. for deficiencies) or a combination of the lot.
With most supplements, especially grain, the animals must be gradually accustomed to the ration to prevent digestive upsets. Before embarking on a supplementary feeding regime you should contact your local nutritionist or district veterinarian.

Pastures
Getting the right, productive and bio diverse pastures are vital to any grazing system. Often the best pasture mix is made up of native grasses, ‘naturalised’ grasses and legumes such as clover.
While this sounds simple, managing pastures to make the best out of them is often very complex. There are, however, many sources of information available to you. Local Land Services has dedicated pasture advisory officers that can give you advice on pasture composition based on your individual agricultural system and farm properties including geological constraints, climate and soil conditions. Workshops are often held across the region that provide a broad spectrum of advice options to suit most needs.
You can keep updated about workshops in your region by visiting your regional website or by subscribing to their e-newsletter.

NSW Department of Primary Industries
NSW Department of Primary Industries, in conjunction with Local Land Services often run training courses, workshops and field days.
All courses have been developed in response to industry needs. Some of the courses available include:
- Identification and management of native grass pastures
- Sowing and managing pastures
- Prograze
- LANDSCAN
- Beef-N-Omics
- Better bull buying
- SMARTtrain® chemical course.

Swill feeding of pigs is illegal in Australia.
Swill consists of meat products, carcases or part of any bird or mammal carcass, the excrement of any bird or mammal, household, commercial or industrial waste or anything that has been in contact with a prohibited substance.
Feeding swill to pigs can lead to the outbreak of several serious diseases including foot and mouth disease.
Travelling stock reserves

Local Land Services manages parcels of Crown Land known as Travelling Stock Reserves (TSRs).

TSRs provide pasture reserves for travelling or grazing stock and cover more than 600,000 hectares of NSW. They are especially beneficial for stock in times of drought, bushfire or flood. They are also important for public recreation, conservation and as apiary sites.

You need a permit from Local Land Services for the following activities on TSRs:

- grazing and/or walking stock
- apiary sites
- collecting native seeds
- accessing water
- collecting firewood (in some regions)
- camp overnight (in some regions).

It is illegal to use a travelling stock reserve to:

- ride motorbikes
- dump rubbish
- shoot and/or hunt
- damage protected vegetation.

Stock watering places are also an important part of the TSR network in the Western Division. These places allow travelling stock access to water with leases managed by Local Land Services Western.

Note: Authorised recreational uses as detailed in the Local Land Services Act 2013 and associated Regulations are excluded from TSRs and stock watering places in the Western Division of NSW which encompasses the Western Local Land Services region.

Additionally, approximately 1.95 million ha of TSR in the Western region is controlled by Crown Lands under the Western Lands Act 1901 and incorporated into Western Lands Leases. Western Local Land Services do not control or manage these reserves, but can occasionally issue permits for certain uses.

Property Identification Codes (PIC’s)

It is a requirement in NSW for owners of livestock such as cattle, sheep, goats and pigs to have a Property Identification Code (PIC) when trading or moving these livestock.

A PIC is a unique eight-character number assigned by Local Land Services to properties with livestock.

This property registration system allows for the tracing of livestock to assist with disease and chemical residue management.

Even if you keep livestock as pets, you must have a PIC.

The requirements have expanded to also include deer, bison, buffalo, alpacas, llama, horses, 100 or more poultry, or 10 or more emus or ostriches.

Obtaining a PIC

To obtain a PIC you must complete an application form and lodge it for a small fee with your Local Land Services office.
Why do I need a PIC?
PICs are fundamental to the operation of the National Livestock Identification System (NLIS).
NLIS is a part of Federal and State Government biosecurity strategies to trace meat from paddock to plate and to safeguard our domestic and export markets.
PIC information improves traceability back to specific properties allowing a quick and effective response to animal disease outbreaks, such as equine influenza, or a food safety incident.
In the event of an outbreak or incident, NSW Department of Primary Industries and Local Land Services can use PIC information to identify the location of properties and their associated livestock.
This measure is a critical component of NSW biosecurity strategy and enhances Australia’s reputation in international markets.
All other States have a PIC system to identify properties where livestock are kept.
All the information required for landholders regarding PICs can be found at www.lls.nsw.gov.au.

Stock control near creeks, rivers and streams
As far as possible, you should keep your livestock away from rivers and streams. You can pump water to troughs placed away from the stream to water stock. This will prevent erosion and degradation of the littoral (water’s edge) zone vegetation and environment.
Stock should also be kept out of watercourses because they:
• eat, trample and destroy the vegetation that protects banks from erosion
• compact the soil making plant growth difficult
• push soil off steep banks
• make tracks that cause erosion
• stir up mud that can destroy aquatic habitat and reduce water quality
• add excess nutrients by defecating
• destroy habitat for native fish.
Best practice to provide drinking water for stock involves:
• a pump and trough in the paddock
• a dam in the paddock
• a bore and tanks in the paddock
• a rock ramp down to the water, preferably on the inside of a bend.
• controlling weeds along watercourses as in the surrounding paddocks.

More information
The NSW Department of Primary Industries provides more information on the National Livestock Identification System at www.dpi.nsw.gov.au/agriculture/livestock/nlis.

Stock on roads
You need a permit from Local Land Services to walk your stock along a public road.
Routine management movements, either walking or transporting on a more frequent basis, are covered by a routine Stock Movement Permit.
Straying stock on public roads can be very dangerous. If there is an immediate threat to the public from straying stock, (such as cattle on highways) the police should be notified. In other circumstances the local council is responsible.

Property management
There are many agricultural systems that are suitable and with the right approach can be very rewarding in terms of both profitability and lifestyle.
Fences
Fences are vital to successfully manage your property. Fences have various functions on rural properties. You should consider the layout of fences in a whole-of-property approach in a property plan. You can use fences for a range of purposes, including:

- defining the boundaries of your property
- managing stock
- protecting the environment, e.g. to keep stock out of native vegetation or away from rivers and streams
- controlling pest animals
- increasing property value
- erosion and vegetation rehabilitation.

There are different fence construction methods depending on what you are building the fence for. For fences to do their job properly, you need to maintain them and keep gates shut and locked. Don’t overengineer your fences.

Flood-prone fencing designs
In flood-prone areas, you should consider the following:

- Design paddocks to avoid fencing across waterways where possible.
- Try to place fences above the floodplain and flood-prone areas.
- Use temporary electric fencing instead of permanent fencing.

Minimise the use of vertical structures (plain wire fences tend to need less maintenance in flood-prone areas than ring lock or mesh as debris is less likely to get caught).

Wildlife friendly fences
Fences are used not only for stock control, but also to protect vegetation and sensitive areas.

What can you do to make fences more wildlife friendly?
Some ways to make sure your fences benefit wildlife and stock include:

- Use plain wires instead of ring lock or hinge joint.
- If possible use white horse sighter wire on the top strand and white caps on steel posts, or treated pine posts.
- Leave 30 cm between the top wire and the next one down. This is important to avoid kangaroos catching and trapping their legs between the two top wires.
- Don’t use barbed wire as birds and gliders are often caught and killed on them. If existing fences have barbed wire, consider taking that wire out, particularly the top strand.
- Keep fences at a moderate height, e.g. approximately 1.2 metres.
- Keep the bottom wire 15 centimetres above the ground level.
- Avoid permanent electric fencing. It can form a significant barrier to wildlife movement, and electrocute native animals on low-level live wires.
- Structures such as wombat gates and pipe underpasses can help wildlife to pass without damaging fences. Check where wildlife is moving through before installing new fences.

Dividing fences
The Dividing Fences Act 1991 sets out how the cost of a dividing fence is shared between adjoining landowners where an owner wants to erect a dividing fence or wants work done on an existing dividing fence. The Act sets out minimum requirements and owners may agree to arrangements exceeding these requirements. The Act also sets out the procedure to resolve disputes about the cost, type and position of a fence. Land and Property Information administer the Dividing Fences Act 1991. However, this responsibility is limited to administration matters. The department does not provide advice about fencing disputes and it does not provide legal advice about the provisions of the Act. You should seek advice about these matters from other sources including Legal Aid Services, the Chamber Magistrate at the local courthouse, LawAccess NSW, community justice centres or private lawyers or your local council.
**More information**


---

**Western Division**

Almost half of NSW falls within the Western Division, a vast and sparsely populated region covering more than 32 million hectares in the west of our state. Nearly all the land in the Western Division is held under Western Lands Leases, granted under the *Western Lands Act 1901*. Western Lands Leases are bought and sold in the same way as freehold property. However, when people “buy” leases they are in fact only buying the improvements on the lease and the right to lease the land. For more information on the Western Division and Western Lands Leases visit [www.crownland.nsw.gov.au](http://www.crownland.nsw.gov.au).

---

Nearly one-third of the Western Division is unincorporated, meaning that it has no formal government. This area includes the villages of Silverton, Tibooburra and Milparinka.
Local council rates

Rates are a tax levied on a community to meet the cost of services provided by your local council. Rates are not a charge for individual services supplied. In this way, they are similar to income tax, as well as in the way they are determined.

Income tax depends on how much you earn and on the tax rate per dollar set by the Australian Government in the annual budget.

Council rates depend on the valuation assessed on your property and on the rate per dollar set by your local council when it finalises its annual budget.

Tax and rates payments are not directly related to services that you may personally receive but instead to the needs of the whole community.

There are two big differences between income tax and rates.

Income tax is usually taken from your salary each pay and you never see it - rate notices arrive four times a year and so are more obvious. The other difference is that income tax is usually far greater than rates.

The valuation process

The Valuer General’s Department regularly values all houses, shops, factories and rural properties in NSW. The basis for valuation is the same for all properties. The valuation is made at a common date, for instance 30 June 2011. This means that the values determined are based on prices, rents and conditions that prevail on that date.

The valuation does not create value and it does not create rates. The valuation is a way to equitably share Council’s rate requirements among all ratepayers based on the value of their property.

If all valuations were reduced by half, Council would have to double the rate per dollar to raise the same total rate income to pay for services. Valuations are updated every four years, as required by state legislation.

Other supplementary valuations take place between those dates where some change has occurred to the property that affects its value, such as extensions or subdivision of land.

The valuation

On your rate notice you will see a valuation. The Valuer General’s office supplies the valuation, and it is from this value that your rates are calculated.

This happens regardless of whether the land is vacant or has a dwelling or improvements.

Any problems

If you have any questions about what appears on your rate notice call your local Council. You also have the right to object to the valuation and ultimately appeal. The Valuer General’s office can explain this process to you.

Local Land Services rates

Besides local council rates, some owners of rural holdings must pay Local Land Services rate levies.

Rates are charged on a two-tier basis, involving a general rate paid by all landholders and a supplementary animal health rate. Each region has a minimum rating area for properties. Information at: www.lls.nsw.gov.au/about-lls/annual-rates.

Rates are used by Local Land Services to pay for biosecurity and emergency services to landholders.

This includes:

- activities relating to the control of declared pest animals and insects
- the provision of animal health and welfare services
- support for stock identification systems
- emergency management assistance for drought and other natural disaster relief such as bushfires and floods.

Biosecurity services provide insurance against pests and disease, and help maintain vital market access for producers.

Examples of biosecurity and emergency response projects in the past year include supporting the response and recovery efforts for widespread flooding and state-wide wild dog management programs.

As well as rates, Local Land Services receives funding from the NSW Government through Catchment Action NSW, which provides on-ground programs to support biodiversity, native vegetation, threatened species and Aboriginal cultural heritage initiatives.

The Australian Government also contributes funding through the National Landcare Programme, which helps drive sustainable agriculture.

This funding also supports the protection, conservation and rehabilitation of Australia’s natural environment.

If you own or occupy rateable land you must advise Local Land Services if you change your postal address. You must also lodge an annual Land and Stock Return with Local Land Services in your area by 31 July every year.

More information


Unincorporated areas of NSW

Nearly one-third of NSW (9.4 million hectares or 10 per cent) is unincorporated, meaning it has no formal local government. In these areas, which include the villages of Silverton, Tibooburra, and Milparinka, the Department of Industry - Lands assists in the co-ordination of various community services.
Absentee landholders
As a landholder you are responsible for looking after the environment of your property and making sure that you don’t contribute to problems on your land and the land of others. People often come to properties not understanding what land management involves and they may overextend themselves and end up damaging the land and environment.

Many rural properties do not have permanent residents. These properties may have been purchased as retreats for the owners to get away from the city and can be left vacant for large portions of the year.

This absence raises potential management problems, including:
- weeds and pest animal control
- erosion control
- boundary fencing maintenance
- failure of the effluent management system due to lack of use
- fuel build up causing a potential bushfire hazard
- straying stock
- inadequate care of stock.

These problems can affect neighbouring properties and cause land degradation and tension between neighbours. Your local council may also place notices and fines on such properties. If you are an absentee landlord, to avoid these potential problems, consider some of the following options:
- visit your property on a regular basis
- make arrangements with farm contractors
- make arrangements with a farm manager
- negotiate with surrounding landholders to carry out work on your property, perhaps in return for agistment rights.

For updates contact absentee.project@lls.nsw.gov.au.

More information
Contact your local council about absentee landholder’s issues.

Chemicals
Chemicals such as fuel, fertiliser and pesticides are commonly used to help run rural properties. These chemicals are often dangerous, some are flammable, most are poisonous and all can be harmful to the environment if used incorrectly.

For example, they can pollute waterways, particularly if they are stored or used near creeks and rivers.

There is a legal requirement to read the label and follow all directions on the container.

This is necessary to ensure the safety of you, your family, your stock and native wildlife. Considerable fines can be imposed for failure to transport, store, apply and dispose of chemicals and containers properly.

There are also requirements under the Pesticides Act 1999 to keep records of pesticide use and for pesticide users to undergo training.

Chemical trespass is a significant issue in rural areas. Any person using chemicals needs to be aware of the impact it can have on neighbouring crops or the environment. The costs of damage from chemical misuse can be very high.

Advice is available from the Office of Environment and Heritage (transport and disposal training), SafeWork NSW (use and storage), and local Council (general information).

Storing chemicals
A farm chemical store needs to have the following features:
- a separate, well-ventilated cupboard or building used only for this purpose - located away from houses, pumps, tanks, waterways and animals and preferably fireproof
- a manifest, copies of labels and a Material Safety Data Sheet (MSDS)
- storage in a cool, dry place
- some form of spillage containment or bunding
- shelving made of impervious materials - for small quantities of chemicals place containers in drip trays
- liquids should not be stored above solids
- don’t store chemicals in soft-drink bottles
- a locked storage area
- clearly sign-posted storage area, e.g. ‘Chemical Store – Keep Out’ and a no smoking sign.

Keep all chemicals in an area specially designed for this purpose. Safe storage maximises the life of pesticides and protects people, animals and the environment.
Transporting farm chemicals

Everyone transporting farm chemicals has a duty of care and a responsibility to carry out tasks in a manner that will not cause harm or injury to themselves, other people, their property, animals, and the environment.

Before moving chemicals, read information on the transport requirements of individual chemicals which are often found on the label or Materials Safety Data Sheet. When collecting new containers of chemicals, check them carefully for damage and tighten lids to prevent leaks.

Make sure your vehicle is roadworthy and can safely transport chemicals. Put chemicals inside a tray of some kind that will contain any spillage.

Do not put chemicals in the same compartment as the driver and passengers, food, drinks or animals. Vapours and spills can cause illness.

Do not transport items classified as Dangerous Goods in large quantities. Private vehicles should transport less than 100 kilograms or 100 litres of farm chemicals at a time.

Pack the load securely so items can’t move or fall over and store different classes of chemicals apart. Take the most direct route back.

If any spills occur clear the vehicle immediately. The main steps for dealing with a spill are to isolate, contain, decontaminate and dispose.

If chemicals enter drains, you should contact the local fire brigade and Council immediately. Make sure you use appropriate clothing and gear to protect your skin and face and to avoid inhaling vapours.

On arrival, put the containers straight into the chemical store. Make sure containers are not damaged.

Safe disposal of non-returnable containers and on-farm chemicals

Disposal of non-returnable crop production and on-farm animal health chemical containers is a significant problem for farmers.

If you use agricultural chemicals you are legally responsible for ensuring that empty containers and unwanted chemicals are disposed of safely.

National programs called drumMUSTER and ChemClear have been set up to help farmers safely manage their farm chemicals. The drumMUSTER program collects and recycles cleaned eligible containers.

The ChemClear service collects and disposes unwanted currently registered rural chemicals.

This program features a web based booking system and free call number 1800 008 182.

More information can be found at www.chemclear.com.au or by contacting your local Council.

Agsafe, which is a subsidiary of CropLife Australia, manages the drumMUSTER and ChemClear programs. These initiatives were developed by the National Farmers Federation, the agricultural industry peak body CropLife Australia, Animal Health Alliance (Australia), Veterinary Manufacturers and Distributors Association and the Australian Local Government Association.

You can store rinsed containers in a safe location until the next drumMUSTER collection is advertised in your area. The rinsed containers can also be taken to some council landfill depots.
Cleaning containers for disposal
You should rinse containers on fallow ground away from drains and waterways, and always wear personal protective equipment as specified on the label for applying, mixing and loading the pesticide.
To ensure your containers are suitable for delivery to a collection centre always follow these procedures:
• Triple or pressure rinse your containers immediately after use and pour the rinse water back into the spray tank.
• Thoroughly clean the container thread and outside surfaces with a hose into the spray tank. Rinse all caps separately into a bucket of clean water and pour rinsate into the spray tank.
• Inspect the container, thread and screw neck to ensure all chemical residue has been removed.
• Puncture metal containers through the neck/pouring opening and through the base of the container.
• Allow containers to drain completely and air dry them over a number of days.
The rinsed containers can also be taken to Council drop off sites (visit drumMUSTER’s website collection calendar for information on local collection sites and details, or contact your local Council).
For more information about drumMUSTER call 1800 008 707 or go to www.drummuster.com.au.

Disposal of rinsate or diluted chemicals
Labels and state environmental legislation prohibit disposing of chemical concentrate on-site or on a farm. You need to dilute unused chemicals.
If you are not applying chemicals according to the label use pattern, you must dispose of them in an environmentally responsible manner, such as an evaporation pit.
An evaporation pit should be one metre deep and lined with plastic sheeting sprayed with hydrated lime.
Any wastes must be covered with at least half a metre of soil. Disposal pits are suited only to small volumes and diluted chemicals.
Evaporation pits should be located well away from drainage depressions, creeks and rivers.
For more information, refer to the SafeWork NSW code of Practice for Safe Use and Storage of Chemicals in Agriculture.

DO NOT DISPOSE OF CHEMICALS IN ANY FORM DOWN DRAINS, GULLIES OR WATERCOURSES.
Farm safety

Rural properties can be dangerous places to live and work. Potential hazards include vehicles, tractors and attachments, motorcycles and all-terrain vehicles, working from heights and the potential for manual handling injuries.

Farming is the third most dangerous occupation in Australia. More than 80 people die from farming related injuries each year.

The number of non-fatal injuries is much greater - numbering several thousand.

Injuries to part-time farmers are a concern. Often these people do not have the skills or equipment of full-time farmers and can be injured as a result.

Children are particularly at risk on farms because of easy access to water/dams and vehicles, including motorbikes and tractors.

On average, 30 children under 16 years die on Australian farms each year as a result of a farm accident. Many more children are injured.

Preventing rural injuries

Just like any work environment, there are legal requirements on a farm under the Workplace Health and Safety Act 2000 to ensure a safe workplace.

Be aware that ordinary house and contents insurance does not cover public liability or workers compensation which is compulsory if you employ anyone to work on a property.

The SafeWork NSW website at www.safework.nsw.gov.au has information on preventing injuries on rural properties.

Two key documents of interest that you can get from their website are:

• farm safety - starter guide
• fifteen-minute farm safety checklist.

Some of the tips from the Farm Safety – Starter Guide include:

• Map the hazards on your property. This involves drawing an outline of your property and mapping features. You can use the map as an induction tool for new employees and casual workers or contractors who come to the property.

• Identify the dangers on your property. Use this four step approach:
  1. identify the dangers (identifying the hazards)
  2. work out what harm the hazard can cause (assess the risks)
  3. get rid of the hazard or control it (control the risks)
  4. review your risk assessment on a regular basis.

It is important that all workers and all family members are included in the process. When something on the property changes, repeat the four steps.

Is your farm safe for kids?

Farms are great places for kids when we create the right environment, but safety for children on farms is a major concern.

On average, one child under 16 years is fatally injured on an Australian farm every 10 days and many more are injured across rural Australia.

The major causes of child deaths and injuries on farms are dams, farm vehicles, machinery, motorcycles and horses.

You need to identify hazards and risks specific to the farm for children as well as visitors.

As well as safety behaviours, you should reduce hazards and design for safety wherever possible.

Key recommendations for child safety on farms include:

• create a securely fenced house yard for children to play
• have safety rules that everyone knows and follows
• children should stay in the safe play area unless an adult can closely supervise them on the farm
• wear seatbelts and restraints when in cars, utes and trucks
• children should not ride on tractors, all-terrain vehicles or in the back of utes
• always wear helmets when riding bikes and horses.

More information

Further information and resources can be found at the FarmSafe NSW website at www.farmsafe.org.au.

Further information about farm safety can be found on the NSW Department of Primary Industries website at www.dpi.nsw.gov.au/agriculture/farm/safety.

Rural injuries can be largely prevented by paying attention to seven major risk areas:

• tractor and machinery safety
• farm vehicle safety
• farm motorcycle safety (including all-terrain vehicles)
• working from heights safety
• chemical safety
• manual handling safety and strain injury prevention
• farm animal handling.
Mental health

Living and working in regional, rural or remote Australia can be a very rewarding and challenging way of life. People living in regional, rural and remote areas are known for being down-to-earth, practical and resilient. But, living away from metropolitan areas can be difficult and it's important to ask for help during tough times. If you are feeling stress, are down or know someone who is, help can be found at: www.lifeline.org.au or by calling 13 11 14.

Safety on rural roads

Road condition

Road surfaces in rural areas are often less predictable than highways and city streets. Be alert at all times as the road surface may change without warning, sharp corners may not always be sign-posted, and the crests of hills may reduce visibility. Always be on the look-out for stock and native animals.

Scan the road ahead. You are likely to have shorter lines of sight and will require shorter reaction times to evade unexpected situations.

Be aware that the tyres of other vehicles may throw up stones that crack your windscreen.

Drivers need to use different skills on gravel and unsealed roads. Dust can reduce visibility and it takes longer to stop when braking.

Bends and curves can have a build up of loose dirt or stones and roads are often narrow. Slow down and be on the look out for other vehicles.

Anti-lock braking systems are not as effective on loose surfaces and it is recommended that on rural roads you turn off the cruise control, reduce your speed and give yourself a lot more stopping space.

Keep left, slow down, and take extra care on crests and corners to avoid collisions.

Other road users

School buses, cyclists, trucks, slow moving farm machinery and animals use rural roads. All are legitimate road users so be patient when you come across them. Most drivers will recognise when they are holding traffic up and pull over when safe to do so for vehicles to pass. Take care when approaching rail crossings. Not all crossings are fitted with safety lights and boom gates.

Livestock on roads

Where there are unfenced roads stock will be present on roads as they graze across these paddocks with a higher likelihood of being on roads if water sources are in close proximity to the road. These unfenced areas must be signposted.

It is also legal for livestock to walk along and graze on roadside vegetation within fenced roads with a permit, which can be obtained from Local Land Services, provided they are not left unattended and the stretch of road where they are grazing is sign-posted at each end.

All rural landowners who own even just a few livestock must ensure that their roadside fences are kept in good condition.

Domestic livestock are not allowed to roam unattended. Straying stock on public roads may be dealt with by council.

Roadside vegetation and wildlife

There are many large trees located close to rural roads, which are easily hit when drivers lose control of their vehicle.

Remember to slow down and drive to the conditions – the speed limit is the maximum and NOT a must.

Native vegetation adjacent to many rural roads often acts as a wildlife habitat and refuge. This can be a problem for drivers from dusk to dawn when native animals, such as kangaroos and wombats, are out looking for food.

Remember, if you can’t avoid a collision with an animal it is often safer to hit them than swerve and lose control of your vehicle.

If you hit an animal, check if it is alive and if it has any young. Contact an animal care organisation such as WIRES if the animal/s can be rehabilitated or euthanised. You can contact WIRES on 1300 094 737.

If the animal is dead, move it to the side of the road if you can. Be careful of your own safety with traffic while moving the animal.

You need helmets and seatbelts in the bush - even if you are just going between paddocks.

Remember to always wear a seatbelt and a helmet no matter how far you are driving or riding.
Alcohol – how are you going to manage the morning after?

There is often no alternative transport in the bush, unless you’re lucky enough to have a local publican with a mini-bus, so you will need to plan how you get home after a few alcoholic drinks.

It is a good idea to take turns with family, friends or neighbours to stay sober and be the designated driver.

Don’t forget that you might still be over the limit the morning after a big celebration.

It takes about an hour for your body to process each standard drink consumed. Check bottles and cans for details.

Local information

More information about rural road safety can be found at the Roads and Maritime Services website at: www.rms.nsw.gov.au.

Developing your property

Rural land is increasingly being used for purposes other than traditional farming, such as rural residential developments, lifestyle properties, light industry and intensive agriculture such as chicken farms.

Conflicts can arise between adjacent land uses.

Development and planning issues such as development applications are considered by applying the controls set out in Council’s Local Environmental Plans.

More details about local planning strategies and Local Environmental Plans can be found in the Local Information section.

Council’s role in development

Councils are responsible for determining land use zones, in consultation with government agencies and their communities.

While not everyone might agree with the final outcome, everyone has the opportunity to have their say. There are rigorous procedures to evaluate land before approval is given to change land use.

When you purchase your rural block, you should ask Council a number of questions about the land uses of your block and those surrounding it.

• Are there any development applications current for the nearby area?
• Have other developments been approved but not commenced?
• Are there any restrictions on obtaining approval to build a house or other buildings on your block, or to develop certain desired land uses?
• Does the property have any constructions or developments that were completed without approval?
• Are there any Property Vegetation Plan agreements, or other forms of covenants and easements that apply to the land?
• Are there threatened species on or near the property?

You have the right to view any current development applications at the Council. Where an application is currently advertised, you can make a submission to Council about your concerns.

While you might have purchased a block of land in a rural area, further subdivision of adjacent land could be possible. Your rural outlook could change if such subdivision is approved.

Detailed information about how a property can be used and restrictions on development is found in the Section 149 Planning Certificate for the property.

When you buy or sell land the Conveyancing Act 1919 requires a Section 149 Planning Certificate to be attached to the contract of sale. You can apply for a Section 149 Planning Certificate by contacting your local Council.

Building

Council assesses building and development proposals against development regulations, including the Local Environment Plans, the Building Code of Australia and Development Control Plans.

If you are preparing a development application contact Council as early as possible to ensure that documentation meets Council’s standards and for any other help.
Why submit a development application?

You are legally bound to submit a development application to Council for any building, demolition and subdivision works and for any development requiring consent under the Local Environmental Plans.

Development applications are required so Council can assess your plans and information, inspect your property and determine whether your proposal is appropriate and does not have an adverse impact on the environment. Remember - if you are in doubt, please ask Council as time spent early may avoid delays later.

Complying development

Complying development is another form of development approval you can seek from Council. Complying development does not apply to all land and is subject to the application meeting pre-set development standards.

Proposals that may be Complying Development include the following:
- dwelling houses (new, alterations and additions) – this includes structures such as carports and garages
- swimming pools
- industrial uses (change of use and internal alterations)
- commercial uses (change of use and internal alterations)
- bed and breakfast accommodation
- subdivision
- boundary adjustment
- temporary buildings.

Contact your local Council for more details about Complying Development.

Exempt development

Some minor development may be exempt from Council approval. Each development must meet certain criteria in order to be exempt. Examples of work that may be exempt include:
- garden sheds
- rainwater tanks
- solar hot-water systems
- solar panels
- building alterations
- different use of a building.

Contact your local Council for more details of exempt developments.

More information

Contact town planners at your local Council listed in the Local Information section for advice about developments on your property.

Improving your skills

Knowledge about sustainable land management is growing rapidly. Getting up-to-date, accurate information will help you enjoy your land.

Landcare and producer groups provide a good way of building knowledge and sharing experience, and there are many quality publications available.

Government departments are also an excellent source of information.

Think about what training you need to manage your land appropriately. Many courses are available covering animal and horticultural production, farm and environment management, chemical use, property management planning and fencing techniques.

TAFE conducts rural studies courses, including courses on:
- wool classing
- sheep shearing
- horticulture
- viticulture
- agriculture (including crop and livestock management)
- aquaculture
- natural resources and environmental management
- forestry.

Local Land Services also run regular one-day courses and field days on a variety of topics.

The NSW Department of Primary Industries in conjunction with Local Land Care offers a large range of courses with topics and focuses constantly changing to meet the needs of landholders. Visit the Profarm website: www.nsw.dpi.gov.au/agriculture/profarm.

More information

For more information about TAFE courses call the TAFE information centre on 131 601.

For more information about Local Land Services training and field days and Department of Primary Industries courses visit the respective websites.
Waste management

It is important to dispose of waste in an environmentally sustainable way. Dumping waste in eroded gullies is not acceptable. Rural properties produce a wide range and significant amount of waste and its successful and environmentally-friendly disposal requires good management. Rural waste typically includes domestic waste, solid waste (e.g. wire or old white goods), farm chemicals and oil and dead stock.

Domestic waste
Details of local domestic waste removal can be sought from your local Council.

Composting
Almost half of our domestic waste consists of kitchen and garden waste. Most of this material can be composted. Composting is nature’s own recycling program. In time, organisms will break down the waste into a rich, dark, crumbly compost that is a nutrient rich fertiliser. Home composting generally takes two months or more. The more you turn and mix the contents, adding air in the process, the more rapidly the composting action will happen. The compost can then be added to the garden to increase productivity.

What can be composted?
- ‘Greens’ including grass cuttings, non woody garden prunings, weeds that have not gone to seed, leaves, flowers and vegetable remains, kitchen wastes (including egg shells and bread), herbivore animal manure – horse, chicken and cow (avoid other animal droppings).
- ‘Browns’ including paper and cardboard, wood fire ash, sawdust and wood shavings, vacuum dust and hair.

You can make compost either in a heap or a bin, depending on quantity. Minimum dimensions for a heap are one metre by one metre by one metre. You can enclose the heap using bricks, timber or metal, such as corrugated iron. Cover with a lid or piece of carpet to retain heat. A compost bin is better for small gardens. Your compost heap or bin should be placed in contact with the soil to allow worms and decomposing insects and micro-organisms to enter the compost. More information is available from your local Council or from the Office of Environment and Heritage.
Recycling and reuse

Contact your local Council for details of recycling services. You can usually recycle a large number of materials, including:

- paper
- cardboard
- plastic bottles (usually types one through to seven)
- steel cans (including aerosol cans and paint tins)
- aluminium cans
- glass jars and bottles
- juice and milk cartons
- aluminium foil.

Constructive ideas for living with less waste include:

- Collect all liquid waste in your kitchen as well as your food scraps. Your compost ‘soup’ will provide some of the water necessary for the composting process. Rain will provide further water, so take the cover off your compost bin while it’s raining. If you have a compost ‘heap’ you may need to cover it during heavy rain to prevent it from being flooded.
- Be creative with juices and fruits and reduce your dependence on store bought alternatives.
- Much household waste begins at the shop. There has been a lot of promotion about taking your own carry bag/s to the shopping centre. Now it’s time to ask yourself, what’s in the bag? Become a conscious consumer and only buy what you need.
- Repair and re-use items.
- Clean out your cupboards and gather all those things still in working condition that you no longer want or need. Take them to a local charity or sell through community garage sales.
- Collect tea bags and coffee grains at work in a sealable plastic container and take them home to your compost heap. Share this resource (and the responsibility for collecting it) with your work colleagues.
- Replace plastic/foil-wrapped sweets with fruit. It’s healthier and the waste can go into the compost.
- If you have enough yard space, keep chickens to eat food scraps and produce fresh eggs.
- Spend less time in the shower. Being conscious of the time will help you to save water, energy and money.
- Give your compost a read by putting food-soiled paper or cardboard into the compost.

Landfill

A landfill site should be the last resort for waste disposal on rural properties. Waste management facilities should be used wherever possible.

If you think a landfill site is appropriate contact your local Council or the Office of Environment and Heritage for advice.

If a landfill site is required, items that can be placed in a properly constructed site include domestic garbage, glass, plastic, metal, compostable material, tree loppings, small cans or containers of acids or alkalines (one litre or less), and car bodies. Restrictions apply so check with your local Council first.

Council can provide details of chemical collection and drumMUSTER opportunities.

Burning

Burning waste, such as household rubbish and garden clippings, has a negative impact on air quality. Measures have been introduced over time to control backyard burning and other open air burning.

These have been successful in reducing average levels of particle pollution. The laws are different for burning for fire hazard reduction and burning for the disposal of waste.

Burning is prohibited in many areas (contact your local Council for details).

The fire ban season generally runs from October to March but can vary according to conditions. You should carry out any burning in a way that prevents or minimises air pollution.

You need a permit from the Rural Fire Service for pile burning.

You may also need a permit from your local Council to light material, so call them before conducting your burn.

Regardless of the time of year, you must notify the Rural Fire Service and your adjoining or nearest neighbours prior to conducting burning activities.
Dead stock disposal

If the cause of death of an agricultural livestock animal is unknown, local vets, or in the case of large numbers of losses, your local Local Land Services district veterinarian may offer services to diagnose the carcass if you make contact in a short time-frame.

Whether one or more animals are to be disposed of, disposing of dead stock carries the risk of polluting watercourses, producing odours, attracting scavenging pests, spreading disease and interfering with community amenity.

If possible, carcasses should be used or rendered. If the animals are to be slaughtered, local abattoirs and knackeries should be contacted to find out the cost of getting them to do the work.

If you have to dispose of carcasses on the farm it is important to do the job quickly and thoroughly. Burning is rarely satisfactory - burying is better.

However, with certain exotic diseases burning may be mandatory. Contact Local Land Services if you are unsure of what to do.

To reduce swelling during decomposition, the abdomens and paunches of the carcasses should be opened to allow gases to escape.

The carcasses should be sprayed with sump oil if immediate burial or burning is impractical.

They should be heaped up in a secluded spot away from watercourses and sump oil should be spread liberally over the heap. The oil discourages flies and scavengers.

The heap can then be buried or burned later.

More information


For information about the Local Land Services animal health services visit the website or contact your local Council for advice about waste management on your property.

The recommended method to dispose of dead stock can be found at the Office of Environment and Heritage website at www.epa.nsw.gov.au/mao/deadstockdisposal.htm.

Effluent management

Failing on-site effluent management systems release dangerous levels of sewage pollution to the environment. Sewage pollution can contaminate water, spread disease, and lead to environmental degradation. There are over 13,000 on-site effluent management systems across NSW and the cumulative impact of effluent, sometimes from thousands of systems is a critical problem. Sewage pollution is evident in different areas across the state often near waterways and in drinking water catchments.

Small domestic sewage management facilities or on-site effluent management systems include all types of human waste storage facilities.

There are a number of different types. With advances in the performance of on-site effluent management systems, there is no reason for the community to accept failing systems. Research shows many people don’t know how to manage their systems and around 70 per cent of systems fail to meet environmental and health protection standards.
**Septic safe**

The NSW Government has introduced local government reforms and guidelines for efficient management of small domestic sewage facilities. Septic Safe is a state-wide partnership between the NSW Government and Councils to address the issue. Councils regulate the installation and operation of on-site effluent management systems under the *Local Government Act 1993*.

Regulations under the Act specify performance standards and require Councils to supervise the operation of on-site effluent management systems.

If you have an on-site effluent management system you must obtain an approval to operate from Council. You, as the owner, are responsible for the system’s operation. Therefore, you must maintain and manage the system in accordance with health and environmental performance standards.

The performance standards are necessary to:

- prevent the spread of disease by micro-organisms
- discourage insects and vermin
- prevent sewage contamination of waterways and ground water
- prevent degradation of soil and vegetation
- prevent the spread of odours
- minimise adverse impacts on neighbours and the amenity of the land
- ensure good water conservation practice and appropriate re-use of natural resources (including nutrients, organic matter and water).

To support these performance standards landholders must ensure:

- People do not come into contact with sewage or effluent (whether treated or not) in their ordinary activities on the premises concerned.
- Effluent is not discharged into any watercourse or onto any land other than a designated effluent application area.
- Whatever system of effluent management is used, it is well maintained and operated in a sanitary condition.
- Relevant information is provided to the Council when requested.
- You have lodged an application for approval to operate, and paid the scheduled fee for registration and assessment costs.

Depending upon where you live in the region, there are different requirements in regards to placement of effluent management areas.

The general recommendation is for a buffer distance to be at 100 metres from a permanent surface water (rivers, creeks, lakes etc.) 250 metres to a domestic groundwater well and 40 metres to other waters such as farms, seasonal water courses and drainage depressions.

There are other influences such as property size, soil type and slope that can change how your system is installed or managed. To ensure your system meets approval and minimise the risk of pollution, talk to your Council health officer.

Failing on-site effluent management systems release dangerous levels of sewage pollution to the environment.
How to maintain a healthy effluent management system - some easy tips

Many of these suggestions help reduce the volume of wastewater going into the effluent management system and help avoid the use of chemicals that interfere with how well the effluent management system works.

- In the laundry, if you have a number of loads of washing spread them over a couple of days. This will avoid flooding the system with large amounts of water at one time.
- Use low phosphorous, or better still phosphorous free, detergent. Phosphorous is a major pollutant of waterways and contributes to the growth of algal blooms.
- Repair leaking taps and cisterns and install a lint filter on the washing machine – a stocking over the outlet hose will do. Make sure to clean it regularly.
- If you’ve got a blocked drain, use boiling water or a drain eel to clear the line. Don’t use caustic soda or drain cleaners in a septic tank.
- Use front loading washing machines for households on effluent management systems because they use less water and detergent.
- In the kitchen, use a sink strainer. Food scraps slow down the digestion process and make solids build up more quickly. Don’t pour oils and fats down the sink as they can block the system.
- In the bathroom, install a low-flow shower head to save water.
- Repair leaking taps and minimise the use of commercial cleaners and bleaches – these interfere with the bacterial breakdown in the tank. Try using baking soda, vinegar or a mild soap.
- Don’t flush anything down the toilet that could block the system. Don’t leave taps running unnecessarily, for instance when cleaning teeth. Install an efficient toilet cistern – aim for 4-stars or higher.
- Around the tank and trench area, keep water from the roof downpipes and paved areas away from the absorption field.
- Have a plumber fit an effluent filter to the septic tank outlet to keep solids in the tank and extend the life of your trenches.
- Only plant grass near the absorption field – roots from larger plants such as trees and shrubs are likely to damage the trench. Mow regularly.
- Don’t drive or park on any part of the absorption area and keep livestock away. These will compact the soil and may crush the pipes and trench domes.
- Grow plants with high nutrient requirements near the drain fields and irrigation areas.

Landscaping and irrigation

How the area around an effluent management system is managed is just as important as how the system itself is maintained.

Planting the right kind of vegetation can help keep your effluent management system in top condition.

Contact Council’s environmental health officer for advice before installing an irrigation system or doing landscaping around your trench area.

When choosing what to plant, consider which plants will do best in the local area and soil type, and which ones will best cope with regular doses of nutrient rich wastewater.

The plants must be able to cope with nutrients such as sodium, chloride, nitrogen and phosphorous. Many Australian natives can’t cope with high levels of these nutrients. Visit your local nursery for advice.

Generally speaking, it is best to grow a mix of summer and winter grasses on absorption areas.

If treated effluent is being used to water landscaped areas, nutrient tolerant trees and shrubs should be planted.

More information

Contact your Council’s environmental health officer for advice about how to install and maintain an effluent management system.

Wood smoke and heating
Smoke from wood heaters adds to air pollution. The following measures will help to minimise pollution, improve local air quality, care for your health, and save money.
Tips for efficient wood burning and minimising pollution include the following:

- If you are buying a new heater check the compliance plate on the back to ensure that it meets the current Australian Standard AS/NZS 4013:1999.
- Check that your wood heater complies with your relevant local Council policy.
- Always burn small logs of aged, dry hardwood. Unseasoned wood (green wood) has more moisture making heaters smoke.
- Store wood under cover in a dry ventilated area and away from buildings.
- Freshly cut wood needs to be stored for 8–12 months before burning.
- Never burn rubbish, driftwood or treated or painted wood - it can pollute the air and be poisonous.
- When lighting a cold heater, use plenty of dry kindling to establish a good fire quickly.
- Stack wood loosely in your firebox so air can circulate - don’t cram the firebox full.
- Keep the flame lively and bright. Your fire should only smoke for a few minutes when you light it and when you add extra fuel. Open the air controls fully for five minutes before and 15–20 minutes after reloading.

- Do not let your heater smoulder overnight. Keep enough air in the fire to maintain a flame.
- Check your chimney regularly. If there is smoke coming from the chimney, increase the air supply to your fire.
- Clean the chimney every year to prevent creosote build-up.
- Here are some more tips to reduce your heating bills and saving money:
  - Insulate ceilings, walls and floors.
  - Seal out drafts.
  - Cover your windows with curtains or blinds, use double glazing and place pelmets above curtains.
  - Install doors between different areas of the house so that sections can be closed off to retain heat.
  - Open curtains on north facing windows on sunny winter days.
  - Use ceiling fans to circulate heat that has risen to the ceiling.
  - Wear warm clothing.
  - Close off chimneys when not in use to stop heat escaping up the chimney.

You could also use solar power, green power (electricity produced from renewable energy sources) and gas, as they are cleaner alternatives to wood heating.

More information
For more information about wood smoke, visit the Office of Environment and Heritage website.
Biosecurity

Biosecurity means protecting the economy, environment and community from the negative impacts of pests, diseases and weeds. Biosecurity is essential to ensuring the safety, well-being and prosperity of all people.

Australia is in a unique position because of its isolation and strong quarantine regulations. We have managed to remain safe from many threats as a result of this. NSW by extension has been able to maintain good biosecurity measures.

Changes in a number of external factors have meant that more and more we must be vigilant about strengthening our measures and upholding biosecurity.

Local Land Services works with landholders, industry and the community to uphold biosecurity.

Disease control

The key to controlling the spread of diseases in NSW is prevention and early action. The isolated nature of Australia means that we are in a unique position to be able to protect and quarantine before some diseases even enter the country.

We also must make a concerted effort to protect NSW from risks that are in Australia, but have not yet entered the state.

Controlling the spread of diseases in our plants and animals protects productivity, profitability as well as protecting the safety of all plants, animals and humans in NSW.

Plant diseases

Protecting NSW from the threat of plant diseases requires on-going vigilance on behalf of all farmers and landholders.

There are very clear regulations that have been put in place to restrict the spread of diseases that even exist in other parts of Australia such as potato cyst nematode or lupin anthracnose.

Always be aware of the regulations surrounding different plant industries, as they adapt to shield the state from spread.

Early detection and constant caution when dealing with your land is recommended. Regularly check your plants for anything unusual and keep up to date with current risks.

Adhere to the recommended notion of ‘come clean go clean’ as set out by the Department of Primary Industries.

If you notice anything unusual or are aware of a plant threat, call the Exotic Plant Pest hotline on 1800 084 881.

Quarantine conditions apply to the movement of fruit, vegetables, nursery stock, flowers, plants, soil, seeds and timber.

Find out what quarantine regulations apply to you by either:

- Viewing the travelers’ guide to interstate quarantine at the Quarantine Domestic website, domesticquarantine.org.au or calling the Quarantine Domestic hotline on telephone 1800 084 881 (free call from anywhere within Australia).
Animal diseases

One of the biggest risks of animal diseases is zoonoses. Zoonotic is defined as a disease which can be transmitted from animals to humans.

Approximately 60-70 per cent of emerging human infectious diseases are zoonoses and originate in domestic or wild animals.

Active steps should be taken to reduce the risk of these diseases potentially spreading.

The Department of Primary Industries has more information about some of the greater risk zoonotic diseases.

Other animal diseases can be an on-going threat to the livestock, productivity and profitability.

Landholders are advised to act with caution when it comes to any potential risks and notify authorities as soon as possible if a threat is identified.

For information or advice contact your Local Land Services on 1300 795 299 or to report an outbreak call the national Emergency Animal Disease Watch Hotline on 1800 675 888.

Pest control

Local Land Services helps landholders by providing advice and coordination in eradicating declared pest species.

We also work with private and government stakeholders to develop vertebrate pest management plans and cooperative management programs.

Species currently declared pests in NSW are:

- wild rabbits
- wild dogs
- foxes
- feral pigs
- a number of locust species (the Australian plague, spur-throated and migratory).

Under the Local Land Services Act 2013, all land managers in NSW, whether on public or private land, have an obligation to control declared pest species on their land.

Mice are classed as nuisance animals in NSW and while there is no obligation for a landholder to control these species, Local Land Services can provide advice and assistance in their control.

Remember, you are required under legislation to control these pests and your local office can best advise you on best practice options.

How biosecurity officers can help

At a local level, biosecurity officers:

- provide advice with eradicating declared pest species
- coordinate management plans to control vertebrate pests
- inspect properties for declared pests and help you to develop a plan to control pest populations
- provide advice on controlling nuisance animals – either through group baiting programs (organised with your neighbours) or individual control methods
- provide restricted pesticides for the control of some species and non-chemical alternatives such as traps.

Many biosecurity officers also play a livestock health role. They are responsible for the management of travelling stock reserves in their district and carry out infrastructure maintenance such as fencing, upgrading of watering points, weed control and pest animal control.

They also handle stock movement permits and stock identification. Biosecurity officers also form part of our rapid response effort in outbreaks such as equine influenza.

More information on pest control can be found on the Local Land Services website under pest control.

Purchasing baits

Local Land Services staff will be able to advise you on pesticide control options. There are restricted pesticides available from Local Land Services including 1080, PAPP, Pindone or RHD. There are also various substrates for each poison to ensure best uptake by the target species and minimal uptake by non-targets.

These are supplied on a cost recovery basis.

Priority areas for on-farm biosecurity

1. livestock sales, purchases and movements
2. people, vehicles and equipment
3. feed and water
4. feral animals, pests and weeds
5. animal health management
6. carcass, effluent and waste management
7. staff training
8. planning, recording and monitoring.
Joining a group control program

It is recognised that coordinated group control programs are the most effective method of controlling pest animals across the landscape.

Each year, Local Land Services biosecurity officers assist with the coordination of hundreds of group programs using a variety of control methods. Landholders are encouraged to participate through newsletters, field days and other promotions.

To find out more about group control programs in your area contact your Local Land Services office.

Vertebrate pesticide course

Local Land Services run a short training course which will allow landholders to use 1080, PAPP, RHD and Pindone baits on their properties.

The course gives landholders a clear understanding of how the pesticides work and their legal obligations.

The AQF chemical application courses remain a requirement for use of any other pesticide, including any vertebrate pesticide.

These training courses are delivered by Local Land Services biosecurity officers and cover topics such as baiting techniques, toxicity, storage, transport, legislation and WH&S. Those completing the course will be issued a certification card and will remain accredited to use 1080, PAPP, RHD and Pindone for five years.

A small fee is charged for the course.

Any landholder interested in attending a vertebrate pesticide training course should contact their local office for details of when and where courses are being held.

Top five tips for small livestock farms

Biosecurity on your farm involves all the activities and practices you undertake to minimise the impacts of animal diseases, pests and weeds.

How you approach your on-farm biosecurity can make a difference to the overall profitability of your enterprise. Responding to diseases, pests and weeds ultimately costs money, so investment in keeping your farm free of these problems can help improve productivity and profitability.

1. Know the risks, rules and requirements

- Stay up-to-date with the rules and regulations for keeping livestock through your state Department of Agriculture or Primary Industries.
- Be familiar with animal disease, pest and weed risks in your area.
- Be aware of what you can and cannot feed to livestock.

2. Have a plan

- A biosecurity plan can help you to prioritise, manage and mitigate risks on your farm and reduce costs in responding to a disease, pest or weed outbreak.
- Coordinate with your neighbours on feral animal, pest and weed control plans.
- Pre-planning for emergency events such as natural disasters can speed recovery after the event.

3. Keep records

- Compulsory records such as those for livestock movements and records such as animal treatments, on-farm chemical usage and vendor declarations, are vital to producing safe and traceable food.
- Ask for an animal health certificate when you purchase in new livestock.

4. Control and patrol

- Aim for one signed entry point onto your farm to control visitor entry.
- Keep a visitor register.
- Quarantine new livestock to your farm.
- Undertake frequent monitoring of your livestock and their environment.

5. Spot something unusual? Report immediately

- If you notice unusual clinical signs of disease in your livestock such as lameness, sudden deaths, diarrhoea, salivation or nasal discharge contact a veterinarian or animal health authority for advice immediately.

More information

Local Land Services works with organisations such as the Department of Primary Industries to ensure that the safety and security of our land is upheld. We aim to be able to provide up to date relevant information about potential threats and on-going risks to our plants and animals.

Call Local Land Services on 1300 795 299 for more information.
Regional strategic plans
The Local Land Services regional strategic plan sets the vision, priorities and strategy for the delivery of local land services in the region, with a focus on appropriate economic, social and environmental outcomes. Local Land Services consults with landholders and the community to develop the regional strategic plan.

Playing your part in the region
Good practices on your property will benefit you, the environment, and the prosperity of the region. By looking after water, soil, plants and animals you will benefit not only the natural environment, but also your stock, other agricultural activities and other landholders in the local area and downstream. Good practices will also help to ensure your safety.

This handbook will help you find out about good environmental and safety practices. Neighbours and other landholders in the region can also help you.

Talk to them, join groups such as Landcare or local bushfire brigades, and contact local authorities such as Council and state government agencies for advice.

Get to know the local agricultural, business, tourism and industry activities. These activities combine to support the society and economy of the region.

You can play your part in the local region as a rural landholder.

More information
You can find more information about your region on your regional Local Land Services website. Visit www.lls.nsw.gov.au

What is a Local Environment Plan (LEP)?
A LEP is the principle statutory planning document applying to Local Government Area (LGA).

It establishes different zones, such as rural, residential, industrial, recreation, and business zones. It also outlines various provisions to control development, for example on flood prone lands, within heritage conservation areas and environmental areas.

For each zone, a LEP will give a list of objectives that indicate the aims intended for that zone.

Each zone also lists the types of development within that zone that are either permissible or prohibited.

To work out whether a particular development is permitted within an area, you should contact Council to find out how the area is zoned under the LEP.

Before you design your development, check with Council to see if the proposal is permissible and consistent with the standards within the relevant LEP.

A duty town planner is available daily for consultation and can be contacted at your local Council during business hours.
What is a Development Control Plan (DCP)?

Development Control Plans (DCPs) provide specific, more comprehensive guidelines and standards for certain types of development, or for smaller areas of the Bathurst Regional LGA.

The detailed guidelines contained within a DCP are in addition to the provisions of the statutory planning instrument (the LEP).

DCPs are important in the planning system because they provide a flexible means of identifying additional development controls and standards for addressing development issues.

Matters generally addressed in a DCP include building setbacks, car parking standards, building material types and landscaping.

When you are designing your development, whether it be a dwelling or shed, check with your Council to see what development standards would apply and advise your designer of these standards.

What are Strategic Land Use Plans or Land Use Strategies?

Strategic Land Use Plans aim to guide the future land management and development of urban and rural lands.

They also aim to identify the best places for a range of land uses including agriculture, business development, urban development, and other types of land uses within a Local Government Area.

Consideration of the potential land use conflicts are generally discussed within the document as well as opportunities and constraints for the inclusion, or exclusion, of land for specific uses.

The Strategic Land Use Plans are used by Council to inform its decision to rezone land associated with future Local Environmental Plans, the programming of infrastructure projects and to assist in the overall strategic growth of the Local Government Area.

The soils, rainfall, temperature and weather can vary remarkably across the entire region, and some species such are better suited to particular sites than others.
My Notes
The Rural Living Handbook

Even the smallest rural blocks will provide a challenge if you have never before encountered noxious weeds, prepared for a bushfire or managed biosecurity issues.

Local Land Services is providing this handbook to let you know about the many resources available to you, as well as your responsibilities as a land-owner.

Keep this handbook as a helpful reference that you can refer to when needed.

This handbook provides useful information on:
- buying your property
- natural resources
- property management
- biosecurity requirements.