

Rural living handbook

**A guide for rural
landholders**



**Local Land
Services**

www.ils.nsw.gov.au

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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 handbook. The information contained in this publication is based on knowledge and understanding at the time of writing May 2020, however because of advances in knowledge, you need to ensure that information upon which you rely is up to date by checking the currency of the information with Local Land Services or your independent adviser.

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 was a collaborative project built on the work of Jack Miller, Landscape Planner, Goulburn Mulwaree Council and contributions of various government, industry and community stakeholders.

Local Land Services recognises the unique, diverse and enduring cultures of First Nations peoples in NSW and their strong, ongoing social, spiritual and cultural connection with their traditional lands and waters. We acknowledge the Traditional Custodians of the land and pay respect to Elders past, present and future.

Contents

Introduction to rural living	2
The great Australian dream	2
Buying a rural property	3
Before you buy checklist	3
You have a rural property, what next?	5
Property plans	6
Natural resources	7
Water	7
Soil	10
Native plants.....	13
Native animals	16
Cultural heritage	19
Aboriginal cultural heritage	19
European cultural heritage.....	20
Property management	21
Agricultural advice	21
Stock	21
Fences.....	27
Your local area	28
Chemicals.....	30
Lead.....	32
Waste management	32
Wastewater management	34
Heating and energy	36
Health and safety	37
Absentee landholders	39
Developing your property	40
Improving your skills	41
Rural crime.....	41
Diseases, pests and weeds	42
Biosecurity.....	42
Diseases.....	43
Domestic dogs and cats	44
Pests	44
Weeds	46
Emergencies	47
Floods, Storms, Bushfires	48
Planning	50
Regional strategic plans	50
Local Land Services plans.....	50
Local government plans	50
Small landholdings	51
Every Bit Counts	51
Small landholdings top tips.....	51
My Notes	52
Credits	53

Introduction to rural living

The great Australian dream

For many of us, the idea of ‘getting away from it all’ and becoming a part of a rural community is a lifelong dream. If this is your dream, this handbook is for you.

The Rural Living Handbook takes you through some of the major aspects of buying and managing a property as well as living and working in a rural area.

Its aim is to assist you to experience the wonderful aspects of rural life as well as to make you aware of the risks and responsibilities that come with that lifestyle.

You might read about issues or information you previously had not thought of. The handbook is designed to be a springboard for you to do further investigations on topics of most relevance to you.

Each section includes lists of useful resources and websites as well as contact details for organisations that provide support to rural landholders.

Local Land Services is a government agency tasked with providing practical, on-ground services that help secure the future of agriculture and the environment in rural NSW. We are here when it matters right through your journey of becoming part of a rural community. We can assist you from the time you buy and set up your property, through to starting or expanding farming operations and ongoing management of your land. We will also be with you in tough times such as emergencies.

Ultimately, this handbook is a tool to help you make the right decisions that will equip you to live sustainably, not only as an individual, but in your local community and the wider world. We hope you can get the most out of your property, protect the health of your family, land and animals as well as the natural environment, contribute to your local community and above all, enjoy rural living!





Buying a rural property

Before you buy checklist

Before you purchase a rural property you should realistically and honestly assess your expectations and capabilities. Owning a property can be a lot of work. It is important to be fully aware of the responsibilities and commitments required to meet your legal requirements. Ask yourself the following questions to see if there are issues you may need to consider or investigate further.

Important note: this checklist is designed to provide general advice only. It is not comprehensive, nor does it provide legal advice. You should always seek legal advice before buying any property.

Property history

- Do you know the history of the property? Request a property search from Local Land Services to ensure there are no outstanding rates, levies or restrictions due to chemical residues, plant or animal diseases on the property.
- What stock did the previous owner have?
- Did they sow pastures and use fertilisers?
- Are there any contaminated sites on the property such as cattle dips or rubbish dumps needing remediation?
- Have you requested a sheep and/or cattle health declaration from the vendor? (This can tell you important information about livestock diseases that might affect the ongoing use of the land.)
- Are there any derelict mine shafts on the property? If so, are they fenced to ensure your safety?

What is on the property and nearby

- Are there any structures on the property and if so, what condition are they in?
- Are there pest animals (e.g. rabbits, foxes) on the property? (See pages 44–45.)
- Are the fences in good repair and suitable for confining stock if that is part of your plan? (See page 27.)

- Are there threatened species of flora and fauna on or near the property? (See page 18.)
- 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.
- 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?

Ask your local council or authority if there are:

- Any development applications current for the nearby area?
- Any restrictions on obtaining approval to build a house or other buildings on your block, or to develop certain desired land uses? (See page 40.)
- Other developments that have been approved but not commenced or were built without approval?
- Any potential constraints under the Section 10.7 Certificate from the local council? (Ask your council to view this certificate and discuss with your conveyancer or solicitor.)
- Is the land prone to flood or bushfire? Will you need to undertake any management activities to minimise these impacts? It may be more expensive to build and get insurance on flood or fire-prone land. (See pages 48–49.)
- 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?
- Are there any outstanding weeds notices on the property?

Land zoning and regulations

- Do you know what the land is zoned and what agency or local government is responsible for activities such as native vegetation management in that zoning? For instance, is it your local council or Local Land Services? Local Land Services can help you with a property search.
- 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? (See page 40.)
- If there is no existing dwelling and you want one, does the land have a dwelling entitlement?
- If you plan to buy a property in far western NSW are you aware there are special conditions apply to land in the Western Division? (See page 28.)

Your plans for the property

- Are you buying the property more for lifestyle reasons? (Many of the regulations and responsibilities of owning a rural property apply across the board, regardless of whether it is a lifestyle block or a productive enterprise.)
- Do you plan to improve the property and receive an income from it? Have you done a cost-benefit analysis? For instance, how many stock do you need to carry in order to be viable and can the property support that?
- Is the activity you plan for the property suited to the landscape and capability of the land?
- Is the activity you plan for the property likely to clash with those of your neighbours?
- Do you know the regulations and conditions for building dams or that you may need approval for sinking bores? Do you know that digging near a watercourse may require a permit? (See pages 7-9.)

- Is there enough water of suitable quality to sustain the activity that you have in mind? (See pages 7-9.)
- 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 or erosion issues? (See pages 10-12.)
- Are there any existing conservation agreements or covenants, vegetation management plans such as Property Vegetation Plans (PVPs), Land Management Code Certificates and Private Native Forestry Plans or conditions of consent over part/s of the property? These may require you to undertake specified management actions, or limit the land use on part of the property?
- Are you aware that in most instances you require approval to remove native vegetation? How might this affect your proposed activities? (See page 15.)
- Are there good quality pastures? Are they dominated by native or introduced species? (See page 23.)
- Is there enough shade and water for stock?
- Will you be living on the property? If not, how often do you plan to be there? Have you thought about how quickly you could attend to situations that might arise? (See absentee landholders on page 39 and rural crime on page 41.)
- Do you understand the term General Biosecurity Duty? (See page 42.)
- What weeds are on the property? Are any on State and Regional priority weed lists? (See page 46.)
- Will the amount of time and money required to control weeds, erosion and pest animals be excessive? After considering all these questions, will the property provide the rural lifestyle that you are looking for?

Resources and websites

- Local Land Services has a range of information and services including property searches. Our website has an interactive map —enter your property address or postcode to find your nearest office. We also have resources for prospective property owners including the ‘Managing native vegetation on a rural property’ fact sheet which you can find by searching our website. Go to www.lls.nsw.gov.au
- To find your property’s zoning, type in your land address or Lot and Deposited Plan number to www.planningportal.nsw.gov.au/spatialviewer
- Search the NSW Department of Primary Industries website for fact sheets including ‘Considerations before buying rural land’ (Primefact 1142) and ‘Cattle dip yards’ (Primefact 1371) www.dpi.nsw.gov.au
- Your local council can offer advice including on whether land is flood prone, weed notices and Section 10.7 Certificates. Follow the links www.olg.nsw.gov.au/find-my-council
- Go to the NSW Rural Fire Service website to search for ‘bush fire prone land’ www.rfs.nsw.gov.au
- For information on whether there are current or former mining operations on the property consult www.minview.geoscience.nsw.gov.au and digsopen.minerals.nsw.gov.au
- See if the property is connected to the National Broadband Network www.nbnco.com.au/learn/rollout-map
- Fair Trading NSW has tips on buying property and agricultural tenancies www.fairtrading.nsw.gov.au

You have a rural property, what next?

There are a few things you need to know about your responsibilities as a rural landholder and how to get help to carry out your rural living goals.

Local Land Services: here to help

Local Land Services is the front line agency tasked with:

- management of animal health and livestock diseases
- pest animal and insect control
- travelling stock reserves
- stock movement and identification
- land management including consents to remove native vegetation
- Private Native Forestry advice and approvals.

Our veterinarians provide advice and assistance to livestock owners. Our biosecurity officers bring landholders together to help protect farms and environments through control of wild dogs, rabbits, foxes, pigs, plague locusts and other pests. We provide education, training and support, and help co-ordinate group control programs.

We work with landholders and community groups to implement on ground projects that enhance and improve our natural resources such as revegetation works and stream rehabilitation.

In partnership with the NSW Department of Primary Industries, we help manage livestock and disease emergencies such as drought, bushfires and floods and biosecurity events involving plants, animals and pest insects.

We provide you with advisory services to help you grow your enterprise including expert agricultural advice on farm management, cropping, livestock, mixed farming, pastures, horticulture, rangelands grazing, soils, land management and capability, seasonal conditions, irrigation and farming in small areas or on urban fringes.

We can connect you with a range of services and advice such as grant and funding opportunities, education and training.

Local Land Services also works to support Aboriginal people to care for Country, share traditional land management knowledge and help protect and strengthen Aboriginal cultural heritage.

Your responsibilities as a rural landholder

Rural landholders have responsibilities under the *Local Land Services Act 2013* and the *Biosecurity Act 2015*.

It is your responsibility to:

- lodge a Land and Stock Return by 31 August each year—your return information is invaluable in the event of an emergency animal or plant disease outbreak
- 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 (see page 28).

Local Land Services rates are separate to council rates.



Why not consider?

- Going to field days, workshops and webinars run by Local Land Services to get more agricultural advice.
- Signing up for your Local Land Service regional newsletter and following the relevant Facebook page/s.
- Joining a local group such as Landcare, NSW State Emergency Service or NSW Rural Fire Service.
- Contacting local service groups and find out what they do in the community.
- Getting to know your neighbours.

Property plans

Property plans can help you 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. The basic property plan guide below will help get you started.

Property plan guide

Obtain a good map of your property, one that is to a metric scale of a large enough size to clearly show the features of the property. Aerial photographs are very useful, as well as surveyor's boundary plans, topographic and cadastral plans.

You will need to identify the following:

- soil types and characteristics as well as areas of soil degradation
- slope
- areas of natural vegetation and vegetation type
- the presence of endangered species as appropriate
- streams, gullies, drainage lines and dams
- flood liable land
- water and shade areas for stock
- rock outcrops
- climate, rainfall and seasonality
- landscape types and physical features
- current land uses.

Carry out a SWOT (strengths, weaknesses, opportunities and threats) analysis, considering:

- the property's strengths you can take advantage of e.g. areas of high quality soils
- the weaknesses that will need attention before they cause problems e.g. existing weed infested areas
- opportunities to develop resources further e.g. moving fence lines to improve management
- threats that could affect the property e.g. erosion.

On an overlay of your property map, illustrate the permanent features such as the property boundary, waterways, vegetation, structures, contours and land types (i.e. the most productive soils to the least). Use this information as a base. On another layer, sketch where features are wanted, e.g. fences, productive paddocks, shelter-belts, wildlife habitat areas, woodlots, dams, troughs, lanes and gates. Rearranging fences according to land features can help you to use the land more efficiently.

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
- vegetation management including methods and timing of any proposed clearing for increased production or efficiency as well as revegetation in disturbed areas
- the frequency of planned harvests if your property has a Private Native Forestry plan or you are considering one
- wildlife management strategies
- methods to control stormwater and prevent erosion
- ways to reduce bushfire hazards, conserve soil and preserve trees
- options for treating and disposing of wastewater and rural rubbish
- legal and planning requirements
- methods to improve stock or alternative water sources for stock.

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 plan actions and prioritise them. Constantly monitor, improve and reshape your goals as necessary.

Resources and websites

- Speak to Local Land Services for help with farm planning help www.lls.nsw.gov.au
- Purchase or view maps and aerial photographs of your property. Visit NSW Spatial Services at www.spatial.nsw.gov.au and via the free map viewer maps.six.nsw.gov.au
- NSW Land Registry Services can assist with cadastral plans and survey marks www.nswlrs.com.au
- Free imagery (of lesser quality) can also be obtained through Google Earth www.google.com/earth
- Search for farm management training options www.myskills.gov.au



Natural resources

Water

Water management is an essential part of rural living. Rivers and creeks are vital living ecosystems that carry water from catchments into estuaries and oceans. They support thousands of species of fish, frogs, aquatic plants and insects, while yielding water for drinking, agriculture, industry and recreation. Efficient use of water can minimise costs and maximise the benefit to you, your property and downstream users as well as prevent severe impacts on aquatic ecosystems.

Water law

When it comes to regulation and management of water in NSW, there are laws about:

- access to water
- equitable sharing of water
- applications for licences and other approvals (such as building structures in streams)
- illegal activity.

Relevant legislation includes the *Water Management Act 2000*, and the Water Management (General) Regulation 2018. There are three types of basic landholder rights in NSW under the *Water Management Act 2000*:

- domestic and stock rights
- native title rights
- harvestable rights.

Responsibilities for granting and managing water licences and approvals are split between the Natural Resources Access Regulator (NRAR) which mainly deals with utilities and irrigation corporations, but also manages floodplain harvesting and ‘controlled activities’ and WaterNSW which mainly deals with rural landholders. (See ‘Resources and websites’ on page 9 for more about landholder water rights.)

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.

Where the property frontage is Crown Land, or where there is a reserve between the property frontage and rivers or creeks, this basic right does not apply and you may need a licence.

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. Any excavation or work in or within 40 m of the bed or bank of a watercourse may be classed as a ‘controlled activity’ and therefore may require a licence.

Irrigation

Many agricultural practices require irrigation to be viable. Contact us at Local Land Services for information about how to best irrigate. You need a licence to draw any water from a stream or groundwater source for irrigation. This also applies to water in dams that has been pumped from a stream or groundwater source. You also need to get a licence before drilling a bore.

Riparian zones

A riparian zone is land alongside creeks, streams, gullies, rivers and wetlands, from the normal water level and across the floodplain. Riparian zones can be degraded by recreational use, land management practices including cropping and grazing and competition from pest animals such as rabbits and plants such as willows and blackberries. Degredation can cause weed infestation, flow restriction, unstable banks as well as loss of windbreaks and shelter. Native vegetation is declining along streams and river banks. 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. Special conditions apply to riparian zones, including that you gain approval for any removal of vegetation. Ask Local Land Services for specific advice.

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

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

Farm dams

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

Harvestable rights

As a landholder, you have a harvestable right to capture 10 per cent of the rainfall runoff from your properties and use it for any purpose without needing a licence.

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 runoff calculations. Any existing dams have to be factored into your overall entitlement.

Farm dam licensing

Dams that conform to previous legislation and were built before January 1999 do not need a licence. Building a new farm dam in excess of the MHRDC or located on a larger (3rd order or higher) stream need a licence. 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. (See 'Resources and websites' on page 9 for formulas for harvestable rights and information on farm dam licensing.)

Managing farm dams

All dams, new and existing, should be managed to maximise the benefits to stock safety and health and minimise impacts on the environment.

Improve your dam's health by:

- preventing nutrients from entering the dam by leaving an unfertilised strip where water flows into the dam

- avoiding using fertilisers, herbicides and pesticides in runoff areas around dams and waterways
- encouraging native plant growth—reeds, sedges and rushes at the water's edge and grasses and shrubs on the banks
- encouraging grass growth on the spillway to prevent erosion
- not planting trees along the dam wall as their roots may weaken it
- wherever possible, using fencing to limit stock to one or two locations at the dam
- establishing shade trees away from dams so stock do not gather around dams to keep cool in summer
- if possible, watering stock with troughs in order to minimise fouling and erosion of your dams.

Stock requirements

Stock must always have access to clean, cool water. Before you purchase stock, you need 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 usually need the following amounts of water as a minimum:

- horse - 12,000 litres a year (40-50 litres a day)
- sheep - 1,230 litres a year (2-6 litres a day)
- beef cattle - 13,500 litres a year (35-80 litres a day)
- pig - 9,000 litres a year (9-18 litres a day)
- dog - 365 litres a year (1 litre a day).

Note: requirements will be at the high end on hot days.

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 and a lactating ewe up to 10 litres), 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).



Water during drought

Many properties, particularly small holdings use their water systems for multiple purposes, including domestic supplies, livestock, orchards and fire safety supply. It is important to design your water system to cover all seasonal conditions, including drought.

In dry times, areas of NSW are classified according to the Combined Drought Indicator (CDI) which takes into account rainfall, soil water, plant growth as well as rainfall trends. The NSW Department of Primary Industries regularly updates CDI listings. Know what is current and predicted for your region and plan early.

Some actions you can take include:

- conduct a comprehensive audit of the available water on your property for both quantity and quality—poor quality water can cause human and animal health issues
- calculate your dam levels—if you need help, contact your nearest Local Land Services office where staff can assist with mapping and calculations for your property
- check for blue-green algae in dams that are low—algal blooms pose dangers for humans and animals
- think about the distances your stock have to travel to reach water and take action to avoid dehydration
- manage your stock levels according to water supplies
- attend a Local Land Services drought management workshop or webinar.

Reducing water use

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

Follow these tips to **use less water inside**:

- buy water efficient appliances such as washing machines and dishwashers and install dual flush toilets and water saving shower heads
- only use washing machines and dishwashers when full or if they can be adjusted for part loads
- ensure that there are no leaks in your plumbing system and repair any dripping taps promptly
- install water efficient taps and tap aerators—most local councils offer rebates for these.

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.

Ways to **conserve water in the garden** include:

- use greywater (household wastewater) in an approved manner—check with your local council
- mulch all garden areas to a depth of 75 mm
- water plants in the early morning or evening
- compost waste to improve soil
- keep lawns at least five cm long to reduce evaporation as the blades shade each other
- allow your lawn to brown off in summer—to be considered alongside your fire protection regime
- encourage deep roots in plants by watering them less often, for longer periods at slow rates
- install a drip irrigation system, rainwater tank and/or greywater treatment system.

Resources and websites

- For information and advice on funding available for river restoration work, support on erosion control or approval to clear riparian vegetation contact your nearest Local Land Services office
- Head to WaterNSW www.waternsw.com.au for:
 - o resources on farm dams including search for ‘The Farm Dam Handbook’ (2011)
 - o information on harvestable rights and a calculator to work how much you can access
 - o application and fee information for licences including for irrigation and bores.
- For information on licences for ‘controlled activities’ see www.industry.nsw.gov.au/water
- For water resources during drought go to the NSW Drought Hub www.dpi.nsw.gov.au/drougthub
- From the app store, get the NSW DPI Farm Tracker app to monitor conditions on your property
- The NSW Department of Primary Industries offers a water testing service to determine the water suitability for agricultural and domestic purposes. Search ‘water testing’ at www.dpi.nsw.gov.au
- Search for the fact sheet ‘Stocktaking water supply for livestock’ (Primefact 269) at www.dpi.nsw.gov.au
- Get involved in your local Landcare group to protect water resources www.landcarensw.org.au
- For general tips on using water wisely go to www.sydneywater.com.au
- The Soil Conservation Service can build dams (fees apply) www.scs.nsw.gov.au



Soil

Your soil is a valuable resource and is the foundation for all landscapes and production systems. Ultimately soil is a combination of physical, chemical and biological properties. The nature of each of these is influenced by the original parent material, climate, environment and management. Understanding each of these components is important for the health of your soil and the overall health of our catchments.

Physical soil properties include the structure, texture (ratio of sand, silt and clay) and colour. Chemical properties include Cation Exchange Capacity (CEC) which is the soil's ability to hold nutrients, soil pH and the nutrients present, e.g. nitrogen (N), phosphorus (P) and potassium (K) among others.

Biological properties can refer to the organic matter, microbes and macrofauna e.g. worms, in the soil. Each of these components can influence one another. For example, soil texture has a large impact on water holding capacity, soil CEC and pH.

Understanding the individual properties of your soil will allow you to make good decisions on how it should be managed across the local landscape for both productive and environmental outcomes. It is recommended that you conduct a soil test on various parts of your property to help understand the capability of your soil.

Tips to minimise erosion and retain topsoil

- Ground vegetation should provide at least 70 per cent groundcover at all times (50 per cent in semi-arid areas).
- Groundcover 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 10–30 m 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. The Department of Planning, Infrastructure and Environment - Environment, Energy and Science (EES) group defines eight classes of land, based on its suitability for particular activities. It is recommended that you don't plough land that is in classes five to eight. Search 'soil capability' at www.environment.nsw.gov.au

Groundcover

Groundcover is living or dead plant material which serves to protect the soil from degradation, improve water retention and assist in soil nutrient cycling. You should aim to maintain greater than 70 per cent groundcover on your soil to maximise its benefits. When grazing livestock, aim to move animals to another paddock before groundcover is reduced to below optimal levels. This allows the paddock to recover and regrow more biomass. Understanding how much feed your stock will require will also assist in planning when they will need to be moved. Matching plant species, whether native or introduced, to your soil type will assist in having healthy plants to maintain groundcover and also maximise potential production. It is recommended that you seek advice to assist in developing feed budgets for your pasture paddocks to prevent overgrazing and maintain sufficient groundcover.

Erosion

Be mindful of potential degradation issues which can arise as a result of climate or management, one of which is soil erosion. Erosion results in topsoil and other matter being washed or blown from your property. This means the loss of valuable nutrients and organic matter, or your growing 'medium'.

There are various forms of erosion including sheet, rill, gully, stream bank, in-stream and wind erosion. Some soils are very susceptible to erosion.

Factors contributing to erosion include:

- slope
- rainfall intensity
- percentage of groundcover
- sodicity
- soil structure.

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. See page 10 for tips to prevent soil erosion.

Three basic tips 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 to raise pH. Organic matter can also help nullify some implications of low pH e.g. aluminium availability.
3. Use plants that are tolerant of acid soil conditions.

Acidity

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

Causes of soil acidity include:

- natural pH decline through nutrient leaching
- past and present land use
- natural movement of alkaline nutrients through plant material
- removal of alkaline plant and animal produce
- long-term result of breakdown of ammonium fertilisers.

Effects of soil acidity include:

- restricted agricultural viability and production rates
- increased production costs, i.e. the addition of lime
- groundcover decline, increasing the likelihood of erosion and declining water quality
- change in nutrient availability.

Dryland salinity

Dryland salinity can occur when water in the soil brings salts to the surface, allowing the salt concentration to increase as the water evaporates. 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 rural and regional NSW. Some properties are particularly prone due to natural factors such as rock/sediments containing high levels of salt, salt in rainfall, salt coming in with wind-blown material, landform and the movement of groundwater in the landscape.

Causes of dryland salinity 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 can bring salt to the surface
- over-watering of gardens and paddocks, raising the water table
- watering with salty water sources
- blocking natural groundwater flow, e.g. by roads or dams.

Effects of dryland salinity include:

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

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. Landholders sometimes use the term 'spewy' to describe sodic soils.

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

Effects of sodicity include:

- hard set or crusted surface soils that do not support effective pasture growth or crop production due to ineffective water infiltration and/or restricted plant emergence

- waterlogging—where sodicity extends below the surface soil layer
- landscape scale problems such as erosion and runoff from sodic soils that carries soil particles into waterways causing problems in rivers and wetlands.

Treatment for sodicity includes:

- applying gypsum or lime (dependant on soil pH) to the affected soil to improve soil structure—this is not a permanent solution as reapplication will be required in a few years
- stopping the subsoil from being exposed by retaining good deep rooted vegetation, maintaining complete soil surface coverage and minimising soil disturbance from tillage of soil
- matching sodic soils with a realistic production system e.g. grazing permanent native pasture, which is more suited to that environment.



Resources and websites

- Local Land Services has information, workshops and webinars on stocking and cultivation to avoid erosion, soil testing, soil texture, obtaining and using soil kits and more. Search for 'soil' at www.lls.nsw.gov.au
- The NSW Department of Primary Industries has many soil resources www.dpi.nsw.gov.au/agriculture/soils
- The Soil Conservation Service is a business arm of Local Land Services which provides fee-for-service consultation and construction projects including erosion and sediment control, conservation earthworks and farm property management www.scs.nsw.gov.au
- Access information including soil profiles www.environment.nsw.gov.au/soils

Native plants

It is important to understand the native vegetation on your property and its place in the landscape and within ecosystems. Start by learning what existing plant species you have on your property, what you could plant for various purposes, how you could help conserve remnant vegetation and your options for managing native vegetation, including clearing for increased production or efficiency.

Remnant native vegetation

Remnant native vegetation is vegetation indigenous to the local area, including forests, woodlands and native grasslands. Over the past two centuries, much of the original native vegetation across NSW has been cleared for agriculture and other land uses.

An absence of native vegetation can result in problems such as soil erosion, poor soil structure, weed invasion, salinity, reduced water quality, and loss of biodiversity. As a general rule, 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.

Plants for your property

Trees and other native plants 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. 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 soils, rainfall, temperature and weather can vary remarkably across the entire region, and some species are better suited to particular sites than others.

Plants for wastewater management areas

Planting lawns and shallow rooted plants and grasses around an wastewater disposal area will greatly increase the system's efficiency. A variety of native species can be used for wastewater disposal systems, however some will not cope with the high nutrient levels. See more on landscaping around wastewater management areas on page 35.



Identifying and using native plants

- To find out which of plants suit your specific location, talk your neighbours and local nurseries.
- Search the Royal Botanic Garden Sydney's PlantNET identification database plantnet.rbgsyd.nsw.gov.au
- Many local councils have lists of local species and some offer seedlings for growing native gardens.
- Local Land Services has vegetation guides that are made for Travelling Stock Reserves but are relevant for whole regions. Search 'TSR vegetation guides' at www.lls.nsw.gov.au



Benefits of native vegetation

Consider maintaining your remnant woodland or forest, isolated paddock trees and native grasslands on your property.

Native vegetation can:

- provide groundcover to stabilise soil
- help prevent sediment entering waterways
- provide shelter and feed for livestock
- protect against drying winds
- moderate temperature extremes
- provide habitat for a range of native wildlife—when it adjoins neighbouring native vegetation, it can be a safe corridor for animals to travel through
- reduce the spread of windblown weed seeds
- protect an area from rising water tables and salinity
- create a beautiful landscape.

Ways to look after native vegetation:

- fence remnant vegetation areas with fauna friendly fencing to protect them from grazing livestock
- avoid fragmenting existing areas of native vegetation, including remnant grasslands
- if you build new fence lines, roads or services, construct them around areas of native vegetation rather than through them (see more wildlife friendly fencing tips on page 27)
- 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)
- set aside parts of your property for revegetation by natural regeneration from regrowth or seed.

When planning a re-planting program, try to:

- source native seed 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
- collect and propagate seed from your property—Landcare can advise on the method.

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. INS can have a serious adverse impact on habitats, landscape health, communities and farming operations. Control measures must be planned for long term follow-up to ensure success. As with any native vegetation management activities, INS management must be approved through processes under the Land Management Framework (see page 15).

Interested in conservation?

- See if there are any grants or incentives for protection and rehabilitation currently available through Local Land Services. Contact your nearest office on 1300 795 299 or go to www.lls.nsw.gov.au and click on the map or enter your postcode to follow the links to your local region's page where you will see 'Grants and funding'. The types, eligibility and timeframes of grants vary from region to region. We can also give you advice on native vegetation management specific to your property.
- There are a number of types of private land conservation agreements available through the Biodiversity Conservation Trust www.bct.nsw.gov.au
- Find a Landcare group near you www.landcare.nsw.gov.au
- Land for Wildlife is a voluntary property registration scheme for landholders who wish to manage areas for biodiversity and wildlife habitat www.cen.org.au/projects/land-for-wildlife
- Conservation Volunteers Australia www.conservationvolunteers.com.au
- Greening Australia www.greeningaustralia.org.au

Managing native vegetation

In NSW there are a range of land management activities that you can do, including the legal clearing of native vegetation.

Prior to undertaking any activity on your property, it is important to check if approval is required. Assessment and approval pathways for clearing native vegetation will depend on the purpose, nature, location and extent of the clearing. Be aware that the clearing of native vegetation and habitat loss is a key threatening process for many endangered plants and animals. Clearing without approval can result in substantial fines.

When to contact your local council

If you need development approval, contact your local council to discuss your proposal. Under the *Environmental Planning and Assessment Act 1979*, 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. Some agricultural activities may also require development approval. If you don't require development approval but your proposed activity is on an area zoned as non-rural (e.g. urban, peri-urban, environmental zones) under a local council's Local Environmental Plan, talk to your local council.

When to contact Local Land Services

If a development approval is not required and the proposed activity is on rural zoned land (under the local council's Local Environmental Plan) and you are proposing to undertake agricultural activities, talk to us. **Note: Rural land is land zoned RU1, RU2, RU3, RU4, RU6 and deferred matters. RU5 is not considered rural land.**

The Land Management and Biodiversity Conservation Framework

The Framework (made up of the *Biodiversity Conservation Act 2016* and *Local Land Services Act 2013*) provides a balanced approach to rural land management and biodiversity conservation in NSW. The Land Management Framework describes those aspects that relate to native vegetation management on rural land.

Local Land Services can help with a range of services relating to the Land Management Framework including advice, approvals and resources.

Rural land categories

Under the Framework, your options for managing native vegetation on your property are determined by the category of your land. Local Land Services can help you understand your land's categorisation.

Rural land in NSW is categorised into:

- exempt land (Category 1)
- regulated land (Category 2)
- excluded land (Category 3).

Allowable activities - no approval from Local Land Services is required

Under the Framework, If your land is 'exempt' (Category 1), and therefore unregulated, you can remove native vegetation so long as you do not knowingly harm an animal or damage the habitat of an animal that is a threatened species or part of a threatened ecological community. If your land is regulated (Category 2) you can undertake a range of allowable activities which are routine land management activities associated with agriculture and other common practices in rural zoned areas. If you are unsure whether your proposed clearing is an allowable activity, talk to Local Land Services.

Land Management (Native Vegetation) Code 2018

If you don't meet the requirements for clearing without approval, you have options within the Framework under the *Land Management (Native Vegetation) Code 2018* (the Code). The level of approval needed depends on the impact of the proposed activity. Before you start any activity, you will either need to notify Local Land Services or seek approval from us.

There are five parts of the Code :

- Invasive native species—which enables the removal of invasive native species that have reached unnatural densities and dominate an area—this Code part is designed to promote the regeneration and regrowth of native vegetation.
- Pasture expansion—which enables the removal of woody native vegetation by uniform or mosaic thinning to promote native pastures and increase farm efficiency and productivity.
- Continuing use—which enables the continuation of lawful land management activities that were in place between 1990 and 25 August, 2017.
- Equity—which enables the removal of paddock trees and the clearing of compromised native groundcover. It also allows for the clearing of small areas of native vegetation in cultivated land in exchange for setting aside and maintaining areas of remnant vegetation as well as clearing of regulated rural land, also in exchange for set asides.
- Farm plan—which enables the removal of paddock tree areas and clearing regulated rural land in exchange for set aside areas containing vegetation or set aside areas where revegetation will be required.

A Local Land Services land management officer can help you work through the Code options.

Other Note: *The Code does not apply on some sensitive land types including critically endangered habitat. In the coastal zone, you can only apply the Code if your primary land use is agricultural.*

Other approvals

Some types of land management activities require you to obtain other NSW or Commonwealth government approvals. ***It is your responsibility as the landholder to obtain any other approvals that may be required before undertaking clearing.***

Private native forestry

Private native forestry (PNF) is the sustainable management of native forests on private property. PNF allows for a range of forestry operations to be undertaken in accordance with the principals of ecologically sustainable forest management. This can include activities such as fire management, thinning or the harvesting of timber for a variety of products such as flooring, construction timber, power poles, furniture and firewood.

Local Land Services is the agency that provides advice and approvals for private native forestry.

Landholders are required to hold an approved Private Native Forestry Plan (PNF Plan) to undertake forest operations in native forests on their land. Once a PNF Plan is in place, landholders and contractors must meet the requirements of the relevant PNF Code of Practice. Many landholders choose to undertake PNF on their land because it can provide an extra income stream each harvest, which can range in frequency from 10 to 30 years. PNF can be managed on a property alongside other land uses such as recreational enjoyment or farming.

Advice, approvals and resources

Local Land Services specialist officers can:

- explain the Land Management Framework and how it applies to your property
- talk through your options including allowable activities
- help you prepare an application under the *Land Management (Native Vegetation) Code 2018* if requested
- give you advice about your Private Native Forestry (PNF) options and help you through the process of applying for a PNF plan.

Contact us by email slm.info@lls.nsw.gov.au for land management advice or pnf.info@lls.nsw.gov.au for Private native forestry help.

Native animals

Native animals in NSW are protected, except dingoes (see page 18). This means that it is illegal to trap, kill or harm them unless licensed otherwise. It is important to understand how you can live in unison with native animals on your property and manage situations when they pose a threat to your safety or activities.

A fauna-friendly home: mammals and birds

To encourage small birds and mammals, such as sugar gliders, around your home you can:

- 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
- avoid planting large numbers of red flowering shrubs because they can attract noisy miners and larger honeyeaters that actively exclude other smaller birds
- provide bird baths and other watering points
- build and maintain nest boxes where few hollow trees remain and monitor them to ensure they are not being taken up by pest species such as Indian mynas and starlings
- keep a belt of native trees to connect bushland areas as these provide habitat and stepping stones for small birds and mammals that can not travel larger distances
- leave fallen timber and hollow logs where fire is not a major threat
- do not remove Mistletoes (a semi-parasitic plant that grows on trees) as they are an excellent source of food and habitat for a range of animals and removing them can damage the tree.





If you would like to provide food for mammals and birds, 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. Artificial feed is not recommended.

A fauna-friendly home: aquatic life

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. Many aquatic creatures such as eels and insects will colonise on their own if you establish and maintain a healthy pond, dam or creek.

To encourage frogs to colonise your property:

- use ponds or pools as part of your garden landscaping, noting that some pond habitats may also attract snakes, so place them away from buildings or lawn areas
- place large rocks or boulders around one end of a dam for shelter and over-wintering
- put logs or other large section offcuts around the edge of a few dams with half in the water and half out
- add plants that thrive around the water's edge like rushes (*Juncus*) and sedges (*Carex*, *Eleocharis*) in clumps around a section of a dam's margins (bulrush, while suitable from a frog's perspective may cause problems around the dam and is not suitable)
- add tussocky plants like mat rush (*Lomandra*) and flax lillies (*Dianella*) a short distance away from the dam for sheltering and foraging
- don't plant Phragmites (reeds) or bulrush in dams.

To encourage native aquatic life or stock dams with fish, you should carefully consider:

- only stocking with native fish from the catchment—depending on numbers and site specifics, you may need a permit from the NSW Department of Primary Industries
- stocking with yabbies from the local stream system—suppliers or the NSW Department of Primary Industries can provide more information

- checking for the presence of tortoises and platypus—yabbie traps are illegal in streams east of the Newell Highway as they may drown these air-breathing animals
- check if the dam is infested with the introduced pest, plague minnow (*Gambusia holbrooki*) and if so, eradicate it—contact the NSW Department of Primary Industries for advice.

Wildlife that can be a nuisance or pose a threat

A few native animals can become a nuisance if not managed appropriately.

Snakes

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.

To reduce the chance of snake bite you can:

- remove loose metal sheets and other cover from around the house
- mow around frequently trafficked areas and buildings
- wear enclosed leather shoes when walking in long grass or near creeks or farm dams
- do not walk outside in thongs or bare feet
- let snakes pass through and away from your house or paddock, but if they decide to take up residence call WIRES (see 'Resources and websites' page 18)
- avoid taking dogs for walks near long grass or river sides in the warmer months when snakes are likely to be breeding.

Possums, wallabies and kangaroos

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 possums from your property can result in the death of the possum and injury to others.

Swamp wallabies can often show a strong liking for garden plants. In rural areas it is wise to fence off prized plants, such as roses and vegetables.

Kangaroos are one of the few native species that have thrived since European settlement and most states have programs in place to allow them to be used as a resource or managed as a pest.

In NSW, kangaroos are protected under the *Biodiversity Conservation Act 2016* and cannot be harmed without a licence.

There are two types of licences:

1. Commercial Harvester (kangaroo) licences for professionals and landholders.
2. Non-commercial licences to harm kangaroos for the purpose of damage mitigation and public safety. These are obtained from the NSW National Parks and Wildlife Service.

Wild dogs

In NSW, dingoes are classified as wild dogs. The NSW Wild Dog Management Strategy 2017–2021 aims to reduce the negative impacts of wild dogs, including dingoes. Local Wild Dog Management Plans assist the community, industry and government improve profitability and sustainability, and fulfil their biosecurity duties by effectively managing wild dogs.

The conservation of dingoes is listed under the Goals of the Strategy and is to be achieved by having Wild Dog Management Plans focus management on areas where the risk of negative impacts are greatest and not undertaking management in other parts of the landscape with a low risk of negative impacts from wild dogs.

Biodiversity on your property

Biodiversity is the variety of plants and animals that exist in an area. Ecosystems that are rich in biodiversity are more resilient and healthy and are better able to recover from outside stresses such as drought, pests, wildfire and climate change.



Understanding biodiversity gives us the ability to more effectively address environmental challenges including:

- controlling pests and supporting species that pollinate crops
- maintaining groundwater tables
- absorbing carbon
- protecting water quality.

Ways to support biodiversity on your property include setting aside areas for native vegetation and animals, managing grazing pressure in remnant vegetation, maintaining native vegetation and leaving shrubs, dead wood and leaf litter in place.

Local Land Services has staff on the ground to support best practice and planning for effective environmental services. Get in touch for help to improve your property's biodiversity.

Biodiversity Conservation Act 2016

The *Biodiversity Conservation Act 2016* sets out the species, populations and ecological communities that are listed as vulnerable and threatened in NSW as well as key threatening processes. Threatened species may not be obvious to you on your property, however as a rural landholder, you have responsibilities under the Act. Be aware that some activities such as developing or clearing your property may require a threatened species survey and an assessment of significance.

Resources and websites

- NSW Department of Primary Industries has a range of resources including habitat management, stocking permits and species identification www.dpi.nsw.gov.au/fishing
- If you find a sick, injured or orphaned native animal, contact WIRES on 1300 094 737 or fill out an online rescue form www.wires.org.au
- Search for potential threatened species on your property and report sightings via the NSW BioNet website www.bionet.nsw.gov.au
- To find links to kangaroo licensing details, search 'kangaroo management' at www.lls.nsw.gov.au
- BirdLife Australia has good resources on species identification, building and installing nesting boxes and bird baths as well as guidelines to design good bird habitats www.birdlife.org.au



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

First Nations 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.

Aboriginal objects and places

- campsites
- shell middens
- scarred and carved trees
- stone artefacts
- burial sites
- natural features
- quarries
- stone arrangements
- axe grinding grooves
- stone engravings
- rock art
- ceremonial and burial grounds.

Your responsibilities

It clearly states in the Act that identified sites need to be recorded within a reasonable amount of time. It is the land manager's responsibility to ensure that cultural sites on any land tenure are recorded. You must not harm or knowingly desecrate an Aboriginal object or an Aboriginal place. Harm is defined as destroying, defacing, damaging or moving an object from the land on which it had been situated or to cause or permit harm.

The Department of Planning, Industry and Environment - Environment, Energy and Science (EES) group maintains a database of known Aboriginal objects and declared Aboriginal places in NSW, called the Aboriginal Heritage Information Management System (AHIMS). It contains detailed information on more than 93,000 recorded sites and over 13,500 archaeological and cultural heritage assessment reports. You or your representative can search AHIMS for use in property planning, land management and development proposals or to gain a greater understanding of the cultural heritage of your place. However, not all Aboriginal objects and places are listed on AHIMS, so the fact that there is no listing does not mean that there is nothing of cultural heritage significance on the land.

You should contact the AHIMS database for more information. It should also be noted that the AHIMS database is limited and that grid references may not be accurate. It is essential to conduct a site assessment of the property to confirm the location of the Aboriginal objects identified through the AHIMS search. If, after conducting an AHIMS search, Aboriginal objects are found or are likely to be present, talk to Local Land Services. We are 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.

Sometimes landholders believe that if they report the discovery of an Aboriginal object or place, that their property will be subject to a land claim. Such a claim cannot be made as there is no legal instrument that allows an Aboriginal land claim over privately owned land.

European cultural heritage

European cultural heritage artefacts can provide significant detail to the telling of the history of towns, cities and the surrounding areas. In rural areas, European cultural heritage can include archaeology, farm houses, barns, agricultural equipment, property markers, former mines and industrial sites such as mills .

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.

In New South Wales, European cultural heritage is protected by the *Heritage Act 1977*. The Act states that during any works undertaken on a property, if a potential artefact is located, work is to cease and EES is to be contacted immediately. Following this, the Local Heritage Branch would assess the works and determine whether further approvals are required.

The 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* provides similar provisions.



Resources and websites

- Go to Heritage NSW at www.environment.nsw.gov.au/topics/heritage for information and search the database at www.environment.nsw.gov.au/heritageapp/heritagesearch.aspx for:
 - declared Aboriginal Places
 - items listed on the State Heritage Register
 - listed Interim Heritage Orders
 - items on State Agency Heritage Registers
 - items listed of local heritage significance on a local council's Local Environmental Plan.
- Refer to the Aboriginal Heritage Information Management System database. Search 'AHIMS' at www.environment.nsw.gov.au
- If you think you may have sites or objects of Aboriginal cultural importance on your property, get information from the Department of Planning, Industry and Environment at www.environment.nsw.gov.au/topics/aboriginal-cultural-heritage
- If you own a heritage listed property, Heritage NSW and your local council may be able to provide free advice on topics including potential funding and recommendations for preservation and restoration.



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 commercial agronomists and livestock consultants to Local Land Services agricultural advisory staff.

Our officers can assist you with:

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

Stock

The type of livestock you run will depend on your experience and how often you plan to be at your rural property. For instance, having breeding stock will not suit if you do not live on farm and visit only infrequently. Talk to a Local Land Services livestock officer to help you decide what livestock to get. Your neighbours, rural newspapers and periodicals, rural merchants, private veterinarians and livestock agents are also valuable sources of advice.

What do I need to know before buying stock?

Ensure you have access to adequate safe handling facilities before you purchase any stock. Cows and mares may become aggressive when protecting their young and the temperament of sick or injured animals is unpredictable. Treat farm livestock with respect. They can cause serious injury to people during handling. Keep records of stock you buy and sell, products you

use to treat stock, details of withholding periods required prior to sale of treated stock, and the numbers of stock in each paddock. Ensure you are able to recognise your stock, in case they stray onto neighbouring land. Ear tags, ear marks, brands and photos may be useful. When buying stock, you should request a National Vendor Declaration (NVD) (see page 25) and a completed health declaration which allows the seller to declare the disease status of the stock, and list recent health treatment.

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 the NSW Department of Primary Industries and consider the whole environment on your property.

Always keep at least 70 per cent vegetation cover to avoid erosion and degradation. If feed is scarce, 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.

The Notional Carrying Capacity stated on your Local Land Services rates is NOT a suggested stocking rate, only a means used to allocate rates to ratepayers.

In determining an appropriate stocking rate and the energy requirements of livestock, a 50 kg wether (castrated ram) is the standard measure. A 50 kg wether maintained at constant weight has a Dry Sheep Equivalent (DSE) rating of 1. Animals requiring more feed have a higher rating and animals requiring less feed have a lower rating. The DSE rating of all classes of stock is based on the feed requirements of the animals.

Total grazing pressure

Total grazing pressure is the combined effect of grazing pressure from feral and native herbivores as well as domestic stock. Domestic animals can be readily controlled to ensure sustainable grazing management. However feral goats, deer and rabbits as well as kangaroos and wallabies 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 is a critical first step to improving groundcover and implementing sustainable management practices. Search the Local Land Services website for 'Grazing management' and you will find a range of practical resources.

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 do not meet the needs of their animals. You should ensure that your livestock always have access to clean, cool water and feed as well as 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 over fat, 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. If minimum levels are not met, there could be decreased production, reduced fertility and possibly metabolic problems and disease.

Pigs and poultry

There are many commercial 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 Local Land Services district veterinarian.

Swill feeding of pigs is illegal in Australia. Swill feeding is the traditional name for the feeding of food scraps to pigs. Prohibited pig feed ('swill') includes meat (raw, cooked or processed), bone, blood, offal or hide derived from a mammal and anything that has come into contact with these materials. Feeding swill to pigs can lead to the outbreak of several serious diseases such as African Swine Fever.



Ruminants

Ruminant animals are defined by the structure of their gastrointestinal system. They include animals such as cattle, sheep and alpacas and have an 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, particularly during tough seasonal conditions such as drought. Poor quality pasture will require some form of supplementation.

Supplements

The trick with supplements 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.

Prior to introducing a grain or hay to your property, you should have the feed tested for nutritional value and also investigate how weed free you anticipate the feed to be as introducing weed seeds to your property via supplementary feeding can be a common mistake. Obtain a commodity vendor declaration for purchased fodder, to avoid chemical residue risk. See 'Resources and websites' on page 24 to see how you can get help to check your feed quality.

Pastures

Getting the right, productive and biodiverse pastures is 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.

However, help is available. Local Land Services has dedicated pasture advisory officers who can give you advice on pasture composition based on your individual agricultural system and farm properties including geological constraints, climate and soil conditions. We hold workshops and webinars, providing a broad spectrum of advice options to suit most needs.

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. Your Local Land Services district veterinarian can help identify samples if you are unsure.

Animal health

Your highest priority should be appropriate nutrition and timely management practices to ensure the welfare of animals on your property. Many disorders of grazing farm animals are exacerbated by poor nutrition. Diets deficient in energy, protein and minerals, or based on inappropriate supplements or poisonous plants, are common causes of disease and even deaths in livestock.





Some animal health disorders can be caused by pastures that are dominated by one plant species. Problems can include bloat, staggers or grass tetany.

In addition, animals in poor body condition due to inadequate nutrition are often more susceptible to diseases, such as those caused by internal parasites. It is important to understand the range of diseases possible in the type of livestock you wish to run on your farm, before you purchase them. It is often easier to implement measures to prevent the importation of diseases rather than try to control them once on your farm. Vaccination, quarantine drenching, segregation upon arrival, avoiding purchase of already diseased animals, and asking relevant questions of the agent and vendor may all be used to your advantage.

Be aware that many animal diseases may also affect people. Infections such as ringworm on horses and cattle, scabby mouth in sheep and goats, and Q fever are common on farms. It is likely that new landholders will have no immunity to common farm animal diseases. Use appropriate protective equipment when handling animals, followed by good personal hygiene. Be especially careful when city visitors handle your livestock or enter stock yards. It is recommended that anyone aged over 15 who is working in livestock industries or living in and around livestock properties and yards should be vaccinated against Q fever. Talk to your GP further about Q fever.

Managing stock during drought

In drought it is important to have a plan, act early, review and then plan again, revising the plan as each step is implemented. Your strategies to manage stock during drought should always take into account their welfare.

Three major considerations are:

- water availability— the water requirement for stock increases significantly in hot, dry conditions
- feed availability—with lack of rain, pastures can suffer severe moisture stress and you may need to consider strategies to meet nutritional requirements such as purchasing supplementary feed, de-stocking, and early weaning
- heat stress—can become a real threat in hot conditions and animals may show signs such as drooling saliva, reduced feed intake and crowding around water troughs.

Talk to a Local Land Services livestock officer for advice.

Resources and websites

- Local Land Services has extensive resources on livestock management on our website. Search 'livestock' and 'grazing management'. Many Local Land Services regions have livestock-specific newsletters—contact your nearest office to sign up. Find out about the training courses, workshops, field days and webinars that we run, often in conjunction with the NSW Department of Primary Industries. We also provide animal health checks and advice. Check under 'events' to see what is on in your area www.lls.nsw.gov.au
- Find an extensive range of information and publications at www.dpi.nsw.gov.au/animals-and-livestock
- Search the NSW Drought hub for resources which may be useful even when not in drought such as the 'managing drought guide' which has information on supplementary feeding. Also search for 'Feed Cost Calculator' and 'Feed Quality Service' (FQS) www.dpi.nsw.gov.au/droughthub
- Tocal College publishes numerous books and other resources www.tocal.nsw.edu.au/publications
- Meat and Livestock Australia has practical resources including cost of production and feed calculators www.mla.com.au/extension-training-and-tools
- For information on Q fever search 'Q fever' at www.health.nsw.gov.au
- The AdaptNSW website has general information, region-by-region climate predictions www.climatechange.environment.nsw.gov.au

What do I need to own, move and sell livestock?

There are a number of regulations in place aimed at food safety and ensuring livestock in Australia is properly managed and can be traced throughout its life.

In NSW, all properties that have livestock, must have a **Property Identification Code (PIC)**. A PIC is a unique eight-character code assigned by Local Land Services to properties with livestock and placed into a district register.

This system holds information identifying land including property names, locations and further details of the trading entity and PIC manager. A PIC allows all movements of cattle, sheep and goats to sale, slaughter or any other property to be monitored, recorded and traced when required, for example when chemical residues are detected in meat. Having a PIC also helps in assisting you and your animals with support during and after emergencies, such as with short-term fodder supplies.

Do I need a PIC ?

Yes, if you have livestock, regardless of whether you are moving them or not. This includes:

- cattle
- sheep and goats
- pigs
- bison and buffalo
- deer
- camelids
- equines (i.e. horses and donkeys)
- poultry (100 or more).

Even if you keep livestock as pets, you need a PIC.

To apply for a PIC go to www.lls.nsw.gov.au/pics

- Also contact Local Land Services for stock movement permits and Transported Stock Statements (TSS). Find out more by searching 'moving and selling livestock' on our website www.lls.nsw.gov.au
- Go to Meat and Livestock Australia (MLA) www.mla.com.au for information on and links to:
 - o accreditation under the LPA
 - o to get an NVD
 - o the NLIS
 - o fit to load advice.
- The NSW Department of Primary Industries livestock page has resources and links www.dpi.nsw.gov.au/animals-and-livestock
- Animal Welfare League NSW has fit to load and stock movement advice www.awlnsw.com.au

The **Livestock Production Assurance (LPA)** program is the on-farm assurance program that underpins market access for Australian red meat. In order to be accredited under the LPA, landholders have to commit to seven requirements including property risk assessments and safe and responsible animal treatment.

If a producer has met the LPA requirements, he or she can obtain a **National Vendor Declarations (NVD)**. These provide evidence of livestock history and on-farm practices when transferring livestock through the process of selling and into the food system.

The **National Livestock Identification Scheme (NLIS)** is Australia's scheme for the identification and tracing of livestock. It is crucial in protecting and enhancing Australia's reputation as a producer of quality beef, sheep, goat and pig meat.

The NLIS has three elements:

- an animal identifier (a visual or electronic ear tag known as a device)
- identification of a physical location by means of a PIC
- a web-accessible database to store and correlate movement data and associated details.

Selling pigs

In NSW, it is a legal requirement for all pigs greater than 25 kg to be branded with a registered swine brand before being sold in a sale yard, direct to a processor, or private sale. You must have a property identification code (PIC) in order to apply for your registered swine brand with Local Land Services. All pigs under 25 kg must have an approved ear tag.

Moving stock

You will need to obtain the correct paperwork for your type of stock movement. Paperwork that may be required for moving stock include TSS, NVDs, animal health declarations and stock permits including for roadside grazing. Local Land Services can advise you which ones you will need. Booklets of TSSs can be obtained from us (a fee applies).

Fit to load

You should also ensure your animals are fit to load and healthy enough for the intended journey. Prior to transport you should conduct a welfare assessment of each animal and remove any that are:

- unable to walk by bearing weight on all legs
- visibly dehydrated
- showing visible signs of severe injury or distress
- showing symptoms of a condition that is likely to cause increased pain or distress during a journey e.g. embedded horns, cancer eye
- blind in both eyes.



Travelling stock reserves

Travelling stock reserves (TSRs) are parcels of Crown land used to graze or move stock around the state. They are especially beneficial for stock in times of drought, bushfire or flood. In addition, the network of TSRs has other values such as biodiversity conservation, Aboriginal and European culture and recreation. Local Land Services is responsible for the care, control and management of about 30% of TSRs in NSW, covering about 530,000 hectares, mostly concentrated in the Central and Eastern Divisions.

To use a TSR, you need to contact us to obtain:

- stock permits for walking, slow travel, grazing and long-term Management Agreements (MA permits)
- permits for apiarists to keep bee hives
- permits for recreational activities between sunrise and sunset such as holding a community event, fishing, photography, mountain bike riding and camping (rarely issued).

In the Western Division, TSRs are generally no longer used or required for moving stock and are also usually not accessible to the general public due to the nature of the Western Lands Leases in this Division.

Interested in TSRs?

Local Land Services has a Travelling Stock Reserves statewide Plan of Management to guide how TSRs under its care and control are to be managed. Day-to-day operations are managed by Local Land Services regions, in collaboration with local groups and users. Find the Plan of Management and more about TSRs at www.lls.nsw.gov.au/tsr

Local Land Services does not control or manage reserves in the Western Division, but can occasionally issue permits for certain uses.

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. Contact us to obtain a permit.

TSRs are monitored for illegal activity including:

- dumping
- motorbike riding
- shooting
- wood cutting
- fires
- damage to protected vegetation.

Stock management on TSRs, on roads and near creeks, rivers and streams

As far as possible, when moving stock on TSRs or anywhere else, you should keep your livestock away from rivers and streams because they can:

- 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
- add excess nutrients by defecating
- destroy habitat for native fish.

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 should be contacted.

Fences

Fences have various functions on rural properties and are vital to successful management of your land, animals and natural resources. You should consider the layout of fences in a whole-of-property approach in a property plan.

The type of fences you build depends on:

- the size of your property
- whether you need boundary or internal fences or both
- the landscape of your property e.g. hilly or flat
- your location i.e. if it is in a flood or fire-prone area
- your intentions i.e. are you building it to keep stock in, keep pests out, fence off waterways or vegetation areas.

Talk through your options with fencing companies, contractors and suppliers in your area. Options include:

- wooden post and rail fencing—sturdy and has aesthetic appeal, but can be expensive and requires maintenance
- plain wire fencing—long lasting, inexpensive and easy to install, but is labour intensive
- mesh wire fencing (similar to plain wire, but with mesh instead of single lines of wire)—easy to install, but animals can get trapped in it
- barbed wire fencing—prevents animals getting in or out, but can cause injuries, including to wildlife

- temporary or permanent electric fencing—good for small area livestock farms to help prevent animals getting injured or tangled in fencing, but is expensive
- exclusion fencing—generally around 1.8 m high with a skirt to prevent incursions by pests under and over, but there are concerns that these fences restrict wildlife movements.

For fences to do their job properly, you need to maintain them and keep gates shut and locked.

Fencing in flood and fire-prone areas:

If you are in a flood or fire-prone area you should:

- design paddocks to avoid fencing across waterways where possible (in case of flood)
- place fences above the floodplain and flood-prone areas
- use temporary electric fencing minimising the use of vertical structures (in case of flood)
- using plain wire construction rather than mesh to reduce the amount of debris that is caught in the fence (in case of flood)
- use hardwood or non-combustible material (for fire prone areas) and only non-combustible material for fences that connect directly to a dwelling (in case of fire).



Wildlife friendly fences

Some ways to make sure your fences benefit wildlife as well as 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 to prevent kangaroos catching and trapping their legs between the two top wires
- do not use barbed wire as birds and gliders are often caught and killed on them or consider taking out the top two strands of an existing barbed wire fence
- avoid permanent electric fencing
- keep the bottom wire 15 cm above the ground level
- check wildlife movements before installing fences.

Fencing requiring vegetation removal

Under the allowable activities provisions of the NSW Land Management Framework, clearing of native vegetation that is necessary for the construction of fences is permitted without approval from Local Land Services. Maximum clearing distances apply and these vary depending on the property location. Contact us for advice.

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 as well as the procedure to resolve disputes about the cost, type and position of a fence. You should talk to your local council and seek legal advice in cases of potential conflict over dividing fences.

Resources and websites

- Find information on fence building, including the publication 'Fencing' at www.tocal.nsw.edu.au/publications
- Tips on wildlife friendly fencing www.wildlifefriendlyfencing.com
- The National Heritage Trust publication, 'Cost effective feral animal exclusion fencing for areas of high conservation value in Australia' is available at by searching www.environment.gov.au
- For information on requirements for constructing fences www.planningportal.nsw.gov.au

Your local area

When moving to a rural area, a few things might be different to what you were previously used to, including local authorities and rates.

Council rates

Rates are a tax levied on a community to meet the cost of services provided by your local council including local roads, environmental planning, public health and waste collection, treatment and disposal.

For rating purposes, each parcel of land is categorised as one of four types—residential, business, farmland or mining. The council decides which category your property should be in based on its characteristics and use. Land is valued by the Valuer General as the basis for calculating how much you pay in rates.

If you have any questions about what appears on your council rate notice, call your local council. You have 60 days to object to the valuation through Service NSW.

The 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 the 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. Nearly one-third of NSW, situated in the Western Division, is unincorporated, meaning that it has no formal local government. This area includes the villages of Silverton, Tibooburra and Milparinka. The Lands section of the Department of Planning, Industry and Environment assists in the co-ordination of various community services in the unincorporated areas.

Local Land Services rates

Besides local council rates, most owners of rural holdings must also pay Local Land Services rate levies. Under the *Local Land Services Act 2013*, we must charge rates on all parcels of land that are classified as rateable land. Each region has a minimum rating area for properties. It is generally land 10 hectares and above, however it is 40 hectares in the Western Region and 20 hectares in some parts of Murray and Riverina Regions. Local Land Services rates include general rates and rates for animal health and pests, the meat industry levy and costs for routine stock moving permit and stock identification. If you own or occupy rateable land you must advise Local Land Services if you change your postal address.



The rates you pay fund Local Land Services' biosecurity, animal health and emergency work. They help us to:

- co-ordinate and support pest control for a healthier and more productive landscape and help you meet your biosecurity responsibilities (see page 42)
- support our animal health programs through our vets and livestock officers
- support agriculture and animals during emergencies
- support stock identification systems.

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 Program, which helps drive sustainable agriculture. This funding also supports the protection, conservation and rehabilitation of Australia's natural environment.

Local Land Service Board elections

Each Local Land Services region has a local board which consists of ministerially appointed and locally elected members. Board members are appointed or elected for up to four years and are people with an interest in rural affairs. At election time, every Local Land Services ratepayer aged over 18 is automatically eligible to vote and has the opportunity to have their say about the direction of the organisation. Only one vote per ratepayer or company in each region is allowed, regardless of the number of holdings they have in that region.

Annual Land and Stock Returns

Each year, NSW landholders who are liable to pay Local Land Services rates or have a PIC are required to submit an annual return of land and stock to Local Land Services. Annual returns are essentially a 'farm census' and need to be lodged with Local Land Services no later than 31 August each year. The number of stock you have does not impact on the Local Land Services rates you pay.

Even if you have no stock, your return provides us with important information on land use and livestock across the state. The information you provide is invaluable and allows us to quickly and accurately respond to emergency or biosecurity events, protect our primary industries from pest and disease and help keep markets open.

Resources and websites

- Find out more about Local Land Services rates and lodging Annual Land and Stock Returns www.lls.nsw.gov.au
- Frequently Asked Questions about council rates in NSW search 'rates and charges' at www.olg.nsw.gov.au
- To learn more about land valuations go to www.valuergeneral.nsw.gov.au
- Lodge a land valuation objection www.service.nsw.gov.au
- For more information on Western Lands Leases search 'western lands' www.industry.nsw.gov.au/lands



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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. 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* and the *Pesticides Regulation 2017* to keep records of pesticide use and for pesticide users to undergo training.

Chemical trespass, such as spray drift from pesticides, is a significant issue in rural areas. Anyone using chemicals must be aware of the impact they can have on neighbouring farms and the environment. The costs of damage from chemical misuse can be very high.

Chemical safety tips

- Substitute hazardous chemicals for safer alternatives.
- Read up-to-date safety data sheets and labels (supplied with the chemicals or contact the manufacturer's website) which will tell you all about the chemicals you are working with as well as how to store and handle them.
- Stay in the loop about banned products.
- Wear the right protective gear.
- Complete a chemical handling course.
- Consider other workers or family who might be exposed, for example, via clothing.
- Alert workers and family about the risks associated with the chemicals you are using.
- Talk to your doctor if you notice a change in your health.

Chemical training

Chemical training courses are available through many registered training organisations. The Australian Qualifications Framework (AQF) Level 3 course is for a person who uses chemicals independently, for example, a farmer. The Environment Protection Authority has information on this training.

Storing chemicals

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.

A farm chemical store should have:

- 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 safety data sheets
- 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
- space for solids to be stored above liquids
- a locked storage area
- clearly sign-posted storage area, e.g. 'Chemical Store-Keep Out' and a no smoking sign.

Transporting chemicals

When transporting chemicals, you have a duty of care to do it so as not cause harm or injury to yourself, other people, property, animals, and the environment.

Before moving chemicals:

- read information on the transport requirements of individual chemicals—these are often found on the label or safety data sheet
- check new containers for damage and tighten lids to prevent leaks

- make sure your vehicle is roadworthy and can safely transport chemicals
- 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 and if any spills occur, clear the vehicle immediately—the main steps for dealing with a spill are to isolate, contain, decontaminate and dispose
- contact the local fire brigade and local council immediately if chemicals enter drains and 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, ensuring containers are not damaged
- 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.

Safe chemical disposal and container cleaning

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 have been set up to help farmers safely manage their farm chemicals. The ChemClear service collects and disposes unwanted currently registered rural chemicals. The ChemClear website has information on how to safely store the chemicals while awaiting collection. The drumMUSTER program collects and recycles cleaned eligible containers. 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. You should rinse empty containers on bare ground away from drains and waterways.

Note: Do not dispose of chemicals in any form down drains, gullies or watercourses.



Resources and websites

- The NSW Department of Primary Industries web page on agricultural chemicals is a great hub of information with fact sheets and links to other resources www.dpi.nsw.gov.au/agriculture/chemicals
- The NSW Environment Protection Authority has information on pesticides legislation, licences, training, safe handling and disposal www.epa.nsw.gov.au/your-environment/pesticides
- SafeWork NSW has advice on storage and getting accredited training. Also search for the 'Safe use and storage of chemicals (including pesticides and herbicides) in Agriculture Code of Practice'. Go to www.safework.nsw.gov.au
- Talk to Local Land Services about pesticides training and accreditation and how we can help you. Find out how we work with landholders to make sure chemical and other residues stay out of the food chain. Search 'chemicals' at www.lls.nsw.gov.au
- Check out ChemClear www.chemclear.com.au and drumMUSTER www.drummuster.com.au for fact sheets and other resources as well as collection dates, sites and details.
- Your local council can provide general information including details of any chemical collection pick ups planned for your area.
- SMARTrain is a nationally recognised brand of chemical training materials. Courses are offered through a range of providers including the DPI's Tocal College www.tocal.nsw.edu.au

Clean your empty containers by:

- triple or pressure rinsing them immediately after use and pouring the rinse water (rinsate) back into the spray tank
- thoroughly cleaning the container thread and outside surfaces with a hose into the spray tank
- rinsing all caps separately into a bucket of clean water and pouring rinsate into the spray tank
- inspecting the container, thread and screw neck to ensure all chemical residue has been removed
- puncturing metal containers through the neck/ pouring opening and through the base of the container
- allowing containers to drain completely and air dry them over a number of days.

Disposal of rinsate or diluted chemicals

While rinsate is usually a very diluted pesticide mixture, it must be disposed of responsibly because even in low concentrations it can adversely affect the environment. The NSW Environment Protection Authority advises landholders to:

- avoid producing rinsate in the first place
- if possible, use a commercial spray contractor who deals with waste disposal as part of their service to dispose of the pesticide rinsate
- reuse rinsate generated from cleaning containers by adding it to the spray tank
- for boom sprays with a rinse tank, the main tank and spray lines can be flushed at the application site, provided that label rates are not exceeded
- if the rinsate cannot be sprayed on the application site, store it in a holding tank and arrange for a licensed waste disposal contractor to collect it.

More details can be found on the EPA's 'Guidelines for managing the disposal of pesticide rinsate' fact sheet.

Lead

Batteries, battery cases and other articles that may be on a rural property including flaking lead paint, sump oil, ashes and diesel can cause lead poisoning of livestock and can also be a danger to humans, especially young children. Cattle are the most common food-producing animals affected. If animals consume lead or lead pieces, or even lick lead surfaces, they may absorb enough of the metal to cause lead poisoning. At low levels of exposure, they may survive and not show clinical signs of lead poisoning. Even so, there may be unacceptable levels of lead residue in the meat, liver and kidney from those animals, or in milk that they produce. For this reason, it is illegal to sell animals suspected of ingesting lead for slaughter or have their milk enter the human food chain.

Lead poisoning can be diagnosed by a Local Land Services district vet. Rubbish sites around the farm should be cleaned up or fenced off to restrict livestock access, with similar exclusions around farm and machinery sheds, and even old houses.

Waste management

Good waste management on rural properties is essential to ensure a healthy, safe and potentially productive enterprise. Problems for landholders and local residents have arisen due to waste being inappropriately dumped in waterways, farm dams, gullies or in old quarries, wells and mineshafts. This can cause land and water contamination.

Rural properties produce a wide range and significant amount of waste. Rural waste typically includes domestic waste, solid waste (e.g. wire or old white goods), farm chemicals, oil products and dead stock. Burning and burying waste can cause serious problems including health risks and pollution. In many cases these measures are illegal or very strict rules apply.

The best way to manage waste on your rural property is to reduce, reuse and recycle.

This includes metal such as wire which should be safely stored and can be reused for future works. Any metal that cannot be reused may have recycling potential, even if it is rusted or burnt. Some companies will pay for and collect scrap metal. Anything else can be taken to local landfill sites.

If you accept fill, for example soil excavated from one site and taken to your property, be aware that it could be contaminated with demolition and other waste. You could be liable for illegal dumping, contamination, pollution and clean-up.

Domestic waste

Contact your local council for details of domestic waste removal in your area. Depending on your distance from town, you may receive a roadside garbage service, including recycling. If you do not receive a roadside service, you can access your nearest regional waste management facility or transfer station for disposals and recycling. Transfer stations are often located in or near small villages and are meant only for disposal of domestic waste from people living in that council area. Check with your local council for the location and opening hours of waste facilities. Licensed commercial waste disposal companies may also be an option for removing wastes from your property. If you use a contractor, you have a legal responsibility to ensure the waste is disposed of lawfully.

Composting

Compost as much of your domestic and garden waste as you can. 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.

You can compost:

- ‘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, cardboard, wood fire ash, sawdust and wood shavings, vacuum dust and hair.

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 is raining. If you have a compost heap you may need to cover it during heavy rain to prevent it from being flooded.

Chickens can also be great to eat food scraps. **Note:** *Household food waste as ‘swill’ must not be fed to pigs.*

Dead stock disposal

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

Disposing of dead stock, even just one animal, carries the risk of polluting watercourses, producing odours, attracting scavenging pests, spreading disease and interfering with community amenity. Animal owners and managers have a legal responsibility to ensure that disposal of carcasses does not adversely affect the environment.

The most common carcass disposal methods are:

- cremation (burning)—preferred for certain infectious diseases such as Anthrax
- composting
- rendering and knackereries
- licensed landfills
- burial.

There are many safety measures to observe when disposing of dead animals including wearing appropriate personal protective equipment (PPE). Avoid contact with any body fluids from the dead animal and if you feel unwell after handling a carcass, contact a doctor.



Resources and websites

- The NSW Environment Protection Authority has general information on waste including waste reduction www.epa.nsw.gov.au/your-environment/waste
- Contact your local council for details on roadside waste collection, waste management centres, transfer stations, opening hours and the types of materials they can process.
- Planet Ark has tips on recycling and you can search for recycling facilities in your area www.recyclingnearyou.com.au
- Find your nearest depot to return eligible bottles and cans for a refund www.returnandearn.org.au
- Find information on topics including burning waste and disposing of paint www.environment.nsw.gov.au
- Check out composting resources and events www.landcare.nsw.gov.au
- Search for the NSW Department of Primary Industries fact sheet on ‘Animal carcass disposal’ (Primefact 1616) www.dpi.nsw.gov.au
- Contact a Local Land Services veterinarian where there has been a group of stock lost. Search for ‘livestock advice’ www.lls.nsw.gov.au



Wastewater management

Your property's wastewater management system will treat sewage from your home, both blackwater (wastewater from toilets) and greywater (wastewater from all domestic sources except toilets).

If your home is not connected to the sewer, it will have an on-site wastewater management system, such as:

- a septic tank
- composting toilet (dry and wet)
- aerated wastewater treatment systems
- biological filter systems.

On-site wastewater management systems have two main processes; treatment of wastewater to a certain standard, and for the higher level systems, application of the effluent (treated wastewater) to a land area on your property. If you are installing a new system, get advice on the right type to meet your needs.

Resources and websites

- See NSW Health rules installing on-site wastewater management facilities including links to accredited providers of septic systems, composting toilets and aerated wastewater treatment system. Search 'domestic wastewater' at www.health.nsw.gov.au
- For information on different wastewater management systems search 'wastewater systems' at www.waternsw.com.au
- For information on septic systems and 'The easy septic guide'. Search 'septic' at www.olg.nsw.gov.au

Also make sure it is a system/supplier accredited by NSW Health (meeting the current Australian Standard) and get council approval to operate it.

If your property has an existing system, identify what type of on-site wastewater system you have, and understand its service and maintenance requirements. Failing on-site wastewater management systems can release dangerous levels of sewage pollution into the environment. Sewage pollution can contaminate water, spread disease, and lead to environmental degradation. With advances in the performance of on-site wastewater management systems, there is no reason for the community to accept failing systems. Research shows many people do not know how to manage their systems and they fail to meet environmental and health protection standards.

As the owner of the property, it is your responsibility to ensure that the system is approved by your local council and that it is working properly. You must identify any leaks, overflows or other problems early. To ensure that your system meets the requirements, you will need to obtain two approvals from your local council:

- to install the system.
- to operate the system.

After you obtain these approvals, the council may carry out regular inspections or request information to make sure the system is working properly. Councils can charge inspection fees for this service. Depending upon where you live in the region, there are different requirements in regards to placement of wastewater management areas.

The general recommendation for placement of a wastewater management area is to have a buffer distance of at least 100 m from permanent surface water such as rivers, creeks and lakes, 250 m from a domestic groundwater well and 40 m from other waters such as seasonal water courses and drainage depressions.

There are other influences such as property size, soil type and slope that can change how your on-site wastewater management system is installed or managed. To ensure your system meets approval and minimise the risk of pollution, talk to your local council prior to installation.

You are required to maintain and manage your system in accordance with health and environmental performance standards in order to:

- prevent the spread of disease by micro-organisms
- discourage insects and vermin
- prevent sewage contamination of waterways and groundwater
- 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).

If you have any questions about the on-site sewerage system requirements, ask your local council.

Tips to maintain a healthy on-site wastewater management system

In order to reduce the volume of wastewater going into the system and avoid the use of chemicals that interfere with its operation you can:

- spread your loads of washing over a couple of days to avoid flooding the system with large amounts of water at one time
- use phosphorous free or low phosphorous detergent—phosphorous is a major pollutant of waterways and contributes to the growth of algal blooms
- use front loading washing machines for households with on-site wastewater management systems because they use less water and detergent
- repair leaking taps and cisterns and install a lint filter on the washing machine and clean the filter regularly
- avoid pouring oils and fats down the sink as they can block the system
- use a sink strainer in the kitchen—food scraps slow down the digestion process and make solids build up more quickly

- use boiling water or a drain eel to clear blocked drains—don't use caustic soda or drain cleaners in a septic tank
- install a low-flow shower head to save water—check if your local council offers rebates for essential water saving devices
- minimise the use of commercial cleaners and bleaches as they interfere with the bacterial breakdown in the tank—try using baking soda, vinegar or a mild soap
- avoid flushing anything down the toilet that could block the system, including wipes
- prevent taps running unnecessarily, for instance when cleaning teeth
- install an efficient toilet cistern
- keep water from the roof downpipes and paved areas away from the absorption field around the tank and trench area
- get a plumber to fit an wastewater filter to the septic tank outlet to keep solids in the tank and extend the life of your trenches
- avoid driving or parking on any part of the absorption area and keep livestock away—these will compact the soil and may crush the pipes and trench domes

Landscaping and irrigation

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

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.

When choosing what to plant around your on-site wastewater management system, 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. Some Australian natives can't cope with high levels of these nutrients. Generally speaking, it is best to grow a mix of summer and winter grasses on absorption areas. Ask a local nursery for advice.

If treated wastewater is being used to water landscaped areas, nutrient tolerant trees and shrubs should be planted. Contact your local council for advice before installing an irrigation system or doing landscaping around your trench area.



Heating and energy

Wood heaters

Smoke from wood heaters adds to air pollution. Under the Clean Air Regulation 2010, all new solid fuel slow combustion heaters sold in NSW must comply with the Australian Standard for pollution emissions. Local regulations about where and how wood heaters and chimneys can be installed also apply. As these can vary, contact your local council to check before installing a wood heater. Some councils keep a register of licensed installers who will certify heaters are installed to the standard.

Tips for wood burning to minimise pollution, improve local air quality and health and save money:

- read the compliance plate on the back of any new heater you are thinking of buying to ensure that it meets the current Australian Standard
- check that your wood heater complies with your relevant local council policy
- burn small logs of aged, dry hardwood because unseasoned (green) wood has more moisture
- 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
- use plenty of dry kindling to establish a good fire quickly when you are lighting a cold heater
- stack wood loosely in your firebox so air can circulate—don't cram the firebox full
- clean the chimney every year to prevent creosote build-up
- 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 by keeping 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
- ensure adequate fresh air enters the room to prevent CO (carbon monoxide) build-up and be alert to symptoms such as drowsiness
- never burn rubbish, driftwood or treated or painted wood because it can pollute the air and be poisonous
- consider alternatives to wood heating including solar power, green power (electricity produced from renewable energy sources) and gas, as they are cleaner alternatives to wood heating.

Note: ensure your firewood is from a legal source.

Taking wood from Travelling Stock Reserves is illegal.

Renewable energy

Increasingly, rural property owners are opting for renewable and cleaner energy sources for all or part of their energy needs. This includes wind turbines, solar energy, solar hot water and battery storage. Many regional towns and cities have renewable energy suppliers and can service rural areas.

Some rural landholders are completely 'off-grid' by producing or storing enough energy, including through renewable sources, to disconnect from the power grid. It can be cheaper in the long run but such systems can be expensive to set up. There are a lot of considerations before choosing to go off grid including analysing your current and forecast energy needs, reviewing the energy star rating of your appliances and switching to gas for cooking. Consult with local suppliers and ask your council for assistance and advice about your options.

Resources and websites

- For tips on reducing wood smoke emissions search 'wood smoke' at www.epa.nsw.gov.au
- Find energy efficiency tips including lighting and insulation at www.energysaver.nsw.gov.au
- For research on farm energy use and opportunities, search 'farm energy forums' at www.dpi.nsw.gov.au
- Refer to the NSW government fact sheet on off-grid power 'Should I go off grid for my electricity' at www.energysaver.nsw.gov.au/media/951/download/
- The Clean Energy Council (representing companies in the sector) has information for consumers on choosing and installing solar and battery systems www.cleanenergycouncil.org.au



If you are or someone else is in immediate danger, call 000 or go to your nearest hospital emergency department.

Health and safety

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

The combination of heavy machinery, isolated work and exposure to elements makes farming one of the most dangerous occupations. On average, more than 60 people die from non-intentional on-farm injuries each year in Australia. 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 they can be injured as a result.

Children are particularly at risk on farms because of easy access to bodies of water, chemicals and vehicles. Children aged under 14 make up 15-20 per cent of farm injury deaths in Australia. (Source: Farmsafe Australia) Many more children are injured.

8 major risk areas

- Tractors and machinery.
- Farm vehicles.
- Farm motorcycles (including all-terrain vehicles).
- Working from heights.
- Chemicals.
- Manual handling and strain injuries.
- Farm animal handling.
- Handling and storage of guns and ammunition.

Preventing rural injuries

Just like any work environment, there are legal requirements on a farm 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 your property.

The SafeWork NSW website has information on making your property safer, including a tool called the 'Farm safety self-assessment'.

Tips for improving farm safety:

- map the hazards on your property—this involves drawing an outline of your property and mapping features
- use your hazards map as an induction tool for new employees and casual workers or contractors who come to the property
- Identify the dangers on your property, using this four step approach:
 1. Identify the hazards (identify risks).
 2. Work out what harm hazards could 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. 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 by:

- not ever allowing children to wander about your property without supervision
- creating a securely fenced house yard for children to play in—children should stay in this safe place unless an adult can closely supervise them
- having safety rules that everyone knows and follows
- wearing seatbelts and restraints when in cars, utes and trucks

- not letting children ride on tractors, all-terrain vehicles (quad bikes) or in the back of utes
- always wearing helmets when riding bikes and horses.

Mental health

Living and working in regional, rural or remote Australia can be a very rewarding, but at the same time challenging way of life. People living in regional, rural and remote areas are known for being down-to-earth, practical and resilient.

However, rural life can come with some stresses, including extreme weather events and natural disasters, financial uncertainty, economic and social change as well as isolation, which can be felt particularly if you have moved from the city. While it is recognised that accessing mental health services in rural areas can be more difficult than in the cities, increasingly services are being made available that are tailored to rural people. See the section below for key contacts.

During tough times, it is important to ask for help from a family member, friend, neighbour, GP or professional service.

See the ‘Need help?’ section below for key contacts.

Safety on rural roads

Driving in rural areas has some particular hazards including unsealed surfaces, dust, stock and wildlife. Be alert at all times as the road surface may change without warning, sharp corners may not always be signposted and the crests of hills may reduce visibility. Wearing a seatbelt or a helmet when riding a motorcycle is mandatory, even if you are just going between paddocks.

Need help?

- NSW Mental Health Line 1800 011 511 from anywhere in the state (24 hours).
- Beyond Blue to talk confidentially to a mental health professional 1300 224 636.
- Lifeline 13 11 14 (24 hours).
- Mens Line Australia 1300 78 99 78 (24 hours).
- Kids Help Line counselling and support provided for young people (to 24 years old) 1800 55 1800 (24 hours).
- Domestic Violence Line 1800 656 463 (24 hours).
- Suicide Call Back Service 1300 659 467 (24 hours).
- The Rural Adversity Mental Health Program www.ramhp.com.au can link you to local mental health services. The Rural Resilience program helps rural families through tough times. Search for it at www.dpi.nsw.gov.au
- The NSW government and NSW Farmers jointly produced resource ‘The A-Z of Farm Safety.’ Find it and other resources at www.safework.nsw.gov.au
- Farmsafe Australia has resources including safe play areas for children on farms, health and safety for older farmers and those with disabilities www.farmsafe.org.au
- Rural and general road safety information at www.rms.nsw.gov.au/safety
- AgHealth Australia has practical resources such as safety checklists. Go to aghealth.sydney.edu.au/resources



All rural landowners who own even just a few livestock must ensure that their roadside fences are kept in good condition. Livestock are not allowed to roam unattended. If they are on roads and here is an immediate threat to the public the police should be notified. In other circumstances, contact the local council.

Alcohol

There is often no alternative transport in rural areas, 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. It takes about an hour for your body to process each standard drink consumed. Don't forget that you might still be over the limit the morning after a big celebration.

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 over-extend 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 problems including:

- weeds and pest animal control
- boundary fencing maintenance
- on-site wastewater system failure due to lack of use
- fuel build up causing a potential bushfire hazard
- 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 owner or 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.

Contact your local council for absentee landholder issues.

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. 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. If you can't avoid a collision with an animal it is often safer to hit it 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. 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.

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 as they graze across these paddocks. This is even more likely 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. This is provided the livestock are not left unattended and the stretch of road where they are grazing is signposted at each end.



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 users.

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

The role of your local council

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 property, you should ask your local council a number of questions about the land uses of your property and those surrounding it. 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 your council about your concerns.

While you might have purchased a property 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 10.7 Certificate for the property. When you buy or sell land, the *Conveyancing Act 1919* requires a Section 10.7 Certificate to be attached to the contract of sale.

You can apply for a Section 10.7 Certificate by contacting your local council.

Development applications

You are legally bound to submit a development application to your local council for any building, demolition and subdivision works and for any development requiring consent under the Local Environmental Plans. Depending on how your land is zoned, you may also need council consent for activities such as keeping stock.

Development applications are required so your local 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. If in doubt, speak to your local council because it may avoid delays later.

If you are preparing a development application, contact your council as early as possible to ensure that documentation meets council standards and for any other help.

Exempt development

Some minor development may be exempt from council approval. Each development must meet certain criteria in order to be exempt. Work that may be exempt includes:

- garden sheds
- rainwater tanks
- solar hot-water systems
- solar panels
- building alterations
- driveways, pathways, paving and carports.

Contact your local council for more details.

Complying development

Complying development is a combined planning and construction approval for straightforward development that can be determined by your local council or an accredited certifier. Proposals that may be complying development include:

- houses (new, alterations and additions), carports, garages
- swimming pools
- industrial uses (change of use and internal alterations)
- commercial uses (change of use and internal alterations)
- building a granny flat or secondary dwelling
- strata subdivision
- fences
- demolishing a building.

Contact your local council for more details about complying development.

Improving your skills

Getting up-to-date, accurate information about managing your land sustainably will increase your enjoyment of it. Think about ways you can get training, information and the right equipment. Some sources of information and training are listed below.

Local Land Services holds workshops, field days and webinars on topics including:

- seasonal information such as cropping
- pasture and grazing management
- animal health and nutrition
- managing through drought
- adapting to climate change and understanding weather
- feral pest control
- pesticide and bait training
- recovery after natural disasters
- native animal and plants
- soil health.

Tocal College offers training including on:

- beekeeping
- machinery hygiene
- business management
- chainsaw operation.

TAFE NSW has courses including:

- sheep shearing
- horticulture
- viticulture
- natural resources and environmental management
- forestry.

Landcare runs events including conferences, regular working bees and habitat field days.

Rural crime

Rural crime costs millions of dollars in NSW every year. Rural crime includes theft of livestock, produce, fuel, equipment, illegal shooting and trespassing.

While you cannot be everywhere at all times, NSW Police advise you to take the following precautions:

- take note of registration numbers, descriptions and any other information on suspicious activity and immediately contact local police
- maintain fences and gates
- install 'Private Property' signs to deter trespassing—signs can be printed from the NSW police website
- never advertise on social media your travel plans or periods of absence
- conduct regular checks on your equipment and keep a plan of your property that identifies where they are stored
- do not leave keys in vehicles or fuel pumps
- consider installing sensor lighting.



Resources and websites

- Local Land Services provides training through workshops, seminars and webinars www.lls.nsw.gov.au
- Tocal College (run by the NSW Department of Primary Industries) www.tocal.nsw.edu.au
- The Young Farmer Business program is NSW Government initiative aimed at building the business skills of young people starting out or continuing in agriculture. www.dpi.nsw.gov.au/yfbp
- TAFE NSW www.tafensw.edu.au
- Find your nearest Landcare group www.landcare.nsw.gov.au
- Resources on protecting your rural property against crime including a fuel storage template and stock theft template. www.police.nsw.gov.au
- Search for 'exempt' and 'complying' development at www.planningportal.nsw.gov.au



Diseases, pests and weeds

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 such as animal and plant diseases 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. We can only successfully manage biosecurity when every person plays a part. Local Land Services can support you to fulfil your responsibilities under biosecurity legislation.

Biosecurity legislation

The Biosecurity Act 2015 (Commonwealth) was passed by parliament to provide greater flexibility in the response, management and control of biosecurity risks across the country. *The Biosecurity Act 2015* supports the Biosecurity Strategy 2013-2021 which shares the responsibility of pests, weeds and diseases between government, industry and the community.

General Biosecurity Duty

Under the *Biosecurity Act 2015*, any person who deals with biosecurity matter or a carrier and who knows, or ought reasonably to know, the biosecurity risk posed or likely to be posed by the biosecurity matter, carrier or dealing has a biosecurity duty to ensure that, so far as is reasonably practicable, the biosecurity risk is prevented, eliminated or minimised.

Resources and websites

- The Exotic Plant Pest hotline 1800 084 881 to report any plant or bee disease threats.
- The Emergency Animal Disease Watch hotline 1800 675 888 to report any animal disease threats.
- The Fishers Watch hotline 1800 043 536 to report mass fish deaths
- The NSW DPI Biosecurity helpline 1800 680 244 for all other biosecurity concerns (animal, aquatic, bee, plant, weed, insect, chemicals etc). To report online, search 'report a pest or disease' at www.dpi.nsw.gov.au At this website you can also find details about biosecurity legislation, information about the latest plant and animal health and disease issues and biosecurity management plans.
- Local Land Services can help you with advice and help on animal and plant diseases as well as pest animal control. Call 1300 795 299 or go to www.lls.nsw.gov.au
- Farm Biosecurity is a joint program of Animal Health Australia and Plant Health Australia. The website has practical resources including templates for drawing up management plans and risk assessments as well as educational videos www.farmbiosecurity.com.au
- Find out about quarantine regulations when moving animals, plants, machinery, soil and more interstate www.interstatequarantine.org.au
- For information on National Parks and management of pests and weeds www.environment.nsw.gov.au
- FeralScan is a citizen pest surveillance website with a range of resources www.feralscan.org.au or download the FeralScan Pest Mapping app

You are not expected to know about all biosecurity risks, but you are expected to know about risks associated with your industry, business, day-to-day work and hobbies. The General Biosecurity Duty can apply to more than one person in relation to the same biosecurity risk, for example an owner and a manager may both be responsible for managing a particular biosecurity risk on a property.

The *Biosecurity Act 2015* prohibits some high-risk activities and materials. There is also a general obligation on people to be aware of their surroundings and take action to prevent the introduction and spread of pests, diseases, weeds and contaminants.

Biosecurity Management Plans

People entering areas where a Biosecurity Management Plan applies must comply with the measures outlined in the plan. Arrangements in Biosecurity Management Plans aim to prevent, eliminate, and minimise the biosecurity risks posed by people entering a place at which commercial agricultural or horticultural activity, including processing and education, occurs.

Failure to comply with these arrangements when dealing with biosecurity matter, such as animals or produce, may be an offence under the *Biosecurity Act 2015*. Penalties can include an on the spot fine of \$1,000 or a court ordered fine of \$220,000 for individuals and \$440,000 for corporations. If you are running a commercial enterprise on your property, see the resources on the NSW Department of Primary Industries website to help you write a plan, obtain signs and more.

Diseases

Controlling the spread of diseases in our plants and animals is important for productivity and profitability as well as for diseases, weeds and contaminants. NSW has a range of biosecurity measures relating to plant and animal diseases.

Biosecurity considerations

- Livestock sales, purchases and movements.
- People, vehicles and equipment.
- Feed and water.
- Feral animals, pests and weeds.
- Animal health management.
- Carcass, wastewater and waste management.
- Training of staff and family members.
- Planning, recording and monitoring.



VISITORS

A Biosecurity Management Plan (the Plan) applies to this place. Failure to comply with the Plan may be an offence under the *NSW Biosecurity Act 2015*.

Please phone or visit the office before entering to obtain a copy of the Plan or to discuss your obligations.



DO NOT ENTER WITHOUT PRIOR APPROVAL
Vehicles, people and equipment may carry
weed seeds, pests and diseases

These include detecting and reporting diseases early through surveillance and increased general awareness of what is 'normal' and what is 'suspect' as well as effective management of animal diseases when they arise.

Almost anything moved onto your property can be a potential source of pests and diseases for livestock and plants. All landholders have a General Biosecurity Duty, so far as is reasonably practicable, to prevent, eliminate or minimise any biosecurity risk diseases can pose. It is a good idea to follow the NSW Department of Primary Industries recommendation to 'come clean go clean'.

Plant diseases

Plant pests are organisms which can affect the health of plants. These include insects, mites, roundworms, snails, fungi, viruses and bacteria.

There are very clear regulations in place to restrict the spread of diseases.



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

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. If you see unusual symptoms on plants or you suspect an exotic pest, it's important to act quickly.

Plant diseases and pests include:

- Citrus canker
- Banana freckle
- Brown marmorated stink bug
- Russian wheat aphid
- Giant African snail.

Animal diseases

Animal diseases can have a serious impact on livestock activity, trade and even human health. A number of diseases are listed as notifiable because they are exotic to Australia, such as foot and mouth disease and rabies.

If they establish here they could impact severely on animal health, trade, livestock production, human health or the environment.

Notifiable pests and diseases can be:

- a prohibited matter, such as anthrax or Hendra virus
- other listed pests and diseases present in NSW including virulent footrot in sheep and goats, and Johnes disease in sheep and cattle
- biosecurity events, including new or emerging diseases, prohibited feed, such as swill feeding of pigs or chemical contamination events.

For information and advice on animal diseases, contact a Local Land Services district veterinarian, a NSW Department of Primary Industries veterinarian or your private vet.

If you suspect or know of a notifiable animal disease, you have a legal obligation to report it immediately.

Examples include:

- African swine fever
- Equine influenza (horse flu)
- Bovine Spongiform Encephalopathy (mad cow disease)
- Foot and mouth disease
- Australian bat lyssavirus (clinical disease in animals other than bats)
- Virulent footrot in sheep and goats
- Johnes disease in sheep and cattle.

Also, the Biosecurity Regulation 2019 declares the following to be biosecurity events in animals:

- the appearance of ulcers or blisters on the mouth or feet of ruminants or pigs

- an unexplained and significant increase in a mortality rate or morbidity rate in animals
- an unexplained and significant fall in production relating to animals
- the appearance of other unexplained and significant clinical signs in animals.

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.

Ways to reduce the impacts of your domestic animals:

- put a bell or mirror collar around your cat's neck and keep it indoors especially at night
- keep your dogs chained up or within a secure yard—wandering animals can cause conflict with neighbours and you are liable for any damage or stock losses they may cause
- check the pet ownership rules in your area with your local council—there may be restrictions if there are known threatened species residing on your property
- register all dogs and cats through your local council
- do not dump unwanted animals in the bush, instead take them to your local animal pound or veterinarian
- give lizards and small marsupials a refuge from cats and dogs, by placing terracotta pipes and piles of stones around your garden.

Pests

For landowners across NSW, pests can cause serious detrimental effects on the environment, our economy and the community. Under the *Biosecurity Act 2015*, pest animals are any species (other than native species) that present a biosecurity threat. All landholders have a General Biosecurity Duty, so far as is reasonably practicable, to prevent, eliminate or minimise any biosecurity risk pests can pose.

Regional Strategic Pest Animal Management Plans have been developed for landowners to understand how to control pest species and their impacts.

They outline how government, industries and the community can work together and share the responsibility to eradicate, contain or manage pest animals across the region. Find out what pests are listed as priorities in your area by getting a copy of the relevant Regional Strategic Pest Animal Management Plan from Local Land Services.

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

Some pest animals can carry zoonotic diseases which means they 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.

Local Land Services can provide advice and help to control pests. You should tell us about any evidence of wild dog attacks or new pest species.

Our **biosecurity officers:**

- provide advice and enable you to eradicate declared pest species from your property
- help you develop a control plan
- sell baits to ratepayers and advise you on purchasing baits such as meat, carrots and grain

- run pesticide training courses to provide you with the necessary accreditation to use 1080, PAPP, RHD and Pindone baits
- advise you on non-chemical control methods and hire out equipment such as traps
- inspect properties for declared pests and help you to develop a control plan
- work with private and government stakeholders to develop vertebrate pest management plans and co-operative management programs.

Group pest control programs

The most effective method of controlling pest animals across NSW landscapes is with co-ordinated group control programs. Each year Local Land Services co-ordinates hundreds of group programs using a variety of control methods. We encourage all landholders to participate for the largest impact on pest populations. To find out more about group control programs in your area, contact Local Land Services.



Why should I join a group pest control program?

- You have a legal responsibility to control pests.
- It is easier and more effective to abide by your responsibilities as part of a group.
- You will contribute to protecting native plant and animal species. Pest species predate on native animals and destroy habitats.
- Pests cost NSW hundreds of millions of dollars each year and farmers are particularly impacted. Help play your part to reduce the impact on our food and fibre growers.
- Keep your property in its best possible condition. Pest animals can cause serious land degradation including erosion.
- You will be educated about best practice for pest control, reducing the chance of baits harming native species or your stock.
- Meet your neighbours and play your part in a rural community.

Weeds

The basic definition of a weed is a plant growing where it shouldn't be. Weeds can be a major problem to rural properties because they can contribute to:

- the loss of native species and their habitat
- reduced land productivity and water quality
- increased control costs as they spread
- soil degradation and erosion
- impacts on human and animal health e.g. through infestations of drinking water supplies.

Weeds can enter and spread to your property via:

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

In NSW, weeds fall into categories of:

- environmental weeds
- agricultural weeds
- weeds of national significance
- national environmental alert list weeds.

NSW's 11 Regional Strategic Weed Management Plans list each region's State and Regional priority weeds under four categories—prevent, eradicate, contain and assets protection. These categories replace the noxious weeds list for NSW. Contact Local Land Services for a copy of your relevant Management Plan.

Under the *Biosecurity Act 2015*, landholders have a General Biosecurity Duty to prevent, eliminate or minimise any biosecurity risk weeds can pose.

Check what weeds may be in your local area and how they need to be managed using NSW WeedWise (via web or app) or ask Local Land Services for advice.

Identifying weeds

You can help Local Land Services with early detection of weeds and weed-based plants by knowing what to look for, where and when to look, and who to contact. If you think you've found a new type of weed on your land or property, contact your local control authority or council. Alternatively, you can call the NSW DPI Biosecurity helpline (see page 42).

When identifying weeds, you should look:

- for plants that quickly spread and take over
- for plants you didn't plant
- for unusual plants you haven't seen before
- in gardens and bushland
- in paddocks, holding paddocks and stockyards
- along fencelines, waterways, road and tracks
- when cultivating, planting and irrigating
- when moving or feeding livestock
- after floods, fires or introducing gravel, sand, soil or turf.

Local councils employ weed inspectors and inspections by councils are available for a fee.

Weed control

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.

Herbicides are often an important part of an integrated plan to control weeds but should not be 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.

When it comes to weed control and management, Local Land Services is primarily responsible for delivering Regional Strategic Weed Management Plans, facilitating and coordinating regional strategic planning and assisting with education and community outreach programs. Local control authorities, for example councils, are responsible for enforcing the *Biosecurity Act 2015*, including conducting weed inspections on public and private land.

Note: Invasive Native Species are types of native vegetation that are thickening and encroaching on an area. They are not weeds and you need approval to remove them. See page 14.

Resources and websites

- Search the WeedWise site and app for more than 300 weeds in NSW weeds.dpi.nsw.gov.au
- Local Land Services has lists of priority weeds, Regional Strategic Management Plans and advice on control methods. Search 'weeds' at www.lls.nsw.gov.au
- Email weeds@dpi.nsw.gov.au to report weeds or make enquiries.
- Refer to Weeds Australia (Commonwealth government) www.environment.gov.au/biodiversity/invasive/weeds



In a life-threatening emergency call 000

Emergencies

The best way to manage the impacts of emergencies is to be prepared. You should plan well in advance and understand the risks and hazards surrounding your property. Emergency planning information is available from your local NSW Rural Fire Service (RFS) brigade, NSW State Emergency Service (SES) unit, council and Local Land Services. Neighbours and regional historical records may help determine if your property is at risk. Local Land Services has officers who know your area and can help you prepare for emergencies particularly if you are new to rural living and have never faced an emergency. Here are six steps to get ready

- 1. Know your risk**—think about the area you live in and the types of disasters that could affect you.
- 2. Plan now**—sit down and talk with your family about what you will do if disaster affects your area. Determine triggers that will activate it such as fire danger ratings or flood height predictions.
- 3. Get your home, animals and property ready**—do maintenance, check your insurance, prepare an emergency kit, make sure your animals are properly identified e.g. through ear tags, identify a safe area on your property for livestock e.g. a grazed or ploughed paddock or in the case of flood, high ground potentially with a large purpose built mound. If possible, transport larger animals off your property to a safer location well in advance of the emergency.
- 4. Be aware**—find out how to prepare specifically for each type of disaster in your local area and stay up to date with alerts and warnings via media particularly local radio, websites and the social media feeds of emergency services and service providers.
- 5. Look out for each other**—share information with your family, friends, neighbours and those who might be in need.
- 6. Ensure Local Land Services has your current contact details**—so we can help you during emergencies.

Agriculture and animal services in emergencies

The NSW Department of Primary Industries and Local Land Services provide support during emergencies, specifically to assist primary producers and animal owners. Services provided by the Agriculture and Animal Services Functional Area (AASFA) include:

- emergency fodder
- assistance for beekeepers such as emergency sugar
- emergency stock water
- veterinary assistance
- livestock euthanasia and burial
- livestock feeding and management advice
- co-ordinating care of animals in evacuation centres.

To request assistance during an emergency, call the AASFA Hotline (see ‘Resources and websites’ on page 48). So we can best assist you, it is important that you have your records in order and on hand, for example your holding reference number which is listed on your Local Land Services rates notice and a PIC for your livestock.

Emergency recovery

Once the immediate danger of an emergency has passed, the recovery phase begins. Disaster recovery centres may be established following some emergencies. These can provide a range of welfare services including financial assistance, personal support and organising temporary accommodation.

There are many services available to provide ongoing assistance such as the NSW Rural Assistance Authority which can help with natural disaster recovery grants. The RFS and SES also have recovery kits available on their websites. Service NSW is a one-stop-shop for NSW government services, including assistance during and after emergencies. Local Land Services is also here to help you during recovery.

Floods

If you live close to a creek, river or are in a low lying area you may be at risk of flood. You may never have experienced a flood before or even if you have, remember that larger floods than those previously experienced can occur in your area.

In rural areas, inundation and losses of crops and fences is usually unavoidable however, through preparation, you could potentially reduce losses of livestock, irrigation equipment, houses and sheds.

Even if your property is not directly affected by flooding, you may be isolated and require assistance such as the supply of essential items and feed for livestock. While in many cases evacuation will not be necessary, you should consider evacuation as an option if severe flooding is predicted. Deciding to remain in your home when it is inundated or surrounded by floodwater can be dangerous. Flooding may last for weeks. Your home may become a refuge for vermin, snakes and spiders. There may be no water, sewerage, power, telephone or other services for several weeks and you may be unable to call for help in an emergency.

The SES has developed a Rural Properties FloodSafe Guide for information and advice on floods in rural and remote properties in NSW.

Storms

Storms can happen anywhere, at any time of the year. In urban areas, storms can have impacts on houses, gardens, sheds, powerlines, roads and pets. In rural areas, those are combined with the impacts of losses of and damage to crops, livestock, fencing, farm machinery, irrigation equipment, fodder and other farm supplies. There are a few things you need to especially be aware of, for instance storing chemicals appropriately to reduce the risk of damage and potential contamination, raising pumps and farm equipment in case of flood and ensuring appropriate shelter for stock. Keep your property tidy to reduce the chance of damage when things are blown around.

Bushfires

Bushfires are a common and natural occurrence in NSW and Australia in general. Not only does bushfire pose a risk to personal safety and property, it can also have major effects on biodiversity and water quality. If you own or manage land, you are legally responsible for minimising the risks. The *Rural Fires Act 1997* states that land managers and owners are responsible for carrying out hazard reduction to protect existing dwellings, major buildings and other assets susceptible to fire.

Resources and websites

- For personal hardship and distress, contact the Disaster Welfare Assistance Line 1800 018 444. Also see mental health services on page 38.
- The NSW State Emergency Service has resources to help you before, during and after floods and storms. Search for specific guides including 'Rural storms', 'Floodsafe for Rural Areas' and 'Get ready animals' resources. Call 132 500, go to www.ses.nsw.gov.au or download the 'Stormsafe' and 'Floodsafe' apps.
- Find an interactive tool to create an emergency plan for flood or storm at www.sesemergencyplan.com.au
- The NSW Rural Fire Service website has sections such as 'Fire information' which includes Fires Near Me (there is also a Fires Near Me app), fire danger ratings, bans, permits and alerts. Under 'Plan and Prepare' there are resources including preparing your home and family, building in a bushfire area and vegetation clearing, and under 'Resources', there is a guide to preparing a bushfire survival plan (there is also a My Fire Plan app). Head to www.rfs.nsw.gov.au or call 1800 679 737.
- NSW Office of Emergency Management has resources including financial assistance and support, evacuation, recovery and Get Ready guides. www.emergency.nsw.gov.au
- The NSW Rural Assistance Authority (RAA) www.raa.nsw.gov.au and Service NSW www.service.nsw.gov.au have information on assistance such as loans and grants after an emergency.
- Refer to the emergency pages of Local Land Services www.lls.nsw.gov.au/emergency and the NSW Department of Primary Industries www.dpi.nsw.gov.au/emergency
- Go to Live Traffic NSW www.livetraffic.com/desktop for road closures and hazards or download the app.
- For tips on helping wildlife in emergencies, search 'wildlife emergencies' at www.environment.nsw.gov.au
- The Agriculture and Animal Services Functional Area (AASFA) hotline during emergencies is 1800 814 647
- The Bureau of Meteorology, NSW, has weather warnings, rainfall and river conditions www.bom.gov.au/nsw
- Search for your local NSW Police station www.police.nsw.gov.au
- Follow the social media feeds of all of the above.

Create a bushfire survival plan well before the fire season begins. There are clear instructions on how to do this on the website, MyFirePlan. Ensure your plan includes what you will do for your pets and livestock.

Danger periods, ratings, bans, permits and alerts

It is essential you keep abreast of the current fire conditions and any restrictions for your region. These are updated by the RFS according to the current weather and environment. There are heavy penalties if you do not follow restrictions or rules. Information on all of these can be found on the RFS website or by contacting your local RFS brigade.

The Bushfire Danger Period (BFDP)—usually starts in spring and ends in autumn but varies from district to district depending on seasonal conditions and fuel loads.

Fire danger ratings—ranges from low–moderate to catastrophic and is updated daily based on conditions and forecasts.

Total Fire Ban (TOBANS)—no fire may be lit in the open and all fire permits are suspended. This means you cannot use incinerators and barbecues which burn solid fuel, e.g. wood, charcoal or heat beads and or do general purpose welding, grinding, soldering or gas cutting in the open.

Permits—a Fire Permit is required for burning activities during the Bush Fire Danger Period. Permits are designed to help ensure fire is used safely to minimise the danger to you, your property and the community. Permits are free and can be obtained from your local RFS brigade.

Alerts—if fires are active in NSW, they have a status of Watch and Act, Advice or Emergency to give you an indication of the level of threat. You may receive text messages or phone calls if a fire is a threat near you but do not wait for a warning to enact your bushfire survival plan. Some fires start and spread quickly and there may not be time for a warning.

Hazard reduction

Cool burning, including cultural burning, at appropriate times can be beneficial for native plants and animals. However, effective bushfire management involves fire authorities, landholders, traditional owners, planning authorities, your local council and the local community and must be done with the relevant approvals. The work you do to prepare your own property is a critical component of bushfire management. Firstly, you need to understand your bushfire zoning risk. Talk to your local council to see if you are in a bushfire prone area or use the RFS online mapping tool.

In NSW, building standards in bushfire prone areas require:

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

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

Asset protection zones

Some of the most important hazard reduction measures for rural properties, particularly those on bush blocks, are the creation of an asset protection zone that breaks the continuous canopy of trees as well as regular maintenance to reduce fuel levels.

Some things you can do include:

- remove some trees and reduce dry undergrowth, long grass and dead branches
- if you have stock, use them to manage pasture near your home during late spring and early summer
- prune low tree branches two metres from the ground and separate tree crowns
- use property features as part of your asset protection zone including a well watered lawn, fire trails, gravel paths, dams, creeks and pools
- ensure vegetation around the house does not provide a path for fire—plant or clear vegetation in clumps rather than rows
- use the 10/50 clearing rule for hazard reduction—contact your nearest RFS brigade.

Note: *There are regulations surrounding removal of native vegetation and approvals may be needed. Local Land Services has a fact sheet on 'Managing native vegetation to prepare for a bushfire'.*

Other tips for preparing your property for bushfires:

- clear out gutters and install fire-rated gutter guards
- fix the roofing to reduce the risk of embers entering
- move items away from the house e.g. the wood pile
- direct 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.
- possibly install a dedicated fire fighting tank.



Planning

Regional strategic plans

There are 10 regional plans in place across NSW which set out the framework, vision and direction for strategic land use, planning for future needs for housing, jobs, infrastructure, environments and communities. They are used by councils, government agencies, industry and local communities to deliver priority actions.

Local Land Services plans

The *Local Land Service Act 2013* requires the development of state and regional strategies to guide how Local Land Services provides services.

Local Land Services has a State Strategic Plan which defines organisational priorities and outlines the way services will be delivered to build resilient communities and meet local needs.

Each of the 11 Local Land Services regions has a local strategic plan which identifies local priorities and determines how the goals and strategies of the State Strategic Plan are best achieved. The strategic plans are developed following public consultation including briefings, public meetings, community advisory groups and online engagement.

Local government plans

Local Environmental Plans

Local Environment Plans (LEPs) are the main planning tool used by local councils to shape the future of communities and also ensure development is done

appropriately. An LEP 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, an LEP will give a list of objectives that indicate the aims intended for that zone and the type of development that is allowed.

If you are planning a development, check with your council first to see if the proposal is permissible and consistent with the standards within the relevant LEP.

Development Control Plans

Development Control Plans (DCPs) provide specific, more comprehensive guidelines and standards for certain types of development. The detailed guidelines contained within a DCP are in addition to the provisions of 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 local council to see what development standards would apply and advise your designer of these standards.

Resources and websites

- View the state Local Land Services Strategic Plan or your region's at www.lls.nsw.gov.au
- Contact your local council to view your area's Local Environmental Plan or Development Control Plan.
- For more about planning regulations and to examine Regional Plans go to www.planningportal.nsw.gov.au



Small landholdings

In recent years there has been a shift in NSW from a countryside once scattered primarily with traditional family farms, to a diverse landscape where large farms operate next door to rural residential properties and small farms. These are generally less than 30 hectares in size. Small area properties and their owners can make a substantial social, economic and environmental contribution to rural communities. However, in some regions, the practice of splitting up larger farms into smaller units of hobby farms and lifestyle blocks has led to negative environmental impacts and land-use conflict in the peri-urban fringe area.

If you are, or are planning to be, a hobby or small scale professional farmer or own a rural lifestyle property, there are programs and specific services, advice and workshops to help you:

- understand the value your property has on local native plants and animals

Resources and websites

- Many Local Land Services regions have specialist small landholding officers. Contact your nearest office to find out more.
- Engage with the 'Every Bit Counts' program and sign up to newsletters and workshops including the 'Bootcamp' at www.lls.nsw.gov.au/ebc
- Some regions have a Small Farms Network. Ask Local Land Services or speak to your local council to make contact with one in your area.
- The NSW Department of Primary Industries has resources specific to small landholdings. Search for publications including 'Building biosecurity for small farms' and 'Small-scale poultry keeping' (Primefact 597) at www.dpi.nsw.gov.au
- Go to your local farmers' market and meet producers and get to know farming in your area.

- learn best practice methods for keeping animals including poultry, sheep, cattle, goats and alpacas
- gain information on growing horticultural crops including bush tucker, vegetables, fruit and winegrapes for family or commercial production
- consider your options for Private Native Forestry which is a popular land management option for small-sized properties that have forested areas
- receive education on weed control, pasture productivity and soil health
- be part of local and regional project planning for bushland, creek restoration or shelterbelts design.

Every Bit Counts

This program is run by Local Land Services for landholders on small holdings. This includes in areas on the fringes of Sydney, the Central Coast, the Hunter, North Coast and South East NSW.

The Every Bit Counts program includes workshops, field days, webinars and podcasts on topics including weed management, habitat protection, pest animal control and opportunities to develop skills in sustainable land management. The program also works to increase connections between landholders and existing local groups such as Landcare.

Small landholdings top tips

1. Stay up to date with the regulations for owning land, animals and your biosecurity responsibilities.
2. Make plans for land management, property development, biosecurity, emergencies and more.
3. Keep records for interactions such as livestock purchases and sales, chemical usage and vegetation clearing approvals.
4. Control and patrol your property through regular checks, keeping a visitor register and maintaining fences.
5. Know what is unusual on your property and report it to the relevant authorities.

Information sources

AdaptNSW www.climatechange.environment.nsw.gov.au
 AgHealth Australia www.aghealth.sydney.edu.au
 Animal Welfare League NSW www.awlnsw.com.au
 Australian Government Department of Agriculture, Energy and the Environment www.environment.gov.au
 Australian Government My skills website www.myskills.gov.au
 Australian Interstate Quarantine www.interstatequarantine.org.au
 Beyond Blue www.beyondblue.org.au
 Biodiversity Conservation Trust www.bct.nsw.gov.au
 Birdlife Australia www.birdlife.org.au
 Bureau of Meteorology www.bom.gov.au
 ChemClear www.chemclear.com.au
 Clean Energy Council www.cleanenergycouncil.org.au
 Communities and Justice NSW www.facs.nsw.gov.au
 Conservation Volunteers Australia www.conservationvolunteers.com.au
 Crown Lands in NSW www.industry.nsw.gov.au/lands
 Department of Planning, Industry and Environment www.dpie.nsw.gov.au
 Department of Planning, Industry and Environment-Environment, Energy and Science group www.environment.nsw.gov.au
 Department of Primary Industries www.dpi.nsw.gov.au
 Regional NSW www.nsw.gov.au/regional-nsw
 Energy NSW www.energy.nsw.gov.au
 drumMUSTER www.drummuster.com.au
 Environment Protection Authority www.epa.nsw.gov.au
 Environment Protection Authority (Victoria) www.epa.vic.gov.au
 Farm Biosecurity www.farmbiosecurity.com.au
 Farmco www.farmco.com.au
 Farmsafe www.farmsafe.org.au
 Fair Trading NSW www.fairtrading.nsw.gov.au
 Greening Australia www.greeningaustralia.org.au
 Heritage NSW www.environment.nsw.gov.au/topics/heritage
 Landcare NSW www.landcarensw.org.au
 Land for Wildlife www.cen.org.au/projects/land-for-wildlife
 Lifeline www.lifeline.org.au
 Live Traffic NSW www.livetraffic.com
 Local Land Services www.ils.nsw.gov.au
 Meat and Livestock Australia www.mla.com.au
 Mens Line Australia mensline.org.au
 National Broadband Network www.nbnco.com.au
 Natural Resources Access Regulator www.industry.nsw.gov.au/natural-resources-access-regulator

NSW BioNet www.bionet.nsw.gov.au
 NSW Farmers www.nswfarmers.org.au
 NSW Health www.health.nsw.gov.au
 NSW Land Registry Services www.nswlrs.com.au
 NSW National Parks and Wildlife Service www.nationalparks.nsw.gov.au
 NSW Office of Emergency Management www.emergency.nsw.gov.au
 NSW Police www.police.nsw.gov.au
 NSW Planning Portal www.planningportal.nsw.gov.au
 NSW Rural Assistance Authority www.raa.nsw.gov.au
 NSW Rural Fire Service www.rfs.nsw.gov.au
 NSW Soil Conservation Service www.scs.nsw.gov.au
 NSW Spatial Services www.spatial.nsw.gov.au
 NSW State Emergency Service www.ses.nsw.gov.au
 Office of Local Government NSW www.olg.nsw.gov.au
 Planet Ark www.recyclingnearyou.com.au
 Resources and Geoscience in NSW www.resourcesandgeoscience.nsw.gov.au
 Return and Earn www.returnandearn.org.au
 Royal Botanic Gardens Sydney PlantNET www.plantnet.rbgsyd.nsw.gov.au
 RSPCA NSW www.rspcansw.org.au
 Rural Adversity Mental Health Program www.ramhp.com.au
 SafeWork NSW www.safework.nsw.gov.au
 Service NSW www.service.nsw.gov.au
 Suicide Call Back Service www.suicidecallbackservice.org.au
 Tocal College www.tocal.nsw.edu.au
 Transport for NSW - Roads and Maritime www.rms.nsw.gov.au
 WaterNSW www.waternsw.com.au
 Wildlife Friendly Fencing Project www.wildlifefriendlyfencing.com
 WIRES www.wires.org.au

Images

Page 30 - drumMUSTER

Page 38 - 'Daylight start' - Jane Smith. *

Pages 7, 8, 13, 27, 29, 36 and back cover - Rachel Gordon.

** This photo was part of the Life and Light Photo Competition which has been run annually by Western Local Land Services and Western Landcare NSW for over 20 years to highlight the beauty, diversity and wonder of Western NSW and the people, flora and fauna that live in it.*

Local Land Services - your one stop shop

We're here to help you with information and advice on a wide range of topics to help you manage your property. Go to www.ils.nsw.gov.au and use the clickable map or 'select your region' drop down menu to find your nearest Local Land Services office. Alternatively, call us on 1300 795 299 and you will be put through to your region's main office. We'd love to hear from you!

The Rural Living Handbook

Local Land Services is providing this handbook to let you know about the many resources available to you as a rural landholder as well as your responsibilities.

Keep this handbook as a helpful reference for information on:

- buying your property
- natural resources
- property management
- biosecurity, pests, weeds and diseases
- emergencies
- key contacts.

