

Environmental code of practice for graziers in the Northern Gulf region

“Four Rivers Document”

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For the Northern Gulf Resource Management Group



Disclaimer

This is not a technical research report. It is a consensus document, which was developed through a series of meetings and workshops with Northern Gulf graziers. These graziers formed the “Four Rivers Group”, an informal and unincorporated group, to progress the preparation of their own environmental code of practice. This document reflects the thinking of this group of graziers as at the date shown and is subject to periodical review and revision. This document may become redundant if and when a whole-of-grazing industry (environmental) code of practice is developed and endorsed.

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1 Relevant background to this document

1.1 Context

An environmental code of practice provides the members of an industry with guidelines how they can meet their environmental duty of care.

Many primary industries in Queensland and elsewhere have developed an environmental code of practice for their members. Adoption of the actions recommended in the code of practice is voluntary but highly advisable, since it helps members demonstrate that they are meeting their environmental duty of care as required by law.

There is no code of practice for the grazing industry, which leaves the members of this industry particularly exposed to potential legal action on the grounds of causing environmental harm.

The Northern Gulf Resource Management Group sought to address this risk to their grazier constituency and give graziers a tool that can assist them in developing land management agreements with the Queensland state government. Land management agreements are a requirement under the Delbessie Agreement for future renewal of pastoral leases.

This document outlines relevant context and background regarding the development of an environmental code of practice in Section 1. Section 2 contains the actual code of conduct for graziers in the Northern Gulf region. Section 3 lists documents which were used in the development of this document.

1.2 Why do we need a code of practice?

The Environmental Protection Act 1994 places responsibility on all Queenslanders to meet a general environmental duty of care. “Environmental duty of care” is a precautionary concept.

An agent (e.g. an individual or a business—for example a landholder) must not carry out any activity that causes or is likely to cause **environmental harm**. Environmental harm is any (potential) adverse effect—direct or indirect—on an environmental value.

Environmental harm can include:

- Land degradation (e.g. soil erosion and decline in soil structure);
- Air pollution;
- Water pollution (including pollution by salt, agrichemical and nutrients);
- Invasion of weeds and pests;
- Noise;
- Destruction of ecosystems and habitats; and

- Loss of species.

Environmental harm may be caused by an activity:

- Whether the harm is direct or indirect result of the activity; or
- Whether the harm results from the activity alone; or
- Whether the harm results from the combined effects of the activity and other activities or factors.

Landholders must take all **reasonable and practicable measures** to conduct their activities and practices in a way that prevents or minimizes environmental harm.

In deciding what “all reasonable and practicable measures” are, the landholder should consider:

- The nature of the harm or potential harm, and
- The sensitivity of the receiving environment, and
- The current state of technical knowledge for the activity, and
- The likelihood of successful outcomes from different methods that might be used, and
- The financial implications of implementing different methods.

What is reasonable and practical will also depend on a number of factors, including the circumstances of the individual manager and the characteristics of the particular property, climatic conditions, regional geography, topography and agronomy.

In addition to the Environmental Protection Act 1994, the Land Act 1994, the Aboriginal Cultural Heritage Act 2003 (Section 2.4), the Water Act 2000 and the Vegetation Management Act 1999 are also relevant to defining the environmental duty of care of Queensland landholders.

The Land Act 1994 is of particular relevance to grazing lease holders. All other Acts equally apply to freehold and leasehold land.

To show that this General Environmental Duty of Care has been met, a producer has to be able to show ‘**due diligence**’. Due diligence is when the person responsible for the property can demonstrate that they have assessed the potential risk to the environment from a farming or grazing activity and then to have taken reasonable and practical measures to minimize that risk.

Demonstration of due diligence is enhanced by ensuring relevant information is available in the event of an investigation into environmental harm. This may be shown by:

- Establishing a system for managing environmental matters;
- Maintaining the system; and
- Monitoring the results.

How to achieve due diligence has been clarified in the Delbessie Agreement (State Rural Leasehold Land Strategy 2008). Lease renewal now requires lessees to enter into a land management agreement with the Queensland state government. The land

management agreement stipulates for each and every property what is “reasonable and practical” for the lessee to do.

To assist their members in demonstrating due diligence, many primary industries have developed and adopted an industry **code of practice** and had them endorsed by government.

Complying with a code of practice is voluntary--there is no offence in not complying. However, compliance with an approved Code provides a means of defence. If a person can show that they fulfil their environmental duty of care, then they are unlikely to be found guilty of causing unlawful environmental harm.

No approved code of practice exists for the grazing industry. However, there is a more generic code of practice for agriculture in Queensland, which includes all agricultural activities including grazing. This code is detailed in section 1.5 (below).

Other industries, in Queensland and elsewhere, have adopted codes of practice that also include operational and business aspects relevant for industry members. For general guidance, Table 1 provides an overview of the elements contained in a selection of codes of practice.

1.3 How to establish a code of practice

The Queensland Environmental Protection Agency has produced guidelines to assist industries to develop a Code of Practice for approval under the *Environmental Protection Act 1994* (EPA, 2001). Having an approved code of practice ensures there are ways of achieving compliance with the general environmental duty as set out in section 319 of the *Act*. The EPA believes there are five key features that distinguish a good Code:

- Clearly identified environmental objectives for the protection of air, noise, water and land;
- Clearly stated measures that are reasonable and practicable;
- Clearly identified measurements that serve as an assessment tool;
- Clearly stated date for review; and
- Evidence of public consultation.

The EPA acknowledges that “a Code cannot accurately describe the general environmental duty for each and every circumstance. However, a good Code will set out reasonable and practical measures that can be adapted to each situation together with assessment tools that will be relevant to all operations” (DEPA, 2001:p.3).

1.4 Towards a local code of practice

A code of practice is more than a suggested list of desirable practices. A code provides a means of taking reasonable and practicable measures to minimise the risk of environmental harm.

A voluntary code of practice

- allows the user to take up the suggested actions but accepts that the environmental aim can be met through alternative measures.
- acknowledges that there will be a variety of land, climate and ecological differences within a region which can impact on actions taken

Table 1: Elements of existing Codes of Practice

Note: valid as at 30 April 2009

	Environmental Code of Practice for Australian Prawn Farmers	Sustainable Canegrowing in Queensland	Native forest practice on freehold land, Queensland	New Zealand Environmental Code of Practice for Plantation Forestry	Code of Good Agricultural Practice to protect water, soil and air quality, UK (Draft)	Grazing Lease Stewardship Code of Practice, Canada	Grazing Best Management Practices Burdekin
Environmental Issues							
Erosion and sediment control	✓	✓	✓	✓	✓	✓	✓
Water quality	✓	✓	✓	✓	✓	✓	✓
Soil conservation and quality	✓	✓	✓	✓	✓	✓	✓
Air quality	✓	✓			✓		
Aquatic Life	✓		✓		✓		
Native Wildlife	✓	✓	✓	✓	✓	✓	✓
Biodiversity	✓	✓	✓	✓	✓	✓	✓
Historical and cultural values			✓	✓	✓		
Landscape and visual values			✓	✓		✓	
Neighbors	✓	✓	✓	✓	✓		
Recreation Values			✓	✓	✓	✓	
Operational Issues							
Planning	✓	✓	✓		✓	✓	
Infrastructure e.g. roads			✓	✓			✓
Land Preparation	✓	✓	✓	✓	✓		
Planting		✓	✓	✓	✓		
Tending/Harvesting	✓	✓	✓	✓	✓	✓	✓
Chemical Use	✓	✓	✓	✓	✓		
Fire Management		✓	✓	✓			✓
Waste Management	✓	✓		✓	✓		
Disease	✓	✓		✓	✓		
Noise/Odor	✓	✓		✓	✓		
Business Management Issues							
Best Management Practice	✓	✓	✓	✓	✓	✓	✓
Compliance	✓	✓	✓	✓	✓	✓	✓
Transparency/Accountability	✓	✓	✓	✓	✓	✓	
Quality Assurance - Monitoring	✓	✓	✓	✓	✓	✓	✓
Workplace Health and Safety		✓		✓	✓		
Personal Development	✓	✓	✓	✓	✓		
Workplace Relations					✓		

There are important benefits in following a code of practice

- improved prospects of successfully defending any legal action in relation to environmental harm
- provides a means of meeting legislative requirements e.g. *Environmental Protection Act 1994*
- easier to meet the requirements of the State Leasehold Land Strategy, more commonly known as the “Delbessie Agreement”
- provides an incentive to maintain appropriate records for measuring environmental outcomes.

1.5 Principles of an environmental code of practice for agriculture

In Queensland an Environmental Code of Practice for Agriculture was introduced in 1998. While it has since been superseded by the Farm Management Systems,¹ the structure and design of the original Code retain particular relevance for the grazing industry, which to date has no dedicated and approved code of practice or farm management system.

The old Code states principles which rural land managers should achieve in order to comply with their General Environmental Duty under the Act. These principles are called **expected environmental outcomes** and form the key components of the Code.

Compliance with the Code is achieved if landholders manage their properties in such a way that it may be shown that the expected environmental outcomes have been achieved.

All reasonable and practical measures should be adopted, within the constraints of a sustainable agricultural system:

1. to conserve representative samples of native species and ecosystems:
2. to conserve the productive characteristics and qualities of the land and its soil:
3. to conserve the integrity of waterways and the quality of water:
4. to manage waste from on-farm activities:
5. to conserve the quality of air through minimizing the release of contaminants;
and
6. to minimize the impact of noise on environmentally sensitive places at sensitive times.

The following sub-sections (1.3.1–1.3.6) outline activities that relate to the environmental objectives outlined in the Code.

¹ The FMS was produced by the Queensland Farmers’ Federation in partnership with the Department of Natural Resources and Mines and major industry groups – CANEGROWERS, Queensland Dairyfarmers’ Organization, Growcom and Cotton Australia. This is a high level agreement, which has industry specific codes of practice nested beneath it.

1.5.1 Biodiversity conservation

Overgrazing and over clearing can cause the loss of bio-diversity and land degradation. Sustainable stocking rates and temporary destocking of heavily grazed areas can provide the opportunity for those areas to recover.

Declared and woody weeds may be managed to some extent by avoiding overgrazing and carefully using fire as a natural control agent. There is an increasing problem in many areas from weed infestation, including an excess of trees, due to lack of regular burning.

The conservation of native plants and animals is essential to maintain the health and integrity of regional ecosystems.

The vegetation along waterways is very important for a number of reasons including stream bank stability, preservation of wildlife, maintenance of large and diverse blocks of linked vegetation, protection of aquatic wildlife, conservation of water quality and also for a number of agricultural production and management reasons.

To preserve the riparian areas consideration may be given to providing buffer areas along waterways, using selected or alternative watering points and in some circumstances fencing areas, where these are reasonable and practical measures.

In determining appropriate widths for riparian buffers, consideration should be given to the size of the channel, the maximum volume and the rate of flow of water, the vegetation and soil type and the productivity impact on the landholder.

1.5.2 Land/soil conservation

Reasonable steps may include:

- identifying the land capacity, assessing the nature and extent of potential limitations to using that land and identifying key indicators for monitoring land conditions;
- assessing current land condition by identifying existing and potential land degradation problems, their cause and extent;
- identifying, planning and implementing solutions;
- regular monitoring of key indicators to assess any changes in land condition; and
- reviewing and modifying land management in response to changes in land condition.

The susceptibility of an area to erosion depends on a number of factors including soil types, intensity of rainfall, length and steepness of slope and vegetative (including ground) cover. Land degradation includes soil erosion, mass movement, salinity, acidification, fertility and structural decline and soil contamination. Agricultural practices that minimize land degradation should be identified and adopted as far as possible.

Serious and widespread degradation of environmental qualities has resulted from poor management in times of drought. Planning which recognizes the extremes of Australia's weather characteristics is recommended.

All reasonable and practicable measures should be used to:

- minimise potential water erosion, wind erosion and other soil loss;
- minimise degradation of land through landslip and gully erosion;
- maintain groundcover in grazing situations;
- manage excessive tree regrowth;
- minimise causes of rising water table levels;
- minimise impacts on aquifer intake sites;
- minimise impacts on natural drainage lines;
- avoid soil structure decline;
- maintain soil fertility levels;
- maintain in grazing situations, sufficient plant cover on the soil surface to minimise raindrop impact, increase infiltration, slow overland flow and minimise wind erosion; and
- reclaim or prevent the spread of severely eroded areas by fencing, removing grazing stock, diversion of water from the area, pasture re-establishment and strategic re-vegetation or land fill as is relevant to the particular production circumstances.

Fertility decline and nutrient loss occurs with soil loss and grazing. Effective management of nutrients should be achieved through practices minimising soil erosion and run-off, especially in high rainfall events.

Pastures should be managed to maintain body and ensure that potential for soil degradation is minimised and long term productivity sustained. Attention should be given to maintaining species composition. When assessing the potential for pasture degradation, feral and native grazing animals should be managed as appropriate and their impact taken into account.

Overall average stocking rates should tend to be conservative and groundcover preserved. Overstocking, i.e. animal densities which violate this objective, is not acceptable practice.

Regular monitoring of pasture availability through "Grasscheck" or similar monitoring programs and variation of stocking rates accordingly is recommended. This is particularly important during climatic extremes such as drought. Consideration may be given to practices such as rotational grazing, spelling and controlled burning (as stipulated in a formal fire plan).

To assist management of pastures during times of drought supplementary feeding within a confined area should be considered to manage potential pasture degradation. At such times, early reduction in stock numbers in response to signals of impending drought is strongly recommended.

1.5.3 Water conservation relating to water use and water quality

Reasonable steps to prevent degradation of water quality may include:

- identifying key indicators for monitoring the quality of water flowing from the property and potentially impacting on waterways and aquifers;
- identifying any existing and potential water quality problems, determining whether they are caused or contributed to by on-farm activities and if so, discovering the cause(s) and extent as far as reasonable and practical;
- identifying, planning and implementing appropriate management solutions;
- regularly monitoring key indicators to assess any changes in water quality;
- reviewing and modifying management in response to any changes in water quality.

Water use within grazing enterprises should endeavour to be sustainable in order to conserve the character and quality of waterways and water and minimise environmental degradation.

Care should be taken to prevent contamination of waterways and aquifers that may result from inappropriate siting of dips, feedlot areas and similar activities.

In some situations where harm caused to waterways by watering stock is significant, consideration should be given to siting watering points so that the level of environmental impact is reduced.

Consideration should be given to new technology and management strategies to support water use efficiency as far as reasonable and practicable. In grazing situations, this may include capping bores and piping artesian water.

1.5.4 Waste management

Producers are expected to consider the environmental effects from waste and prevent or reduce the amount generated in farm business activities. Where the potential to cause environmental harm exists but its actual effect is unknown, consideration should be given to ways of managing the risk.

In considering management of waste, producers should where reasonable and practical:

- reduce actual and potential impact on the environment caused by waste;
- establish management strategy for minimising and managing waste on farm;
- reduce the overall amount and toxicity of waste generated on farm.

1.5.5 Air quality management

An environmental nuisance may occur when people affected consider there is unreasonable interference caused by dust, odour, smoke, or an unhealthy, offensive or unsightly condition is caused by air contamination.

Before undertaking an activity which involves release of contaminant to the air, consideration should be given to the existing air quality, weather patterns and landform in the area, the nature of the activity, acceptable release levels and the likely impact on neighbouring activities. An assessment of impact on your neighbours from farming activities should be considered and steps taken to reduce or remove this impact where this is practicable.

In April 2009, the United States of America, declared carbon dioxide a hazardous substance because of its greenhouse-effect enhancing properties. Large amounts of carbon dioxide are generated by savanna burning. Savanna grazing systems generate other gases also with greenhouse-effect enhancing properties. For example, cattle generate methane (with a carbon dioxide equivalency of 25) as a natural by-product of their digestive system and savanna burning generates nitrous oxide (with a carbon dioxide equivalency of 298). The Australian Government is in the process of formulating policy relating to carbon dioxide and other greenhouse relevant gases and in the future a grazing code of practice may need to include activities to minimise emissions of these gases.

1.5.6 Noise management

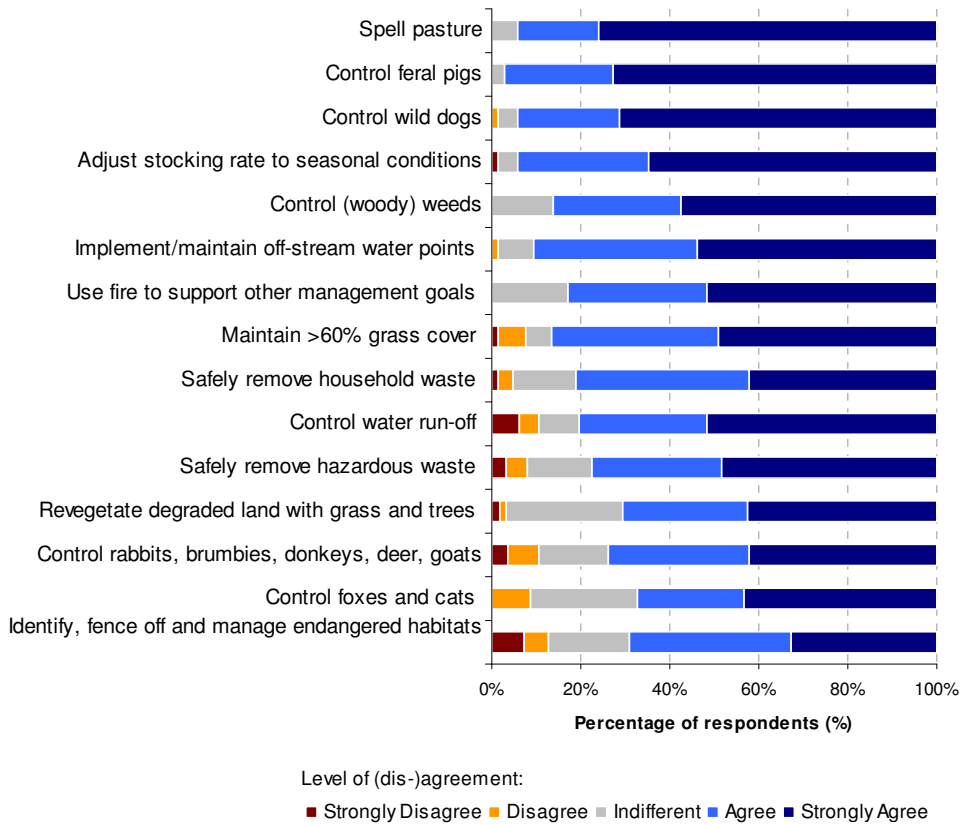
An assessment of impact on neighbours from noise caused by agricultural activities should be undertaken and if impact is considered unacceptable, steps taken to reduce or remove the impact. An example of an unacceptable impact on a sensitive place is when people have difficulty sleeping or holding a conversation within a dwelling.

Noise also needs to be considered in relation to the native fauna and excessive noise disturbance of animals, particularly such as it prevents animals from accessing vital areas such as water holes, needs to be avoided.

1.6 Research supporting the design of an environmental code of practice in the Northern Gulf region

Graziers across the Northern Gulf region were consulted during the 2007-2008 wet season on behalf of the Northern Gulf Management Resource Group to determine what "reasonable and practical" meant in their contexts. A suite of "environmental management principles" was established based on the objectives of the statutory duty of care as defined in Queensland, prior research conducted into the environmental aspects of grazing in the tropical savannas of Northern Australia and a Northern Gulf grazier scoping workshop. A survey of Northern Gulf graziers during the summer of 2007-08 found extensive agreement by graziers with the proposed environmental management principles (Greiner & Miller, 2008; Figure 1). "Agreement" meant that graziers thought these principles were 'reasonable and practical' for graziers in the Northern Gulf region to implement.

Figure 1 Level of agreement of Northern Gulf graziers with environmental management principles



1.7 Monitoring and evaluation

An environmental monitoring plan may be used to quantify the extent and nature of any environmental changes. The environmental monitoring plan must aim to differentiate such environmental changes from naturally occurring environmental fluctuations. It is important to have a clear understanding of both acceptable levels of environmental change and levels of natural variability, to ensure that the monitoring program can determine environmental impacts as required. The frequency of data collection needs to take into account the magnitude and time scale of potential impacts.

The Australian Government has developed the Natural Resource Management Monitoring, Evaluation, Reporting and Improvement Framework (MERI Framework) to specifically address needs and issues relevant to monitoring and evaluation relating to natural resource management. The MERI concept exceeds the requirements of environmental monitoring. It includes the monitoring of “input”-based variables and can therefore be more readily adapted for the purpose of an environmental code of practice. The fundamental objectives are to describe the state of the environment over time, monitor change in practices, and compare actual with intended outcomes, thus providing an information base for ongoing adjustment of strategy.

2 A grazing environmental code of practice for the Northern Gulf region

In our grazing operations, we endeavour to achieve the following environmental objectives are:

- Safeguarding biodiversity
- Conserving and/or improving soils and land condition
- Ensuring ground and surface water of sufficient quantity and high quality
- Minimising air pollution, including the release of greenhouse active gases
- Managing hazardous substances appropriately
- Avoiding or minimizing noise pollution

We believe that there are a series of environmental management principles that are practical and reasonable for us to undertake in achieving these objectives.

Because of the interconnectedness of the various aspects of the environment, the implementation of any one of these environmental management principles is likely to support multiple environmental outcomes, as shown in Table 2.

Table 2: Environmental objectives and how to achieve them

Environmental management principles	Biodiversity	Soils & Land condition	Water quantity and quality	Air quality	Hazardous substances	Noise
Achieve maximum grass cover	✓	✓	✓	✓		
Control feral animals	✓	✓	✓		✓	
Control declared weeds	✓	✓	✓		✓	
Develop and adopt property fire management plan	✓	✓	✓	✓		
Install off-stream water points	✓	✓	✓			
Control water runoff		✓	✓			
Revegetate degraded areas	✓	✓	✓			
Identify and protect endangered species and habitats	✓					
Appropriately store, use and dispose of household and hazardous waste					✓	
Avoid/minimise noise pollution						✓

We believe that we have a number of strategies and actions at our disposal under each of the environmental management principles. The choice, extent and timing of any one of these activities will depend on a number of property-specific and external factors in any one year, including prices, weather, and significant natural events (e.g. floods).

Here is a list of actions that help achieve each environmental management principle. This list is not inclusive and is meant as a list of suggestions.

Achieve maximum grass cover and promote 3-P grasses (perennial, palatable, productive)

- Rotationally graze the property
- Regularly wet-season spell each paddock
- Proactively adjust stocking rate to carrying capacity, e.g. through purchase, sale and agistment of stock
- Distribute impact of stock watering points and lick/feeding stations
- Update knowledge of grazing best management practices
- Seek input from DPI staff and other experts where possible
- Keep paddock-scale diary of grazing activities (stock records should reflect adjustments to stocking levels, diary documentation, paddock logs)
- Monitor grass cover and pasture composition (e.g. photo points, satellite mapping, grass charts and budgets, etc).

Control feral animals

- Identify feral animal creating problem e.g. pigs, cats, dogs
- Control feral pigs using methods of expected highest effectiveness e.g. baiting, shooting, trapping
- Consider effects of methods e.g. baiting affecting water supplies.
- Obtain relevant permissions if necessary
- Coordinate activities with neighbouring landholders where possible
- Engage Aboriginal and Traditional Owner rangers in control works where possible
- Keep records of control activities undertaken (what/when/where)
- Keep records of feral animal sightings (species/abundance/when/where) and collect evidence (photos, visual count, invoices for baits, poison, future monitoring)

Control weeds

- Identify types of weeds causing threat
- Identify appropriate method for control e.g. fire, mechanical, herbicide
- Obtain relevant permissions if necessary
- Consider effects of methods e.g. fire affecting native vegetation and wildlife
- Coordinate activities with neighboring landholders where possible

- Engage Aboriginal and Traditional Owner rangers in control works where possible
- Keep records/evidence of weed occurrence as well as control activities undertaken (photo points, visual observation, regular inspections, chemical invoices)

Install off-stream water points

- Consider location of off-stream water points and build water points of appropriate size at some distance from creeks, streams and wetlands
- Consider impacts/effects on pastures, wetlands etc. Effects could include better pasture utilization and lessening erosion.
- Identify appropriate methods to implement watering points e.g. dams, solar pumps, piping, bores, troughs and tanks as a means to implement
- Train and encourage cattle to use water points
- Maintain off-stream water points in good working condition
- Keep evidence (photo sites, paddock logs, observations and diary documentation)

Control water run-off

- Identify locations on property that may be susceptible to erosion from water run off. For example roads and creek beds.
- When constructing tracks, dams and other infrastructure,
- Identify best methods to control run off e.g. silt traps, collars, whoa boys, grading etc.
- Develop and implement a road/creek maintenance plan in place.
- Consider impact and effects of implementing controls e.g. ground cover, accessibility etc
- Gather evidence (pictorial evidence, contractor invoices, etc)

Develop and adopt property fire management plan

- Work with approved fire consultant and/or local NRM groups to develop a fire management plan for the property, based on NRM objectives (e.g. control of woody weeds)
- Match grazing regime to requirements of fire plan
- Consider carbon balance in design of fire plan
- Collaborate with neighbouring land holders in implementation of fire plan
- Collaborate with local rural fire brigade
- Keep records of fire management activities and wildfire events (e.g. written plan in place, permits, photo points, observations on weed presence and ground cover)
- Review and adapt fire plan regularly; adapt significantly following wild fires etc

Restore degraded areas/sites

- Identify sites within property that are considered degraded

- Consider revegetation alternatives and implement e.g. natural processes through spelling of area or by intervention using fencing etc.
- Consider effects and impacts of revegetation, e.g. pressure on ground cover as stock is kept away from revegetating area.
- Consider interactions on other aspects of the grazing system and unintended consequences e.g. wildlife restricted from fenced areas and impact on other pasture.
- Collect evidence (e.g. photo sites, satellite mapping, observation of ground cover and pasture composition)

Identify and protect endangered species and habitats

- Identify any endangered habitats on the property e.g. springs, riparian areas
- Consider native flora and fauna on the property that could be protected.
- Identify means of protecting habitats e.g. fencing.
- Consider effects of protecting habitats and interactions with other aspects of the grazing system e.g. improved water quality, increased vegetation.
- Work with local NRM groups and possibly scientists and volunteer organisations to identify endangered habitats and species
- Identify best way of protecting species/habitats; e.g. fence off endangered habitat(s)
- Reduce access by cattle to endangered habitats in other ways (e.g. remove water points; time-limited access)
- Learn more about native species
- Keep records of sightings (species/abundance/when/where)
- Collect evidence (species lists, pasture response, wildlife count, photo points)

Appropriately store, use and dispose of household and hazardous waste

- Purchase approved substances only
- Store and secure substances as prescribed
- Undertake required training and obtain relevant gear to apply substances
- Use substances as prescribed
- Promptly and comprehensively manage spills
- Identify household and hazardous waste that require removal from property (e.g. expired, unwanted substances) and consider removal requirements e.g. recycle bins, collection points
- Develop and implement a waste management plan e.g. private dumps, incinerators, collection depots for hazardous materials.
- Collect evidence (e.g. written waste management plans, receipts from collection points)

Avoid/minimise noise pollution

- Consider neighbours, visitors and wildlife when undertaking noisy activities
- Consult with neighbours and/or visitors prior to undertaking noisy activities

We will monitor the extent to which we are complying with the environmental code of practice using the methods and measurements identified in the following table (Table 3). We will do so on an annual basis.

Table 3: Monitoring compliance with Environmental Code of Practice

Review date: _____

Practical and reasonable actions to be undertaken	Target (e.g. % property by what date)	Level of achievement on review date	Comments (e.g. provide paddock names, provide details of unexpected events and observations, give reasons for adaptations)
Land type & vegetation mapping	100% of property by 2010		
Infrastructure mapping	100% of property by 2010		
Pasture spelling program. Maintenance of 3P grasses What % of property is spelled each year? Which paddocks in what year? For what period of time?			
Maintenance of ground cover levels at break of season: ____ %. If necessary, provide details by paddock or land type.			
Adjusting stocking rates to suit changing environmental conditions. Provide target stocking rate and record date and level of adjustments, and reason(s).			
Rehabilitation and/or protection of erosion prone areas Provide details of area intended for protection and area(s) protected.			

<p>Fencing to manage grazing pressure</p> <p>Give km fenceline required and location(s).</p>			
<p>Fencing to protect riparian zones and wetlands</p> <p>Give km fenceline required and location(s).</p>			
<p>Construction of watering points to spread grazing pressure</p> <p>Provide details by paddock and stream/wetland name.</p>			
<p>Construction of off-stream watering points to protect riparian zones and wetlands</p> <p>Provide details by paddock and stream/wetland name.</p>			
<p>Weed management program</p> <p>Provide details about problem weeds, affected areas and management approach(es)</p>	<p>100% of property by 2010, continuing</p>		
<p>Manage woody weeds and timber thickening</p> <p>Provide details about problem areas and species, and management approach(es)</p>			
<p>Pest management program</p> <p>Provide details about problem pests, affected areas and management approach(es)</p>	<p>100% of property by 2010, continuing</p>		
<p>Fire management program</p> <p>Provide details about fire management strategy in a given year as per approved property fire plan</p>	<p>100%</p>		

<p>Plan stream crossings and stream/wetland access points</p> <p>Provide details</p>			
<p>Control water run-off</p> <p>Provide details about key management areas and actions</p>			
<p>Protect areas within the property that support endangered, "a risk " or significant species</p> <p>Provide details about species, relevant areas and actions</p>			
<p>Establish and maintain photo sites to record ground covers; pasture composition and yield; weed infestations; etc.</p> <p>Provide details about locations (GPS co-ordinates), identifier, frequency of data collection, purpose, etc.</p>			

3 Helpful reading

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