

Caring for our Land

Caring for our Land – Summary

Our *regional goal* for land is:

To identify, protect, restore and sustainably manage the land resources of SEQ.

Desired outcomes associated with this goal are:

Regionally significant land resources identified and protected for their preferred use through appropriate planning schemes

Resource planning and decision making based on reliable, land resource information and on sound sustainable

Land resources managed wisely through the adoption of integrated planning and management..

Land degradation and its associated impacts minimised through adoption of Best Management Practice by all stakeholders

Three *key strategies* have been identified to achieve these desired outcomes.

- L1 Develop a comprehensive inventory and assessment of land resources in the region;**
- L2 Develop and promote the adoption of plans for sustainable land use management and conservation; and**
- L3 Develop and promote Best Practice for the wise use and management of land resources**

Priority Actions required to implement these strategies include:

- Mapping of potential and existing acid sulphate soil risk areas
- Resource inventory programs to identify and document significant water catchments and riverine resources
- Resource inventory programs to identify and document Good Quality Agricultural Land (GQAL)
- Resource inventory programs to identify and document regionally significant landscapes

- Make land resource data available to key stakeholders to assist in planning
- Protect through planning schemes, significant land resource areas and their associated infra-structure
- Adopt catchment-based flood plain planning processes to reduce flood damage while maximising ecological values
- Develop policies/strategies to ensure mining decisions fully consider environmental and social factors

- Develop and implement Best Practice for the management of acid sulphate soil risk areas
- Develop and implement Best Practice to minimise and reverse soil erosion
- Provide incentives and regulations to support private and farm forestry, encourage sustainable land practices, and minimise the cost of managing green space
- Review poorly managed or sited landfill sites and rehabilitate closed sites of concern

1.0 Our goal for land management

To identify, protect, restore and sustainably manage the land resources of SEQ.

The rationale behind this goal

The finite land resources of South East Queensland are in high demand from, and essential to, urban and rural residential development, industry, agriculture, forestry, mining, tourism, recreation, and road, rail and other infrastructure. These often-competing uses place pressure on the resources, contributing to soil, land and water degradation and threatening their long-term sustainability. The continued protection, restoration and sustainable management of land resources, together with their equitable allocation between prospective users, is therefore essential to the economic, social and environmental viability of the region.

2.0 Desired outcomes

- Regionally significant land resources identified and protected for their preferred use through appropriate planning schemes.
- Resource planning and decision making based on reliable, well-documented land resource information and on sound and sustainable economic principles.
- Land resources managed wisely through the adoption of integrated planning and management.
- Land degradation and its associated impacts minimised through the adoption of Best Management Practice by all industries and stakeholders.

3.0 Threats to our land resources

Agriculture and its associated industries and services constitute one of the major land uses in the region and are a major contributor to the economy and an important source of employment. Agricultural industries cannot be sustained if farm management practices are detrimental to, or threaten, the resource base. The ever-increasing demand for production efficiency will continue the trend towards more intensive agricultural practices and this, in turn, places greater pressure on the land resource.

Mining and extractive industries, too, place significant demands on key resources within the region. Such resources, by their very nature, are non-renewable, although their distribution within the system may be changed by natural forces such as wind and water. The use of these resources must, therefore, be based on sound economic principles taking into account the long term implications of their removal; the strategic and practical value of alleviating unwanted deposition, and our capacity to use alternative products.

Whilst the above arguments may not apply to all land uses, the significance of their impacts may be no less severe. Strategies and practices that minimise the risk and occurrence of soil and water degradation must accompany all land development.

Management of land resources in SEQ to achieve the desired outcomes listed above must take account of the following threatening issues:

Land use competition

Competing land use requirements necessitate that local and regional planning initiatives identify, designate and protect land resources for their preferred long term sustainable and/or equitable use. This will include good quality agricultural land; environmental, open space and recreational use; industry; mining and residential development. Failure to allocate suitable land to appropriate use and development purposes will result in further deterioration or loss of the natural resource base through on and off-site impacts.

Soil degradation

Preventing soil degradation requires an understanding of the soil's capability and managing the resource accordingly. Soil must remain in place and retain its physical, chemical and biological fertility to be useful as a sustainable, functioning resource. Soil erosion removes a fundamental asset and the off-site impacts, such as siltation and nutrient enrichment of waterways, can have long term detrimental effects on the wider community and environment. Soil fertility can be compromised by increasing levels of soil acidity, salinity, sodicity, heavy metal accumulation and toxic levels of trace elements. Bio-organisms in the soil are critical to its fertility, through the nutrient breakdown and recycling processes to which they contribute.

Soil salinity is an example of land degradation in the region. In areas such as the Lockyer and Bremer valleys, removal of deep-rooted native vegetation has contributed to dryland salinity with the effects sometimes taking up to 20-30 years to become visible. Salt concentration adversely affects germination and plant growth, and high sodium levels can lead to deterioration in soil structure affecting plant growth.

Management of riparian lands

Riparian areas are critical to the maintenance of stream bank stability, good quality water supplies and the general health of aquatic environments. They provide habitat and movement corridors for terrestrial and aquatic native plants and animals. Riparian management practices should aim at the maintenance and recovery of these important functions. A key issue in riparian management in the region is the ownership and definition of the beds and banks of waterways. This affects a range of environmental and management concerns and well managed watercourses and riparian areas are valuable assets for both individual landholders and the community.

Weeds and pest animals

Weeds are among the most serious threats to the region's primary production and natural environment. Pest animals can threaten agricultural production, native ecosystems and social values. The impact of weeds is of particular concern in the riparian zone, where high fertility and moisture provide an ideal habitat for their establishment and expansion. A serious impact of weeds in such areas is the physical blocking of waterways and the replacement of native habitat.

Pest animals can change the environment, destroy crops, attack livestock, compete with native fauna, and can be vectors for parasites and disease. Community awareness of the importance of pest animal control and the need to prevent the spread of existing and introduction of new pest species is critical.

4.0 Strategies required to achieve the Outcomes

Three *key strategies* to achieve the desired outcomes have been identified:

L1	Develop a comprehensive inventory and assessment of land resources in the region.
L2	Develop and promote the adoption of plans for sustainable land use management and conservation.
L3	Develop and promote Best Practice for the wise use and management of land resources

A diagrammatic summary of how the actions and strategies link to, and address, the desired outcomes and goal for '*Caring for our land*' is presented at the beginning of this theme Section.

L1 Develop a comprehensive inventory and assessment of land resources in the region.

How is the implementation of these actions being coordinated?

The Department of Natural Resources gathers land resource information for the identification of Good Quality Agricultural Land and the assessment of land use suitability, including irrigation. Other agencies and local governments gather land resource information as part of development assessment requirements. While there is some collaboration between agencies, there is often a lack of coordination across agencies within the region.

Existing major initiatives include:

State

- Queensland Acid Sulfate Soil Investigation Team (QASSIT)
- Land Facts (DNR)
- DNR State of the Rivers

Regional

- Comprehensive Regional Assessment
- South East Queensland Recreation Site Inventory Database project

Local government / Catchment

- Boonah Shire Land Resource Assessment (NHT funded project)

Actions Required

Code	Actions	Current Activities	Priority/ Localities
L1.1	Continue resource inventory programs to identify, map and document:		
	• significant water catchments based on water quality and quantity;		A
	• significant riverine resources, including riparian areas, riverine aquatic habitat, and wetlands;		A
	• Good Quality Agricultural Lands (<i>particularly Redland Shire, coastal hinterland, Lockyer, Bremer & Brisbane valleys</i>)	Planning Policy 1/92 Planning Guidelines	A
	• regionally significant landscapes; including, geological features and regionally significant open space areas on public, private and 'designated' land.	Regional Landscape Strategy development	A
	• areas for sustainable native forestry;		B
	• available resources for all types of extractive materials (including baseline production data)		B
	• significant eco-tourism resources		B
	• Soil and land capability/suitability		B
L1.2	Complete and utilise the Comprehensive Regional Assessment (CRA) for the SEQ Biogeographic Region.		B
L1.3	Continue detailed mapping of potential and existing acid sulphate soil risks (particularly Gold Coast, Pumicestone, Maroochy		A

L2 Develop and promote the adoption of plans for sustainable land use management and conservation.

How is the implementation of these actions being coordinated?

Local Governments are required to prepare and implement revised Planning Schemes under the Integrated Planning Act. These Planning Schemes, which are approved by State Government, through DCILGP as lead agency, are central instruments for embracing sustainable outcomes in land use planning. Supporting these are plans such as Integrated Catchment Management Plans which are prepared in collaboration with community, industry and government, and endorsed through DNR as lead agency. Successful coordination of sustainable land use planning relies, largely, on achieving an integrated approach between participating agencies. DNR also have responsibility for the Regional Landscape Strategy, which is the umbrella project for regional landscape and open space planning in South East Queensland. Development of this strategy is guided by an advisory committee representing all major community and industry sectors.

The Extractive Industries Unit within the Department of Mines and Energy has responsibility to address the issue of mid-long term secure supply of sand and gravel extractive resources throughout Queensland, but in particular for the South East. In particular, it coordinates extractive industry policy and planning. In South East Queensland, regional extractive industries planning is also coordinated through and accountable to the Brisbane River Management Group Policy Council. Specifically, the Environment Protection Agency manages extraction in tidal areas; DNR manages planning and approval for non-tidal in-stream extraction; and Local Governments manage planning and approval for off-stream extraction. Additionally, the Extractive Industry Association actively collaborates to ensure the best regional resource management plans are developed.

Existing major initiatives include:

State

- State Planning Policy 1/92 and Guidelines – Good Quality Agricultural Land.

Regional

- Establishment of a Regional Landscape Strategy Advisory Committee
- Guidelines on Regional Landscape Planning for Local Governments in South East Queensland

Local government / Catchment

- Lockyer Catchment Flood Scoping Study.
- Brisbane River Flood Study
- Extractive Industries Strategy for non-tidal Brisbane River
- Oxley Creek ICM Plan Bremer River ICM Plan
- Upper Brisbane River Catchment Investigations
- Brisbane City Council's City Plan
- Maroochy City Council's new Planning Scheme

Actions Required

Code	Actions	Current Activities	Priority/Localities
L2.1	Make land resource data available to Local Governments and other stakeholders to assist in the development of planning schemes and other measures that minimise land degradation. <i>(Also see U1.19)</i>		A
L2.2	Designate and protect, through planning schemes, available and required areas of Good Quality Agricultural Land, forestry land and eco-tourism resources, together with their associated infrastructure requirements - at the same time, minimising impacts on core conservation areas.		A
L2.3	Develop specific resource protection measures for key mineral deposits and associated haulage routes.		A
L2.4	Ensure that lands having regional significance are identified and protected in local government planning and management schemes.		A
L2.5	Adopt catchment-based flood plain planning processes to reduce flood damage and potential loss of life, while maximising ecological values. (particularly Lockyer, Bremer).	Lockyer Flood Scoping Study	A
L2.6	Locate residential development in appropriate, well-serviced locations with minimal encroachment on areas of natural, agricultural and extractive resource significance.	Planning Policy 1/92 and Guidelines	B
L2.7	Develop an Environmental Protection Policy, Codes of Practice and appropriate strategies to minimise the impact of extractive industry activities on the environment and community.		A
L2.8	Plan and protect the infrastructure requirements of allocated resource reserves.		A

L3 Promote Best Practice for the wise use and management of land resources in the region.

How is the implementation of these actions being coordinated?

The sustainable use and management of land resources is dependent on close cooperation and involvement of all relevant stakeholders, including landholders involved in all industries, community groups, government and non-government agencies. All agencies have a responsibility to implement and coordinate an integrated approach to land resource management and the industry association plays an active role in promoting best management practices.

Existing major initiatives include:

State

- Code of Practice for Agriculture.
- DPI Farm Forestry Joint Venture Program.
- Regional Forest Agreement preliminary information
- Future *Profit*
- Grass Check, Pasturewatch, Saltwatch, Soilwatch
- National Landcare Program (NHT)
- Rivercare Program (DNR)

Local government / Catchment

- Moreton Bay Catchment Water Quality Management Strategy (1999)

Actions Required (Also see 'Caring for our Water' theme)

Code	Actions	Current Activities	Priority/Localities
L3.1	Develop and implement Best Management Practice for the following agricultural issues:		
	<ul style="list-style-type: none"> • Soil erosion in areas used for agriculture and forestry 	Land conservation measures - eg contour bank construction, stubble management, minimum tillage Code of Practice for Agriculture Land Degradation research Boonah gully rehabilitation project	A
	<ul style="list-style-type: none"> • Pasture decline (particularly Upper Brisbane Valley) 	Grass Check Pasturewatch program	B
	<ul style="list-style-type: none"> • Chemical and fertiliser use 	Code of Practice for Agriculture, Guidance provided by chemical companies Chemical applicators course Legislation re safe use of chemicals	B
	<ul style="list-style-type: none"> • Soil salinity (particularly Lockyer) 	Saltwatch	B

Draft Natural Resource Management Strategy SEQ 50

Code	Actions	Current Activities	Priority/Localities
	<ul style="list-style-type: none"> Stream bank erosion and erosion of riparian lands (particularly - Lockyer, Bremer) 	Rivercare program (DNR) Greening Australia Bushcare program BCC streambank erosion programs DOT vessel wash review DNR State of the Rivers assessment	A
	<ul style="list-style-type: none"> Mass movement / Landslip 	Landcare groups have assisted landholders with rehabilitation of individual sites	C
	<ul style="list-style-type: none"> Problems of soil health (acidity, fertility and structural decline) 	Research by DPI in the horticulture and cropping industries	B
L3.2	Develop and implement best management practice for the following issues related to development :		
	<ul style="list-style-type: none"> Acid sulfate soils (particularly Gold Coast, Pumicestone, Maroochy) (<i>see also Action C4</i>) 	Qld Acid Sulfate Soil Investigation Team programs	A -
	<ul style="list-style-type: none"> Soil erosion resulting from construction of houses, roads, railway, pipe and power lines, etc. 	Code of Practice for construction industry Awareness programs by local authorities "on the spot" fines	A
	<ul style="list-style-type: none"> Contaminated land 	Maintenance of the contaminated land sites register	B
L3.3	Develop and implement Best Management Practice for the following land uses:		
	<ul style="list-style-type: none"> Native forestry 		B
	<ul style="list-style-type: none"> Mining and extractive industries 		A
L3.4	Develop effective mechanisms for monitoring and reporting the status and condition of regionally significant land resources.		B
L3.5	Promote and facilitate whole farm planning based on sustainability of a property's natural resources.(<i>See U2.16</i>)	Future <i>Profit</i> program	A
L3.6	Develop and provide incentives and regulations to: <ul style="list-style-type: none"> support the expansion of private and farm forestry; encourage sustainable land use practices; and minimise costs to community of managing green space. 	Farm Forestry Joint venture program Farm Forestry extension program Codes of Practice	A
L3.7	Identify suitable sites for land-fill		B
L3.8	Review poorly sited and managed land-fill sites and rehabilitate closed sites where necessary		A

